

Sustainability Statement
PEELHOUSES, LOCKERBIE

Sustainability Statement

**PEELHOUSES,
LOCKERBIE**

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SUMMARY OF THE SUSTAINABILITY APPRAISAL

The proposed development at Peelhouses, Lockerbie has been assessed against the most relevant, up-to-date sustainability indicators available. As a result, the principles of sustainability will be at the heart of the proposals.

In summary, the proposed development would:

- Retain areas of important habitats across the site wherever possible;
- Improve areas of the site which are currently not of high nature conservation value;
- Be designed to minimise impacts to existing habitats and would integrate with and enhance existing biodiversity;
- Incorporate sustainable drainage systems (SuDS) to control surface water drainage and protect water resources;
- Control noise levels from traffic and from the proposed data centre;
- Ensure that air quality would not be significantly impacted;
- Be designed, as far as possible, to minimise adverse impacts to the landscape character of the surrounding area;
- Use the existing topography to screen views of the data centre;
- Ensure that no known archaeological sites or monuments are disturbed or destroyed;
- Remove or remediate any on-site contamination prior to construction of the development;
- Ensure that the development is safe and secure for all future residents, workers and visitors;
- Provide extensive areas of formal and informal public open space including children's play areas;
- Provide up to 25% to 33% affordable on-site housing units within an overall total of 750 units;
- Provide community facilities, easily accessible by all members of the community, including a primary school, sports facilities, a village hall and allotments;
- Provide good links from the site to Lockerbie via footpaths and public transport;
- Create significant employment, both during construction and operation, including local jobs;
- Provide the UK's largest linked data centre and business park offering bespoke IT services, thereby attracting investment to the area;
- Residential buildings designed to the equivalent of Code for Sustainable Homes Level 4 to Level 5;
- Re-use of excess heat from the data centre buildings by residential and commercial units;
- Utilise nearby existing and proposed biomass and wind energy developments;
- Investigate the feasibility of incorporating rainwater harvesting to provide irrigation for allotments and greenhouses;
- Minimise waste streams from the operational development;
- Upgrade local roads to alleviate existing road safety concerns; and
- Adhere to a Code of Construction Practice to control potential adverse environmental impacts of the construction phases.

The tables presented in Section 6 provide details of each sustainability theme covered in the appraisal together with site-specific initiatives committed to by the Applicant and a commentary on how the initiatives comply with the relevant sustainable development policies and guidance.

1. INTRODUCTION

- 1.1 Lockerbie Data Centres Ltd (hereafter referred to as ‘the Applicant’) is seeking to obtain outline planning permission for the development of approximately 106ha of land (‘the site’) near Lockerbie in Dumfriesshire. The proposed mixed use development will comprise internet data storage facilities, up to 750 residential units and new business and retail accommodation. The land is situated within the jurisdiction of Dumfries and Galloway Council (‘DGC’) in a rural setting approximately 2.5km north of Lockerbie town centre.
- 1.2 This Sustainability Statement, submitted to accompany an outline planning application for the site, describes the approach that the team has taken to sustainability during the design process and the extent to which the development accords with the principles and aspiration of sustainable development. It was prepared by Waterman Energy, Environment and Design Ltd following a review of all relevant national, regional and local policy objectives and consultation with all key members of the design team, namely:
- Lockerbie Data Centres Ltd (the Applicant);
 - WYG Planning and Design (Planning Consultants and Project Managers);
 - Faber Maunsell (Energy Consultants);
 - Waterman Transport and Development (Drainage and Infrastructure Consultants);
 - Waterman Boreham (Transport Consultants);
 - Ryden (Socio-Economic Consultants);
 - AOC Archaeology;
 - Penn Associates (Ecological Consultants); and
 - Prospect Design Partnership (Landscape Consultants).
- 1.3 Opportunities for incorporating features into the development that contribute to the objectives of sustainable development were explored during the design process.

2. THE SITE AND SURROUNDINGS

- 2.1 The site is situated approximately 2.5km north of Lockerbie town centre and covers approximately 110ha as indicated in Figure 1. The site is bordered by the B723 to the west and is surrounded by partially forested moorland to the north, east and south. Lockerbiehouse Wood is located adjacent to the site’s southern boundary. The precise boundary of the site, together with existing land uses, is shown in Figure 2.
- 2.2 The site generally comprises undeveloped agricultural land. The disused Peelhouses Farm and associated outbuildings are situated within the lower lying area in the west of the site. The majority of the site is made up of fields used for grazing. The site also contains areas of woodland and a number of small watercourses, including drainage ditches.
- 2.3 The site slopes gradually upwards from west to east, with the gradient steepening in the centre of the site. The western part of the site generally forms a shallow bowl-shaped valley. The topography of the site is indicated in Figure 1.
- 2.4 Peelhouses Cottage is approximately 10m to the north of the site, in close proximity to Peelhouses Farm. Bishopcleugh Farm and Croftheads Farm are approximately 120m and 315m north of the site respectively. The Lockerbie Manor Hotel is approximately 250m south of the site. The west-coast mainline railway runs north/south approximately 600m to the west of the site at its closest point and the M74 motorway runs north/south approximately 1km to the west. The outskirts of Lockerbie begin approximately 1km to the south of the site.
- 2.5 The western part of the site drains via small burns and ditches in a westerly direction into the Kirk Burn, approximately 150m west of the site. The eastern part of the site drains in a south-easterly

direction via small burns and ditches into the Scalescleuch Burn, approximately 500m south-east of the site.

3. THE PROPOSED DEVELOPMENT

- 3.1 The main built elements of the proposed development are shown on Figure 3 and would include:
- An internet data centre of up to 250,000m², including associated offices and back-up generators, employing up to 40 people;
 - Up to 18,500m² of Class 4 business units in a commercial and technology park;
 - Commercial greenhouses employing up to 100 people;
 - Residential development of up to 750 homes including affordable housing;
 - Community facilities including a primary school (for up to 200 pupils), sports facilities, a local shop (of up to 1,000m²), a community hall (of up to 500m²) and allotments; and
 - A visitor and information centre of up to 950m².
- 3.2 The new residential development would be designed around a traditional market street with a village square and residential streets created in line with DGC's design guidance and other relevant local and national policies. Formal and informal open space would be provided with an emphasis on pedestrian and cycle linkages within the development and with connections to Lockerbie town centre. Road traffic access to the development would be from the B723 which forms the western boundary of the site.
- 3.3 A district heating system would be implemented which would recycle excess heat produced by the data centre to heat the residential, commercial and horticultural elements of the proposed development. There would also be the potential to provide heating to the wider Lockerbie area.
- 3.4 The development would be drained using a sustainable drainage system (SuDS) which would also be designed to protect and enhance existing water resources and control flood risk across the site.

4. POLICY OBJECTIVES

NATIONAL POLICY – UK LEVEL

'Securing the Future' – The UK Sustainable Development Strategy (2005)

- 4.1 Many definitions of sustainable development exist, although the common objective for all is the integration of economic, social and environmental issues to ensure a better quality of life for people today, without compromising the needs of future generations. In March 2005, the Government launched its new strategy for sustainable development entitled 'Securing the Future' (Ref. 1). In order to achieve sustainable development in the UK, the strategy identifies the following priority areas for immediate action:
- sustainable consumption and production;
 - climate change and energy conservation;
 - protection of natural resources; and
 - sustainable communities.
- 4.2 The strategy sets out a clear commitment to government action on sustainable development. Of particular relevance to new developments, the strategy proposes a new code for sustainable buildings that would establish new voluntary standards on key issues such as energy, waste, water and materials. The UK Government also proposes to drive higher standards in design through the establishment of a new design forum to champion and educate in eco-design, and promote best practice tools and approaches.

'One Future – Different Paths' – The UK's Shared Framework for Sustainable Development (2005)

- 4.3 In conjunction with the UK Government's new strategy for sustainable development, the UK Government and Devolved Administrations launched their new Strategic Framework, '*One future - different paths*', on 7 March 2005 (Ref 2). This document demonstrates that although we have devolved Government, England, Scotland, Wales and Northern Ireland are all working towards the same goals. This framework comprises:
- a shared understanding of sustainable development;
 - a common purpose outlining what we are trying to achieve and the guiding principles we all need to follow to achieve it;
 - our sustainable development priorities for UK action, at home and internationally; and
 - indicators to monitor the key issues on a UK basis.

NATIONAL POLICY – SCOTLAND

Meeting the Needs...Priorities, Actions and Targets for Sustainable Development in Scotland (2002)

- 4.4 '*Meeting the Needs*' was published in March 2002 (Ref. 3) and sets out the approach to sustainable development in Scotland. The document sets out a number of actions under the key priority areas of 'Resource Use', 'Energy' and 'Travel'. Targets and indicators are identified under each priority area in order to monitor and review progress to assist in driving forward sustainable development in Scotland.
- 4.5 To reflect more recent UK goals and translate them into practice in Scotland, a new sustainable development strategy was developed through a process of public engagement and close working with key stakeholders.

Choosing Our Future: Scotland's Sustainable Development Strategy (2005)

- 4.6 This document (Ref 4) was published in December 2005 and sets out the measures to be taken in Scotland to turn the 2005 UK Framework into action. The document sets out at a high level what the Government is trying to achieve in Scotland in terms of sustainable development. It provides the strategic framework for a number of the Executive's new and emerging strategies for sustainability including such areas as travel, social well-being, economic sustainability, environmental justice and waste.

Scottish Planning Policy 1: The Planning System

- 4.7 Scottish Planning Policy (SPP) 1 was published in November 2002 (Ref. 5) and was the first in a new series of planning policy documents to be issued by the Scottish Executive. It updates NPPG1: The Planning System, published in 2000, and sets out the key principles and priorities for land use planning in Scotland to guide policy formulation and decision making towards the goal of sustainable development. In particular, planning should encourage sustainable development through the following:
- promoting regeneration and the full and appropriate use of land, buildings and infrastructure;
 - promoting the use of previously developed land and minimising Greenfield development;
 - conserving important historic and cultural assets;
 - protecting and enhancing areas for recreation and natural heritage;
 - supporting better access by foot, cycle and public transport, as well as by car;
 - encouraging energy efficiency through the layout and design of development;
 - considering the lifecycle of development from the outset; and
 - encouraging prudent use of natural resources.

Scottish Planning Policy 3: Planning for Housing

- 4.8 SPP3 (Ref. 6) was revised in July 2008 and sets out the Scottish Government's policy on the identification of housing requirements, the provision of land for housing and the delivery of homes through the planning system. It states that the siting and design of new housing should consider its setting, whether urban or rural, and the relationship with the landscape in which it is located, as well as topography, local materials, character, appearance and ecologies.
- 4.9 SPP3 notes that efficiency in use of energy and other resources throughout a new development can be influenced by a range of factors including location, siting, orientation, layout, materials and design. Good design can have positive effects for building performance, maintenance requirements, quality and attractiveness and the lifespan of buildings. Efficient use of resources during construction, and in the way buildings are used, should enable adaptation to the effects of climate change, as well as reducing the impacts of development itself.
- 4.10 The policy states that new development should respect, and where appropriate enhance, existing vegetation and other natural features. The creation and management of natural heritage interests is encouraged. Well-designed, sustainable water management, including the use of sustainable urban drainage systems (SUDS), can enhance the biodiversity of the local area.
- 4.11 SPP3 advises that development sites should provide a "benchmark figure" of 25% of the total number of housing units as affordable housing.

Scottish Planning Policy 6: Renewable Energy

- 4.12 SPP6 (Ref. 7) replaced NPPG6 in March 2007. It sets out the national planning policies for renewable energy developments that planning authorities should consider when preparing development plans and when determining planning applications. Its stated aim is to ensure the delivery of renewable energy targets as well as supporting the development of a viable renewables industry in Scotland. The development of existing and new technologies has the potential to provide significant opportunities for Scotland to enhance its manufacturing capacity with associated economic and employment benefits. Such benefits, which may accrue both locally or nationally, should be fully taken into account when considering planning applications.
- 4.13 SPP6 promotes a major increase in the smaller-scale production of heat and electricity from renewable sources. While much of the forecasted activity in this sector may take place at a domestic level (through micro wind turbines, woodchip boilers, heat pumps and solar heating), there is also significant potential for decentralised energy supply systems for businesses, public buildings and community/housing schemes.
- 4.14 Planning authorities should make positive provision for renewable energy developments by:
- supporting a diverse range of renewable energy technologies including encouraging the development of emerging and new technologies;
 - recognising the importance of fully engaging with local communities and other stakeholders at all stages of the planning process;
 - guiding development to appropriate locations and providing clarity on the issues that will be taken into account when assessing specific proposals; and
 - maximising environmental, economic and social benefits;

while at the same time:

- meeting international and national statutory obligations to protect designated areas, species and habitats and protecting the historic environment from inappropriate forms of development; and
- ensuring impacts on local communities and other interests are satisfactorily addressed. Such interests will vary from technology to technology.

Scottish Planning Policy 7: Planning and Flooding

- 4.15 One of the general principles of SPP7 (published in February 2004) (Ref. 8) is that new development should be free from significant flood risk from any source. It states that surface water run-off from development should be fully or partially drained by a sustainable drainage system unless this is impracticable.

National Planning Policy Guidance (NPPG) 10: Planning and Waste Management

- 4.16 NPPG10 (Ref. 9), published in March 1996, sets out the Government's approach to waste management in Scotland and defines the context for Structure and Local Plans. In contributing towards the management of waste, Local Authorities are required to apply the principles of sustainable development using the following hierarchy of options; reduction of waste at source; reuse; recovery (including recycling, composting and energy recovery); and environmentally sensitive disposal. This hierarchy places waste reduction above all other options. Examples include using products that avoid unnecessary packaging and designing buildings to last, or so that they can be adapted to serve alternative uses.

Draft Scottish Planning Policy 10: Planning For Waste Management

- 4.17 Draft SPP10 (Ref. 10) was published for consultation in August 2006 and, upon adoption, will replace NPPG10. It aims to promote a sustainable approach to waste management planning through a number of objectives including those reflected in the waste hierarchy, reduced reliance on landfill and principles such as the polluter pays and the proximity principle
- 4.18 The Draft SPP focuses on industrial land and promotes a model policy for planning authorities to adopt in their development plans. It requires planning authorities to encourage the provision for waste separation and kerbside collection of recyclable material in consideration of proposals for new housing. It states that waste reduction at demolition and construction sites should be supported through protocols and site management.

National Planning Policy Guidance 11: Sport, Physical Recreation and Open Space

- 4.19 NPPG11 (Ref. 11) was published in June 1996. It highlights the importance which the Government attaches to the retention and creation of open space as an important element in the promotion of health and quality of life. It states that providing opportunities for sport and recreation near to where people live can make an important contribution to sustainable development through the enhancement of people's quality of life and through the reduction of the need for people to travel, thereby contributing to a reduction in fuel consumption and pollution.

National Planning Policy Guidance 14: Natural Heritage

- 4.20 NPPG14 (Ref. 12), published in January 1999, stresses the importance of ensuring that land required for housing, economic activity, transport infrastructure and recreation is developed in ways which do not damage the environment. The protection of natural heritage may sometimes impose constraints on development. However, conservation and development can often be fully compatible and, with careful planning, the potential for conflict can be minimised.
- 4.21 The guidance further states that the scale, siting and design of any new development should take full account of the character of the landscape and the potential impact on the local environment. In particular, careful consideration of proposals is required for new development at the edge of settlements or in open countryside.

Scottish Planning Policy 15: Planning for Rural Development

- 4.22 For the purposes of SPP15 (Ref. 13) (published in February 2005), rural Scotland is defined as the countryside and settlements with populations of 3,000 or less, although the guidance is also relevant to the links between rural areas, small towns and urban areas. SPP15 encourages a more supportive attitude towards 'appropriate' development whilst acknowledging and valuing the enormous diversity of rural Scotland.
- 4.23 SPP15 is designed to underpin planning policies and decisions affecting rural areas and describes the increasingly important links between development planning and community planning.
- 4.24 It is acknowledged that in the more accessible and densely populated rural areas (such as the Lockerbie area) most new development will continue to be in, or adjacent to, existing settlements. SPP15 states that the amount and location of housing that can be developed in rural areas is determined by factors such as proximity to schools and shops, ease of access and drainage and

sewerage capacity. Fit in the landscape and design will also be important planning considerations. The impact of badly designed and sited houses is often particularly important in rural areas because of their visibility over large distances. Design standards should comply with published advice, use sustainable materials where appropriate and be energy efficient. The protection and enhancement of historic cultural assets and the need to further the interests of biodiversity are important considerations.

STRATEGIC POLICY OBJECTIVES

Dumfries and Galloway Structure Plan, 1999

- 4.25 The Dumfries and Galloway Structure Plan (Ref. 14) was approved in 1999. It stresses that Structure Plans should be the link between the broad aims of sustainable development and decisions on the use of land and buildings. It acknowledges that sustainable development is not only concerned with environmental protection but also embraces economic and social dimensions. In the context of the Structure Plan sustainable development means “*Development which maintains or improves the quality of life of the present generation whilst conserving the environment and resources to meet the needs of future generations*”.
- 4.26 The key themes of the development strategy are:
- encouraging further economic development across Dumfries and Galloway;
 - supporting economic diversification;
 - encouraging a slight increase in the areas population largely through in-migration;
 - making best use of existing infrastructure, transport links and service provision;
 - helping to support the retention of essential service provision particularly in rural communities;
 - recognising the importance of the natural and built environment to the quality of life; and
 - developing a partnership involving the Council, public and private agencies, local people and communities to facilitate and encourage development.
- 4.27 These themes are underpinned by four Strategy Statements, namely:
- Strategy Statement 1 – The Local Economy: Encouraging economic development which diversifies and strengthens the local economy in a sustainable manner;
 - Strategy Statement 2 – Development Strategy: To support the important service and employment role played by towns and villages while sustaining rural communities by encouraging appropriate development in the countryside;
 - Strategy Statement 3 – Quality of Life: Improving the quality of life for everyone in Dumfries and Galloway by maintaining and improving access to essential services and facilities and caring for the natural and built environment; and
 - Strategy Statement 4 – Infrastructure Provision and Investment: To make the most effective and efficient use of existing infrastructure provision and maximise the benefit of public and private investment.

Dumfries and Galloway Local Biodiversity Action Plan (LBAP)

- 4.28 LBAPs do not carry statutory force. However, in preparing Development Plans there is a requirement to take full account of natural heritage, in accordance with the statutory framework for safeguarding habitats and species under national and international law. The protection and enhancement of important natural heritage sites is the most obvious contribution that Development Plans can make towards biodiversity. However, current guidance in NPPG14: Natural Heritage, highlights the importance of safeguarding and enhancing the natural heritage beyond the confines of designated areas where the level of protection accorded to local designations is a matter for the planning authority. In this way the statutory planning process can make a significant contribution to the delivery of LBAP targets, both through policies for site protection and enhancement and by providing opportunities for the creation of new habitats in appropriate locations.

- 4.29 The Dumfries and Galloway LBAP (Ref. 15) provides proposals and actions which translate national natural heritage objectives into effective action at a local level. It is comprised of various Habitat Action Plans and Species Action Plans. Each of these identifies a number of specific actions that will protect and/or enhance the habitat or species directly. There are also general actions that can be taken to benefit Dumfries and Galloway's habitats and species as a whole and these too play an important part in the process.

Dumfries and Galloway Local Transport Strategy

- 4.30 The previous Dumfries and Galloway Local Transport Strategy (LTS) covered the period 2001 - 2004 but is now out of date. Development of the next LTS was put on hold until the South West of Scotland Transport Partnership (SWestrans) Regional Transport Strategy (RTS) was formulated. This was ultimately agreed by the Minister for Transport, Infrastructure and Climate Change in July 2008. The next LTS document is expected to be available for consultation in mid-2009.
- 4.31 The over-arching aim of the new LTS will be to promote economic growth, social inclusion, health and protection of our environment through a safe, integrated, effective and efficient transport system, thus echoing the objectives of sustainable development.

LOCAL POLICY OBJECTIVES

Annandale and Eskdale Local Plan, 2006

- 4.32 The Local Plan (Ref. 16) provides more detailed and site-specific policies for proposals within Annandale and Eskdale. This Plan was approved in June 2006 and, together with the Structure Plan, forms the basis for determining all planning applications within Annandale and Eskdale.
- 4.33 The Local Plan presents various policies in relation to sustainability under the following topic headings: Development Policies, Housing, Business and Industry, Retailing and Commercial Development, Tourism and Countryside Recreation, Environment, Servicing Development, Transport and Community Services and Facilities. The policies respond specifically to the four Strategy Statements within the Structure Plan, as summarised above.

5. APPROACH TO SUSTAINABILITY FOR THE PROPOSED DEVELOPMENT

- 5.1 The Sustainability Appraisal (SA) was undertaken in three main stages:
- a desktop policy review process;
 - consultation with the project design team; and
 - appraisal and report production.

Desktop Policy Review Process

- 5.2 Stage 1 focused on gaining an understanding of the guiding policy on sustainability in the location of the site. To achieve this, a review of all relevant local, regional and national policy documents was undertaken. This has been briefly summarised in Section 4 above. During this stage, the SA assessment framework was developed. This framework comprised eight sustainability themes, namely:
- natural environment and biodiversity;
 - built environment, landscape and views;
 - community and social needs;
 - economic prosperity;
 - energy, water and resources;
 - waste;
 - transport; and

- construction.

5.3 These headline issues were supported and enhanced by referring to specific policies set out in the Structure and Local Plans and in any other relevant policies or guidelines.

Design Team Consultation

5.4 The bespoke framework was then used as a checklist for the consultation undertaken in Stage 2, involving all relevant members of the design team and coordinated by Waterman EED. The consultation focused on the sustainability features that have been designed-in and the options available for further features to be incorporated at the detailed design phase.

5.5 The overall objectives of this consultation were two-fold. Firstly, to discuss the design options for delivering a scheme which contributes to sustainable development within the constraints imposed by the site. Secondly, to demonstrate to DGC how the principles of sustainable development have formed an integral part of the design evolution of the proposals and to ensure transparency in decision-making.

Appraisal and Report Production

5.6 Stage 3 involved an appraisal of the workshop and the compilation of the summary tables presented in Section 6. The Sustainability Statement was then reviewed and finalised for submission with the outline planning application.

6. SUSTAINABILITY APPRAISAL FRAMEWORK



Table 1: Conserve and Enhance the Natural Environment and Biodiversity

Sustainability Objective	Relevant Planning Policy	Commentary
<p>Safeguard, manage and enhance existing biodiversity</p>	<p>LOCAL PLAN POLICY GP7: Siting and Design The Council will require development to:</p> <p>b) retain and, where appropriate, enhance important physical and landscape features which contribute to the quality of the local environment having regard to the Local Biodiversity Action Plan; and</p> <p>(f) have regard to the replacement of any trees which are unavoidably lost as a result of development.</p> <p>LOCAL PLAN POLICY GP71: Road Design Where new road schemes are required they will have to...include, where appropriate, positive measures to safeguard biodiversity.</p>	<p>The masterplan has been designed to take account of known on-site ecological receptors, including ancient woodland and national and local biodiversity action plan species. The masterplan maximises the area of priority habitats that are retained in situ, as well as areas of habitat that support priority species.</p> <p>Green spaces are proposed, which could be subject to habitat management and creation techniques to sustain and enhance the ecological value of retained habitats as well as create new areas of ecological value on areas of land currently not of high nature conservation value.</p> <p>Through masterplanning, it has been possible to mitigate the need for tree loss. As the scheme is refined, small losses of trees are likely. However, such losses would be at a scale that could be mitigated for by replacement planting. Additionally, replacement tree, hedgerow and verge planting could be incorporated into the internal road design with locally appropriate native tree, shrub and herbaceous species being used to enhance biodiversity.</p> <p>The internal roads and associated surface water drainage infrastructure would be designed to minimise impact on existing habitats including watercourses and, where possible, would integrate with and enhance existing biodiversity.</p>
<p>Protection of water resources</p>	<p>STRUCTURE PLAN POLICY S2: Development Affecting Groundwater Resources The Council will seek to protect groundwater resources from being adversely affected by development, in consultation with SEPA and other agencies.</p> <p>LOCAL PLAN POLICY GP56: Protecting the Quality of Groundwater Development that is likely to result in the deterioration in status of a groundwater body will not normally be permitted unless appropriate mitigating measures are undertaken to prevent this occurrence.</p> <p>LOCAL PLAN POLICY GP55a: Implementation of the Water Framework Directive The Council will not normally permit development which would result in the deterioration of a waterbody below the status required by the EC Water Framework Directive.</p> <p>In addition to specific measures contained in other Structure and Local Plan policies, the Council will also give attention to the impact of development involving culverting and/or other engineering works which would have a significant adverse affect on the status of the waterbody.</p>	<p>The implementation of Sustainable Drainage Systems (SuDS) would be designed to provide the requisite level of treatment to prevent pollution of groundwater resources. Additionally, the lower lying areas of the site are underlain with sand and gravels which may be suitable for infiltration systems, which would allow the recharging of groundwater in developed areas. Infiltration rates and groundwater levels would be confirmed through intrusive investigations during the detailed design of the development, with all method statements for intrusive works being agreed with SEPA prior to commencement.</p> <p>The crossing of existing watercourses would be avoided wherever possible. However, where bridge crossings or culverts are deemed necessary, they would be sized appropriately to prevent flooding or detriment to the watercourse in terms of the Water Framework Directive and other relevant guidance. Any minor alterations to existing watercourses that may result from bridge crossings would be designed to comply with the relevant SEPA policies and CAR regulations.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Minimise pollution of natural resources, including noise, light, air, soil and water</p>	<p>LOCAL PLAN POLICY GP12: Potentially Polluting Development</p> <p>Where a development has the potential to cause pollution of water, air, soil or pollution through noise, dust, odour, vibration, light and heat the Planning Authority will only consider granting planning permission where it has been established, following consultation with the relevant regulatory organisations, that:</p> <p>a) the development would not result in an unacceptable level of nuisance, or unacceptable risk to human health; and</p> <p>b) the quality of the environment would not be materially damaged or put at risk.</p>	<p>A Surface Water Management Plan has been developed to attenuate and treat surface water runoff from the site, in accordance with SEPA and DGC policies and guidelines. This Plan accompanies the outline planning application. The surface water from the site would undergo two levels of treatment for road runoff and one level of treatment for roof runoff prior to discharge to ensure that the development would not result in adverse impacts to the watercourses downstream of the site.</p> <p>A number of potentially noise generating activities would be introduced as a result of the proposed development, including increased levels of road traffic, plant noise from the proposed data centre, and operational noise associated with the commercial and technology park. Control measures would be introduced during the detailed design phase to minimise potential noise impacts at existing and future noise sensitive receptors, thus ensuring that the development would not give rise to unacceptable levels of nuisance, or unacceptable risks to human health.</p> <p>Similarly, the predicted increase in traffic flows in the area as a result of the proposed development would lead to some slight increases in the concentration of traffic based pollutants, including nitrogen dioxide (NO₂) and fine particulates (PM₁₀). However, these predicted increases in pollutant concentrations at nearby sensitive receptors would be insignificant in terms of the national Air Quality Objectives and would not represent a risk to health of either existing nearby residents or future residents of the proposed development.</p> <p>Proposals for the lighting of the development would be brought forward during the detailed design phases. However, the Applicant is committed to ensuring that the lighting of the completed development (e.g. street lighting, security lighting, etc) would be in keeping with the semi-rural nature of the area and would not create nuisance to any existing or proposed receptors. Lighting during the construction phases would be controlled through a Code of Construction Practice (CoCP), to be agreed with DGC prior to commencement of any on-site construction activities. The great majority of construction activities would take place during daylight hours.</p>



Table 2: Built Environment, Landscape and Views

Sustainability Objective	Relevant Planning Policy	Commentary
<p>Sensitive design and layout of new development to protect and enhance local landscape character and views</p>	<p>STRUCTURE PLAN POLICY D11: Large Distribution and Warehousing Development Development of large warehousing and distribution centres will be supported, subject to [there being] minimal impact on the landscape or built environment.</p> <p>STRUCTURE PLAN POLICY D36: Design of Development The Council expects development proposals to take into account:</p> <ol style="list-style-type: none"> 1. siting, scale, form, massing and layout in relation to townscape and landscape setting; and 2. local building styles. <p>LOCAL PLAN POLICY GP7: Siting and Design The Council will require development to :</p> <ol style="list-style-type: none"> a) have regard to the character and appearance, scale, density, massing and materials, of the building, group of buildings or adjacent area, of which it will form a part; c) have no material adverse effect on the local landscape character, avoiding prominent ridge lines or other visually sensitive sites; d) take into account the guidance and advice set out in the Landscape Assessment Study; and e) comply with the Supplementary Guidance on Design. <p>LOCAL PLAN POLICY GP71: Road Design Where new road schemes are required they will have to...respect the character and appearance of the locality and minimise any material adverse effects.</p>	<p>The data centre would be designed in a way to blend into the landscape to as far a possible in order to minimise adverse impacts to the existing landscape character of the area. Furthermore, the significance of any adverse impacts would be mitigated by the fact that the landscape character type currently extends eastwards for many miles. Therefore, any adverse impacts would only be to a relatively small proportion of the overall extent of the landscape character type.</p> <p>Views to the site from the west would not be adversely impacted by the development of the data centre as they would be screened by the natural topography of the site, particularly the ridgeline to west of the proposed location of the data centre. Furthermore, the views from the site to the west already contain significant industrial installations such as the nearby Steven's Croft biofuel power station (approximately 2.5km to the north-west of the site) and the Dalswinton wind farm (approximately 15km to the west).</p> <p>Where housing is proposed, the existing landscape character of the area would be changed from agricultural to residential. However, any visual impacts would be mitigated through the judicious siting of residential areas on the lower lying areas of the site.</p> <p>Planting on the site would help to reinforce the sense of structure in this landscape and would provide additional screening of the data centre. Elsewhere on the site, available land could be used to enhance the existing landscape character through, for example, the reinstatement of walls and field boundaries.</p> <p>The internal road design would be set out to minimise ground modelling and thereby allow key features to be retained. DGC's Road Design guidelines would be adhered to during the detailed design stage of the development.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Maintain and enhance existing built environment and archaeological assets</p>	<p>STRUCTURE PLAN POLICY E9: Listed Buildings Development proposals which would destroy or adversely affect the character, appearance, or setting of a listed building will be resisted.</p> <p>LOCAL PLAN POLICY GP51: Listed Buildings In considering proposals affecting listed buildings the Planning Authority will ensure that: d) proposals for development will not be permitted if they would harm the setting of a listed building.</p> <p>LOCAL PLAN page 40: Where proposals involve ground disturbance, developers should seek appropriate archaeological advice at an early stage in developing their proposals. <i>(Within justification of Policy GP54: Known Archaeological Sites.)</i></p> <p>DGC SPG2: Design Guidance for the Built Environment Proposals affecting listed buildings or their setting should respect the qualities of the building and its important features and safeguard the integrity of these buildings, both individually and where appropriate as a group.</p>	<p>No listed buildings would be demolished as part of the proposed development. There may, however, be some slight visual impacts to the settings of existing listed buildings in the vicinity of the site. These would be mitigated through appropriate design of the built elements and landscaping of the proposed development.</p> <p>No known archaeological sites or monuments would be disturbed or destroyed by the proposed development. It is envisaged that any unknown archaeological remains encountered during the construction of the development would be dealt with by a standard planning condition in line with PAN 42: Archaeology, which would be administered by the archaeological advisor to DGC with whom productive consultation has already been undertaken.</p>
<p>Make the best use of the development site and remediating contaminated land</p>	<p>LOCAL PLAN POLICY GP12(a): Reusing Vacant, Derelict or Contaminated Land: Where appropriate, and having regard to other Development Plan policies, the Council will encourage the reuse and/or redevelopment of vacant or derelict land or buildings. Where sites are known or suspected to be contaminated, the Council will require developers to undertake sufficient remediation measures to ensure that the proposed use or users of the site will not be at risk from the effects of contamination, and that the contamination will not adversely affect the surrounding environment.</p>	<p>The buildings associated with Peelhouses Farm would be removed to make way for the proposed development. The farm buildings are currently in a poor state of repair and are mostly disused.</p> <p>A programme of intrusive investigation, assessment and remediation, would be carried out before commencement of demolition and construction works. Appropriate PPE and sanitary facilities would be provided to all site-workers, and all workers would be suitably trained as a condition of their employment.</p> <p>Site inductions for construction staff would include training on a site-specific Pollution Incident Response Plan, so that in the event of a significant contamination release, action can be taken quickly and effectively to minimise environmental impacts.</p> <p>In the event that asbestos is identified within the existing on-site buildings, an asbestos risk management plan would be developed and asbestos would be removed by a licensed contractor, in accordance with current legislation and best practice guidance.</p> <p>Any potentially contaminative storage tanks or existing contaminated ground on the site would be removed and appropriately disposed of and/or subjected to remediation, where feasible, as part of the construction process, in line with the Code of Construction Practice formulated for the development.</p>



Table 3: Ensure Developments are Comfortable and Secure for Users and Help Meet Community Needs

Sustainability Objective	Relevant Planning Policy	Commentary
<p>Ensure new development is safe and secure</p>	<p>LOCAL PLAN POLICY GP7: Siting and Design The Council will require development to: f) where appropriate, have regard to the principles of PAN 46: Planning for Crime Prevention.</p>	<p>PAN 46 has now been superseded by PAN 77: Designing Safer Places (March 2006) (Ref. 17). The Applicant is committed to adhering to the principles of PAN 77 within the proposed development.</p> <p>Examples of the principles contained within PAN 77 include:</p> <ul style="list-style-type: none"> • orienting buildings to overlook footpaths and public spaces; • providing clear and uncluttered signage, particularly for pedestrians; • ensuring high quality external lighting to help reduce the incidence of crime; and • including speed reducing measures on roads.
<p>Provide adequate open space within new development</p>	<p>STRUCTURE PLAN POLICY C4: Open Space and Play Facilities The Council will seek to ensure the long term maintenance of new areas of open space and play facilities provided by a developer.</p> <p>LOCAL PLAN POLICY GP18: Provision of Open Space in Residential Developments Except in areas where there is an identified surplus of public open space, all new residential developments which will, either individually or through phasing, result in the development of 10 or more dwellings must provide an appropriate amount and form of open space that reflects the needs of the residents, the scale of the development and the character of the area, in accordance with the Supplementary Guidance on Open Space in New Residential Development.</p>	<p>The proposed development would provide extensive areas of public open space, both formal and informal, children's play facilities, adult recreational routes and allotments. These open spaces would be linked by a network of green corridors suitable for pedestrians and cyclists and possibly horses, with routes and design being finalised following consultation with local cycling and equestrian groups.</p> <p>The development could also enable long-term management of the adjacent Lockerbiehouse Wood with new public access being created. The open spaces would exceed the required provision in terms of satisfying basic planning requirements and will be a new valuable resource for the local community.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
Provide a suitable amount of affordable and special needs housing	<p>STRUCTURE PLAN POLICY D5: Affordable Housing [Pending completion of Local Plans] the Council when considering planning applications for housing will consider the need to negotiate with the developer some provision for low cost housing as part of the proposal taking into account the size of the site and existing or planned provision of affordable housing in the locality.</p> <p>LOCAL PLAN POLICY GP20: Affordable Housing In order to assist in the provision of affordable housing, the Council will: a) negotiate with developers of large allocated and long term housing sites to secure an element of affordable housing within the development site.</p> <p>LOCAL PLAN POLICY GP21: Special Needs Housing In order to assist in the provision of special needs housing, the Council will: a) negotiate with developers of large allocated and long term housing sites to secure an element of special needs housing within the development site. d) have regard to the particular locational requirements of special needs housing when determining planning applications for this type of development.</p>	<p>The Applicant is committed to providing a range of affordable and special needs housing within the development, at 25% to 33% of the total. At this stage, it is anticipated that affordable housing will comprise a mix of 2 and 3 bedroom properties, which will be constructed</p> <p>It is anticipated that the affordable housing will be delivered within the first 5 years of the construction period, though this, along with the range of unit types provided, will be subject to discussion and agreement with the Council.</p>
Ensure adequate and easily-accessed community facilities including by means other than the private car	<p>LOCAL PLAN POLICY GP32: Village Shops and Services Within settlements which do not have a defined town centre there will be a presumption in favour of the development of new or extended retail facilities that provide a service to the local community or the surrounding rural area. The re-use or conversion of existing buildings will be encouraged.</p> <p>LOCAL PLAN POLICY GP76: Community Facilities on Unallocated Sites Proposals for new and improved community facilities will be permitted provided that...they are located so as to be accessible to the local population including non-car users.</p>	<p>The proposed development would provide up to 750 new homes and would include local retail facilities which would be easily accessible by foot or cycle. Community facilities would include a primary school with sports facilities available for use by the wider community, and a new village hall.</p> <p>The new development would be linked to the existing town of Lockerbie by footpaths.</p> <p>It is proposed that the development would be regularly served by the local public bus service, either through an amendment to an existing route, or the creation of a new route.</p> <p>A feasibility study is to be carried out with regards to providing a small fleet of electric buses to connect the development with Lockerbie and the wider area. More transport related detail is provided in Table 7 below.</p>
Ensure new development is accessible for all	<p>STRUCTURE PLAN STRATEGY STATEMENT 3: Quality of Life Improving the quality of life for everyone in Dumfries and Galloway by maintaining and improving access to essential services and facilities and caring for the natural and built environment. The strategy seeks to maintain and improve the quality of life in the area by...ensuring that development takes into account the access needs of all groups in society including the young, elderly and the disabled.</p>	<p>The proposed development would provide easily accessible public open space, both formal and informal, children's play facilities, adult recreational routes and allotments. The design of such spaces and routes would ensure that the needs of young, elderly and disabled people are taken into account.</p>



Table 4: Economic Prosperity

Sustainability Objective	Relevant Planning Policy	Commentary
Encourage a healthy local economy	<p>STRUCTURE PLAN STRATEGY STATEMENT 1: The Local Economy Encouraging economic development which diversifies and strengthens the local economy in a sustainable manner. This will be achieved [in part] by:</p> <ul style="list-style-type: none"> • supporting the potential of Gretna, Lockerbie and Dumfries in terms of population and employment to grow and expand; • supporting business development which broadens the economic base and increases the supply of jobs particularly in areas of high unemployment and in rural areas; and • encouraging new and high technology industries. 	<p>It is envisaged that the development will build on the geographic advantages of Lockerbie, for example the climate of Southern Scotland and the strategic communication and renewable opportunities within the Lockerbie area.</p> <p>Upon completion the development will provide a pull factor to the Lockerbie area allowing businesses to take advantage of the IT capability and network, power supply and environmental benefits and credentials.</p> <p>The development of the horticultural centre will provide an opportunity for further economic development and diversification, as this sector is not represented within Dumfries and Galloway at present.</p>
Sustain and promote employment	<p>STRUCTURE PLAN STRATEGY STATEMENT 2: Development Strategy To support the important service and employment role played by towns and villages while sustaining rural communities by encouraging appropriate development in the countryside. This will be achieved [in part] by:</p> <ul style="list-style-type: none"> • supporting the reuse where possible of derelict or vacant sites, while recognising that there will still be a need for greenfield sites. <p>STRUCTURE PLAN POLICY D7: Employment Creation Development proposals which assist in the growth and development of the local economy will generally be supported particularly where they would...introduce new businesses and inward investment including electronics, or the use of high technology and telecommunications.</p> <p>STRUCTURE PLAN POLICY D10: Medium and Small Business Development Small (i.e. less than 10 employees) and medium sized businesses (i.e. 10-50 employees) will be encouraged to utilise existing premises or serviced industrial and business sites in towns and villages. Development proposals outside these sites including the adaptation of existing buildings, will be considered favourably subject to the Council being satisfied in relation to:</p> <ol style="list-style-type: none"> 1. the reasons for selecting the site in preference to allocated or serviced sites; 2. impact on the landscape and the environment can be minimised; 3. traffic impact; 4. servicing of the development; and 5. the amenity of the surrounding area is not adversely affected. 	<p>The proposed development is expected to provide an additional and retained annual retail and leisure expenditure of £11 million and additional and retained Council Tax revenue of £0.94 million annually.</p> <p>It is envisaged that the proposed development will create 1940 full time equivalent jobs for the 10 year duration of the project. A further 1158 jobs in employment and commercial sectors as well as 75 service jobs are likely to be created once the development is operational.</p> <p>Physical and environmental linkages, such as the cycle paths and the utilisation of low grade heating from the data centre will add to the green credentials of the development, not only highlighting environmental benefits but also providing a working example of environmental initiative and desire to minimise environmental impacts.</p> <p>Upon completion the proposed development will provide opportunities for similar industries as well as respective service providers to co-locate as they will benefit from the IT and power network created. Direct, indirect and induced employment may therefore be local, regional (South of Scotland and perhaps the North of England), national to the UK and also international as companies seek high quality data storage and management space.</p> <p>The location of the proposed residential units ensures easy access to local shopping facilities by a variety of transport methods including by foot, cycle, public transport and car.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Provide learning and training opportunities</p>	<p>For example; skills training through employment. There are no relevant policies within the Structure and Local Plans.</p>	<p>As noted above direct, indirect and induced employment may be local, regional to the South of Scotland and perhaps the North of England, national to the UK and international also as companies seek high quality data storage and management space. It is envisaged that the proposed development will provide additional requirements for skilled individuals as well as attract to the area skilled workers as companies seek to relocate to take advantage of the business and IT network.</p> <p>The areas SIMD ranking in education, skills and training has increased over the period 2004 to 2006 and it is expected with the construction and completion of the proposed development this ranking will continue to increase as companies located at the site demand more qualified staff and related services.</p>



Table 5: Minimise the Use of Energy, Water and Resources

Sustainability Objective	Relevant Planning Policy	Commentary
<p>Promote energy efficiency through design</p>	<p>LOCAL PLAN POLICY GP7: Siting and Design The Council will require development to: h) have regard to the need for energy conservation and efficiency in the design, orientation and layout of the site or buildings.</p>	<p>The overwhelming energy demand within the proposed development would be from the data centre buildings. Options studies are currently being undertaken by the design team to develop innovative building form solutions that would aid in achieving a 'best in class' energy performance taking full advantage of the local climate. This work is being supported by Carbon Trust.</p> <p>The layout and planning of the residential buildings will aim for at least the equivalent to Code for Sustainable Homes Level 4 and, perhaps, Level 5. The team is being supported by the Energy Savings Trust (EST) and the Building Research Establishment (BRE) in the development of construction options to achieve enhanced thermal insulation and airtightness.</p> <p>The data centre buildings would unavoidably be large energy consumers and a major contribution to energy efficiency would be made by the re-use of waste heat from these buildings by the residential and various commercial enterprises within the proposed development.</p>
<p>Utilise renewable energy sources</p>	<p>STRUCTURE PLAN POLICY S21: Renewable Energy Development proposals for renewable energy sources will be considered positively provided they do not have a significant adverse impact on:</p> <ol style="list-style-type: none"> 1. the built and natural heritage; 2. areas and routes important for tourism or recreational use in the countryside; 3. water and fishing interests; 4. air quality; and 5. the amenity of the surrounding area. <p>All proposals will be required to provide detailed information on associated infrastructure required, including roads and grid connections, impact during construction and operational phases of the development, including visual impact, noise and odour issues and provisions made for restoration of the site.</p>	<p>The siting of the data centre would take full advantage of the proximity of the Steven's Croft biomass power station (approximately 2.5km to the north-west of the site) and of nearby existing and proposed windfarms, including Newfield (approximately 1km to the north at its closest point) and Minsca (approximately 7km to the south-east). The importation of off-site and the development of on-site renewable energy (in the form of district heating) would lead to significantly reduced overall carbon emissions as the project develops.</p> <p>The use of small scale building integrated renewable energy systems would be reviewed on a regular basis to take maximum advantage of evolving technologies and the buildings would be designed to be 'renewable enabled'.</p> <p>The available renewable energy options for the site are continuing to be assessed and would be finalised during the detailed design stage of the development.</p> <p>Rainwater harvesting has been proposed to provide water for irrigation of the allotments and greenhouses. The CIRIA W12 report 'Sustainable Water Management in Schools' (Ref. 18) states that rainwater harvesting can provide schools with educational, financial and environmental benefits. The proposed location of the primary school and other community facilities is in the low lying, relatively flat area to the south west corner of the site, where it is proposed to discharge the flows from the school roof and paved area to an educational wetland feature.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Minimise flood risk</p>	<p>STRUCTURE PLAN POLICY S3: Development in Flood Risk Areas Development will not normally be permitted where there would be a significant risk from flooding or where it could increase the risk of flooding elsewhere. Depending on the location and type of development the Council may require works to be carried out to manage surface water run-off.</p> <p>LOCAL PLAN POLICY GP58: Flood Risk and Development There will be a presumption against development which would be at a significant risk from flooding or which would significantly increase the likelihood of flooding elsewhere. In these areas new development proposals will be subject to consultation with SEPA to assess the flood risk. Development in or which could affect flood risk areas will only be permitted if:</p> <ul style="list-style-type: none"> a) it would not, either individually or cumulatively, increase the risk of flooding <ul style="list-style-type: none"> i) by reducing the capacity of, or increasing flows within a flood plain; or ii) through the discharge of additional surface water; or iii) by harming flood defences ; and/or b) it would not be at risk from flooding; and c) adequate provision is made for access to watercourses for maintenance. <p>As part of the implementation of this policy the use of culverts and/or the canalisation of watercourses should normally be avoided and existing culverted or canalised watercourses in redevelopment and land rehabilitation schemes should be restored where appropriate.</p> <p>DGC SPG8: Flooding It is important when considering proposals for a new development of any type that they be located where they will not be prone to flooding. Also, developments should be located where they will not reduce flood storage, or where surface water run-off from the development site will not cause problems either upstream or downstream of a receiving watercourse or drainage network. The capacity of a new development's surface water drainage system should be adequate to deal with the required storm events, without causing flooding.</p>	<p>A Surface Water Management Plan for the proposed development, submitted with the outline planning application, provides details of how surface water runoff would be attenuated and treated in accordance with SEPA and DGC policies and guidelines. The surface water from the site would be attenuated to equivalent greenfield runoff rates prior to discharge to ensure that on-site and off-site flood risk is minimised.</p> <p>The site is not within an identified flood risk area. Nevertheless, a flood risk assessment in the form of a detailed hydrological assessment would be undertaken at the detailed design stage.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Provide suitable sustainable drainage within new development</p>	<p>LOCAL PLAN POLICY GP57: Sustainable Urban Drainage Systems (SUDS) The Council will encourage the use of SUDS and other appropriate innovative methods such as reed beds, as a means of treating surface water run-off from development sites.</p> <p>LOCAL PLAN POLICY GP60: Water Sewerage and Drainage Provision In dealing with development proposals which require either the provision of water supplies, the disposal or treatment of sewage or foul water or the disposal of surface water, the Council will encourage early consultation with Scottish Water and /or SEPA as appropriate. In determining planning applications, the Council:</p> <p>a) will normally require developments to have separate surface and foul/sewage systems, and</p> <p>b) will encourage, particularly in accordance with General Policy 57, the use of SUDS for dealing with surface water.</p>	<p>A Surface Water Management Plan has been developed in accordance with CIRIA C697 report 'The SUDS Manual' (Ref. 19) to attenuate and treat surface water runoff from the site in accordance with SEPA and DGC policies and guidelines.</p> <p>It is proposed to implement a completely separate sewerage network with surface water being treated and attenuated on-site prior to discharge to local watercourses and foul sewerage discharging to the Scottish Water sewerage network. Currently, there is insufficient capacity in the local sewerage network and wastewater treatment works. However, Scottish Water has proposed a sewer network assessment to determine the upgrade requirements.</p>
<p>Minimise water use</p>	<p>There are no relevant policies within the Structure and Local Plans.</p>	<p>Rainwater reuse and rainwater harvesting have been proposed where applicable throughout the site as part of the Surface Water Management Plan.</p> <p>Measures to reduce water demand, such as installation of water meters and low-flush toilets would be considered at the detailed design stage.</p>



Table 6: Promoting Sustainable Waste Behaviour

Sustainability Objective	Relevant Planning Policy	Commentary
<p>Provide sustainable waste management infrastructure and promote its use</p>	<p>DGC SPG4.2: Managing Waste in Housing and Commercial Developments</p> <p>Developers are advised to...address waste storage and collection requirements for the completed development and make allowance for the collection of source separated wastes and, where appropriate, on-site composting facilities.</p> <p>Implementation of the Council's Integrated Waste Management Strategy relies in part on kerbside collection with some responsibilities on householders to separate their waste (source segregation). This will require space for multiple waste storage bins and containers at each property. The availability of adequate secure storage at source is therefore important.</p> <p>Home composting areas should be designed into all new housing developments. These must be carefully designed as part of the garden and not merely placed in a convenient area, which may be inappropriate. Community compost sites where the community has responsibility for maintenance and for conveying waste to the site are encouraged.</p> <p>Development of a new settlement or large neighbourhood offers the opportunity to establish centralised recycling points.</p> <p>Commercial premises will be expected to recycle waste and so multiple storage containers are likely to be required. As with residential properties, areas of hard standing at storage and collection points are required and dropped kerbs along routes where waste will be moved in wheeled containers.</p>	<p>Specific details regarding waste management have not been formulated at this early stage in the design process (outline planning application). However, any subsequent detailed design will reflect the Applicant's commitment to ensuring that wastes arising from the completed development are minimised and separated through adherence to DGC's specific SPG as well as other relevant national guidance.</p>



Table 7: Promoting Sustainable Transport Modes

Sustainability Objective	Relevant Planning Policy	Commentary
<p>Ensure good access to the development is provided for all modes of transport, promote sustainable travel and reduce use of private cars</p>	<p>STRUCTURE PLAN POLICY D36: Design of Development The Council expects development proposals to take into account...the access needs of all groups.</p> <p>STRUCTURE PLAN POLICY S4: Location of Development Development proposals which would generate significant travel activity should, where possible, be located on sites where they are capable of being well served by a variety of means of transport including public transport, walking and cycling.</p> <p>STRUCTURE PLAN POLICY S11: Local Public Transport The Council will continue to co-ordinate, publicise, improve and financially support local public transport services, in response to local needs and development of a sustainable transport strategy.</p> <p>STRUCTURE PLAN POLICY S14: Pedestrian and Cycle Facilities The Council...will support the development of facilities for cyclists and pedestrians in towns, villages and the countryside.</p> <p>LOCAL PLAN POLICY GP70: Cycling The Planning Authority recognises that cycling has an increased role to play within an overall transport strategy and will develop measures to promote and facilitate cycling wherever it is considered appropriate.</p> <p>LOCAL PLAN POLICY GP71: Road Design Where new road schemes are required they will have to comply with...the Council's Design Guidelines and Standards [and] make positive provision for pedestrians, cyclists and public transport.</p> <p>LOCAL PLAN POLICY GP72: Passenger Transport The Council will encourage the maintenance and enhancement of passenger transport facilities. The Council will continue to support the passenger transport network and will give priority to supporting services in rural areas or which meet education, employment, shopping and entertainment/recreational needs, subject to the availability of resources.</p> <p>LOCAL PLAN POLICY GP73: Access to Transport Facilities The Council will require development proposals which would generate a significant level of travel activity to provide for a balanced choice of means of travel, to, from and within the site as an integral part of the overall design and layout of the development.</p>	<p>The detailed design of the proposed development would place particular focus on levels at proposed junctions to ensure that they are as shallow as practicably possible and would not compromise pedestrian safety.</p> <p>A Green Travel Plan has been proposed for the site which would ensure that all properties would be within 400m walking distance of a bus stop. The commercial bound traffic would be separated from residential traffic, ensuring that traffic associated with the data centre, commercial units, and the horticultural development would not be required to travel along residential streets with frontage access. It is proposed that all areas of the site should be accessible to cyclists and pedestrians.</p> <p>Furthermore, a Travel Plan Framework and report would be developed and would be subject to ongoing monitoring throughout a set period to be agreed with DGC. The Framework would include a detailed review of existing public transport provision, assess the requirement for additional bus services, and specify measures to encourage non-car travel.</p> <p>Local buses would service the site, which may involve the re-routing of an existing service, or the provision of a completely new service to link Lockerbie town centre and the development site. In particular, it is intended that the provision of a new bus service or the re-routing of existing services would allow access from the development to Lockerbie railway station, as this has been identified as an important commuter link. Bus services linked to school times will also be considered, to reduce private car journeys by parents to/from the site. Up to date information in the form of real-time displays at bus-stops would help to encourage use of public transport.</p> <p>New pedestrian routes would be created to link to existing routes and local roads, providing safe access to the facilities within Lockerbie town centre.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Improve road safety and manage traffic during construction and operation</p>	<p>LOCAL PLAN POLICY GP65: Traffic Management and Road Safety</p> <p>The Council will seek to improve road safety through the use of traffic management and traffic calming measures. To address traffic/pedestrian conflicts and other road safety issues, developers will be required to incorporate the following within their proposals:</p> <ul style="list-style-type: none"> a) measures to reduce pedestrian/vehicle/cycle conflict; b) provision for cyclists in terms of priority routes and parking facilities; c) control and management of heavy commercial traffic; and d) adequate provision for vehicle parking. 	<p>All new road junctions would be designed with safety as a paramount consideration. Where necessary, roads would be upgraded in order to alleviate existing road safety concerns.</p> <p>New dedicated pedestrian and cyclist routes would be created to link to existing routes and local roads, providing safe access to the facilities within Lockerbie town centre.</p> <p>Any heavy traffic accessing the commercial elements of the proposed development would be routed away from the proposed village core.</p> <p>Measures for minimising the potential safety issues associated with construction traffic would be detailed within the Code of Construction Practice and adequate training would be provided to all site workers.</p>



Table 8: Sustainable Construction

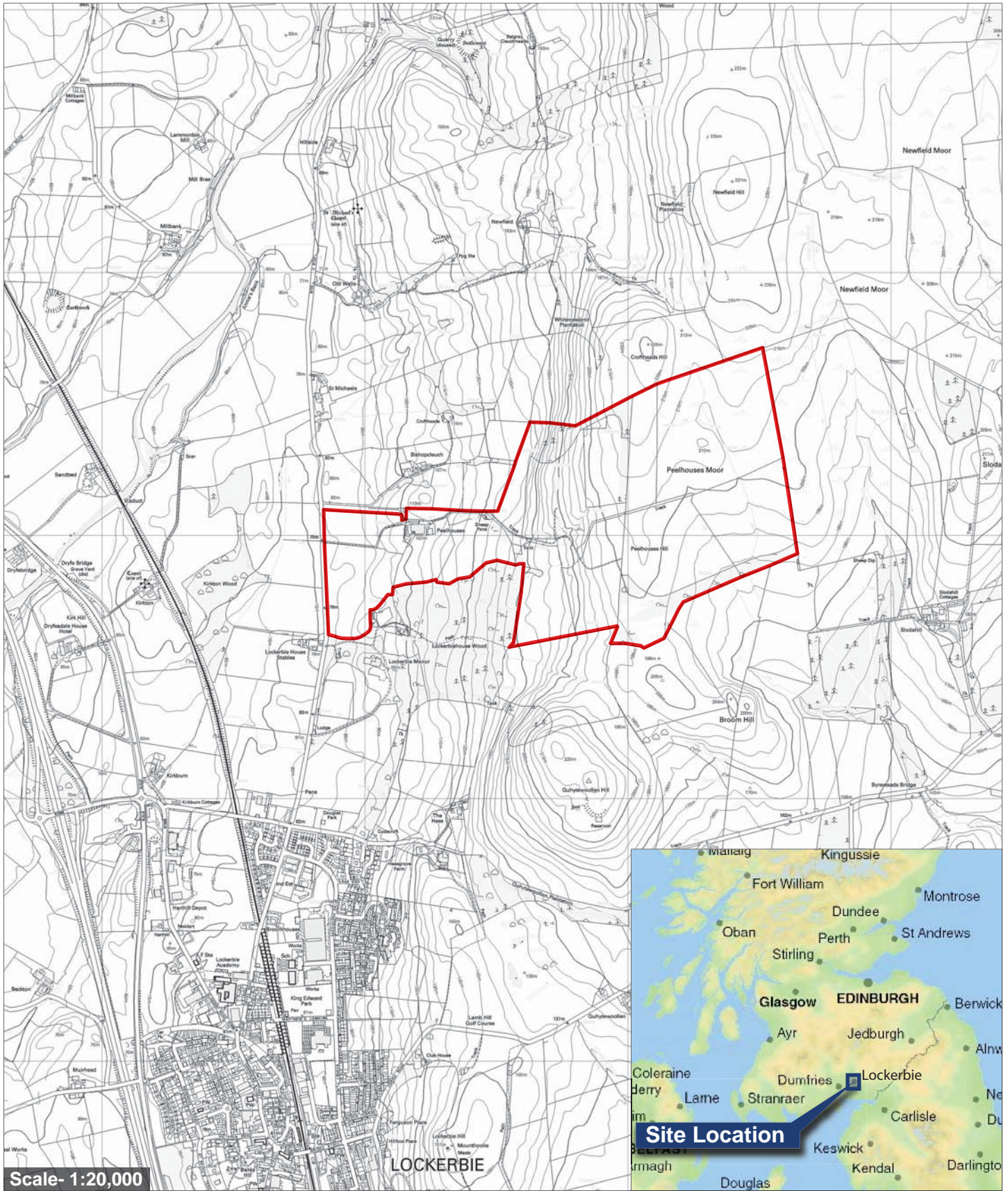
Sustainability Objective	Relevant Planning Policy	Commentary
<p>Minimise environmental impact of construction materials</p>	<p>There are no relevant policies within the Structure and Local Plans.</p>	<p>The Carbon Trust and Energy Saving Trust are being engaged to provide advice on carbon reduction techniques for the construction of, respectively, the non-residential and residential buildings. Additionally, the Building Research Establishment (BRE) are looking at design matters to achieve 'low carbon in use' homes and have included material selection as part of this to achieve the lowest possible embedded carbon in the buildings.</p> <p>In addition, there is an aspiration to construct the housing units to at least the equivalent of Code for Sustainable Homes Level 4 and, perhaps, Level 5. The Carbon Trust are looking at the design of the data centre, office buildings and greenhouses and, in particular, issues surrounding energy sourcing and energy re-use. The wider design team is utilising in-house experience of data centres and office buildings previously designed and built in Europe to help achieve both 'low carbon embedded' and 'low carbon in use' buildings for these elements of the project.</p> <p>Both the Carbon Trust and the Energy Saving Trust are providing input to the design of the proposed district heating system, with the main phase of design to take place during the detailed design stage of the proposals.</p> <p>Materials from recycled sources and with low embodied energies would be utilised wherever practicable. Locally sourced materials would be preferred. Timber from an FSC or equivalent certified source would be used during construction. The precise proportions would be decided by the contractor but the highest proportion will be strived for.</p> <p>It is envisaged that an all-encompassing Code of Construction Practice (CoCP) would be formulated for the site as a condition of any planning consent. This would help to ensure that the principles of sustainability would be central to the development's design, layout and use of materials.</p> <p>All of these issues would be considered further at the detailed design stage.</p>



Sustainability Objective	Relevant Planning Policy	Commentary
<p>Ensure sustainable construction techniques are used</p>	<p>DGC SPG4.2: Managing Waste in Housing and Commercial Developments Developers are advised to</p> <ul style="list-style-type: none"> b. Devise a Waste Management Plan for large developments (see below). d. Separate waste construction materials for reuse, recycling or disposal to ensure the waste is handled in the most sustainable manner possible. e. Use construction materials that are either recycled or from secondary material markets where practical and when fit for purpose. <p>WASTE MANAGEMENT PLAN Reducing waste in terms of the amount of material used on site and the associated costs of waste disposal can have economic savings for developers. Developers are therefore advised to submit a Waste Management Plan with the planning application, and it should include information on:</p> <ul style="list-style-type: none"> a. Wastes that will be produced and how they will be recovered (recycled / reclaimed). b. Steps taken to minimise waste and maximise the use of recovered materials. c. Procedures for the management of waste on site and waste leaving the site. d. Waste carrier(s), waste transfer and sites that receive the waste, as appropriate. <p>It is recommended that builders and developers use locally sourced reclaimed materials where possible.</p>	<p>A Waste Management Plan would be developed for the proposed development, in line with the requirements of DGC and with other best practice guidance. The Waste Management Plan would be part of the CoCP, to be developed during the detailed design phase of the proposals.</p>
<p>Minimise environmental impact of construction activities</p>	<p>STRUCTURE PLAN POLICY E16: Conservation of Habitats and Species When assessing development proposals, the Council will seek to ensure that the impact on any habitat which is valued for its nature conservation interests is fully considered.</p> <p>Paragraph 4.12: Developers will be encouraged to consider the impact of their proposal on nature conservation interests and take appropriate measures to maintain or where possible enhance this interest. Development proposals and notifications which are most likely to affect nature conservation interests include...construction projects.</p> <p>LOCAL PLAN POLICY 12: Potentially Polluting Development Where a development has the potential to cause pollution of water, air, soil or pollution through noise, dust, odour, vibration, light and heat the Planning Authority will only consider granting planning permission where it has been established, following consultation with the relevant regulatory organisations, that:</p> <ul style="list-style-type: none"> a) the development would not result in an unacceptable level of nuisance, or unacceptable risk to human health; and b) the quality of the environment would not be materially damaged or put at risk. 	<p>Consideration will be given to signing up to the Considerate Constructor Scheme or equivalent.</p> <p>There is predicted to be some minimal disturbance in terms of noise and air quality (dust) for sensitive receptors immediately adjacent to the proposed development. However, suitable control measures would be introduced in line with Best Practicable Means in order to minimise the potential for disturbance and minimise the potential for unacceptable levels of noise and vibration to occur. These control measures would be detailed within the CoCP.</p> <p>A Biodiversity Implementation Plan would be prepared that would set out in detail the measures that would be taken during the construction phase to minimise any adverse impacts on habitats and species. Consideration would be given to the type of construction techniques utilised, the timing of works, location of protective fencing and buffer areas, etc. Where species are protected from disturbance by specific legislation (e.g. bats, breeding birds, etc) any works would have to be undertaken in accordance with the legislation as it relates to these species and, potentially, licence conditions.</p>

7. REFERENCES

- 1 Department for Environment, Food and Rural Affairs (DEFRA), 2005: *Securing the Future: Delivering UK Government Sustainable Development Strategy*. HMSO.
- 2 Department for Environment, Food and Rural Affairs (DEFRA), 2005: *'One Future – Different Paths' – The UK's Shared Framework for Sustainable Development*, HMSO.
- 3 Scottish Executive, 2002: *Meeting the Needs...Priorities, Actions and Targets for Sustainable Development in Scotland*, Scottish Executive.
- 4 Scottish Executive, 2005: *Choosing Our Future: Scotland's Sustainable Development Strategy*, Scottish Executive.
- 5 Scottish Executive, 2002: *Scottish Planning Policy (SPP) 1: The Planning System*, Scottish Executive.
- 6 Scottish Government, 2008: *Scottish Planning Policy (SPP) 3: Planning for Housing*, Scottish Government.
- 7 Scottish Executive, 2007: *Scottish Planning Policy (SPP) 6: Renewable Energy*, Scottish Executive.
- 8 Scottish Executive, 2004: *Scottish Planning Policy (SPP) 7: Planning and Flooding*, Scottish Executive.
- 9 Scottish Office, 1996: *National Planning Policy Guidance (NPPG) 10: Planning and Waste Management*, HMSO.
- 10 Scottish Executive, 2006: *Scottish Planning Policy (SPP) 10: Planning for Waste Management, Consultation Draft*, Scottish Executive.
- 11 Scottish Office, 1996: *National Planning Policy Guidance (NPPG) 11: Sport, Physical Recreation and Open Space*, HMSO.
- 12 Scottish Office, 1999: *National Planning Policy Guidance (NPPG) 14: Natural Heritage*, HMSO.
- 13 Scottish Executive, 2005: *Scottish Planning Policy (SPP) 15: Planning for Rural Development*, Scottish Executive.
- 14 Dumfries and Galloway Council, 1999: *Dumfries and Galloway Structure Plan*.
- 15 Norman, P, *et al.*, 2009: *Dumfries and Galloway Local Biodiversity Action Plan*, Dumfries and Galloway Biodiversity Partnership.
- 16 Dumfries and Galloway Council, 2006: *Annandale and Eskdale Local Plan*.
- 17 Scottish Executive, 2006: *Planning Advice Note (PAN) 77: Designing Safer Places*, Scottish Executive.
- 18 Construction Industry Research and Information Association, 2006: *Sustainable Water Management in Schools*, CIRIA.
- 19 Construction Industry Research and Information Association, 2007: *The SUDS Manual*, CIRIA.



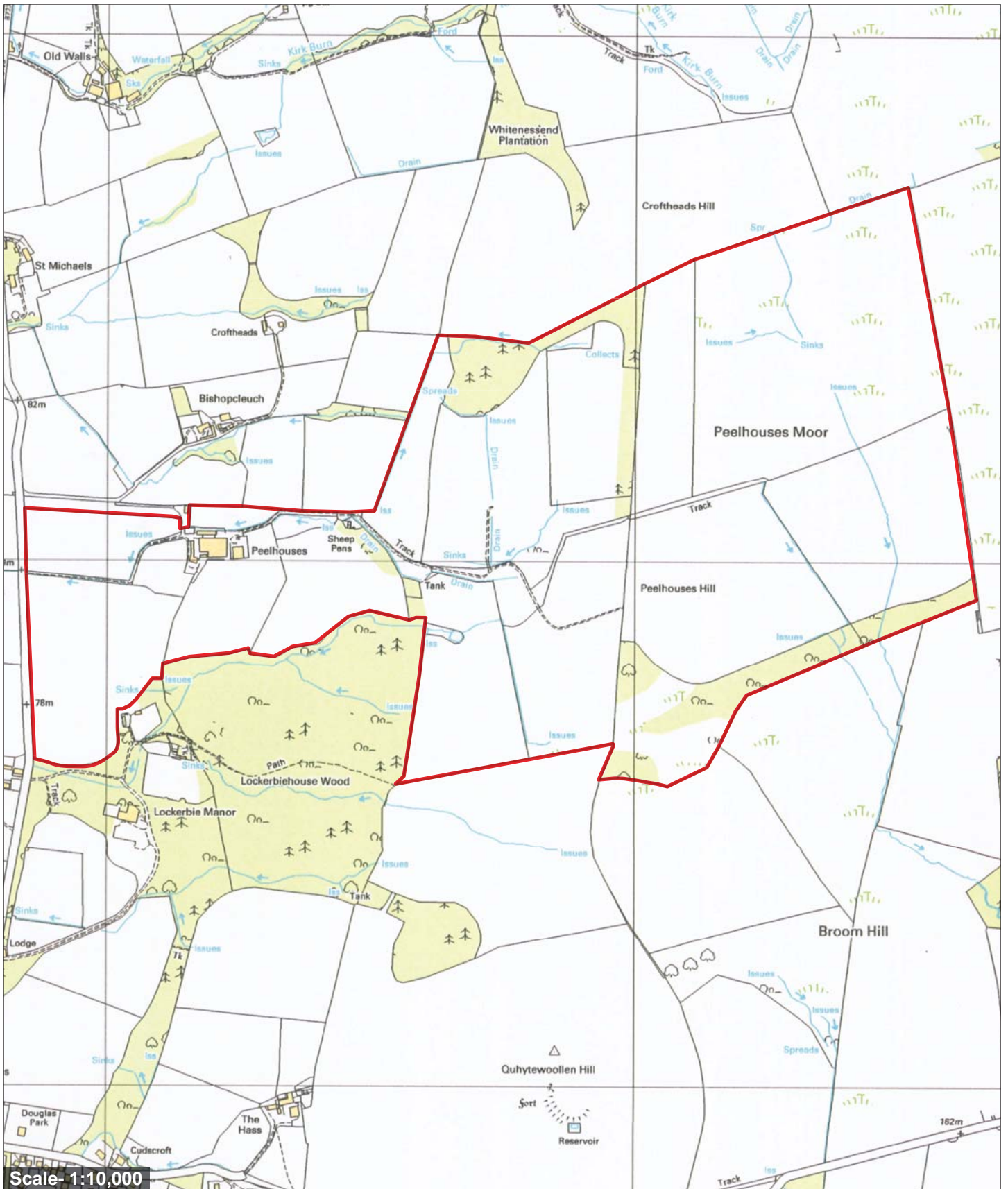
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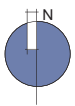
Site boundary

Project Details
 Figure Title
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30501E: Peelhouses, Lockerbie - Sustainability Statement
 Figure 1: Site Location Plan
 30501E-GR-SS-001
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Site boundary

Project Details

30501E: Peelhouses, Lockerbie - Sustainability Statement

Figure Title

Figure 2: Site Boundary Plan

Figure Ref

30501E-GR-SS-002

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02-03-09

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LEGEND

- ① Primary School and Community Sports Facilities
- ② Community Hall with shop / retail
- ③ Linear events space on the Market Street
- ④ Potential pedestrian & cycle links to the south including access to Lockerbie Manor Hotel (by agreement with the landowner)
- ⑤ Community Allotments
- ⑥ Meadows
- ⑦ Feature Glass Houses and Research Park
- ⑧ Pedestrian link
- ⑨ Amenity open space / parklands
- ⑩ Viewpoint with landscape feature
- ⑪ Visitor & Information Centre / Gate house
- ⑫ Technology & Business Park
- ⑬ Shell North Western Ethylene Pipeline
- ⑭ Data Centre - Generator
- ⑮ Data Centre - Offices
- ⑯ Existing water body retained and incorporated into Sustainable Urban Drainage System (SUDS)
- ⑰ Sustainable urban drainage system (SUDS) facilities

Project	30501E: Peelhouses, Lockerbie - Sustainability Statement
Figure Title	Figure 3: Proposed Development
Figure Ref	30501E-GR-SS-003B
Date	23-04-09
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