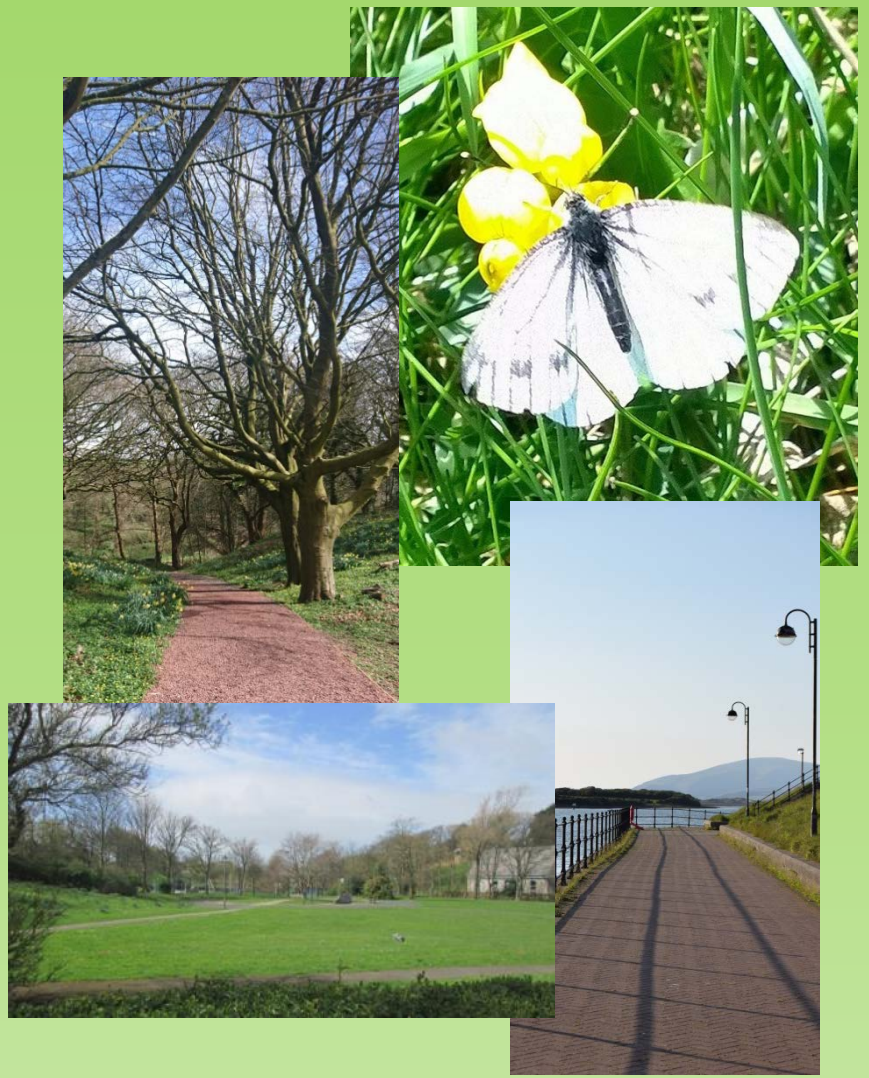
Barrow Borough Green Infrastructure Strategy



Draft Supplementary Planning Document

February 2018

Working together to support sustainable development within the Borough of Barrow-in-Furness

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Overview

Managing Change, Supporting Nature - A `Step Change'

As development pressure on the environment continues to increase it is clear that previous approaches to meeting our housing, employment and leisure needs must change if decisions made now are to be sustainable in the future.

The preparation of the Green Infrastructure Strategy is what the Council considers to be an essential `step change' in the way proposals are managed, making sure that the health of the natural environment is balanced with the needs and aspirations of our local communities in such a way that makes the Borough an attractive place to live in and not leave.

Using the Green Infrastructure Strategy

The Green Infrastructure Strategy Supplementary Planning Document (SPD) is a planning and design `toolkit' which supports the Barrow Borough Local Plan that aims to guide development to the right locations and in the most appropriate forms.

Whilst Part One looks at the background context Part Two identifies the components of the new Green Infrastructure Framework that developers need to take into account in their land value assumptions and for their designers to respond to in creating schemes that have a locally distinctive a sense of space and place.

Community Action

Local communities can actively help too. The Green Infrastructure Strategy SPD is designed to help people identify opportunities to improve open green spaces in their area. This is especially important as it is community groups that are best placed to attract funding.

Individuals can also paly an important part by setting aside a `wilderness' area in their gardens especially where they join with others to give wildlife a home.

Doing it Right

Part Four is about getting a design right from the outset. Advice on `characterisation' is also provided to help make sure that schemes look like natural additions to the local landscape.

The Green Infrastructure Strategy is a `living document', meaning it will be updated regularly make sure we have an up to date picture of the Borough and best practice.

The Green Infrastructure Framework can be viewed using Council's Web Mapping service allowing you to `zoom in' on individual locations in more detail:

https://webgis1.barrowbc.gov.uk/webgis/

Contents

Using Part One

Green Infrastructure is still an emerging issue within the development sector. It is one that has always been present, but typically only considered within the confines of a site and on the basis of how little space can be given over to it. Increasing awareness by the general public as to the increasing vulnerability of our environment, and the risks that so little attention to it in the past has added to it, now make Green Infrastructure a defining approach to making sure that the needs of the present are not at the expense of future generations.

Part One provides the contextual overview for Green Infrastructure as an issue and highlights the approach the Council is taken to help ensure that a better balance is achieved between the needs of the people and the needs of the environment we depend on.

The Strategy is one stand of a new more holistic approach being taken by the Council in seeking to improve the quality of development and the wider environment as set out in the Barrow Borough Local Plan 2016-2031.

Introduction & Methodology

Part One

Introduction

1.1 The Borough expects to face a period of steady growth over the next 20 years. If this growth is to be positive and sustainable it must be guided by a parallel emphasis on 'Green Infrastructure' making sure that existing and future communities can access to a high quality, bio-diverse network of open green space that reflect and enhance the valued character and appearance of the Borough.

1.2 The Green Infrastructure Strategy SPD has been produced to help guide this process providing the context for future development so that it reinforces the distinctive character of the Borough and does not undermine it.

1.3 The Strategy has the following aims and objectives:

- That development is directed to the most sustainable and least sensitive locations and designed in a way that contributes positively to site context and wider landscape character;
- That the planning and design of Green Infrastructure results in a coherent, practical and visible network of `open green spaces' that provide a framework for layout design and a focus for `place making';
- That Green Infrastructure is planned and designed to provide improved access to the natural environment in a form that allows the wildlife that depends on it to flourish;
- That greater awareness is achieved, especially within local communities, of the important contribution that Green Infrastructure has on their daily lives and in responding to the potential effects of climate change; and
- That Green Infrastructure is used consistently as a `common thread' in all `day to day' planning and infrastructure decision-making.

1.4 Recognising the significant contribution that well-planned and designed Green Infrastructure can have on commercial values is also an important message for developers. The Council sees the Borough's environmental quality as being an increasingly important factor in creating a competitive edge in both underpinning and securing long term sustainable growth.

1.5 Green Infrastructure is an important material planning consideration. By adopting the Green Infrastructure Strategy as a Supplementary Planning Document (SPD) the Council wants to make it clear that green infrastructure will be a primary consideration in its decision-making at every stage in the planning process from strategic site selection to negotiations surrounding detailed site design and the discharge of conditions.

1.6 Perhaps most important of all it is hoped that the Strategy will help introduce Green Infrastructure issues to a wider audience as well as encouraging developer and community led initiatives to take ownership of Green Infrastructure in their control as well as informing the Council's own environmental roles and responsibilities.

Structure

1.7 The Strategy is set out in four parts:

Part One sets out the purposes of Green Infrastructure and how existing open green spaces and those coming forward through development can be combined and enhanced to create high quality locally distinctive environments that support the needs of local communities as well as local wildlife. The methodology used in developing the Strategy is also explained.

Part Two describes the five Green Infrastructure classifications that have informed the Green Infrastructure Policies set out in the Barrow Borough Local Plan.

Part Three details the approach to delivering Green Infrastructure from masterplans and development briefs to the negotiation of individual planning applications. A periodically reviewed Action Plan is attached at Appendix A highlighting a range of potential Green Infrastructure projects that development might contribute to along with a list of key partners and potential sources of funding.

Part Four provides `best practice' design advice in the form of principles and guidelines to help ensure that Green Infrastructure and built form are designed together along with the supporting `Grey Infrastructure' needed to service it.

So what is Green Infrastructure?

1.8 Green Infrastructure is a an interconnected `life supporting' network of landscape, open green spaces, and access routes integrated with other natural and historic features that promote direct and indirect benefits for the economy, landscape, wildlife and for the health and social well-being of the wider community.

1.9 The National Planning Policy Framework (NPPF, 2012); described Green Infrastructure as:

" A strategic network of multifunctional green space, both new and existing, both rural and urban, which supports natural and ecological processes and is integral to the health and quality of life in sustainable communities."

1.10 Green Infrastructure can be any `green space' that makes a contribution to environmental and/or social quality. It can be a sizeable urban park, prominent field in agricultural use, an existing hedgerow or even a derelict overgrown urban space. The common theme is that they all contribute to the character of an area and to the amenity of its inhabitants as well as the wildlife that depend on them.

1.11 Green Infrastructure planning and design must be a `holistic' activity that considers all design and development objectives together from the outset. Only this approach will guarantee that a balance can be achieved that allows development to become part of the wider landscape and not something arbitrarily imposed upon it.

1.12 At this stage it is important to say what Green Infrastructure is not. The Green Infrastructure Strategy is not about creating a Green Belt by another name. Whilst many of the Green Infrastructure designations are in similar peripheral locations they have been identified individually based on their capacity to accommodate change and not on a uniformly restrictive basis.

1.13 The Green Infrastructure Strategy is designed to help identify where development can go and in what general form it should take to best support the Council's housing supply requirement. The Green Infrastructure Strategy is as much to do with enabling development as controlling it. Using landscape to accommodate development sensitively and creatively will become increasingly important as development invariably reaches more sensitive locations.

1.14 Instead of one uniform designation the Green Infrastructure Strategy has five different classification types each with a different purpose, some aimed at protection with others designed to actively guide the form of development to make sure that open green spaces are integrated with existing access and landscape features as part of good site design.

1.15 The specific role of the Green Infrastructure classifications is set out in Part Two.

Why Produce a Green Infrastructure Strategy

1.16 Without a strategic approach there is a real danger that insufficient or inconsistent weight is given to the importance of open green space and to the opportunities for improving it. Achieving a shared understanding and commitment between all partners is essential if development is to be genuinely sustainable in the long term.

1.17 Green Infrastructure is important at every scale the Strategy will help to ensure that assets are seen in terms of how they contribute to the bigger picture. An area of hedgerow, for example, whilst a very small area of a site looked at in isolation, may well be a key connecting route in the wider movement of wildlife, or in protecting the amenity of nearby properties.

1.18 The Green Infrastructure Strategy is intended to be a proactive tool adopted by all development partners not just the Local Planning Authority (LPA). If used properly as a starting point it will help to identify from the outset what the important characteristics of a site are improving certainty regarding areas of search, land values, viability testing and in providing a positive environmentally-led approach to marketing.

1.19 The Green Infrastructure Strategy also has an important educational role to play not just within the development industry, but in Schools to introduce to future generations of decision-makers to the nature of environmental and development pressures being faced.

A Vision of Green Infrastructure

1.20 Establishing a `Vision' for the Strategy helps to position the value of Green Infrastructure as a way of coordinating public, private and voluntary sector efforts to raise the Borough's profile as a great place to live, invest, do business in and visit. The following Vision reflects the Council's stated position regarding the role of Green Infrastructure within the Borough:

The Vision

The Vision is of a Borough increasingly characterised by an overarching network of multi-functional, well-connected open and planted green spaces providing a high quality setting for regeneration, development and recreation that inspires communities to be healthier whilst maintaining and enhancing a valued bio-diversity.

A locally distinctive and valued landscape character delivered, protected and well-managed through the public, private and voluntary sectors working together.

`Managing Change, Supporting Nature'

1.21 It is important to note that whilst Green Infrastructure is a Borough-wide asset and initiative the Green Infrastructure Strategy: Managing Change, Supporting Nature SPD focuses on the Borough's settlement edges most vulnerable to development pressure and where the greatest additional benefit of Green Infrastructure will be achieved.

1.22 The Strategy needs to be read alongside both the Natural Environment and Green Infrastructure Chapters of the Local Plan which highlight the strategic Borough-wide context for the Strategy and for those areas not subject to the same development pressures as the settlement edge. Cumbria County Council's and Natural England's Landscape Characterisation Studies provide detailed generic characterisation.

1.23 The Planning Act 2008 removed the requirement to carry out Sustainability Appraisals on Supplementary Planning Documents (SPD) and for this reason the Strategy has not been subjected to this process.

1.24 The Green Infrastructure Strategy has been developed following a programme of internal consultation with Officers and Elected Members as well as with stakeholders and the public consultation conducted as part of the Council's Local Plan and amended accordingly.

Strategy Status & Scope

1.25 Once adopted by the Council as a Supplementary Planning Document (SPD) The Green Infrastructure Strategy will be used for the purposes of spatial planning and development management.

On-going Review

1.26 The pressure for all types of development will continue well beyond the plan period. The Strategy is intended to be a `live' document subject to regular review so that it is able to help assimilate development in light of any changes in legislative or economic circumstances.

Policy Context

1.27 The following sections provide the background justification for the development of the Strategy.

National Policy

1.28 Access to open green space is an important quality of life indicator and a key element in the delivery of sustainable communities. The Natural Environment White Paper (The Natural Choice: securing the value of nature 2011) highlighted "the importance of green spaces to the health and happiness of local communities".

"Green spaces, particularly natural green spaces, located close to local people provide a range of inter-related social, environmental and economic benefits, including –

- ☐ improved mental and physical health
- ☐ increased social activity
- ☐ increased physical activity
- ☐ reduced crime
- ☐ improvements in children's learning
- ☐ increased voluntary action
- ☐ improved community cohesion and sense of belonging
- ☐ potential for local food growing
- ☐ more attractive places to live, work, play, visit and invest
- ☐ enhanced opportunities for wildlife habitats and wildlife corridors
- ☐ climate change adaptation for example by flood alleviation."

1.29 Green Infrastructure is now an integral part of the planning system and is well defined in policies and guidance at the national and at the local level. The context supporting the Green Infrastructure Strategy is provided in the following Core Planning Principle set out in para. 17 of the National Planning Policy Framework (NPPF), which states that planning should;

"promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production)"

1.30 The NPPF goes on to require Local Planning Authority's (LPAs) to;

"..set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure". (Para 114)

Local Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure. (Para 99)

1.31 The NPPF also makes the following statements in support of Green Infrastructure in terms of its need to;

- ***"contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this Framework";***

- ***"actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable; and"***

- ***"take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs".***

Local Policy

1.32 Locally, the context for the Strategy comes from initial work undertaken by the Cumbria Green Infrastructure Working Group and the Council's previously adopted Green Wedge Policy D4. A Saved Policy of the Barrow Borough Local Plan Review 1996 to 2006, adopted in 2001, Policy D4 has been effective in protecting important green spaces from inappropriate forms of development including at appeal. This policy was itself a carry over from the previous 1991 Local Plan for these reasons.

1.33 The Green Wedge Policy has proved very successful in keeping important open green spaces in and around the Borough's urban areas available for formal and informal recreation, providing visually open areas for amenity purposes and in separating and guiding the form of settlements and development areas.

1.34 The recognition that Green Wedge areas could become increasingly isolated within the built up area as future development continues to extend outwards highlighted the need to review the Green Wedge concept within a wider Green Infrastructure context. This ensures that in addition to such spaces being protected that their connectivity with the surrounding countryside would also be protected and enhanced wherever possible and that new spaces created as part of development schemes would also do the same.

1.35 The key issues providing the background to the Council's stance on Green Infrastructure as set out in the Strategy are set out below:

Issues

1.36 The value of a Green Infrastructure Strategy is widely accepted at a strategic policy level, but requires further guidance to ensure that its objectives carry through to the `day to day' implementation of development proposals.

Landscape Pressures

1.37 Barrow in particular has reached a point where the distinctive `Green Horizon' of visible hills that define its eastern edge is increasingly vulnerable to potential development unless managed carefully.

1.38 The Strategy aims to highlight ways of mitigating this kind of impact by highlighting a range of Green Infrastructure solutions that used together would enable a proportionate amount of development to be achieved whilst avoiding any undue effects on the environment.

1.39 The term `Green Horizon' is used to describe a fluid visual concept based on the ability to see a skyline defined by open green space that either forms or appears to form a `settlement edge' that contributes to local identity and character and the associations that individuals and communities have with it.

Coordination

1.40 Greater environmental awareness between Drainage, Highways and Planning Authorities raises an important opportunity to coordinate design advice between agencies

1.41 With the range of groups involved in environmental design and management from private landowners to Council Parks Services and voluntary groups there is a need to share objectives and avoid duplication and weaken what would have been a better outcome together. The Strategy now provides a starting point in aligning the views of all interested parties, expertise and knowledge so that a coordinated approach can be taken to site design and layout including Green Infrastructure.

1.42 Extending the scope of Green Infrastructure means that a new scale and diversity of project can be identified and delivered which consequently means that they are more likely to make a material contribution to the character of the Borough's townscape and landscape.

Regeneration

1.43 High profile community-led projects along with area – based Masterplans have the potential to provide the necessary impetus and momentum to re-position and improve the attractiveness of the Borough and interest in it, acting as a persuasive indicator of the Borough's desire to embrace growth and manage change sensitively in ways that do not undermine the qualities that make it valued and distinctive.

1.44 Diversifying the economy is a key task in making the Borough more resilient to wider economic conditions. As the economy becomes increasingly competitive it also becomes increasingly important that the Borough is able to attract the development it needs. High quality development informed by landscape and urban design will contribute directly to enhancing the image of the Borough and getting people to look at the Borough positively improving both internal and external perceptions of place.

1.45 Protecting the rural landscape character of the Borough, especially as it is visible from the A590 and the A595, will need to be taken into consideration particularly where larger scale or sensitively located development is proposed in making sure it continues to be a positive aspect of the Borough's character.

A New Direction

1.46 Increasing interest and awareness of environmental matters and the Borough being the natural `Gateway to the Energy Coast' provides a significant opportunity to promote a major energy sector-led visitor attraction to the area. A major project of this nature would help to diversify the local economy, attract visitor spend and educate people about environmental responsibility and the benefits of adopting its technologies including Green Infrastructure.

Sustainability

1.47 Climate change represents a significant threat to the character of the Borough in the longer term requiring action from the current generation. Even relatively small changes in the way we do things at a site level can, if coordinated, make a significant difference. The Green Infrastructure Strategy is intended to increasingly become the focus for coordinating such effort.

1.48 The Woodland Trust has identified the need for the Borough to increase the area covered by woodland by 70 hectares. This is a considerable area when imagined on a single site.

1.49 Whilst the opportunity to deliver large scale woodland is likely to be difficult economically as well as in terms of its impact on existing landscape character, the coordinated provision of meaningful areas of tree planting connected to the existing landscape framework will over time make an important contribution towards this figure.

1.50 Even modest increases in tree-canopy can significantly reduce the `urban heat-island' effect at the same time improving carbon storage, local air quality and water absorption as well as shade and visual and physical amenity benefits for the communities surrounding them.

1.51 People who are physically active were identified by the Chief Medical Officer in 2004 as reducing their risk of developing major chronic diseases, such as coronary heart disease, stroke and Type Two diabetes, by up to 50% and reducing the risk of premature death by 20-30%. Creating a high quality environment structured to support walking and cycling can create new opportunities as well as reducing dependence on the private car, becoming less carbon-orientated and healthier community as a result.

1.52 The Green Infrastructure Strategy is at the heart of the sustainability agenda setting out a range of core aims and objectives that managing change in our environment will need to respond to in the future.

Aims & Objectives

1.53 The following aims and objectives frame the Green Infrastructure Strategy and inform the Green Infrastructure Chapter of the emerging Barrow Borough Local Plan by aiming to:

(a) Protect the Borough's existing landscape and settlement character by directing development to the most sustainable locations.

(b) Maintain the separation, identity and setting of adjacent settlements and individual development areas within the built up area.

(c) Maintain the existing context and setting of designated heritage assets and landscapes that support people's associations with place.

(d) Enhance access to the open countryside by developing a coherent network of open green spaces and routes for the convenience, health and well-being of the urban population

(e) Enhance opportunities for formal and informal recreation.

(f) Ensure that existing landscape character is used to inform layout design in a way that incorporates development within a locally distinctive landscape context and setting that is mature and still recognisable.

(g) Improve access to sustainable movement choices providing viable alternatives to the private car.

(h) Protect and enhance opportunities for biodiversity especially the connectivity between new and existing ecological assets.

(i) Identify and design sustainable multi-purpose settings within which allow necessary 'Grey Infrastructure' requirements to be sited and landscaped sensitively.

(j) Ensure that planting schemes are of a scale and content that will contribute to climate change adaptation are well composed as a defining part of a site's layout design, especially arrangements for surface water drainage & waste management.

(k) Make provision for additional capacity for domestic food production combined with improved opportunities for environmental education.

(l) Promote opportunities to support community cohesion, safety and security through Green Infrastructure projects.

(m) Ensure that opportunities to contribute to tourism and economic regeneration initiatives are taken where appropriate.

1.54 The above aims and objectives are explored further in the following guiding themes as well as in more detail in the design guidance set out in Part Four.

Themes

Protecting the Borough's existing valued Landscape Character

1.55 An understanding and appreciation of the Borough's landscape is fundamental to protecting its locally distinctive character and in ensuring that new development complements it.

1.56 Familiarity with place from the widest to the most local level is important to people's identity and associations and needs to be managed sympathetically when subject to change.

1.57 Of particular concern is the undulating open `Drumlin' character visible to the east of Barrow that rolls from the higher fells to the north east down towards the urban centre of Barrow and the coastal plain to the north. As development needs create the pressure to expand, the ability to appreciate the wider setting of the town will diminish unless carefully managed by directing development to the least visually prominent and vulnerable locations. The Borough's general landscape character is described in more detail in the Cumbria County Council's Landscape Characterisation Study(LCS)2010.

1.58 The Green Infrastructure Strategy, in recognising the need to alter the way development has previously come forward, aims to encourage a more `clustered' approach', "softening the edges of development"(LCS, p.76) in building forms and groupings more associated with the rural character of the settlement edge as well as adding additional choice and quality to the local housing market

1.59 The European Landscape Convention offers the following definition of landscape:

***"An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors"* (Council of Europe, 2000; Natural England, 2009, (p.1404).**

1.60 Natural England *et al.* (2007) expand this further by acknowledging that;

"*Landscape is a meeting ground between past, present and future as well as between natural and cultural influences. It has both a physical and an emotional presence and sets a context for people's lives"* (p. 2).

1.61 The Strategy aims to ensure that landscape character is acknowledged as a defining consideration in determining the

land most suitable for development and subsequent planning applications and that key definable components of the landscape will need to be protected, retained and optimised as a positive focus for place making.

1.62 Spatial planning has the potential to have a significant impact on the landscape in a very short space of time with permanent effects on its character and appearance. An early discussion with the Local Planning Authority (LPA) about a sites capacity to accommodate development will be vital in making sure that numbers of units and most importantly values are realistic from the outset and not made on simplistic area-based calculations without fully understanding the opportunities and limitations of the site.

Maintaining the separation and identity of adjacent settlements and development areas

1.63 Avoiding the coalescence of settlements is a cornerstone of the planning system and fundamental to maintaining the rural character of the Borough and the distinctive identity and character of the settlements within it.

1.64 The protection of the Borough's rural character is important not just in ensuring that its settlements remain identifiable within the landscape, but also as an important factor in the long term economic future of the area with environmental quality being an important factor in businesses location and investment decisions, especially in high-tech research and specialist manufacturing industries.

1.65 Opportunities exist within the Borough where settlements can be seen together in the landscape. Poor decisions that might appear logical in plan form can have far reaching visual implications. Topography and lines of sight are vital considerations if the `appearance' and perception of coalescence are to be avoided which would be just as harmful if settlements were physically joined.

1.66 The rural character of the Borough is apparent from its key arterial routes, the A590 and the A595. Views from these routes are of great importance in terms of how the Borough is seen by visitors. Any apparent loss of separation between the A590 and its two key towns in particular, even on a small scale, could have a significant urbanising effect `blurring' the distinction between Barrow and Dalton to the detriment of both settlements.

1.67 A distinct identity is also important to people living in one part of a town as opposed to another. Open green space within and around the built up area will play an important part in making sure that development areas remain distinct and legible from one another.

1.68 In densely built up areas it is very often the landscape areas that makes a place memorable and easy to move around and therefore important to protect. The limited availability of open space within the inner urban areas makes providing new open green space a priority where suitable redevelopment opportunities can be identified.

1.69 The purpose of the Action Plan which forms Part Three of the Green Infrastructure Strategy is to create a project partner focus by identifying sites that have the potential to contribute to the provision of attractive green spaces within the urban area.

Guiding the form of development

1.70 Guiding the form of development works at two distinct levels. Firstly, at the broader planning policy level in directing development to the most sustainable and least sensitive locations and secondly, in making sure that individual proposals do not undermine the character and accessibility of open green space assets either on or surrounding a site.

1.71 The Green Infrastructure classifications described in Part Two show a suggested Green Infrastructure Framework for the Borough based on open space, topography and proximity to existing landscape features.

1.72 Development proposals should demonstrate that the site can be arranged as part of a coherent Green Infrastructure layout. The design guidance set out in Part Four of the Strategy provides guidance on characterisation to help ensure that the form of development connects naturally within its surroundings.

Protecting the Historic Environment

1.73 The visibility and integrity of the historic environment is a strong influence on people's attitudes and feelings towards a place. The Grade I Listed Furness Abbey Scheduled Ancient Monument is a good example of how important open green space can be in providing the physical, visual and `experiential' setting as well as the physical remains themselves. The protection of the Abbey and its environs is essential to maintaining the Borough's most historic landscape and established biodiversity which runs as a central spine with its Valley landscape linking with that of both Mill and Poaka Beck.

1.74 The presumption will be to protect all open green spaces that form or contribute to the curtilage setting of any Listed Building, or Conservation Area. Proposals seeking to enhance such spaces will need to ensure that the integrity of any relic features can be maintained intact visually as well as physically such that the experience and associations with place are not undermined. The role and character of the Borough's formal natural and historic assets is explored further in the Natural Environment and Heritage and the Built Environment Chapters of the Barrow Borough Local Plan.

1.75 The Borough's wider landscape is itself of historic interest not least due to the activity of former traditional heavy industries and military installations. Proposals will need to ensure that archaeological finds are protected and recorded in accordance with an appropriate method statement. In terms of the effect of former uses on the landscape every effort will need to be made to ensure that they are recorded and incorporated sensitively into a landscaping scheme or otherwise protected.

1.76 Heritage assets are a culturally important source of tourism visits as well as a means of educating the local community, especially children, about their local area. Well managed Green Infrastructure provides a practical opportunity to promote and enhance the protection and enjoyment of the historic environment for all.

1.77 The integration of heritage assets within areas of Green Infrastructure provides an opportunity to capitalise on public

interest in the historic environment through the use of interpretation and promotion to also raise the profile of the developing network of routes as a positive feature of the Borough in its own right.

1.78 Projects aimed at developing interpretation schemes that coincide with proposals to improve or enhance sustainable access around the Borough will be supported.

Protected Trees

1.79 A further area of conservation interest relevant to the Green Infrastructure Strategy is trees subject to Tree Preservation Orders (TPOs). By far the largest proportion of protected trees is found in the countryside as part of large groups with small groups and specimen trees in the towns. The TPO procedure is complementary to the purposes of Green Infrastructure in seeking to protect the contribution of the best examples that are at particular risk.

Recreational Opportunities

1.80 Recreation takes many forms both formal and informal involving both individuals and groups. The Strategy focuses on the contribution of children's play areas, playing fields and pitches only in terms of where their physical characteristics and visual amenity contribute to the Green Infrastructure Framework rather than whether the level of provision for the intended use is adequate. The Strategy is concerned that where new provision is required sufficient space exists within the layout to ensure that any facilities can be adequately landscaped and configured so that they function properly and connect wherever possible to landscape beyond its boundaries.

1.81 The Action Plan in Part Three identifies a number of potential Green Space and Green Route projects, including proposals relating to the enhancement and accessibility of playing fields and pitches.

Health, Development & Well-Being

1.82 The value of open green space is well established as having both physical and psychological benefits. Having the space to relax and unwind in an open space is an important antidote to the stresses of modern day living. In a society where close proximity to others is commonplace the ability to find relative isolation and tranquillity to reflect is important.

1.83 To be effective areas of Green Infrastructure need to be close enough so that the benefits can be readily accessed and that routes to and from are in good condition. If either of these factors is missing then the benefits will be undermined.

1.84 It is important that designers consider layout design from the point of view of the people living within it. Careful consideration will need to be given to striking a balance between the way space is to be used and seen by different groups so that the potential for positive outcomes are maximised and negative experiences avoided.

1.85 Both active and passive forms of recreational provision need to be taken into account in designs with opportunities for quiet as well as more active pursuits. The proposed use of space for one activity must not be at the expense of another.

1.86 Green Infrastructure can be used as the focus for fostering interaction, ownership and has the potential to inspire individuals and groups to champion community-led environmental projects.

Sustainable Access

1.87 Barrow is a town that enjoys an already significant proportion of sustainable movement with significant numbers of people regularly cycling to and from work on the existing road network. Although the density of the Borough's urban areas makes retrofitting new routes difficult where opportunities can be identified every effort should be made to develop the coverage of the cycle network to improve connections within the Borough and the National Cycle Network.

1.88 Sustainable access is not just concerned with connectivity, but the environmental design quality of the route itself so that it is attractive and accessible by all groups. Routes forming part of the Green Infrastructure Framework will be expected to meet the requirements of the Disability Discrimination Act (DDA, 1995), ensuring that the specification, materiality and configuration meets the needs of all users.

Grey Infrastructure

1.89 Utilities that serve development have not always been well planned for or designed resulting in poor relationships between buildings, roads and landscaping. The Strategy highlights the requirement to ensure that `grey' infrastructure is designed in a way that follows the building layout avoiding the potential to be an `eyesore' or so independently designed that it dictates the layout and appearance of an otherwise acceptable development site.

1.90 The Council's Infrastructure Delivery Plan (IDP) is aimed at identifying the demands associated with development so that they can be factored in early in the planning and design process including what is required to make them an unobtrusive part of the layout. The costs associated with incorporating services sensitively into the site will need to be factored into land value assumptions.

1.91 Where possible shared service strips should be used to minimise disruption to access and also the highway surface.

1.92 Above ground structures will need to be designed so that they are well screened whilst ensuring that suitable access and natural surveillance can be achieved. This also applies to any access routes to the facility which should be as unobtrusive as possible utilising soft landscaped as opposed to engineered surfaces wherever possible.

1.93 Drainage designs will also need to be based on existing site patterns and storage features, such as swales, located where water already collects without heavily engineered solutions elsewhere. Designs will need to build in additional capacity to accommodate extreme events in a way that is unobtrusive landscaping when not in use.

1.94 The heavy clay character of the Borough's soils will inevitably mean that some drainage schemes will need an engineered component below ground. The challenge for the designer will be to make such installations appear natural and

include features that support biodiversity and not provide a hindrance or at worst a hazard.

Highways & Drainage

1.95 The 2017 Cumbria Development Design Guide encourages highway design which 'creates an environment that is safe for all road users and in which people are encouraged to walk, cycle and use public transport and feel safe in doing so'. Residential development layouts should recognise that roads have a wider role to play in creating a sense of place and community rather than simply having a functional transport role.

1.96 Traditional highway design is often uncompromising in its appearance. Every effort is needed to reduce the amount of space and definition needed for the hard surfacing of kerbed footways, turning heads and parking areas to avoid a development dominated by the requirements of vehicles even when none are present.

1.97 A general principle that the Council expects to see routinely applied is the provision of adequate space around buildings such that that sufficient space exists to allow parking behind the front building line unless innovate or alternative designs can demonstrate a suitable alternative that avoids subsequent pressure to lose front gardens to parking and to allow residential streets to become greener places.

1.98 The focus for highway design needs to be increasingly based on managing the space from an environmental design perspective. The Council will be very keen to support schemes where highway infrastructure is fully integrated using the minimum required solution.

1.99 Adopting this approach is also valid when considering a sites drainage requirements. Recent flooding events have demonstrated the need for layouts to respond to topography in such a way that provides enough capacity within the site to attenuate water such that it does not become a problem elsewhere.

1.100 Watercourses are often associated with Green Infrastructure assets and are mutually dependant. Equal attention to detail must be given to the way water is managed on development sites such that it is a natural part of landscaping proposals and not an arbitrary engineered solution. Further detailed advice on the integration of drainage requirements is set out in Part 4 of this SPD.

Ecology & Biodiversity

1.101 The sections above set out how the Strategy intends to manage the impact of development on the landscape, settlement patterns and the people that live in them. Of equal, if not greater importance is the priority the Strategy also places on the Boroughs ecology and biodiversity.

1.102 Nationally wildlife is under threat from the direct and indirect interventions of man with respect to reducing and increasingly fragmented habitat as well as from global changes in climate altering migration and the availability of forage and shelter.

1.103 The Council considers that every effort needs to be made to address these concerns at a local level raising the profile of ecology and biodiversity including their value in commercial terms. Even the smallest enhancement can have positive far reaching effects. The removal or addition of a modest stretch of hedgerow that may not appear significant individually may be a crucial link within the wider movement of wildlife.

1.104 Development has significant potential to disrupt and displace existing ecology during construction, the enclosures that go with development and its occupation by humans and their pets A key component of the Strategy is therefore to ensure that networks of existing hedgerows, treed areas and water features are automatically valued as Green Links and are kept, as far as reasonably possible intact with sufficient space around them protected so that they can continue to be accessed largely undisturbed.

1.105 It follows that new high quality landscaping needs to allow for and inter-connect with the existing Green Infrastructure network. Where there is limited existing Green Infrastructure the scheme should enhance the current provision so that it might subsequently connect better in the future following further development. Protected road accesses need to be complemented by protected wildlife access. Developments that demonstrate an integrated landscape scheme that allows species to co-exist and move around unencumbered will be supported.

1.106 The Council's previous Wildlife Corridors Policy unintentionally created a weak `two-tier' approach to ecology and biodiversity with the rest of the Borough outside the designated areas seeming less important in comparison. The Green Infrastructure Strategy and the Local Plan Policies now propose to create a `hierarchy' from the strategic Borough-wide context described in the Natural Environment Chapter to the detailed advice contained in the Green Infrastructure Chapter of the Barrow Borough Local Plan supplemented by the advice and design guidance set out in this Strategy.

1.107 The Green Infrastructure Strategy is a positive attempt to make biodiversity a part of people's everyday lives whilst allowing it its own place to exist and flourish undisturbed. The Council has also produced a Biodiversity and Development SPD which will sit alongside this SPD.

Open Green Space Provision

1.108 Other Council Strategies have and will continue to focus on the precise level of provision needed for informal and formal recreational open space. The Green Infrastructure Strategy is only concerned with the ability to access such opportunities within and beyond the Borough.

1.109 Natural England's Accessible Natural Greenspace Standard (ANGSt) criteria set out in its `Nature Nearby' document a simple proximity test to help identify communities that have deficiencies in terms of access to open green space. The Council and developers will be expected to consider the standard in developing its strategies for provision.

1.110 ANGSt recommends that everyone, wherever they live, should have an accessible natural greenspace:

☐of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home;

☐at least one accessible 20 hectare site within two kilometres of home;

☐one accessible 100 hectare site within five kilometres of home; and

☐one accessible 500 hectare site within ten kilometres of home; plus

☐a minimum of one hectare of statutory Local Nature Reserve per thousand head of population.

1.111 The standard is based on improving access, improving `naturalness' and improving connectivity. Natural England's flexibility in assessing what can be determined as `natural greenspace' means that whilst the Borough's settlements in spite of their dense urban character in places do in large part meet the standard.

1.112 Where the Borough does fall short is in the provision of smaller open green spaces below the Angst standard within the inner wards which have very limited access to any kind of green space. It is hoped that the Strategy will to encourage the identification of suitable spaces to be championed by community groups in conjunction with other delivery and funding partners. Natural England's position is that it:

"…wants all people in England to have the opportunity to be inspired by the natural environment through outdoor activity, and especially to reach those who do not currently see it as relevant to their lives..."(p.10)

1.113 The Council's previous Playing Fields and Pitches Strategy (2003) decided to `disaggregate' pitch sport requirements from a more general open space strategy to allow it to focus specifically on meeting sporting requirements in response to local demand.

1.114 Detailed proposals for outdoor sporting uses will be subject to the same design guidance set out in Part Four of this Strategy to ensure that the more intensively managed open green space areas are complemented by landscaped boundaries that will contribute to improved appearance and biodiversity value.

The Woodland Trust Access Standards

1.115 As previously stated the Woodland Trust has identified a requirement for 70 hectares of woodland to be identified for planting. The Borough is a coastal environment with very little dense tree cover apart from those areas protected by the Mill Beck and Poaka Beck valleys and other minor inland watercourses.

1.116 The exposure and climate, combined with the evolution of farming practices mean that the Borough is not heavily characterised by woodland. Introducing large tranches of woodland as proposed would run counter to the existing valued character of the Borough unless coming forward on one of the Council's Opportunity Sites identified in the emerging Local Plan.

1.117 The contribution of woodland planting is acknowledged in helping to offset the `urban heat island' effect, providing carbon storage and shade within residential environments for cooling. It is considered that the inclusion of small groups of trees as the feature of schemes as well as in green links between back to back rear gardens represents the most practical way of increasing tree cover.

1.118 The Woodland Trust `standard' is based on a similar principle of size and proximity as Natural England's ANGSt standard:

- **No person should live more than 500 metres from at least one area of accessible woodland of no less than 2 hectares in size.**

- **There should also be at least one area of accessible woodland of no less than 20 hectares within 4 kilometres (8 kilometre round-trip) of people's homes.**

1.119 Sowerby Woods at 34 Hectares meets a large part of the Borough's requirement without it none of the Borough would. Even if large areas of woodland were planted around the edge of all of the settlements the 4 kilometre standard for a 20 hectare site will be difficult to deliver. The key issue that this also highlights is the value of and contribution made by the woodland that does exist within the Borough and the need to protect it for future generations.

Scope of the Strategy

1.120 The Strategy first acknowledges the contribution made by all open green spaces towards the Green Infrastructure framework. This is especially true of the broad context provided by the Borough's open countryside and the significant area taken up by private gardens representing both ends of the green infrastructure `spectrum' in terms of scale and sensitivity.

1.121 Whilst the cumulative effect represented by these areas is significant they also represent the areas least subject to development pressure.

1.122 The Green Infrastructure Strategy as a result focuses intentionally on those sites within and adjacent to the built up area that characterise the `settlement edge' or `urban fringe' where the pressure for development is greatest; where the effects on settlement and landscape character will be most significant and where the additional benefits of Green Infrastructure will be most effective. The scope of the strategy is therefore focused on the settlement edges of Barrow, Dalton, Askam & Ireleth, and the villages of Lindal and Newton.

1.123 The Green Infrastructure Strategy developed from a review of the Council's previous Green Wedge Policy D4 and in light of the requirement to ensure that a 5 year housing supply is maintained.

1.124 Green Infrastructure considerations apply across the design scales from the largest to the smallest. The Local Plan housing sites scoped by the Strategy (Appendix B) have been subject to a desk top review using the Council's GIS system recording the physical characteristics, constraints and opportunities presented by each.

1.125 A list of the criteria used in the site evaluation template is set out at the end of this section. The template is based on The Landscape Institute's Guidelines for Landscape and Visual Impact Assessment to provide an objective picture of sites and their surroundings in terms of their potential to accommodate various forms of development taking into account form and scale, topography and where the site and any proposed development can be seen from.

1.126 Successful design and development rely on design awareness and an ability to translate design objectives into reality. The design guidance in Part Four of this Strategy provides a range of practical criteria and ideas that will assist design teams in developing creative proposals.

1.127 The consistent use of the Strategy by the Council is vital in making sure that Green Infrastructure objectives are applied across all development sites so that the framework avoids breaks in connectivity.

1.128 The ultimate goal of the Strategy is the receipt and delivery of schemes that combine physical and visual elements in a way that result in a high quality designed development.

1.129 Proposals will be visible from a variety of places, routes and directions and will be subject to a variety of site and weather conditions that will make them more or less visible throughout the year all which needs to be taken into account.

1.130 Development schemes can often overlook landscaping and setting issues as being of little or no importance, or even a hindrance based on the idea that best values will only be achieved by the highest density of development.
1.131 The Council considers that adopting this SPD and emerging Plan Policies represent an essential `step change' in delivering high environmental quality in the Borough.

A Qualitative Approach

1.132 Quantitative studies may be useful in identifying the statistical deficiencies in terms of access to open green space but resolving them will depend on a qualitative approach that looks realistically at what can be achieved and where.

1.133 Deficiencies in terms of provision of open space and green infrastructure are very often not close to those locations most able to provide the opportunities. It is therefore important to identify and enhance connections between deficient areas and areas of new provision.

1.134 It will also be important to assess the function of existing open spaces to make sure that best use is being made of them. Investing in a more qualitative approach offers a more practical, specific and ultimately cost-effective way of improving access to high quality open green space over time.

1.135 A performance criteria approach has been adopted in this Strategy to allow designers the maximum flexibility in responding to site context. Performance criteria focus on the achievement of an objective, not stipulating how it is to be achieved.

Existing Assets - What to include as green infrastructure

1.136 Green Infrastructure in its broadest sense comprises any undeveloped land. Green Infrastructure assets include the following:

- Amenity space
- Allotments
- Cemeteries
- Children's play space
- Country parks
- Formal sports facilities
- Habitats for wildlife including nature reserves, Sites of Special Scientific Interest and
- Wildlife corridors
- Historic parks and gardens and historic landscapes
- Public Rights of Way and cycle ways
- Scheduled Ancient Monuments
- Urban parks and formal gardens
- Watercourse and water bodies
- Woodland

1.137 There are two notable exclusions to the list of open green space assets for the purposes of the Green Infrastructure Strategy. These are private gardens and the open countryside.

Private Gardens

1.138 Private gardens make a significant contribution to Green Infrastructure in terms of area they cover in the Borough, approximately 4.25 km^2, and the opportunities that they afford to wildlife and in helping to reduce the `Heat Island' effect. Private gardens are collectively one of the least vulnerable forms of open green space to development in terms of both area and visual impact. The Barrow Borough Local Plan contains a policy guiding the development of residential gardens to ensure that change is only allowed where the prevailing character of the surrounding area and site frontage would not be compromised.

Countryside

1.139 Out of the 77.78 km^2 that represents the Borough, 43.76 km^2 represents land outside the built up area. Only landscape that contributes to the character of the settlement edge and under pressure from development is considered by the Strategy as the majority of the Borough's countryside will remain in its present `countryside' use and condition with only minor variations due to agricultural requirements. The broader countryside context for the Green Infrastructure Strategy is provided by the Natural Environment Chapter of the Local Plan which identifies the Borough's statutorily designated sites and general landscape character.

1.140 Whilst all undeveloped areas contribute to Green Infrastructure it is essential that the Strategy focuses on the areas most liable to development pressure as their location, prominence and scale would be most likely to have a

detrimental impact on the important environmental, social and economic characteristics of the Borough if located, designed and developed in an unmanaged and insensitive way.

Evaluation Criteria

1.141 The following criteria were used to assess the housing sites in Appendix B and should be used for future development sites to establish how green infrastructure can be accommodated and any areas which will need to be protected along with any mitigation requirements.

- **Landscape Character Type by Area** – It is important to describe a site accurately. It will be rare for a site to be described as having one uniform character across the entire site. By identifying the particular characteristics of a site's sub-character areas it becomes possible to begin to inform the design process in terms of how those different areas might contribute to an appropriate landscaped setting and framework for development and its associated infrastructure whilst maintaining a sense of openness.

- **Historic Landscape Character** – Any evidence of relict use will be identified as the basis for identifying sub-character areas.

- **Cultural Character** – The way a site contributes to an individual or shared experience of place is an important consideration in establishing the relevance and contribution of a site in forming valued associations for different people and communities.

- **Ecological Character** – The way the landscape features support ecology will be a key factor in assessing the potential for development and whether supporting landscaping would be able to compensate for the net loss of openness and the closer proximity and effect of human habitation on wildlife in particular.

- **Flood & Surface Water** – Based on desk top mapping the way water performs on and around the existing site will suggest the location and design arrangement for attenuation features.

- **Landscape Designations** – Establishing whether any specific formal designations need to be taken into account.

- **Planning History** – Details and outcomes of previous planning applications are reviewed in the interests of proper planning.

- **Evaluation Location, Date and Time** – A record of the survey viewpoints that a site was assessed from.

- **Type of View** – An important consideration in terms of the proportion of the view that the site occupies visually, whether the view is a static one, for example from a primary window in a residential dwelling or whether it is a dynamic view achievable on passing the site. The position of the site relative to the viewpoint is also considered in terms of whether it is direct or only achieved obliquely. How long the view is available for is also considered.

- **Land Use** – The current use of a site will suggests its vulnerability to change

- **Adjacent Land Uses** – Helps to characterise the site in its wider landscape/townscape context.

- **Topography** – Describing the shape and form of the site will help in suggest the deliverability of a site.

- **Aspect & Landscape Features** – A site's landscape composition is important in contributing to valued character and sensitivity to change. Qualities of openness, tranquillity, spatial variation, complexity and scale are all relevant considerations in making value judgements about place.

- **Existing Visual Separation** – The way a site contributes to or avoids the physical or visual coalescence of settlements or other development areas within settlements.

- **Green Lung Contribution** – Does the site contribute to ease of visual or physical access to open space for the local community?

- **Extent of Existing Built Form** – Understanding the emphasis and contribution of built form will help to determine the extent and potential arrangement of development that might be acceptable in principle as well as the need to take into account Listed or other important buildings and their settings within the landscape and scheme design.

- **Provision of Public Open Space** – Identifying any areas of existing formal open space will inform layout and access arrangements issues for any design.

- **Recreational Opportunities and Extent** – Is the site used for any recreational purposes private or public.

- **Type and Level of Use of Public Access** – Does the site have any existing access through the site.

- **Ease and Condition of Public Access** – How viable is the public accessibility that exists on site

- **Defensible Boundaries** – Does the site have formal or informal defensible boundaries with other sites or developments?

- **Impact of Further Built Form – Landscape Character Effect (Sensitivity & Magnitude)** – What would be the effect of further development on the actual character of the site and that of the surrounding landscape

- **Impact of Further Built Form – Visual Effect (Sensitivity & Magnitude)** – What would be the effect of any further development on the way in which the site would be seen within the wider landscape

- **Impact of further Built Form – Cumulative Effect (Sensitivity & magnitude)** – What would be the impact of development on the way other development areas would be seen.

- **Mitigation Opportunities** – Are there any required actions to make a development acceptable and/or to reduce the overall visual effect of development or any particular element of a site

Using Part Two

Allocated Sites

In addition to the strategic areas of Green Infrastructure identified in the Local Plan Proposals Map each of the Allocated Sites will need to take into account the site specific Green Infrastructure principles and advice set out in this Strategy. This is to ensure that layout designs are well-informed from the outset in such a way that would be consistent with the Strategy and as a result capable of being wholeheartedly supported by the Council. Allocations subject to a Development Brief will need to respond to the site specific Green Infrastructure Frameworks set out in those SPD documents.

Unallocated Sites

Whilst the focus of the Green Infrastructure Strategy is on managing change at the settlement edge the approach to site appraisal and design will be just the same on smaller but more numerous `windfall sites' which are just as important in contributing to building the environmental asset.

Opportunity Sites

The Council has a number of exciting opportunity sites and sees Green Infrastructure as being a `unique selling proposition' in developing concepts for their development; adding value in such a way that makes the Borough an even more attractive and involving place to live, work, invest and enjoy leisure. Green Infrastructure being at the heart of making Barrow's better future a reality.

It must be remembered that the site Green Infrastructure designations are not a `Blueprint'. They represent a coherent approach that reflects a study of the site such that a proposal that comes forward in accordance with it will be more likely to be supported. Where alternative configurations are proposed they will need to demonstrate that they are capable of meeting the objectives of Green Infrastructure policies and the advice and guidance contained in the Strategy.

NOTE: Due to the limitations of printing reference should be made to the Council's Web mapping site for greater detail.

Green Infrastructure Types

Part Two

Introduction

2.1 This Chapter describes the approach to classifying Green Infrastructure types and identifies the strategic and site specific designations that have been made to ensure that the Borough-wide Green Infrastructure Framework can be maintained and enhanced. The Green Infrastructure Strategy Classification types are set out in more detail as follows:

- Green Wedges
- Green Spaces
- Green Corridors
- Green Routes
- Green Links

2.2 It is important to note that just because an area of open green space is not currently identified within a classification type does not mean that it does not have value as Green Infrastructure and as such needs to be subject to the same general objectives and considerations as set out in the Strategy.

Green Wedges

2.3 Avoiding the coalescence of settlements remains a cornerstone of planning. As Barrow and Dalton have grown development has continued to move physically and visually closer towards the `Drumlin' hilltop skyline that lies between them. If left unmanaged, the same approach to development would compromise this important landscape character that the surrounding hills contribute in providing the setting and identity for the Borough's two largest settlements within the wider landscape.

2.4 Any potential `blurring' of the distinction between the two key settlements is a significant concern. For harm to occur does not require towns to be physically connected, just for development to be positioned within views such that a `line of sight' to the landscape beyond is restricted or obscured.

2.6 In reviewing the currently designated Green Wedges and in identifying new ones the Council has sought to ensure that the identities of the key settlements and key development areas remain intact and buffered from the strategic A590 highway route so that the Borough's prevailing rural character can be maintained.

2.7 Green Wedges are about protecting important areas of open landscape. This does not mean that development cannot happen, just that what is proposed must accord with the Green Wedge purposes including avoiding coalescence, guiding development to the right places and in maintaining access to open space as `green lungs' and for recreation.

2.8 The following Green Wedges comprise those carried over from the previous saved Local Plan, including those that have been modified, and new ones that have been identified as being important in mitigating the effect of development on the landscape as a result of sites that have come forward through the Local Plan process.

Green Wedges

Green Wedge Key

Green Wedges

Barrow-in-Furness

Walney

2.9 The Walney Green Wedge is key in providing protection for the `green spine' that runs up the centre of Walney Island separating the urban form on the eastern and western sides.

2.10 The Green Wedge is characterised by dynamic medium distance views gained from the road and footpath network and from static views gained from properties in the surrounding development areas.

2.11 Its land use is a mix of open fields in horsiculture and agricultural use with associated ancillary structures, surrounded by mature hedgerow and pockets of scrub woodland with areas of allotments connecting through the valley landscape to the south connecting the footpath network with the formal civic environment of Vickerstown Park.

2.12 The Green Wedge is well defined on either side by the edges of the built up areas. Much of the Green Wedge is located on undulating land and well vegetated with scrub providing a natural horizon and rural setting for the urban communities of North Walney, North Scale and Vickerstown

2.13 The following modifications have been made to facilitate a number of development opportunities and consolidate the character of the Green Wedge:

- Amendment to the edge to the Green Wedge as it abuts Solway Drive to a discernible boundary for two parcels of land identified as proposed housing allocations;

- The former garden centre site has been identified as having the potential for development subject to a robust Green Infrastructure approach to landscaping the boundaries of the site in helping to improve the definition of the Green Wedge and to improve and alleviate the current poor condition of what is a prominent site.

- The site adjacent to the junction of Trent Vale and Mill Lane has been identified in conjunction with an area of land to the north of the existing athletics track and cleared site of former public house, along part of the frontage of Mill Lane, as having potential for development. Development would provide the means to enhance to the coverage and quality of the local footpath network, especially the connection across Mill Lane, improving accessibility for local communities.

- Vickerstown Primary School has been taken out of the Green Wedge due to the heavily urbanised nature of the site's design.

- The Green Wedge at the George Hastwell School has been reviewed to include an area of open space previously omitted.

2.14 The images below characterise the Walney Green Wedge:

1 – Attractive parkland

2 – Defined access

3 – Scrub woodland

4 – Isolated facilities

5 – Key route

6 – Wild openness

7 - Horsiculture

8 – Rural Character

9 – Undulating landscape

Ormsgill

2.15 Ormsgill Green Wedge is almost entirely surrounded by existing development areas. The Wedge forms a substantial green lung that provides a significant 'edge of settlement' character to the housing areas either side.

2.16 The Green Wedge occupies the base, slope and top of a ridge visible from the Park Road Strategic Route affording high quality views from the Wedge outwards across the Duddon Estuary.

2.17 The Green Wedge is characterised by open fields in pasture to the north with areas of woodland and formal amenity in centre and larger open areas supporting formal playing fields to the south and east. Short and medium dynamic views into the Green Wedge are available from the surrounding road and footpath network with long static views achievable from adjacent properties.

2.18 The mature woodland and hedgerow elements serve to enclose the Wedge's land uses creating a robust series of sub-character areas.

2.19 The following modifications have been made to facilitate a number of development opportunities and consolidate the character of the Green Wedge:

- Land to the East of Netherby Drive has been identified as having the potential for development subject to maintaining an appropriate landscape buffer with existing development and the maintenance of its landscape frontage with Ormsgill Lane.

2.20 The images below characterise the Ormsgill Green Wedge

1 – Open hillside

2 – Wide coastline

3 – Enclosed Allotments

4 – Semi rural

5 – Hedgerows

6 – Edge Character

7 – Formal enclosure

Flass Lane

2.21 The Flass Lane Green Wedge is visible predominantly from the east, from the railway line, playing fields, properties to the west of Yarlside Road and from the public footpath at the base of Mill Beck valley leading towards Furness Abbey. The Wedge is characterised by sloping hillside used for grazing with views of sporadic building and tree groups to the ridge to the west.

2.22 A smaller distinct area to the south of the main area is formed by an un-developable steep slope between housing areas within the Piel View Grove area affording wide views of the landscape horizon to the east of the town.

2.23 Land to the centre and northern part of the Green Wedge provides setting for the Furness Abbey Grade I Listed Ancient Scheduled Monument, the most northern part forming part of the Furness Abbey Conservation Area.

2.24 The following modifications have been made to facilitate a number of development opportunities and consolidate the character of the Green Wedge:

- Former Lister's Land between the Mill Beck watercourse and the western side of the railway line is identified for removal from the Green Wedge as the poor quality `Brownfield' site forms a logical extension to the development area to the south.

- Land to the east of Meadowlands Avenue has been identified as having some potential for development

subject to incorporating open views from key open spaces.

- It is proposed that the Green Wedge is extended northwards up to Rating Lane to reflect the sensitivity of the historic landscape and experiential setting of Furness Abbey.

2.25 Images characterising the Flass Lane Green Wedge:

1 – Green horizon

2 – Enclosure

3 – Water meadow

4 – Allotment edge

5 - Smallholding

6 - Meadowlands

7 – Valley side

8 – Rating lane

9 – Abbey setting

Roosegate & Leece Lane

2.26 The Roosegate & Leece Lane Green Wedges provide important landscape setting and openness to the `gateway' entry to Barrow from the south contributing to the transition from rural to urban including glimpses of countryside views to the east of the town.

2.27 The Roosegate Green Wedge is characterised by a prominent hillside that, along with its woodland, makes a distinctive focal contribution within the local streetscene defining the key junction between Rampside and Roose Roads. The land is in private ownership and currently used as allotments and for private horsiculture.

2.28 The Leece Lane Green Wedge is characterised by a well-defined linear tree planted verge with land used as pasture, sports pitches and for horsiculture behind bounded to the south by elevated allotments behind properties on North Row

2.29 The following modifications are being proposed to facilitate and mitigate potential development opportunities and to further consolidate the character of the Green Wedge at this key arrival route into Barrow:

- It is proposed that the Roosegate Green Wedge is extended in a south westerly direction to protect the existing mature wooded landscape and in providing a setting for the potential re-development of the Salthouse Mills area.

2.30 The images below characterise the Roosegate & Leece Lane Green Wedge as modified:

1- Landscaped junction

2 – Green horizon

3 – Green horizon

4 - Gateway

5 – Untidy edge

6 – Linear verge

7 - Horsiculture

8 – Settlement edge

9 – Restricted access

Dungeon Lane

2.31 The Dungeon Lane Green Wedge provides important context for the landscaped setting of Barrow as it is approached from the south as the setting changes from a an undulating `Drumlin' landscape and in providing prominent setting and separation between the Roosecote Farm group and the settlement edge.

2.32 The Green Wedge comprises two areas. The smaller of the two is a low lying area to the west comprising allotments adjacent to an area used for pitches providing a landscape buffer between the two areas. The larger site forms the hillside setting for Roosecote Farm as it extends eastwards along Dungeon Lane with both parts defined to the west by Rampside Road comprising an extensive `Green Horizon to the south that would be compromised if developed.

2.33 To the east the larger Green Wedge area provides the setting for entering Barrow along Hard Knotts Lane. The proposed extent of the Green Wedge will be important in making sure that the first views of Barrow are landscape dominated and that the junction to Stank village remains as a distinct component of the rural landscape and not absorbed into the built up area of Barrow should this site and the adjacent one at Holbeck Avenue come forward unmanaged.

2.34 The larger area of Green Wedge is characterised by undulating topography to the west which softens and lowers as the landform `rolls' to the east. The land is used mainly for grazing and defined by mature linear hedgerows. To the

north the Green Wedge is defined by an area of wet scrub woodland habitat providing setting for adjacent fields.

2.35 The Green Wedge is naturally defined by the extent of the urban area, the undulation of the surrounding landscape and the enclosing relationship of the rural highway network.

2.36 No modifications have been made to the Green Wedge as it is a new designation.

2.37 The following images characterise the Dungeon Lane Green Wedge.

1 – Allotment use

2 – Leisure use

3 – Rural character

4 – Drumlin roll

5 – Wet woodland

6 – Field enclosure

7 – Access track

Park View

2.38 The Park View Green Wedge is important in providing wider setting for Furness Academy and in providing a major green lung and buffer for the Lesh Lane housing area. It supports an informal network of paths used by local people for recreation.

2.39 The Green Wedge is characterised by a grassed linear ridge running north to south that would be unduly prominent and overbearing on existing housing if developed

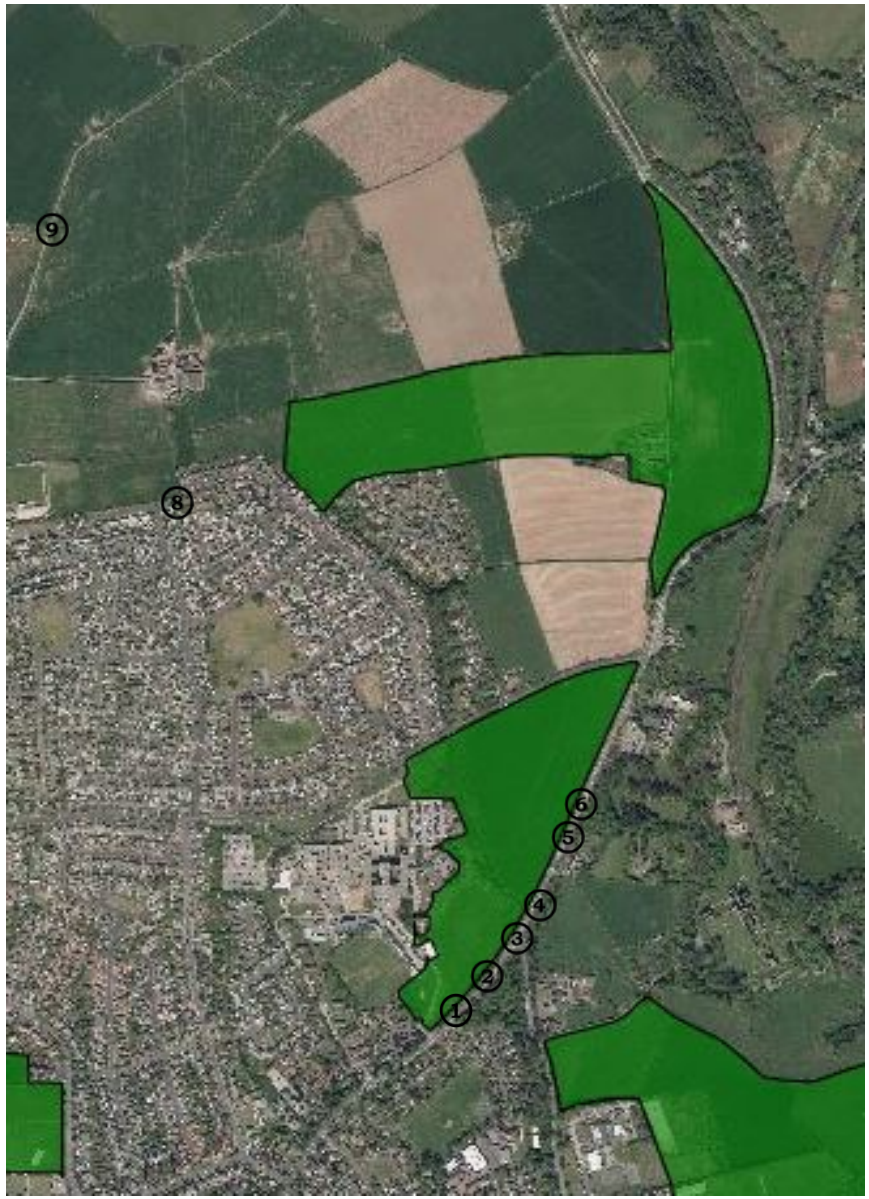
2.40 The Green Wedge is well-defined by existing boundaries to residential properties to the east and by Bridgegate Avenue to the south.

2.41 There are no modifications to the Park View Green Wedge as this is a new designation.

2.42 The images below characterise the Park View Green Wedge.

1 – Landscape backdrop

2 – Green horizon



Rakesmoor & Abbey Road

2.43 The Rakesmoor & Abbey Road Green Wedge is in two parts; the northern part to the west of Barrow Road/Park Road and the southern part bounded by Dalton Lane and Abbey Road.

2.44 This Green Wedge is significant in contributing to the settlement edge character of Barrow; maintaining the physical, visual and perceptible separation with Dalton and defining the streetscene quality of this important route in and out of Barrow. The distinctive visual sequence of hillside forms are visible to the north east of Abbey Road, connecting with distant fell views creating a sense of openness and providing the setting for the Furness General Hospital and the Grade II Listed Abbey House Hotel opposite.

2.45 In addition, the northern part is intended to create a less hard relationship between the countryside and new development approved at Dalton Lane which will form the settlement edge.

2.46 The elevation of the Green Wedge as seen from Abbey Road, Mill Brow and Park Road, contributes to an important `Green Horizon', providing a distinctive character that complements the linear nature of Abbey Road as defined by its mature hedgerows and walls.

2.47 There are no modifications as this is a new designation.

2.48 The images characterise the various parts of the Rakesmoor and Abbey Road Green Wedge.

1- Landscape setting

2 – Visual sequence

3 – Tree lined

4 – Supporting wildlife

5 – Hospital setting

6 – Green horizon

6 – Linear route

8 – Recreation use

9 – Cluster approach

Green Wedge Key

Green Wedge

Dalton-in-Furness

Dalton South West

2.49 The Dalton South West Green Wedge is important in protecting the transitional landscape character and setting of Abbey Road as the main approach into Dalton from Barrow.

2.50 The Green Wedge is characterised by a ridge defined by woodland, hedgerows, sporadic individual dwellings and the edge of development. Much of the land is in civic amenity use and as such is sustainable as a long term open green space.

2.51 The Green Wedge is largely well-defined by walling to the cemetery, by mature woodland and by the highway network.

2.52 The following modifications have been made to facilitate a number of development opportunities and consolidate the character of the Green Wedge:

- An area of the Green Wedge west of Newton Road has been identified as having potential to form a small clustered development set within an agricultural setting and has therefore been removed from the Green Wedge classification. Other Green Infrastructure classifications support the site to frame development as a distinct group that would not undermine the role and character of the remaining Green Wedge.
- An area to the west of Crompton Drive has also been identified. The boundaries of the site have been defined to avoid undue impact on the landscape and built character of along Abbey Road.

2.53 The images characterise Dalton South West Green Wedge:

1 - Distinctive gateway

2 - Openness

3 – Ridge site

4 – Walled site

5 – Agricultural use

6 - Civic use

7 – Urban edge

8 – Wooded edge

9 – Abbey Road

Dalton South East

2.54 The Dalton South East Green Wedge is an important `green lung' in providing a large area of open visual amenity for surrounding housing as well as providing separation between these areas.

2.55 The Green wedge is characterised by its significant slope especially immediately adjacent to Hollygate Road where it appears steepest contributing to a distinctive edge of settlement `green horizon' to the streetscene, a notable open space glimpsed from the A590 bypass.

2.56 The Green Wedge is split between agricultural and educational use restricting access for public recreation.

2.57 The following modifications have been made to facilitate development on a small area previously part of the Green Wedge

- A smaller area of scrubland on Hollygate Road, separated by a mature hedgerow has a separate character to the rest of the open space, with the potential to support a small cluster of development subject to it being of a low rise form and siting to ensure that the aspect of adjacent housing is not unduly affected.

2.58 The following images characterise the Dalton South East Green Wedge.

1- Green horizon

2 – Potential Cluster

3 – Amenity space

Dalton North

2.59 The Dalton North Green Wedge fulfils an important role in maintaining Dalton's position visually as a discrete settlement within the landscape, especially as it is seen from the A590, and in making sure that it remains clearly separate from Barrow.

2.60 The Green Wedge is characterised predominantly by grazing land across the elevated sections of moderately to steeply undulating `Drumlin' landscape that separates Dalton from the bypass. This character is particularly distinctive on entering Dalton along Ulverston Road and from glimpse views south from along the A590, making the fields to the north west of Ulverston Road, and those north of the High Bank area, particularly sensitive to development.

2.61 The Green Wedge comprises mainly grazing uses though the areas where the slope diminishes adjacent to the built up area include allotments, playing fields and school environs.

2.62 The Green Wedge is well-defined by the A590 to the north and by the existing edge of development to the south and east. The environs surrounding Dowdales School drawing open green space into the middle of Dalton.

2.63 The following modifications have been made to facilitate a number of development opportunities and consolidate the character of the Green Wedge:

- The site to the rear of the Our Lady of the Rosary School has been identified as having potential for

development again subject to maintaining as much of the environmental value of the existing succession landscape that has evolved on site over the years in the interests of assimilating development and maintaining habitat. A smaller site to the east has also been identified. Due to the elevation of the site it will be important to minimise storey heights to the southern site boundary.

- A further area for development has been identified to the rear of properties fronting the eastern side of Askam Road. This will be subject to addressing access issues and ensuring that the variation in levels would not compromise the amenity of existing residents.

- The site on the opposite side of Askam Road will be important to the character of the Green Wedge in making sure that the north western `gateway' into Dalton remains semi- rural in character. Submitted schemes will need to ensure that the site reads as a discrete development that maintains separation between the topographic form of the Quarry and the formal settlement edge of Askam Road, Elliscales.

- The defined siting of the Quarry, and its poor condition as a SSSI, creates an opportunity to improve the environmental quality of this important gateway into Dalton subject to proposals demonstrating improvements to its environment, public access and SSSI interpretation.

- The character of the barn conversion group on the other site of Askam Road is considered to provide relevant design cues for a similar `clustered' group.

- The Council may seek the production of a site specific Development Brief to be agreed prior to the submission of a planning application setting out the detailed environmental planning and design criteria to be followed.

- The Green Wedge is characterised by short to medium views of the fields that would remain to the north of the existing boundary wall with the junction of St. Helen's Road and Askam Road.

2.64 The following images characterise the Dalton North Green Wedge as modified.

1- Arcadian edge

2 – Setting

3 – School grounds

4 - Formality

5 - Site

6- Open views

7- Former Mining landscape

8 - Important buffer

9 – Defined site

Greenhills Farm

2.65 The Greenhills Farm Green Wedge responds to the identification of a wider area for development that would have a significant effect on the character of the landscape if not managed. The introduction of the Green Wedge would focus the development on a redevelopment of the existing farm group along with groupings of buildings of varied scales, forms and orientations that would provide more a more `rural' character than a `wholesale' suburban extension

2.66 The Green Wedge is characterised by a moderately steep undulating field used for grazing. The rear boundaries of properties off Stainton and Buttermere Drives define the edge of the site to the west and the north respectively with the local highway providing boundaries to the south and east.

2.67 A proportion of the site is subject to surface water flooding that expands the existing attractive pond this will need to be taken into account in any layout design so that a distinctive, high quality setting can be achieved whilst maintaining access to the entire site. The pond is also provides valuable habitat and foraging for local bird populations as well as providing natural storage for surface water run-off. The design of roads and parking areas will need to be designed to prevent its contamination.

2.68 No modifications have been made as Greenhills Farm as it is a new designation.

2.69 The following images characterise the Greenhills Farm Green Wedge:

1 – Settlement edge

2- Farm group

3- Distant view

4- Site entrance

5- Green horizon

6- Wildlife asset

7- Natural succession

8- Setting

Green Wedge Key

Green Wedge

Askam & Lindal

Lots Road, Askam

2.70 The Lots Road Green Wedge protects a large area of woodland and open green space that provides a buffer between Askam and the A595 and the adjacent railway line.

2.71 The Green Wedge is characterised by its use as setting for Askam Village School and an area of storage and private amenity use. The potential for these areas to be vulnerable to development has resulted in their classification to ensure that this general character is maintained.

2.72 The Green Wedge is well defined by Lots Road to the west and the railway line to the east. The potential for development sites to the west of Lots Road are to be buffered by other Green Infrastructure classifications to ensure that the Green wedge retains is distinct form and scale, set within a degree of surrounding openness and separation.

2.73 There are no modifications as the Lots Road Green Wedge is a new designation.

2.74 The following images characterise the Lots Road Green Wedge.

1- Railway Line

2- Natural succession

2- Mature boundary definition

4- Open views

5- Countryside views

Lindal

2.75 The Lindal Green Wedge has been identified following the identification of the adjacent land to the west as a potential development site.

2.76 The Green Wedge is important in maintaining the character of the surrounding area especially the mature tree-planted frontage to the A590 and the field behind, which is a distinctive feature when driving through Lindal, as well as providing the setting of any development.

2.77 The land is in grazing use and separated from the potential development site to the west by a mature hedgerow to be protected as part of the classification.

2.78 There are no modifications as the Lindal Green Wedge is a new designation.

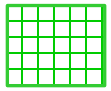
2.79 The following images characterise the Lindal Green Wedge.

1. Road view

2. Green Wedge

Green Spaces

Green Spaces Key



Green Spaces

Green Spaces

2.80 Green Spaces have been introduced as a new classification to highlight the important visual and amenity role played by existing open spaces within the Borough's urban areas. Whilst these spaces do not necessarily contribute individually at a landscape scale they nevertheless make a valuable contribution in terms of townscape character and in providing functional access to open space for informal and formal recreation.

2.81 A large number of the existing Green Spaces identified are playing fields. The scale and functional purpose of playing fields and the high level of maintenance involved in supporting their use mean that whilst they contribute a strong sense of openness with either a tranquil or active character when used. They do however have a low value in terms of biodiversity with the exception of those sites sharing a boundary with another Green Infrastructure asset or open countryside.

2.82 Green Spaces also have an important role in the development of new sites. As a separate classification it means that the location for open amenity space can be provided in viable and focal locations where it will be most used and best contribute to the identity and setting of the development.

2.83 Green Spaces are commonplace urban landscapes that often provide a very important role in people's lives.

2.84 The Action Plan in Part Three highlights a range of potential projects that might come forward, subject to the availability of resources. Details of typical third party funders are also provided. It must be emphasised that funding for such projects must be community-led. The Council in highlighting the opportunities can only provide guidance and advice in helping groups to implement viable and positive schemes that will complement the Council's emerging strategies and existing areas of work that the Council will continue to pursue in seeking to enhance the Borough's open green spaces.

2.85 The design of Green Spaces is discussed in more detail in Part Four of the Strategy. It is vital in designing new Green Spaces that they are designed to prevent negative consequences arising from open space as much as they are about maintaining or creating positive landscapes.

2.86 The Green Spaces currently identified are set out in the following settlement plans and can be seen in more detail via the Council's web mapping.

Green Spaces: Barrow

Green Spaces: Dalton

Green Spaces: Askam

The Villages

Green Spaces: Newton

Green Spaces: Lindal

Green Corridors

Green Corridors Key

Green Corridors

Green Corridors

2.87 Green Corridors are areas within proposed development sites that have been identified as suitable to provide space for a range of multi-functional purposes within an overarching objective of creating high quality landscape settings for new development.

2.88 With the uncertainties of climate change it is essential that all sites make provision for the retention and movement of water during wet periods and the storage of water for when it is dry making sure that adequate space exists to future-proof capacity.

2.89 Green Corridors are also the location for access routes within and through a development. The intention is that routes are designed and arranged and integrated within a landscape hierarchy that is designed to be pedestrian dominated, making sure that it is people and their experiences of place that define spaces, not vehicles.

2.90 Every effort will need to be made to ensure that connections between different sites are achieved to ensure that routes make sustainable connections that people will choose to use for local trips instead of the car.

2.91 The key aspect of Green Corridors is that they are not the `dumping' ground for `Grey Infrastructure', but the opportunity to integrate infrastructure requirements within a comprehensive approach to landscape design. This will be especially relevant where built structures for utilities are needed.

2.92 It is important that developers and landowners are aware of the Council's expectations from the outset and not subject to later negotiation. Green Corridors identified in the Strategy will be a key component in the production of site specific development briefs where they are produced.

Green Corridors: Barrow-in-Furness

Green Corridors: Dalton-in-Furness

Green Routes

Green Routes Key

Green Routes

Green Routes

2.93 In our movement-orientated society places are increasingly characterised, especially by visitors, from the public highway. The perception of a whole town can be based on the appearance of a few key streets. Whether this impression is a good or bad first experience, or indeed last experience, can make a significant difference to a business or worker thinking of investing or settling in the area.

2.94 Green Routes are identified at two key levels, the strategic and the local. The key strategic routes identified are Abbey Road, Park Road and Rawlinson Street in Barrow and are important in making the best first and last impression possible.

2.95 At the `local' level Green Routes are designed to identify routes between existing and new development areas to help promote a legible ease of access around the built up area and to help reduce reliance on the private car especially for short trips as well as promoting healthier lifestyles.

2.96 The Public Right of Way network and other available and proposed routes are also shown highlighting the range of potential trips available within and increasingly beyond the Borough.

2.97 The creation of a project looking at enhancing the quality of the strategic Green Routes is identified in the Action Plan in Part Three.

Green Routes: Barrow-in-Furness

Green Routes: Dalton-in-Furness

Green Routes: Askam-in-Furness

Green Links

Green Links Key

Green Links

Green Links

2.98 Green Links are divided between Strategic and Local Green Links. The Strategic Links comprising Strategic Wildlife Corridors and Local Landscapes are set out in the Natural Environment Chapter of the Local Plan. These designations were brought forward from the previous Local Plan. The local `operational' level of Green Links whilst one of the individually smallest components of Green Infrastructure is along with the Green Wedge classification the most important to develop and protect.

2.99 The Green Link classification is focused on developing and protecting the existing network of mature hedgerows and small woodland groups that characterise and define a significant part of the Borough's natural and built environment, which in turn, support a large proportion of the Borough's wildlife,

2.100 Integrating development in a way that works with nature and not against it is an underlying theme of the entire Green Infrastructure Strategy. Green Links are an effective way of doing this providing instant maturity for a development by making best use of existing features to provide screening and creating sub-character areas that can all help contribute to a valued sense of place that allows people and wildlife to co-exist positively.

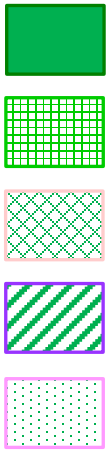
Green Links: Barrow-in-Furness

Green Links: Dalton-in-Furness

Green Links: Askam-in-Furness

Green Infrastructure Framework:

Green Infrastructure Framework Key



Green Wedges

Green Spaces

Green Corridors

Green Routes

Green Links

Putting it all together

The Green Infrastructure Framework: Putting it all together

2.101 A point made in the Green Routes section above highlighted the way perceptions of place can be established on the basis of small amounts of visual information gained from the way we move through the environment.

2.102 The Green Infrastructure Framework is useful in showing just how green the Borough really is even without the countryside and private gardens factored in, but importantly, how little of it can actually be seen from the public realm or highway network.

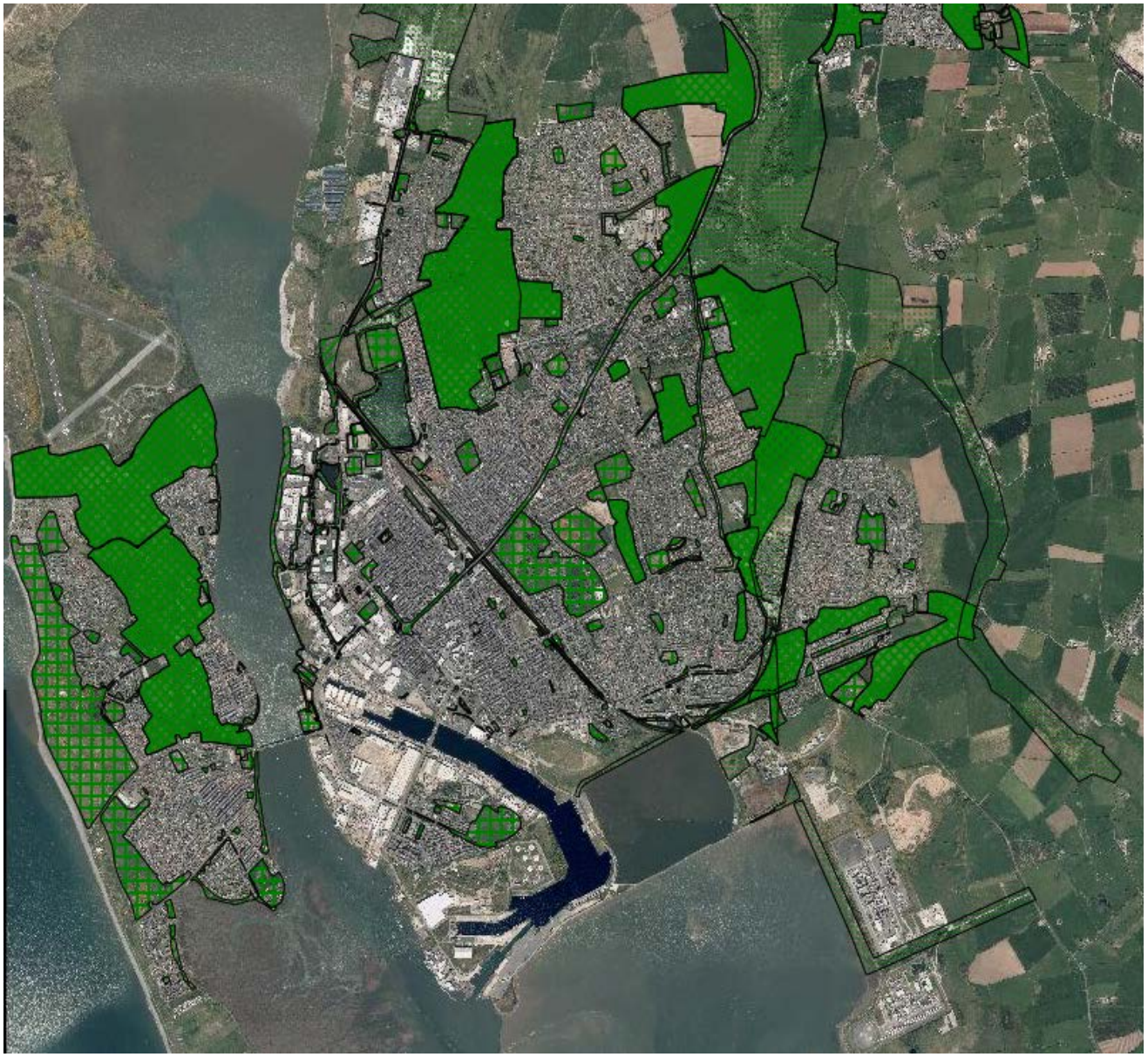
2.103 In developing schemes proposals will need to focus on making sure that all schemes contribute to increasing the length and quality of visible `Green Frontage' wherever possible.

2.104 Awareness of the importance of Green Infrastructure is an important reason for producing this Strategy. All groups with an influence on the appearance of the environment need to take ownership, whether public, private or voluntary, of the Green Infrastructure Strategy's objectives. This will include aligning aims and objectives as well as making sure individual proposals and projects then accord with it. It is also an important way for the public to identify what is important to them promoting active ways to get involved through the Action Plan.

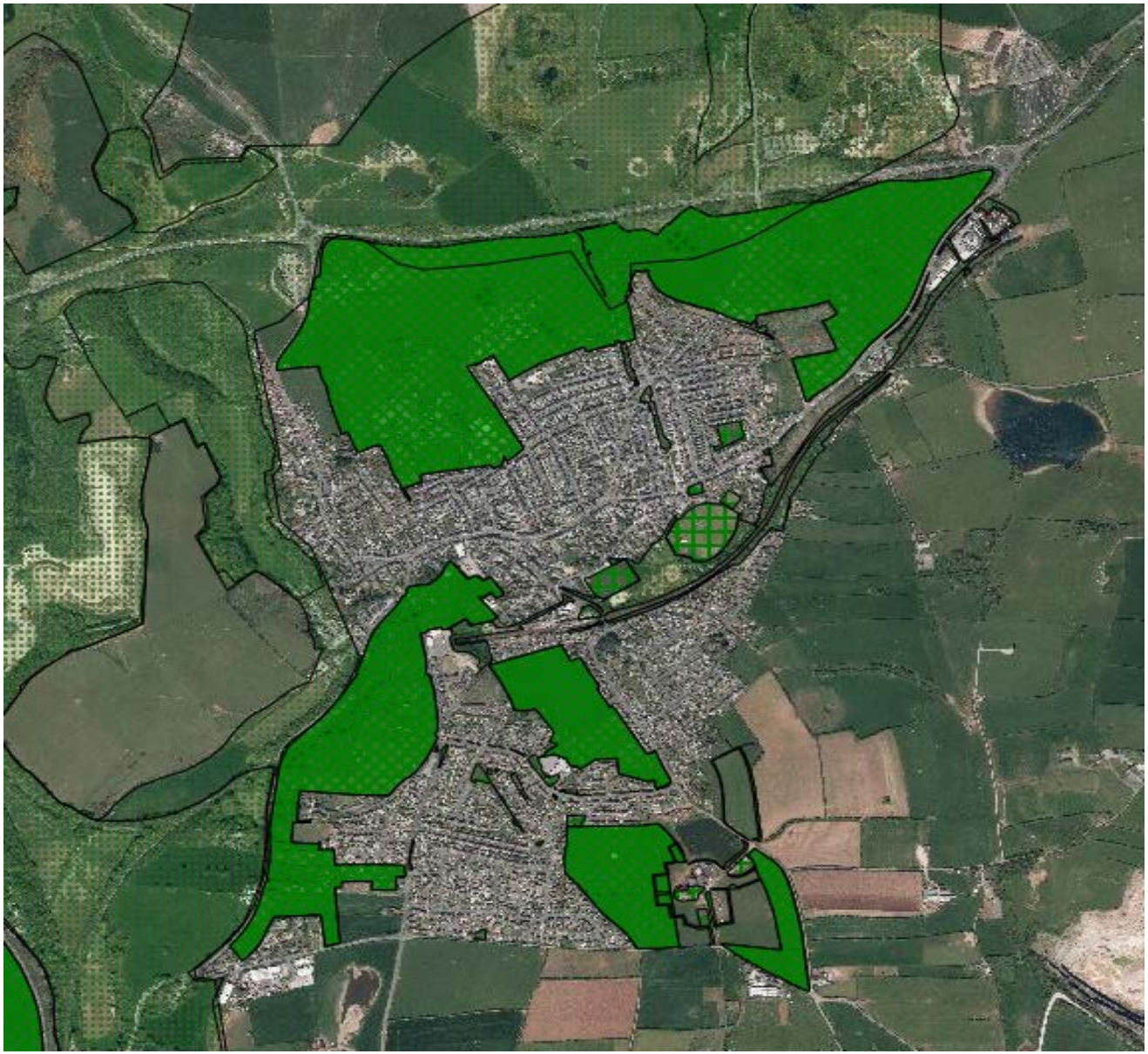
2.105 Together the different classifications of Green Infrastructure combine to form a comprehensive network of Green Infrastructure and the role each classification plays in contributing to the Green Infrastructure Framework for the Borough. Appreciating how significant even small areas can be is vital to the decision-making process if the Green Infrastructure Strategy objectives are to be delivered on. The Green Infrastructure Framework in relation to specific sites is available in more detail at the Council's website;

https://webgis1.barrowbc.gov.uk/webgis/

2.106 Part Three looks in more detail at the ways in which Green Infrastructure can be delivered along with opportunities for how it can be funded.



Green Infrastructure Framework: Barrow



Green Infrastructure Framework: Dalton

Green Infrastructure Framework:
Askam & Ireleth

Green Infrastructure Framework:

Lindal

Newton

Using Part Three

Part Three provides an overview in terms of the need for the working practices of the development industry, Local Planning Authority, community and amenity groups to develop shared objectives in developing effective projects that will make a difference to local people and the environment they live in.

Set out in Appendix A is an Action Plan Schedule designed to position the types of projects that can be considered so that they can be incorporated within schemes or contributed to by development.

Public funding is unlikely to be anything other than scarce in the future. By identifying a range of projects in is hoped that over time incremental change will result in a wider tangible change within the built and natural environment in terms of quality and accessibility.

Green Infrastructure Action Plan

Part Three

Introduction

3.1 Securing Green Infrastructure on the ground will be the most important outcome of the Strategy. It is essential that the Strategy translates its objectives, principles and guidance into tangible actions and projects on the ground.

3.2 This Chapter has two purposes. Firstly it sets out a schedule to identify Green Infrastructure actions and projects and secondly the means by which they can be implemented and resourced.

3.3 There are two types of projects/actions being suggested. Firstly, actions based on developing the way the public, private and voluntary sectors work together and secondly. a range of specific site-based projects for locations identified in the Strategy for which project briefs can be produced readily for when resources permit. The Action Plan is a `live' document allowing the list of projects to evolve in light of opportunities as they develop.

Working Practice Output Projects

3.4 The following topics will form the basis for setting project objectives against and in developing opportunities for joint working.

- **Overarching actions** – The need for all parties in the development process to see Green Infrastructure as `critical' infrastructure and a key corporate objective.

- **Managing the Water Resource** – The need to share information and coordinate activity regarding climate change and the impact this will have on the water hierarchy will need to filter through proposals in helping to create an environment better able to respond to weather events and to intercept, retain and manage water better as a scarce resource;

- **Managing Temperatures** – Improving knowledge within the Borough about the `heat island' phenomenon and how landscape design can help mitigate the effects of further development and improving the existing situation;

- **Carbon Storage** – Recognising the importance of increasing tree and plant cover and its provision within meaningful and resilient positions within development sites ;

- **Food Production** – Recognising the environmental and social potential of community food growing initiatives including allotments making sure that site management avoids an untidy appearance.

- **Sustainable Materials & Specifications** – It will be important to seek certification as to the origins and production of materials and services using the most sustainable options as is possible.

- **Reducing the need for car travel** – Working jointly with the Highway Authority and developer design teams to make non-motorised movement easier.

- **Biodiversity** – Making sure that biodiversity decisions not only consider the characteristics of existing species distribution, but also consider the potential demands of species dispersing into the area as a result of climate change.

- **Sustainable Regeneration** – Securing improvements to the environment through the use of Community Benefits Packages and funding from the Environmental Bodies and by diversifying the local economy into new areas where environmental quality is an important commercial factor in location.

Site Specific Projects

3.5 The site specific projects are set out in the Action Plan Schedule at Appendix A under the relevant Green Infrastructure classification.

How to Deliver Green Infrastructure

3.6 Green Infrastructure can be delivered at any level of activity, but needs to be coordinated. Not just in terms of Green Infrastructure, but with Master planning, development brief and other Council and industry initiatives and processes. The Action Plan Schedule set out in Appendix A is intended to be the focal point for initiatives involved in the delivery of Green Infrastructure within the Borough.

3.7 The following mechanisms highlight the opportunities available for the delivery of Green Infrastructure, identifying who would be most likely to be the `owners' of the activity as well as possible sources of funding.

Barrow Borough Local Plan

3.8 The Local Plan demonstrates throughout, and especially within the Chapters on Green Infrastructure and the Natural Environment, the Council's commitment to making sure that Green Infrastructure is a determining factor in the consideration of all relevant development proposals.
The statutory function of the Local Plan will also help to ensure that the Strategy's objectives are reflected in all other relevant corporate and partner initiatives that have a role in influencing the environmental quality of the Borough.

3.9 As well as informing the production of the Local Plan the Green Infrastructure Strategy is a Supplementary Planning Document (SPD) alongside the Local Plan for the purposes of development management, as well as future spatial planning.

3.10 It is important for the public to be able to grasp and appreciate the important role of Green Infrastructure in terms of what it means to them and how it adds to their life experience and that of their families. Green Infrastructure is and needs to be interwoven into all our lives if subsequent generations are to enjoy the same access and values that have all too often been taken for granted in the past.

Development Briefs

3.11 Development Briefs are used to refine strategic objectives down to the individual site level, highlighting the parameters for development along with detailed guidance on site context, characteristics, condition and expectations relating to the form and character of development.

3.12 Development Briefs are being produced for a number of Council sites. The Council may also require developers to commission briefs to be agreed with the Local Planning Authority before submitting a planning application.

3.13 Development Briefs and the Design Codes that may stem from them are not `blueprints' nor are they prescriptive in any way. Instead they set out a range of parameters and principles, as performance criteria that a scheme will need to show can be met. There will be many ways a scheme can do this and it will be the challenge for the designer and his client to demonstrate it.

Development Control

3.14 The Council's Development Management service will play a vital role in assessing whether submitted schemes meet the objectives of the Green Infrastructure Strategy negotiating much of what is required as part of pre-application discussions.

3.15 It will be essential that the substantive Green Infrastructure elements are dealt with as an intrinsic part of the site layout. Outline Planning Applications will need to include a framework for Green Infrastructure and reinforced as part of subsequent reserved matters applications. The Council will expect to see the arrangements for Green Infrastructure incorporated in Design and Access Statements submitted in support of planning applications.

Conditions

3.16 Conditions relating to Green Infrastructure will need to be restricted to planting and maintenance schedules, the design of tree and planting protection measures, timings and plant replacement arrangements in accordance with the relevant British Standards.

Enforcement

3.17 Conditions and site monitoring will be conducted to ensure that Green Infrastructure measures have been implemented and maintained in accordance with the approved drawings.

Planning Obligations

3.18 Where off-site Green Infrastructure has been identified these will need to be secured through Section 106 agreements including any contributions made to implementation or on-going maintenance.

Environmental Project Funding

3.19 The funding of Green Infrastructure will be mainly as part of works related to a specific development either as part of the scheme itself or through the payment of S106

contributions towards relevant projects identified in the Strategy.

3.20 The Strategy highlights the importance of community action in taking forward individual projects on sites in their local areas. There are a number of sources of public sector funding available, but the eligibility criteria stipulate that projects must be community-led.

Landfill Tax & Minerals Levy

3.21 The Landfill Tax and Minerals Levy are funding mechanisms designed to divert funding collected in tax to re-invest in the local environment.

Community Benefit Packages

3.22 Major developments may attract community benefit packages which as the name suggests are focused on issues of importance to local communities, including Green Infrastructure.

Community Infrastructure Levy

3.23 At present the Council has yet to explore the introduction of a Community Infrastructure Levy (CIL) which would secure a more general central fund to assist in delivering a range of Green Infrastructure objectives.

Maintenance and Management

3.24 Public sector funding through the Council is likely to continue to be limited. The Strategy will however, provide a focus to assist in the allocation of resources where they can best make a difference to the environment.

3.25 Consideration may be given to developing mowing regimes aimed at allowing a more natural appearance to areas of open green spaces within the urban area instead of intensively managed the entire grassland area creating greater interest, improved appearance and enhanced biodiversity.

Outreach and Training

3.26 Ownership of Green Infrastructure is a cross sector issue. It requires a general understanding of its importance and commercial value balanced with other development pressures. It is important that the proactive nature of Green Infrastructure in allowing development to happen is highlighted. As the space most easily developed diminishes more creative environmentally-focused approaches need to be taken. Not least in providing the kind of higher quality environments that all of the Borough's communities have the right to expect.

3.27 As a `live' document it is intended to review the Green Infrastructure Strategy periodically to update advice on initiatives in Cumbria and elsewhere in looking at where new `best practice' might be applicable.

Using Part Four

Part Four provides guidance to help design teams to take a holistic and integrated approach to their layouts in terms of landscaping, built form, drainage and access. It also provides the Council's thinking on the characterisation of place in terms of where any given place sits between rural and most often suburban areas.

The guidance will be used by the Local Planning Authority to guide negotiations with developers and to assess submitted applications in terms of their suitability against the principles and objectives of the Green Infrastructure Policies in the Barrow Borough Local Plan 2016-2031.

Design Guidance & Coding

Part Four

Introduction

4.1 The aim of this Chapter is to help applicants ensure that proposals for development make the most of opportunities to protect and enhance the Green Infrastructure framework as well as maintaining the distinctive qualities of the Borough's built form.

4.2 Successful implementation of Green Infrastructure will depend on making the right amount of space available in the right place and making sure that Green and Grey Infrastructure components are integrated fully within an overall landscape and streetscene character. This is the purpose of design guidance.

4.3 Design guidance is advisory. It highlights approaches that the Local Planning Authority considers to be appropriate. Alternative approaches may be valid, but they will need to be balanced against the guidance. Design Coding differs in being more detailed and best produced by the developer on larger schemes as a means to negotiate intentions for specific relationships such as a methodology for introducing variation within a building line, a hierarchy of boundary treatments or the design of specific components like windows and doors.

4.4 In providing guidance at its broadest level, the following Chapter aims to characterise generic patterns of settlement found within the Borough and the nature of the inter-relationships with Green Infrastructure. The following sections set out the range of design principles and performance criteria that the Council expect to see demonstrated as having been applied in formulating proposals from the outset.

Design Approach

4.5 Good design is fundamental to creating high quality Green Infrastructure without it proposals will be likely to be piecemeal or poorly resolved. The design of development must be seen as a single activity where all components be they buildings, landscaping or infrastructure are considered together as part of a single design process based on a comprehensive appraisal of site context.

4.6 In developing an approach consideration should be given to how the guidance could be used to develop the character of the development and on larger sites the potential and desirability to develop sub-character areas utilising Green Infrastructure tools to frame proposals.

4.7 The Council expects all development sites to be designed in line with the following general design principles as well as those set out within the Barrow Borough Local Plan. Development will need to show how a scheme:

(a) Relates and functions well as part of the overall quality of the surrounding area, not just for the short term but over the lifetime of the development;

(b) Optimises the potential of the site to accommodate development, create and sustain an appropriate mix of uses within a framework of Green Infrastructure and other public spaces that actively encourages sustainable access to local facilities and transport networks;

(c) Establishes a strong sense of place, using streetscapes landscape and buildings to create attractive and memorable places to live, work and visit;

(d) Responds to local character and history, reflecting the identity of local building traditions and materials, while not preventing or discouraging genuine innovation;

(e) Creates safe and accessible environments where crime and disorder, and the fear of crime, do not undermine use of the environment, quality of life or community cohesion; and

(f) Schemes that are visually attractive as a result of the composition of good planning, urban design, architecture and appropriate landscaping.

4.8 Sites are not flat. An obvious statement, but too little consideration has been given in the past to the three-dimensional impact of site design especially when viewed from elsewhere. Full account must be taken of the potential effect of topography, perspective and line of sight on the ability to assimilate development within its setting. Site context within the wider landscape and detailed setting will be the starting point for the design of all development proposals. The design thinking demonstrating this will need to be clearly set out in a Design & Access Statement (D&AS)

Transitional Settlement Patterns

4.9 The need to manage change is the purpose behind the Green Infrastructure Strategy. Development on the edge of settlements has often been just an extension of existing densities, layouts and housing types within the confines of land ownerships and field boundaries. This has resulted in a `creeping' homogenisation adding uniformity to the urban mass and creating ill-thought out and uncompromising edges with the open countryside.

4.10 A significant proportion of development naturally occurs at the edge of settlements as they expand. It is essential that in evolving design thinking that the correct appraisal is made as to whether a site requires a semi-rural or a semi-urban approach as this will determine the general design approach that will be appropriate as both have distinctive qualities and emphasis.

4.11 The following settlement types are identified to encourage a more contextually driven approach to site design where designers can exploit the characteristics of the site and tailor a development accordingly. The following paragraphs are set out to encourage designers to think about character and not attempt to rely on standard house types and layouts, but deliver something more distinctive and commercially valuable.

Rural

4.12 At the beginning of the rural to urban `spectrum' is the wholly rural situation where an isolated dwelling or small group would be located in the wider landscape. This type will only ever represent a very small percentage of the total of new buildings being limited to agricultural workers.

4.13 Where a development is acceptable in principle siting must be chosen carefully in such a way as to ensure that existing landscape character remains the dominant feature with sufficient space and planting to ensure that it integrates with its surroundings without appearing prominent or contrived.

Semi-Rural

4.14 A semi-rural character will entail reduced and varied densities in defined clusters in a form and character consistent with groupings typically found within the rural landscape.

4.15 Semi-rural settings can display both informal and formal elements. Designers will need to reflect on the arrangement of landscape and built form components in establishing the appropriate design rationale. The example of a formal setting might be a `planned farmstead' with a variety of uniform building scales and forms arranged around an enclosed farmyard with an asymmetric approach to openings across the elevations.

4.16 An informal setting might reflect the location of a small or looser grouping of dwellings of varying scales and designs around a more winding road layout incorporating existing landscape features with greater variety in orientation and spacing between units to achieve greater irregularity and a distinct degree of openness from within.

4.17 A composite approach incorporating both types may be achievable in providing variety and contrast on a larger site in helping to reduce the visual effect of density and massing especially in peripheral locations.

Suburban

4.18 In locations where a significant proportion of suburban development is visible there would also be variation between a more formal `street-based' form and a more informal `Lane' character dominated by landscaping.

4.19 The informal Lane type would be characterised by dwellings displaying greater variation in house type and orientation. Dwellings could be set back within a heavily

landscaped setting with restricted visual access to frontages from the road, revealing only a few properties at a time with a verge separating the frontage from the footway and road.

4.20 The formal Suburban `street' type would have a closer more regular relationship between house types, incorporating more semi-detached units, with some variation within an otherwise more consistent building line. Variation would remain in terms of orientation of units but the road would have longer straight sections between bends with a depth of landscaped frontage behind lower front boundary treatments maintaining a degree of separation from the road with a verge between the footway and the road.

Semi-Urban

4.21 Opportunities for development within the existing built up area will also continue to come forward, many as windfall sites. It is important to recognise the characteristics of sites within the urban area as being distinct from those generally located around the edges of settlements.

4.22 Informal Semi –Urban areas can be characterised by a more uniform approach to house types, predominantly semi-detached, with some off-street parking, fronting onto shorter length roads with some variation in alignment allowing a typically more unified frontage between dwellings to be clearly seen. Landscaping will be limited to separating hedges to front, side and rear garden areas punctuated by the occasional tree, areas of formal open space, and grass verges.

4.23 Formal Semi-Urban areas will be differentiated by a higher density of dwellings including terraced groups with parking on straight roads of repeated form character within the wider area with front gardens being the only visual relief. Some townhouse forms may fall within this category where they are set within large areas of planted amenity green space.

Urban

4.24 Urban housing forms also fall into formal and informal categories. Informal urban housing will be largely terraced with some front and rear gardens, parking will be on-street or in parking courtyards. Small areas of green space in association with grouped parking or local amenity areas will be the only relief.

4.25 Formal urban housing will comprise either terraced, town house dwellings with higher density flat blocks with no front gardens and hard surfaced rear yards. Access to landscape will be formal amenity spaces elsewhere within the wider urban area.

Design Principles

4.26 The following principles have informed the production of the site specific Development Briefs which will need to be taken into account in developing detailed schemes that accord with the Green Infrastructure objectives. Schemes without the context of a Brief will also be expected to use them in setting out a design rationale in submitted Design & Access Statements. The Council expects to see reference made to these design principles in development proposals and supporting information.

Landform

4.27 Landform presents two key issues for the designer. Its practical characteristics, like drainage, and how it is and would be seen from the surrounding environment. Both aspects will inform where and how development will be best placed and oriented and how Green Infrastructure will help assimilate it into its surroundings.

Principle 1 - Landform

4.28 Proposals will need to demonstrate how:

- the pattern of development and Green Infrastructure responds to the landscape character, topography and drainage of the site.
- natural views into or across the site are incorporated into the proposals and framed through the siting of undeveloped spaces, landscaping and development frontages

Protecting & Enhancing Biodiversity

4.29 Development has in the past taken only limited account of the need to protect biodiversity. Falling populations of previously common species like Bees, Hedgehogs and even Sparrows and Blue Tits not only represent a loss in terms of amenity, but harbour serious consequences for the local food economy with reducing pollination and pest control.

4.30 Green Infrastructure, providing that the right specification and enough space is made available can help redress some balance to the inevitable disruption that development can cause. Every effort needs to be taken to work actively with a site's existing character to retain and incorporate as many and as much of a site's existing features as possible to minimise displacement and loss of continuity between sites.

4.31 The presence of wildlife at all its scales represents a quality of life indicator adding to the colour, sound and character of places. The Council will expect the detail of all proposed schemes to actively support biodiversity objectives, in line with Biodiversity and Development SPD.

Principle 2 - Protecting & Enhancing Biodiversity

4.32 Proposals will need to demonstrate:

- how on site Green Infrastructure would integrate with existing landscape habitat around the site;
- how landscape proposals would support a graded natural succession with its surroundings
- How structural landscaping will be designed to create inaccessible areas to people.
- That no fully solid boundaries are created to rear garden areas to allow freedom of access for wildlife. Woven panels with gaps and holes would be acceptable alternatives.
- That only a range of naturally occurring local species are used within the planting of Green Infrastructure assets.

Sustainable Movement

4.33 Modern development has inevitably been focused on people's increasing reliance on the private car. Whilst this is unlikely to change it is important that provisions made for the car are better integrated into an overall and balanced site character that is not dominated by overly-engineered roadway, signage, lighting and most of all parking.

4.34 Green Infrastructure provides important vertical landscape capable of providing screening for parking and helping to reduce pollution, especially particulates in the air.

4.35 The creation of an alternative sustainable movement network aimed at encouraging using the private car less will be an important aspect for layouts to demonstrate using more tortuous or constrained routes for vehicles with more convenient and attractive pedestrian and cycle shared routes accessing beyond the site.

Principle 3 - Sustainable Movement

4.36 Proposals will need to demonstrate how:

- The design of roads and other routes and infrastructure have been integrated as a visually subordinate component of a landscape and built form-led layout design and not the starting point for design.
- How routes connecting sites are designed to encourage sustainable movement choices that are safe.

Place Making

4.37 Achieving an identity and a sense of place are now well established urban design objectives for development. Green Infrastructure is a key component in helping to assimilate development within a wider context by making connections between local distinctiveness at a wider landscape scale through the creation of a identifiable site character down to the plot level in making sure that all development relates well in terms of composition and scale to its surroundings.

4.38 Good place making can reduce concerns relating to the impact of new development on the local environment as well as introducing a distinctiveness that helps to increase commercial values. On larger sites it will be important to create Sub-Character areas that exploit natural shapes or enclosures.

Principle 4 - Place Making

4.39 Proposals will need to show:

- How development is designed in conjunction with landscaping to create a meaningful character for the site including where appropriate a series of sub-character areas.
- How the siting of Green Spaces and green drainage requirements where necessary are used to create a focus and a setting for development.

Adapting to Climate Change

4.40 Changes to the global and regional climate are likely to result in periods of hotter and drier weather in the summer and colder and wetter periods in the winter with potentially significant implications for liveability and environmental quality.

4.41 Green Infrastructure is an increasingly important consideration in meeting this challenge especially in coordinating efforts to ensure that the built environment is better able to capture and retain moisture and contribute to urban cooling.

4.42 The design and management of tree planting and natural drainage features has the potential to mimic natural processes without significant engineered infrastructure. Every effort will need to be made to utilise and consolidate the natural characteristics of a site in terms of the way water in particular moves through the site and how it would move post-development.

4.43 Tree planting in groups within hedgerows will be important in the future in providing shade providing they are located in a position that would provide usable shade.

Principle 5 - Adapting to Climate Change

4.44 Proposals will need to demonstrate:

- An understanding of the site's water characteristics.
- A water hierarchy from a site-wide to curtilage level showing where and how the rate and volume of surface water runoff will be retained and managed on site;
- How the coordination of planting and drainage proposals will contribute to `urban cooling' and shading
- Landscaped drainage features that would optimise the interception and dispersal of water by plants (transpiration), evaporation from surface water and ground infiltration

- How individual dwellings will contribute to rain water harvesting and conservation
- All curtilage off-road surfaces specified as being permeable.
- Where engineered retention and or filtration schemes are required due to soil characteristics that they are concealed as part of landscaping proposals.
- How species selection will contribute to the sustainability of drainage features, landscaping, biodiversity and urban cooling.
- A section drawing through any proposed key landscaped feature drainage.

Space for Amenity

4.45 Space for amenity includes visual and physical factors that all proposals will need to take into account. Providing an attractive and enclosed setting for the development including its landscaped areas will be important in creating identity, legibility and ownership that help to foster community ownership.

4.46 All routes will need to be considered so they do not become the dominant visual component of the layout at the expense of amenity. Any routes passing through the development will also need to be designed to feel distinct from those serving the development only.

4.47 Incidental and formal Green Spaces intended to support amenity and recreation play areas will need to be well located and designed to ensure that the provision is visible without being so close to private curtilages and dwellings to cause disturbance through noise or activity.

4.48 Areas will need to be provided for the storage and collection of waste and recycling that are convenient to use and without being unduly visible, but at the same time not so concealed as to cause the potential for anti-social behaviour.

Principle 6 - Space for Amenity

4.49 Proposals will need to demonstrate:

- How Green Spaces and amenity areas within Green Corridors will make adequate useable space available in suitable locations which is capable of being naturally overlooked without compromising residential amenity.

Ground Conditions

4.50 Soil strength is of fundamental importance to construction. The Borough is characterised largely by heavy clays however, the legacy of previous heavy industries, including mining and waste disposal will need to be checked for to make sure that any less stable or unusable parts of the site to the overall layout design.

Principle 7 - Ground Conditions

4.51 Proposals will need to show:

- How any variations in ground conditions have been taken into account in the design to optimise the contribution of such areas to overall site character and quality.

Species Selection

4.52 Naturally occurring species within a location will always be the most appropriate species to select for schemes as their tolerance to the location and suitability for species is known as well as requiring no special care.

Principle 8 - Species Selection

4.53 Proposals will need to demonstrate:

- A comprehensive landscaping framework showing structural connections between surrounding landscaping to plot boundaries.
- A section through key planting areas to show a natural succession form of planting providing sufficient space for wildlife to be undisturbed.
- A range of naturally occurring plant species, including ground cover, planted at a maturity and density to have immediate visual effect;
- Protection measures in the form of supporting post and strand wire fencing and stock guards;
- How the proposals will contribute to habitat creation, wildlife movement and foraging.

Green Infrastructure Material Selection

4.54 Taking a more environmentally-focused approach to design also means giving greater attention to the selection of construction and landscaping materials. As well as avoiding the sole use of solid walls and fences consideration will need to be given to including measures that actively promote habitat. The Council will expect to see a fencing schedule showing designs capable of providing biodiversity access along with a plan showing the distribution of such fences within the site.

4.55 Where necessary the Council will seek to withdraw permitted development rights for boundary fencing to ensure that patterns proposed would conform to the principle.

4.56 Hard surfacing of front gardens in particular has also been an increasing trend with the rise in the number of cars within households. Hard surfacing increases the rate at which water runs off with potential consequences for the capacity of the local drainage network.

4.57 All off-road surfacing within private garden areas must be porous to maximise natural infiltration. Reinforcing mesh products may be an alternative in the treatment of grassed areas where vehicle parking is required without compromising the areas potential to provide a soakaway for rainwater.

4.58 Building plot designs will also need to show how rain harvesting is to be carried out and exploited.

Principle 9 - Materials Selection

4.59 Proposals will need to demonstrate;

- How access to all forms of wildlife is to be supported within the landscape layout plan and by a schedule of wildlife friendly fencing.
- How parking areas, especially visitor areas are surfaced to allow the infiltration of rainwater.
- Provision for rain harvesting.

Conclusion

5.1 "The challenges we face today are too often approached as separate issues. There is insufficient consideration given to the complex interactions between, for example, housing, flood management, food growing and biodiversity. This approach prevents us from adopting more dynamic, integrated and forward-thinking solutions. Green Infrastructure offers an alternative to this narrow-minded approach- a way not only of tackling specific challenges head on, but of realising multiple secondary benefits at the same time. It is this integrated approach that will unlock the potential of our landscape."

Green Infrastructure: An Integrated Approach to Land Use, Landscape Institute p.1

Appendix A – Action Plan Schedule

ACTION PLAN SCHEDULE

Site Specific Projects						
Objective	Location	Action	Content	Interested Bodies	Owner	Outcome
Green Wedge Maintenance and Enhancement	Designated Green Wedges	• Planning Control • Landscape Maintenance • Improvement Projects	• Management of planning applications to ensure only development in accordance with Green Wedge principles is permitted.	• BBC Development Services pre and post application. • Planning Conditions	• BBC Development Services • Applicants/ Developers • Landowners • Designers	To ensure that the landscape, environmental and amenity quality of strategically important open green space is maintained and where possible enhanced.
Green Space Enhancement	Designated Green Spaces	• Planning Control • Landscape Maintenance • Community Led Improvement Projects	• Optimising value of locally important open green spaces. • Management of planning applications	• BBC Development Services pre and post application. • BBC Streetcare • Community & Voluntary Groups • Funding Partners	• Community & Voluntary Groups • Designers	To ensure that open green spaces remain as positive features of the built up area making sure that any issues are resolved with improvement projects being a focus for community engagement
Green Corridor Integration	Designated Green Corridors	• Planning Control • Integrated approaches to layout	• Sharing of best practice expertise. • Coordination of services	• BBC Development Services pre and post application. • CCC as Highways & Drainage Authority	• BBC Development Services • Applicants/ Developers • Landowners	To ensure that servicing contributes to high quality site planning and

		design, utilities planning and landscaping.	and related design activity	• Applicant/ Developers • Landowners	• Designers	design, character and identity.
Green Routes (Strategic)	Designated Green Routes	• Planning Control • Integrated approaches to layout design, utilities planning and landscaping. • Street Tree Replacement • Frontage Improvements	• Sharing of best practice expertise. • Coordination of services and related design activity • Lighting and Signage design	• BBC Development Services pre and post application. • CCC as Highways & Drainage Authority • BBC Streetcare • Applicant/ Developers	• BBC Streetcare • CCC as Highways & Drainage Authority • BBC Development Services • Applicant/ Developers • Landowners • Designers	To ensure that the character of Strategic Green Routes can be maintained and enhanced in the long term contributing to wider urban regeneration
Green Routes (Local)	Designated Green Routes and spaces contributing to Green Route quality.	• Planning Control • Integrated approaches to layout design, utilities planning and landscaping.	• Sharing of best practice expertise. • Coordination of services and related design activity	• BBC Development Services pre and post application. • CCC as Highways & Drainage Authority • BBC Streetcare • Applicant/ Developers	• BBC Streetcare • Applicant/ Developer • Landowner • Designers	To maintain and develop the quality of local access routes in encouraging sustainable movement and local identity.
Green Links	Designated Green Links	• Planning Control • Integrated approaches to layout design, utilities planning and landscaping.	• Sharing of best practice expertise. • Coordination of services and related design activity • Improvements to Biodiversity	• BBC Development Services pre and post application. • Applicant/ Developers • Wildlife Groups	• BBC Development Services • Applicant/ Developers	To create a balance between the needs of development and those of the natural environment.

Policy & Practice						
Green Infrastructure Developer Workshop	Town Hall	A series of best practice advice and training sessions on Green Infrastructure for Officers, Members the Development Sector and their designers	On-going advice and guidance to the development industry	• Lectures • Guest speakers • Practical Exercises • Group Review • CPD Certificate	• BBC Development Services • Applicants/ Developers • Designers • Natural Environment Groups and Bodies	To develop awareness of the environmental and commercial value of Green Infrastructure and to ensure that its purposes and objectives are pursued consistently across the Borough.

Appendix B – Site Design Criteria

The Green Infrastructure Strategy is designed to be the starting point for developer negotiations with landowners and pre-application discussions with the Local Planning Authority (LPA) and provides an indication of the general proportion and arrangement of Green Infrastructure that the Council expects to see. Any alternative approach will be required to demonstrate variations are complementary with the intent of the Green Infrastructure Strategy SPD.

The following Green Infrastructure Site Design Criteria are intended to assist in the site design process and will apply to all planning applications in the Borough including the site's currently being considered as housing allocations in the emerging Barrow Borough Local Plan 2016-2031.

The Criteria set out the basic requirements that all applications for planning permission will need to address.

Proposals will need to demonstrate:

- A robust inter-connected framework of Green Infrastructure to include Green Spaces, Green Corridors, Green Routes and Green Links designed in such a way that responds to and utilises the site's existing topography, character and landscape features.
- How a submitted Green Infrastructure Layout and built form layout would connect physically and visually with the form, scale and character of existing Green Infrastructure both surrounding and connecting with the site;
- The positioning of Green Space within the development such that it provides local identity as well as a degree of informal practical opportunities for recreation in locations that are well-supervised by building frontages whilst not directly impacting on their amenity.
- A network arrangement of Green Corridors designed to provide margins to accommodate `grey infrastructure', surface water and sustainable pedestrian and cycle access requirements in a coherent landscaped form as an integral part of the overall character, appearance and function of the site.
- Where a site addresses a Green Route the frontage landscaping scheme will need to complement the character and specification of well-planted frontages of a similar size and configuration in the area in terms of age and species.
- The positioning and specification of all Green Infrastructure components will need to ensure that they

consolidate and extend the connectivity of hedgerows and tree planting in such a way that encourages the establishment of viable habitat and the unobstructed movement of wildlife.

Proposals for the development of allocated housing sites identified on the Proposals Map will need to demonstrate how they conform with this document (the Green Infrastructure Strategy SPD). For allocated sites the criteria set out above are supplemented by the Green Infrastructure Considerations for Proposed Site Allocations Table below which provides guidance specifically related to the design of individual sites in the emerging Local Plan.

SITE DESIGN CRITERIA

Site Reference	Address	Green Infrastructure Considerations for Proposed Site Allocations
Housing Sites – Barrow		
REC05	Land South of Leece Lane	Greenfield site outside but adjoining the existing urban area. The site is adjacent to a proposed area of Green Wedge to the east. Stream to south-west. Green Corridor suggested along site frontage to create buffer along Leece Lane and reduce the visual impact of development on its surroundings. Green Links suggested through the site connecting the Green Corridor with the stream at south-west of the site and Green Wedge to east.
REC09	Field between Netherby Drive and Ormsgill Lane	Greenfield site within the existing urban area. Suggested Green Link around the perimeter of the site to reduce the visual impact on the development and provide a buffer between new and existing development. Existing Green Wedge to the north and east. Set within a Wildlife Corridor therefore the site should incorporate Green Links connecting it with the existing Green Wedge to the north. Existing hedgerows should be retained where possible.
REC18	Field to East of Park View	Greenfield site within existing urban area adjacent to an area of proposed Green Space to the north. Suggested Green Link along eastern and western boundaries connecting the site to the adjoining Green Wedge to the south and providing a buffer between new and existing development.
REC19b	Thorncliffe South (former tennis court/field section)	Mixed site within the existing urban area adjoining proposed Green Spaces (allotments and school fields). Should incorporate an area of green space on the greenfield section of the site and Green Routes linking new development with existing footpaths to Devonshire Rd and Thorncliffe Rd. Suggested Green Links around the edges of the site to provide a buffer between new and existing housing.

REC26	Land East of Holbeck	Greenfield site outside but adjoining the existing urban area. The site is a prominent gateway into Barrow from the East. Green Space should be provided to create a buffer between new and existing housing and in centre of site. Suggested Green Link (existing hedgerow) along Eastern and Northern boundaries should be retained. A Green Space should be provided along Leece Lane and hedgerows parallel with the road should be retained where possible to reduce the visual impact of the development.
REC54	Strawberry Grounds, Croslands Park	Greenfield site within the urban area adjoining proposed areas of Green Wedge to the north and east. A Green Link should be created along the eastern and southern boundaries connecting to the proposed Green Link to the rear of Croslands Park. A Green Link should also be provided to form a buffer between new and existing houses.
SHL001	Marina Village	See Barrow Port Area Action Plan for further guidance.
SHL010a	Land at Mill Lane	Mixed site within the urban boundaries. A Green Route should be provided along Mill Lane to reduce the visual impact of the development. Green Links (which can also form pedestrian links) should be created with Mill Lane and Trent Vale. Suggested Green Route through the site allowing species movement between the Green Wedge to the north, south and east.
SHL013b	Former Candleworks Site (South), Schneider Rd	Brownfield site within the existing urban area set within an existing wildlife corridor. A Green Route should be provided along the northern boundary of the site to create a buffer between the development and the site to the north. This should incorporate the existing trees where possible. Suggested Green Link along the southern boundary connecting the site to Ormsgill Reservoir and the Green Space to the south.
SHL037	E5 Land South of Ashley & Rock, Park Rd	Mixed site within the existing urban area. Suggested Green Space in centre of the site within the area at most risk from surface water flooding. Green Link suggested along site frontage with Middlefield. Retention of trees along southern boundary adjoining Green Space to the south. Substantial Green Route along Park Rd and around existing commercial premises in north-

		western corner of site to create a buffer between residential and commercial areas and reduce the visual impact of development along this strategic route.
SHL047	North Central Clearance Area	The design should incorporate areas of Green Space to improve the visual and recreational amenities of the area.
SHL059	Former Avon Garden Centre, Mill Lane	Brownfield site within existing urban area. Should incorporate a Green Route along Mill Lane linking with proposed areas of Green Wedge to the east and west. This will allow species movement and also reduce the visual impact of development.
SHL068	Fields to rear of Croslands Park (Holly Croft)	Greenfield site within existing urban area. A Green Link should be provided along the northern and western boundaries of the site to create a buffer between new and existing development between site and existing development. Suggested Green Corridor along the southern boundary between the development and the Green Wedge to the south. Existing hedgerows should be retained where possible.
SHL070a	Land to South of Abbey Meadow, Flass Lane	Greenfield site within the existing urban area. Suggested Green Corridor along the western site boundary to reduce the visual impact of the development. An area of Green Space should be incorporated within the site. A Green Link should be provided along the southern boundary between site and the Green Wedge to south, linking existing grass verges along Flass Lane to the Green Wedge. Potential to link with Furness Abbey Greenway.
SHL082	Land East of Rakesmoor Lane	Greenfield site outside but adjoining the existing urban area. The site is a prominent gateway into Barrow from the North. An area of Green Space should be provided to the west of the site to reduce the visual impact of development from Rakesmoor Lane. Green Routes (which could also form pedestrian links) should be created with Rakesmoor Lane, Glenridding Drive and Breast Mill Beck Road. If the farm buildings are to be retained, Green Space should be provided to act as a buffer between new and existing development.

		Cumbria County Council have made the following comments regarding the site: "This site lies in CLCGT landscape type 5c 'Rolling Lowland'. The CLCGT identifies open, undulating topography, pastoral land use and hedgerows as characteristic. It notes that views are generally limited by the topography. The Vision for the area seeks to soften unsympathetic development edges, with peripheral development integrated within a stronger woodland landscape framework. The allocation is significant in size, although for the main part it is largely contained in a hollow on top of a broad plateau. It is well related to existing settlement form… Given the scale of the site, it is anticipated that a masterplan, incorporating an appropriate GI strategy will be prepared. Opportunities exist given the scale of the site, to create linked communities, focussed around green spaces. Significant native planting, creating points of interest should be incorporated, further to creating a strong woodland landscape framework, as envisaged by the CLCGT."
SHL100a	Land North of Westpoint House (Western Section), Solway Drive	Greenfield site within the existing urban area adjoining an area of Green Wedge to the east. A Green Link should be provided along the boundary with Solway Drive to reduce the visual impact of development. Maintaining the setting around any development will be important in optimising the setting of the green wedge. The site boundary also includes an area to the north of the site which has issues with surface water, this area as suggested by the LLFA should be used as an area for Sustainable Drainage and as such is not available for development.
SHL101	Land South of Westpoint House, Solway Drive	Greenfield site within the existing urban area adjoining an area of Green Wedge to the east. A Green Link should be provided along the boundary with Solway Drive to reduce the visual impact of development. Maintaining the setting around any development will be important in optimising the setting of the Green Wedge. An area of Green Space should be provided at the southern end of the site to create a buffer between new and existing development.

Housing Sites - Dalton		
REC10	Land West of Crooklands Brow	Greenfield site outside but adjoining the existing urban area, adjoining an area of Green Wedge to the north and east. The site should include an element of Green Space and a Green Corridor to act as a buffer between new and existing development. Suggested Green Links (which could also provide pedestrian access) through the site linking development with Mouzell Bank, Crooklands Brow and the Green Wedge to the north. Connections should be made between the Green Links in the north and south. Cumbria County Council have made the following comments regarding the site: "The northern part of the site lies within an area designated by the CLCGT as 3c 'Disturbed Areas'. Key characteristics include: undulating glacial till; restored mine working landscape; patchy woodland cover, small areas of marsh, pond and reed beds; abandoned mine buildings, old limestone quarries and reclaimed agricultural land. The CLCGT notes that "This disturbed hummocky land is fast becoming naturalised and taking on a bosky appearance… commonly covered by a mixed native scrub of willow, alder, hawthorn, gorse, elder, bramble and rose", going on to draw attention to the "…rich diversity of semi-natural habitats (which) forms a valuable wildlife refuge bounded by pasture or built up areas." The CLCGT Vision for 3c is: "These areas will be conserved and enhanced to retain their industrial legacy and wildlife interest." The site reflects the characteristics described in the CLCGT. The northern part of the site is relatively self-contained being flat and low lying, and surrounded by mature hedgerow. The southern part is more exposed, and is steeply sided, sloping downwards to the west. The site is visible in its entirety from the short section of footpath to the immediate north, and from various higher parts of the town to the south and west. The southern part is the more prominent. The industrial heritage of the area is reflected in the names of the dwellings which abut the southern part of the site – 'Quarry Side' and 'Quarry Lodge'.

		In wider landscape terms, the site is well related to the existing settlement, and could therefore be sensitively developed. Attention is drawn to the following: • Existing hedgerows and hedgerow trees should be retained where possible. These provide screening for the site, and may provide valuable habitats. • Consideration should be given to potential linkages to the existing residential area immediately to the west – for example to Mouzell Bank. Pedestrian accessibility through the site should form a key consideration. Opportunities should be taken to link to the sports ground to the east. • The currently undeveloped bank, which forms the southern part of the site, allows for open views outwards towards the east for residents in properties adjacent to the site. This is particularly important given the densely developed character of this residential area."
REC25a	Land at Greenhills Farm	Greenfield site outside but adjoining the urban boundaries, surrounded by proposed Green Wedge to the east and west. The site is a prominent gateway into Dalton from the South-East. An area of Green Space should be incorporated within the site and a Green Corridor should be created around the pond which could provide recreational opportunities. Green Links through the site to the Green Wedges are suggested to allow for species movement. Existing hedgerows should be retained where possible. Cumbria County Council have made the following comments regarding the site: "Pedestrian links should be created with Long Lane, Greystone Lane and the footpath between Long Lane and Buttermere Drive. This site is located in CLCGT landscape type 7b 'Drumlin Field'. The site reflects the characteristic drumlin landform. The northern part of the site is self contained, and well related to the existing settlement. Development of the southern part would create more of an obvious encroachment into the open countryside however. The south-western boundary, located at the top of a slope,

		and bounded by an established hedgerow, forms a natural boundary to the settlement in visual and topographical terms. This part of the site is clearly visible from the road adjacent Preferentially, this element of the allocation should be deleted. If this is not a suitable option however, it is suggested that adverse landscape and visual effects should be mitigated by focusing development close to the aforementioned boundary, introducing substantial native planting to the new boundary, and including an area of open space to the south east of the site. This could include a SUDS pond – which would be suitable given the landform, and which would reflect the character of the landscape to the immediate north."
REC34	Site at junction of Long Lane & Newton Rd	Greenfield site within the urban boundaries, adjoining an area of proposed Green Wedge to the west. The Site is a prominent gateway into Dalton from the South West. Suggested Green Corridor to create a buffer between new and existing development. Green Space should be maintained along the site boundaries with Long Lane and Newton Rd to reduce visual impact of development. Existing hedgerow through the centre of site and along the northern boundary should be retained where possible as a Green Link.
REC43	Land East of Greystone Lane	Greenfield site outside but adjoining existing urban area. Retain existing hedgerow around the site boundaries as a Green Link where possible to reduce visual impact of development.
REC47	Land West of Askam Rd (including Elliscales Quarry)	Mixed site outside but adjoining the existing urban area. The site is a prominent gateway into Dalton from the north, comprised of two distinct sections; a greenfield section and a former quarry which is currently occupied by commercial uses. A Green Link must be retained around the quarry and northern site boundary to enhance the setting of the SSSI and provide a buffer between development and Dalton Bypass. The existing hedgerow through centre of site should also be retained as a Green Link if possible. A Green Corridor should be provided along the eastern and western site boundaries to reduce the visual impact of development and provide a buffer between existing and new development.

		Cumbria County Council have made the following comments regarding the site: "This site straddles two CLCGT landscape types: 3c 'Disturbed Areas' and 5c 'Rolling Lowland'. In visual terms, the majority of site is relatively low lying, and self-contained. The most notable site feature is the well maintained limestone wall which forms a boundary to the east. This should be retained. The use of limestone in key frontage buildings should be encouraged where possible, particularly given the site's 'gateway' location to the town. Site of Special Scientific Interest – currently in an unfavourable condition, development provides an opportunity to improve this."
REC48	Land East of Askam Rd	Greenfield site outside but adjoining the existing urban area. A Green Corridor should be provided to create a buffer between new and existing development. Trees along the eastern boundary should be retained as a Green Link where possible. Development should be set back from Askam Rd to reduce its visual impact.
REC49	Land at Hollygate Rd	Greenfield site within the existing urban area adjoining an area of Green Wedge to the east. The hedgerow along the eastern site boundary should be retained where possible and a Green Corridor should be provided between new and existing development.
REC52	Land at Tantabank	Greenfield site outside but adjoining the existing urban area. A Public Right of Way runs close to the northern site boundary. The site should incorporate Green Spaces, particularly around the boundaries of the site to reduce the visual impact and to help "soften" the edges of the development.
SHL005	Land at Crooklands Brow	Brownfield site within the existing urban area. A Green Link along south-eastern boundary should be provided to create a buffer between development and the railway line. A Green Corridor is suggested along the western boundary which should incorporate the Public Right of Way which runs adjacent to the site boundary.

SHL096	Crompton Drive	Greenfield site within the existing urban area, surrounded to the west and south by Green Wedge. Green Links should be provided around the site boundaries, retaining existing trees and hedgerows where possible and connecting the site to the Green Wedge.
Housing Sites – Askam & Ireleth		
REC01	Land at Saves Lane	Greenfield site currently outside but adjoining Askam and Ireleth Development Cordon. Green Links, incorporating existing hedgerows, should be provided around boundaries of the site to reduce the visual impact of development. Development should be set back from Saves Lane to retain a green frontage along Saves Lane.
REC02	Duke St	Greenfield site currently within the Askam and Ireleth Development Cordon. Green Links should be incorporated around boundaries of the site to reduce the visual impact of development.
REC03	Land at junction of Lots Rd and Duke St	Greenfield site currently outside but adjoining Askam and Ireleth Development Cordon. A Green Route should be provided along the eastern site boundary, ensuring that development is set back to maintain setting for vista achievable across settlement and to maintain a softer edge to street scene and settlement edge character. A Green Link should be maintained along the western site boundary to allow for species movement.
REC31	Land North of New Rd	Greenfield site currently outside but adjoining Askam and Ireleth Development Cordon. A Green Route should be provided along the eastern site boundary, ensuring that development is set back to maintain setting for vista achievable across settlement and to maintain a softer edge to street scene and settlement edge character. A Green Link should be maintained along the western site boundary to allow for species movement.
REC36	Land South of New Rd	Greenfield site currently outside but adjoining Askam and Ireleth Development Cordon. Green routes should be provided along the northern and south-eastern boundaries linking to the wider green route to ensure that development is set back to maintain setting for vista achievable

		across settlement and to maintain a softer edge to street scene and settlement edge character. The site should incorporate an element of Green Space.
SHL017	Urofoam, Duddon Rd	Brownfield site currently within the Askam and Ireleth Development Cordon. A Green Link should be provided along the eastern site boundary to provide a buffer between new development and the railway line. Potential for pedestrian links to surrounding residential streets.
Lindal & Newton		
REC37	Land East of London Rd, Lindal	Greenfield site currently outside but adjoining Lindal Development Cordon, adjoining an area of Green Wedge to the north. The site is in a prominent location close to the A590 which passes through the village. The development must incorporate an area of Green Space given the fact that the public open space (Lindal Green) is on the opposite side of the A590 making access difficult. A Green Corridor should be provided along the A590 acting as a buffer between the development and the road and retaining the existing trees and hedgerows where possible. A buffer and planting should be considered at the southern boundary with the railway line. Development should also be set back from London Road to maintain street scene character and reduce the massing of development. The allotments on London Road should be protected and where possible enhanced.
REC39	Land to rear of Farmers Arms, Newton	Greenfield site currently outside but adjoining Newton Development Cordon. Green Links around site boundaries should be provided to act as buffer between new and existing development.

Employment Sites – Barrow		
EMR01	Remaining part of Furness Business Park	Green Route along front of site, and along southern boundary to connect with existing footpaths/cycleways to Channelside walk and slag bank beyond and also to Cocken Lake and Walney Road. Green strip of vegetation/bushes should be retained along southern and western boundary of site as a wildlife habitat.
EMR03	Waterfront Business Park	See Barrow Port Area Action Plan for further information
EMR05	Land East of Park Rd	Site adjoins existing industrial park at Sowerby Woods and is currently greenfield predominantly pasture, with the most south westerly part bordered by the golf course. A Green Link should be provided as a buffer around the northern, western and southern boundaries to screen the industrial development from the adjacent countryside. Potential for pond at north east of site to be retained.
EMR06	Land West of Robert McBride, Park Rd	Green buffer to be provided between the site and the railway line. Green Route suitable for pedestrians and cyclists should be created between site and Park Road, and potentially adjacent EMR07.
EMR07	Land South of Kimberley Clark, Park Rd	Green buffer to be provided between the site and the railway line, and Sowerby Lodge/Kimberley Court beyond. Green Route suitable for pedestrians and cyclists should be created between site and Park Road, and potentially adjacent EMR06.
EMR08	Land West of County Park Estate, Park Rd	Green Route suitable for pedestrians and cyclists should be created between site and Park Road. Hedgerows forming the northern, southern and western boundaries to the site should be retained as wildlife habitats and for screening to the adjacent open countryside.
EMR13	Former Training	Green Link providing vegetated buffer at the northern and eastern boundaries of the site should

	Centre, North Scale	be retained including mature bushes/trees to provide buffer between the Promenade and channel beyond. Pedestrian and cycle links from the Promenade through the existing public car park should be retained and enhanced. Any development should be of size and scale to respond to, maintain and enhance the adjacent green wedge, and nearby residential and recreational areas.
EMR15	Land opposite Phoenix Court Barrow	Green Link acting as a landscaped buffer should be provided along boundary with Phoenix Road to complement adjacent developed sites. Pedestrian and cycle links should be created between the site and Phoenix Road to link with the existing network to provide access to Channelside and Walney Road.
Employment Sites - Dalton		
EMR11	Ulverston Rd	Hedgerows and planting should be retained and enhanced to maintain a buffer between the development and the railway line. Some landscaping along the frontage with Ulverston Road should be provided. A green buffer should be retained at the south east of the site where it adjoins residential development for screening purposes. Pedestrian and cycle links with Ulverston Road should be created.
EMR12	Land at Billings Rd	Green Links should be provided along the boundaries of the sites to facilitate species movement and to act as a buffer to the adjoining open countryside. Existing hedgerows and mature trees should be retained as wildlife habitats, and provision of an informal Green Space should be considered as visual relief, to facilitate species movement and for drainage. Pedestrian and cycle links should be provided with Long Lane.

Opportunity Areas - Barrow		
OPP1	Land at Channelside (South)	Brownfield site within the existing urban area. A Green Route should be provided along the western site boundary to provide a buffer between development and the public footpath and an area of Green Space should be included within the development.
OPP2	Former Golf Driving Range, Walney Rd	Mixed site within the existing urban boundary. A Green Route is suggested along the western site boundary to provide a buffer between development and Walney Rd and to reduce the visual impact on the streetscene. An area of Green Space should be provided to the south of the site connecting to a Green Link around southern and eastern boundary. Potential for recreational links to Ormsgill Reservoir.
OPP3	Salthouse Mills	See Barrow Port Area Action Plan for further information.
OPP4	Phoenix Rd (by Travelodge)	Prominent gateway location would benefit from high quality design incorporating some Green Space. Green Route around north and eastern boundary of site. Green Link around boundary with Cocken Lake and connection with established pedestrian/cycle links in the area.

Appendix C – Useful Documents and Links

International Organisations

The European Landscape Convention

National Organisations

Ecosystems Knowledge Network on Green Infrastructure: http://ekn.defra.gov.uk/resources/tools-guidelines/green-infrastructure/

English Heritage on Streets for all: http://www.english-heritage.org.uk/professional/advice/advice-by-topic/planning-and-transport/streets-for-all/regional-documents/

Environment Agency: www.environment-agency.gov.uk/

Landscape Institute on Green Infrastructure: www.landscapeinstitute.org/policy/GreenInfrastructure.php

Natural England on Green Infrastructure: www.naturalengland.org.uk/ourwork/planningdevelopment/greeninfrastructure/default.aspx

Susdrain on SuDS: www.susdrain.org/delivering-suds/using-suds/design-guidance/green-infrastructure.html

National Publications

DEFRA, (2010), Making Space for Nature: A review of England's Wildlife Sites and Ecological Network: http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf

DEFRA, (2011), Biodiversity 2020: A strategy for England's wildlife and ecosystem services: www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services

Forestry Commission, (October 2010), Benefits of Green Infrastructure Report to DEFRA and CLG: www.forestry.gov.uk/pdf/urgp_benefits_of_green_infrastructure_main_report.pdf/$file/urgp_benefits_of_green_infrastructure_main_report.pdf

The Natural Environment White Paper (The Natural Choice: securing the value of nature 2011

Landscape Institute/IEMA: Guidelines for Landscape and Visual Impact Assessment: Third Edition, Routledge, 2013

RTPI, Briefing on Green Infrastructure: www.rtpi.org.uk/media/499964/rtpi_gi_task_group_briefing_final.pdf

Town & Country Planning Association, The Wildlife Trusts (July 2012) Planning for a Healthy Environment - Good Practice Guidance for Green Infrastructure and Biodiversity: www.tcpa.org.uk/data/files/TCPA_TWT_GI-Biodiversity-Guide.pdf

DCLG, (March 2012) National Planning Policy Framework: www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

UK Biodiversity Action Plan (UK BAP) (2004)

Natural England's Landscape Character Guidance and Toolkit

Local Publications

Green Wedge Review, Barrow Borough Council, 2014

Saved Barrow Borough Local Plan Review, Barrow BC 1996 -2006 (Adopted 2001)

Cumbria Development Design Guide, Cumbria County Council, 2017

Cumbria County Council Landscape Characterisation Study and Toolkit Cumbria CC, 2010

Cumbria Green Infrastructure Forum, Cumbria Vision: Action with Communities in Cumbria, EBS, 2010

Contact:

Planning Policy Team

Development Services

Barrow Borough Council

Town Hall

Duke Street

Barrow-in-Furness

Cumbria

LA14 2LD

Email: developmentplans@barrowbc.gov.uk

Website: www.barrowbc.gov.uk/residents/planning/

BOROUGH OF BARROW IN FURNESS
www.barrowbc.gov.uk

Working together to support sustainable development within the Borough of Barrow-in-Furness

DEVELOPMENT SERVICES