

## 1.0 Introduction and Purpose



1.1 Sustainable development is defined in Wales as a means of enhancing the economic, social and environmental wellbeing of people and communities, achieving a better quality of life for our own and future generations in ways which:

- promote social justice and equality of opportunity; and
- enhance the natural and cultural environment and respects its limits – using only our fair share of the earth's resources and sustaining our cultural legacy.

*(One Wales: One Planet – The Sustainability Development Scheme of the Welsh Assembly Government, 2009).*

1.2 The principles of sustainable development are embedded in national planning policy and the Merthyr Tydfil Local Development Plan (2006-2021) which set out commitments to delivering new homes, infrastructure, investment and jobs in a sustainable manner. Both recognise that we need to respect our environmental limits in order to ensure that our resources are not irrecoverably depleted or the environment irreversibly damaged. This means, for example, protecting and enhancing our natural environment and cultural heritage, minimising harmful emissions and promoting sustainable use of natural resources.

1.3 Addressing climate change is also an important part of delivering sustainable

development. It has the potential to significantly affect the way our society and economy functions and how the environment is managed. The climate change we experience will depend on the amount of greenhouse gases actually emitted over the coming decades, and it is therefore essential that we minimise such emissions to avoid the worst impacts of climate change in the future. This can be achieved by moving towards a low carbon economy through reducing energy demand and facilitating the delivery of more sustainable forms of energy.

1.4 It must be recognised that changes to our climate over the next 30 to 40 years caused by past emissions are largely unavoidable. We therefore need to plan for these impacts and facilitate adaptation measures that limit the risks to people, property, infrastructure and resources.

1.5 Welsh Government guidance, as set out in Local Development Plans Wales (2005), highlights the value of supplementary planning guidance (SPG) in setting out more detailed thematic guidance and advice on the way in which the policies of a local development plan (LDP) will be applied. The purpose of this SPG is to expand on and assist in the interpretation of LDP policies which seek to deliver sustainable development locally. It aims to provide advice on the various aspects of sustainable design and encourage the incorporation of sustainable design techniques into the design of new buildings. It is expected

that this SPG will be used by developers, agents and other stakeholders involved in the planning and development process.

1.6 Whilst this guidance should be read as a whole, the various aspects of sustainable design are considered under individual chapters, allowing the user to focus on the most relevant chapter during the design process. The aspects of sustainable design considered in this guidance include:

- Reducing Energy Demand - Layout and Building Design;
- Energy - Low and Zero Carbon Technologies;
- Transport and Movement;
- Water Conservation and Sustainable Drainage;
- Materials;
- Waste Management;
- Green Infrastructure;

- Designing Out Crime; and
- Flexible and Adaptable Buildings.

1.7 It is recognised that there will be occasions where a development is unable to successfully deliver all aspects of sustainable design covered within this guidance. There will inevitably be situations where site constraints, the local context and urban design considerations result in the need for “trade-offs” in the overall design solution proposed. Nevertheless, there is an expectation that all aspects of sustainable design are explored and that the proposed design solution is fully explained and justified.

1.8 This SPG is a material consideration to be used by the Town Planning Division to assess whether planning applications comply with the Merthyr Tydfil Local Development Plan (2006-2021).



### 2.1 National Planning Policy

2.1.1 Sustainable design is a broad topic covered throughout Planning Policy Wales (Edition 5, November 2012) and within a number of Technical Advice Notes. Of particular relevance are:

- **Chapter 4 – Planning for Sustainability of Planning Policy Wales (Edition 5, November 2012);**
- **Technical Advice Note 5: Nature Conservation and Planning (September 2009);**
- **Technical Advice Note 8: Planning for Renewable Energy (July 2005);**
- **Technical Advice Note 12: Design (June 2009);**
- **Technical Advice Note 15: Development and Flood Risk (July 2004);**
- **Technical Advice Note 18: Transport (March 2007);**
- **Technical Advice Note 21: Waste (November 2001); and**
- **Technical Advice Note 22: Planning for Sustainable Buildings (June 2010).**

### 2.2 Local Planning Policy

2.2.1 The Merthyr Tydfil Local Development Plan (2006-2021) contains a number of policies that seek to secure sustainable design in new developments. The main policy is **BW7: Sustainable design and place making**, which covers, amongst other things, reducing energy demand, energy and resource efficiency, renewable energy, green

infrastructure, waste management, 'inclusive design', adaptable buildings and 'designing out crime'. The Policy states:

**The Council will support good quality sustainable design and require new development to:-**

- **be appropriate to its local context in terms of scale, height, massing, elevational treatment, materials and detailing, layout, form, mix and density;**
- **integrate effectively with adjacent spaces and the public realm to enhance the general street scene and create good quality townscape;**
- **not result in unacceptable impact on local amenity in terms of visual impact, loss of light or privacy, disturbance and traffic movements;**
- **incorporate a good standard of landscape design;**
- **sensitively relate to existing settlement patterns and take account of natural heritage and the historic environment on site and in terms of potential impact on neighbouring areas of importance;**
- **foster 'inclusive design' by ensuring the development allows access for the widest range of people as possible;**
- **contribute to the provision of usable open and outdoor play space, ensuring its accessibility and connectivity to other green infrastructure, footpaths and cycleways;**

- incorporate resource efficient/adaptable buildings and layouts using sustainable design and construction techniques, including the re-use and recycling of construction and demolition waste on site, and energy and water conservation/efficiency measures;
- minimise the demand for energy and, where appropriate, utilise the renewable energy resource through appropriate layout, orientation, mix of uses, density of development, landscaping, optimal use of local topography and incorporation of renewable energy technologies;
- incorporate facilities for the segregation, recovery and recycling of waste; and
- provide a safe environment by addressing issues of security, crime prevention, and the fear of crime in the design of buildings and the space and routes around them.

**2.2.2 Policy BW8: Development and the water environment** is relevant to sustainable design particularly in respect of the latter part which addresses the use of sustainable drainage systems. The Policy states:

**Proposals for built development will only be permitted where:-**

- they avoid identified river flood plains in order that these areas continue to fulfil their flood flow and water storage functions;
- they do not have an adverse effect on the quality and/or quantity of surface waters or groundwater resources, and where opportunities exist, they incorporate measures to improve existing quality; and
- adequate water and sewerage systems exist, or are reasonably accessible, or are capable of being provided prior to the development becoming operational without placing unacceptable pressure on existing capacity or causing unacceptable environmental harm.

In addition, development proposals will be required to avoid exacerbating flood risk locally and elsewhere within the river catchment by

incorporating sustainable drainage systems (SuDS) for the disposal of surface water. Alternative methods of surface water disposal will only be considered where a developer demonstrates that the incorporation of SuDS is inappropriate for practical or environmental reasons.

**2.2.3 Policy BW12: Development proposals and transport** covers, amongst other things, reducing the need to travel and encouraging alternative modes of transport to the private car. The Policy states:

**Where appropriate, the Council will expect all development proposals to demonstrate how they will:-**

- help reduce the need to travel;
- encourage the use of transport other than the private car;
- avoid increasing traffic to unacceptable levels; and
- avoid causing or exacerbating highway safety problems.

**Transport assessments will be required for developments likely to result in significant trip generation.**

**2.2.4 Finally, Policy TB7: Renewable energy** seeks to facilitate renewable energy proposals that contribute to meeting national and local renewable energy targets provided they meet certain criteria. The Policy States:

**Development proposals that contribute to meeting national and local renewable energy targets will be favourably considered providing:-**

- In the case of wind turbine developments, their capacity does not exceed 25 MW on urban and industrial brownfield sites, and 5 MW elsewhere in the County Borough;
- They do not have an unacceptable impact on biodiversity and landscape including the setting of the Brecon Beacons National Park; and
- They do not have an unacceptable impact on the amenity of residential areas.



## 3.0 Design and Access Statements



3.1 A design and access statement (DAS) is a useful communication tool that provides a clear way in which to demonstrate that a development proposal has gone through a proper design process and achieves an appropriate level of sustainability. The DAS should demonstrate how the physical, social, economic and policy context of the development has been appraised, and how the choice of design principles and concepts takes that context into account. This guidance forms part of the policy context and applicants are encouraged to illustrate how the sustainability issues raised have informed and influenced the design of the development proposal.

3.2 A DAS should refer to the objectives of good design set out in Technical Advice Note 12: Design (2009)<sup>1</sup> and explain how they have informed the design process. These objectives can also provide a basis for considering the topics covered within this guidance. The link between the two is presented in Table 3.1.

Guidance Topics	TAN 12 - Objectives of Good Design
Reducing Energy Demand - Layout and Building Design	Character - particularly in respect of scale and layout of development Environmental Sustainability
Energy - Low and Zero Carbon Technologies	Environmental Sustainability
Transport and Movement	Access Movement
Water Conservation and Sustainable Drainage	Environmental Sustainability
Materials	Environmental Sustainability
Waste Management	Environmental Sustainability
Green Infrastructure	Environmental Sustainability
Designing Out Crime	Community Safety
Flexible and Adaptable Buildings	Access Character - particularly in respect of scale and layout of development Environmental Sustainability

**Table 3.1**

<sup>1</sup> Detailed guidance on design and access statements can be found in Appendix 1 of Technical Advice Note 12: Design (June 2009).

3.3 Applicants are encouraged to use the DAS as a tool to identify the intended sustainable building standard <sup>2</sup> (BREEAM or Code for Sustainable Homes) and explain the approach taken to reducing the carbon emissions associated with the development through the implementation of the energy hierarchy. In respect of the latter, details and explanations of passive design solutions, energy efficiency measures and the incorporation of low and zero carbon technologies (where appropriate) are recommended. The findings of sustainable building standard pre-assessments and low and zero carbon feasibility studies (where undertaken) can also be summarised and cross-referenced in the DAS.

3.4 A DAS should be proportionate in length and complexity to the type and scale of development proposed. The level of detail required will depend on the nature and scale of development and the sensitivity of the location. Major new developments and developments in sensitive locations are likely to require greater levels of detail with illustrative material and cross references to additional information contained within supporting documents submitted with the application. Smaller, less complex developments, and those in less sensitive locations, may be much shorter and only require concise written explanations.

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<sup>2</sup> *It should be noted that at the time of writing the Welsh Government propose to remove minimum sustainable building standards from Planning Policy Wales and to secure improvements to the energy performance of new and existing buildings through improvements to Part L of the Building Regulations. See 2012 Consultation on Changes to the Building Regulations in Wales Part L (Conservation of Fuel and Power) (WG, July 2012).*