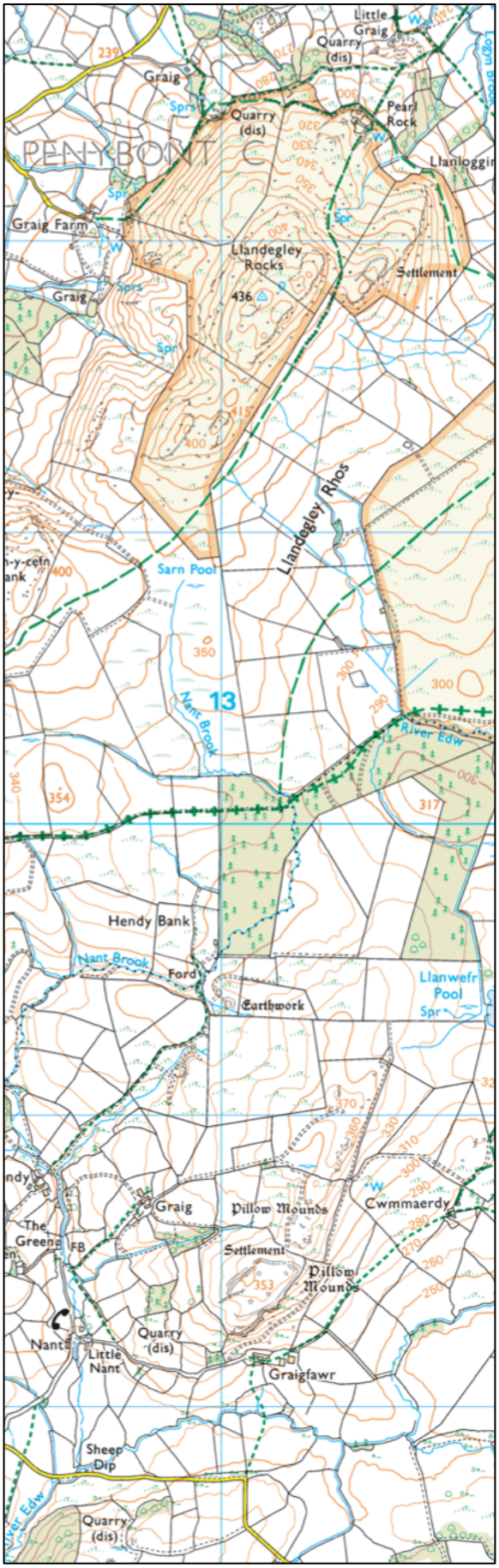

MICHELLE BOLGER
Expert Landscape Consultancy

Proof of Evidence
Landscape and Visual Issues

Prepared by
Michelle Bolger
CMLI, Dip.LA, BA, PGCE, BA

In respect of Appeal concerning
7 Wind Turbines on land off A44 South West of Llandegley, Llandrindod Wells

On behalf of
Campaign for the Protection of Rural Wales

Appeal ref
APP/T6850/A/17/3176128
LPA ref
P/2014/0672

February 2018

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APPENDICES

MB Appendix 1 is provided in a separate A3 document
MB Appendices 2 – 5 are provided in a separate A4 document

1 Introduction

1.1 Qualifications and Experience

1.1.1 My name is Michelle Bolger. I am a Chartered Landscape Architect and Director of Michelle Bolger Expert Landscape Consultancy. I have a degree and a Diploma in Landscape Architecture from Greenwich University and I am a Member of the Landscape Institute. I also have a degree in English from Durham University and a Postgraduate Certificate in Education from London University. I am Chair of the Landscape Institute's Education and Membership Committee and a Trustee on the Landscape Institute Board. I have previously worked as a Senior Associate for Gillespies LLP and Liz Lake Associates.

1.1.2 I have prepared Landscape / Townscape and Visual Impact Assessments (L/TVIA) to accompany planning applications for a range of projects including residential, light transit, highways, leisure, retail, commercial and enabling development, both as standalone documents and as part of Environmental Impact Assessments. On behalf of local planning authorities and other bodies such as National Resources Wales and the National Trust, I have reviewed L/TVIAs prepared for a number of developments including Nationally Significant Infrastructure Projects.

1.1.3 During the last fifteen years I have presented evidence at appeal, call-in and local plan inquiries on behalf of Appellants, Local Planning Authorities and local action groups with regard to the landscape impacts of proposals for light transit, residential, commercial and wind turbine development.

1.1.4 I have given evidence at more than 25 inquiries in England, Wales and Scotland with regard to wind turbine development and I have advised a number of local planning authorities with regard to wind turbine applications. In South Wales, I was responsible for the preparation of a number of wind turbine sensitivity and capacity studies and for the development of planning guidance for wind turbine applications. I was also responsible for the current version of Huntingdonshire's wind energy and landscape sensitivity study.

1.1.5 During the last ten years my work has included the assessment of impacts of wind turbines on the visual aspects of the setting of heritage assets. This has included providing an in-house training day for landscape officers at English Heritage and contributing to courses run by Oxford University Department of Continuing Education in association with English Heritage on current approaches to the Setting of Heritage Assets and Places in 2012 and 2014.

1.1.6 I have jointly delivered a series of training workshops on LVIA for other landscape architects and local authority officers. I have delivered two sessions on LVIA for the English and Welsh Planning Inspectorate training days. The first, in January 2013, was with reference to onshore wind energy developments and the second, in December 2013, was on the application of the 3rd Edition of the Guidelines for Landscape and Visual Impact Assessment. I have delivered presentations at the International Association for Impact Assessment's annual conferences in 2012, 2016 and 2017.

1.2 Scope of my Evidence

1.2.1 My evidence is concerned with the application to construct and operate a development of 7 wind turbines on land off the A44, south west of Llandegley, Llandrindod Wells. The local planning authority is Powys County Council (PCC). The proposed development would include wind turbines with a maximum tip height of 110m and maximum hub height of 69m. Ancillary development would include a substation, control building, new and upgraded access roads and hardstanding. The development is described in my evidence as the Hendy Wind Turbine Development (WTD).

1.2.2 The Hendy WTD was refused planning permission by PCC in May 2017. Three grounds for refusal were given:

I. '*The proposed development is unacceptable in landscape and visual terms due to the extent and degree of the significant landscape effects on LANDMAP High overall evaluation VSAAs (Upland Moor Radnor Forest and Upland Moor Glascwm Hill) and moderate overall evaluation VSAAs (Upland Moor north of Hundred House Rocky Moorland Gilwem Hill and Rolling Hills central south-east). The proposed development is contrary to policies UDP SP12, ENV2, GP1 and E3 of the Powys Unitary Development Plan (March 2010), Technical Advice Note 8: Renewable Energy (2005) and Planning Policy Wales: Edition 9 (2016).*

II. *The proposed development would have a significant effect on users of the BOAT, Open Access Land and Public Rights of Way and thereby contrary to policies UDP SP12, GP1 and E3 of the Powys Unitary Development Plan (March 2010) and Planning Policy Wales: Edition 9 (2016).*

III. *The proposed development would have an unacceptable adverse impact on the setting of Scheduled Nant Brook Enclosure, Scheduled Graig Camp, Scheduled Llandegley Rocks Hillfort and Scheduled Crug Eryr Mound and Bailey Castle. The proposed development is therefore contrary to policies UDP SP12, UDP SP3, ENV17 and E3 of the Powys Unitary Development Plan (March 2010), Welsh Office Circular 60/96: Planning and the Historic Environment: Archaeology (1996) and Planning Policy Wales: Edition 9 (2016)*'.[1]

1.2.3 In June of 2017 I prepared a review, *Landscape Review of Evidence Base for Powys Renewable Energy Policy*, which formed part of the statement submitted by the Campaign for the Protection of Rural Wales (CPRW) for Hearing Session 15 of the Examination of the Powys LDP by Planning Inspector Nicola Gulley. In July 2017, I was asked by CPRW to review the Hendy WTD application with a view to providing landscape and visual evidence for the public inquiry into the appeal. Having reviewed the Hendy WTD application I confirmed that I was happy to provide evidence to support CPRW's objection and PCC's reasons for refusal and I was instructed in August 2017.

1.2.4 My evidence addresses the landscape and visual aspects, including the historic aspects of landscape, of the three reasons for refusal listed above.

[1] Decision Notice, Powys County Council, 18/05/2017.

1.3 Documents

1.3.1 I have reviewed the documents submitted with the application and the consultee responses. In particular my evidence has taken account of the following documents:

- Environmental Statement (ES) Chapter 5, Landscape and Visual Assessment (LVIA) (Core Document Reference (CD) ES-2);
- Figures 1.1 – 1.7, 8.1 – 8.12 and 9.1 – 9.6 in ES Volume II (CD ES-3);
- LVIA Technical Appendices 5.1 – 5.9 in ES Volume III (CD ES-4);
- LVIA Figures 5.1 – 5.58 in ES Volume IV;
- A Review of The Environmental Statement - Landscape and Visual Impact Assessment Chapter by Enplan on behalf of PCC, Feb 2016 (CD LVIA-8);
- Hendy Proposed Wind Farm Landscape and Visual Impact Assessment, A Quality Assessment for Natural Resources Wales by Anthony Jellard Associates, October 2014;
- Planning Officer's report, April 2017 (CD PP-11);
- Planning Officer's Update Report (CD PP-12); and
- Planning Officer's Second Update Report (CD PP-13).

1.4 Structure of my Evidence

1.4.1 My evidence is structured as follows:

- **Section 2** sets out the landscape planning context.
- **Section 3** sets out the methodological approach used in this evidence and considers the methodological approach used in ES.
- **Section 4** describes the existing landscape character of the site and its surroundings.
- **Section 5** considers the landscape value of the site and the surrounding landscape.
- **Section 6** assesses the sensitivity of the site and the surrounding landscape.
- **Section 7** describes the effects of the development on landscape character.
- **Section 8** describes the effects of the development on landscape fabric.
- **Section 9** describes the visual effects of the development.
- **Section 10** provides a summary and conclusion.

1.4.2 MB Appendix 1 includes Figures that have been prepared to illustrate my evidence and they are presented as a separate A3 document. The remaining appendices are bound together as an A4 document.

1.5 Relevant Guidance

1.5.1 A range of published guidance on assessing landscape and visual impact and the landscape and visual impact of wind turbine development is available. Although some of the Guidance has been prepared for Scotland it has generally been considered to have relevance to wind turbine development in Wales and England. The key guidance is as follows:

- Landscape Institute/Institute of Environmental Management and Assessment (2013)
  Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) (CD LVIA-1)
- Natural Resources Wales (NRW)
  Landscape and Visual Impacts Assessment of Onshore Wind Turbines, LANDMAP Information Guidance Note 3 (2016)
- Design Commission for Wales (2014)
  Designing Wind Farms in Wales
- Scottish Natural Heritage (2017)
  Visual Representation of Wind Farms Guidance Version 2.2
- Scottish Natural Heritage (2017)
  Siting and Designing Windfarms in the landscape- Version 3 (CD LVIA-5)
- Scottish Natural Heritage (2012)
  Assessing Cumulative Impact of Onshore Wind Energy Developments (CD LVIA-6)
- The Highland Council (2016)
  Visualisation Standards for Wind Energy Developments

1.6 Duty to the Inquiry

1.6.1 I understand my duty to the Inquiry and have complied, and will continue to comply, with that duty. I declare that the evidence which I have prepared and provide for this appeal is true. It has been prepared and is given in accordance with the guidance of the Landscape Institute and I confirm that the opinions expressed are my true and professional opinions.

2 Landscape Planning Context

2.1 National Planning Policy: Planning Policy Wales, Edition 9, November 2016

2.1.1 *Planning Policy Wales Edition 9 (2016)* (PPW 9) (CD POL-19) contains the current land use planning policies of the Welsh Government and it provides the policy framework for the effective preparation of local planning authorities' development plans. *PPW 9 Chapter 5 Conserving and Improving Natural Heritage and the Coast* begins with the statements that '*The natural heritage of Wales includes its geology, land forms and biodiversity and its natural beauty and amenity. It embraces the relationships between landform and landscape, habitat and wildlife, and their capacity to sustain economic activity and to provide enjoyment and inspiration.* ***The natural heritage and valued landscapes of Wales are not confined to statutorily designated sites but extend across all of Wales - to urban areas, the countryside and the coast'***.[2] *(My emphasis).*

2.1.2 With regard to measures to conserve landscape and biodiversity PPW 9 states that '*While the value of all the landscapes of Wales is recognised*[3] *local planning authorities should have regard to the relative significance of international, national and local designations in considering the weight to be attached to nature conservation interests and should take care to avoid placing unnecessary constraints on development'*.[4]

2.1.3 PPW 9 notes that '*The LANDMAP information system methodology is an important information resource upon which local planning authorities can draw in making the landscape assessments needed to inform local policy, guidance and decision making in this field. LANDMAP describes and evaluates aspects of the landscape and provides the basis of a consistent Wales-wide approach to landscape assessment. LANDMAP assessments should be published. They can help to inform supplementary planning guidance on landscape assessment (covering, for example, local distinctiveness, special landscape areas and design)'*.[5]

[2] Planning Policy Wales Edition 7 – July 2014 Para 5.1.1
[3] In line with the provisions of the European Landscape Convention
[4] Planning Policy Wales Edition 7 – July 2014 Para 5.3.2
[5] Planning Policy Wales Edition 9 – November 2016 Para 5.3.13

2.1.4 *PPW 9 Chapter 12 Infrastructure and Services* sections 12.8 – 12.10 sets out the policy context for renewable and low carbon energy development. The aim of the Welsh Government is '*to secure an appropriate mix of energy provision for Wales which maximises benefits to our economy and communities, whilst minimising potential environmental and social impacts*'.[6]

2.1.5 The Welsh Government accepts that '*the introduction of new, often very large structures for onshore wind needs careful consideration to avoid and where possible minimise their impact. However, the need for wind energy is a key part of meeting the Welsh Government's vision for future renewable electricity production as set out in the Energy Policy Statement (2010) and should be taken into account by decisions makers when determining such applications*'.[7]

2.1.6 The approach adopted by the Welsh Government has been to identify areas for large scale onshore wind at a national level '*Technical Advice Note 8: Planning for Renewable Energy (2005) identifies areas in Wales which, on the basis of substantial empirical research, are considered to be the most appropriate locations for large scale wind farm development; these areas are referred to as Strategic Search Areas (SSAs). The detailed characteristics of SSAs and the methodology used to define them are outlined in TAN 8 and its Annexes*'.[8]

2.1.7 The Welsh Government notes in relation to wind farms that '*developers will need to be sensitive to local circumstances, including siting in relation to local landform*'[9] and recognises that *'the impacts from renewable energy developments and associated infrastructure will vary depending on their type, location and scale'.*[10]

2.1.8 PPW 9 recommends that *'Local planning authorities should facilitate local authority-wide scale renewable energy in development plans by undertaking an assessment of the opportunities and potential for renewable energy in the area'.*[11]

[6] Planning Policy Wales Edition 9 – November 2016 Para12.8.6
[7] Planning Policy Wales Edition 9 – November 2016 Para 12.8.12
[8] Planning Policy Wales Edition 9 – November 2016 Para 12.8.13
[9] Planning Policy Wales Edition 9 – November 2016 Para 12.8.14
[10] Planning Policy Wales Edition 9 – November 2016 Para12.8.15
[11] Planning Policy Wales Edition 9 – November 2016 Para 12.8.18

2.1.9 PPW 9 states that *'Developers for renewable and low carbon energy developments should seek to avoid or where possible minimise adverse impacts through careful consideration of location, scale, design and other measures'.*[12]

2.2 Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) (CD POL-20)

2.2.1 Following substantial empirical research, the Welsh Government Assembly prepared TAN 8 which identifies the most appropriate locations for large scale WTD; known as the Strategic Search Areas (SSAs). The application site is not in an SSA. Whilst TAN 8 pre-dates the current version of PPW 9, it remains relevant and is one of the key documents that drive the delivery of renewable energy policy in Wales. Since the publication of *TAN 8: Planning for Renewable Energy* there have been some policy and legislative changes. Annex A of the Chief Planning Officers (CPOs) letter '*Publication of Planning Policy Wales Edition 4, February 2011*' sets out these changes and it has been read alongside TAN 8 and taken into account in the follow discussion of TAN 8.

2.2.2 Outside of the SSAs TAN 8 identifies that most areas should remain free of large wind power schemes or the cumulative effect of a number of smaller schemes. TAN 8 recommends that '*Most areas outside SSAs should remain free of large wind power schemes. Local planning authorities may wish to consider the cumulative impact of small schemes in areas outside of the SSAs and establish suitable criteria for separation distances from each other and from the perimeter of existing wind power schemes or the SSAs. In these areas, there is a balance to be struck between the desirability of renewable energy and landscape protection. Whilst that balance should not result in severe restriction on the development of wind power capacity, there is a case for avoiding a situation where wind turbines are spread across the whole of a county.*'[13]

2.2.3 The empirical research that informed TAN 8 was undertaken in two stages by Arup and the results are published in *Facilitating Planning for Renewable Energy in Wales: Meeting the Target, 2004*. The second stage of the research, which identified the most appropriate landscapes for WTD, did not include landscape and visual issues (with the exception of National Parks and AONBs). However, *Appendix J: Initial Guidance to Local Planning*

[12] Planning Policy Wales Edition 9 – November 2016 Para12.10.3
[13] Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) Para 2.13

Authorities on the treatment of the strategic areas does include guidelines to minimise the landscape and visual impacts of wind farms (Table J) (MB Appendix 2).

2.2.4 Annex D of TAN 8 which sets out a Potential Methodology for Local Planning Authorities within SSAs also identifies sensitivity criteria particularly relevant to wind turbine development which include: '*landform character, scale and height, skyline character, pattern and grain of landcover, openness/enclosure, character of vertical elements, manmade features, settlement/circulation patterns, time depth and condition*'.[14] TAN 8 notes that some of this should already be in the relevant LANDMAP assessment but this '*should be developed further during fieldwork*'.[15]

2.2.5 Annex D of TAN 8 also contains Supplemental information on cumulative landscape and visual impact. In considering the cumulative impacts it states, '*the degree of cumulative impact also gives rise to the notion of thresholds, beyond which impacts may not be acceptable*'.[16] Annex D goes on the consider what those thresholds may be and comes to the following conclusions:

- '*There is an implicit objective in TAN 8 to maintain the integrity and quality of the landscape within the National Parks/AONBs of Wales i.e. no change in landscape character from wind turbine development.*
- *In the rest of Wales outside the SSAs, the implicit objective is to maintain the landscape character i.e. no significant change in landscape character from wind turbine development.*
- *Within (and immediately adjacent) to the SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine development*'.[17]

2.2.6 The site is not in an SSA, nor is it in a National Park or AONB. The landscape objective for the site is therefore '*to maintain the landscape character i.e. no significant change in landscape character from wind turbine development*'. This interpretation was recently endorsed by Inspector Nixon in the decision with regard to the Pentre Tump WTD which was proposed for a site approximately 6 km from the current appeal site.

[14] Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) Annex D Para 6.5
[15] Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) Annex D Para 6.5
[16] Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) Annex D Para 8.2
[17] Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) Annex D Para 8.4

TAN 8 recognizes that large scale (over 25 MW) wind developments will make the greatest contribution to meeting renewable energy targets from onshore wind sources, and advises that such developments should be concentrated into particular defined Strategic Search Areas (SSAs). TAN 8 considers that most areas outside the SSAs should remain free of large wind power schemes. It recommends that local planning authorities consider the cumulative impact of small schemes in areas outside of the SSAs. TAN 8 states that there is a balance to be struck between the desirability of renewable energy and landscape protection. Whilst that balance should not result in severe restriction on the development of wind power capacity, there is a case for avoiding a situation where wind turbines are spread across the whole of a county. Outside the SSAs the implicit objective is to maintain the landscape character, i.e. no significant change in landscape character from wind turbine development.'[18]

2.3 Local Planning Policy

2.3.1 The currently Local Plan is now out of date and is not consistent with national policy. The Emerging Local Plan has undergone numerous and significant changes and at this time it is not clear what policy on Renewable Energy is going to emerge. With regard to local planning policies I am therefore relying on the evidence of PCC's planning witness.

[18] APP/T6850/A/13/2198831 Land at Pentre Tump, South-East of Llanfihangel-Nant-Melan, New Radnor, Powys Para 9

3 Methodology

3.1 Introduction

3.1.1 The methodology used in preparing this proof of evidence is based on the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition 2013 (GLVIA3) prepared by the Landscape Institute/Institute of Environmental Management and Assessment.

3.1.2 Landscape effects are effects on the fabric and character of the landscape. Effects on landscape character may be because of changes to the fabric of the landscape but they may also be a consequence of changes to the appearance of the landscape. Wind turbines can have significant landscape effects because of how they change the pattern of the landscape and its perceptual qualities. Visual impacts are assessed separately and are concerned with the effects of the proposals on the amenity of those people who will experience the changes in views.

3.1.3 GLVIA3 sets out the factors that should be considered in determining the baseline conditions. (GLVIA3 Page 32 Paragraphs 3.15-3.17) *'For the landscape baseline the aim is to provide an understanding of the landscape in the area that may be affected – its constituent elements, its character and the way this varies spatially, its geographic extent, its history (which may require its own specialist study), its condition, the way the landscape is experienced, and the value attached to it.'*[19] Establishing the key characteristics of the local landscape character is done through published landscape character assessments, including designation assessments where they exist, and site survey.

3.1.4 GLVIA3 recommends that the value of the landscape should be identified as part of the baseline assessment. The value of a landscape is '*the relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a variety of reasons…A review of existing landscape designations is usually the starting point in understanding landscape value but the value attached to undesignated landscapes also needs to be carefully considered.*' [20]

[19] Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013 Page 32 Para 3.15
[20] Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013 Page 80 Para 5.19

3.1.5 The second stage of the assessment is to establish the sensitivity of the landscape to the type of development proposed. Landscape sensitivity is derived from '*combining judgements of their **susceptibility to the type of development or change proposed** and the **value** attached to the receptors.*'[21] (My emphasis).

3.1.6 The susceptibility to change of a landscape is '*the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or areas, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.*' [22] The assessment of susceptibility must be tailored to individual projects and '*should not be recorded as part of the landscape baseline but should be considered as part of the assessment of effects.*'[23]

3.1.7 Wind turbine development is unusual in that the range of potential effects are very similar for all schemes as wind turbine development is less varied than other forms of development. It is therefore common practice to undertake a sensitivity assessment (combining judgments regarding susceptibility and value) following on from the description of the landscape baseline.

3.1.8 Over the last twenty years a considerable number of landscape sensitivity studies have been undertaken regarding wind turbine development and there is a consensus about those attributes that increase a landscape's susceptibility to wind turbine development and those that decrease it, as for example in Annex D of TAN 8.

3.1.9 The following attributes are generally considered to be indicators of the degree of susceptibility that a landscape has to wind turbine development:

- **Scale and Enclosure:** Large scale open landscapes are likely to be less susceptible to wind turbine development than small scale intimate landscapes with a strong sense of enclosure. Turbines are more likely to appear out of scale and dominate landscapes with smaller and / or irregular field sizes and landscapes with frequent human scale features.

[21] Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013 Page 88 Para 5.39
[22] Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013 Page 88 Para 5.40
[23] Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013 Page 89 Para 5.42

- **Landform and Topography:** A smooth, convex or flat landform is likely to be less susceptible to wind turbine development than a landscape with a dramatic rugged landform, distinct landform features or pronounced undulations because turbines are less likely to detract from visually important landforms, appear confusing or unsettling (due to turbines being at varying heights or on the crest of valleys).
- **Land Cover Pattern:** Simple, regular landscapes with extensive areas of uniform ground cover are likely to be less susceptible to wind energy development than landscapes with more complex or irregular land cover.
- **Settlement Pattern and Density:** More sparsely settled areas are likely to be less susceptible than more densely settled areas or areas with a high proportion of historic villages as there will be opportunities to site turbines so that they do not dominate distinctive settlements.
- **Visible Built Structures:** Landscapes that contain large scale infrastructure, major communications routes and large-scale developments are less susceptible to wind turbine development although development needs to be carefully sited to avoid visual clutter or cumulative impacts.
- **Landmarks** Historic landmarks such as important views to distinctive church spires, and towers or views to and from historic features in the landscape increase susceptibility, especially where they occur frequently.
- **Skyline:** Prominent and distinctive skylines, or skylines with important landmark features that are identified in the landscape character assessment, are likely to be more susceptible to wind turbine development because turbines may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines.
- **Visual Connections with Adjacent Landscapes:** Where views to and from adjacent landscapes are important the susceptibility to wind turbine development may be increased as landscape impacts may extend to adjacent landscape character areas.
- **Remoteness and Tranquility:** Relatively remote or tranquil landscapes, due to freedom from human activity and disturbance and having a perceived naturalness or a strong feel of traditional rurality, tend to be more sensitive to wind turbine development because wind turbine development will introduce new and uncharacteristic features which may detract from the sense of tranquility and or

remoteness/ naturalness. Landscapes that contain many signs of modern development are generally less sensitive. Remoteness and tranquility are generally aspects likely to increase the value that is placed on a landscape.

3.2 LANDMAP Guidance Note 3

3.2.1 *Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines* (LANDMAP Guidance Note 3) sets out the essential role of LANDMAP in the LVIA process. Key principles that underpin the use of LANDMAP when undertaking a wind turbine development LVIA are:

- All five aspect layers should be considered in the assessment;
- The study areas for the different aspect layers will vary; and
- The ZTV and the LANDMAP database should be used to identify where turbines would be visible from aspect areas with high or outstanding evaluations.

3.2.2 The initial consideration should consider all aspect areas in which the turbines are located. For the Cultural Landscape, Geological Landscape and Landscape Habitat aspect layers only the aspect area in which the turbines are located, or the immediately adjacent aspect areas, require consideration. For the Historic Landscape and Visual & Sensory aspect layers all aspect areas within the study area should be considered.

3.2.3 All aspect areas in which the turbines are located must be considered in the detailed consideration. A ZTV should be used to scope out aspect areas within the study area where there is either no visibility or very limited visibility. Aspect areas can be scoped out of the detailed assessment if they:

- Do not have an overall evaluation of high or outstanding;
- Do not have an evaluation of high or outstanding for scenic quality or character in the Visual and Sensory layer; and
- No turbines are located within them.

3.3 Cumulative Methodology

3.3.1 When considering cumulative assessments there are two key guidance documents; SNH Guidance, *Assessing the Cumulative Impact of Onshore Wind Energy Developments* March 2012 (SNH Cumulative Guidance) and GLVIA3. In defining cumulative impacts the SNH Cumulative Guidance states that '*cumulative impacts can be defined as the additional changes caused by the proposed development in conjunction with other similar developments or as the combined effect of a set of developments taken together.*'[24]

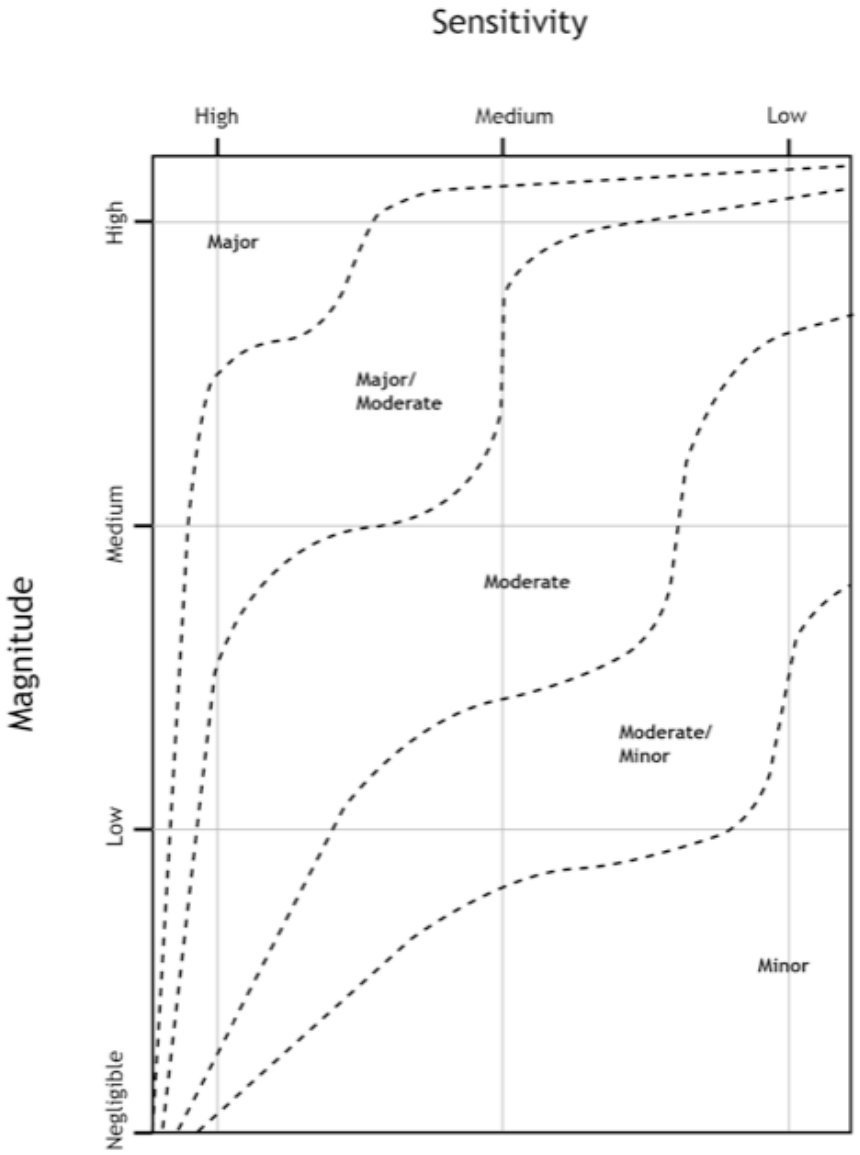
3.3.2 Paragraph 51 of the SNH Cumulative Guidance states that '*Two windfarms need not be intervisible – or even visible from a common viewpoint – to have impacts on the landscape experience for those travelling through an area. For example, it may be necessary to consider the cumulative effects of windfarms* ***on users of scenic road routes****, or routes for walkers, along their full length within the agreed study area.'*

3.4 Terms used in my Evidence

3.4.1 The LVIA methodology uses a complicated scale for both sensitivity and magnitude of change with five categories of landscape sensitivity and eight categories of magnitude of change. In preparing my evidence, I have used a three-point scale, high, medium and low for both sensitivity and magnitude of scale plus negligible for magnitude of change. The conclusions with regard to the significance of the effects are based on professional judgment that considers the sensitivity of the receptor and the magnitude of change. The diagram overleaf illustrates how these factors interact to reach a conclusion on the significance of the effect.

3.4.2 I agree with the approach taken in the LVIA that effects greater than moderate are significant and moderate effects may also be significant.

[24] SNH Guidance Assessing the Cumulative Impact of Onshore Wind Energy Developments March 2012 Para 7



3.5 Environmental Statement Methodology

3.5.1 Enplan prepared a review of the methodology used in the LVIA prepared by Viento Environmental Limited on behalf of PCC[25] (Enplan Review). Another review was undertaken by Anthony Jellard Associates on behalf of NRW[26] (Anthony Jellard Review). Both these reviews identified shortcomings in the methodology used in the LVIA and

[25] Hendy Wind Farm A Review of the Environmental Statement- Landscape and Visual Impact Assessment Chapter - Enplan Feb 2016
[26] Hendy Proposed Wind Farm Landscape And Visual Impact Assessment A Quality Assessment for Natural Resources Wales - Anthony Jellard Associates Oct 2014

inconsistencies in the way that it was applied. I agree with the criticisms set out in both reviews.

3.5.2 I do not consider that it would be helpful to the inquiry to have yet another extensive set of criticisms with regard to the methodology as used in the LVIA. I have chosen therefore to concentrate my evidence on providing an understanding of the existing landscape and the effects on the existing landscape of the proposed wind turbines and the associated access tracks. I have limited my criticism of the LVIA to key issues.

3.5.3 The LVIA identifies a number of major adverse landscape and visual impacts (Paragraph 5.10 conclusion) but dismisses these significant adverse effects on the basis that *'Some significant effects on landscape and visual amenity are inevitable as a result of a wind farm development, as with any large structure located within an open location.'* The LVIA goes on to claim that *'For a proposed wind farm comprising this number and size of turbines, the extent of predicted effects on landscape character and visual amenity are not unusual.'*[27]

3.5.4 It is inevitable that there will be a large magnitude of change for some kilometres around a wind farm comprising this number and size of turbines. However, it is not inevitable that these changes will be significantly harmful, that will depend on the nature of the receiving landscape and its susceptibility to wind turbine development. PPW9 is explicit about this when it states that '*developers will need to be sensitive to local circumstances, **including siting in relation to local landform***'[28] (emphasis added). The LVIA does not include a wind turbine specific susceptibility analysis nor has it identified which aspects of a landscape might make it more susceptible to harmful impacts from wind turbine development. Consequently, it cannot accurately assess whether the local circumstances make significant effects as a result of wind turbine development more likely or less likely.

3.5.5 Although it is likely that any wind turbine development will result in some harmful landscape effects, PPW9 makes clear that all developments **will not inevitably result in the same level of significant adverse effects.** On the contrary PPW 9 states that '*the*

[27] Hendy Wind Farm ES: June 2014; Volume I Para 5.10
[28] Planning Policy Wales Edition 9 – November 2016 Para 12.8.14

impacts from renewable energy developments and associated infrastructure ***will vary depending on their type, location and scale'*** *(emphasis added)...*[29]

3.5.6 PPW9 also makes clear that it is the responsibility of developers of renewable and low carbon energy developments to '*seek to avoid or where possible minimise adverse impacts* ***through careful consideration of location****, scale, design and other measures' (emphasis added).*[30] With a wind turbine development comprising this number and size of turbines careful consideration of location must be the primary means by which adverse impacts are minimised. I can find no assessment within the LVIA as to whether the current proposed location for the Hendy WTD has minimised potential adverse impacts.

3.5.7 The Enplan Review in 2016 identified that there were a number of important locations for which no visualisations had been prepared. On 9th February 2018, three working days before evidence had to be submitted, the appellant issued three new photomontages and a wireframe associated with a fourth. Where possible, references to these new photomontages have been added to my evidence which was substantially complete when the new visualisations arrived. They are identified as PRV Vps as they were requested by Phillip Russell-Vick the author of the Enplan Review and the landscape witness for PCC. They have been added to MB Figure 01 which shows the LVIA viewpoints and the location of the photographic viewpoints selected to illustrate my evidence.

[29] Planning Policy Wales Edition 9 – November 2016 Para 12.8.15
[30] Planning Policy Wales Edition 9 – November 2016 Para 12.10.3

4 Existing Landscape Character

4.1 National Landscape Character Areas

4.1.1 The site falls within National Landscape Character Area (NLCA) 20: Radnorshire Hills. The summary description for this NLCA is:

> *Radnorshire's topography is breathtaking and varied, with smooth, rolling, open moors, dissected by steep sided valleys with hedgerow-enclosed pastures by small rivers and streams, and ancient woodlands. Unfenced moorland roads reinforce the sense of openness and being away from the confines and pressures of other, more urbanised landscapes. The varying topography straddles the upland-lowland divide in many places, giving rise to marginal agriculture.*
>
> *Radnorshire, the old county name that included this area, historically had the lowest population of any of the Welsh counties. Offa's Dyke runs through part of the area and there are a mix of English and Welsh influences to the east in this Marches landscape. It is a very rural, and in the main it is a quiet area, away from the focus of tourism, despite promotion as 'Kilvert Country'.*[31]

4.1.2 The key characteristics of the NLCA include (inter-alia):

- *'Smooth rounded moorland hills and glacially modified valleys.*
- *An undulating upland landscape - with sinuous skylines and distant views from moor to moor.*
- *Minor river valleys - such as the Ithon and Marteg, dissect the area. A lateral network of minor tributaries drains the hillsides.*
- *Enclosed Pasture in valleys and lower hillsides.*
- *Heather dominated moorland - occurs in the most elevated parts of the area, some recognised for red grouse.*

[31] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales.

- *Very little settlement, which is confined to the lower valleys – the pattern is defined by compact linear villages, together with a small number of larger nucleated, valley towns at river crossing points. A comparatively low population in this former county'.*[32]

4.1.3 The Visual and Sensory profile states that '*the area is very rural and largely undisturbed by industries, heavy traffic, tourism or commuters, and herein lies its timeless beauty and tranquillity*'.[33] One of the illustrative images is of '*the gentle, farmed valleys, bounded with hedgerows and fences, with hedgerow trees and open moors*' between Hundred House and Paincastle.

4.2 Landscape Context

4.2.1 The location of the site and its topographical context are shown on MB Figure 01. The LANDMAP aspect areas in the landscape surrounding the site are shown on MB Figures 02 to 04.

4.2.2 The site forms part of an undulating upland area located at an elevation of between approximately 300 – 340m AOD. This upland area is enclosed by higher land – particularly to the west, north-west and east. Located within this area is the boundary between the catchments of the River Ithon, to the north, and the River Edw, to the south: a tributary of which dissects the upland area within a narrow valley immediately east of the site.

4.2.3 To the north-east, beyond the River Edw tributary and the A44, lies Radnor Forest, an upland plateau. Radnor Forest is characterised by a mixture of open moorland and areas of coniferous forestry and has a broad and largely featureless high point of 660m AOD at Great Rhos. The western edge of Radnor Forest is convoluted by a distinctive sequence of steep, parallel and regularly spaced Dingles and corresponding spurs. Elevated land continues to the south of Radnor Forest and the A44, and includes Gwaunceste Hill at 542m AOD, some 5km south east of the site.

[32] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales Pages 2-3
[33] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales Page 3

4.2.4 Immediately north and west of the site, and in direct contrast with the domed landform of Radnor Forest, lies a narrow craggy ridge. This ridge features the distinctive outcrops of Llandegley Rocks, and has a high point of 436m AOD, some 1.2km north of the site. The ridge forms an important landmark within the wider landscape surrounding the site. Its rocky outcrops and narrow ridgeline create a distinctive skyline, particularly in views from the A44 and the surrounding PRoW network. A Scheduled Monument, the Iron Age Llandegley Rocks Hillfort (RD264) is located at the northern end of the ridge, overlooking the site.

4.2.5 Land to the south of the site, immediately east of the small hamlet of Nant, also rises upon a ridge which reaches 370m AOD (where an existing single turbine is located at Cwmmaerdy). This ridge also features a Scheduled Monument: the Iron Age Graig Fawr Hillfort (RD112) at its southern end. This landform establishes a southern 'edge' to the upland area in which the site is located. The site is therefore contained by elevated land in all directions, and has a strong sense of enclosure. The enclosure provided by the surrounding area is varied in its nature owing to the numerous topographical variations and protrusions of varying steepness.

4.2.6 The surrounding landscape is generally comprised of land used for grazing, with some areas of plantation forestry and areas of rough grazing/moorland. The surrounding landscape includes areas of Common Land and OAL (including an area immediately east of the site and upon the Llandegley Rocks ridgeline) (See MB Figure 01). Settlement is sparse and the A44 is the main transport link, which serves as a key east-west connection into and out of Powys County, and between Wales and England. It has been called 'the Gateway to Wales'.

4.2.7 The surrounding landscape features many archaeologically and culturally valuable sites. These include the aforementioned Scheduled Monuments and others such as Nant Brook Enclosure (Medieval) (RD147) which lies immediately to the south of the site and Crug Eryr Motte-and-Bailey Castle (Medieval) (RD003) which is located alongside the A44, overlooking the site.

4.3 LANDMAP Aspect Areas

4.3.1 The LANDMAP aspect areas in which the site is located are listed in Table 1 below, followed by a more detailed description of the Visual and Sensory, Historic and Geological layers which have been identified as being the most significant layers with regard to this assessment in this landscape. MB Appendix 3 contains the LANDMAP descriptions for the Aspect Areas considered in my proof.

Table 1: LANDMAP Aspect Areas

LANDMAP Aspect Layer	Aspect Area ID and Name	Classification/ Evaluation
Visual and Sensory	RDNRVS112 Upland Moor, North of Hundred House	Upland Moorland (Evaluation: **Moderate**)
Historic Landscape	RDNRHL427 Gelli Hill	Other fieldscapes (Evaluation: **Outstanding**)
Landscape Habitat	RDNRLH023	Mosaic (Evaluation: **Moderate**)
Geological Landscape	RDNRGL663 Camnant	Undulating upland terrain (Evaluation: **High**)
Cultural Landscape	RDNRCL014 Radnor Forest	Sense of Place (Evaluation: **High**)

4.4 Visual and Sensory Aspect Areas (VSAA) (MB Figure 02)

4.4.1 The site is located within RDNRVS112 Upland Moor, North of Hundred House, for which the summary description is as follows: '*Two areas, including Castle Bank & Blaen Edw Bank. Upland hills, plateau with a smooth & rounded profile and mix of semi-natural rough moorland landcover and large fields*'. Attractive views are identified as: '*both in and out (To and from adjacent hills)*'. No detractive views are identified, and the perceptual and

other sensory qualities are described as: '*Attractive, Tranquil, Exposed, Remote, Wild* and *Spiritual*'. The evaluation of scenic quality, character and rarity are moderate, but the integrity is considered to be high. The overall evaluation is **Moderate** this appears to be due to the fact that despite a '*high degree of coherence from good composition of elements*' it is a landscape type that is '*reasonably well represented across the County*'.

4.4.2 The site is near two other VSAAs. Directly north and west of the site lies RDNRVS107 Rocky Moorland, Gilwern Hill. This aspect area comprises an upland ridge composed of two linear areas, running north east to south west. The distinctive rock outcrops at Llandegley Rocks are located at the northern end and the southern end extends to LLanelwedd. Attractive views are identified both in and out of the area and include views '*in to craggy skyline*' which includes the skyline formed by Llandegley Rocks. The area has an overall evaluation of **Moderate**. The overall moderate evaluation is in part due to the quarry at the southern end which is considered to harm the integrity and value of the area. The quarry has no impact on the area to the north.

4.4.3 To the south and east of the site and enclosing RDNRVS112 is the VSAA RDNRVS133 *Rolling Hills, Central South-East*. This area is described as '*Generally peaceful, settled farmland with pleasant views*'. Attractive views are identified '*in and within from small roads. Similarly views out to higher land, open hills and across valleys*'. The area has an overall evaluation of **Moderate**.

4.5 Historic Landscape Aspect Areas (HLAA) (MB Figure 03)

4.5.1 The site is located within RDNRHL427 Gelli Hill, for which the summary description is as follows:

> '*Enclosed 19th-century common on upland ridge just to the east of Llandrindod Wells with large, straight sided fields defined by fences or hedges. Early land use and settlement indicated by dispersed early prehistoric burial and ritual monuments and several later prehistoric hillforts. Late medieval and post-medieval settlement and land use indicated by abandoned house platforms, farmsteads and pillow mounds. Discrete area of 18th- and 19th-century metal mining. Modern golf course*'.

4.5.2 The overall evaluation is **Outstanding** on account of it being an '*area of unenclosed upland with rich early and late prehistoric and medieval landscape elements in a relatively undisturbed condition*'.

4.5.3 The site is located close to a number of other HLAAs. RDNRHL914 Edw lies immediately south of the proposed WTD and includes mention within its summary description of '*small post-medieval nucleated roadside settlements at Hundred House and Franksbridge'*. The overall evaluation for this area is **Outstanding.** The justification is '*a large sinuous area covering entire length of the Edw valley and its tributaries. The land is enclosed with systems of irregular fields and is intensely settled and farmed and contains significant archaeological remains of all periods all of which enhances its score'*.

4.5.4 The RDNRHL673 Llandegley HLAA lies to the north of the site. This area receives a **Moderate** overall evaluation rating on account of it featuring '*mixed medieval (including some residual strip fields) and later fieldscapes surrounding the single small medieval settlement at Llandegley*'.

4.5.5 South east of the site is the RDNRHL950 Fedw HLAA. This area receives a **High** overall evaluation rating on account of it featuring *'…mixed but extensive and high scoring historic content - a prehistoric rock carving, standing stones, round bar rows, a stone circle, a matte and bailey castle, and sundry farms*'.

4.6 Geological Landscape Aspect Areas (GLAA) (MB Figure 04)

4.6.1 The site is located within RDNRGL663 Camnant, which is described as '*undulating upland-style terrain*'. The overall evaluation rating is listed as **High** and the condition is '*Good (No significant development)*'. The RDNRGL131 Llandegley GLAA is located immediately north west of the site and includes the Llandegley Rocks. This area has an overall evaluation rating of **High** and is described as a '*narrow and rugged ridge dominated by Ordovician volcanic rocks rising above lower lying areas dominated by mudrocks*'.

4.7 Powys Landscape Character Assessment by John Campion Associates Ltd, 2008

4.7.1 Within this study the site is located within LCA R9 - Llanbister – Penybont Uplands. This is a large character area, extending from around Hundred House in the south to around Llanbister in the north. The study utilises the LANDMAP Aspect Area descriptions as a baseline, and includes descriptions of: Visual and Sensory Characteristics; Vegetation and Habitat Characteristics; Geological Characteristics; and Historical and Cultural Characteristics. The latter includes the following statement which is relevant to the site's context, to the south and east: '*the south east has a fieldscape of irregular fields occupying the upland valley of the river Edw and its tributaries…*'.[34]

4.8 Overall Assessment of the Surrounding Landscape

4.8.1 The LANDMAP approach considers the five separate aspects of the landscape in separate layers. However, this is not because these aspects of the landscape are experienced in isolation but rather to ensure that any consideration of the landscape of Wales recognises all aspects of the landscape. That is particularly relevant with regard to the landscape surrounding the site. The site itself is located within an area of upland moor but the overall context in which the site is experienced is as an area of enclosed land between the high ground of Radnor Forest to the east and the very distinctive ridge of Llandegley Rocks to the west. This area has its own character and is known as Llandegley Rhos. The impression of enclosure is particularly strong when viewed from the A44, which runs along the edge of Radnor Forest, and from the A481 which runs along the base of higher land to the south west which has a highpoint at Gwaunceste Hill.

4.8.2 The singular character of the landscape is created by the distinctive ridge of Llandegley Rocks which is experienced alongside the enclosed 19th century field pattern of the Gelli Hill HLAA. This is evident in LVIA Vps 4 and 5 which are taken from the A44 and the A481 respectively. The outstanding overall evaluation of the Gelli Hill HLAA is a reflection of the time depth that is still evident in this landscape which is rich in '*early and late prehistoric and medieval landscape elements in a relatively undisturbed condition*'.

[34] Powys Landscape Character Assessment, Powys – Radnorshire LCA R9 - Llanbister – Penybont Uplands Page 125.

4.8.3 The relatively undisturbed condition of the historic landscape elements reflects the overall character of this landscape which is substantially unaffected by man-made structures. This can be seen from Vp 4 Llandegley which is the first view that visitors to Wales arriving along the A44 will get of the distinctive landform of Llandegley Rocks forming the local western horizon. The existing single turbine at Cwmmaerdy is not easily discernible in certain weather conditions due to its size (15.4 m (to hub) 20.4m to blade tip).[35]

4.8.4 Llandegley Rocks have been recognised as a distinctive feature of the landscape and a destination for tourists since the 18th Century. MB Appendix 4 contains an extract from *Wanderings and Excursions in South Wales* by Thomas Roscoe Esq. which was first published in 1791. It includes the following advice: *'Llandegley, a neat little village celebrated for its medicinal springs lies on the way to Rhaiadyr, and is well worthy of a brief sojourn, for the sake of it lovely scenery. A very singular range of rocks, abounding in beautiful quartz crystals, nearly joins the churchyard, and is much visited both for the views it commands, and the glittering treasures which may be won from the clefts and sides of the rock'.*[36] MB Vp E (MB Figure 12) illustrates one of the views from Llandegley Rocks. A view from Llandegley Rocks has recently been prepared by the appellants which illustrates that the views commanded from the ridge continue to be commanding and unspoilt. There are no obvious 20th or 21st century structures to draw the eye or spoil Radnorshire's breathtaking and varied topography which can be appreciated from here.

4.8.5 The varied and picturesque outline of Llandegley Rocks are also mentioned in a 19th Century edition (1875) of Archaeologia Cambrensis, the journal of the Cambrian Archaeological Association.

> *'Ascending the turnpike road from New Radnor, over Radnor Forest, a most striking and beautiful view of the upper part of the valley and surrounding country, which any one who has travelled that way will scarcely forget, is obtained from the highest part of the road, about 1,200 feet above the sea level, near the earth work marked "Tomen" in the Ordnance Survey. Volcanic hills of considerable height, with a very varied and picturesque outline, commencing with the Carn- eddau at Builth, and ending with Llandegley rocks, bound the valley on the west; beneath lies a sterile*

[35] As determined from the proposed plans for application P/2011/1115.
[36] *Wanderings and Excursions in South Wales* by Thomas Roscoe Esq Page 75 See MB Appendix 4

and wet looking plain, interrupted occasionally by rising ground upheaved by the volcanic outburst, while the lofty ranges of the Glascomb Hills[37], in part clad with heather, and the Forest of Colwyn, bare of all but herbage, shut it in on the east. At the foot of the latter, the Hundred House and site of the Forest farm are clearly seen'.[38]

4.8.6 The approximate location from where the '*most striking and beautiful view'* can be enjoyed is shown on MB Figure 01. It is in the approximate location of LVIA Vp 4.

4.8.7 Whilst the bowl shape of Llandegley Rhos is clear from the immediately surrounding roads it is also a significant part of the wide views that can be obtained from the higher ground. From Vp 7 for example, from the edge of the Radnor Forest VSLAA, the land can be seen sweeping up to either side of Llandegley Rhos. The distinctive shape of the Rocks forming the end of a sweeping upland area is very noticeable here. It is a different impression to that gained when viewing Llandegley Rocks from the east but equally distinctive. From Vp 9, Gwaunceste Hill, the location of the site within a bowl is equally evident. The distinctive profile of Llandegley Rocks is clear even from this elevated position, from where it is seen set against more distant rising ground.

4.8.8 From Viewpoint 4 the very locally undulating nature of the landscape of Llandegley Rhos is visible, emphasised by the straight lines of the 19th century field enclosures. The field sizes to the north (in the right-hand image) being smaller and the field boundaries more treed than the land to the south. The fieldscape is typical of the Radnorshire NLCA '*hedgerow-enclosed pastures[39]'* whilst the distinctive profile of Llandegley Rocks gives this area its own singular character. A few dispersed properties are visible including the house at Pye Corner which marks the start of the access roads for Hendy WTD. This area as a whole is typical of the Radnorshire NLCA in having a '*sense of openness and being away from the confines and pressures of other, more urbanised landscapes.'* [40]

[37] The highest point of the Glascomb Hills is Gwaunceste Hill 542m AOD.
[38] Archaeologia Cambrensis, 1875 Page 247
[39] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales.
[40] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales.

4.8.9 The area surrounding the site is particularly rich in its Public Rights of Way as set out in other evidence prepared for CPRW. MB Figure 05 shows the PRoWs that cross the site and the connections to the PRoW network in the surrounding landscape. The site is crossed by a Byway Open to All Traffic (BOAT). The BOAT runs from the end of the minor road off the A44 that leads to Pye Corner where a single property is located. The start of the BOAT is also a junction with a Bridleway (BW) that runs north south along the edge of the Open Access Land (OAL) to the north before meeting the A44 and down to Cwmmaerdy Farm in the south. The Boat runs roughly East/West, crossing Nant Brook close to the junction with the bridleway that runs in a north easterly direction and also joins the A44. From close to the junction of the two BWs with the A44 is another BW that runs north-east and connects with a series of BWs within and on the edge of Radnor Forest.

4.8.10 Beyond Nant Brook the bridleway continues to the west, along the edge of another area of OAL before reaching a minor road that runs roughly north/ south. This winding and undulating minor road is part of the SUSTRANS cycle route 825 (CR 825). LVIA Vp 2 is located on the minor road but the BOAT is not visible from LVIA Vp 2 due to the landform. MB Vp C (MB Figure 09) is taken from the BOAT shortly before it reaches the CR 825. PRV Vp 1 is also taken from the BOAT just west of MB Vp C.

4.8.11 From CR 825, just north of the junction with the BOAT, a bridleway runs north east across the OAL and then along the foot of Llandegley Rocks within another area of OAL. After this it rises up the flank of Llandegley Rocks and comes down to Llandegley on the A44 to the north. The bridleway does not go to the summit of Llandegley Rocks but the whole area is OAL and there are clear paths that lead to the trig point on the top of the Rocks. On its way to Llandegley the bridleway crosses another bridleway which runs along the northern foot of the rocks. The bridleway to Llandegley also meets a footpath which runs to the south west and crosses another footpath.

4.8.12 At the junction between the BOAT and CR 825 the route of the BOAT runs along the road before continuing to the west across Pwl-hir. Beyond Bank House it continues as a footpath before reaching the outskirts of Llandrindod Wells.

4.8.13 This network of PRoWs allows local people and visitors, on foot and on horseback, to enjoy the landscape in this area. In particular to enjoy the variety in the landscape, the varied and picturesque outline of Llandegley Rock, the enclosing form of Radnor Forest and the small-scale landscape of the fields. MB Figure 01 which is based on 1:25,000 OS mapping

shows the variation in the field sizes and shapes in this relatively small area. Straight 19th century enclosures are evident in the Llandegley Rhos area with smaller, more sinuous field boundaries that follow the contours of the landscape more evident in the landscape to the south of Nant Brook and around Hendy.

4.8.14 Although it has not been possible to establish the antiquity of the BOAT there are a number of Scheduled Ancient Monuments (SAMs) and other undesignated heritage features located close to the BOAT. They include Craig Camp, Cwm-Maerdy Standing Stones, Nant Brook Enclosure, Crug Eryr Mound, Bailey Castle and Llandegley Rocks Hillfort.

4.9 Summary

4.9.1 With regard to LANDMAP assessments the site is located in:

- VSLAA RDNRVS112 Upland Moor, North of Hundred House that has a **moderate** overall evaluation. The VSAA is identified as having attractive views to and from adjacent hills and no detracting views either in or out.
- HLAA RDNRHL427 Gelli Hill that has an **outstanding** overall evaluation due to the relatively undisturbed survival of both prehistoric and medieval remains.
- GLAA RDNRGL663 Camnant that has a **high** overall evaluation as it forms a distinctive part of an outstanding geological formation.

4.9.2 With regard to the overall character of the landscape the most distinctive feature is the varied and picturesque outline of Llandegley Rocks which has been a notable landmark and a visitor attraction since at least the 18th century. The site is located in a bowl, surrounded by higher land including Llandegley Rocks and the edge of Radnor Forest, and is representative of Radnorshire's varied topography. Within the bowl the topography is locally steeply undulating and the fieldscape is varied. The sense of openness is strong as is the sense of being away from the confines and pressures of other, more urbanised landscapes. The landscape surrounding the site is relatively free of man made structures.

4.9.3 The A44 is a well-used tourist route from England into Wales and the landscape surrounding the site can be appreciated from the A44, in particular the distinctive profile of Llandegley Rocks which provides a memorable backdrop to the fieldscape of hedgerow-enclosed pastures by small rivers and streams, a view that has been enjoyed for more than a hundred years.

5 Landscape Value

5.1 Introduction

5.1.1 GLVIA3 requires an assessment of landscape value in advance of an assessment of landscape susceptibility. This is because landscape value is inherent whereas susceptibility is specific to the kind of development proposed and to the location of the development. The sensitivity of a landscape is a combination of the value of the landscape and the susceptibility of a landscape.

5.1.2 PPW 9 makes clear that valued landscapes are not confined to those with designations. '*The natural heritage and valued landscapes of Wales are not confined to statutorily designated sites but extend across all of Wales – to urban areas, the countryside and the coast'.*[41] PPW 9 supports the use of local landscape designations but PCC has chosen not to define Special Landscape Areas.

5.1.3 GLVIA3 on Page 84 in Box 5.1 provides a list of factors that can be useful in indicating landscape value '*in cases where there is no existing evidence to indicate landscape value'*[42] The factors in Box 5.1 are useful in confirming the value of the site and the surrounding landscape and I consider them in turn below based on a four-point scale of outstanding-high-medium-low. Outstanding value is generally confined to landscapes with national or international designations. The overall value of the landscape is not merely an average of the individual scores.

5.1.4 Due to the extent of the area that will be affected by the introduction of the turbines the assessment of value is not confined to the site itself but includes a consideration of the surrounding landscape.

[41] Planning Policy Wales Edition 7 – July 2014 Paragraph 5.1.1
[42] GLVIA3 Paragraph 5.28 Page 84

5.1.5 **Landscape Quality**: The condition of the site and the surrounding landscape is **medium.**

5.1.6 **Scenic Quality:** I consider the scenic quality of the landscape surrounding the site to be **High**. Although the VSLAAs for the site and the immediately adjacent landscape to the west are considered to be moderate, land to the east and south in VSLAAs Radnor Forest and Glascwm Hill is considered to have high scenic quality. The attractive profile of Llandegley Rocks also makes a significant contribution to the scenic qualities of the surrounding area and combined with the pastoral farmland it creates a distinctive local character.

5.1.7 **Rarity**: The visual and sensory evaluations are generally moderate or moderate to high based on the premise that the fieldscape is reasonably well represented across the county. Llandegley Rocks forms part of a classic geological landscape. With regard to the historic elements the rarity is judged as being outstanding. Overall the rarity is **high**.

5.1.8 **Representativeness**; The landscape is representative of the local landscape character and contains no detracting features. A number of the SAMs which are of particular importance to the historic landscape are located close to the site. Overall the site as **medium/high** representative value.

5.1.9 **Conservation Interests**: There is a rich assemblage of early and late prehistoric and medieval landscape elements in a relatively undisturbed condition in the HLAA in which the site is located. In addition, there is high scoring historic content to the south (prehistoric rock carving, standing stone, round barrows etc.) and significant archaeological remains of all periods along the length of the Edw. Overall of the site and the surrounding landscape has **High/outstanding** conservation value.

5.1.10 **Recreation value**: The site and the surrounding landscape are criss-crossed by a network of PRoWs and a high proportion of bridleways and other routes accessible for equestrians. In addition, there are several areas of OAL including Llandegley Rocks and significant section of Radnor Forest. The recreational value of the site and the surrounding landscape is **High**.

5.1.11 **Perceptual aspects**: The perceptual values of the site and the surrounding landscape are noted in the LANDMAP assessments as attractive, tranquil, exposed, remote, wild, spiritual. This includes the VSAA in which the site is located. The value of the perceptual aspect of the site and the surrounding landscape is **High**.

5.1.12 **Associations**: The wider area has an association with mineral water through the *Radnor Hills* brand.

5.1.13 I consider that landscape value of the site and the immediately surrounding landscape to be **high**. Outside of a nationally or internationally designated landscape I would not expect to find a landscape with an overall value of outstanding. I consider that the key aspects that account for its high value are

- The presence of the distinctive profile of Llandegley Rocks;
- The presence of a rich and varied assemblage of historical landscape elements; and
- The network of PRoW that cross the site and spread out through the surrounding landscape.

6 Landscape Sensitivity

6.1 Defining Sensitivity

6.1.1 The sensitivity of the receiving landscape is a combination of the susceptibility of the site and the surrounding landscape to the development proposed and the value placed on the site and the surrounding landscape. As identified in the baseline section, the value placed on the landscape immediately surrounding the site is **high**.

6.1.2 The assessment of susceptibility below is specific to a wind turbine development of the size proposed and in the location proposed. The assessment is based on a three-point scale of high, medium and low. A landscape with high susceptibility to wind turbine development is one where the development envisaged could not be accommodated without significant adverse consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.

6.2 Scale and Enclosure

6.2.1 Although located in an upland landscape the site is surrounded on all sides by higher land which give it a sense of enclosure. This is not a large-scale landscape with uniform characteristics. There is a variety of field sizes and shapes even within the landscape immediately adjacent to the site and also a variety of field boundary treatments. The overall impression, which can be seen from LVIA Vps 4, 5 and 9 for example, is of a smaller-scale complex landscape enclosed by areas of higher land.

6.2.2 With regard to scale and enclosure the site and the surrounding landscape has **medium-high** susceptibility to WTD.

6.3 Landform and Topography

6.3.1 The most distinctive feature in the landscape surrounding the site is the attractive profile of Llandegley Rocks this results in **high** susceptibility to wind turbine development as the turbines will become the most dominant feature in the area and will detract from the profile of the Rocks. The locally undulating nature of the landscape of the site means that it will be more difficult to accommodate the access tracks without either cutting in or embankments. The presence of higher land surrounding in the site means that there will be views from elevated locations overlooking the site. (PRV Vp 2 & PRV Vp 3) As a consequence, the access tracks are likely to have greater visibility and the turbines will often be seen against a land backdrop. The grey colour of the turbines, designed to mitigate their visual impact when seen against a grey sky, will increase their visibility when seen against a land backdrop.

6.3.2 With regard to landform and topography the site and the surrounding landscape has **high** susceptibility to WTD.

6.4 Land Cover Pattern

6.4.1 The site and the surrounding landscape do not form a simple regular landscape and there is no extensive area of uniform ground cover. The topographical variations, the varied fieldscape, the mix of pastoral, OAL and Common land give the landscape surrounding the site a degree of complexity that would make it difficult to introduce turbines without a loss of the existing character. MB Figure 05, which shows the turbines and the turbine access tracks on the 1:25,000 OB base, indicates just how many field boundaries would need to be breached in order to implement the scheme.

6.4.2 With regard to land cover pattern the site and the surrounding landscape has **high** susceptibility to WTD.

6.5 Settlement Pattern and Density

6.5.1 The site and the surrounding landscape are sparsely settled. It does contain a number of historic villages, but they are well spaced and not particularly close to the site. With regard to **Settlement Pattern and Density** the site and the surrounding landscape has **low/medium** susceptibility to WTD.

6.6 Visible Built Structures

6.6.1 The site and the surrounding landscape are generally free from large scale infrastructure, major communications routes or large-scale developments. There is an overall sense that this is a pastoral/upland, lightly settled landscape that has not been unduly affected by large scale 20th century development. The existing single turbine at Cwmmaerdy is at odds with the landscape that surrounds it, in which there are no other similar features. However, its impact is reduced because being small (15.4 m to hub and 20.4m to tip) it is more readily hidden by the surrounding landform than the larger turbines that are the subject of this appeal. The closest large-scale wind turbine development is Garreg Lwyd, some 18 km away: this does not have any effect on the character of the landscape surrounding the site.

6.6.2 With regard to visible built structures the site and the surrounding landscape has **high** susceptibility to WTD.

6.7 Landmarks

6.7.1 In the landscape surrounding the turbines there are frequent occurrence of historic features where views to and from the features have been identified as important. These include Graig Fawr Hillfort, Llandegley Rocks Hillfort and Crug Eryr Mound and Bailey Castle.

6.7.2 With regard to landmarks the site and the surrounding landscape has **high** susceptibility to WTD.

6.8 Skyline

6.8.1 Although the turbines are located on lower land and much of the turbines will be seen against a land backdrop, they will also be seen in many circumstances against the distinctive skyline formed by Llandegley Rocks. The turbines would detract from and draw attention away from this skyline features (e.g. MB Vps B1 and D1).

6.8.2 With regard to the skyline the site and the surrounding landscape has **high** susceptibility to WTD.

6.9 Visual Connections with Adjacent Landscapes

6.9.1 The elevated nature of land surrounding the site means that the site makes an important contribution to the character of the views from local high viewpoints such as Llandegley Rocks (MB Vp E & PRV Vp 2) Gwaunceste Hill (LVIA Vp 9) and the edge of Radnor Forest (PRV Vp 3).

6.9.2 With regard to the visual connections with adjacent landscapes the site and the surrounding landscape has **medium/high** susceptibility to WTD.

6.10 Remoteness and Tranquillity

6.10.1 Remoteness and tranquillity are two of the perceptual qualities identifies in the LANDMAP assessments for the site and the surrounding landscape. The sparsely settled character of the area, the distance to any large towns and strong sense of traditional rurality all contribute positively to the sense a landscape that has retained its historic character and has remained largely free of large scale 20th century activity and large-scale development. Even the tourism in the area is low key, related to walking and horse riding and has not had a noticeable impact on the character of the landscape.

6.10.2 With regard to the remoteness and tranquillity the site and the surrounding landscape has **high** susceptibility to WTD.

6.11 Conclusions with regard to susceptibility

I consider that the site and the surrounding landscape has overall **high** susceptibility to wind turbine development of the scale and in the location proposed. Of the factors that reduce susceptibly only the sparsely settled pattern of developments indicates suitability. Of the other factors the landform and topography is particularly unsuited to wind turbine development because of the harm to the distinctive landform of Llandegley Rocks. The variety in the land cover and the local undulations will also exacerbate adverse impacts that result from the access tracks.

6.12 Published Landscape Sensitivity and Capacity Studies

6.12.1 The Hendy WTD is located outside both the Strategic Search Areas identified in TAN 81[43] and the PCC Refined Strategic Search Areas[44].

6.12.2 In 2017 PCC commissioned AECOM to undertake a Renewable Energy Assessment (REA) Update in 2016 (AECOM REA 2016). The assessment identified Local Areas of Search (LSAs) for 5MW-25MW WTD. The methodology used to identify these areas was not robust (e.g. there were a number of omissions and inaccuracies in the GIS datasets used) and did not include any landscape sensitivity and capacity study. Even given the omissions and inaccuracies, the Hendy WTD is not located within a LSA identified in the AECOM REA 2016.

6.12.3 In 2017 AECOM corrected the errors. The AECOM REA 2017 did not identify any '*least constrained land parcels of sufficient area to identify wind LSAs for local authority wide schemes of installed capacity range 5-25MW*'[45] within Powys. Consequently, no PCC landscape sensitivity and capacity study has been undertaken within PCC outside of the studies associated with the SSAs. As the site has not been considered as suitable for WTD in any studies undertaken to date there is no landscape sensitivity and capacity study that includes the Hendy WTD site.

6.13 Conclusions on Sensitivity

6.13.1 The site and the surrounding landscape have **high** value and **high** susceptibility to wind turbine development. The sensitivity of the landscape is a combination of those judgements and I consider that the site and the surrounding landscape has **high** sensitivity to wind turbine development of the scale and in the location proposed.

[43] Welsh Assembly Government (2005) Technical Advice Note 8: Planning for Renewable Energy.
[44] Local Refinement of TAN 8 Strategic Search Areas B and C' published by Powys County Council in 2008
[45] AECOM REA 2017 Section 4.2.5 Page 24

7 Landscape Effects

7.1 Introduction

7.1.1 Landscape effects resulting from wind turbines are generally due to the visual changes that the turbines bring to a landscape and to the character of that landscape. In the case of the Hendy WTD there are also significant changes to the fabric of the landscape. This is due to the access tracks which cannot be easily accommodated within the locally-very varied topography. Section 9, Visual Effects, describes the visual changes and identifies the effect they will have on the visual amenity within the local area. The detailed analysis of how the turbines would change the visual character of the landscape are not repeated in this section.

7.2 Landscape Character effects

7.2.1 PPW 9 identifies that '*siting in relation to local landform*'[46] is a key sensitivity that wind turbine developers need to take account of in locating developments. The turbines would be seen in front of Llandegley Rocks and to the side of them from within a wide area stretching from the south west to the north east. For example, the Llandegley Rocks can be seen to the left of the turbines on PRV Vp 4, immediately in front of them, ES Vps 4 & 5 and to the right of them on PRV Vp 3. Section 8 following also identifies how the turbines would interrupt closer views towards the rocks and replace them as the most noticeable feature in the view. The turbines would in most views be either at the same height as the Llandegley Rocks or higher than them. Hendy WTD would dwarf the Rocks as a feature in the landscape.

7.2.2 Hendy WTD, due to its location immediately adjacent to Llandegley Rocks, would have a **major adverse** effect on the prominence of the distinctive profile of Llandegley Rocks and harm their landmark function.

[46] Planning Policy Wales Edition 9 – November 2016 Paragraph 12.8.14

7.2.3 The complex, rural character of the landscape surrounding the turbines site is evident in all of the viewpoints but is particularly striking in ES Vps 4, 5, & 7 and MB Vp G. The turbines would introduce large-scale, engineered, moving structures into a landscape that is currently mostly free of such structures or other detracting features. The turbines would disrupt the sense of an intact landscape and would diminish the sense of a long established rural landscape. The cutting and filling required for the access tracks would further harm the traditional rural character.

7.2.4 The description of the Radnorshire Hills NLCA is that '*the area is very rural and largely undisturbed by industries, heavy traffic, tourism or commuters, and herein lies its timeless beauty and tranquillity*'.[47] The turbines would disturb and diminish the sense of remoteness and the consequent timeless beauty and tranquillity due to their large scale, utilitarian appearance and their movement.

7.2.5 The following section describes in detail the harm to the visual amenity of users of the BOAT that crosses the site but the turbines would also adversely affect the landscape character surrounding the BOAT. The BOAT would no longer have the sense of passing through a tranquil, rural landscape but would feel like the approach route to a wind farm and a wind farm itself.

7.2.6 In addition to the visual intrusion of the turbines the access tracks would disrupt the users of the BOAT and users of the bridleway that leads north from it. The BOAT will be crossed in four places for three of these crossings the access track is either in cutting or on embankment. In addition, the access track is shown as running along the BOAT for approximately 400m. This will entirely alter the current character of the BOAT. The effects of the access tracks on the landscape fabric are considered below.

[47] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales Page 3

7.3 Historic Character effects

7.3.1 The LANDMAP approach is intended to make sure that the historic dimension of the landscape is always recognised and taken into account in any consideration of landscape changes. As described above the site is located in HLAA Gelli Hill which has an outstanding overall evaluation due to the relatively undisturbed condition of the rich early and late prehistoric and medieval landscape elements that are present.

7.3.2 The presence of the turbines will significantly disrupt the relatively undisturbed condition of the historic landscape elements close to the site. The turbines will bring about substantial changes to the setting of these heritage assets. This is acknowledged within the Historic Environment Desk Based (HEDB) Study which forms Archaeological Technical Appendix 8.1. The following paragraphs outline some of the conclusions of the HEDB and the basis on which those conclusions were reached, with regard to the significance of the effect of the proposed development on the SAMs closest to the site.

7.3.3 **Nant Brook Enclosure (RD147).** The HEDB concludes that '*It is considered therefore that the proposed wind farm will have a **moderate adverse** impact upon the setting and heritage significance of this scheduled monument. The significance of effect of this impact is considered to be **moderate /large**'.*[48] This assessment only considered views from the SAM and did not consider how the presence of the turbines in views towards the SAM might affect its setting. Moreover, the sensitivity of the SAM was considered to be 'reduced' due to the presence of a single turbine: the Cwmmaerdy turbine at 15.4m (to hub) in height.

7.3.4 **Graig Camp /Graig Fawr Hillfort (RD112).** The HEDB acknowledges that the key setting of the Hillfort is its location in an elevated, prominent position providing extensive views across the landscape in all directions and to other similar sites in the vicinity, for example Llandegley Rocks Hillfort. The HEDB concludes that '*It is considered that the proposed wind farm will have a **moderate adverse** impact upon the setting and heritage significance of this scheduled monument. It is considered also that the proposed development is likely to have a moderate adverse impact on the inter-visibility of Llandegley Rocks Hillfort and Graig Fawr Hillfort. The significance of effect of these*

[48] Hendy Wind Farm ES: June 2014; Volume III, App 8.1 Historic Environment Desk Based Study page 38 para 5.2.7

*impacts are considered to be **moderate /large'**.*[49] In this assessment, the HEDB is concerned only with views from the SAM and not with views towards it. The HEDB considers that, with respect to Graig Fawr Hillfort the single turbine at Cwmmaerdy is considered to have a potential for cumulative adverse impacts.

7.3.5 **Llandegley Rocks Hillfort (RD264).** The HEDB acknowledges that the key setting of the Hillfort is its location in an elevated, prominent position providing extensive views across the landscape in all directions and to other similar sites in the vicinity. The HEDB concludes that '*It is considered that the proposed wind farm will have a **moderate adverse** impact upon the setting and heritage significance of this scheduled monument. It is considered also that the proposed development is likely to have a moderate adverse impact on the visual relationship of Graig Fawr Hillfort and Llandegley Rocks Hillfort. The significance of effect of these impacts are considered to be **moderate /large'**.*[50] In this assessment the HEDB is again only concerned with views from the SAM and not with views towards it.

7.3.6 **Crug Eryr Motte-and-Bailey Castle (RD003)** The HEDB acknowledges that the heritage significance of this SAM derives from '*its prominence and defensible position in the landscape and it's inter-visibility with other major defended sides of the period*'.[51] It also acknowledges that '*key views from this motte and bailey castle our extensive and are likely to have been to the north west and south over the downwards-sloping landscape'*.[52] The turbines are approximately 2 km west of the SAM. The HEDB acknowledges that all of the proposed turbines will be visible from the Crug Eryr Motte-and-Bailey Castle[53] although it considers that this will only have a small adverse impact due to distance and the fact that the views in other directions will not be affected.

7.3.7 The HEDB assessment does not fully assess all the potential effects, in particular it does not assess the effects of the turbines on views towards the SAMs. The HEDB does not assess the effect of the access tracks on the sense of a relatively undisturbed landscape in which the heritage assets are located. Despite that, the HEDB identifies significant harm to the landscape setting of at least three SAMs as well as harm to other SAMs. Taken

[49] Hendy Wind Farm ES: June 2014; Volume III, App 8.1 Historic Environment Desk Based Study page 39 para 5.2.12
[50] Hendy Wind Farm ES: June 2014; Volume III, App 8.1 Historic Environment Desk Based Study page 40 para 5.2.15
[51] Hendy Wind Farm ES: June 2014; Volume III, App 8.1 Historic Environment Desk Based Study page 42 para 5.2.20
[52] Hendy Wind Farm ES: June 2014; Volume III, App 8.1 Historic Environment Desk Based Study page 42 para 5.2.20
[53] Hendy Wind Farm ES: June 2014; Volume III, App 8.1 Historic Environment Desk Based Study page 42 para 5.2.21

together this is significant harm to the historic character of an outstanding historic landscape.

7.3.8 With the turbines in place it would be impossible for a LANDMAP evaluation to reach the conclusion that part of the justification for an outstanding evaluation was that the rich assemblage of historic landscape elements had survived '*in a relatively undisturbed condition.*'

7.3.9 The Hendy WTD would have a **major adverse effect** on the Gelli Hill HLAA.

7.4 Conclusion

7.4.1 I consider that on account of the adverse effects on the distinctive qualities of the existing landscape, the current proposals would result in a **major adverse** impact on landscape character. This is contrary to the implicit objective of TAN 8 which is to maintain the landscape character, i.e. no significant change in landscape character from wind turbine development.

7.4.2 The ES also concludes that there would be significant adverse effects on the landscape character but instead of interrogating that conclusion dismisses it with the statement that such effects are to be expected with wind turbine development. (See Section 3.5 above) This statement is insufficient to explain why some landscapes are considered more capable of accommodating wind turbine development than others. The ES does not identify the aspects of a landscape that make it more susceptible to landscape harm as a result of the introduction of wind turbine development. Consequently, it does not identify that the landscape surrounding the site displays almost all of those characteristics.

7.4.3 The LVIA conclusion (5.10 page 5-70) lists the landscapes that it considers would suffer significant, adverse direct harm to their character as a consequence of the introduction of the turbines. However, there is no consideration of whether these significant adverse effects matter. Whether, for example, the distinctive qualities of the existing landscape as a whole would be maintained post development, or whether they would be lost or diminished.

8 Effects on Landscape Fabric

8.1 Introduction

8.1.1 In addition to the landscape character effects of the development I also consider that there would be significant effects on the landscape fabric of the site. The adverse effects on the fabric of the landscape would be due to the imposition of the proposed access tracks on the locally undulating character of the site. The design and layout of the proposed tracks do not respond to the historic field pattern or historic tracks, due to the technical requirements involved in the transportation of the large-scale structures. This inability to respect the existing grain of the landscape is the inevitable consequence of introducing large-scale development into a complex landscape.

8.2 Access Tracks

8.2.1 The failure of the LVIA to properly assess the landscape and visual impacts of the access tracks is identified in both the Anthony Jellard Review (5.10-5.12 page 9) and the Enplan Review. Para 3.3 of the Enplan Review states that:

> *'The access tracks are included within the landscape assessment but we consider the assessment to be cursory and which does not consider the effect of the significant earthworks. We note that the design does not show how the BOAT, which is severed three times, would be integrated.'*

8.2.2 The route of the access tracks is described in the Anthony Jellard Review:

> *'From Pye Corner westwards, the new access track route would follow the route of an existing right of way (a byway open to all traffic (BOAT) - and way-marked as such) for around a kilometre westwards, which would require substantial engineering modifications in places to be able to accommodate the heavy haulage traffic required to construct the wind farm. From just west of the point where the BOAT diverges from a farm track which runs roughly northwards up to a group of farm buildings, two new tracks would be constructed to gain access to each turbine position to facilitate their construction and subsequent operation. One track would run first south-westwards then to the south-east, along a curved horizontal alignment which would cause it to cross the route of the BOAT on the rising ground*

in order to serve Turbine Nrs 6 and 7. The other new access track would run first north-west then turn south-westwards to serve, in turn, Turbine Nrs 5, 4, 3 and 1, with a short spur off this route between Turbine Nrs 3 and 1 running almost northwards to serve Turbine Nr 2. This track would also cross the route of the BOAT between Turbine Nrs 3 and 4.[54] *These tracks would have a running surface width of a minimum of 4.5 metres and be surfaced with compacted aggregate.*[55] *The total length of new access track to be constructed would be 3.3 kms; and 1 kilometre of existing track would be upgraded*[56]*.'*[57]

8.2.3 MB Figure 05 shows the proposed access tracks with indicative earthworks overlaid onto an OS Map that shows the location of the PRoWs. The extensive nature of the earthworks required is evident. In particular the following can be seen:

- At Pye Corner a retaining structure 3.25m high will be required adjacent to the River Edw (ES Figure 1.2.2).
- A significant area of cutting between T5 and T4. (ES Figure 1.2.4 and ES Fig. 1.2.5) which will involve lowering the ground level by up to slightly over 12m (at Chainage 0+750). This access track will be directly in the line of sight of ES Vp 1. The track will sever the piece of woodland to the east of T5 (the closest turbine from this viewpoint) on a new embankment up to 6m high (at Chainage 0+350) and will then arc across the field in cutting towards T4.
- The access track between T5 and T4 cuts across a small field dividing it in two. It also cuts across a bridleway immediately adjacent to a field boundary. It is not clear how it is intended that the bridleway would cross this cutting.
- The track between T4 and T3 includes a cut section which would lower the ground level by nearly 12m (11.797m at Chainage 1+350).
- The track from T6 to T7 is raised on embankments up to 7m above the existing ground level (at Chainage 0+650) (ES Figure 1.2.7).
- The spur to T2 (ES Figure 1.2.8) would include an embankment raising the access track up to 6m above ground level (Chainages 0+200 and 0+250).

[54] Hendy Wind Farm ES: June 2014; Volume II, Figure 1.2.1
[55] Hendy Wind Farm ES; June 2014; Volume I, Para 3.3.3
[56] Hendy Wind Farm ES; June 2014; Non-Technical Summary, Para. 3.0
[57] Anthony Jellard Review Para 4.6

8.2.4 MB Appendix 5 includes some photographs taken recently during the final stages of the construction of the Bryn Blaen WTD at Llangurig, Llanidloes, Powys. Bryn Blaen WTD is a similar size (6 turbines rather than 7) to the appeal proposal. The photographs illustrate:

- Potential impacts that access tracks and associated earthworks can have on the landscape character;
- Potential impacts on users of PRoWs, including bridleway users; and
- Potential landscape impacts resulting from drainage issues.

8.2.5 MB Appendix 5 also includes some of the access track cut and fill figures for Bryn Blaen WTD prepared by Halcrow (Bryn Blaen WTD ES Figure 1.2.1 Rev C) and the access track cut and fill figures for Hendy WTD also prepared by Halcrow (ES Figure 1.2.1). The following table compares the indicative cut and fill quantities from the two drawings:

Table 2: Comparison of Indicative Cut and Fill Quantities

	Bryn Blaen WTD	Hendy WTD
Volume of Cut	33,351m^3	135,023m^3
Volume of Fill	41,985m^3	91,154m^3

8.2.6 From this it is clear that the volume of cut for Hendy WTD is more than four times that required for Bryn Blaen WTD and the volume of fill more than double. Given that the development is of a similar size this is indicative of the locally variable topography within the Hendy WTD site.

8.2.7 MB Figure 05 shows the existing field boundaries within the site. From Pye Corner heading west the access tracks cross 13 field boundaries. This is another indication, along with the quantities of cut and fill required, that the appeal site is not a physically suitable location for WTD and such development could not be accommodated without undue consequences for the baseline conditions. As proposed, the access tracks would go against the grain of the landscape, with no opportunities for the access tracks to follow existing field boundaries. This is due to the contour and in places, the irregularity of the enclosure within the appeal site.

8.2.8 I would respectfully ask that during the course of the inquiry a site visit to the Bryn Blaen WTD is undertaken in order to assist in an understanding of the potential impact of the access tracks on both the fabric and character of the landscape at Hendy.

9 Visual Effects

9.1 Introduction

9.1.1 Visual changes that result in changes to the local landscape character have been described in the section above. This section is concerned with the visual receptors who will experience those changes. Visual effects are a result of the sensitivity of visual receptors to the proposed development and the magnitude of changes to existing views.

9.1.2 GLVIA3 provides guidance on the relative sensitivity of different visual receptors (Page 113-114). In summary, the most sensitive receptors are:

- Residents at home;
- People engaged in outdoor activities whose attention is focused on the landscape and view; and
- Visitors to heritage assets or other attractions where views are an important part to the experience.

9.1.3 The least sensitive receptors are:

- People engaged in outdoor sports or activities which do not depend on an appreciation of views; and
- People at their place of work (although this can vary).

9.1.4 The sensitivity of road users varies. People on busy or main routes are considered to have medium or low sensitivity, whilst users of rural roads or scenic routes will have medium or even high sensitivity.

9.2 Visual receptors who would be affected by this development are:

- Residents of nearby properties and settlements. **High sensitivity.**
- Walkers and equestrians using the PRoW network that crosses the site and extends into the wider landscape. **High sensitivity**
- Walkers using Open Access Land - **High sensitivity.**
- Vehicles users including tourists using the A44. **Medium/ high sensitivity.**
- Tourists using the laybys on the A44 – **High sensitivity.**
- Vehicle users of the local rural roads - **Medium sensitivity**

- Cyclists using local roads and the Sustrans Route 825 - **Medium/high sensitivity**
- Bird watchers who come to see the starlings that roost on the site **- High sensitivity**

9.3 LVIA Visual Assessment

9.3.1 The visual assessment in the LVIA is seriously flawed because it fails to provide a sufficiently representative selection of viewpoints. In particular there is a glaring omission in that there are no viewpoints from the BOAT that crosses the site and no viewpoint from Llandegley Rocks. Some other viewpoints, such as Vp 2 suggest limited visibility whereas it is clear, even just from looking at the ZTV, that there will be more extensive visibility from locations nearby.

9.3.2 The failure of the LVIA to provide a sufficiently representative selection of viewpoints was identified in both the Enplan Review (2.7 Pages 9-10) and the Anthony Jellard Review (5.16 & 5.19 pages 10 & 11) and requests were made for further visualisations. No further visualisations were prepared. Three working days before evidence had to be submitted, the appellant issued three new photomontages and a wireframe associated with a fourth. It is to be hoped that the visual assessment in the appellant's evidence will reflect the high degree of visual intrusion that these new photomontages illustrate.

9.4 Additional Viewpoints

9.4.1 A number of MB Viewpoints were prepared in order to address the key gaps in the ES. Had the new photomontages been prepared and issued in good time this would not have been required.

9.4.2 **MB Vp A BOAT East (MB Figure 06)**. This viewpoint is located along the BOAT shortly after it departs the OAL and crosses into an area of former coniferous forestry. Land within the former plantation (to the left in the photograph) is overgrown and has a scrub-like appearance which contrasts with the more manicured pastoral farmland immediately north of the BOAT. The landscape character is distinctly rural and users are not aware of any obvious human structures. The sensitivity of the BOAT users is high. Turbines T1, T2, T3 and T4) are located directly ahead (looking south-west) as is highlighted on MB Figure 06 and would be visible to varying degrees above a nearby low ridgeline. Their rotors and blades would be viewed against the sky. At this location users of the BOAT are approximately 230m from T5, 300m from T6 and 540m from T7. The locations of T5-T7

are not shown on MB Figure 06 as they positioned obliquely (north; south) relative to Vp A and would be visible to the right and left of the frame. In reality, BOAT users would not have a fixed view - as is often misleadingly represented by viewpoint photography - but instead would be taking in the views around them and would be aware of all 7 turbines. As well as the turbines, the access track leading to T6 and T7 would intersect the BOAT approximately 160m ahead of the viewpoint on an embankment. The introduction of the turbines and the new access track and associated earthworks would result in a high magnitude of change. The effect on the visual amenity of BOAT users would be **major adverse.**

9.4.3 **MB Vp B1 and B2 BOAT Centre (MB Figure 07, 08)**. Viewpoint B is located at the western end of the former forestry block, where the land rises west of Nant Brook. It is close to the approximate 'centre' of the WTD. I have included two photographs from this location: one (Vp B1) which is directed north towards Llandegley Rocks and another (Vp B2) which is directed east along the BOAT. North of Vp B1 the landform increases in elevation which together with changes in land cover: from scrub to rolling pasture, and then beyond to the highly distinctive, craggy ridgeline of Llandegley Rocks creates an interesting landscape sequence; absent of any large man-made structures. The Nant Brook is also visible winding down the hillside, as it does from Sarn Pool. Looking eastwards (Vp B2) the foreground is characterised by former forestry land which frames either side of the BOAT at this location.

9.4.4 From Vp B1, T4 would be clearly visible approximately 210m ahead as a dominant feature in front of Llandegley Rocks (MB Figure 07). T5 (although not within the viewpoint photograph) would be apparent, obliquely off to the north-east. Additionally, part of the main access track (leading from T5 to T1) would be visible. Including a section on embankment over the Nant Brook, which would then be visible within an area of cutting behind T4. This access track also intersects the BOAT immediately west of MB Vp B, where it will be located within an area of cutting. It is not clear what treatment is proposed for the BOAT. Looking east in Vp B2, BOAT users will have clear views of T6 and T7 (approximately 450m and 650m away). Users of the BOAT have high sensitivity. The introduction of the three turbines into views B1 and B2, together with the access tracks and other four turbines - which will also be visible when looking in the other directions, including T3 only 200m south-west - would result in a high magnitude of change. The overall effect on the amenity of BOAT users would be **major adverse.**

9.4.5 **MB Vp C BOAT West (MB Figure 09)**. This viewpoint is located west of the turbines, approximately 530m from T1 and immediately alongside an area of OAL. Here the BOAT traverses around the southern end of the ridge which extends from Llandegley Rocks. It has gained elevation relative to the BOAT further east. As such this Vp sits above the ground levels of the proposed turbines and from here BOAT users would look across the entire development without having to change their direction of view significantly. The existing view is rural in character and features no obvious signs of settlement or large scale, human structures. The introduction of all seven turbines into this view would result in a high magnitude of change. The effect on the amenity of BOAT users would be **major adverse.**

9.4.6 MB Vp C is close to the location of PRV Vp 1. This photomontage illustrates clearly the intrusive effect of the introduction of the turbines into this landscape. As with ES Vp 1 no access tracks are shown although the track from T1 to T3 would be clearly visible to the right and the spur to T2 would be across the centre of the view.

9.4.7 As is evident from MB Vps A-C, the amenity of users of the PRoW network within and surrounding the site would be adversely impacted for prolonged stretches of such routes. This point is particularly pertinent to users of the BOAT, which traverses through the middle of the site. The BOAT, which begins at Pye Corner, travels west through OAL before crossing a branch of the River Edw and entering land formerly used for plantation forestry. BOAT users will see at least one turbine (T5) immediately upon entering the BOAT at Pye Corner; after which the number of turbines visible would increase with progress westwards along the BOAT. Users would have a constant awareness of not only being close to, but being *within* a WTD: having their route (the BOAT) disrupted and intersected by the proposed access tracks. At locations between MB Vp A and west of Vp B, BOAT users would be surrounded by turbines, with views in all directions being dominated by them. This is also the case for users travelling eastwards.

9.4.8 The western section of the BOAT leads eastwards from a local road (also CR 825), and increases in elevation alongside an area of OAL to a high point of circa 380m AOD. Close to this point BOAT users would see all seven turbines (MB Vp C and PRV Vp 1). Travelling downhill from this high point, the PRoW would feel like an access track into the WTD. Users of the BOAT west of the local road, leading to Pawl-hir (400m AOD) would also have views of the turbine blades. This means that people's visual amenity along the whole of

the route between Pye Corner and Pawl-hir would be adversely impacted by the proposed development.

9.4.9 **MB Vp D1 and D2 Footpath Near Nant Brook Enclosure (MB Figures 10, 11)**. This viewpoint is located on a PRoW approximately 110m south-west of Nant Brook Enclosure. I have included two photographs: one looking north (Vp D1) and one looking north-east (Vp D2). Walkers on this footpath are currently afforded views across an agricultural landscape, containing numerous points of interest: including Llandegley Rocks on the horizon; a localised landform depression which marks the Nant Brook in the middle-distance; and the Scheduled Monument of Nant Brook Enclosure nearby. Whilst a simulated view was prepared from the latter as part of the Archaeology Figures (ES Volume II Figures 8.7 and 8.8), no account of these – or the impacts relative to the Monument - was made within the LVIA. I also note that the simulated view was photographed around the northern-most edge of the Scheduled Monument (i.e. closest to the rising land directly ahead). There are no images within the ES which show the Monument in its context or which properly account for its setting.

9.4.10 From this location, all seven turbines would be visible (T1 is just out of shot and therefore is not shown in MB Figure 10). The turbines (including rotors and blades of all turbines) would be viewed in a row stretching across the landscape directly ahead. Turbines T5-T7 would be seen against the skyline; with T6 and T7 rising behind and above the Nant Brook Enclosure. Likewise, T3 and T4 (of which the full towers would also be visible) would be viewed in front of Llandegley Rocks. The turbines – at their closest point (T3) - would be less than 580m away. As such the development would form a highly prominent feature, which would appear at odds with the scale and intricacies of the landform and sense of enclosure which surrounds this viewpoint. They would also disrupt visibility of and take attention from the aforementioned points of interest, including Nant Brook Enclosure: which would appear to be flanking turbines which would dominate it. Additionally, parts of the access tracks to T4, T3 and T2 would be visible, including a section within a substantial area of cut leading uphill north of T3. The magnitude of change at this location would be high. The overall effect on the amenity of the PRoW users would be **major adverse.**

9.4.11 **MB Vp E Bridleway at Llandegley Rocks (MB figure 12)**. This viewpoint is located within OAL along the bridleway close to the Llandegley Rocks Hillfort Scheduled Monument. It is approximately 100m west of the simulated view included as ES Figure 8.9 of the Archaeology Figures; which was photographed from the Monument. Bridleway users following the route from the Church of St Tecla in Llandegley and then walking/ riding up through farmland and OAL will find themselves at this location. It exists within a minor saddle between the more elevated Llandegley Rocks proper (marked with a trig point) to the west and that upon which the Scheduled Monument is located, to the east. Views from here are therefore channeled (focused) south-westwards out towards the appeal site.

9.4.12 From this location bridleway users are afforded views across Llandegley Rhos and towards the River Edw valley and the more elevated land around Gwaunceste Hill and Little Hill on the horizon. The view has a highly rural landscape character, which presents a largely corresponding sequence of land uses and cover to the various altitudinal zones which they occupy: from open moorland and rough/upland grazing on elevated OAL, to open pasture with small wood lots, and to smaller-scale enclosure on lower elevated land. Human settlement is primarily limited to scattered agricultural buildings and is not prominent in the view. Nor is the existing Cwmmaerdy turbine, due to its small size (20.4m to tip) . The bowl-landscape in which the turbines are located is clear from this location: that is the land enclosed by Llandegley Rocks to the north and the ridgeline around Graig Fawr to the south. All seven turbines (including towers, rotors and blades) and the network of access tracks would be visible within this 'bowl' with T5 the nearest turbine1.3km away. The towers would be viewed against the darker land backdrop and the majority of blades would be viewed partly against the land and partly above the horizon line. The turbines would collectively form a highly prominent and utilitarian addition to the view: impacting upon an otherwise high-quality rural landscape scene. The magnitude of change would be high. The overall effect on walkers and equestrians using the bridleway would be **major adverse.**

9.4.13 **MB Vp F Bridleway at Upper Llandegley Rhos (MB Figure 13).** This viewpoint is located approximately 800m further south-west along the bridleway from MB Vp E. It is located next to a gate which accesses the wider OAL around Llandegley Rocks. I have included this view in addition to MB Vp E, as from here the turbines are closer to the viewer (at 790m from T5) and therefore their size and the contrasting sense of scale between them and attributes of the landscape such as its topographical variation, would be even more

pronounced. As with the BOAT above, users of the bridleway would have their amenity adversely impacted from Vp E all the way to Vp F and some distance beyond. The magnitude of change would be high throughout this route. The overall effect on walkers and equestrians using the bridleway would be **major adverse.**

9.4.14 Viewpoint PRV2 is located just east of MB Vp E close to the highest point on the Rocks. The photomontage from this viewpoint was not available at the time of completing my evidence. In the email from Kay Hawkins, the appellant's landscape witness, dated the 9th February, she notes that '*The photomontage from PRV2: Llandegley Rocks (Figure KFH/3 (ii)) is not ready yet and this will follow on Monday. As you will see from the wireframe for PRV2, the DTM does not accurately illustrate the middle ground topography and so the lower towers of some of the turbines will be screened more than suggested by the wireframe*.' It is important to remember that a viewpoint only represents a moment in a walker's or rider's journey. The topography in this area is so varied that what is screened at one moment is revealed at the next. It is also interesting to note how different the view appears from PRV2 compared to from MB Vps E and F. This is also illustrative of how in a landscape of such variety the character of the views also varies noticeably depending on degrees of elevation and precise location.

9.4.15 **MB Vp G Bridleway to Llanevan (MB Figure 14).** This viewpoint is located on a bridleway leading from the A44 towards Llanevan. Its users are afforded views above the A44 road, and out across a wider agricultural landscape of pastoral fields enclosed by mature vegetation and up towards the more open pasture of Llandegley Rhos and the highly distinctive ridgeline of Llandegley Rocks beyond. The view is of an intact rural landscape.

9.4.16 All seven turbines would be visible from this location, including all towers, rotors and blades. T7, the closest would be approximately 1.9km distant. All seven turbines would be seen above the skyline, higher than Llandegley Rocks. The access track between T4 and T5 would be noticeable due to the cutting and ground disturbance proposed for its formation. The turbines would be seen within the bowl-landscape, with the enclosure provided by Llandegley Rocks being particularly evident at this location. The sensitivity of users of this bridleway is high and I consider that the magnitude of change for users of the bridleway would also be high. The overall effect on the visual amenity of walkers and equestrians would be **major adverse.**

9.5 Open Access Land

9.5.1 There are a number of areas of OAL within the vicinity of the site and the LVIA accurately identifies that one of the turbines will be approximately 200m from the nearest OAL. (T5). The LVIA does not mention that the site includes land within the OAL, that two sections of access road will run through the OAL, including areas of cut and fill, and that the junction between the two main tracks will be located adjacent to the point where the BOAT enters the OAL.

9.5.2 The LVIA identifies users of the OAL as visual receptors and considers that they would have high /medium sensitivity and that '*within approximately 4.0km of the proposed Hendy turbines, where clear views of the turbines would be available, that a significant effect would occur for visitors to the Access Land'*[58] . The LVIA has accepted that the effects of wind turbine development on visual amenity should be considered as negative[59] so these are significant adverse effects. I consider that users of the OAL would have high sensitivity and consequently significant adverse effects would extend beyond 4km. However, even on the conclusion reached by the LVIA, of significant adverse impacts on the visual amenity of users of OAL land within 4km, there is no analysis within the LVIA as to whether this matters.

9.6 ES Viewpoints

9.6.1 In addition to the serious omissions in the viewpoint selection, which means that the ES has not fully assessed the visual impact of the development, the LVIA has understated the impact from the viewpoints it has assessed and also understated the sensitivity of the receptors. As with people using OAL, GLVIA3 considers that all users of PRoWs have high sensitivity, as they are likely to be engaged in outdoor activities where enjoying the landscape is a primary focus.

9.6.2 The methodology used by the LVIA to determine the magnitude of change also inevitably underestimates the impact on the turbines because the magnitude is always determined by the angle of view occupied by the turbine. Table 5.1/13 sets out the criteria for determining the Magnitude of Change in a View. A very substantial change is defined as

[58] Hendy Wind Farm ES: June 2014; Volume I, Page 5-57
[59] Hendy Wind Farm ES: June 2014; Volume I, Page 5.59

'Where the proposed turbines would be close to the viewpoint, visible in their entirety would occupy the majority of one sector of the view (90º), the rotors would be moving and facing the viewpoint, the turbines would be in stark contrast to the landscape context) such that they would be a dominant new feature which would be present for a long albeit temporary and reversible timeframe.' This definition cannot be correct as it would mean that a single turbine could never result in a very substantial magnitude of change no matter where it was located. I consider that the parts of this definition are each in themselves capable of resulting in a very substantial magnitude of change. I.e. if a proposed wind turbine development is in stark contrast to its landscape context, such that it would be a dominant new feature, then this would constitute a very substantial magnitude of change. It is not necessary for it to also occupy the majority of one sector of the view.

9.6.3 Table 5.1/13 defines precise angles of view that determine the magnitude of change. Anything less than 12º can never be greater than 'slight'. This mathematic approach is not supported by GLVIA3. The magnitude of change will always be dependent on the character of the existing view. For example, the introduction of a single turbine into a view that has no large-scale engineering structures is likely to result in a greater magnitude of change than the introduction of several turbines, spread over a wider area, in a view that is already characterised by large scale infrastructure. Whilst a wide spread of turbines can be an **aggravating factor**, it is not the case that it is a **necessary factor** for there to be a very substantial magnitude of change.

9.6.4 The following paragraphs consider some of the most significant viewpoints within the LVIA. These can be located on MB Figure 01.

9.6.5 **LVIA Vp 1 Bridleway on Llandegley Rhos**. This bridleway runs for approximately 2km south from the A44 and connects with the BOAT that crosses the site east/west. The viewpoint also lies within OAL and I consider that the sensitivity of users of this bridleway is high. All of the turbines would be visible from the majority of this bridleway including from closer viewpoints where the turbines are likely to appear overwhelming. I consider that the magnitude of change for users of the bridleway, would be high. The overall effect on the visual amenity of walkers and equestrians would be **major adverse.**

9.6.6 **LVIA Vp 2 SUSTRANS near Pawl-hir**. This viewpoint is from a local road which forms part of the National Sustrans Route 825. Cyclists in particular have a medium/high sensitivity given that the enjoyment of their activity, in part at least, depends upon the character of the landscape which surrounds them. From this viewpoint, cyclists are at an elevated location close (1.35km) to the nearest turbine (T1): which would be in alignment with their direction of travel at this location. Four of the turbine blades would be visible over and above the skyline currently formed by a hill: the northern parts of which are OAL. I consider that the magnitude of change for users of Route 825, would be medium. The overall effect on their visual amenity would be **major/moderate adverse.** I also consider that the location of this viewpoint is not representative of views in this general area (i.e. west of and nearby the turbines). MB Vp C is taken from the BOAT approximately 800m to the east of LVIA Vp 2, and highlights the difference in visibility of turbines between the two locations (MB Figure 09). There would also be increased visibility to the south of ES Vp 2 as indicated by the ES ZTV (E.g. Figure 5.5).

9.6.7 **LVIA Vp 4 A44 near Castell Crugerydd.** This viewpoint is located on the A44 opposite a lay-by on one of a series of bends –It is within 1km of the summit of the road and, when travelling westbound, this is the first opportunity to park before the long downhill section of the road to Llandegley. It is also the first view that westbound motorists will get of the distinctive landform of Llandegley Rocks forming the local western horizon. As described earlier in my evidence, the quality of this view was recognised as far back as 1875, when it was described in the journal of the Cambrian Archaeological Association. There are intermittent views from this length of road for westbound traffic over Llandegley Rhos and there would be intermittent views of the turbines. As noted in the section on landscape character, the bowl formation in which the turbines would be located (the closest at 1.9km) is currently substantially unaffected by man-made structures – even the existing single turbine at Cwmmaerdy is not always easily discernible.

9.6.8 The A44 is an important, long-established and well-used recreational route along a trunk road between the English Midlands and Wales. The Pentre Tump WTD would have been visible from the A44 further to the east and Inspector Nixon concluded as follows: '*I recognise that road travellers are generally classified as visual receptors of low sensitivity. However, the A44 is a principal leisure route into Wales, recognised as having scenic value. Given this, and the volume of use as a principal route, I regard the effects*

of the development as perceived by users of the A44 as significant'.[60] I consider that the sensitivity of visual receptors is medium/high and the magnitude of change is high. The overall effect on the visual amenity of vehicles drivers and visitors choosing to stop at the layby to enjoy the view would be **major adverse**.[61]

9.6.9 **LVIA Vp 5 A481 near Rhewey.** This viewpoint is located within a lay-by along the A481. The A481, in the vicinity of this viewpoint, travels along the southern side of a valley which features the River Edw and several of its upper branches at its base. Road users are afforded views out across an attractive rural scene. The northern side of this valley is enclosed by a ridge landform which features the single Cwmmaerdy turbine next to a telecommunications mast (close to the highest point of the ridge, 370m AOD). Immediately south of the existing turbine, also upon the ridge, lies the Scheduled Monument of Graig Fawr. Beyond this ridge lies the proposed turbines and beyond those, Llandegley Rocks: which form part of the northern horizon. All seven turbines would be visible – in varying degrees - above the aforementioned ridgeline and each would form a significantly more prominent feature than the existing Cwmmaerdy turbine, due to their size. In particular turbines 5-7 would be clearly visible against the backdrop of Llandegley Rocks. I consider that the sensitivity of visual receptors in this location is medium and the magnitude of change is high. The overall effect on the visual amenity of vehicles drivers and visitors choosing to stop at the layby to enjoy the view would be **moderate/major adverse**.

9.6.10 **LVIA Vp 7 Bridleway across Cowlod.** This viewpoint is located on a bridleway within OAL that is part of the Radnor Forest upland area. The LVIA viewpoint illustrates the wide panorama and far-reaching views which are available from this location. Looking south-west, users of the bridleway will see all seven turbines in a row: each of which will be visible in part against the skyline. From this viewpoint, the location of the turbines within an enclosed upland area / the bowl formation – as previously described in my evidence - is particularly evident. The enclosure is provided by Llandegley Rocks to the north and the ridgeline around Graig Fawr to the south and the turbines would sit within this enclosed area; contrasting in scale with the intricacy of the surrounding area's topographical variations. The sensitivity of users of this bridleway is high and I consider that the

[60] APP 2198831 Land at Pentre Tump, South-East of Llanfihangel-Nant-Melan, New Radnor, Powys Para 17
[61] The LVIA considered the sensitivity of visual receptors to be medium and the magnitude of change substantial. The resultant '*Major/moderate*' effect is 'significant', and adverse although the LVIA scale of effects extends to major ++

magnitude of change for users of the bridleway would be high/medium. The overall effect on the visual amenity of walkers and equestrians would be **moderate/major adverse.**

9.6.11 **LVIA Vp 9 Gwaunceste Hill.** This viewpoint is located within OAL near the summit of Gwaunceste Hill; albeit some 470m north-east of the true summit and trig point. Other closer views are available from a bridleway to the north east of Vp 9. Nevertheless, from this location all of the turbines would be visible, and unlike Vp 7 – where parts of the turbines would be seen against the skyline – the full extent of all turbines will be viewed against a darker land backdrop and be front-lit. Such a contrast increases the prominence of the turbines, which is not identified by the LVIA.[62] The sensitivity of users of the nearby bridleway and wider OAL of the summit area is high and I consider that the magnitude of change would be high/medium. The overall effect on the visual amenity of walkers and equestrians would be **moderate/major adverse.**

9.6.12 **LVIA Vp 11 A481 Hundred House.** This viewpoint is located within an area of OAL (Hundred House Common), close to Sustrans Route 825 which passes alongside it, and then through the Common. From this location, looking north-east, the hubs and blades of three turbines would be visible and with reference to LVIA Figure 5.36 (I), it appears the blade tips of two other turbines would also be visible. The turbines will be located 5.4km from this viewpoint. People enjoying use of the Common have a high sensitivity to change. I consider that the magnitude of change would be medium/low and that the overall effect on the visual amenity would be **moderate adverse.**

[62] Hendy Wind Farm ES: June 2014; Volume I Para. 5.9.5

9.7 Conclusions

9.7.1 The presence of the turbines in Llandegley Rhos would bring about a **major adverse** change to the visual amenity of walkers, equestrians, cyclists and drivers in the vicinity of the turbines. Although the local topography, 'the bowl' in which the turbines are located does limit wider effects of the turbines it is generally acknowledge that significant effects resulting from wind turbines are most likely to be found within 6km of the turbines. What is important, therefore is the current visual environment within 6km and the visual receptors likely to experience the change. With regard to the current landscape, the Visual and Sensory assessments for all the Aspect Areas from which the turbines would be visible is that there are currently attractive views in and out and no detractive views, in or out.

9.7.2 With regard to the presence of visual receptors, the network of PRoWs that cross the site and spread out into the surrounding landscape means that there is potential for significant adverse harm to visual amenity from a wide range of locations. In particular the visual experience of using the BOAT for walkers and equestrians will be entirely altered. Not only will views of the turbines dominate the entire length of the Boat from Pye Corner to the minor road near Pawl-hir but the embankments and cuttings for the access tracks will also have a major adverse impact on the visual experience of the section of the BOAT that crosses the site.

10 Summary and Conclusions

This Summary and Conclusions is also provided as a separate Summary Proof

10.1 Landscape Planning Context

10.1.1 Planning Policy Wales Edition 9 (2016) (PPW 9) (CD POL-19) states that '*The natural heritage and valued landscapes of Wales are not confined to statutorily designated sites but extend across all of Wales – to urban areas, the countryside and the coast'*[63] The aim of the Welsh Government is to maximise the benefits of wind turbine development (WTD) whilst '*minimising potential environmental and social impacts'*.[64] In order to minimise adverse landscape impacts PPW requires developers to be '*sensitive to local circumstances, including siting in relation to local landform'*[65] and to give careful consideration to '*location, scale, design and other measures'*[66]

10.1.2 Technical Advice Note (TAN) 8: Planning for Renewable Energy (2005) (CD POL-20) identifies the most appropriate locations for large scale WTD; known as the Strategic Search Areas (SSAs). The application site is not in an SSA.

10.2 Methodology

10.2.1 The methodology used in my evidence is based on GLVIA3. Landscape effects are effects on the fabric and character of the landscape whilst visual effects are effects on people's amenity. GLVIA3 recommends that the sensitivity of a site is a combination of its susceptibility to the development proposed and the value placed on the landscape. *Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines* (LANDMAP Guidance Note 3) sets out the role of LANDMAP in assessing the impact of WTD.

10.2.2 A large number of landscape sensitivity studies have been undertaken regarding wind turbine development and there is a consensus about those attributes that increase a

[63] Planning Policy Wales Edition 7 – July 2014 Paragraph 5.1.1
[64] Planning Policy Wales Edition 9 – November 2016 Paragraph 12.8.6
[65] Planning Policy Wales Edition 9 – November 2016 Paragraph 12.8.14
[66] Planning Policy Wales Edition 9 – November 2016 Paragraph 12.10.3

landscape's susceptibility to wind turbine development and those that decrease it, as for example in Annex D of TAN 8.

10.2.3 The following attributes are generally considered to be indicators of the degree of susceptibility that a landscape has to WTD:

- Scale and Enclosure
- Landform and Topography
- Land Cover Pattern
- Settlement Pattern and Density
- Visible Built Structures
- Landmarks
- Skyline
- Visual Connections with Adjacent Landscapes
- Remoteness and Tranquility

10.2.4 The Landscape and Visual Impact Assessment contained in the Environment Statement (LVIA) does not identify any WTD specific criteria.

10.3 Existing Landscape Character

10.3.1 The site falls within National Landscape Character Area (NLCA) 20: Radnorshire Hills which is described as having '*breathtaking and varied'*[67] topography and being '*very rural and largely undisturbed by industries, heavy traffic, tourism or commuters, and herein lies its timeless beauty and tranquillity*'.[68]

10.3.2 The site forms part of an undulating upland area (300-340m AOD) enclosed by higher land. Immediately north and west of the site (1.2km) is a narrow craggy ridge that features the distinctive outcrops of Llandegley Rocks, (436m AOD). A Scheduled Ancient Monument (SAM), the Iron Age Llandegley Rocks Hillfort is located at the northern end of the ridge, overlooking the site. To the north-east lies the contrasting domed landform of Radnor Forest, to the south high ground that includes Gwaunceste Hill. (MB Figure 01) Within the

[67] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales.
[68] Page 2, NLCA 20 Radnorshire Hills, Natural Resources Wales Page 3

bowl created by these landforms the topography is locally undulating and the fieldscape is varied.

10.3.3 With regard to LANDMAP assessments the site is located in:

- VSLAA RDNRVS112 Upland Moor, North of Hundred House that has a **moderate** overall evaluation. The VSAA is identified as having attractive views to and from adjacent hills and no detracting views either in or out.
- HLAA RDNRHL427 Gelli Hill that has an **outstanding** overall evaluation due to the relatively undisturbed survival of both prehistoric and medieval remains.
- GLAA RDNRGL663 Camnant that has a **high** overall evaluation as it forms a distinctive part of an outstanding geological formation.

10.3.4 With regard to the overall character of the landscape the most distinctive feature is the varied and picturesque outline of Llandegley Rocks which has been a notable landmark and a visitor attraction since at least the 18th century. The site is located in a bowl, surrounded by higher land including Llandegley Rocks and the edge of Radnor Forest, and is representative of Radnorshire's varied topography. Within the bowl the topography is locally undulating and the fieldscape is varied. The sense of openness is strong as is the sense of being away from the confines and pressures of other, more urbanised landscapes. The landscape surrounding the site is relatively free of man made structures.

10.3.5 The A44 is a well-used tourist route from England into Wales and the landscape surrounding the site can be appreciated from the A44, in particular the distinctive profile of Llandegley Rocks which provides a memorable backdrop to the fieldscape of hedgerow-enclosed pastures by small rivers and streams, a view that has been enjoyed for more than a hundred years.

10.3.6 The area surrounding the site is particularly rich in Public Rights of Way and is crossed by a Byway Open to All Traffic (BOAT). (MB Figure 05) The PRoWs allow local people and visitors, on foot and on horseback, to enjoy the variety in the landscape; Llandegley Rocks, the enclosing form of Radnor Forest and the small-scale landscape of the fields.

10.4 Landscape Value

10.4.1 GLVIA3 requires an assessment of landscape value in advance of an assessment of landscape susceptibility. Box 5.1 on Page 84 in provides a list of factors that can be useful in indicating landscape value. I have assessed them as follows:

- Landscape Quality – medium
- Scenic Quality – high
- Rarity - high
- Representativeness – medium/high
- Conservation Interests - high/outstanding
- Recreation value - high
- Perceptual aspects - high

10.4.2 Overall, I consider the landscape value of the site and the immediately surrounding landscape to be **high** due in particular to:

- The presence of the distinctive profile of Llandegley Rocks;
- The presence of a rich and varied assemblage of historical landscape elements; and
- The network of PRoW that cross the site and spread out through the surrounding landscape.

10.5 Landscape Sensitivity

10.5.1 The sensitivity of the receiving landscape is a combination of the susceptibility of the site and the surrounding landscape to the development proposed and the value placed on the site and the surrounding landscape.

10.5.2 With regard to WTD the site and the surrounding landscape have the following susceptibility:

- **Scale and enclosure. Medium-high** susceptibility as the surrounding landscape is a complex landscape enclosed by areas of higher land. (LVIA Vps 4, 5 and 9)
- **Landform and topography**. **High** susceptibility due to the potential for harm to the distinctive profile of Llandegley Rocks, and the presence of surrounding elevated land. (PRV Vp 2 & PRV Vp 3)

- **Land cover pattern: High** susceptibility as there is is no extensive area of uniform ground cover but rather a complex and varied mix.
- **Settlement Pattern and Density. Low/medium** susceptibility as settlement is sparse.
- **Visible Built Structures. High** susceptibility as the surrounding landscape is generally free from large scale infrastructure.
- **Landmarks. High** susceptibility due to the frequent occurrence of historic features where views have been identified as important.
- **Skyline. High** susceptibility due to the potential for harm to the distinctive skyline formed by Llandegley Rocks
- **Visual Connections with Adjacent Landscapes**. **Medium/high** susceptibility due to the contribution that the site makes to the character of views from local high viewpoints such as Llandegley Rocks (MB Vp E & PRV Vp 2) Gwaunceste Hill (LVIA Vp 9) and the edge of Radnor Forest (PRV Vp 3).
- **Remoteness and Tranquillity. High** susceptibility due to a strong sense of traditional rurality, historic character and general lack of large scale activity or development.

10.5.3 The site and the surrounding landscape have **high** value and **high** susceptibility to wind turbine development. The sensitivity of the landscape is a combination of those judgements and the site and the surrounding landscape has **high** sensitivity to WTD of the scale and in the location proposed.

10.6 Landscape Character Effects

10.6.1 Hendy WTD, would have a **major adverse** effect on the prominence of the distinctive profile of Llandegley Rocks and harm their landmark function. (ES Vps 4 & 5 and PRV Vps 3 & 4). Hendy WTD, would disrupt an intact landscape and would diminish the sense of a long established rural landscape. (ES Vps 4, 5, & 7 and MB Vp G)

10.6.2 The Historic Environment Desk Based (HEDB) Study identifies significant harm to the landscape setting of at least three SAMs as well as lesser harm to other SAMs. Taken together this is significant harm to the historic character of an outstanding historic landscape. With the turbines in place LANDMAP could not reach the conclusion that part of the justification for an outstanding overall evaluation was that the rich assemblage of historic landscape elements had survived '*in a relatively undisturbed condition.*' Hendy WTD would have a **major adverse effect** on the Gelli Hill HLAA.

10.6.3 Hendy WTD would result in a **major adverse** impact on landscape character contrary to the implicit objective of TAN 8 to maintain the landscape character.

10.6.4 **Effects on Landscape Fabric**

10.6.5 There would be significant effects on the landscape fabric of the site due to the imposition of the proposed access tracks, which do not respond to the existing grain of the landscape. The tracks would be very visible and would disrupt the use of PRoWs. The tracks would include cuttings of nearly 12m, embankments of up to 7m and 3.5m retaining structures. MB Appendix 5 includes some photographs taken during the final stages of the construction of Bryn Blaen WTD. The volume of cut for Hendy WTD is more than four times that required for Bryn Blaen WTD and the volume of fill more than double.

10.7 Visual Effects

10.7.1 The presence of the turbines in Llandegley Rhos would bring about a **major adverse** change to the visual amenity of walkers, equestrians, cyclists and drivers in the vicinity of the turbines. Although the local topography, 'the bowl' in which the turbines are located does limit wider effects of the turbines it is generally acknowledge that significant effects resulting from wind turbines are most likely to be found within 6km of the turbines. What is important, therefore is the current visual environment within 6km and the visual receptors likely to experience the change. With regard to the current landscape, the

Visual and Sensory assessments for all the Aspect Areas from which the turbines would be visible is that there are currently attractive views in and out and no detractive views, in or out.

10.7.2 With regard to the presence of visual receptors, the network of PRoWs that cross the site and spread out into the surrounding landscape means that there is potential for significant adverse harm to visual amenity from a wide range of locations. In particular the visual experience of using the BOAT for walkers and equestrians will be entirely altered. Not only will views of the turbines dominate the entire length of the Boat from Pye Corner to the minor road near Pawl-hir but the embankments and cuttings for the access tracks will also have a major adverse impact on the visual experience of the section of the BOAT that crosses the site.

10.8 Conclusion

10.8.1 I consider that the landscape and visual harm that would result from the Hendy WTD would be as a direct result of the choice of location in a distinctive generally unspoilt landscape. I consider that the Hendy WTD is not sensitive to local circumstances and has not sought to minimise adverse impacts through careful consideration of location.

GLOSSARY AND ABBREVIATIONS

AONB	Area of Outstanding Natural Beauty
Cumulative effects	Cumulative effects are additional or in combination effects that result from changes caused by a development in conjunction with other past, present, or reasonably foreseeable actions.
EIA	Environmental Impact Assessment
ES	Environmental Statement
GLVIA	Guidelines for Landscape and Visual Impact Assessment, Third Edition, published jointly by the Landscape Institute and Institute of Environmental Management and Assessment, 2013.
HLC*	Historic characterisation is the identification and interpretation of the historic dimension of the present-day landscape or townscape within a given area. HLC is the term used in England and Wales, HLA is the term used in Scotland.
Indirect effects*	Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.
Key Landscape* Characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Landscape character*	A distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, landuse and human settlement. It creates the particular sense of place of different areas of the landscape.
Landscape designations	Areas protected by law or through planning policies for reason of their landscape qualities e.g. National Parks, AONB and Local Landscape Designations.
Landscape effects	Effects on the landscape as a resource in its own right. Change in the elements, characteristics, character, and qualities of the landscape as a result of development.
Landscape elements	A component part of the landscape, such as trees, hedges, buildings and ponds.
Landscape features	Prominent eye-catching elements, e.g. tree clumps, wooded hill tops, and church towers/spires.
Landscape quality (or condition)*	Based on judgements about the physical state of the landscape, and about its intactness, from visual, functional, and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place.
Landscape qualities	Term used to describe the aesthetic or perceptual and intangible characteristics of the landscape such as scenic quality, tranquillity, sense of wildness or remoteness. Cultural and artistic references may also be described here.
Landscape resource	The combination of elements that contribute to landscape context, character, and value.
Landscape value*	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a wide variety of reasons.
LCA	Landscape Character Area – single unique areas that are the discrete geographical areas of a particular landscape type.
LCT	Landscape Character Type – distinct types of landscape that are relatively homogeneous in character. They are generic in nature may occur in different areas in different parts of the country.
LVIA	Landscape and Visual Impact Assessment.
Magnitude*	A term that combines judgements about the size and scale of the effect. The extent of the area over which is occurs, whether it is reversible or irreversible and whether it is short or long term in duration.
Mitigation	Measures including any process, activity, or design to avoid, reduce, remedy or compensate for adverse environmental impact or effects of a development.

NCA	National Character Areas. Landscape character areas as defined for the whole of England.
Photomontage*	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs.
Receptor	Physical or perceptual landscape resource, special interest, viewer group or individuals that may be affected by a proposal.
Residual effects	Potential environmental effects, remaining after mitigation.
Residential Visual Amenity*	A collective term describing the views and general amenity of a residential property, relating to the garden area and main drive, views to and from the house and the relationship of the outdoor garden space to the house.
Scale Indicators*	Landscape elements and features of a known or recognisable scale such as houses, trees and vehicles that may be compared to other objects where the scale of height is less familiar, to indicate their true scale.
Sense of Place (genius loci)*	The essential character and spirit of an area: genius loci literally means 'spirit of the place'.
Sensitivity*	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor.
Temporary or permanent effects	Effects may be considered as temporary (limited duration and reversible) or permanent (irreversible). Some development may also be reversible.
Tranquillity*	A state of calm and quietude associated with peace, considered to be a significant asset of landscape.
Type or Nature of Effect	Whether an effect is direct or indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
Visual amenity*	The overall pleasantness of the views people enjoy of their surroundings which provide an attractive visual setting or backdrop for the enjoyment of activities of the people living, working and recreating, visiting or travelling through an area.
Visual effect*	Effects on specific views and on the general visual amenity experienced by people.
Visualisation*	A computer stimulation, photomontage, or other technique illustrating the predicted appearance of a development.
ZTV –*	Zone of Theoretical Visibility. A map, usually digitally produced, showing areas of land within which a development is theoretically visible.

Note: Descriptions marked with an asterisk are identical to those provided in the Third Edition Guidelines for Landscape and Visual Impact Assessment glossary or text.

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