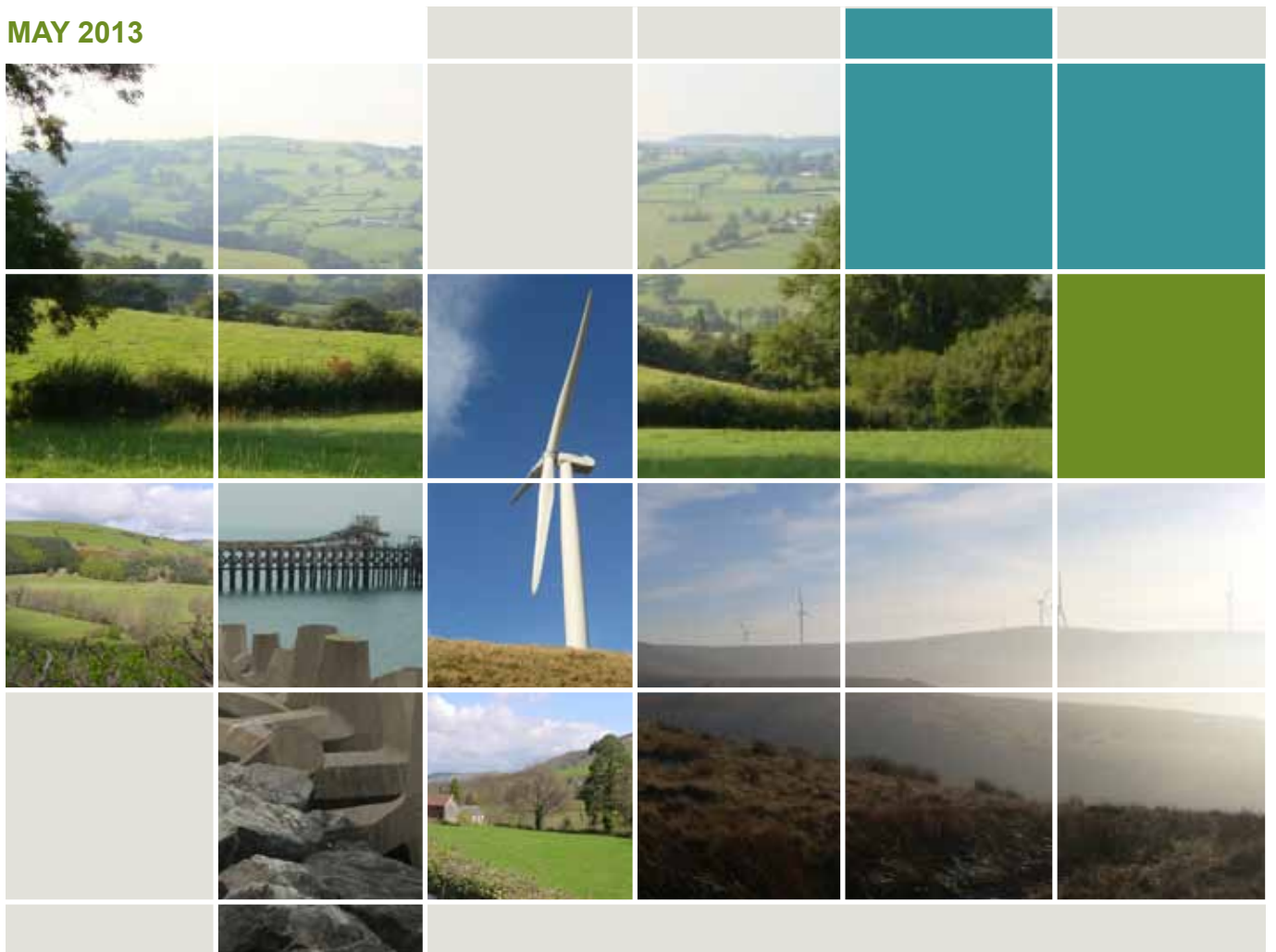


MAY 2013



CONWY AND DENBIGHSHIRE LANDSCAPE SENSITIVITY AND CAPACITY ASSESSMENT FOR WIND ENERGY DEVELOPMENT

FINAL REPORT

Acknowledgements

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Executive Summary

Background

Conwy County Borough Council and Denbighshire County Council (the Councils) both have a significant expanse of rural upland areas which have an abundant onshore wind resource. This includes Clocaenog Forest which has been designated as one of seven Strategic Search Areas (SSAs) in Wales, as defined in TAN 8. The Welsh Government's approach to wind energy development is to concentrate the development of large scale (>25MW) wind farms within Clocaenog Forest Strategic Search Area and the other SSAs, in order to contribute to the Welsh Government's aspiration to achieve 2GW in total capacity by 2015/2017 (of which 8MW of onshore and offshore wind energy is expected to be provided).¹

The identification of Clocaenog Forest SSA has led to some large wind energy developments being consented and constructed. Whilst it is recognised that renewable energy development is important to meeting sustainability targets, there does need to be a balance struck between accepting change to landscape character in some areas whilst protecting other areas that may be more susceptible to change.

Welsh Government planning policy does not set out spatial limitations for onshore wind energy development under 25 megawatts (MW) and those smaller developments under 5MW both of which are applicable to all parts of Wales subject to the assessment of localised impacts.

Conwy and Denbighshire comprise a diverse mix of landscapes many of which are highly valued for their great natural beauty and tranquillity - ranging from remote and wild uplands and moorlands to narrow steep sided valleys, wide river floodplains, gently undulating pastoral lowlands and dramatic coastlines. The busy coastal resort towns along the north coast contrast markedly with the highly rural areas inland.

These landscapes are experiencing an increasing number of planning applications and enquiries for wind energy developments under 5MW, (i.e. applications for single and pairs of wind turbines) as well as larger wind energy schemes being progressed outside the SSA.

This study was commissioned by the Councils in response to this growing pressure on the landscape from wind energy developments. The study provides an evidence based assessment of the relative sensitivity and capacity of the Conwy and Denbighshire landscapes to accommodate wind energy development of varying scales; focussing on smaller scale developments (typically up to a group of 9 wind turbines and 80m maximum height to blade tip).

This study does not generally consider larger wind energy developments (typically a group of 10 turbines or more, over 80m in height to blade tip) as due to the high sensitivity of the landscapes of Conwy and Denbighshire these are generally deemed inappropriate outside Clocaenog Forest SSA.

¹ Ove Arup & Partners (2005), TAN 8 Annex D Study of Strategic Search Area A – Clocaenog Forest Final Issue Report

Table 1.5 below illustrates the wind energy development typologies (types/scales) that were identified in collaboration with the Steering Group for the purpose of this study:

Table 1.5: Wind Energy Development Typologies

Wind Energy Typology	Indicative Output (broad output category ¹)	Supplementary Criteria (meets one or more of the criteria) (determines whether this typology applies or whether a larger one does)
Micro	under 50kW	▪ Single or twin turbine applications ▪ Turbine up to 20m to blade tip
Small	under 5MW	▪ Turbines up to 3 in number ▪ Turbines up to 50m to blade tip ▪ Viewed as a small group
Medium	over 5MW and up to 25MW	▪ Turbines up to 9 in number ▪ Turbines up to 80 metres to blade tip ▪ Viewed as a large group
Large	over 25MW	▪ Turbines over and including 10 in number ▪ Turbines up to 110 metres to blade tip ▪ Viewed as a large scale wind farm
Very Large	Over 25MW	▪ Turbines over and including 10 in number ▪ Turbines over 110 metres to blade tip ▪ Viewed as a very large scale wind farm

As stated previously, applications and enquiries for large and very large scale wind farm developments are most commonly associated with Clocaenog Forest SSA. The large and very large typologies have been included within Table 1.5 above for reference; however, as noted above, the capacities for these categories are not dealt with as part of this study.

Aim of the Study

The overall aim of the study is to inform the development of strategic Supplementary Planning Guidance and to assist the Councils in assessing the landscape and visual effects of onshore wind energy development for development control purposes with a view to minimising the effect of such developments on the landscape.

² These values are for guidance only. Efficiency and energy outputs are continually subject to advances in technology and operational efficiency, therefore it is recognised that these values are likely to change.

Study Objectives

The objectives of the study are to:

- Provide a strategic assessment of the relative sensitivity of Conwy and Denbighshire's landscapes for wind energy development using a defined set of landscape and visual criteria that includes both physical and perceptual aspects as well as a consideration of landscape value.
- Identify the key landscape, visual and perceptual sensitivities of different landscape areas.
- Provide broad guidance on those landscape areas where wind energy development of different scales is potentially most acceptable and those landscape areas where development is likely to result in unacceptable adverse landscape and visual effects.
- Comment on any likely cumulative and cross boundary effects of wind energy development.

Methodology

There is currently no formally agreed approach for assessing the sensitivity or capacity of landscapes for onshore wind energy development. The methodology set out in Section 2 of the report is developed from current guidance and the approach taken in other similar studies and tailored to this geographically unique study area. It is based on the premise that wind energy development could be more readily accepted in the least sensitive areas and should avoid areas that are highly valued for their scenic, recreational and undeveloped qualities such as tranquillity and remoteness; particularly those areas safeguarded by international or national designations and those where the cumulative effects of existing and consented wind energy schemes limit further development.

Professional judgement and understanding of landscape character is used to make broad assumptions, for instance what makes one landscape more or less sensitive than another. These evaluations have been informed and backed up by data gathered from the sources of baseline information listed in Appendix 1, including maps, relevant landscape and historic character assessments, LANDMAP, field work and consultations with the Steering Group.

It is important to note that this report represents a strategic study and is not prescriptive at an individual site level. It does not replace the need for the Councils to assess individual planning applications or for specific local landscape and visual impact assessment as part of formal Environmental Impact Assessment on a case by case basis.

It is also important to note that the study is not a cumulative appraisal of wind energy developments. It is also limited to landscape character and visual amenity issues. It does not take account of other natural and cultural heritage considerations (except where they relate to landscape character and visual amenity, including setting), technical factors such as wind speed, grid capacity or aviation constraints or the perceived need for wind energy development. The study focuses on smaller scale wind energy developments and does not consider the remaining capacity of Clocaenog Forest SSA.

Evaluation of Landscape Units and Their Sensitivity for Wind Energy Development

For the purpose of assessing the sensitivity of the landscape for wind energy development the Study Area (refer to Figure 2) was broken down into smaller geographical areas which broadly represent different character areas of the landscape. A total of 42 landscape units (smaller areas) were identified across Conwy and Denbighshire.

Data for each these geographical areas was reviewed and site visits made to back up the findings and to inform evaluations of landscape sensitivity for wind energy developments, as follows:

- 21 LANDMAP layers were reviewed and analysed.
- Desk top studies were reviewed including but not limited to the following: Clwyd Landscape Assessment; Denbighshire Landscape Strategy; Seascope for Wales; Cadw Historic Landscapes; World Heritage Site information; and many more.
- Site visits were made to back up and moderate the findings.

The overall findings of the sensitivity assessments are illustrated in Section 4 and summarised in Table 4.1 below.

Table 4.1: Summary of Sensitivity

Landscape Unit		Assessed Sensitivity	Location	Page no.
Ref	Name			
LOWLAND AREAS				
A1	Eastern Lowlands (Cefn Meiriadog Vale Slopes)	High	DCC	32
A2	Coastal Slopes (Gronant, Prestatyn Coastal Slopes)	Medium-High	DCC	36
A3	Lowland Hills	High	CCBC	40
A4	Coastal and Estuarine Flats (Prestatyn to Abergele)	Medium	CCBC/DCC	44
A5	Coastal and Estuarine Flats (Colwyn Bay)	Medium-High	CCBC	48
A6	Vale Farmlands (Vale of Clwyd)	High	CCBC/DCC	52
A7	Vale Farmlands (Dee Valley – Corwen)	High	DCC	56
A8	Coastal Landscape Unit (Penmaenmawr to Llanfairechan)	High	CCBC	60
LOWER HILLS AND VALLEYS				
B1	Gritstone Hills (Graianrhyd)	High	DCC	64
B2	Deep Valleys (Aled and Elwy)	High	CCBC/DCC	67
B3	Deep Valleys (Vale of Llangollen and Eglwyseg Valley)	Very High	DCC	71
B4	Hill Slopes (Clwydian Range Hill Slopes)	Very High	DCC	75
B5	Hill Slopes (Morwynion Valley)	High	DCC	79
B6	Hill Slopes (Llandrillo Berwyn Hill Slopes)	High	DCC	83
B7	Conwy Valley	High	CCBC	87

Landscape Unit		Assessed Sensitivity	Location	Page no.
Ref	Name			
LIMESTONE COUNTRY				
C1	Trelawnyd Plateau	High	DCC	92
C2	Limestone Farmlands (Llandegla to Maeshafn)	High	DCC	96
C3	Limestone Farmlands (West of the Vale of Clwyd)	High	DCC	100
C4	Limestone Farmlands (Abergele to Denbigh Coastal/ Vale Hills)	High	CCBC/DCC	104
C5	Limestone Farmlands (Northern Clwydian Range)	Very High	DCC	108
C6	Limestone Escarpment and Hills (Bryn Alyn – Maeshafn Escarpment)	Very High	DCC	112
C7	Limestone Escarpment and Hills (Eglwyseg Escarpment)	Very High	DCC	116
C8	Limestone Escarpment and Hills (Prestatyn - Dyserth Hillside)	Very High	DCC	120
C9	Limestone Escarpment and Hills	High	CCBC	124
C10	Great Orme and Creuddyn Peninsular	High	CCBC	128

MARGINAL UPLAND				
D1	Aled Hiraethog Hills (West)	High	CCBC	133
D2	Hill Forest (Clocaenog Forest)	Low	CCBC/DCC	137
D3	Cerrig Uplands	High	CCBC/DCC	141
D4	Maerdy Hills	High	CCBC/DCC	145
D5	Edeirnion Hills	Medium-High	DCC	149
D6	Upland Plateau (Mynydd Rhyd Ddu)	Low	DCC	153
D7	Upland Plateau (Mynydd Mynyllod)	Medium	DCC	156
D8	Upland Plateau	Medium-High	CCBC	159
D9	Moorland Plateau (Y Berwyn)	High	DCC	162
D10	Moorland Plateau (Denbigh Moors)	High	CCBC/DCC	166
D11	Moorland Plateau	Very High	CCBC	170
D12	Moorland Plateau (Cyrn y Brain – Eglwyseg Mountain)	Very High	DCC	173
D13	Moorland Ridge (Clwydian Ridgeline)	Very High	DCC	177
D14	Moorland Ridge (Llantysilio Ridgeline)	Very High	DCC	181
D15	Moorland Ridge	High	CCBC	185
D16	Marginal Upland (East Conwy Valley)	High	CCBC	189
D17	Aled Hiraethog Hills (East)	High	DCC	193

Evaluation of Landscape Strategy Areas and Capacity Assessments

For the purpose of assessing the capacity of the landscape for wind energy development the 42 landscape units were combined into 15 larger landscape strategy areas. This process was informed by reviewing the sensitivity assessments, supplemented by an analysis of intervisibility, key visual receptors, topography (including ridgelines and water-sheds based on LANDMAP information), Ordnance Survey and GIS data, landscape character, observations made during field studies and discussions with the Steering Group.

A judgement was then made on the overall sensitivity of each of these strategy areas based on an assessment of their constituent landscape units. A statement of the overall sensitivity of the strategy area in relation to wind energy development is presented within each landscape strategy evaluation, together with a justification of the assessment. This justification includes a list of the landscape, visual and cultural heritage characteristics and qualities which are susceptible to wind energy development. The overall sensitivity assessments for the landscape strategy areas are illustrated in Section 5 and summarised in Table 5.1 below.

Table 5.1: Summary of Strategy Areas and Overall Sensitivity

Landscape Strategy Area		Overall Sensitivity	Landscape Strategy Area Location		Page Number
Ref	Name		Conwy	Denbighshire	
1	Clwydian Hills	Very High		100%	198
2	Vale of Clwyd	High	5%	95%	201
3	South Clwydian Hills	Medium-High		100%	204
4	Vale of Llangollen	Very High		100%	208
5	Berwyn Mountains	Very High		100%	212
6	Western Dee Valley	Medium-High		100%	215
7	Clocaenog Forest	Low	50%	50%	218
8	Cerrig Uplands	High	90%	10%	221
9	Denbigh Moors	High	80%	20%	224
10	Rhos Hills	High	60%	40%	227
11	Elwy Valley	High	95%	5%	230
12	Conwy Valley	High	100%		233
13	North West Conwy Coast	High	100%		236
14	Colwyn Coast	High	95%	5%	239
15	Coastal Flats	Medium	45%	55%	242

The landscape strategy for each of the 15 LSA areas is set out separately and includes the landscape objective(s) for the area, a record of operational and consented wind energy development (March 2013), an indication of the types of wind energy development which might be accommodated (indicative capacity) and some broad guidance notes regarding the scale, design and siting of wind energy developments.

It is important to note that the strategy area evaluation sheets must be read together with the relevant sensitivity evaluation sheets to gain a full appreciation of the sensitivity and capacity of the landscape in relation to wind energy developments

Guidance for Wind Energy Development Within Strategy Areas

Additional generic guidance notes for the siting and design of wind energy developments are included in Section 6.

Conclusion

Conwy and Denbighshire are enveloped by two nationally designated landscapes, Snowdonia National Park which lies immediately to the west of the study area and the Clwydian Range and Dee Valley AONB much of which lies within the eastern part of the study area. The distance between these two highly valued landscapes ranges from approximately 20 km to 35 km and there is good intervisibility between the higher parts of each.

Taking the above into consideration and the fact that Conwy and Denbighshire comprise a diverse mix of landscapes (many of which are highly valued for their natural beauty and special qualities such as tranquillity and/or remoteness) much of the study area is considered to be highly sensitive for wind energy developments.

The study identifies some capacity for mostly micro and small scale wind energy developments but little capacity for anything larger.

This report provides a good starting point for identifying the key landscape and visual issues that should be taken into consideration when looking at individual development applications.

It provides a strategic overview of the sensitivity and capacity of Conwy and Denbighshire's landscapes for wind energy development, and helps answer the following questions:

- What types of landscapes do Conwy and Denbighshire have?
- Why are these landscapes sensitive (or not) for wind energy developments?
- How sensitive are the area's landscape for wind energy developments?
- What types of wind energy could potentially be accommodated without compromising the integrity and value of the landscape?
- How could wind energy development be designed/accommodated to minimise adverse landscape and visual effects?

The text below summarises how it is anticipated that this report will be used to assist decision makers with regard to assessing wind energy development proposals.

How to Use This Report

The text below and accompanying flow chart diagram represents a brief guide on how to use the Conwy and Denbighshire Landscape Capacity and Sensitivity Assessment for Wind Energy Development report.

Sensitivity of Development Location

1. Review **Figure 5** Landscape Units
 - Which landscape unit is the proposed development located in?
2. Review the evaluations of the sensitivity of the landscape unit and **Figure 3** Landscape and Cultural Heritage Designations / Constraints taking into consideration the descriptions of intervisibility and also reviewing adjacent landscape units where strong associations are identified.
3. List the key landscape features which are sensitive to wind energy development within the landscape unit which the proposal is located.

Proposed Scale of Wind Energy Development

4. Review **Table 1.5:** Wind Energy Development Typologies
 - What is the typology is deemed the 'best fit' for this proposed development?

Landscape Strategy and Capacity

5. Review **Figure 6** Landscape Strategy Areas
 - Within which landscape strategy area is the proposed wind energy development located?
6. Review the Landscape Strategy for this Area
 - What is the landscape objective for this strategy area? What does this objective mean? (detailed descriptions are included in **Section 2: Methodology** Landscape Objectives)
7. Review **Figure 4** Operational and Consented Wind Energy Developments (March 2013) and accompanying **Table A41:** Operational and Consented Wind Energy Developments (March 2013)
 - What developments already exist in this strategy area?
 - Are you aware of any additional wind energy developments that have been consented / constructed in the landscape strategy area since March 2013?
 - Are there any wind energy developments within neighbouring strategy areas or within the study area buffer that may influence the viability of this development? In order to answer this question it would be useful to obtain details of zones of theoretical visibility (ZTV) relating to any such other developments to identify where potential cumulative impacts may arise. ZTV may have been submitted as part of an Environmental Impact Assessment (EIA) or landscape and visual impact assessment (LVIA) – check with planning authority.
8. Review the Indicative Overall Capacity for the area
 - Is there sufficient information to put a case forward which demonstrates that this proposed development falls within the indicative capacity for the area?
 - Is there any evidence to suggest that this development may give rise to any cumulative landscape or visual effects?
9. Review the guidance on siting for this landscape strategy area
 - Consider and note down any guidance which may have implications on this particular proposed development.

Offer advice

10. Use the landscape strategy evaluation, indicative overall capacity and guidance on siting turbines (backed up by cross referencing the evaluation of the relevant landscape units and their sensitivity for wind energy development) to advise perspective applicants on what needs consideration in the application.

Applicants are to address these issues in the application justification statement (be that Design Access Statement/Landscape and Visual Impact Assessment/Environmental Impact Assessment).

Guide to using the Conwy & Denbighshire Landscape Sensitivity & Capacity Assessment to Wind Energy Development Report

Key Question Approach

Location



Is wind energy development supported within the landscape strategy area?

To identify which Strategy Area the proposed Wind Energy Development is located:

1. Check location of the proposed development against Figure 5 'Landscape Units'
2. Review the assessed sensitivity of the 'Landscape Unit' and adjoining units
3. Check location of the proposed development against Figure 6 'Landscape Strategy Areas'
4. Review the Strategy Area objective(s)

Y N

ACTION

Planner:

Consider whether this is a material consideration to refuse permission

Developer:

Consider relocation of development to reduce conflict with Landscape Sensitivity, Strategy and Capacity

Scale



Does the typology of the proposal fit with those supported in the 'Landscape Strategy'?

To identify the topology of the proposed development:

1. Check proposed development against Table A: Wind Energy Development Typologies
2. Review the Strategy Area objective(s) and indicative overall capacity to determine which typologies are appropriate

Y N

ACTION

Planner:

Consider whether this is a material consideration to refuse permission

Developer:

Consider relocation of development to reduce conflict with Landscape Sensitivity, Strategy and Capacity

Capacity



Does the proposal fit within the overall indicative capacity identified within the strategy area?

To Identify what other wind energy developments are in the landscape strategy area:

1. Check proposed development against Figure 4 operational and consented Wind Energy Developments (March 2013)
2. Check whether any other applications have been made or consents given for Wind Energy Developments since March 2013?

maybe

Y N

ACTION

Planner:

Consider whether this is a material consideration to refuse permission

Developer:

Consider relocation of development to reduce conflict with Landscape Sensitivity, Strategy and Capacity

ACTION

Planner:

Assess potential landscape & visual effects of proposed Wind Energy Development. If necessary, seek to revise the scheme siting, layout and design in relation to guidance within this report

Developer:

Review and address detailed siting, layout and design issues in relation to guidance within this report

Section 1: Background

This study was commissioned by Conwy County Borough Council (CCBC) and Denbighshire County Council (DCC) - (the 'Councils'). Its purpose is to provide an evidence based assessment of the relative sensitivity and capacity of the Conwy and Denbighshire' landscapes to accommodate wind energy development of varying scales (focussing on smaller scales), with the aim of informing the development of strategic Supplementary Planning Guidance and assisting the Councils in assessing the landscape and visual effects of wind energy development for development control purposes. Key requirements of the brief for the study were transparency, clarity and relative simplicity, with a focus on smaller scale developments.

Conwy and Denbighshire both have a significant expanse of rural upland areas with an abundant wind resource. This includes Clocaenog Forest which has been designated as one of seven Strategic Search Areas (SSAs) in Wales (TAN 8) with an indicative capacity target of 140 megawatts (MW) (approximately 50 modern wind turbines of 100m in height)¹. The Welsh Government's approach is to limit the development of large scale wind farms to the SSAs, which have been independently and empirically assessed to be the most suitable areas for wind energy development. However, Welsh Government planning policy does not set out spatial limitations for wind energy development under 25MW which are applicable to all parts of Wales subject to the assessment of localised effects. In light of the increasing number of planning applications, Environmental Impact Assessment (EIA) screening opinion requests and pre-application enquiries being submitted to the Councils for individual and clusters of wind turbine developments of varying scales, this study has been commissioned in order to guide development to the most suitable locations and ensure that the key characteristics and quality of the area's landscapes are safeguarded.

Wind turbines are tall structures, which are typically sited in open or elevated areas. This raises the potential for extensive landscape and visual effects, which is exacerbated by the often complex visual interplay between different lighting conditions and the scale and form of groups of turbines.

The movement of the rotor blades attracts the eye and in certain lighting conditions moving turbines can be highly visible from a long distance.

The acceptability of wind turbines in the landscape is an emotive subject and one where compromise is often needed. Whilst it is generally acknowledged that the most valued aspects of the natural heritage should be protected, those landscapes of lesser value can normally accommodate some wind energy development, albeit in a controlled way to minimise adverse effects.

This study considers the main factors that influence the sensitivity of Conwy and Denbighshire's landscape to wind energy development and describes how these are combined to identify spatial variations in relative sensitivity². It then provides an indication as to where wind energy development might best be located and an indication of the appropriate scale of development, based on thresholds of maximum capacity³.

The assessment approach was developed with the Project Steering Group which includes representatives from both Councils as well as representation from Natural Resources Wales⁴ (NRW). **This is a strategic study and is not prescriptive at an individual site level. It does not replace the need for the Councils to assess individual planning applications or for specific local landscape and visual impact assessment as part of formal EIA.**

¹ Ove Arup & Partners (2005), TAN 8 Annex D Study of Strategic Search Area A – Clocaenog Forest Final Issue Report

² Relative Sensitivity – the sensitivity of each discrete geographical 'landscape unit' is assessed in relation to the baseline of the overall study area.

³ Maximum capacity refers to the extent to which a landscape can accommodate wind energy development without significant adverse effects on landscape character, quality, fabric, value or amenity, including significant adverse visual effects.

⁴ Formerly the Countryside Council for Wales (CCW).

The study is not a cumulative appraisal of wind energy developments and is limited to landscape character and visual amenity issues. It does not take account of other natural and cultural heritage considerations (except where they relate to landscape character and visual amenity, including setting), technical factors such as wind speed, grid capacity, aviation constraints or the perceived need for wind energy development. The study focuses on smaller scale wind energy developments and does not consider the remaining capacity of TAN 8 SSAA.

Planning and Policy Framework

National Policy Context

Planning Policy Wales (PPW) (2012) Edition Five

Land use planning policies for the Welsh Government set out in Planning Policy Wales (PPW) establish the Government's objectives for conservation and improvement of natural heritage, in particular the protection of native habitats, trees and woodlands and landscapes with statutory designations. The LANDMAP information system is endorsed as an important resource to use for landscape assessment. All forms of renewable energy are promoted where they are environmentally and socially acceptable.

Relevant policies are provided in Appendix 2 and extracts from PPW regarding renewables is included below as follows:

The UK is subject to the requirements of the EU Renewable Energy Directive. These include a UK target of 15% of energy from renewables by 2020. The Welsh Government is committed to playing its part by delivering an energy programme which contributes to reducing carbon emissions as part of its approach to tackling climate change. The Welsh Government's Energy Policy Statement (2010) identifies the sustainable renewable energy potential for a variety of different technologies as well as establishing its commitment to energy efficiency. It explains the aim by 2050, at the latest, to be in a position where almost all local energy needs can be met by low carbon electricity production. The approach is to reduce energy consumption and improve energy efficiency first and maximise renewable and low carbon energy generation at every scale across Wales. This is part of a concerted effort to tackle climate change in Wales.

Planning policy at all levels should facilitate delivery of both the Welsh Government's overall Energy Policy Statement, and UK and European targets on renewable energy. The Renewable Energy Directive contains specific obligations to provide guidance to facilitate effective consideration of renewable energy sources. In this context both local planning authorities and developers should have regard in particular to the guidance contained in Technical Advice Note 8: Planning for Renewable Energy, Technical Advice Note 22: Sustainable Buildings and Planning for Renewable Energy - A Toolkit for Planners.⁵

Technical Advice Notes

PPW is supported by a series of Technical Advice Notes (TANs) including TAN 8: Renewable Energy which allocates seven SSAs across Wales within which most large wind farms (> 25MW) can potentially be located and sets a target maximum capacity for each. TAN 8 identifies areas where proposals are likely to be supported, areas to be afforded significant protection from wind farm development, and the approach to be followed elsewhere.

Welsh Government planning policy does not set out spatial limitations for wind energy development under 25MW and those smaller developments under 5MW, both of which are applicable to all parts of Wales subject to the assessment of localised effects. TAN 8 states that most areas outside SSAs should remain free of large wind power schemes although there may be some potential for wind farm schemes up to 25MW capacity on urban brownfield sites and for smaller community based and domestic wind farm schemes less than 5MW elsewhere.

⁵ Planning Policy Wales (Edition 5, November 2012)

It is generally recognised that there is a presumption for major landscape change within and immediately adjacent to SSAs but that there should be no significant change outside SSAs.

LANDMAP Information Guidance Note 3, (Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines) refers back to TAN 8 and provides more detailed information about SSAs and wind energy development with a view to avoiding, minimising and compensating for adverse effects. Relevant text from this guidance note is included in Table 1.1 below.

Table 1.1: Extracts from LANDMAP Information Guidance Note 3

Areas within and immediately adjacent to Strategic Search Areas (SSAs)	TAN 8 Strategic Search Areas (SSAs) are considered the most appropriate locations for large scale wind farm development (Welsh Assembly Government, 2005). Within the SSAs landscape change has been accepted, and the creation of ‘wind farm landscapes’ in these areas acknowledged by Government as an outcome of delivering renewable energy targets, <i>“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.”</i> However, given the height of turbines, the visual impacts of a wind farm inside an SSA, may well affect the character of areas some distance away. Such issues arise most clearly where SSAs are close to National Parks and AONBs. An example is the Hirwaun Inquiry, 2008, where large wind turbines sited within 8km of the National Park boundary were considered to be unduly intrusive.
Other areas outside the SSAs.	TAN 8 states that “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”. Whilst “most areas outside SSAs should remain free of large wind power schemes”, wind farm schemes may be proposed on urban/industrial brownfield sites (up to 25MW), as smaller community based schemes (generally less than 5 MW) or as part of the re-powering and/or extension of existing wind farms. The LVIA should help determine if the “environmental and landscape impacts are acceptable” (TAN 8 2.11-2.14).

TAN 12: Design, requires Local Planning Authorities to appraise the character of the landscape, including its visual and sensory qualities and emphasises that landscape character needs to be considered when developing a robust and coherent planning framework. This is intended to help ensure that development including wind energy developments is sited in areas which are best able to accommodate them thereby helping to limit adverse effects and maintain landscape diversity. TAN 12 advocates the use of LANDMAP to help inform and identify where development is preferable in landscape terms.

Local Policy Context

Conwy Deposit Local Development Plan 2007 – 2022 (revised edition 2011)

The Revised Deposit Local Development Plan (LDP) covers the part of Conwy County Borough that lies outside Snowdonia National Park (known as the Plan Area). The Plan Area contains diverse, high quality landscapes ranging from the open moorland of Hiraethog (the Denbigh Moors) to locally significant spaces around towns and villages. The coastline of Conwy is seen as playing an important part in attracting visitors to the area.

Accompanying the LDP is a series of background papers which explain how specific policies have been formulated. Two of these are relevant to this study:

Revised Background Paper 27 - Special Landscape Areas, August 2012 (covering Conwy only)

This background paper explains how LANDMAP was used to identify and designate a number of Special Landscape Areas (SLAs) within the Plan Area. These are shown on the LDP Proposals Map and include:

- SLA1 - Y Gogarth a Phenrhyn Creuddyn (Great Orme and Creuddyn Peninsular)
- SLA 2 – Rhyd y Foel i Abergele (Rhyd Y Foel to Abergele)
- SLA 3 – Dyffrynnoed Elwy ac Aled (Elwy and Aled Valleys)
- SLA 4 – Hiraethog
- SLA 5 – Cerrigydrudion a choridor yr A5 (Cerrigydrudion and the A5 corridor)
- SLA 6 – Dyffryn Conwy (Conwy Valley)

Development will only be permitted in the SLAs if it is shown to be capable of being satisfactorily integrated into the local landscape.

Denbighshire Deposit Local Development Plan (covering Denbighshire only)

Denbighshire County Council is currently preparing the Denbighshire Deposit Local Development Plan (LDP) which, once approved (anticipated Summer 2013), will replace the current adopted Unitary Development Plan 1996-2011 (UDP). The new Denbighshire LDP will cover the period 2006-2021.

The LDP will contain specific policies outlining the Council's priorities in terms of protecting areas such as the Clwydian Range and Dee Valley AONB and Pontcysyllte World Heritage Site and will provide guidance for wind energy development, including small scale community based wind farms.

Denbighshire County Council Interim Planning Guidance – Wind Energy Development Consultation Draft November 2012 (covering Denbighshire only)

Denbighshire County Council has committed to produce a Wind Energy Supplementary Planning Guidance Note (SPG) following the adoption of its LDP. In the meantime it is developing interim planning guidance in advance of the production and adoption of a Wind Energy SPG. Consultation on the draft guidance closed on January 9th 2013.

Denbighshire Landscape Strategy 2003 (covering Denbighshire only)

This landscape strategy for the county which was produced in 2003 remains relevant. The strategy provides landscape management guidelines for 45 identified landscape character areas based on an assessment of landscape qualities derived from LANDMAP data.

Clwyd Landscape Assessment 1995 - Useful Historical Data (covering Conwy & Denbighshire)

The landscape assessment of the former county of Clwyd covers both Conwy and Denbighshire. It was based on the Warwickshire landscape character assessment which is documented in CCW's report, Assessment and Conservation of Landscape Character: The Warwickshire Landscapes Project Approach (CCP332, 1991); this remains a widely accepted method for assessing landscape character. The assessment identified 27 distinct landscape types within four broad categories - Lowland Areas, Lower Hills and Valleys, Limestone Country and Marginal Uplands.

Snowdonia Local Development Plan 2011-2022 (covering Snowdonia National Park)

Conwy and Denbighshire share authority boundaries with Snowdonia National Park Authority. Snowdonia National Park has used LANDMAP to inform the identification of Landscape Character Areas (LCAs) and accompanying management guidelines. Although the National Park Authority decides planning applications within its area, Conwy Borough County Council and Denbighshire County Council are the planning authority for adjoining areas. Because any development in these areas could affect the wider setting of the Park, the Environment Act 1995 requires the Councils to consider the purpose for which the National Park was designated.

Clwydian Range Area of Outstanding Natural Beauty, Management Plan, 2009-14 and Clwydian Range and Dee Valley AONB Interim Statement on the Extension Area, October 2012 (covering Denbighshire only)

The purposes, duties and management requirements for AONBs are set out in the Countryside & Rights of Way (CROW) Act 2000. It is not the purpose of this designation to stop development but the planning authorities will consider any development proposal to ensure that it does not unduly harm the character and appearance of the AONB, that it is sensitively located and designed and that it compliments or enhances the special qualities and features of the area.

The Clwydian Range Management Plan 2009-14 provides a framework to inform and guide activities that may affect the AONB. In November 2011 the AONB was extended to include much of the Dee Valley and renamed the Clwydian Range and Dee Valley AONB. The Clwydian Range and Dee Valley AONB Interim Statement on the Extension Area (October 2012) serves as an addendum to the 2009-2014 Management Plan by identifying the special qualities and features of the extension area. This document does not however set out a full management response to the issues that affect these special qualities and features. The next plan (2015 onwards) will include a more detailed management strategy for the extended AONB.

Relevant policies for wind energy development established in the 2009-2014 AONB Management Plan include:

- PSQ1: Conserve and enhance the special qualities and distinctive character of the landscape and associated features.
- PSQ2: Safeguard the panoramic views and tranquillity of the Clwydian Range and Dee Valley.
- PCP2: Protect the AONB from development within and around the area that will harm the special character of the area and its setting, and resist proposals that impact adversely on the special qualities or features of the AONB.
- Cynwyd and Llandrillo Area of Outstanding Beauty (AOB)

The Area of Outstanding Beauty (AOB) around Cynwyd and Llandrillo was not included in the extended Clwydian Range and Dee Valley AONB because it was considered to have a greater perceptual and visual link with the upper Dee Valley and Y Berwyn. The value of the landscape in this area was first identified in the Hobhouse Report in 1947 and its special characteristics have been protected by the Glyndwr District Local Plan, the Denbighshire Unitary Development Plan (1996-2011) and the Denbighshire Deposit Local Development Plan (2006-2021). The Denbighshire Landscape Strategy recognises its landscape value however it does not have the same status as AONB in the determination of planning applications.

Landscape Strategy Heather and Hillforts 2005 (covering Denbighshire only)

The Heather and Hillforts Landscape Strategy describes and introduces issues affecting the important cultural and natural heritage resources within the Clwydian Range and Llantysilio Mountain. The aim of the strategy is to provide an overarching strategic approach to restore and maintain the upland historic and natural heritage as a highly scenic and sustainable landscape.

Pontcysyllte Aqueduct & Canal World Heritage Site Supplementary Planning Guidance Note 26 (covering Denbighshire only)

The aim of this guidance note is to ensure that the integrity of the Pontcysyllte Aqueduct and Canal World Heritage Site, its buildings, structures and landscape setting are maintained; stating that new development should ensure no adverse effects. The World Heritage Site Buffer Zone defines the wider visual setting of the designated area and is the context within which development is assessed and controlled.

Seascape Assessment of Wales (covering Conwy & Denbighshire)

The Seascape Assessment of Wales subdivides the Welsh coast into 50 regional seascape units detailing the character and qualities of each unit. It also assesses the sensitivity and capacity of each seascape unit to offshore renewable energy developments. Whilst the report focuses on offshore wind energy development it nevertheless provides a valuable information resource in determining the potential effects of onshore wind energy developments on seascape character and qualities.

Approach to the Study

The objectives of the assessment are to:

- Provide a strategic assessment of the relative sensitivity of Conwy and Denbighshire's landscape to wind energy development using a defined set of landscape and visual criteria that includes both physical and perceptual aspects as well as a consideration of landscape value.
- Identify the key landscape, visual and perceptual sensitivities of different areas.
- Provide broad guidance on those areas where wind energy development of different scales is potentially most acceptable and those areas where there is likely to be significant adverse landscape and visual effects; bearing in mind the capacity limits.
- Comment on any likely cumulative and cross boundary effects of wind energy development.

There is currently no formally agreed approach for assessing the sensitivity or capacity of landscapes to onshore wind energy development. The methodology set out in Section 2 is developed from current guidance and the approach taken in other similar studies. It is based on the premise that wind energy development should be more readily accepted in the least sensitive areas and should avoid areas that are highly valued for their scenic, recreational and undeveloped qualities such as tranquillity and remoteness; particularly those areas safeguarded by international or national designations and those where the cumulative effects of existing and consented wind energy schemes limit further development.

Structure of the Report

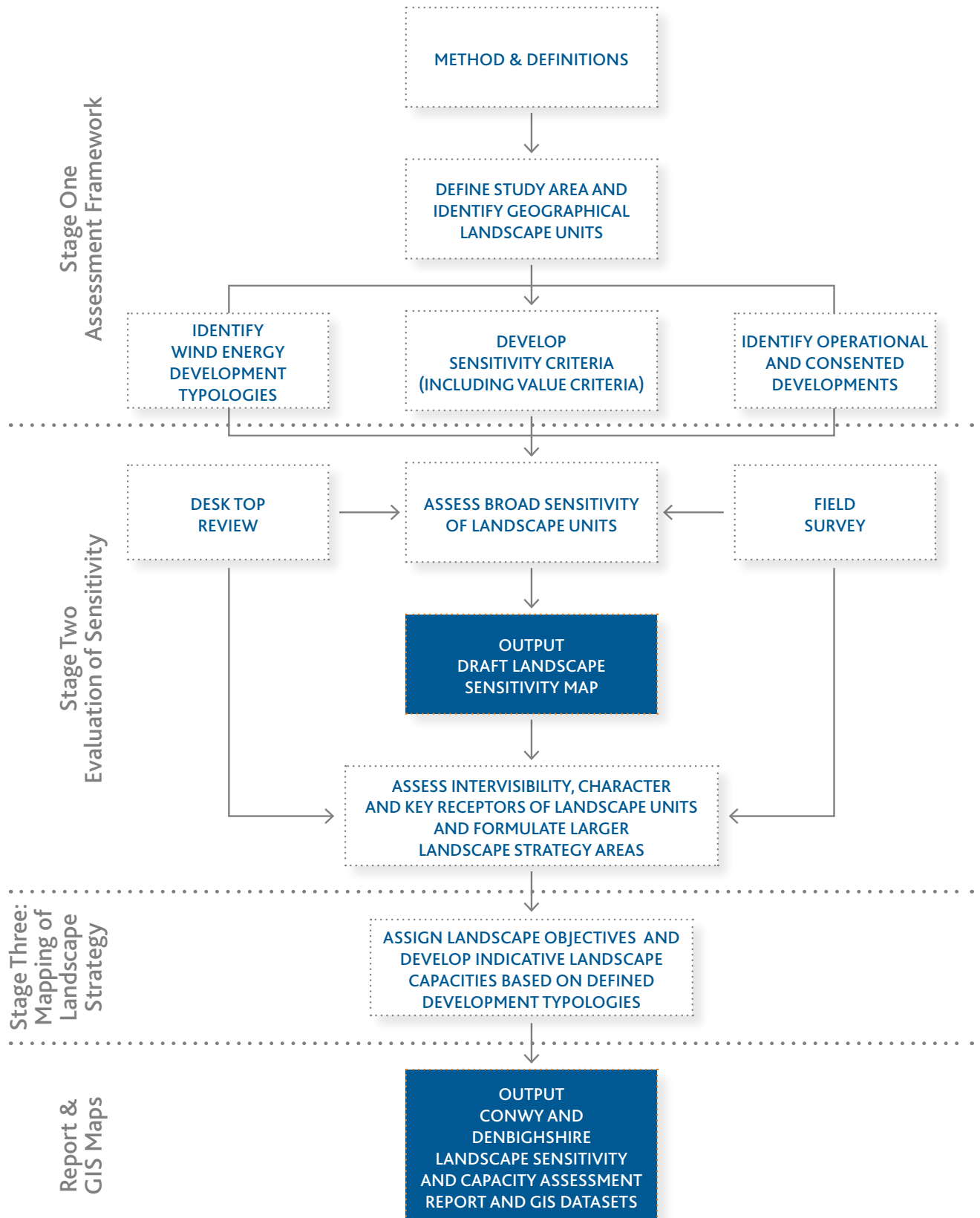
The remainder of the report is structured as follows:

- **Section 2:** Methodology
- **Section 3:** Baseline landscape of Conwy and Denbighshire
- **Section 4:** Evaluation of landscape units and their sensitivity to wind energy development
- **Section 5:** Evaluation of landscape strategy areas and capacity assessments
- **Section 6:** Guidance for wind energy development within strategy areas

The report is also supported by figures and appendices as listed in the contents.

SECTION 2: METHODOLOGY

Definitions of key terms/words and a glossary of abbreviations that are used within this report are included in Appendix 7 for clarity and transparency. The methodology for the report is illustrated in the flowchart below and described in more detail in the text that follows.



Stage One: Assessment Framework

The methodology was informed by the documents listed in Appendix 1, including guidance developed for use in Scotland which is specific to wind energy development schemes and is widely accepted for use in England and Wales. The following good practice documents were particularly informative:

- *Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity* (Scottish Natural Heritage and the Countryside Agency, 2006).
- *Guidelines for Landscape and Visual Impact Assessment (GLVIA)*. The Landscape Institute and the Institute for Environmental Management and Assessment (Second edition 2002) replaced by GLVIA Third edition April 2013. This is the industry standard for landscape and visual assessment.

Both Topic Paper 6 and GLVIA advocate the use of professional judgement and an understanding of landscape character to help inform broad assumptions as to what makes one landscape relatively more or less sensitive than another to particular forms of development. Key to this is an understanding of which aspects of the landscape are particularly susceptible to the type of development proposed. These include physical, perceptual and experiential characteristics. The susceptibility of these is first assessed individually before being combined and a judgement for overall sensitivity made through balanced assessment of all the characteristics.

Data Sources

The assessment was informed by data gathered from the sources of baseline information listed in Appendix 1, including maps, relevant landscape and historic character assessments, LANDMAP, field work and consultations with the Steering Group.

LANDMAP

LANDMAP is the formally adopted methodology for landscape assessment in Wales and has been extensively used to inform this study in accordance with GLVIA. LANDMAP is an all-Wales GIS based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent dataset. LANDMAP comprises five spatially related datasets (layers) - Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and Cultural Landscape. Information on each is detailed in the *LANDMAP Methodology: Guidance for Wales* (CCW, 2008).

Each of the five spatial layers are subdivided into discrete geographical units (GIS polygons) referred to as aspect areas. Each mapped aspect area is defined by its recognisable landscape characteristics and qualities. Accompanying each aspect area is a description (Collector Survey record) which describes and documents the landscape character, qualities and features. Management recommendations are also provided, together with an overall evaluation score, contextualised from a local to international scale of importance.

Each Collector Survey records information from the unique perspective of the LANDMAP layer concerned, with each LANDMAP layer being produced independently for each of the five layers. Therefore when key characteristics are referred to across several layers for the same geographic area, the value of their importance is typically emphasised. However, it is only by assessing each layer on its own, that it becomes clear which aspects of the landscape character and qualities are sensitive.

Although GLVIA recommends that data from all five LANDMAP layers should be used in any assessment, the Cultural Landscape information provided in the Cultural Landscape layer was not sufficiently detailed to be useful for this study⁶.

⁶ LANDMAP Information Guidance Note 3 doesn't identify any specific evaluation criteria for Cultural Landscape

Definition of the Study Area and Scale of Mapping

Study Area

As shown in Figure 3, the study covers the whole of the local Planning Authority area for Conwy and Denbighshire, excluding Snowdonia National Park. It includes areas with particular landscape interests notably the Pontcysyllte Aqueduct and Llangollen Canal World Heritage Site, Conwy Castle World Heritage Site, Clwydian Range and Dee Valley AONB, Great Orme Heritage Coast, Cynwyd and Llandrillo AOB, Registered Historic Landscapes and Registered Parks and Gardens.

The assessment took account of coastal and seascape issues only where they were relevant to the assessment of landscape character and sensitivity of the coastline between Lavan Sands (to the north west) and the Point of Ayr (to the north east). Consideration of offshore wind energy developments were not in the remit of the study.

Due to the height of turbines and their wide ranging visual influence, any development will typically affect the landscape in which it is located and also neighbouring landscapes. Existing and proposed wind energy developments beyond the Councils' boundaries were therefore included in the baseline for the assessment, focusing on those within 10km of the boundary. This report is principally concerned with wind energy developments of smaller to medium scale, therefore for the purposes of this study it was considered that this is the distance where the potential for significant visual effects arising from small to medium scale wind energy developments is most likely to arise.

Scale of Mapping

Landscape sensitivity and capacity studies are typically based on existing local landscape character assessments which subdivide the landscape into character units (types or areas). These are then reviewed and the key characteristics of each landscape unit which are potentially sensitive to any given development (key sensitivity criteria) are identified. Whilst these key sensitivity criteria may vary according to the nature of the development being considered, the methodological approach between studies is generally similar. In this case, there wasn't a current consistent landscape character assessment covering both Conwy and Denbighshire⁷. After consideration with the Steering Group, the Clwyd Landscape Assessment 1995 was considered to be the most appropriate baseline for the purpose of this study, due to the following reasons:

- The Clwyd Landscape Assessment covers the most of the study area (approximately 85%).
- Although it was produced 18 years ago the landscape character types within the Clwyd Landscape Assessment are closely linked to the landscape character areas of the more recent Denbighshire Landscape Strategy (produced in 2003), which is based on an analysis of data from the five LANDMAP layers.
- LANDMAP uses the Clwyd Landscape Assessment 1995 as a key data source.
- The landscape character types were generally considered to be of a suitable scale to use as the reporting units for the study.

The 15% of the study area which was not covered by the Clwyd Landscape Assessment was subdivided into three landscape units, primarily based on Special Landscape Areas as described in Conwy's Revised Background Paper 27 - (August 2012). This approach was endorsed by the Steering Group.

Figure 5 illustrates the 42 landscape units which were devised. Due to the Clwyd Landscape Assessment plan not being available in GIS or any other digital format, the original paper based plan was scanned in and digitised into GIS format and then overlaid onto a current 1:50,000 OS base of the area.

⁷ Although the Visual and Sensory Aspect Area (VSAAs) boundaries could have been used as the reporting units for sensitivity, the scale of these (>300 across the study area), was considered too detailed for this strategic study.

Landscape and Visual Sensitivity Criteria

A key step in the study process was to identify and understand the aspects of the landscape which are more likely to be affected by wind energy development as it is these characteristics which ultimately define how much development could potentially be accommodated or not in a particular area.

The criteria defined in Table 1.3 and Table 1.4 are based on current good practice and were agreed with the Steering Group. They include criteria relating to landscape character and visual amenity as well as other aesthetic, perceptual and experiential aspects, for example scenic quality, remoteness and tranquillity. They also include criteria relating to the value of the landscape⁸, as defined by the presence of any landscape designations and undesignated landscapes which have been evaluated by LANDMAP as Outstanding or High⁹. It is important to emphasise that a landscape which is highly valued by society may still be able to accommodate some wind energy development in the right location - if it fits with the characteristics of the landscape and doesn't compromise the reason why value is attached to the landscape and in the case of designated landscapes, does not compromise the purpose for designation. Conversely a landscape that isn't designated may be highly sensitive to wind energy development if it has particular characteristics which are very sensitive to wind energy development.

Table 1.4 identifies the LANDMAP datasets which were used to help assess the sensitivity of each criteria and how they have been used to indicate lower or higher sensitivity. This was supplemented by information from existing assessment work (see Appendix 6).

The sensitivity of each landscape unit within the study area was assessed against each of the sensitivity criteria and graded using a transitional three point sensitivity scale, higher, medium or lower as described in Table 1.2 below.

Table 1.2: Definition of Sensitivity

	Definition
Higher	Areas where the key landscape characteristics are vulnerable and likely to be adversely affected by wind energy development. The landscape would not be able to accommodate wind energy development without significant effects on its character.
Medium	Areas where wind energy development may cause some adverse effects on key landscape characteristics. Although the landscape may be able to absorb some development if sensitively sited and designed, it may introduce new inappropriate characteristics or result in a change in character.
Lower	Landscapes which taking into account their character and general visibility are not very vulnerable to change and could accommodate some wind energy development without significant adverse effects.

The overall assessment of sensitivity of each landscape unit was then evaluated and an overall grade of sensitivity was assigned using a more detailed five point sensitivity scale, low, medium, medium-high, high and very-high. This process involved a balanced approach, considering all the assessed criteria and focussing particularly on the susceptibility of the key landscape characteristics of each unit to wind energy developments. All of these evaluations represent the judgement of two qualified and experienced landscape architects, based on both desk top studies and field surveys. The overall evaluations of sensitivity are not based on any mathematical formula (for example – assigning scores and adding up the lower, moderate and higher scores and averaging them out) there is also recognition

⁸ Although not strictly a sensitivity criterion as defined by Topic Paper 6, designated landscapes are typically highly vulnerable to change associated with wind energy development, therefore they were included in the assessment of sensitivity.

⁹ TAN 8 states that to identify the landscape value of an area, existing information on landscape value derived from LANDMAP should be mapped. A concentration of Outstanding and High evaluation scores in a given area can be significant. However it does not mean a blanket ban on development; it is the underlying information from which the evaluations are derived that must be judged in order to arrive at an assessment of sensitivity based on value.

that sensitivity does vary locally within the landscape units and that the overall evaluation represents the general sensitivity across the landscape unit to reflect the strategic nature of this study.

Table 1.3: Criteria for Assessing Landscape and Visual Sensitivity to Wind Energy Development

Landscape Criteria
Scale: This is one of the most important characteristics affecting where turbines may be more readily accommodated and also in influencing the scale of development that may be appropriate. A large scale expansive landscape is typically less sensitive to large wind energy developments than small scale intimate landscapes. A large height differential between valley floors and hill tops may help reduce sensitivity by lessening the perceived size of the turbines. In both instances care has to be taken to ensure that the apparent scale of the landform is not diminished by the size of the turbines.
Landform: Landforms that are smooth, regular and convex, or flat and uniform are likely to be less sensitive to wind energy development than complex varied landforms with distinctive landmarks where visible wind turbines may have a detrimental effect on the appearance and experience of the landform. Complex landforms may provide some screening opportunities for turbines but care has to be taken not to dominate intricate landforms.
Landcover Pattern: This criterion is not concerned with the particular material sensitivity of a type of landcover, but with the impression of landcover pattern. Simple uncluttered landscapes with sweeping lines and a consistent groundcover are likely to be less sensitive to wind energy development. Areas of commercial forestry and intensive farming may also indicate lower sensitivity. Complex landscapes comprising a variety or mosaic of characteristic or sensitive landscape features such as trees and woodlands, irregular field patterns and hedgerows are typically more vulnerable to change arising from wind energy development. Tree and woodland cover offers the potential to screen small scale turbines in certain situations (particularly in combination with undulating landform) although care must be taken not to allow turbines to detract from or dominate locally distinctive features such as tree knolls, ancient specimen trees or avenue trees.
Built Environment: This criterion is concerned with the presence of built structures and human intervention present in the landscape. The presence of modern structures such as wind turbines, transport, utility or communications infrastructure or industrial development may reduce landscape sensitivity to wind energy development, as may the visible influences of quarrying or landfill. The frequency of built form and human intervention in more contemporary densely settled areas may also indicate a reduced sensitivity to the introduction of wind turbines. However, in all of these cases care must be taken to avoid further visual conflict and cumulative change through the introduction of additional vertical structures. In settled areas there is a balance to be struck between visual effects and effects on landscape character. Areas which are more sparsely settled and/or characterised by a more established, traditional or historic built character, including historic structures are likely to be more sensitive to wind energy development.
Visual Criteria
Skylines and Settings: Landscapes with distinctive ridges or skylines are likely to be more sensitive to wind energy development than skylines that are less prominent or have been affected by existing contemporary structures such as electricity or communications infrastructure. The presence of distinctive or historic landscape features such as hilltop monuments, church spires or vernacular villages' increases sensitivity.
Movement: Turbines can draw the eye by introducing movement into the landscape. Landscapes that are already affected by movement are therefore likely to be less sensitive, whilst landscapes which are valued for their tranquillity will be more sensitive.

Visibility, Key Views, Vistas: This criterion is concerned with views and visual receptors which influence visual sensitivity. The likelihood of turbines being highly visible in the landscape depends on the scale of the development and landform in which it is sited and on the screening opportunities of landcover, especially buildings, trees and woodlands. Landscapes which are visually contained with limited inward and outward views are likely to be less sensitive than open landscapes with extensive inward and outward views. The availability of views of these landscapes from neighbouring areas will also influence sensitivity. Landscapes which are experienced from tourist routes, national or regional trails and other recognised visitor locations are more sensitive to wind energy development. Similarly, close proximity to settlement which increases the chance of adverse effects on visual amenity may increase an area's sensitivity.

Typical Receptors: The numbers and types of people likely to experience a change in a view due to potential development influences visual sensitivity. The most sensitive receptors are likely to be residents, communities, people engaged in outdoor recreation where landscape is part of the experience, visitors to landscape focussed natural and built heritage assets, key amenity and recreational attractions and users of scenic routes. Each location brings with it certain expectations. Transport routes are generally considered less sensitive receptors, however single and sequential views from strategic road and rail routes are important to the perception of the landscape.

Intervisibility/Associations with Adjacent Landscapes: Landscape units which have limited intervisibility (inward and outward views to and from adjoining landscapes) are likely to be less sensitive than units which have extensive views. Where adjoining landscapes are intervisible and are of higher sensitivity then this increases the sensitivity of a landscape unit. Where the adjoining landscapes are not intervisible or are of a lower sensitivity, then sensitivity is likely to be lower. The setting of designated landscapes may be more sensitive where the setting contributes to the overall scenic quality of the designated landscape.

Views to and from Important Landscape and Cultural Heritage Features: Landscapes which are important to the views in and out and setting of key designated landscape and cultural heritage areas / focal features (such as AONBs, National Parks, World Heritage Sites, Historic Landscapes, Registered Parks and Gardens, Areas of Outstanding Beauty, National Trails and Cycle Networks and key/focal designated visitor attractions such as historic hillforts/castles/church spires) are likely to be more sensitive.

Aesthetic, Perceptual and Experiential Criteria

Scenic Quality and Character: Areas of attractive scenery, character, quality, integrity, strong sense of place and local distinctiveness will typically be more sensitive to wind energy development than less scenic areas. This includes landscapes designated for their natural beauty (see below) but also areas of undesignated landscape, including areas which are locally distinctive or have strong character.

Remoteness/Tranquillity: Areas which are relatively remote and have a wild and/or tranquil character and lack built development increase the sensitivity of the landscape to wind energy development. Turbine development adjacent to such areas can undermine the special qualities and setting of such areas, although if this is associated with and in scale with other forms of development such as farms, the effects may be lessened.

Value Criteria

Landscape Value: Areas which are predominantly recognised by Outstanding or High LANDMAP evaluations are likely to be more highly sensitive to wind energy development. In addition, landscapes that are formally designated for their scenic, designed or recreational value are likely to be more sensitive to wind energy development than undesignated areas. The degree of sensitivity depends on the nature of the proposal and the landscape qualities which are valued by the designation. The hierarchy of the designation has a bearing on sensitivity of a landscape. Internationally and nationally designated landscapes such as National Parks, World Heritage Sites and AONBs are considered to be very sensitive, closely followed by regional and local designations such as AOBs and SLAs. Landscape value is formally recognised by designation, but value can also be informed by published documentation such as tourist leaflets; art and literature. Heritage Coasts are not protected by designation but are considered to be of national value.

Historic Value: Areas which are predominantly recognised by Outstanding or High LANDMAP evaluations are likely to be more highly sensitive to wind energy development. Areas designated for their international, national or regional historic or cultural heritage value such as World Heritage Sites are likely to be more sensitive to wind energy development especially if the character or perception of the landscape in which they are located is likely to be significantly altered. Registered Historic Landscapes and Registered Parks and Gardens are not protected by designation but are considered to be of national value.

Table 1.4: Source of Data Relevant to the Sensitivity Criteria

Characteristic	LANDMAP Data Source (other data sources will be used)	Some Indicators of Lower Sensitivity to Wind Energy Development	↔	Some Indicators of Higher Sensitivity to Wind Energy Development
Landscape Criteria				
Scale	VS8: Scale	▪ Vast or large scale landscapes	↔	▪ Intimate and small scale landscapes ▪ Small scale field systems
Landform	VS4: Topographic Form	▪ Simple featureless landform ▪ Convex landform ▪ Plateaux ▪ Flat and uniform landform	↔	▪ Rugged hills ▪ Irregular or complex landform ▪ Narrow valleys and ridges
Landcover Pattern	VS3: Landcover VS5: Landcover Pattern	▪ Developed land, derelict or waste ground ▪ Open upland pasture ▪ Upland moorland ▪ Forestry ▪ Lowland farmland	↔	▪ Rocky uplands ▪ Open hillsides ▪ Field pattern/Mosaic ▪ Valleys ▪ Water
Built Environment	VS6: Settlement Pattern VS27: Condition	▪ Contemporary structures (transport/communications/utility infrastructure/wind turbines) ▪ Modern day industrial development ▪ Major infrastructure/modern settlements	↔	▪ Infrequent/no residential built form ▪ Sparsely settled/unpopulated areas ▪ Presence of, historic buildings/structures or settlement
Visual Criteria				
Skylines & Settings	Topographic data	▪ Less prominent skylines ▪ Existing vertical features (modern development) ▪ Existing built development	↔	▪ Prominent skylines ▪ Distinctive skylines ▪ Uninterrupted skylines ▪ Presence of distinctive/sensitive landscape features

Movement	VS18: Level of Human Access	▪ Constant or frequent access ▪ Busy	↔	▪ Rare or infrequent access
Visibility, Key Views, Vistas and Typical Receptors (both within and outside of each landscape unit)	VS 9: Enclosure	▪ Landscapes which are confined, contained or enclosed with few outward views ▪ Sparsely populated or inaccessible	↔	▪ Landscapes which are open or exposed with far reaching views ▪ Views from scenic routes, well-known landmarks, or views from visitor viewpoints ▪ Densely populated
Intervisibility/ associations with Adjacent Landscapes		▪ Limited views into or out of landscape ▪ Neighbouring landscapes of lower sensitivity ▪ Contributes little to wider landscape ▪ Large scale simple backdrops ▪ Weak association with adjacent landscape units	↔	▪ Views into or out, especially from high ground ▪ Neighbouring landscapes of higher sensitivity, especially internationally and nationally designated landscapes ▪ Contributes to wider landscape ▪ Distinctive or complex backdrops ▪ Landscapes important to the settings/approaches/ gateways to designated landscapes ▪ Strong association with adjacent landscape units

Views to and from Important Landscape and Cultural Heritage Features (both within and outside of each landscape unit)	National Park, Area of Outstanding Natural Beauty, World Heritage Site, Area of Outstanding Beauty, Heritage Coast, National Trails and National Cycle Routes, Registered Historic Landscape, Registered Park and Garden (for the purpose of this strategic study Listed Buildings and SAMs are considered only if valued as a key visitor attraction or focal point).	▪ Weak association with landscape ▪ Little intervisibility between sites	 ▪ Strong association with landscape ▪ Intervisibility between sites
Aesthetic, Perceptual and Experiential Criteria			
Scenic Quality and Character	VS46: Scenic Quality VS47: Integrity VS48: Character Sense of Place	▪ Low to Moderate LANDMAP evaluation ▪ Weak sense of place	 ▪ Outstanding or High LANDMAP evaluation ▪ Strong sense of place
Remoteness/Tranquillity	VS24: Perceptual and Sensory Qualities	▪ Noisy, threatening, unattractive	 ▪ Attractive, settled, remote, tranquil, safe, wild

Landscape Value	Designated site/ nationally valued site/regionally valued site or its setting VS50: Overall Evaluation VS49: Rarity LH45: Overall Evaluation LH42: Connectivity / Cohesion GL31: Rarity / Uniqueness GL33: Overall Evaluation	▪ No designated sites ▪ Low to Moderate LANDMAP evaluation		▪ National Park, AONB, Heritage Coast, AOB, SLA ▪ Outstanding or High LANDMAP evaluation
Historic Value	Designated site/ nationally valued site/regionally valued site or its setting HL38: Rarity HL35: Integrity HL40: Overall Evaluation	▪ No designated sites ▪ Low to Moderate LANDMAP evaluation		▪ World Heritage Site, Registered Historic Landscape, Registered Park and Garden, visually prominent Scheduled Ancient Monuments such as hillforts and castles frequently visited by tourists ▪ Outstanding or High LANDMAP evaluation

Stage Two – Assessing Landscape and Visual Sensitivity

This part of the study involved desk and field survey, the latter being undertaken both in the early stages of the study (familiarisation) and later to help verify and refine the desk based sensitivity assessments.

Baseline Assessment

The first step in the process was to:

- Identify and evaluate the existing landscape of the study area, including its distinctive characteristics, existing landscape designations and effects of existing wind energy developments.
- Identify and evaluate the existing views and visual amenity of the study area.

The following information was reviewed as a desk exercise:

- Ordnance Survey maps and aerial photography.
- Designated and nationally/regionally valued landscapes, including the Clwydian Range and Dee Valley AONB, Cynwyd and Llandrillo AOB, SLAs, Registered Historic Landscapes, Registered Parks and Gardens.
- Information from LANDMAP datasets (all five Aspect Areas).
- Natural and Built Heritage GIS mapping data.
- Existing landscape character assessments.
- Registered Historic Landscapes, including Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Conwy (Lower Conwy Valley), Creuddyn a Chonwy (Creuddyn and Conwy), Gogledd Arllechwedd (North Arllechwedd), Y Berwyn (Berwyn), Pen Isaf Dyffryn Elwy (Lower Elwy Valley), Mynydd Hiraethog (Denbigh Moors), Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg), Comin Treffynnon a Mynydd Helygain (Hollywell Common & Halkyn Mountain), Pontcysyllte Aqueduct and Canal World Heritage Site, Registered Parks and Gardens and visually prominent Scheduled Monuments.
- Existing wind energy developments within the study area.

The findings of the desk survey, which were subsequently refined following field survey work, are presented in Section 3. They include an overview of the key landscape characteristics of the study area, a description of existing and consented wind energy developments and their effect on the landscape and comments on any issues of existing and potential cumulative effects.

Assessing the Sensitivity of Landscape Units (LUs)

This part of the study required the preparation of sensitivity assessment sheets for each landscape unit, as presented in Section 4.

The key features of each landscape unit are described before being evaluated against the sensitivity criteria described in Table 1.3 and Table 1.4 using a three point grading: **higher, medium or lower** (described in Table 1.2, Section 1). Those characteristics which are considered particularly susceptible to development are highlighted. Finally a judgement on the overall sensitivity of each landscape unit to change associated with wind energy development is made, based on a more detailed five point sensitivity scale: **low; medium; medium-high; high; and very high**.

Appendix 6 includes a CD containing 21 plans which represent data taken from LANDMAP overlaid onto the study area (as listed in Table 1.4). This information was used to make initial judgements on sensitivity which was then backed up and or moderated following further desk top studies and the site visits.

Field Survey

On completion of the draft assessment, field surveys were undertaken to help test and refine the findings and provide the following information:

- Better understanding of the general characteristics of the landscape including the effects of existing wind energy developments and any forces for change which it may be experiencing.
- Analysis of the landscape, in terms of the characteristics and qualities which affect its sensitivity to wind energy development, including the special qualities of any designations which apply.
- Appreciation of the variations within individual landscape units and more detailed understanding of scenic quality and landscape condition.
- Appreciation of the nature of any visual amenity issues.
- Understanding of the degree of intervisibility, both between landscape units within Conwy and Denbighshire and with landscapes in neighbouring authority areas.
- Important views to and from each landscape unit were recorded, identifying distinctive features such as iconic viewpoints, views to and from designated landscapes, skylines or uninterrupted horizons (both land and sea). It is important to understand how the landscape is experienced both from fixed viewpoints and sequentially as people travel through an area.
- Understanding of how individual characteristics either alone or in combination make one landscape more sensitive than another. This helped identify any specific strategic sensitivity / capacity constraints which may reduce the potential of particular landscape areas to accommodate wind energy development.

The fieldwork also briefly considered the likely implications of the different wind energy development typologies in relation to different aspects of the landscape. The acceptability of the different wind energy development typologies varies across all landscape units. In small scale sheltered valleys for example, there are clear technical constraints to large and medium typologies. Similarly, areas with significant landscape sensitivities to large scale development such as the Clwydian Range and Dee Valley AONB, may only be suitable for single very small turbines.

Based on the results of the field surveys, the draft evaluations of landscape unit sensitivity were refined and the final sensitivity assessment and accompanying summary tables for each landscape unit prepared.

Combining Landscape Units into Landscape Strategy Areas

The final step in Stage Two involved combining the landscape units into larger strategy areas.

This was informed by the sensitivity assessments, supplemented by an analysis of intervisibility, key visual receptors, topography (including ridgelines and water-sheds based on LANDMAP information), Ordnance Survey and GIS data, landscape character, observations made during field studies and discussions with the Steering Group.

A judgement was then made on the overall sensitivity of each of these strategy areas based on an assessment of their constituent landscape units. To allow for more refined judgement, the overall sensitivity of strategy areas was judged on a five point scale - **low, medium, medium-high, high and very high**. As before, these levels are based on professional judgement rather than a mathematical scoring system or matrix analysis as discussed previously

Stage Three – Assigning Landscape Strategies and Developing Siting and Design Guidance

This stage in the study applied professional judgement to determine the most appropriate landscape objective(s) and the relative capacity of each of the identified strategy areas by combining the landscape and visual sensitivity evaluation with issues of intervisibility and potential cumulative effects that may arise should further development take place.

Wind Energy Development Typologies

Landscape capacity for wind energy development reflects not only the presence of different landscape characteristics and values, but also the grouping and height of the turbines in relation to the scale of the landscape. To help evaluate this, a series of generic wind energy development typologies based on past wind energy development applications and anticipated future trends, was identified.. The almost endless possible permutations of turbine numbers and heights made the choice of an appropriate range of typologies difficult. There was, however, a clear need to establish appropriate typologies to enable the provision of meaningful guidance, including guidance on single and pairs of turbines below 60m to blade tip, which are becoming increasingly common in planning applications and enquiries.

The five categories (**micro**, **small**, **medium**, **large**, and **very large**) which were identified and agreed with the Steering Group are presented in Table 1.5 overleaf and illustrated in Figure 9 in comparison to other well-known local landmarks to provide a sense of scale.

A proposal will normally be considered as falling within the category that represents the biggest type for which it qualifies.

Table 1.5: Wind Energy Development Typologies

Wind Energy Typology	Indicative Output (broad output category ¹⁰)	Supplementary Criteria (meets one or more of the criteria)(determines whether this typology applies or whether a larger one does)
Micro	under 50kW	- Single or twin turbine applications - Turbine up to 20m to blade tip
Small	under 5MW	- Turbines up to 3 in number - Turbines up to 50m to blade tip - Viewed as a small group
Medium	over 5MW and up to 25MW	- Turbines up to 9 in number - Turbines up to 80 metres to blade tip - Viewed as a large group
Large	over 25MW	- Turbines over and including 10 in number - Turbines up to 110 metres to blade tip - Viewed as a large scale wind farm
Very Large	Over 25MW	- Turbines over and including 10 in number - Turbines over 110 metres to blade tip - Viewed as a very large scale wind farm

¹⁰ These values are for guidance only and should not be taken as a criterion for determining typology. Efficiency and energy outputs are continually subject to advances in technology and operational efficiency, therefore it is recognised that these

Applications and enquiries for smaller to medium scale wind energy projects are applicable to the wider study area. Here, turbine height (rather than just the number of turbines) and how this relates to landscape scale and landform, is a key consideration as well as localised issues including settlement separation, views from settlement edges and routes. Applications and enquiries for **large** and **very large** scale wind farm developments are most commonly associated with TAN 8 SSAA. The **large** and **very large** typologies have been included within Table 1.5 above for reference; however, the capacities for these categories are not dealt with as part of this study, as developments of this scale are not considered to be appropriate outside the TAN 8 Area.

Whilst output is used to define different scales of wind energy development in the Councils' emerging Local Development Plans, there are a number of specific conditions (in relation to height, rotor diameter or number of turbines), which influence the landscape and visual effect of a proposal and which can therefore change the categorisation of a proposal regardless of output. Indicative outputs are presented in Table 1.5 for reference; however, this information should not be used to determine which typology applies to proposed wind energy developments.

Landscape Objective + Indicative Overall Capacity = Landscape Strategy

Landscape Objectives

The Design Commission for Wales (DCfW) in its 2012 document, *Designing Wind Farms in Wales*, applied Scottish Natural Heritage (SNH) guidance to the development of its own guidance relating to the development of wind farms. In this document three landscape objectives are discussed in relation to 'wind farm' developments as follows:

- **Landscape Protection:** a 'landscape with no wind farms or infrequent wind farms'.
- **Landscape Accommodation:** a 'landscape with occasional wind farms'.
- **Landscape Change:** a 'landscape with wind farms'.

This landscape sensitivity and capacity assessment for wind energy development was commissioned to identify the sensitivity of the landscapes of Conwy and Denbighshire, specifically in relation to '**wind energy**' development as opposed to 'wind farm' development. The above DCfW guidance has therefore been slightly modified and an extra objective added to reflect the scales of wind energy development which are being addressed in this report. It is important to note that these should not be seen as rigidly prescriptive objectives.

Objective 1	
Landscape Protection	<i>Typically no wind energy development or very infrequent smaller scale wind energy development</i>
Landscape protection is applicable to landscapes where the conservation of resource and visual experience of the landscape has been assessed to be of very high importance. It aims to retain or reinforce the present character, quality and integrity of the landscape. It is likely to be difficult to accommodate anything more than 'micro scale' wind energy development in such areas. Micro scale development may be acceptable where this relates well to the existing built environment. Whilst smaller scale wind energy development may be appropriate in certain circumstances within areas where landscape protection is the primary objective, such opportunities are likely to be very limited due to the landscape and visual sensitivities of these areas and is dependent on how well the scale and design of development relates to the existing landscape and visual constraints. With tall structures such as turbines, intervisibility between strategy areas must be carefully considered to avoid adverse landscape and visual effects arising from multiple developments.	

Where a landscape designation is in place, it is important to understand how wind energy development could affect the special qualities for which it is designated.

PPW (Edition 5, 2012) aims to maintain the integrity and quality of the landscape within the National Parks, Area of Outstanding Natural Beauty (AONB), Natura 2000 Habitat Directive Sites, National Nature Reserves and World Heritage Sites. In these areas, 'landscape protection' will be the most appropriate landscape objective, reflecting the high degree of protection afforded these designated areas. As such they are all excluded from TAN 8 SSAs.

Objective 2

Landscape Accommodation	<i>Typically a landscape with occasional wind energy developments</i>
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Landscape accommodation is applicable to landscapes where the conservation of landscape character and visual amenity has been assessed to be of moderate to high importance.

This objective aims to retain the overall character, quality and integrity of the landscape, whilst accepting that occasional small to medium scale developments may be allowed. Such development may have an effect on the local landscape but should not bring about large scale changes in character.

Objective 3

Landscape Change	<i>Typically a landscape with relatively frequent wind energy developments</i>
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Landscape change is applicable to landscapes where it is accepted that the landscape character can accommodate some change as a result of wind energy development.

The landscape change objective accepts that medium to larger scale developments may be allowed which may have an effect both locally and across a wider area. In such areas it is important to ensure that turbines do not become a major feature of the landscape and that they fit in with the scale and character of the landscape.

Objective 4

New Landscape	<i>Typically a landscape with a notable amount of wind energy developments - a wind farm landscape</i>
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Within (and immediately adjacent) to the SSAs, the implicit objective is to accept a significant change in landscape character resulting from wind turbine development located within the SSA. Where it is accepted that the area is one whose landscape character may be allowed to change, DCfW considers that good landscape design principles still need to be followed to ensure that the development is appropriate to the scale and character of the landscape.

Each landscape strategy area is assigned a landscape objective, or in some cases several landscape objectives, to assist the Councils' decision making on new applications. These landscape objectives then form the basis for recommendations on the wind energy development typologies which may be appropriate in each of the strategy areas.

The relationship or thresholds of landscape change that may arise from development vary depending on the landscape and the nature of the potential development. It is assumed however that there is typically higher capacity for wind energy development in areas of lower sensitivity where landscape change is considered more acceptable. Conversely areas of higher sensitivity, particularly those which are designated are likely to have very limited capacity. In addition, larger strategy areas may be able to accommodate a greater number of developments.

Indicative Landscape Capacity

An overall indicative landscape capacity has been derived for each landscape strategy area by considering the following:

- Overall landscape and visual sensitivity to wind energy development which determines the objective for the area.
- The range of visual experiences; how the landscapes of the area are seen and contribute to strategic and local issues.
- Operational and consented wind energy developments within and adjacent to each landscape strategy area.
- The size of each visual compartment. There may be scope for a greater number of developments within large strategy areas before a capacity threshold is reached.

Whilst the indicative landscape capacity helps to identify the type of developments which could be potentially accommodated, this does not in itself suggest that planning applications for wind energy development in these areas will be appropriate. Other variables such as environmental designations and technical constraints, the site specific siting, layout and design and need for the development are beyond the scope of this assessment and will need to be considered on a case by case basis.

The general relationship between landscape sensitivity, landscape objectives and capacity is illustrated below.

Landscape Sensitivity	Landscape Objective	Landscape Capacity	Threshold
Higher Sensitivity	Landscape Protection	Limited Capacity	<i>No wind energy development or very infrequent smaller scale development</i>
	Landscape Accommodation		<i>A landscape with occasional wind energy development</i>
	Landscape Change		<i>Typically a landscape with relatively frequent wind energy developments</i>
Lower Sensitivity	New Landscape	Highest Capacity	<i>Typically a landscape with a number of wind energy developments essentially a wind farm landscape</i>

Siting and Design Guidance in Relation to Potential Landscape and visual Impacts of Wind Energy Development

Guidance has been formulated for each strategy area to help direct development to the most appropriate locations in landscape and visual terms. This guidance broadly indicates what type(s) of wind energy development (if any) may be considered appropriate and highlights specific design and siting issues. Any specific constraints which may reduce the potential of particular areas to accommodate wind energy development are noted as are any potential cumulative and cross boundary effects of wind energy development.

A number of more general guidance notes have also been developed to be read alongside this specific guidance; these are found in Section 6.

SECTION 3: BASELINE LANDSCAPE OF CONWY AND DENBIGHSHIRE

LANDSCAPE CHARACTER BASELINE

Key Landscape characteristics of Conwy & Denbighshire

Conwy and Denbighshire comprise a diverse mix of landscapes many of which are highly valued for their great natural beauty and tranquillity. These landscapes range from remote and wild uplands and moorlands to narrow steep sided valleys, wide river floodplains, gently undulating pastoral lowlands and dramatic coastlines. Busy coastal resort towns contrast markedly with the highly rural areas inland. Topography plans within Appendix 5 illustrate the diverse landform of the study area.

There is no consistent/current landscape character assessment which covers both Conwy and Denbighshire. The most recent assessment is the Denbighshire Landscape Strategy¹. This covers just over half of the study area and identifies and provides landscape management guidelines for 45 landscape character areas. Because there wasn't a comparable assessment for Conwy, these character areas were not considered an appropriate mapping base for this study.

Clwyd Landscape Assessment 1995 – Broad Landscape Character

The landscape character assessment of the former county of Clwyd has therefore been used to provide the mapping base for this study as described in the methodology (Section 2). Figure 1 illustrates the Clwyd Landscape Character Types which cover the study area. Many of these character types broadly align with the character areas which are detailed in the Denbighshire Landscape Strategy.

The objective of the Clwyd Landscape Assessment was to identify and describe the distinctive characteristics and qualities of the varied landscapes which made up the former county of Clwyd. The assessment identified four main landscape types across Clwyd:

- **Lowland areas** - generally rolling farmland with extensive tree cover and a historic and nucleated settlement pattern.
- **Lower Hills & Valleys** - a mosaic of low hills and narrow valleys with abundant woodland.
- **Limestone Country** - a range of landscapes dominated or influenced by limestone.
- **Marginal uplands** - a series of upland fringe landscapes dominated by high hills, numerous valleys and extensive moorland with an overall strong rural character and sparse population.

Much of the geographical area covered by this study is identified as marginal upland.

A Countryside Strategy for Conwy 1998-2003 – Broad Landscape Character

A Countryside Strategy for Conwy produced in 1998 set out the Council's aims for the management of Conwy's countryside. The strategy refers to the Clwyd Landscape Assessment and also subdivides the county into four broad landscape character types, as follows:

- Coastal Lowlands
- Valleys
- Limestone Country
- Uplands

Mapping Base for the Conwy and Denbighshire Landscape Sensitivity and Capacity Study

Figure 2 identifies the mapping base for this study, together with the four broad landscape character types which cover the study area as discussed above. These broad landscape character types are an amalgamation of those identified in the Clwyd Landscape Assessment and A Countryside Strategy for Conwy.

¹ Denbighshire County Council (2003) Denbighshire Landscape Strategy

Protected Landscapes

Planning Policy Wales sets out the targets for renewable energy development whilst also establishing the Government's objectives for conservation and improvement of natural heritage (as outlined in both Section 1 and Appendix 2).

The landscapes of Conwy and Denbighshire are protected by a significant proportion of both statutory and non-statutory landscape related designations.

The study area is bounded by two nationally important landscapes; Snowdonia National Park to the west and south; and the Clwydian Range and Dee Valley AONB to the east (most of which is included within the study area).

These landscape designations together with cultural heritage and other environmental constraints are illustrated on Figure 3 and the key designations related to landscape character and value are outlined below.

World Heritage Sites

Pontcysyllte Aqueduct and Canal World Heritage Site is located to the south east of Denbighshire and incorporates the Pontcysyllte Aqueduct and associated engineering features including Horseshoe Falls, the Llangollen feeder canal, cuttings, embankments and tunnels. Buildings, archaeology, views and landscape features create a distinctive character and sense of place. A buffer zone has been drawn around the World Heritage Site to ensure that the cultural heritage and landscape features which contribute to the authenticity and integrity of the World Heritage Site are conserved.

Detailed guidance regarding proposed wind energy development in relation to the World Heritage Site is set out in Section 6, Table 1 of the Pontcysyllte Aqueduct & Canal World Heritage Site Supplementary Planning Document (2011)

Conwy Castle (Castles and Town Walls of King Edward in Gwynedd) World Heritage Site is located to the north of Conwy County on the west bank of the river Conwy. The extensive and detailed contemporary technical, social, and economic documentation of the castle, and the survival of adjacent fortified town at Conwy, makes it one of the major references of medieval history²

There is no detailed guidance regarding the siting of proposed wind energy development in relation to this World Heritage Site or its essential setting, however Part 2 of The Castles and Town Walls of King Edward I in Gwynedd, World Heritage Site Management Plan³ discusses the importance of significant/historic views into and out of each monument in the World Heritage Site, stating that inappropriate development would obstruct or interfere with these views, which generally extend beyond the areas of essential setting. This is particularly relevant to proposed wind energy developments.

National Parks

Although excluded from the study area both Conwy and Denbighshire have sections of boundary which adjoin **Snowdonia National Park**. The Park is the largest of three National Parks in Wales and attracts thousands of visitors each year. It is administered by its own National Park Authority whose aim is to:

- Conserve and enhance the natural beauty, wildlife and cultural heritage of the area.
- Promote opportunities to understand and enjoy its special qualities.
- Foster the economic and social wellbeing of its communities.

² <http://whc.unesco.org/en/decisions/1540>

³ <http://cadw.wales.gov.uk/historicenvironment/protection/worldheritage/cstlisedward1/?lang=en>

Areas of Outstanding Natural Beauty

The Clwydian Range and Dee Valley AONB is located to the south and east of Denbighshire.

The Clwydian Range and Dee Valley AONB is a 35 km long chain of undulating hills bounded by the Vale of Clwyd to the west and the Dee Estuary to the east. The vision for the AONB contained within the AONB 'Interim Statement on the Extension Area' (2012) describes it as a dramatic and dynamic landscape with flourishing communities and a thriving local economy. It supports a diverse and distinctive visual character and a rich biological and cultural heritage resource that is accessible to all. It is described as a tranquil haven by those living and visiting the area and noted for its open spaces, panoramic views and cultural associations (refer to methodology Section 3)

Open Access Land

In May 2005 the Countryside and Rights of Way Act (CROW) came into force, clearly identifying open access land (open country and/or common land) in Wales. One fifth of Wales is mapped as 'access land' where the public have a right of access on foot.⁴ A large proportion of land within Conwy and Denbighshire is mapped as Open Access Land where the public have a right to access and enjoy the countryside.

It is recognised that wind energy development may occur in open country and on common land. However each wind turbine would be regarded as a building, therefore the turbine and the developed land immediately around it would be excepted land under Schedule 1 of the CROW Act. Depending on how close the turbines are, the public may be able to walk between the turbines.

Registered Historic Landscapes (Wales)

The Historic Landscapes Register aims to help planners and developers introduce changes and new developments in ways that will cause the least harm to the historic character of the land. Inclusion in the Register does not confer statutory protection – but it does help highlight the cultural heritage importance of some parts of the landscape.

Conwy and Denbighshire contain a cluster of Registered Historic Landscapes:

- **Dyffryn Clwyd (The Vale of Clwyd)** - *'A broad, lowland river valley, edged by the Clwydian Hills in central Denbighshire, representing the best surviving and most complete, typical historic part of the Vale of Clwyd. The area contains significant evidence of late prehistoric and medieval land use and includes a spectacular, defensive chain of Iron Age hillforts overlooking the valley floor, which is characterised by medieval estate enclosures, settlements, and Denbigh and Ruthin defended towns and castles'.*
- **Pen Isaf Dyffryn Conwy (Lower Conwy Valley)** - *'A topographically diverse landscape, straddling the lower Conwy valley and adjacent uplands on the north eastern flanks of the Carneddau ridge in north Snowdonia, containing extensive and well-preserved relict evidence of land use, communications and defence from the prehistoric period onward'.*
- **Creuddyn a Chonwy (Creuddyn & Conwy)** - *'This mainly coastal landscape, comprising the Great and Little Orme's Heads and the lower part of the Conwy Estuary and its hinterland in north Snowdonia, contains evidence of highly diverse land use and settlement from the early prehistoric period to the present'.*
- **Gogledd Arllechwedd (North Arllechwedd)** - *'A dissected, mainly upland, area situated on the northern flanks of the Carneddau ridge in north Snowdonia, containing well-preserved relict evidence of recurrent land use and settlement from the prehistoric to medieval and later periods'.*

⁴ <http://www.ccg.gov.uk/enjoying-the-country/open-access-land.aspx>

- **Y Berwyn (Berwyn)** – ‘An upland area situated above the Dee valley on the western side of the Berwyn Mountains, containing extensive and well-preserved relict evidence of land use from the prehistoric, medieval and later periods, including Bronze Age settlements, field systems and groups of ritual stone monuments overlain in parts by medieval and later habitation sites and field systems, the whole having a significant potential for further study and representing one of the best preserved landscapes of its type in central Wales’.
- **Pen Isaf Dyffryn Elwy (Lower Elwy Valley)** - ‘A steeply-sided gorge and part of a narrow river valley to the west of the Vale of Clwyd, with a group of caves containing internationally significant Quaternary geological and archaeological deposits, including evidence for, and human remains belonging to, the earliest occupation of Wales a quarter of a million years ago’.
- **Mynydd Hiraethog (Denbigh Moors)** - ‘A visually striking and extensive rolling moorland landscape comprising the central and western part of the Denbigh Moors situated between the major river valleys of the Clwyd and Conwy in North Wales. The area represents a large, and in Wales an increasingly rare, survival of an uninterrupted extent of heather moorland, deliberately managed and maintained as a grouse moor and a shooting estate in the early part of the 20th century, the greater part overlying archaeological evidence of successive periods of land use from the prehistoric, medieval and later periods’.
- **Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg)** - ‘This picturesque part of the Dee valley presents a spectacular natural backdrop to a rich diversity of archaeological and historic sites representing evidence of a variety of land uses that have left their imprint on the area’.

Registered Parks and Gardens

A large number of Registered Parks and Gardens of Special Historic Interest in Wales are found within the study area. Although not protected by statutory designation they are nationally valued as they form an important and integral part of the historic and cultural fabric of Wales.

Heritage Coast

The area around the Great Orme near Llandudno is nationally valued and as such ‘defined’ as a **Heritage Coast** which is administered by Natural Resources Wales (NRW) (formerly the Countryside Council for Wales). This 4 mile stretch of coastline wraps around Orme Head, which defines the eastern shore of Conwy Bay. The aim of this non-statutory ‘definition’ is to conserve the natural beauty of the coast and improve accessibility for visitors.

Areas of Outstanding Beauty

The Cynwyd and Llandrillo AOB (formerly Berwyn Mountains AOB revised March 2013) is a non-statutory designation designed to protect the Berwyn Mountains, in recognition of its nationally important landscape value.

Conwy Special Landscape Areas

A number of areas within Conwy are designated as Special Landscape Areas (SLAs) within the revised deposit LDP:

- SLA 1 – Y Gogarth a Phenrhyn Creuddyn (Great Orme and Creuddyn Peninsular)
- SLA 2 – Rhyd y Foel i Abergele (Rhyd Y Foel to Abergele)
- SLA 3 – Dyffrynnoed Elwy ac Aled (Elwy and Aled Valleys)
- SLA 4 – Hiraethog
- SLA 5 – Cerrigydrudion a choridor yr A5 (Cerrigydrudion and the A5 corridor)
- SLA 6 – Dyffryn Conwy (Conwy Valley)

The purpose of this regional designation is to ensure that the character of these areas is not altered by inappropriate forms of development and that features which contribute to local distinctiveness are conserved.

Operational and Consented Wind Energy Developments

Figure 4 and accompanying Table A4.1 (within Appendix 4) identify and illustrate the wind energy development baseline for this study as at the end of March 2013. Operational and consented wind energy developments are shown within the study area including the 10 km buffer. The data used to compile the table and Figure 4, was provided by the Councils and neighbouring authorities.

Table A4.2 (within Appendix 4) also includes information about existing and proposed offshore wind energy developments.

Appendix 4 also includes Table A4.3 (Other Wind Energy Development Proposals) and Figure A4.1 which represent all operational and consented wind energy developments together with all other applications for wind energy developments (including those refused) within the study area as at the end of March 2013.

The operational wind energy developments were considered as part of the baseline for the sensitivity assessments of the landscape units; however, for the purposes of the evaluations of the landscape strategy areas, all consented wind energy developments were assumed to have been built and as such were considered in the baseline together with operational developments.

The highest concentrations of wind energy developments within the study area are found in and around TAN 8 SSAA. There are three notable areas of wind energy developments outside SSAA; these are as follows:

- The first is a small area to the south of Cerrigydrudion (refer to Figure 4 and Appendix 4, wind energy development references E3, E5, E7, E8 and E29)
- The second area is in and around Moel Maelogen wind farm to the east of Llanrwst (refer to Figure 4 and Appendix 4, wind energy development references E4, E6, E15, E22 and E23)
- The third area is just outside the study within the 10 km buffer in Gwynedd. This is the Braich Ddu development. (refer to Figure 4 and Appendix 4, wind energy development reference E62).

In some areas (in particular the SSAA), the presence of existing wind energy developments somewhat reduces the sensitivity of the landscape to that particular type of development. This is because this type of modern development is already a component of the landscape in those particular areas. However, the presence of existing wind energy developments does not automatically suggest that there is further capacity for more developments of this nature.

It is recommended that the Councils maintain a 'live' register of wind energy development applications and consents in the future; similar to the table within Appendix 4 and Figure A4.1. This information will be invaluable in assisting the decision making process regarding applications for new wind energy developments when considering the identified indicative capacities of each of the landscape strategy areas.

Comment on Potential Cumulative Visual Effects

Cumulative visual effects can occur as a result of further wind energy developments which may be viewed in sequence from along sensitive routes, or, when a receptor is able to see two or more wind energy developments from any one viewpoint. Taking into consideration all of the operational and consented wind energy developments within the study area there are a number of key receptors for which the potential for cumulative effects has been noted, as follows:

Effects on views from residential properties which have views of existing wind energy developments (in particular to the south of the study area around SSA A)

- Effects on views from Snowdonia National Park
- Effects on views from the Clwydian Range and Dee Valley AONB
- Effects on views from Offa's Dyke Path national trail
- Effects on views from promoted public rights of way such as the Clwydian Way and Dyserth Cycleway
- Effects on views from the A5 historic route
- Effects on views from the A5 and North Wales Coast Railway

References regarding potential cumulative visual effects and guidance on how to avoid these are made, where relevant, within the landscape strategy area assessments.

Comment on Potential Cumulative Landscape Effects

Cumulative landscape effects can impact on either the physical fabric or character of the landscape, or any special values attached to it.⁵ There are a large amount of designated and highly valued landscapes within and around the study area. There is therefore potential for additional wind energy developments to cause cumulative landscape effects on these landscapes. The main issues regarding cumulative landscape effects are linked to the following key designations / valued landscapes:

- Snowdonia National Park and its setting
- Clwydian Range and Dee Valley AONB and its setting (including the Pontcysyllte Aqueduct and Canal World Heritage Site and its essential setting)
- Cynwyd and Llandrillo AOB and its setting
- Conwy Special Landscape Areas
- Registered Historic Landscapes⁶

References regarding cumulative landscape effects and guidance on how to avoid these are made, where relevant, within the landscape strategy area assessments.

⁵ Definition taken from SNH (2012) Assessing the cumulative impact of onshore wind energy development, Inverness: Scottish Natural Heritage

⁶ Undesignated but recognised as being of national value

SECTION 4: EVALUATION OF LANDSCAPE UNITS AND THEIR SENSITIVITY TO WIND ENERGY DEVELOPMENT

A total of 42 landscape units were identified across the study area as illustrated in Figure 5. These landscape units are listed below in Table 4.1 together with an overall evaluation of their landscape and visual sensitivity in relation to wind energy development.

Table 4.1: Summary of Sensitivity

Landscape Unit		Assessed Sensitivity	Location	Page no.
Ref	Name			
LOWLAND AREAS				
A1	Eastern Lowlands (Cefn Meiriadog Vale Slopes)	High	DCC	32
A2	Coastal Slopes (Gronant, Prestatyn Coastal Slopes)	Medium-High	DCC	36
A3	Lowland Hills	High	CCBC	40
A4	Coastal and Estuarine Flats (Prestatyn to Abergele)	Medium	CCBC/DCC	44
A5	Coastal and Estuarine Flats (Colwyn Bay)	Medium-High	CCBC	48
A6	Vale Farmlands (Vale of Clwyd)	High	CCBC/DCC	52
A7	Vale Farmlands (Dee Valley – Corwen)	High	DCC	56
A8	Coastal Landscape Unit (Penmaenmawr to Llanfairechan)	High	CCBC	60
LOWER HILLS AND VALLEYS				
B1	Gritstone Hills (Graianrhyd)	High	DCC	64
B2	Deep Valleys (Aled and Elwy)	High	CCBC/DCC	67
B3	Deep Valleys (Vale of Llangollen and Eglwyseg Valley)	Very High	DCC	71
B4	Hill Slopes (Clwydian Range Hill Slopes)	Very High	DCC	75
B5	Hill Slopes (Morwynion Valley)	High	DCC	79
B6	Hill Slopes (Llandrillo Berwyn Hill Slopes)	High	DCC	83
B7	Conwy Valley	High	CCBC	87
LIMESTONE COUNTRY				
C1	Trelawnyd Plateau	High	DCC	92
C2	Limestone Farmlands (Llandegla to Maeshafn)	High	DCC	96
C3	Limestone Farmlands (West of the Vale of Clwyd)	High	DCC	100
C4	Limestone Farmlands (Abergele to Denbigh Coastal/ Vale Hills)	High	CCBC/DCC	104
C5	Limestone Farmlands (Northern Clwydian Range)	Very High	DCC	108
C6	Limestone Escarpment and Hills (Bryn Alyn – Maeshafn Escarpment)	Very High	DCC	112
C7	Limestone Escarpment and Hills (Eglwyseg Escarpment)	Very High	DCC	116
C8	Limestone Escarpment and Hills (Prestatyn - Dyserth Hillside)	Very High	DCC	120
C9	Limestone Escarpment and Hills	High	CCBC	124
C10	Great Orme and Creuddyn Peninsular	High	CCBC	128

Landscape Unit		Assessed Sensitivity	Location	Page no.
Ref	Name			
MARGINAL UPLAND				
D1	Aled Hiraethog Hills (West)	High	CCBC	133
D2	Hill Forest (Clocaenog Forest)	Low	CCBC/DCC	137
D3	Cerrig Uplands	High	CCBC/DCC	141
D4	Maerdy Hills	High	CCBC/DCC	145
D5	Edeirnion Hills	Medium-High	DCC	149
D6	Upland Plateau (Mynydd Rhyd Ddu)	Low	DCC	153
D7	Upland Plateau (Mynydd Mynyllod)	Medium	DCC	156
D8	Upland Plateau	Medium-High	CCBC	159
D9	Moorland Plateau (Y Berwyn)	High	DCC	162
D10	Moorland Plateau (Denbigh Moors)	High	CCBC/DCC	166
D11	Moorland Plateau	Very High	CCBC	170
D12	Moorland Plateau (Cyrn y Brain – Eglwyseg Mountain)	Very High	DCC	173
D13	Moorland Ridge (Clwydian Ridgeline)	Very High	DCC	177
D14	Moorland Ridge (Llantysilio Ridgeline)	Very High	DCC	181
D15	Moorland Ridge	High	CCBC	185
D16	Marginal Upland (East Conwy Valley)	High	CCBC	189
D17	Aled Hiraethog Hills (East)	High	DCC	193

Approach to Evaluating Landscape Units

The following text (in addition to the methodology) describes the how the sensitivity evaluations have been approached and presented for each strategy area:

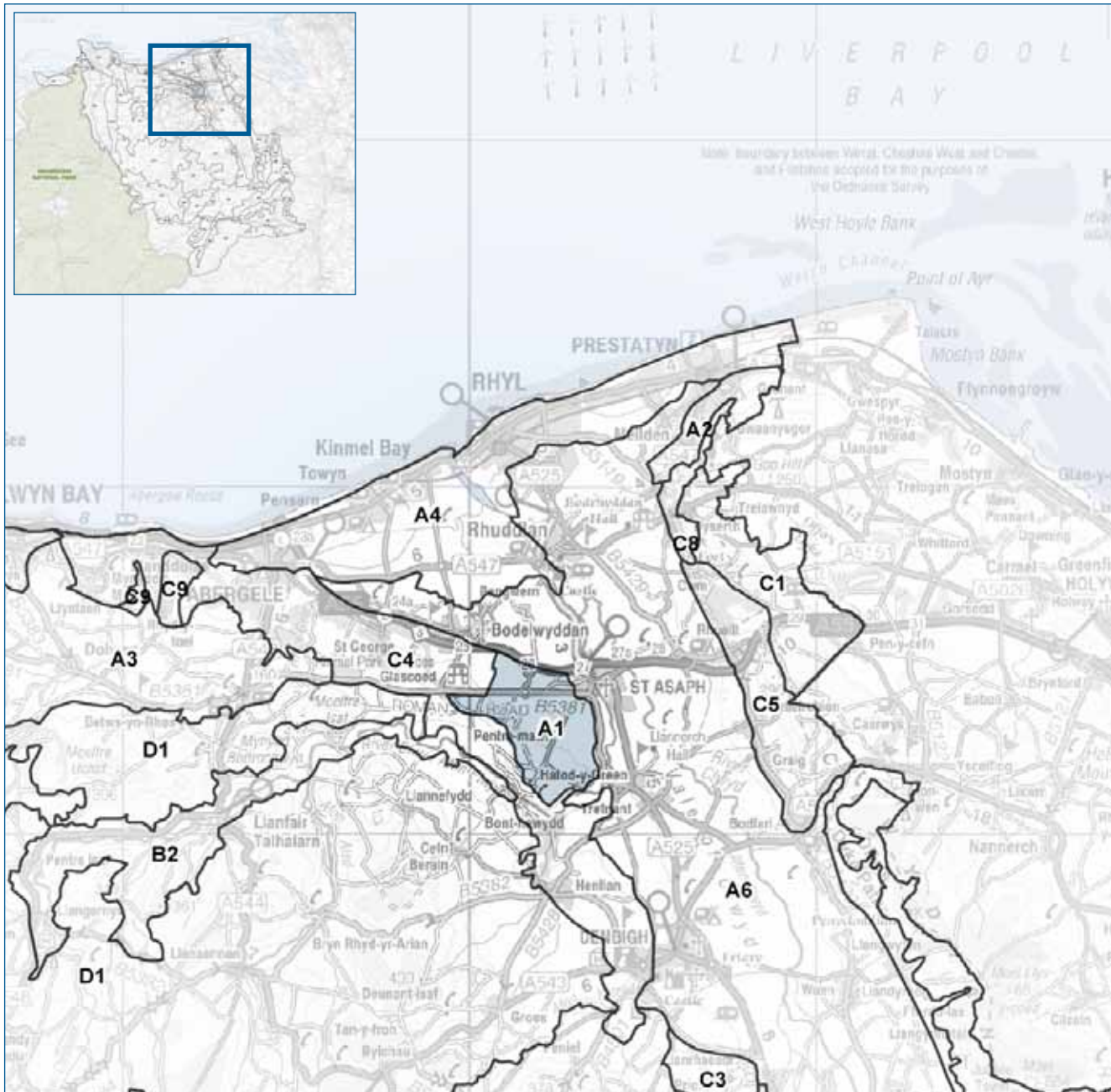
- A key plan and text describing location, extent and key characteristics are provided upfront as a brief introduction to each landscape unit.
- The evaluation of the sensitivity of each landscape unit in relation to wind energy development is broken down into four overarching sensitivity criteria categories, as follows:
 - Landscape
 - Visual
 - Aesthetical, Perceptual and Experiential
 - Value
- Detailed criteria are included within each of these overarching categories and evaluations of sensitivity (lower, medium and higher) are made against each of these respectively.
- Boxes have been highlighted in grey within the ‘Sensitivity Criteria’ column to represent those characteristics which are considered particularly susceptible to wind energy development and therefore have a bearing on the overall assessment of sensitivity.
- LANDMAP¹ has been used as a tool for assisting the evaluations of sensitivity as outlined in the methodology. The text shown in *grey italics* within the ‘Characteristics of the Landscape Unit’ column represents LANDMAP evaluations specific to each landscape unit. For example *VS4: Levels / Hills/Valleys denotes visual and sensory LANDMAP evaluations of topographic form; the underlined text signifies the evaluation(s) which geographically cover the majority of the landscape unit.*

¹ The LANDMAP data sources relevant to this study area are illustrated on plans of the study area which are contained on a CD within Appendix for reference.

- In addition to the LANDMAP evaluations a wide range of data sources have been drawn upon to reinforce / build upon the initial LANDMAP evaluations. These data sources have been listed at the end of each table under the heading **Key Reference Sources Used for this Assessment** for ease of reference and to point the reader in the direction of more detailed information relevant to each landscape unit should this be required.
- Site visits have also been made to verify the evaluations.
- The text shown in black represents the key findings of LANDMAP backed up by additional data source research and site visits; text highlighted in **bold** indicates the main findings that have informed the assessed sensitivity of each criterion.
- A summary of sensitivity to wind energy developments is included at the end of each table; this includes an overall assessment of sensitivity together with a summary of justification.
- It is important to note again that the overall evaluation of sensitivity of each of the landscape units is not based on any mathematical formula (for example - adding up the individual lower, moderate and higher scores and dividing by the total) but on the professional judgements of two chartered landscape architects through a balanced assessment of all the characteristics which takes into consideration the key criteria and the weight of evidence in relation to sensitivity. As explained in the methodology the overall assessment of sensitivity has been made using a more detailed five point sensitivity scale, **low**, **medium**, **medium-high**, **high** and **very-high**.

It is important to note that the sensitivity evaluation sheets must be read in conjunction with the relevant landscape strategy evaluation sheets when considering the appropriateness for wind energy developments within a specific area (refer to Figure 7 for locations of landscape units in relation to strategy areas.)

A1 Eastern Lowlands (Cefn Meiriadog Vale Slopes)



Location and Extent

This gently undulating pastoral lowland landscape unit is located along the western fringe of the Vale of Clwyd, just south west of St Asaph.

Key Characteristics

- Medium scale pastoral lowland landscape
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. <i>VS8: Medium scale</i>			
	Landform	Gently undulating lowland. <i>VS4: Levels</i>			
	Landcover Pattern	Mosaic of irregular and semi-regular medium-sized pastures with frequent small broadleaved woodlands and vegetated river valley . <i>VS3: Mosaic Rolling Lowland / Flat Open Lowland Farmland</i> <i>VS5: Field Pattern Mosaic</i>			
	Built Environment	Man-made influence is evident in the managed landscape and frequency of dispersed farmsteads / rural properties. Modern development is most notable along the A55, at St Asaph Business Park and where pylon lines cross the landscape unit. <i>VS6: Scattered Rural Farmland</i> <i>VS27: Poor / Unassessed</i>			
Visual	Skylines and Settings	Distinctive skylines of the Clwydian Range lie to the east, but otherwise skylines are not prominent in this landscape unit. Skylines are occasionally punctuated by pylon lines and existing built development.			
	Movement	Frequent road traffic brings movement, particularly to the north of this landscape unit. Movement towards the south is less frequent. <i>V18: Frequent</i>			
	Visibility, Key Views, Vistas	Views are typically enclosed and filtered by landform and vegetation. There are few outward views, other than eastwards towards the Clwydian Range from the higher parts of this landscape unit. <i>VS9: Enclosed</i>			

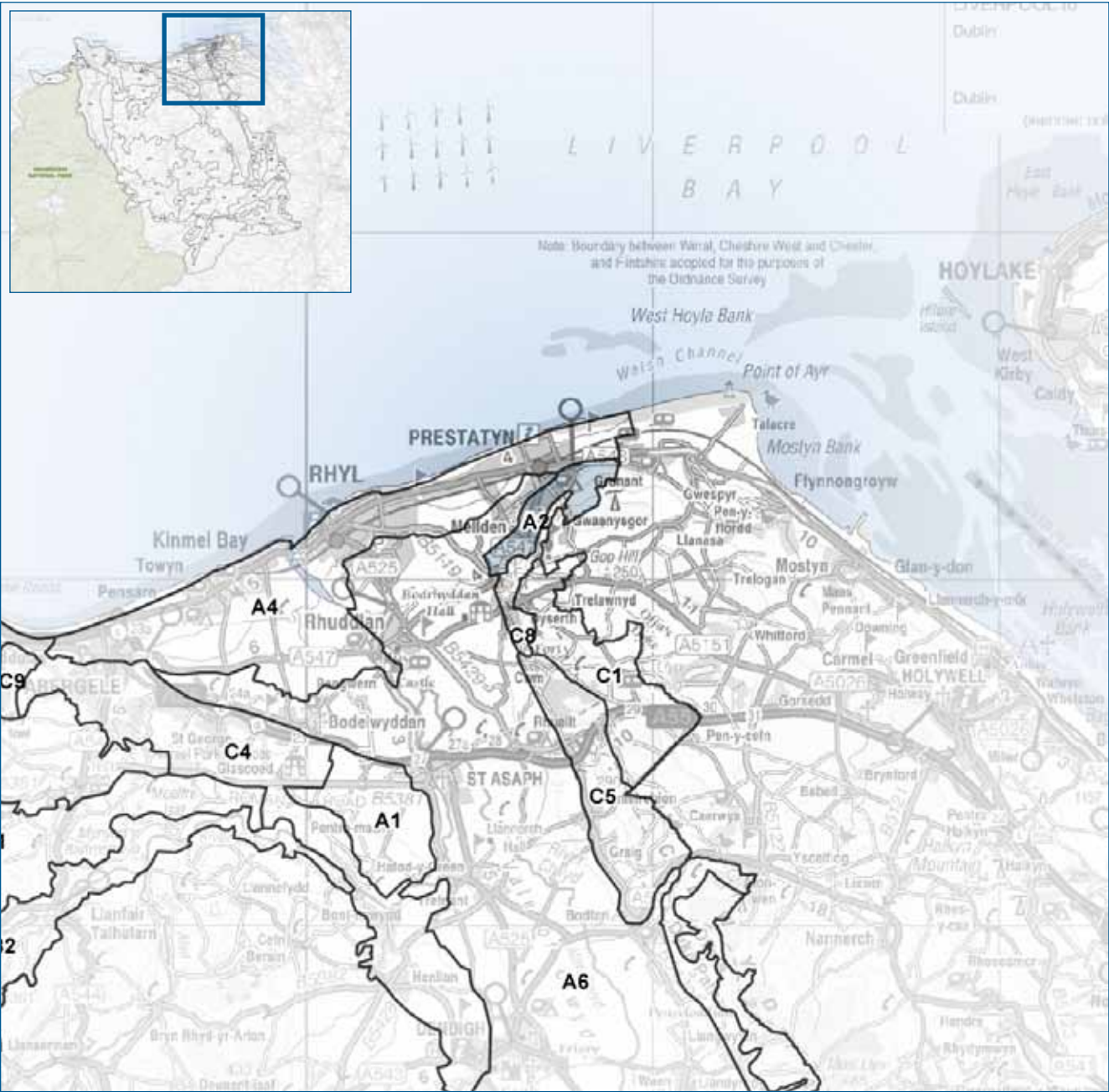
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Properties along the A55 corridor and dispersed throughout the farmland - Long distance routes including Offa's Dyke Path national trail and the Clwydian Way - Local attractions and public rights of way - The A55 tourist route - The local road network			
	Intervisibility/Associations with Adjacent Landscapes	Intervisibility with outer edges of adjacent landscape units as well as distant views to and from the highest parts of the Clwydian Range.			
	Views to and from Important Landscapes and Cultural Heritage Features	These include : - The Clwydian Range and Dee Valley AONB - Pen Isaf Dyffryn Elwy (Lower Elwy Valley) - Registered Historic Landscape - Registered Parks and Gardens			
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. <i>VS46: High</i> <i>VS47: Moderate</i> <i>VS48: Moderate-High</i>			
	Remoteness / Tranquillity	A typically attractive rural landscape with some modern development and human activity which lessen the sense of remoteness and tranquillity. <i>VS24: Attractive; Safe; Settled</i>			

Value	Landscape Value	Typical Moderate LANDMAP evaluation. <i>VS50: Moderate</i> <i>VS49: Moderate</i> <i>LH45: Moderate</i> <i>LH42: High</i> <i>GL31: Moderate</i> <i>GL33: Moderate</i>	
	Cultural Heritage Value	This landscape unit includes parts of Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape and a part of the unit is a Registered Park and Garden . Typical Moderate LANDMAP evaluation. <i>HL38: Unassessed</i> <i>HL35: Unassessed</i> <i>HL40: Moderate</i>	
	Summary of Sensitivity to Wind Energy Developments	This is a medium scale farming landscape with an undulating landform. The presence of features of cultural heritage value, landcover pattern, sensitive visual receptors and intervisibility with areas of high landscape value increases the overall sensitivity.	Medium-High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Eastern Lowlands
- Regional Landscape Character Map for Wales, Area 11 Vale of Clwyd
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Denbighshire Landscape Strategy 2003, Character Area: Vale of Clwyd North (Code: D/LC/6)

A2 Coastal Slopes (Gronant, Prestatyn Coastal Slopes)



Location and Extent

This landscape unit comprises the south eastern urban fringes of Prestatyn and adjacent flat farmland and sloping pastures below Prestatyn Hillside.

Key Characteristics

- Medium scale, settled landscape
- Urban settlement

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Typically gently sloping /undulating with hill slopes rising to the south. VS4: <u>Levels</u> / Hills/Valleys			
	Landcover Pattern	Urban fringe landscape with sloping pastures to the east and more level farmland to the west. VS3: Urban / Mosaic rolling Lowland / Flat Open Lowland Farmland VS5: <u>Development</u> / <u>Field Pattern/Mosaic</u> / Woodland			
	Built Environment	Densely settled areas on the southern edge of Prestatyn. Modern development includes the local road network, residential properties, electricity and communications lines which dominate the landscape. VS6: Urban / Scattered Rural/Farm / No Settlements VS27: <u>Poor</u> / <u>Fair</u> / Good / <u>Unassessed</u>			
Visual	Skylines and Settings	Relatively flat and simple skylines are interrupted by urban development, occasional wood poles (telegraph/low voltage wood pole lines) and mature hedgerow trees. Skylines towards the south are more distinctive due to prominent localised variations in landform, including Prestatyn Hillside.			
	Movement	Road traffic brings frequent movement into this landscape, particularly around Prestatyn. VS18: Infrequent / Frequent / Constant			
	Visibility, Key Views, Vistas	Views within this landscape unit are frequently contained by buildings, although there are more expansive views from the urban edge and higher ground. Views commonly focus upon the coast to the north or Prestatyn Hillside to the south. Both are scenically attractive features. VS9: Open / Enclosed			

Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Numerous properties particularly around the southern edge of Prestatyn - Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), Dyserth Cycleway and the Clwydian Way - Open Access Areas - Local attractions and public rights of way - The local road network - Passing ships and ferries		
	Intervisibility/Associations with Adjacent Landscapes	This area has a strong association with the coastal fringe and the Clwydian Range. Views out are generally open and the backdrop of Prestatyn Hillside has a strong visual presence .		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: The Clwydian Range and Dee Valley AONB particularly Graig Fawr and Prestatyn Hillside Nature Reserve which are accessed by Offa's Dyke Path national trail and the public right of way network - Sustrans - North Wales Coast cycle route (NCN Route 5)		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation with some areas Outstanding. VS46: <u>Low</u> / <u>Moderate</u> / <u>High</u> / Outstanding VS47: <u>Low</u> / <u>Moderate</u> / High VS48: <u>Moderate</u> / High / Outstanding		
	Remoteness / Tranquillity	This is primarily an urban landscape with frequent human activity and well visited tourist attractions, particularly close to Prestatyn. VS24: Exposed; Settled; Other / Unattractive; Noisy; Exposed; Smell / Attractive; Exposed; Remote; Settled		

Value	Landscape Value	The sloping pastures in the south west of this landscape unit are included within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and Sustrans - North Wales Coast cycle route (NCN Route 5) . Typical Moderate LANDMAP evaluation with some Outstanding. VS50: <u>Low</u> / <u>Moderate</u> / <u>High</u> / Outstanding VS49: Low / <u>Moderate</u> / High / Outstanding LH45: <u>Low</u> / <u>Moderate</u> / Outstanding LH42: Moderate / Unassessed GL31: Low / <u>Moderate</u> GL33: Moderate		
	Cultural Heritage Value	Typical Low-Moderate LANDMAP evaluation. HL38: Low / <u>Unassessed</u> HL35: <u>Low</u> / Moderate / <u>Unassessed</u> HL40: <u>Low</u> / <u>Moderate</u> / High / Unassessed		
Summary of Sensitivity to Wind Energy Developments		This landscape unit comprises the southern edge of Prestatyn, which although heavily developed and of only moderate scenic quality, has many sensitive visual receptors and a high degree of intervisibility with surrounding undeveloped upland areas including the northern section of the Clwydian Range and Dee Valley AONB. Prestatyn Hillside (part of the AONB) forms a prominent scenic backdrop to the unit and provides elevated panoramic views over the unit. The inclusion of a small area of sloping pastures in the south west of the area within the Clwydian Range and Dee Valley AONB lends to locally high landscape sensitivity. This and the presence of a number of nationally designated footpaths increase the overall sensitivity.	Medium-High	

Key Reference Sources Used for this Assessment

- LANDMAP
- Clwyd Landscape Assessment 1995, Coastal Slopes
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline and 12 Clwydian Range
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit 2 Point of Ayr to Colwyn Bay
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Rhyl and Prestatyn Coast (Code: D/LC/1); and Coastal Hills (Code: D/LC/3)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

This area comprises the coastal fringe and hills between Colwyn Bay and Abergele.

- Medium scale lowland landscape
- Arable and pastoral fields

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. VS8: <u>Small/Medium</u>			
	Landform	Low rolling hills slope northwards towards the coastline and are incised by small valleys. VS4: <u>Rolling/Undulating/Hills/Valleys</u>			
	Landcover Pattern	A farmland mosaic of medium - large fields with field and hedgerow trees and small woodland blocks. VS3: <u>Mosaic Rolling Lowland</u> / Hill & Lower Plateau Mosaic VS5: Field Pattern/Mosaic			
	Built Environment	Densely dispersed pattern of farms and rural properties distributed along a network of local lanes. VS6: <u>Mixture</u> / Clustered / Scattered Rural/Farm VS27: <u>Fair</u> / Good			
Visual	Skylines and Settings	Skylines are relatively simple, interrupted by occasional mature field and hedgerow trees, wood pole lines and dispersed rural properties.			
	Movement	The presence of occasional road traffic brings some movement to the otherwise relatively still character of this landscape unit. VS18: <u>Infrequent</u> / Frequent			
	Visibility, Key Views, Vistas	This landscape unit is typically enclosed by landform and vegetation , although there are some open views to the sea, coastal fringe and Clwydian Range from more elevated areas to the south. VS9: Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Numerous scattered properties ▪ Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) ▪ Open Access Areas (west of Abergele) ▪ Local attractions and public rights of way ▪ The A55 tourist route and North Wales Coast Railway ▪ The local road network			
	Intervisibility/Associations with Adjacent Landscapes	This area has a strong association with adjacent limestone escarpment landscapes and coastal landscapes to the north.			

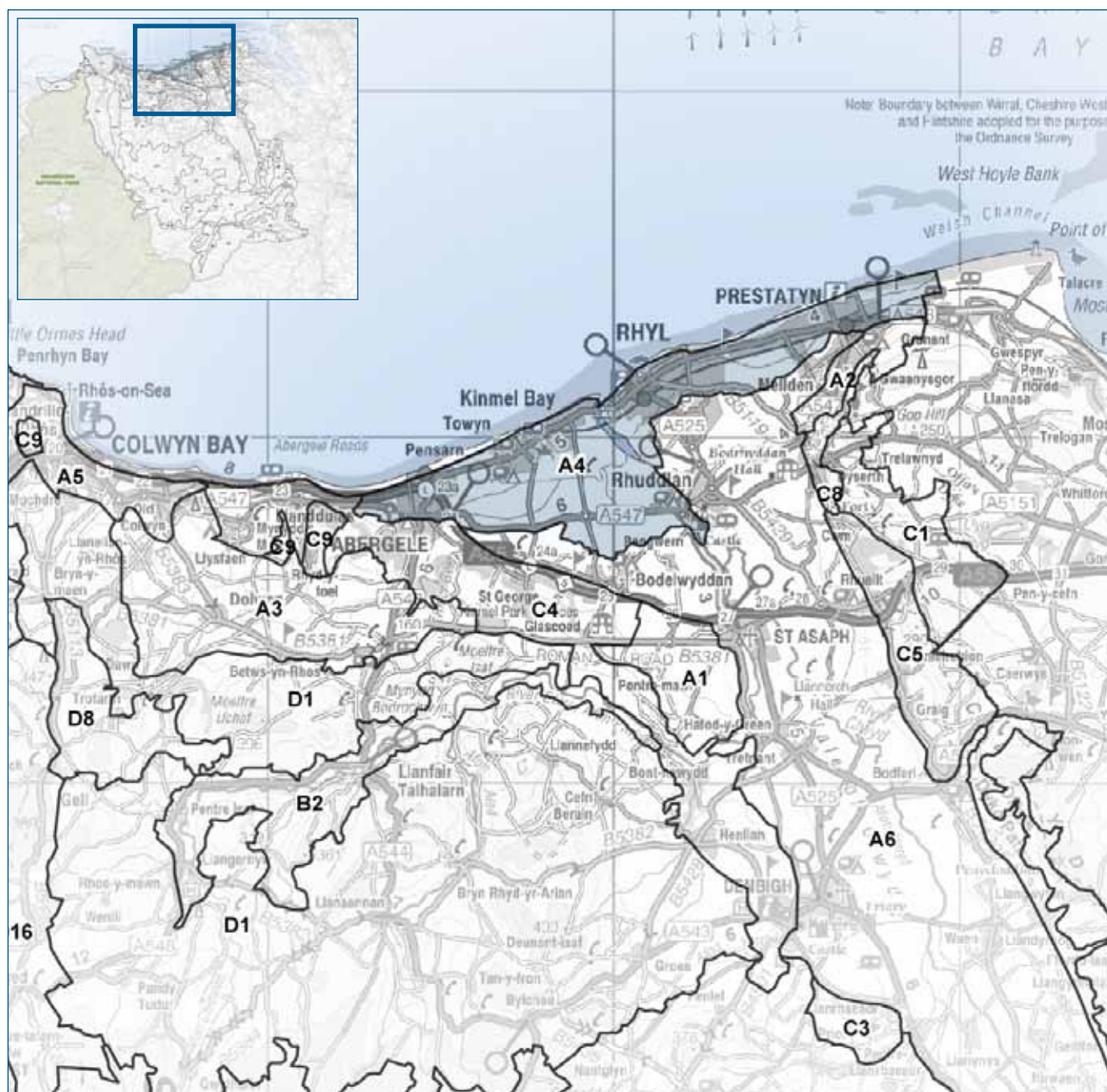
Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Rhyd Y Foel to Abergele SLA ▪ Open Access Areas (west of Abergele) ▪ Sustrans - North Wales Coast cycle route (NCN Route 5) ▪ Registered Parks and Gardens ▪ Hillforts			
	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: <u>Moderate</u> / High VS47: <u>Moderate</u> / High VS48: <u>Moderate</u> / High			
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	A tranquil and attractive rural landscape with a relatively small amount of modern development and activity. VS24: Attractive; Sheltered; Settled / Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual			
	Landscape Value	The eastern part of this landscape unit lies within the regionally designated Rhyd Y Foel to Abergele SLA. Typical Moderate-High LANDMAP evaluation. VS50: <u>Moderate</u> / High VS49: Moderate / <u>High</u> LH45: Moderate LH42: Low / <u>Moderate</u> / High GL31: Moderate / <u>High</u> GL33: Moderate / <u>High</u>			
Value	Cultural Heritage Value	This landscape unit includes a Registered Park and Garden. Typical Moderate LANDMAP evaluation. HL38: Moderate / High HL35: Low / Moderate HL40: Moderate / High			

Summary of Sensitivity to Wind Energy Developments	The landscape is medium scale with a gently rolling landform. The presence of settlement and other man-made features is relatively limited and the eastern part is regionally designated as the Rhyd Y Foel to Abergele SLA. There is strong association and intervisibility with the SLA landscape and sensitive coastal landscapes further north. These factors and the presence of a number of sensitive visual receptors and important cultural heritage features increase the overall sensitivity.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Lowland Hills
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit 2, Point of Ayr to Colwyn Bay
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd Y Foel to Abergele
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

A4 Coastal and Estuarine Flats (Prestatyn to Abergele)



Location and Extent

Located on the north Denbighshire coast around Rhyl, Prestatyn and Abergele, this landscape unit is an established holiday destination and recreational area.

Key Characteristics

- Large scale open and relatively straight coastal landscape
- Highly developed for tourism
- Extensive, mostly flat area of coastal farmland

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically a large scale landscape. <i>VS8: <u>Large</u> / Medium</i>		
	Landform	Extensive, mostly flat area. <i>VS4: Levels</i>		
	Landcover Pattern	Low lying coastal farmland , coastal dunes, golf course, sections of natural coastline and manmade sea defences with the immediate coastal area largely developed for tourism. <i>VS3: Flat Open Lowland Farmland / Urban / Estuary / Dunes & Dune Slack / Intertidal</i> <i>VS5: Development / Mixture / Open Land</i>		
	Built Environment	This landscape unit is heavily influenced by modern development within the urban resort towns of Rhyl and Prestatyn and major transport infrastructure , including the A55 tourist route and North Wales Coast Railway. <i>VS6: <u>Urban</u> / Linear / No Settlements (along shoreline)</i> <i>VS27: <u>Poor</u> / Fair / Good</i>		
Visual	Skylines and Settings	Skylines are less prominent particularly to the north. Offshore wind turbines and the Rhyl Tower interrupt skylines to the north. Upland areas to the south west and south east provide distant uninterrupted rolling skylines .		
	Movement	The A55 tourist route and the North Wales Coast Railway form a major transport corridor within this landscape unit. This coastal landscape is characterised by activity and bustle with some quieter areas where transport routes and tourism development are less prevalent. <i>VS18: <u>Constant</u> / Frequent / Infrequent</i>		
	Visibility, Key Views, Vistas	Expansive views to surrounding hills, settled lowlands and along the coast. There are open views across farmland to the Clwydian Range to the east and the Rhos Hills uplands to the south west. A large offshore wind farm is prominent in views from Prestatyn. <i>VS9: Confined / Enclosed / <u>Open</u></i>		

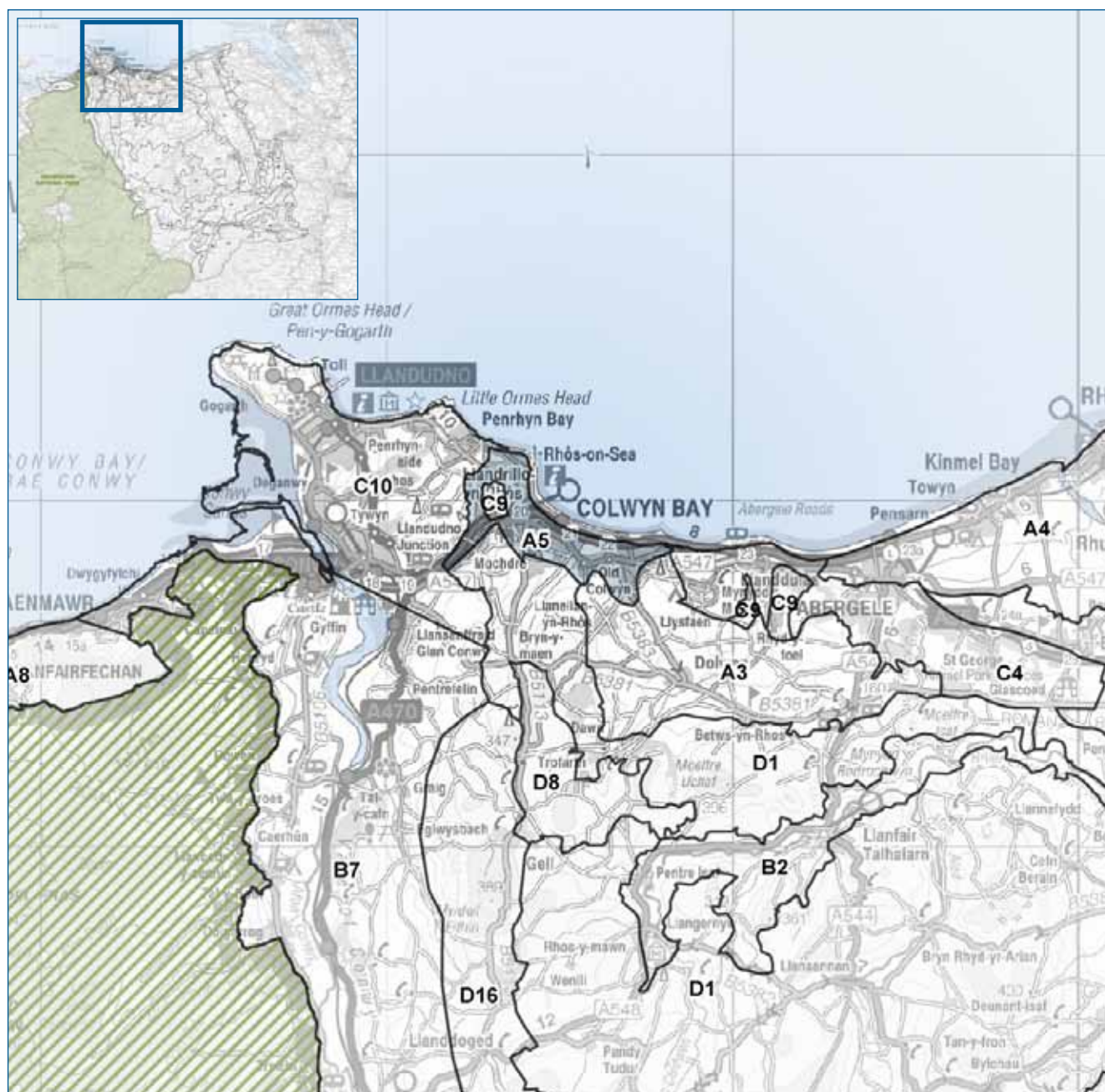
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Numerous properties in and around Rhyl and Prestatyn - Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), the North Wales Path (part of the Wales Coast Path) and the Clwydian Way - Local attractions including the Gronant Dunes and public rights of way - The A55 tourist route and North Wales Coast Railway - Dense network of local roads - Passing ships and ferries		
	Intervisibility/Associations with Adjacent Landscapes	The level low lying landscape affords a high degree of intervisibility , particularly with the adjacent limestone hills and more distant Clwydian Range. The nearby seascape is highly visible and includes views from ships heading to and from the Port of Liverpool.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: - The Clwydian Range and Dee Valley AONB - Rhuddlan Castle - Registered Parks and Gardens, notably Bodelwyddan - Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape - The Marble Church (St Margaret's Church, Bodelwyddan)		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Low-Moderate LANDMAP evaluation, VS46: <i>Low / Moderate / High (immediate coastline)</i> VS47: <i>Low / Moderate / High (immediate coastline)</i> VS48: <i>Low / Moderate / High (immediate coastline)</i>		
	Remoteness / Tranquillity	The settlements and major transport routes give a sense of activity and movement to much of this landscape unit, with the exception of the Gronant Dunes which are much more tranquil and remote. VS24: <i>Unattractive; Noisy; Exposed; Smell / Unattractive; Noisy; Settled / Exposed; Threatening; Wild; Smell</i>		

Value	Landscape Value	Nationally designated features include Offa's Dyke Path national trail (running through the urban environment) and Sustrans - North Wales Coast cycle route (NCN Route 5). This landscape unit has a typical Low-Moderate LANDMAP evaluation. <i>VS50: <u>Low</u> / <u>Moderate</u> / High (immediate coastline)</i> <i>VS49: Low / Moderate / High (immediate coastline)</i> <i>LH45: <u>Low</u> / Moderate / High</i> <i>LH42: Low / Moderate / High / Unassessed</i> <i>GL31: <u>Moderate</u> / High (immediate coastline)</i> <i>GL33: <u>Low</u> / <u>Moderate</u> / High (immediate coastline)</i>		
	Cultural Heritage Value	This landscape unit contains important cultural heritage features including some Registered Parks and Gardens. Typical Moderate LANDMAP evaluation. <i>HL38: Low / High / Unassessed</i> <i>HL35: <u>Low</u> / Moderate / <u>High</u> / <u>Unassessed</u></i> <i>HL40: Low / Moderate / High / <u>Unassessed</u></i>		
	Summary of Sensitivity to Wind Energy Developments	The large scale and mostly flat coastal farmland, which is heavily developed in places lessens the sensitivity of the landscape. However this is partially counterbalanced by the high number of sensitive visual receptors, presence of nationally designated footpaths and high degree of intervisibility with important landscape and cultural heritage features, which together increase the overall sensitivity. The area where the Gronant Dunes are located is particularly scenic and the sensitivity in this locality is therefore considered high.	Medium	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Coastal and Estuarine Flats
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, No: 2 Regional Seascape Unit Name: Point of Ayr to Colwyn Bay
- Denbighshire Landscape Strategy 2003, Character Area: Rhyl and Prestatyn Coast (Code: D/LC/1)

A5 Coastal and Estuarine Flats (Colwyn Bay)



Location and Extent

Located along the north coast of Conwy around Colwyn Bay, this landscape unit is an established holiday destination and recreational area.

Key Characteristics

- Medium scale, settled landscape
- Narrow, low lying coastline backed by steep hills
- Highly developed for tourism
- Major transport and communication corridor

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. <i>VS8: Medium</i>			
	Landform	Narrow, low lying, linear coastline backed by steep sided hills. <i>VS4: Rolling/Undulating</i>			
	Landcover Pattern	Immediate coastal area is largely developed for tourism. <i>VS3: Urban / Road Corridor</i> <i>VS5: Development / Open Land</i>			
	Built Environment	Heavily influenced by the urban resort town of Colwyn Bay and major transport infrastructure. <i>VS6: Urban / No Settlements (immediate coastline)</i> <i>VS27: Fair</i>			
Visual	Skylines and Settings	Skylines to the north focus on offshore wind turbines. To the south the skylines are strongly undulating and mainly uninterrupted.			
	Movement	This coastal landscape unit is characterised by activity and bustle. The A55 tourist route and North Wales Coast Railway form a busy major transport corridor. <i>VS18: Constant / Frequent</i>			
	Visibility, Key Views, Vistas	Views to the south are enclosed and filtered by landform, vegetation and modern development. However, to the north there are some expansive views across the sea to offshore wind farms. <i>VS9: Enclosed</i>			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Numerous properties particularly along the coast around Colwyn Bay - Long distance routes including the Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) - Local attractions and public rights of way - The A55 tourist route and North Wales Coast Railway - The local road network			
	Intervisibility/ Associations with Adjacent Landscapes	This landscape unit has a moderate association with the adjacent limestone hills and coastal landscapes.			

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Sustrans - North Wales Coast cycle route (NCN Route 5) ▪ Registered Parks and Gardens ▪ Hillforts ▪ Pwllcrochan Woods (Local Nature Reserve)			
	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: <u>Moderate</u> / High (immediate coastline) VS47: <u>Moderate</u> / High (immediate coastline) VS48: <u>Moderate</u> / High (immediate coastline)			
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	Urban development and major transport routes bring frequent movement to this landscape unit. VS24: Noisy; Threatening; Unattractive / Attractive; Unattractive; Noisy; Settled			
	Landscape Value	Nationally designated features include Sustrans - North Wales Coast cycle route (NCN Route 5). Typical Moderate LANDMAP evaluation. VS50: <u>Moderate</u> / High (immediate coastline) VS49: <u>Moderate</u> / High (immediate coastline) LH45: <u>Moderate</u> / High (immediate coastline) LH42: <u>Low</u> / High (immediate coastline) GL31: <u>Moderate</u> GL33: Low / Moderate / High			
Value	Cultural Heritage Value	This landscape unit includes some Registered Parks and Gardens. Typical Moderate LANDMAP evaluation. HL38: <u>Moderate</u> / High (immediate coastline) HL35: Low (immediate coastline) / <u>Moderate</u> HL40: Moderate			

Summary of Sensitivity to Wind Energy Developments	The medium scale low lying coastal landscape is characterised by development and transport corridors which lessens the sensitivity of the landscape. However these characteristics are counterbalanced by the high number of sensitive visual receptors, presence of nationally designated footpaths and high degree of intervisibility with important landscape and cultural heritage features, which together increase the overall sensitivity.	Medium
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Coastal and Estuarine Flats
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit No: 2 Point of Ayr to Colwyn Bay and Unit No: 3 Rhos Point to Great Orme Head
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

This map illustrates the St Asaph area, highlighting the River Clwyd and its surrounding landscape. Key features include the town of St Asaph, the River Clwyd, and various local roads and landmarks. The map also shows the proximity to the Irish Sea and the surrounding countryside. A small inset map in the bottom left corner provides a broader geographical context, showing the location of the study area within the United Kingdom.

This landscape unit comprises the Vale of Clwyd which runs from the fringes of Rhyl and Prestatyn south past Ruthin.

- Medium scale, broad valley landscape
- Predominantly pastoral farmland
- Cultural heritage interest

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: <u>Medium</u> / Small</i>			
	Landform	The river Clwyd meanders along the floor of a broad valley between adjacent upland areas. <i>VS4: <u>Rolling/Undulating</u> / Hills/Valleys / Levels</i>			
	Landcover Pattern	Lowland pastoral farmland with some woodlands and historic parkland and the river Clwyd. <i>VS3: <u>Flat Lowland Mosaic</u> / Wooded Rolling Lowland / Flat Open Lowland Farmland</i> <i>VS5: <u>Field Pattern/Mosaic</u> / Development</i>			
	Built Environment	This landscape unit is historically settled . Other than dispersed, scattered farmsteads, settlement is typically concentrated in small villages and hamlets and several small towns of medieval origin. <i>VS6: <u>Mixture</u> / Scattered Rural/Farm / Village / Urban</i> <i>VS27: <u>Poor</u> / Fair / Unassessed</i>			
Visual	Skylines and Settings	This landscape unit is rarely seen as a skyline feature . The Clwydian Range and Denbigh - Ruthin Hills form distinctive skylines and backdrops to much of this area. A number of prominent historic landmarks including churches and castles are seen against the skyline in local to middle distance views. To the north of the area, existing pylon lines interrupt skylines.			
	Movement	There is frequent traffic along the road network which has some localised influence and brings visual movement within this landscape unit, whilst to the south this is screened more by valley vegetation. Traffic along the A55 is noticeable and in places intrusive. <i>VS18: <u>Frequent</u> / Infrequent / Constant (towns and villages)</i>			
	Visibility, Key Views, Vistas	Views within the valley are typically enclosed and filtered by landform and vegetation. There are however some clear views to and from the valley sides, including from the Clwydian Range and tourist attractions. There are also several open long views focussed along road corridors which cross and flank the area. <i>VS9: <u>Enclosed</u></i>			

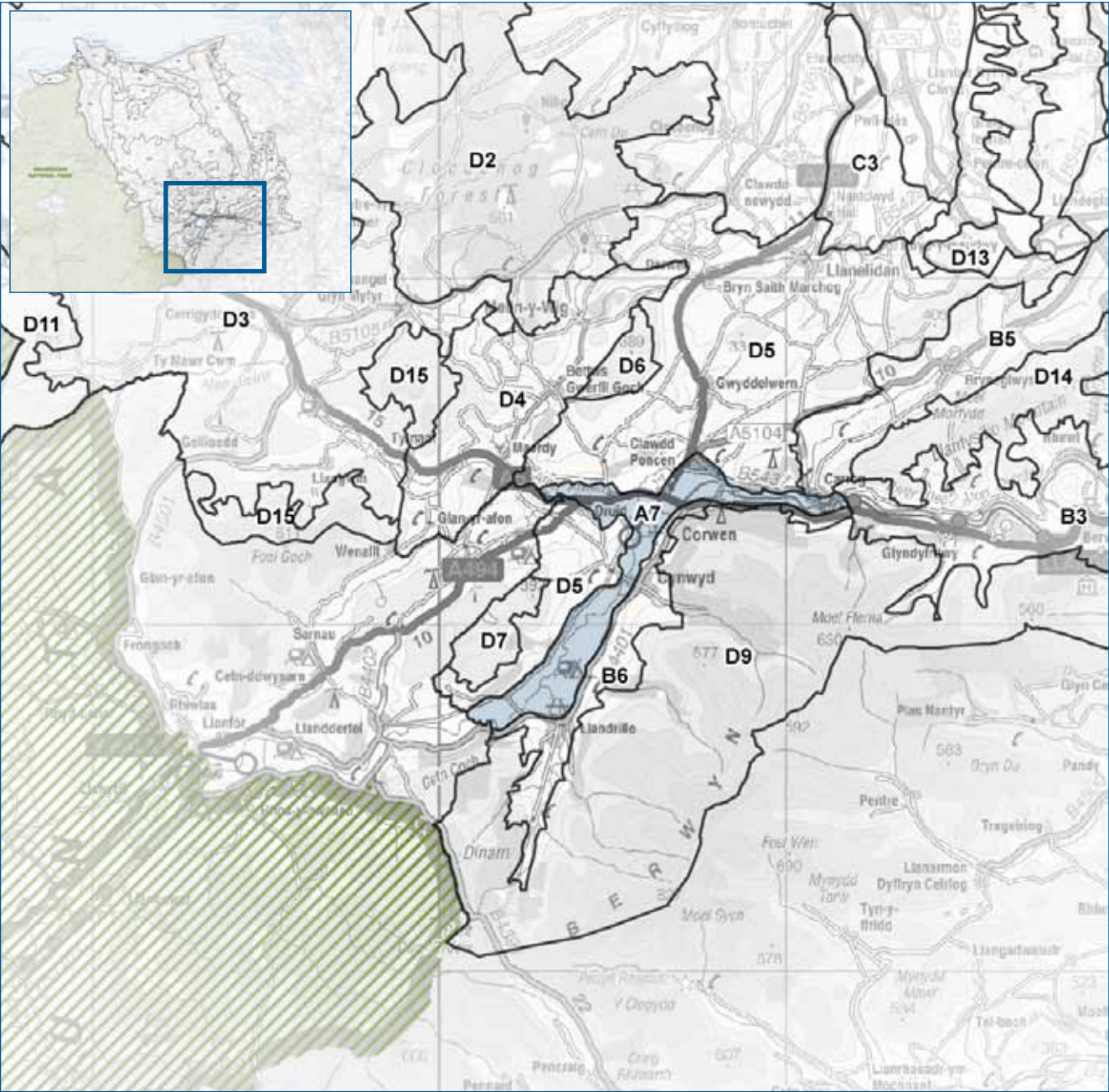
Aesthetic, Perceptual and Experiential	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Numerous properties along the valley, both dispersed and concentrated in settlements ▪ Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), Clwydian Way ▪ Open Access Areas along the Clwydian Range ▪ Local attractions including historic parks, churches and castles in adjacent landscape units ▪ Public rights of way ▪ The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	This area has a strong association with the Clwydian Range to the east and the Denbigh Hills and foothills to the west.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas along the Clwydian Range ▪ Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Rhuddlan Castle ▪ Denbigh Castle ▪ The Marble Church (St Margaret's Church, Bodelwyddan)		
	Scenic Quality and Character	The Vale of Clwyd is valued for its high scenic quality and character which is recognised by its typically High LANDMAP evaluation VS46: <u>High</u> / Moderate / Low VS47: <u>High</u> / Moderate / <u>Low</u> VS48: <u>High</u> / Moderate		
	Remoteness / Tranquillity	Away from settlements, the Vale's landscape is perceived to be tranquil. However, the well-developed farmed character and presence of settlement and network of local roads in this landscape gives a reduced sense of remoteness. VS24: <i>Attractive; Safe; Settled; Other / Attractive; Tranquil; Safe; Settled / Attractive; Sheltered; Safe; Settled</i>		

Value	Landscape Value	The western edge of the Clwydian Range and Dee Valley AONB lies just inside the south eastern edge of this landscape unit. Nationally designated features also include the Sustrans - North Wales Coast cycle route (NCN Route 5). This landscape unit typically has a moderate-high LANDMAP evaluation. VS50: <i>High / Moderate / Low</i> VS49: <i>High / Moderate / Low</i> LH45: <i>High / Moderate / Low</i> LH42: <i>High / Moderate / Low / Unassessed</i> GL31: <i>High / Moderate</i> GL33: <i>High / Moderate / Low</i>		
	Cultural Heritage Value	The southern half of this landscape unit lies within Registered Historic Landscapes, principally Dyffryn Clwyd (The Vale of Clwyd) and also a small part of Pen Isaf Dyffryn Elwy (Lower Elwy Valley). This landscape unit also includes Rhuddlan Castle, Denbigh Castle and some Registered Parks and Gardens. Typical Moderate LANDMAP evaluation. HL38: <i>Unassessed / Low / Moderate / High</i> HL35: <i>Unassessed / Low / Moderate / High</i> HL40: <i>High / Moderate / Low</i>		
	Summary of Sensitivity to Wind Energy Developments	This is a scenic pastoral valley landscape the western edge of which lies just inside the Clwydian Range and Dee Valley AONB. The historic dispersed settlement pattern, presence of important cultural heritage features and many sensitive visual receptors also increase the overall sensitivity.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Vale Farmlands
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline and 11 Vale of Clwyd
- Countryside Council for Wales, Historic Landscapes Register, areas as follows: 1 The Vale of Clwyd (HLW (C) 1) and 38 Lower Elwy Valley (HLW (C) 4)
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Rhyl and Prestatyn Coast (Code: D/LC/1); Vale of Clwyd North (Code: D/LC/6); Vale of Clwyd East of Denbigh (Code: D/LC/7); and Vale of Clwyd South (Code: D/LC/8).
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

A7 Vale Farmlands (Dee Valley – Corwen)



Location and Extent

Located in the south of Denbighshire this landscape unit comprises a broad section of the Dee valley and also the confluence of the rivers Dee and Alwen at a point where the valley is particularly wide.

Key Characteristics

- Large scale, broad open valley
- Intensive agricultural landscape

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically large scale landscape. VS8: Large			
	Landform	The River Dee meanders along the broad U-shaped flat valley floor . VS4: <u>Levels</u> / Hills/Valleys			
	Landcover Pattern	Mainly pastoral fields. VS3: <u>Open Lowland Valleys</u> / Open Hillside & Scarp Slopes VS5: Mixture			
	Built Environment	This landscape unit is historically settled and includes a dispersed pattern of small villages, scattered farmsteads and rural properties. VS6: <u>Clustered</u> / Mixture VS27: Unassessed			
Visual	Skylines and Settings	This landscape unit is rarely seen as a skyline feature . Pylon lines punctuate the skyline north west of Corwen. Skylines in the adjacent upland areas are more prominent and provide a backdrop to views out from the valley.			
	Movement	Traffic brings frequent movement into the landscape along the lar meanders along the ss frequent.siness Parktypologyto other well known local landmarks se?smnt plan i B4401; away from this road movement is less frequent . VS18: Frequent			
	Visibility, Key Views, Vistas	The valley is generally enclosed; however there are open views to and from the adjoining upland areas including the Berwyn Mountains and Mynydd Mynyllod. VS9: Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Properties along the valley, both dispersed and concentrated in settlements - Long distance routes including the North Berwyn Way, Dee Valley Way and Clwydian Way - Open Access Areas - Local attractions and public rights of way - The A5 historic route - The local road network including the B4401			

Visual	Intervisibility/Associations with Adjacent Landscapes	The valley is bounded by and has a strong association and intervisibility with the Berwyn Mountains to the east and Mynydd Mynyllod and associated uplands to the west.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Y Berwyn (Berwyn) Registered Historic Landscape		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation with some areas evaluated as Outstanding . VS46: <u>Moderate</u> / High / Outstanding VS47: <u>Moderate</u> / High VS48: <u>Moderate</u> / High / Outstanding		
	Remoteness / Tranquillity	The presence of settlement and the road network reduce the sense of remoteness and tranquillity in this landscape unit particularly in the north of the area. VS24: Attractive; Safe; Settled / Noisy; Settled; Other / Attractive; Remote; Settled; Wild		
Value	Landscape Value	Typical High LANDMAP evaluation, with some areas of Outstanding value. VS50: <u>Moderate</u> / High / Outstanding VS49: <u>Moderate</u> / Outstanding LH45: Moderate / <u>High</u> / Outstanding LH42: Moderate / <u>High</u> / Outstanding GL31: Moderate / <u>Outstanding</u> GL33: Moderate / <u>Outstanding</u>		
	Cultural Heritage Value	Typical Moderate-High LANDMAP evaluation. HL38: Moderate / High HL35: Moderate / High HL40: Moderate / High		

Summary of Sensitivity to Wind Energy Developments	This is a scenic valley landscape which has strong associations with the Berwyn Mountains and Mynydd Mynyllod. The historic dispersed settlement pattern and proximity to important landscape, visual and cultural heritage receptors including Clwydian Range and Dee Valley AONB and Cynwyd and Llandrillo AOB lend a high degree of sensitivity.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Vale Farmlands
- Regional Landscape Character Map for Wales, 15 Vale of Llangollen and Dee Valley
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Vale of Llangollen (Code: D/LC/41); and Dee Valley - Corwen (Code: D/LC/42)

A8 Coastal Landscape Unit (Penmaenmawr to Llanfairfechan)



Location and Extent

This landscape unit comprises the immediate coastline and uplands which run west from Penmaenmawr to Llanfairfechan, to the far north west of Conwy.

Key Characteristics

- Medium scale coastal landscape
- High hills/mountains extend to the coast

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. VS8: <u>Medium</u> / Vast			
	Landform	Gentle coastal slopes interrupted by dramatic rugged mountains along the northern fringes of Snowdonia National Park. VS4: Disturbed / High Hills/Mountains / Levels / <u>Rolling/Undulating</u>			
	Landcover Pattern	Rural pastoral landcover with modern development including quarries, coastal settlements and transport corridors. VS3: Intertidal / <u>Urban</u> / Excavation / Upland Grazing / Hillside & Scarp Slopes Grazing VS5: Open Land / <u>Mixture</u> / <u>Development</u>			
	Built Environment	Urban development along the coast includes settlements and a major road and rail corridor. Urban influences are less evident in the upland areas with the exception of quarrying activities. VS6: Mixture / <u>Urban</u> / <u>No Settlements</u> VS27: Poor / <u>Fair</u> / Good			
Visual	Skylines and Settings	The northern fringes of Snowdonia National Park form a dramatic backcloth to southerly views. Skylines to the north are also prominent and include Anglesey and the distinctive Great Orme Headland.			
	Movement	Frequent traffic on the local road network brings movement into this landscape unit, particularly in connection with the larger settlements. However, in contrast the uplands are more still in character . VS18: Rare / Occasional / Infrequent / Constant			
	Visibility, Key Views, Vistas	Views are typically open and include expansive views to Snowdonia National Park and the Great Orme Headland. VS9: <u>Open</u> / Exposed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Numerous properties particularly along the coast - Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) - Open Access Areas - Local attractions and public rights of way - The A55 tourist route and North Wales Coast Railway - The local road network - Passing ships and ferries			

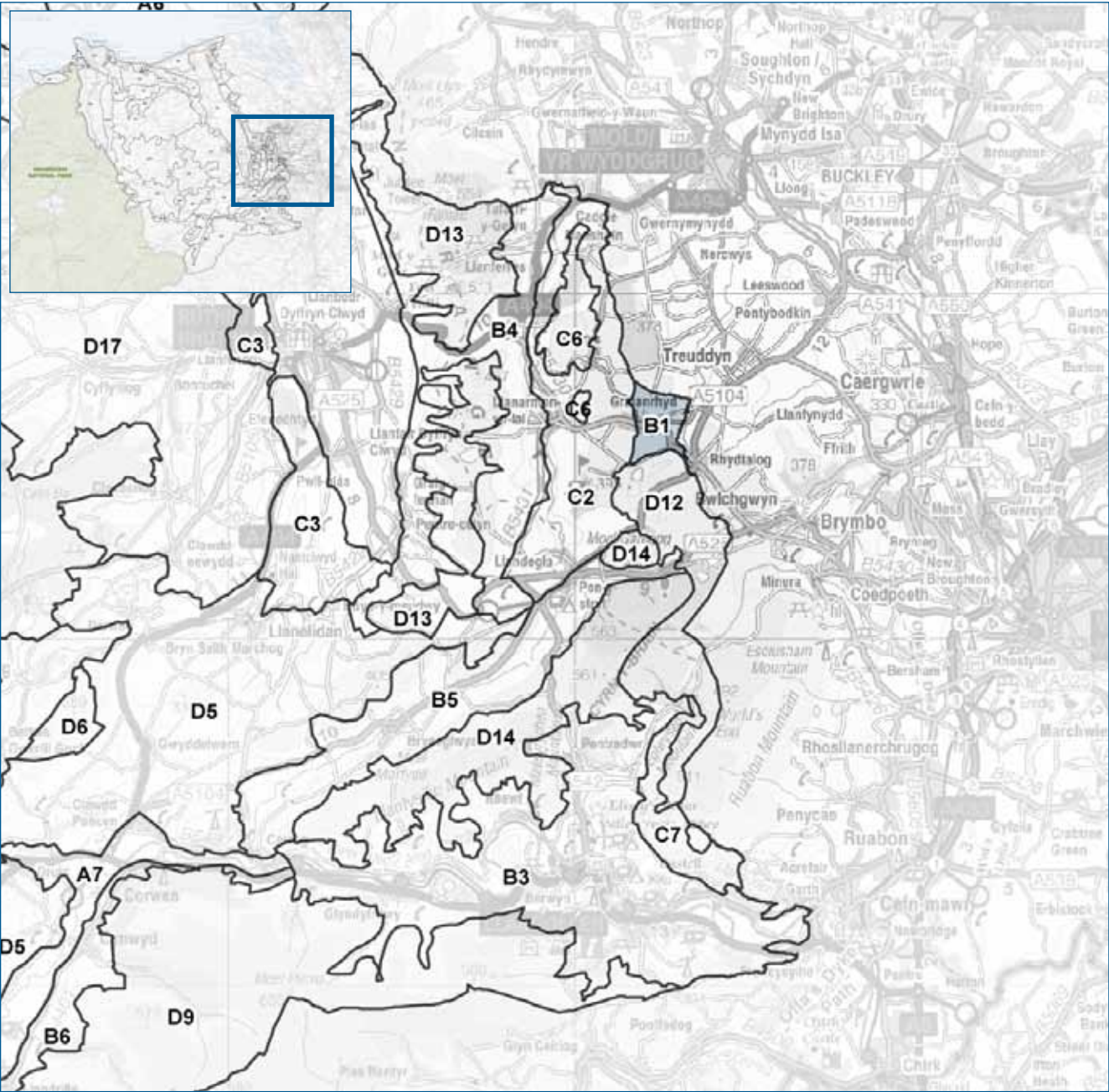
Visual	Intervisibility/Associations with Adjacent Landscapes	There is a strong association and intervisibility with Snowdonia National Park , with adjacent coastal landscapes including the Great Orme Headland and more distantly with Anglesey.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ Anglesey Coast AONB ▪ Great Orme and Creuddyn Peninsular SLA ▪ Great Orme Heritage Coast ▪ Open Access Areas ▪ Gogledd Arllechwedd (North Arllechwedd) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: Low / High VS47: Low / High VS48: Moderate / High		
	Remoteness / Tranquillity	Although the coastline is busy due to modern development and the A55, a short distance inland it rapidly becomes highly remote and tranquil. VS24: Smell; Tranquil; Exposed; Remote; Wild; Spiritual, Settled; Tranquil; Noisy; Exposed, Exposed, Unattractive		

Value	Landscape Value	Nationally designated features include Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas. Typical Moderate LANDMAP evaluation with some areas as Outstanding. VS50: Low / High VS49: <u>Low</u> / Moderate / High / Outstanding LH45: Low / <u>Moderate</u> / <u>High</u> / <u>Outstanding</u> LH42: Low / <u>Moderate</u> / <u>Outstanding</u> GL31: <u>Moderate</u> / High GL33: <u>Moderate</u> / High		
	Cultural Heritage Value	Much of this landscape unit lies within the Gogledd Arllechwedd (North Arllechwedd) Registered Historic Landscape. This landscape unit includes a Registered Park and Garden. Typical Moderate LANDMAP evaluation with some areas Outstanding. HL38: <u>Moderate</u> / High / Outstanding HL35: Low / <u>Moderate</u> / High / Outstanding HL40: Moderate / High		
	Summary of Sensitivity to Wind Energy Developments	This sensitivity of this dramatic coastal landscape is significantly increased by proximity to Snowdonia National Park and by its intervisibility with the Great Orme and Creuddyn Peninsular SLA and more distantly the Anglesey Coast AONB. The high cultural heritage value of the landscape further increases the overall sensitivity.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, RLCA 6 Snowdonia / Eryri and 7 Conwy Valley
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Units, as follows: 4 Conwy Estuary and 5 Great Orme Head to Puffin Island
- Countryside Council for Wales, Historic Landscapes Register 30 North Arllechwedd (HLW (Gw) 12)
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

B1 Gritstone Hills (Graianrhyd)



Location and Extent

This landscape unit is located to the east of the Clwydian Range on the eastern boundary of Denbighshire. This is a small part of the wider Gritstone Hills - a distinctive group of hills that extend beyond the boundary of this study.

Key Characteristics

- Medium scale landscape
- Scattered settlement

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

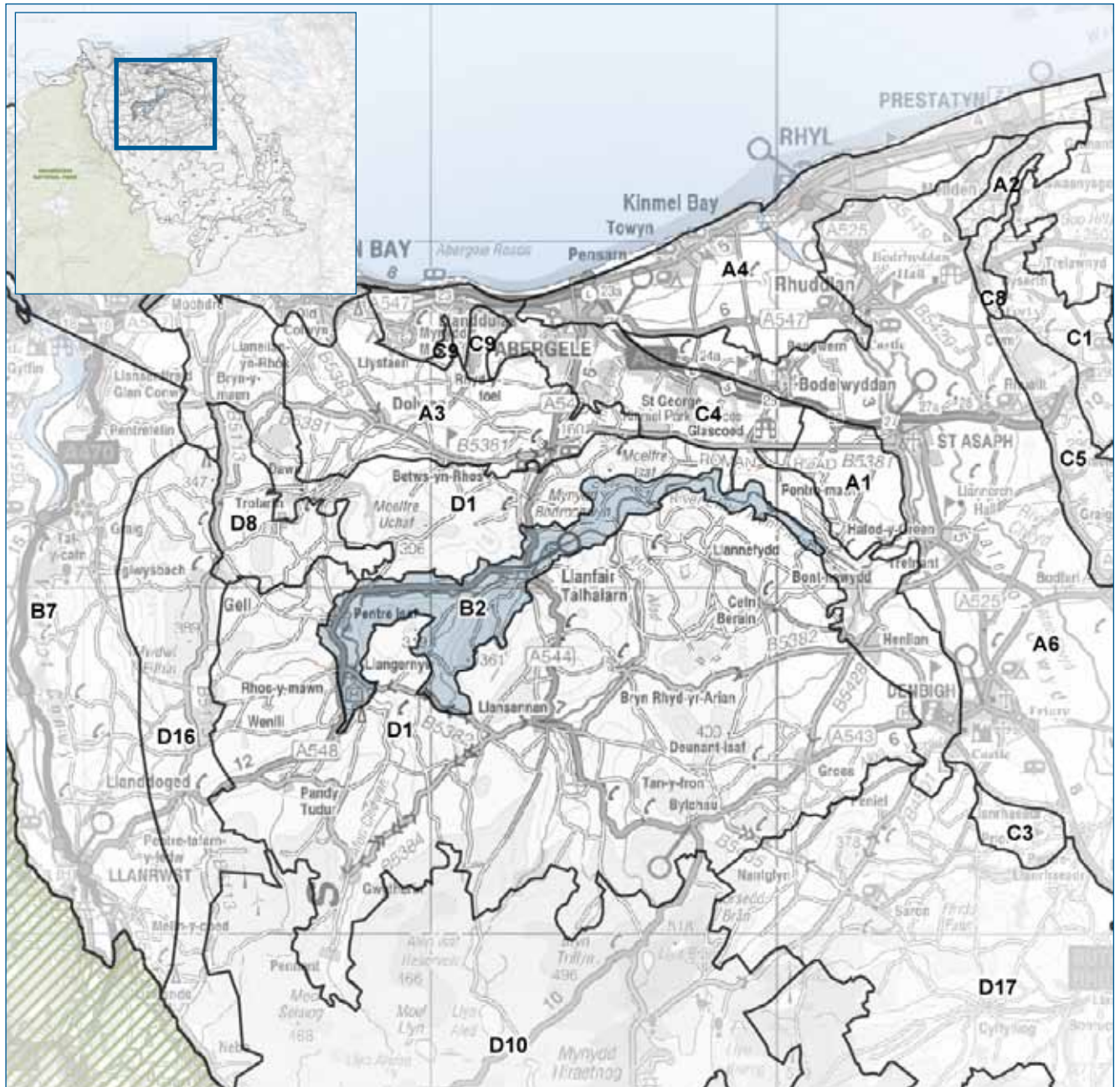
Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Gently undulating landform. VS4: <u>Levels</u> / Disturbed			
	Landcover Pattern	Landcover comprises a mosaic of pastures and broadleaved woodland . VS3: <u>Mosaic Upland & Plateaux</u> / Excavation / Hillside & Scarp Slopes Mosaic VS5: <u>Field Pattern/Mosaic</u> / Mixture / Development			
	Built Environment	Man-made influences include the local road network, scattered settlement pattern, pylon lines and quarrying activities. VS6: Scattered Rural/Farm VS27: Unassessed			
Visual	Skylines and Settings	This landscape unit is not seen as a skyline feature . Pylon lines interrupt skylines in places.			
	Movement	Infrequent road traffic and quarrying activities bring occasional movement to this relatively still landscape unit. VS18: <u>Infrequent</u> / Frequent			
	Visibility, Key Views, Vistas	Views are typically enclosed and filtered by landform and vegetation. There are some longer views to and from the Clwydian Range and Gritstone Hills. VS9: Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Scattered properties ▪ Open Access Areas in adjacent landscape units ▪ Local attractions and public rights of way ▪ The local road network			
	Intervisibility/Associations with Adjacent Landscapes	There is a strong association between this landscape unit and the Clwydian Range and Gritstone Hills.			
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas			

Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation with some areas Outstanding. VS46: Low / <u>Moderate</u> / Outstanding VS47: Low / <u>Moderate</u> VS48: Low / <u>Moderate</u> / Outstanding		
	Remoteness / Tranquillity	An attractive rural landscape unit with some modern development and human activity. The presence of a quarry lessens the sense of remoteness. VS24: <u>Attractive</u>; <u>Sheltered</u>; <u>Settled</u> / Unattractive; Noisy; Threatening; Other		
	Landscape Value	Part of this landscape unit is included within the Clwydian Range and Dee Valley AONB. Typical Moderate-High LANDMAP evaluation with some areas Outstanding. VS50: Low / <u>Moderate</u> / Outstanding VS49: <u>Moderate</u> / Outstanding LH45: Outstanding LH42: Outstanding GL31: Moderate / High GL33: Moderate / High		
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: Moderate / <u>Unassessed</u> HL35: Moderate / <u>Unassessed</u> HL40: Moderate / <u>High</u>		
	Summary of Sensitivity to Wind Energy Developments	This is a scenic, predominantly rural landscape comprising pastures and broadleaved woodlands punctuated by occasional man-made features. Parts of the area lie within the Clwydian Range and Dee Valley AONB which increases the overall sensitivity.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Gritstone Hills
- Regional Landscape Character Map for Wales, RLCA12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Area: Gritstone Hills (Code: D/LC/21)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

B2 Deep Valleys (Aled and Elwy)



Location and Extent

This landscape unit includes the valleys of the Rivers Aled and Elwy and is a distinct landscape located within the wider area of the rolling uplands of the Rhos Hills.

Key Characteristics

- Medium scale
- Valley topography with scattered farms

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. VS8: <u>Small/Medium</u>			
	Landform	Relatively narrow and deep , gently meandering river valleys . VS4: <u>Hills/Valleys / Levels</u>			
	Landcover Pattern	Landcover is characterised by a mosaic of woodland, open hillsides, grassland, pasture and scrub. VS3: <u>Hillside Scarp slopes grazing / Open lowland valleys / mosaic lowland valleys</u> VS5: <u>Field pattern/mosaic/Mixture</u>			
	Built Environment	Man-made influences are limited to the local road network and dispersed settlement pattern. VS6: <u>Scattered Rural/Farm</u> VS27: <u>Good/Fair</u>			
Visual	Skylines and Settings	The lower lying parts of this landscape unit are typically not seen as skyline features. The more elevated parts form prominent undulating skylines .			
Visual	Movement	Occasional road traffic brings infrequent movement to much of this landscape, although in the west the A548 is significantly busier. VS18: <u>Frequent/Infrequent/Occasional</u>			
	Visibility, Key Views, Vistas	Views to and from the valley floors and lower valley sides are contained by landform and vegetation. By contrast, there are extensive views from the higher valley sides out across the Rhos Hills to Snowdonia National Park and the Clwydian Range. VS9: <u>Open/Exposed/Enclosed</u>			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors of the following: ▪ Dispersed settlements ▪ Local attractions and public rights of way ▪ The local road network			
	Intervisibility/Associations with Adjacent Landscapes	Intervisibility with surrounding landscape units is dependent on local topography and vegetation cover. There are some views to and from Snowdonia National Park to the west and more limited views to and from the Clwydian Range to the east.			

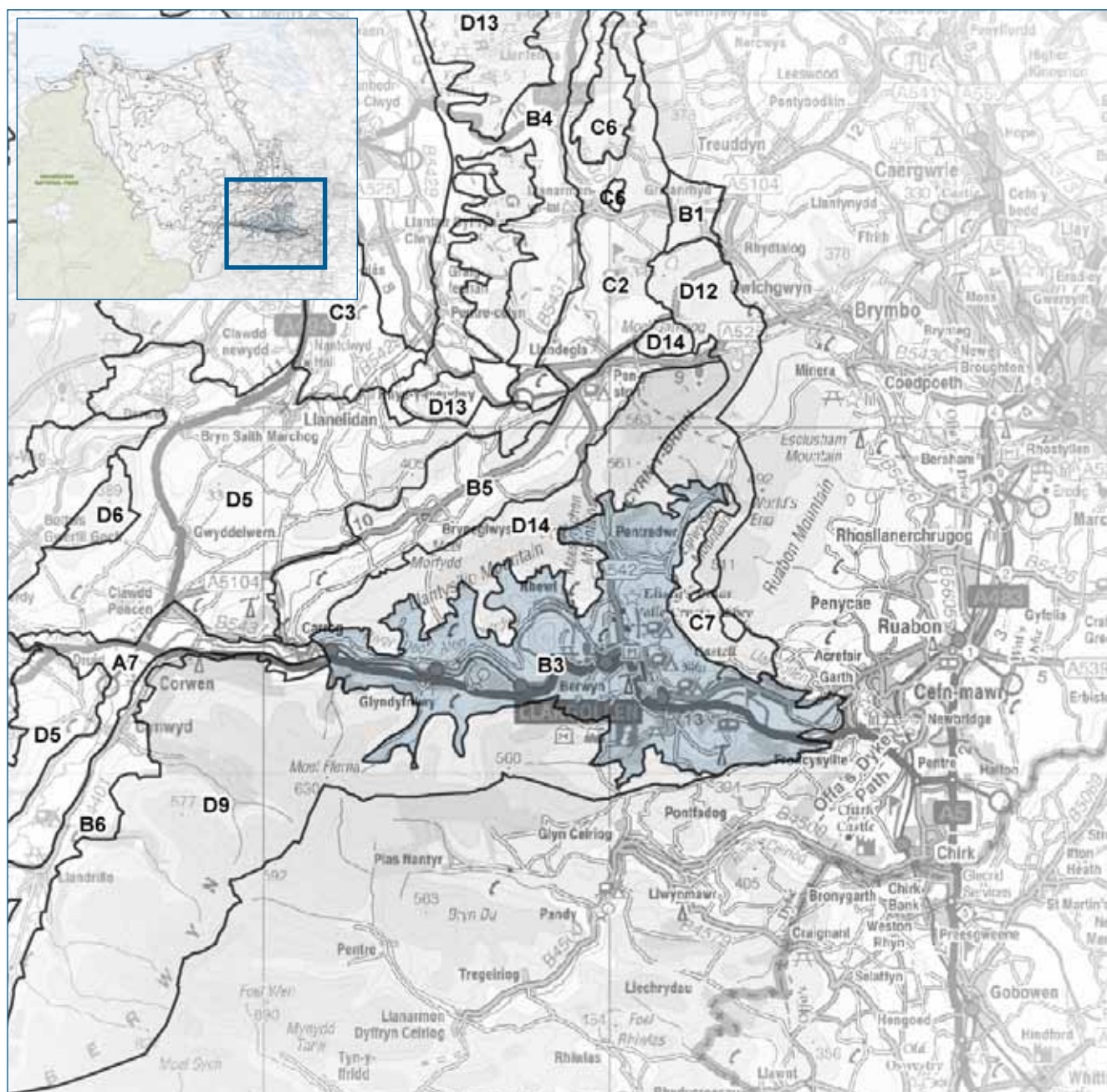
Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Elwy and Aled Valleys SLA ▪ Rhyd Y Foel to Abergele SLA ▪ Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape ▪ Registered Parks and Gardens ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: Moderate/<u>High</u> VS47: Moderate/<u>High</u> VS48: Moderate/<u>High</u>		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	Typically a tranquil and relatively remote rural landscape with occasional development and human activity, principally minor roads and dispersed settlements. VS24: <u>Attractive</u>; <u>Exposed</u>; <u>Wild</u>; <u>Remote</u> / <u>Attractive</u>; sheltered; Settled; Tranquil / Unattractive; Settled; <u>Attractive</u>; sheltered		
	Landscape Value	Much of this landscape unit is regionally designated as the Elwy and Aled Valleys SLA or Rhyd Y Foel to Abergele SLA. Typical High LANDMAP evaluation, with some areas Outstanding. VS50: Moderate/<u>High</u> VS49: Moderate/<u>High</u> LH45: Low/Moderate/<u>High</u>/Outstanding LH42: Low/Moderate/<u>High</u>/Outstanding GL31: <u>Moderate</u>/<u>High</u>/Outstanding GL33: <u>Moderate</u>/<u>High</u>/Outstanding		
Value	Cultural Heritage Value	Part of this landscape unit lies within Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. The area includes a number of Registered Parks and Gardens and a hillfort. Typical High LANDMAP evaluation, with some areas as Outstanding. HL38: Unassessed/Moderate/<u>High</u>/Outstanding HL35: Unassessed/Low/<u>Moderate</u>/<u>High</u>/Outstanding HL40: Moderate/<u>High</u>/Outstanding		

Summary of Sensitivity to Wind Energy Developments	The natural characteristics of these undeveloped, relatively remote and scenic river valleys with their mosaic of pasture, woodland and scrub impart a high degree of sensitivity and have resulted in much of the landscape unit being designated as the Elwy and Aled Valleys SLA or Rhyd Y Foel to Abergele SLA. This sensitivity is further enhanced by important cultural heritage features.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Deep Valleys
- Regional Landscape Character Map for Wales, 9 Rhos Hills
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 3 Aled and Elwy valleys
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

B3 Deep Valleys (Vale of Llangollen and Eglwyseg Valley)



Location and Extent

This area comprises the Vale of Llangollen.

Key Characteristics

- Distinctive highly scenic valley landscape
- Dramatic deep narrow valley
- Extensive cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. <i>VS8: <u>Medium</u> / Large</i>			
	Landform	Major river valley with distinct, deeply incised meanders and intricate side valley to the north. <i>VS4: <u>Hills/Valleys</u> / Levels (Llangollen)</i>			
	Landcover Pattern	Landcover is characterised by a diverse mosaic of grazing land, heathland, acid grassland, bracken, scrub and woodland (both broadleaved and coniferous). <i>VS3: <u>Mosaic Lowland Valleys</u> / Urban (Llangollen)</i> <i>VS5: <u>Mixture</u> / Development (Llangollen)</i>			
	Built Environment	This area is historically well settled , particularly along the valley floor with a major town and villages and scattered rural farms. The Dee Valley is an important road and rail communications route whilst Llangollen is an important tourism centre. Moving up the valley sides from the valley floor, settlement is much less frequent. <i>VS6: <u>Mixture</u> / Scattered Rural/Farm / Urban (Llangollen)</i> <i>VS27: Unassessed</i>			
Visual	Skylines and Settings	The skylines formed by the high hills and mountains which frame the Vale of Llangollen are distinctive and dramatic .			
	Movement	Movement is frequent at the bottom of the valley but the valley sides and side valleys are much quieter. <i>VS18: <u>Frequent</u> / Constant (Llangollen)</i>			
	Visibility, Key Views, Vistas	Visually contained along the valley floor, but with frequent open views to the valley sides and enclosing hills/ridgelines from tourist routes and attractions. <i>VS9: Enclosed</i>			

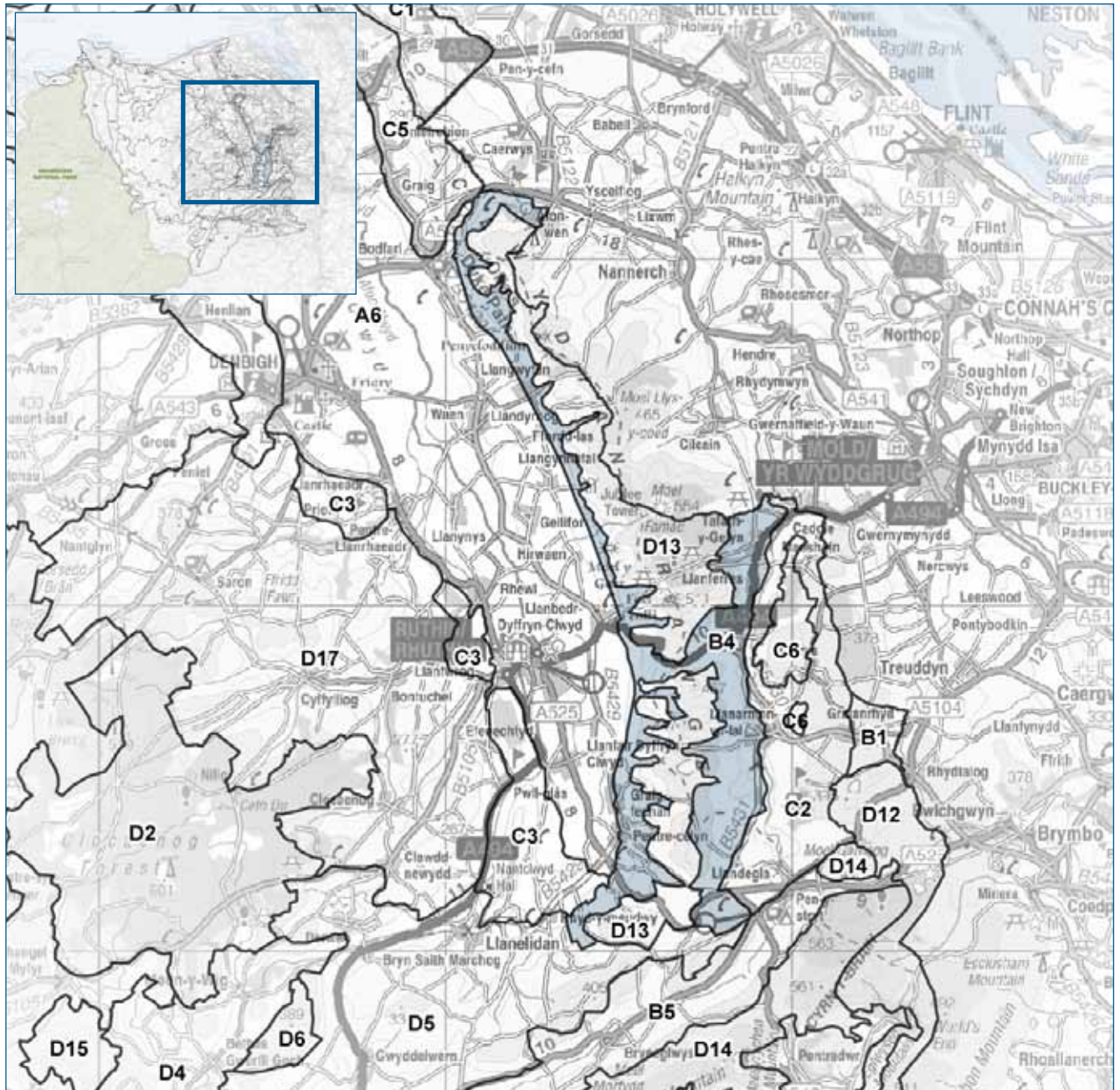
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Numerous properties particularly along the Dee Valley and including Llangollen ▪ Long distance routes including Offa's Dyke Path national trail, the Clwydian Way, Dee Valley Way and Llwybr Ceiriog Trail, North Berywn Way and Brenig Way ▪ Open Access Areas ▪ Local attractions, including the World Heritage Site, Valles Crucis Abbey, Castell Dinas Bran, Llangollen Railway, Canal, Eisteddfod and Llangollen town ▪ Public rights of way ▪ The A5 historic route and other scenic routes ▪ The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	The landform of this landscape unit creates a strong association with the immediately adjoining hills , there is significant inter-visibility between this unit and the adjacent enclosing Berwyn ridgeline, Llantysilio Mountain ridgeline and Eglwyseg outcrops.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Pontcysyllte Aqueduct & Canal World Heritage Site ▪ Open Access Areas ▪ Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscape ▪ Registered Parks and Gardens ▪ Valles Crucis Abbey ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High-Outstanding LANDMAP evaluation. VS46: <i>Outstanding / High (Llangollen)</i> VS47: <i>High / Moderate</i> VS48: <i>Outstanding / High (Llangollen)</i>		
	Remoteness / Tranquillity	Although the railway, canal and A5 historic route all run along the bottom of the valley, they do not dominate the landscape and the impression is one of a more tranquil and remote landscape than is actually the case. Tranquillity increases quickly with distance from the A5 and settlement along the valley floor. VS24: <i>Sheltered; Safe; Remote; Settled; Attractive / Exposed; Attractive; Tranquil; Remote; Settled / Attractive; Sheltered; Safe; Settled; Other</i>		

Value	Landscape Value	This landscape unit is entirely contained within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and Open Access Areas. Typical Outstanding LANDMAP evaluation. VS50: <i>Outstanding / High (Llangollen)</i> VS49: <i>Outstanding / High</i> LH45: <i>Outstanding / High / Moderate</i> LH42: <i>Outstanding / High / Moderate</i> GL31: <i>Outstanding / High / Moderate</i> GL33: <i>Outstanding / High / Moderate</i>		
	Cultural Heritage Value	Much of this landscape unit is designated as the Pontcysyllte Aqueduct & Canal World Heritage Site and Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Historic Landscape Typical Moderate-High LANDMAP evaluation with some Outstanding. HL38: <i>Low / Moderate / High / Outstanding / Unassessed</i> HL35: <i>Low / Moderate / High / Outstanding / Unassessed</i> HL40: <i>Low / Moderate / High / Outstanding</i>		
	Summary of Sensitivity to Wind Energy Developments	The natural characteristics of this distinctive and scenic river valley impart a high degree of sensitivity and have resulted in its designation within the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by the man-made features which have contributed to part of this area being internationally designated as Pontcysyllte Aqueduct & Canal World Heritage Site. The unit is very important to the World Heritage Site's setting. The A5 historic route, railway, canal and settlements influence tranquillity but only very locally and within some hillside views. The impression is more of a scenic valley landscape than a busy transport route. When combined with the high number of sensitive visual receptors, the overall sensitivity of this landscape is considered very high.	Very High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Deep Valleys
- Regional Landscape Character Map for Wales, 15 Vale of Llangollen and Dee Valley
- Countryside Council for Wales, Historic Landscapes Register, 40 Vale of Llangollen and Eglwyseg (HLW (C) 6)
- Denbighshire Landscape Strategy 2003, Character Area: Vale of Llangollen (Code: D/LC/41)
- Pontcysyllte Aqueduct & Canal World Heritage Site Supplementary Planning Guidance Note 26

B4 Hill Slopes (Clwydian Range Hill Slopes)



Location and Extent

This area comprises the lower slopes of the Clwydian Range to the west and east of the main Clwydian ridgeline.

Key Characteristics

- Medium scale upland landscape recognised for its scenic beauty
- Pastoral farmland
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. <i>VS8: Medium</i>			
	Landform	Gentle to moderately sloping hill slopes with steeper hill slopes to the east and with incised valleys. <i>VS4: Hills/Valleys</i>			
	Landcover Pattern	Typically a mosaic of pastoral farmland and open hillsides . <i>VS3: Hill & Lower Plateau Grazing / Hillside & Scarp Slopes Grazing / Hillside & Scarp Slopes Mosaic</i> <i>VS5: Field Pattern/Mosaic / Mixture</i>			
	Built Environment	Relatively sparse settlement pattern. Man-made influence is evident in the local road network, which often comprises sunken lanes. <i>VS6: Scattered Rural/Farm / Mixture</i> <i>VS27: Fair / Good / Unassessed</i>			
Visual	Skylines and Settings	This landscape is sometimes seen as a component of the distinctive and undulating Clwydian Range skyline .			
	Movement	The presence of occasional road traffic brings a small amount of movement to this landscape. <i>VS18: Frequent / Infrequent / Occasional</i>			
	Visibility, Key Views, Vistas	Views from localised high valleys are channelled and sometimes restricted by vegetation. However, far reaching views over intervening landscapes to Snowdonia National Park are afforded from some the western parts of this landscape unit. Open views towards Wrexham and the Dee Valley from elevated parts in the east of this landscape unit. <i>VS9: Enclosed</i>			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Dispersed properties - Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Brenig Way - Open Access Areas along the Clwydian Range and around the Vale of Llangollen and Berwyn Mountain - Loggerheads Country Park and other local attractions and public rights of way - The A55 tourist route - The local road network			

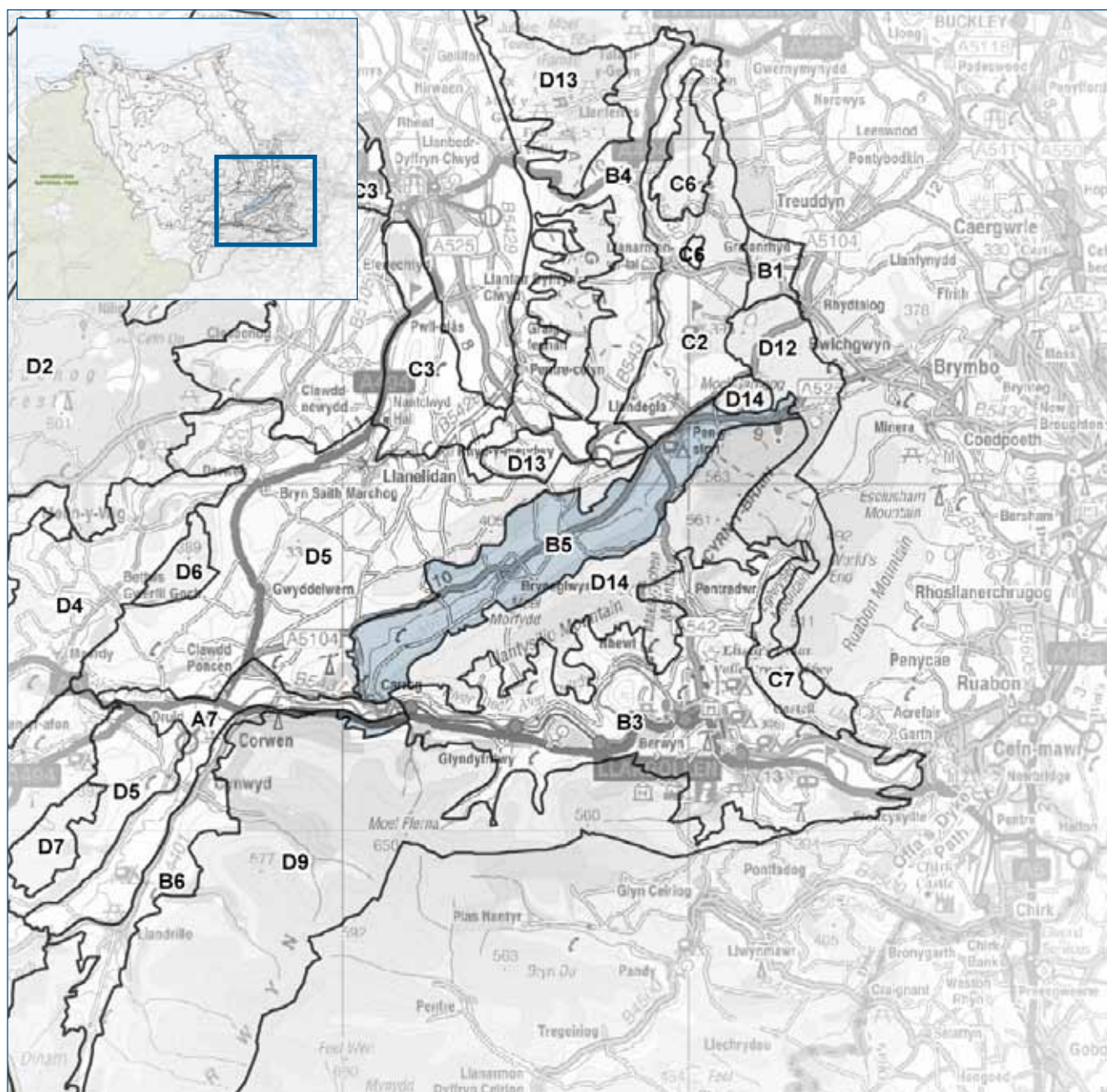
Visual	Intervisibility/ Associations with Adjacent Landscapes	This area has a strong association with the Vale of Clwyd and Denbigh – Ruthin uplands. Distant views to and from Snowdonia National Park to the west.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas along the Clwydian Range and around the Vale of Llangollen and Berwyn Mountain ▪ Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation with some areas Outstanding. <i>VS46: High / Outstanding</i> <i>VS47: Low / <u>Moderate</u> / High</i> <i>VS48: High / Outstanding</i>		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	This landscape unit is on the whole perceived to be a tranquil landscape. <i>VS24: Attractive; Exposed; Threatening; Wild; Spiritual / Attractive; Tranquil; Sheltered; Safe; Settled / Attractive; Sheltered; Safe; Settled</i>		
	Landscape Value	Most of this landscape unit lies within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail. The beauty of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. Typical High LANDMAP evaluation with some areas as Outstanding <i>VS50: High / Outstanding</i> <i>VS49: Moderate / High / Outstanding</i> <i>LH45: Low / <u>Moderate</u></i> <i>LH42: Low / <u>Moderate</u> / <u>High</u></i> <i>GL31: <u>Moderate</u> / High / <u>Outstanding</u></i> <i>GL33: Moderate / High / Outstanding</i>		
Value				

Value	Cultural Heritage Value	Much of the western slopes of this landscape unit lie within the Vale of Clwyd Registered Historic Landscape). The value of the historic and natural heritage of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. Typical Moderate-High LANDMAP evaluation. <i>HL38: Low / <u>Moderate</u> / <u>High</u> / Unassessed</i> <i>HL35: Moderate / High / Unassessed</i> <i>HL40: Low / <u>Moderate</u> / <u>High</u></i>		
Summary of Sensitivity to Wind Energy Developments		The natural characteristics of this sparsely settled, tranquil pastoral landscape impart a high degree of sensitivity and have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. The beauty and value of the historic and natural heritage of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. When combined with the sensitive visual receptors, including users of the A55 tourist route, the overall sensitivity of this landscape is considered very high.	Very High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Hill Slopes (including small section Deep Valleys to the north east)
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas: Clwydian Slopes West (Code: D/LC/17); Clwydian Slopes East (Code: D/LC/18); and Wheeler Valley (Code: D/LC/14).
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14
- Landscape Strategy Heather and Hillforts 2005

B5 Hill Slopes (Morwynion Valley)



Location and Extent

The Morwynion Valley is a high valley separating the upland ridge of Llantysilio Mountain to the south from the hills to the north.

Key Characteristics

- Medium scale high valley
- Agricultural landscape
- Scattered traditional settlement pattern

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Moderately sloping valley bounded by higher land to the north and south. VS4: Hills/Valleys			
	Landcover Pattern	Mainly farmland dominated by pasture . VS3: Open Lowland Valleys VS5: Field Pattern/Mosaic			
	Built Environment	This area has a scattered traditional settlement pattern . Modern developments include the A5104 and pylon lines. VS6: Mixture VS27: Fair			
Visual	Skylines and Settings	This landscape is rarely seen as a skyline feature . Pylon lines run along the length of the valley and occasionally punctuate the skyline when viewed from lower parts of the valley. Skylines in the adjacent upland areas are more prominent and provide a backdrop to the valley landscape.			
	Movement	The presence of traffic, in particular along the A5104 which runs along the length of the valley, bring frequent movement to this landscape. VS18: Frequent			
	Visibility, Key Views, Vistas	The valley is generally enclosed ; however open views are afforded to and from the adjoining uplands, including Llantysilio Mountain, Cynr-y-Brain and Moel Garegog and the southern end of the Clwydian Range. VS9: Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Dispersed settlements and properties - Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Brenig Way - Large tracts of Open Access Areas in adjacent landscape units - Local attractions and public rights of way - The local road network including the A5104			

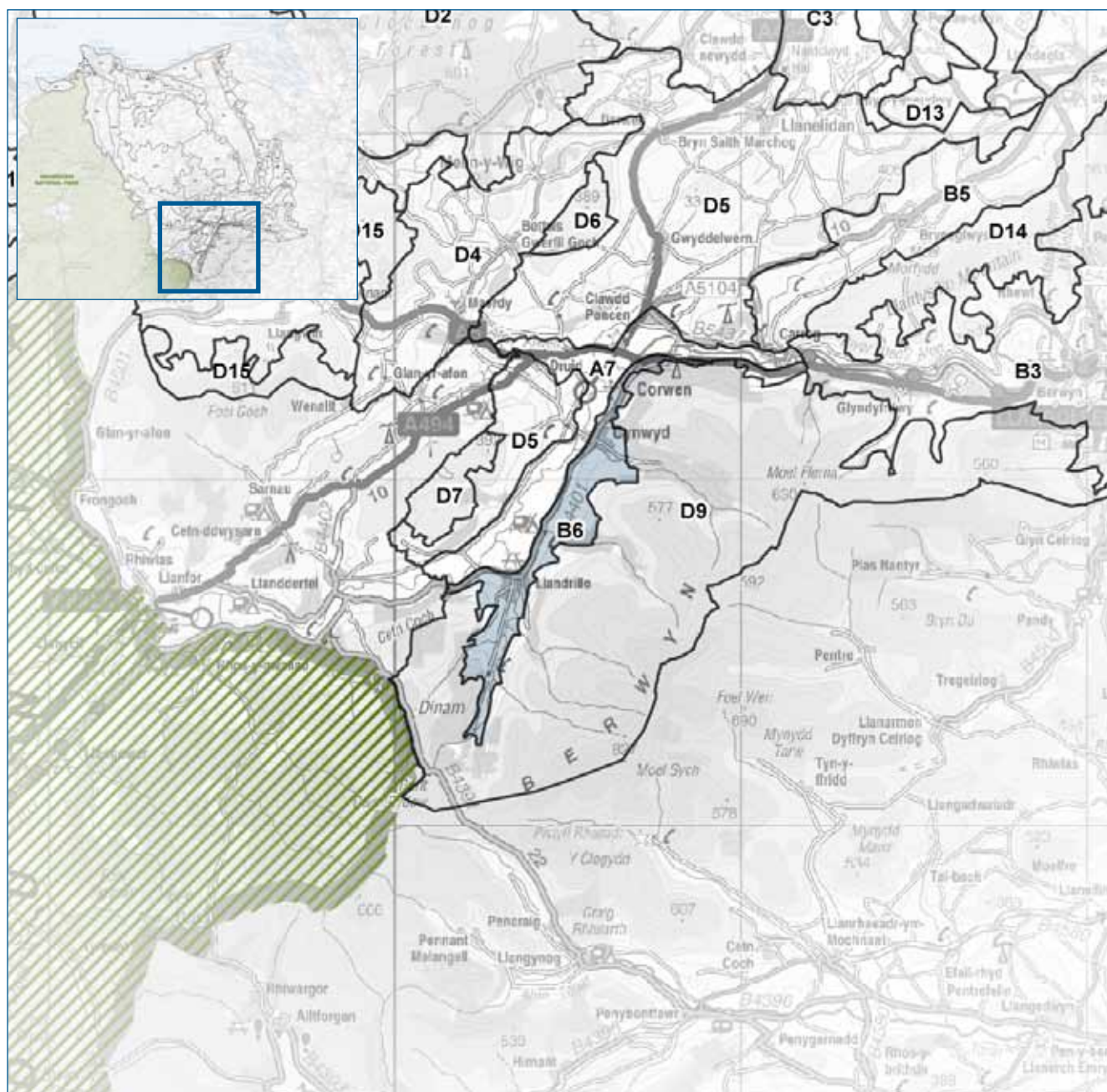
Visual	Intervisibility/ Associations with Adjacent Landscapes	There are strong associations and intervisibility between this and adjoining landscape units, in particular Llantysilio Mountain uplands which give the valley a strong sense of place. Longer distance views are restricted by landform.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and ▪ Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscapes ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: High VS47: Moderate VS48: High		
	Remoteness / Tranquillity	Although this area has relatively few settlements and is typically tranquil , the presence of a main road locally reduces the sense of remoteness and tranquillity . VS24: Attractive; Tranquil; Settled		
Visual	Landscape Value	Most of this landscape unit is contained within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail. Typical Moderate-High LANDMAP evaluation with some Outstanding . VS50: High VS49: Moderate LH45: Moderate LH42: Moderate GL31: Moderate / High / Outstanding GL33: <u>Moderate</u> / Outstanding		
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: Unassessed HL35: Unassessed HL40: Low / <u>Moderate</u>		

Summary of Sensitivity to Wind Energy Developments	The natural characteristics of this sparsely settled, mainly tranquil pastoral landscape impart a high degree of sensitivity and have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by proximity to important cultural heritage features in adjoining landscape units and significant intervisibility with Llantysilio Mountain. When combined with a number of sensitive visual receptors, including users of the A5104, the overall sensitivity of this landscape is considered high.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Hill Slopes
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Area: Morwynion Valley (Code: D/LC/31)

B6 Hill Slopes (Llandrillo Berwyn Hill Slopes)



Location and Extent

This area comprises the steep upland slopes of the Berwyn Mountains to the south of Corwen.

Key Characteristics

- Upland landscape
- Historic and scattered settlement pattern
- Mosaic of woodland and pasture

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Steeply sloping landform. VS4: Hills/Valleys			
	Landcover Pattern	A mosaic of woodland and pasture with numerous field and hedgerow trees. VS3: Hillside & Scarp Slopes Mosaic VS5: Field Pattern/Mosaic			
	Built Environment	This landscape is historically settled . The main man-made influences in this area are the B4401, scattered properties and small settlements. VS6: Scattered Rural/Farm VS27: Poor / Unassessed			
Visual	Skylines and Settings	This landscape is rarely seen as a skyline feature . Skylines to the west and north are occasionally punctuated by turbines.			
	Movement	Traffic, principally on the B4401, brings some movement into this landscape. VS18: <u>Infrequent</u> / Frequent / Constant (within settlements)			
	Visibility, Key Views, Vistas	Views are typically contained within the immediate valley. Turbines at Llyn Mynyllod and at Wern-ddu are locally visible from higher parts of these slopes. VS9: Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Dispersed settlements and individual properties - Long distance routes including the North Berwyn Way and Clwydian Way - Open Access Areas - Local attractions and public rights of way - The A5 historic route - The local road network			
	Intervisibility/ Associations with Adjacent Landscapes	The Berwyn Mountains form a large scale backdrop to this landscape unit. Longer views are restricted by landform.			

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Y Berwyn (Berwyn) Registered Historic Landscape ▪ Hillforts		
	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation with some areas Outstanding. VS46: <u>High</u> / Outstanding VS47: <u>Low</u> / High VS48: <u>High</u> / Outstanding		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	The presence of settlement and road traffic reduces the sense of remoteness in the area particularly to the north. The southern half of this landscape unit is more tranquil, although views of turbines lessen the sense of remoteness. VS24: Sheltered; Safe; Remote; Settled; Attractive / Attractive; Safe; Settled; / Sheltered; Settled; Other Noisy; Settled; Other		
	Landscape Value	Much of this landscape unit is contained within the Cynwyd and Llandrillo AOB. Typical Moderate-High LANDMAP evaluation with some Outstanding. VS50: <u>Moderate</u> / Outstanding VS49: <u>Moderate</u> / Outstanding LH45: Low / <u>Moderate</u> / High / Outstanding LH42: Low / <u>Moderate</u> / High / Outstanding GL31: <u>Moderate</u> / High / Outstanding GL33: <u>Moderate</u> / High / Outstanding		
Value	Cultural Heritage Value	Typical High LANDMAP evaluation. HL38: Moderate / <u>High</u> / Unassessed HL35: Moderate / <u>High</u> / Unassessed HL40: Low / Moderate / <u>High</u>		

Summary of Sensitivity to Wind Energy Developments	This is an attractive steeply sloping landscape of pastures and woodland with a high prevalence of individual trees. This combined with the presence of many highly sensitive receptors, the inclusion of much of this landscape unit in the Cynwyd and Llandrillo AOB, potential intervisibility with the Clwydian Range and Dee Valley AONB and important cultural heritage features increase the sensitivity to high.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Hill slopes
- Regional Landscape Character Map for Wales, 15 Vale of Llangollen and Dee Valley
- Denbighshire Landscape Strategy 2003, Character Area: Afforested Slopes (Code: D/LC/44)

B7 Conwy Valley



Location and Extent

This landscape unit comprises the valley of the River Conwy which flows north from the Migneint moor, through the town of Llanrwst to the estuary in Conwy town.

Key Characteristics

- Typically small to medium scale
- River valley floodplain and valley sides
- Cultural heritage interest
- Developed coastline

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower ⇌ Higher	
Landscape	Scale	Typically a small to medium scale landscape. VS8: Small / Medium		
	Landform	Distinctive broad and deep valley with a flat river floodplain and strongly undulating valley sides with gentle coastal slopes to the north. VS4: <u>Hills/Valleys</u> / Levels / Rolling/Undulating		
	Landcover Pattern	Landcover within the valley comprises a mosaic of woodland and pasture with a high prevalence of field and hedgerow trees. Modern development is concentrated in the far north of this landscape unit. VS3: <u>Hill & Lower Plateau Mosaic</u> / Open Lowland Valleys / Urban / Hill & Lower Plateau Grazing / Mosaic Rolling Lowland VS5: <u>Field Pattern/Mosaic</u> / Development / Water		
	Built Environment	Man-made influences are most evident to the north where the developed coastline includes the town of Conwy, the A55 tourist route and the North Wales Coast Railway. Other man-made influences include the A470 which runs down the valley, and several pylon lines that cross the valley east-west. Elsewhere, settlement is sparser and modern development much more limited . VS6: <u>Clustered</u> / Scattered Rural/Farm / Mixture / Urban / No settlements VS27: Fair / <u>Good</u>		
Visual	Skylines and Settings	The valley sides and bottom of the valley do not form skyline features; however the surrounding valleys sides rise to prominent undulating skylines .		
	Movement	Road traffic brings movement into this landscape. This is more frequent along the coast where most of the settlement and transport infrastructure is located . Traffic along the A470 brings movement along the valley. Other, more remote parts of the valley are more still in character . VS18: Occasional / <u>Infrequent</u> / <u>Frequent</u> / Constant		
	Visibility, Key Views, Vistas	There are some long views along the valley floor and from coastal areas. The higher valley sides afford open views to Snowdonia National Park and the Rhos Hills . VS9: Enclosed		

Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Numerous properties particularly in the north along the coast and including the town of Conwy ▪ Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5), the ▪ North Wales Path (part of the Wales Coast Path) ▪ Open Access Areas within Snowdonia Nation ▪ Many local attractions both along the coast and inland, including Conwy Castle and Bodnant Garden ▪ Public rights of way ▪ The A55 & A470 tourist routes to local and regional/national attractions such as Snowdonia National Park ▪ The North Wales Coast Railway ▪ The local road network ▪ Passing ships and ferries		
	Intervisibility/ Associations with Adjacent Landscapes	The Rhos Hills appear as a large scale backdrop in views from the valley to the east. There are some views to and from Snowdonia National Park which lies immediately to the west. Views are afforded to and from adjacent landscape units to the north along the coast including the Creuddyn Peninsular.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ Great Orme Heritage Coast ▪ Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site ▪ Conwy Valley SLA ▪ Great Orme and Creuddyn Peninsular SLA ▪ Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape ▪ Registered Parks and Gardens ▪ Open Access Areas within Snowdonia National Park ▪ Gwydir Castle and Gwydir Uchaf Chapel ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation with some Outstanding. VS46: Low / Moderate / <u>High</u> / Outstanding VS47: Low / Moderate / <u>High</u> / Outstanding VS48: Low / Moderate / <u>High</u> / Outstanding		
Aesthetic, Perceptual and Experiential				

Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	A sense of tranquillity and remoteness develops away from the developed and busy coastline. VS24: Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual / Attractive; Sheltered; Settled / Attractive; sheltered; Settled; Tranquil / Unattractive; Noisy; Settled (to the north)		
Value	Landscape Value	Most of this landscape unit is regionally designated as the Conwy Valley SLA. Nationally designated features also include Sustrans - North Wales Coast cycle route (NCN Route 5). Typical Moderate-High LANDMAP evaluation with some Outstanding. VS50: Low / Moderate / <u>High</u> / Outstanding VS49: Low / <u>High</u> / Outstanding LH45: Low / <u>Moderate</u> / High / Outstanding (immediate coastline) LH42: Low / <u>Moderate</u> / High / Outstanding GL31: <u>Moderate</u> / <u>High</u> / Outstanding GL33: Moderate / <u>High</u> / Outstanding		
	Cultural Heritage Value	Large areas of this landscape unit lie within Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscapes. The area also includes Registered Parks and Gardens and parts of the essential setting of Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. Typical Moderate-High LANDMAP evaluation, with some Outstanding. HL38: Low / Moderate / <u>High</u> / Outstanding HL35: Low / <u>Moderate</u> / High / Outstanding HL40: Low / Moderate / <u>High</u> / Outstanding		
Summary of Sensitivity to Wind Energy Developments		This distinctive valley landscape with its mosaic of pastures, woodlands and individual trees is attractive and for the most part tranquil, which has resulted in its regional designation as an SLA. This, combined with its association with the Rhos Hills and intervisibility with Snowdonia National Park and the Great Orme and Creuddyn Peninsular SLA, as well as some important cultural heritage features including Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site and Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscapes increase the sensitivity to high.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, 7 Conwy Valley and 9 Rhos Hills
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit 4 Conwy Estuary
- Countryside Council for Wales, Historic Landscapes Register 22 Lower Conwy Valley (HLW (Gw) 4)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 6 Conwy Valley
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

C1 Trelawnyd Plateau



Location and Extent

This landscape unit comprises an elevated limestone plateau to the northern end of the Clwydian Range, running along the north eastern boundary of Denbighshire.

Key Characteristics

- Large scale open plateau
- Pastoral farmland
- Forms part of the Clwydian Range

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale landscape VS8: Large		
	Landform	Gently rolling landscape on an elevated limestone plateau. VS4: Levels		
	Landcover Pattern	Predominantly pastoral fields. VS3: Open Rolling Lowland VS5: Field Pattern/Mosaic		
	Built Environment	Scattered rural properties are linked by a few minor roads. Man-made influences are most evident around the A55 and A5151 road corridors. VS6: Scattered Rural/Farm VS27: Unassessed		
Visual	Skylines and Settings	Skylines within this landscape unit are simple and relatively uninterrupted. The distinctive skylines of the Clwydian Hills form an immediate and frequently seen backdrop to the unit, with Snowdonia National Park forming a distant skyline within occasional views.		
	Movement	Traffic along the local road network brings some movement into this landscape; there is more frequent movement along the A55 and A5151. VS18: Infrequent / Frequent		
	Visibility, Key Views, Vistas	This landscape is typically open with expansive views across the Clwydian Range. Panoramic views are afforded over the area from Gop Hill and Clwydian Range to the west where long ranging views extend well to the east; and from above Dyserth include distant views of Snowdonia National Park in the west. VS9: Open		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Dispersed properties - Long distance routes including Offa's Dyke Path national trail and the Clwydian Way - Small Open Access Areas to the north west - Local attractions and public rights of way - The A55 tourist route and other well used roads such as the A5151 - The local road network		

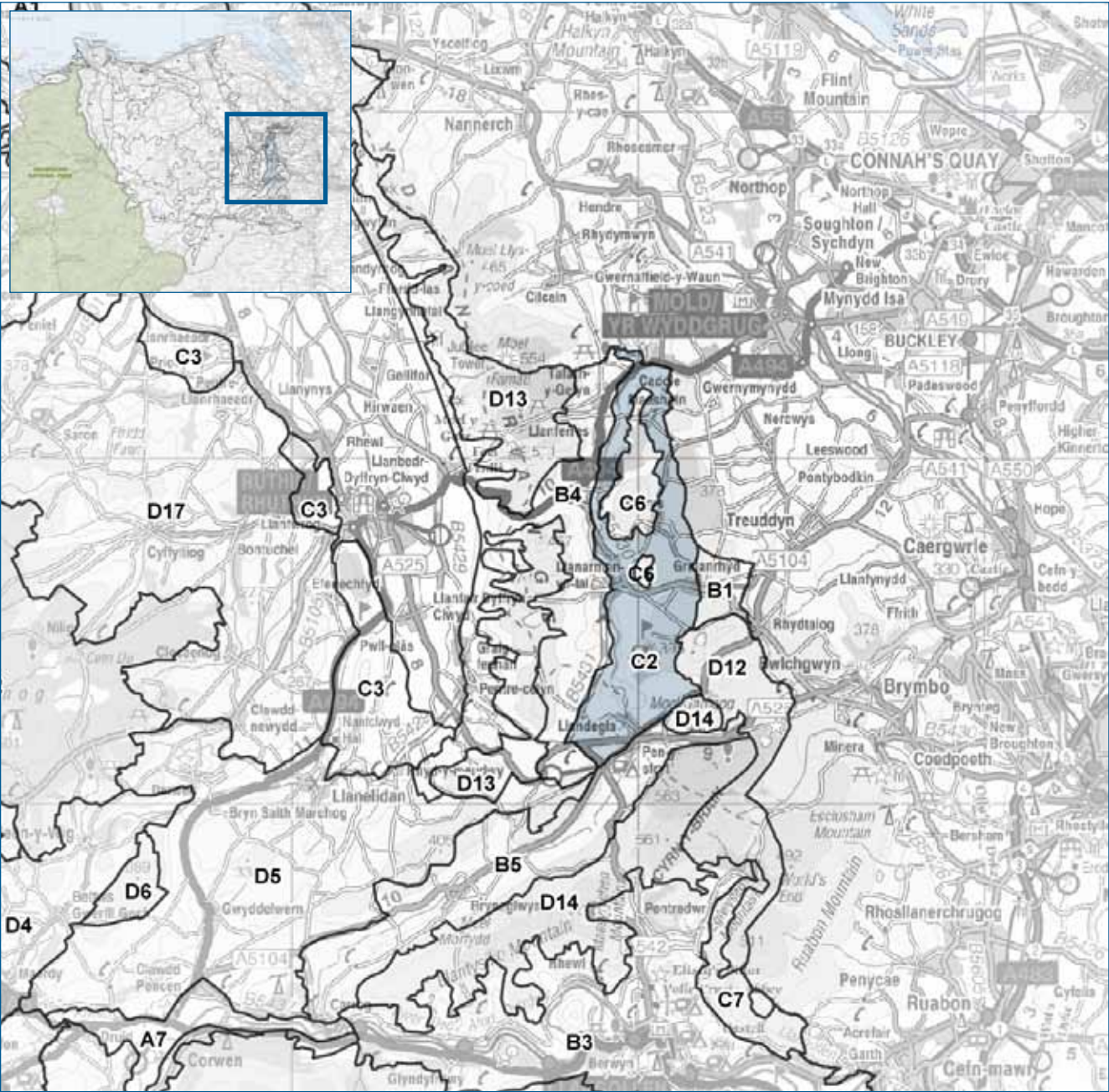
Visual	Intervisibility/ Associations with Adjacent Landscapes	This upland landscape has a strong visual association with the rest of the Clwydian Range .		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Small Open Access Areas to the north west of this landscape unit ▪ Registered Parks and Gardens ▪ Hillforts and hill top monuments		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: Moderate VS47: Moderate VS48: Moderate / <u>High</u>		
	Remoteness / Tranquillity	The presence of settlement and the road network lessens the sense of remoteness around the A55 and A5151 road corridors. Elsewhere the landscape appears more remote and tranquil. VS24: Attractive; Exposed; Settled; Spiritual / Attractive; Settled / Attractive; Tranquil; Sheltered; Exposed		
Value	Landscape Value	Parts of this landscape unit are included within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and a small part of an Open Access Area to the north west. Typical Low-Moderate LANDMAP evaluation with some Outstanding . VS50: Moderate VS49: <u>Moderate</u> / High LH45: <u>Low</u> / Outstanding LH42: <u>Low</u> / High GL31: <u>Low</u> / Moderate / Outstanding GL33: <u>Moderate</u> / Outstanding		
	Cultural Heritage Value	The area includes part of a hillfort. Typical Moderate LANDMAP evaluation with some areas Outstanding . HL38: Moderate / High / <u>Unassessed</u> HL35: High / Outstanding / <u>Unassessed</u> HL40: <u>Moderate</u> / High		

Summary of Sensitivity to Wind Energy Developments	Although the large scale gently rolling landform and movement along the road corridors lessens the sensitivity of this landscape unit to wind energy development, this is counterbalanced by part of the area's designation within the Clwydian Range and Dee Valley AONB and intervisibility with the more distant Snowdonia Park. Overall this landscape has a high sensitivity.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Trelawnyd Plateau
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Area: Trelawynd Plateau (Code: D/LC/5)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

C2 Limestone Farmlands (Llandegla to Maeshafn)



Location and Extent

This landscape unit comprises an upland area of limestone farmland to the east of the Clwydian Range.

Key Characteristics

- Medium to large scale
- Upland limestone landscape
- Undulating farmland

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Medium to large scale landscape VS8: Medium / Large		
	Landform	Landform is strongly undulating . VS4: Hills/Valleys / High Hills/Mountains		
	Landcover Pattern	Wooded hillside and complex mosaic of outcrops, woodland and fields. A golf course also covers a part of this landscape unit. VS3: Wooded Hillside & Scarp Slopes / Hillside & Scarp Slopes Mosaic VS5: Field Pattern/Mosaic / Mixture		
	Built Environment	A rural landscape with small dispersed settlements and individual farms and cottages linked by a network of minor lanes. Two quarries have limited local influence and one pylon line crosses the very south eastern extremity of the landscape unit. VS6: Scattered Rural/Farm VS27: Unassessed		
Visual	Skylines and Settings	This landscape is rarely seen as a skyline feature due to the surrounding higher hills, the majority of which form distinctive skylines in the backdrop of views from this landscape unit.		
	Movement	Local traffic introduces some infrequent movement into the landscape. VS18: Infrequent		
	Visibility, Key Views, Vistas	Visibility is restricted in some places by landform and woodland; however, there are far ranging views from more open and elevated parts (such as Moel Findeg). Moel Famau Jubilee Tower forms a distant focal point along the Clwydian Ridge. VS9: Open / Enclosed		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Dispersed settlements - Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Brenig Way - Open Access Areas - Loggerheads Country Park and other local attractions including Moel Famau Jubilee Tower - Public rights of way - The local road network		

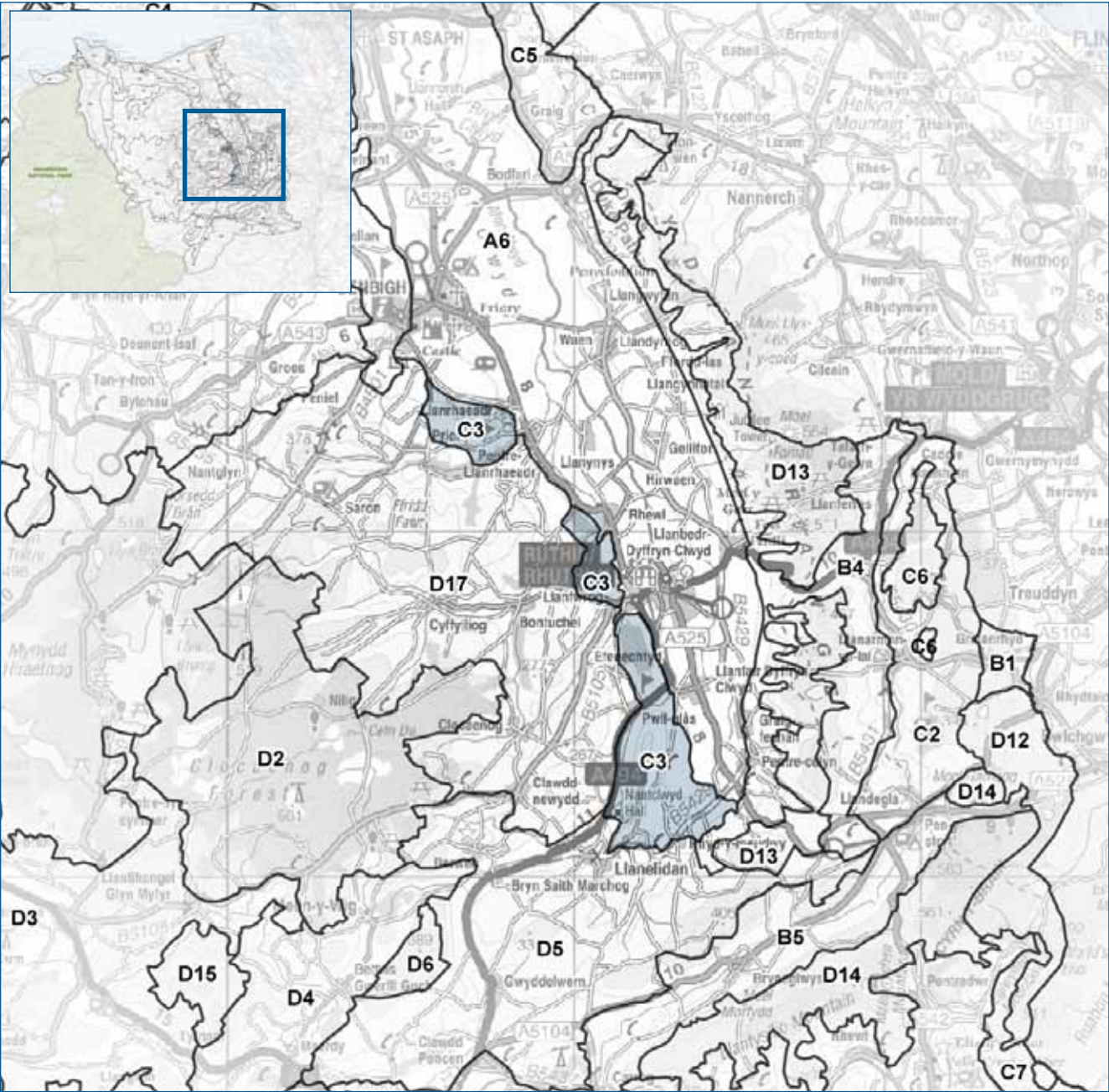
Visual	Intervisibility/ Associations with Adjacent Landscapes	Intervisibility between this landscape unit and the adjacent upland landscapes of the Clwydian Range, Llantysilio Mountain, Bryn Alyn and Moel Gareog is significant . These uplands form distinctive skylines and contain views from the unit; there are many opportunities for long distant views to and from these areas. Landform and woodland within the unit screen views in places.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Offa's Dyke Path national trail. ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscapes ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High-Outstanding LANDMAP evaluation. VS46: High / <u>Outstanding</u> VS47: Moderate VS48: High / <u>Outstanding</u>		
	Remoteness / Tranquillity	The sense of remoteness and tranquillity varies across the area . There are some distinct pockets of remoteness and tranquillity, which in other places are reduced by the presence of settlement, the road network and quarrying. VS24: Attractive; Sheltered; Exposed; Settled / Attractive; Sheltered; Safe; Settled; Other / Attractive; Remote; Settled; Wild		
Value	Landscape Value	Much of this landscape unit lies within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail. Typical High-Outstanding LANDMAP evaluation with some areas Outstanding . VS50: Low / High / <u>Outstanding</u> VS49: Outstanding LH45: Moderate / <u>Outstanding</u> LH42: High / <u>Outstanding</u> GL31: Moderate / High GL33: Moderate / High		

Value	Cultural Heritage Value This area includes a Registered Park and Garden. Typical Moderate LANDMAP evaluation with a small area of Outstanding value. HL38: Moderate / <u>Unassessed</u> HL35: Moderate / <u>Unassessed</u> HL40: <u>Moderate</u> / <u>High</u> / Outstanding	
Summary of Sensitivity to Wind Energy Developments	Although movement along the road corridors and quarrying activities locally lessen the sensitivity of this landscape unit to wind energy development, this is counterbalanced by much of it being designated within the Clwydian Range and Dee Valley AONB and by its high number of sensitive visual receptors and intervisibility with important cultural heritage features. The overall sensitivity is considered high. However, the complex limestone and woodland areas west and north of Llandegla and views to the Clwydian Range and Dee Valley AONB raise the sensitivity of these parts of the area to very high.	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Limestone hills and Valleys – Loggerheads and Eryrys (Code: D/LC/19); and Limestone Rocks and Woods South of Graianrhyd (Code: D/LC/20).
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

C3 Limestone Farmlands (West of the Vale of Clwyd)



Location and Extent

This landscape unit comprises some well wooded landscapes which lie to the west of the Vale of Clwyd and extending south from Denbigh, past Ruthin to Llanfyllin.

Key Characteristics

- Medium scale
- Low undulating farmland and mixed woodland
- Extensive woodland cover

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Low lying undulating landscape becoming more rolling to the west and south of the Vale of Clwyd. VS4: Hills/Valleys / <u>Rolling/Undulating</u>			
	Landcover Pattern	Mosaic of farmland, including pastures and extensive woodland cover, including estate woodlands and designed parklands. VS3: Wooded Hill & Lower Plateau / Mosaic Lowland Valleys / Hillside & Scarp Slopes Grazing VS5: Field Pattern/Mosaic / Woodland			
	Built Environment	Man-made influence is evident in the form of a dense dispersion of individual properties which are linked by minor roads. VS6: Scattered Rural/Farm / Village VS27: Fair / <u>Unassessed</u>			
Visual	Skylines and Settings	This landscape is rarely seen as a skyline feature . The large scale prominent skyline of the Clwydian Range in the east provides a distinctive backdrop in views from this landscape unit.			
	Movement	Local traffic introduces infrequent movement into much of this landscape. VS18: <u>Infrequent</u> / Constant			
	Visibility, Key Views, Vistas	Open views from higher ground, however most views are contained and filtered by the high prevalence of woodland. VS9: Open / Enclosed (woodland)			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Dispersed properties - Long distance routes including Offa's Dyke Path National Trail, the Hiraethog Trail, Brenig Way and the Clwydian Way - Open Access Areas along the Clwydian Range - Local attractions and public rights of way - The local road network			
	Intervisibility/ Associations with Adjacent Landscapes	Open views are afforded to adjacent landscape units from open areas of higher ground. Elsewhere, views out tend to be limited and filtered by the woodlands. There are some views into this landscape unit particularly from the Clwydian Range and Vale of Clwyd to the east.			

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas along the Clwydian Range ▪ Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape ▪ A number of Registered Parks and Gardens ▪ Hillforts		
	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: Moderate / <u>High</u> VS47: <u>Moderate</u> / High VS48: High		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	There is a strong sense of tranquillity particularly in the northern parts of this landscape unit; however the presence of settlement and the road traffic locally reduces the sense of remoteness. VS24: Attractive; Tranquil; Safe; Settled / Attractive; Sheltered; Settled / Attractive; Safe; Settled; Spiritual		
	Landscape Value	Typical High LANDMAP evaluation with some areas evaluated as Outstanding. VS50: Moderate / <u>High</u> VS49: Moderate / High LH45: <u>Moderate</u> / High / Outstanding LH42: <u>Moderate</u> / High / Outstanding GL31: Moderate / <u>High</u> GL33: Moderate / <u>High</u>		
Value	Cultural Heritage Value	Part of this landscape unit lies within Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape. The area also includes a number of Registered Parks and Gardens. Typical High LANDMAP evaluation with some areas Outstanding. HL38: High / Unassessed HL35: High / Unassessed HL40: Low / <u>High</u> / Outstanding		

Summary of Sensitivity to Wind Energy Developments	This is a medium scale undulating/rolling landscape of pastures with extensive woodland cover. It is attractive and for the most part tranquil. A high number of sensitive receptors, the presence of nationally designated cultural heritage features and the strong association with the Clwydian Range and Dee Valley AONB also serve to increase the sensitivity of this landscape to high.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 11 Vale of Clwyd
- Countryside Council for Wales, Historic Landscapes Register 1 The Vale of Clwyd (HLW (C) 1)
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Woodlands South of Ruthin (Code: D/LC/22); and Denbigh and Ruthin Hills (Code: D/LC/23).

C4 Limestone Farmlands (Abergele to Denbigh Coastal/Vale hills)



Location and Extent

This landscape unit comprises land which runs from Colwyn Bay and Abergele, south past Henllan, to Denbigh.

Key Characteristics

- Medium scale, rolling landscape
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Typically a rolling landscape with some prominent limestone ridges in the central area. VS4: <u>Rolling/Undulating</u> / Plateau / Levels / Hills/ Valleys			
	Landcover Pattern	Mosaic of pastures and woodland, including estate woodlands and designed parklands. VS3: <u>Mosaic Rolling Lowland</u> / Urban / Wooded Lowland Valleys VS5: <u>Field Pattern/Mosaic</u> / Woodland / Mixture / Urban			
	Built Environment	The coastline along the northern part of this landscape unit around Colwyn Bay and Abergele is densely settled . Man-made influence is evident in the road system, including the A55 tourist route, the North Wales Coast Railway, quarries and pylon lines which punctuate the skyline south of the B5831. Elsewhere the landscape becomes more rural in character with a settlement pattern dispersed along a network of minor lanes. VS6: No Settlements / <u>Scattered Rural/Farm</u> / Village / Urban VS27: Fair / Good / <u>Unassessed</u>			
Visual	Skylines and Settings	The Clwydian Range forms rolling skylines to the east of this landscape unit. Denbigh Castle is a prominent skyline feature . To the north west, the limestone escarpment and hills at Llanddulas create more complex and distinctive skylines . Skylines in the central section of this landscape unit are interrupted by pylon lines.			
	Movement	The presence of traffic on the local road network brings frequent movement into this landscape, particularly around the larger settlements and along the coastline. Away from the settlements and roads movement is less frequent . VS18: <u>Infrequent</u> / <u>Frequent</u> / Constant			
	Visibility, Key Views, Vistas	Views are typically enclosed by landform and vegetation , although there are some more open and extensive views from areas of higher land and along the coast. VS9: Enclosed			

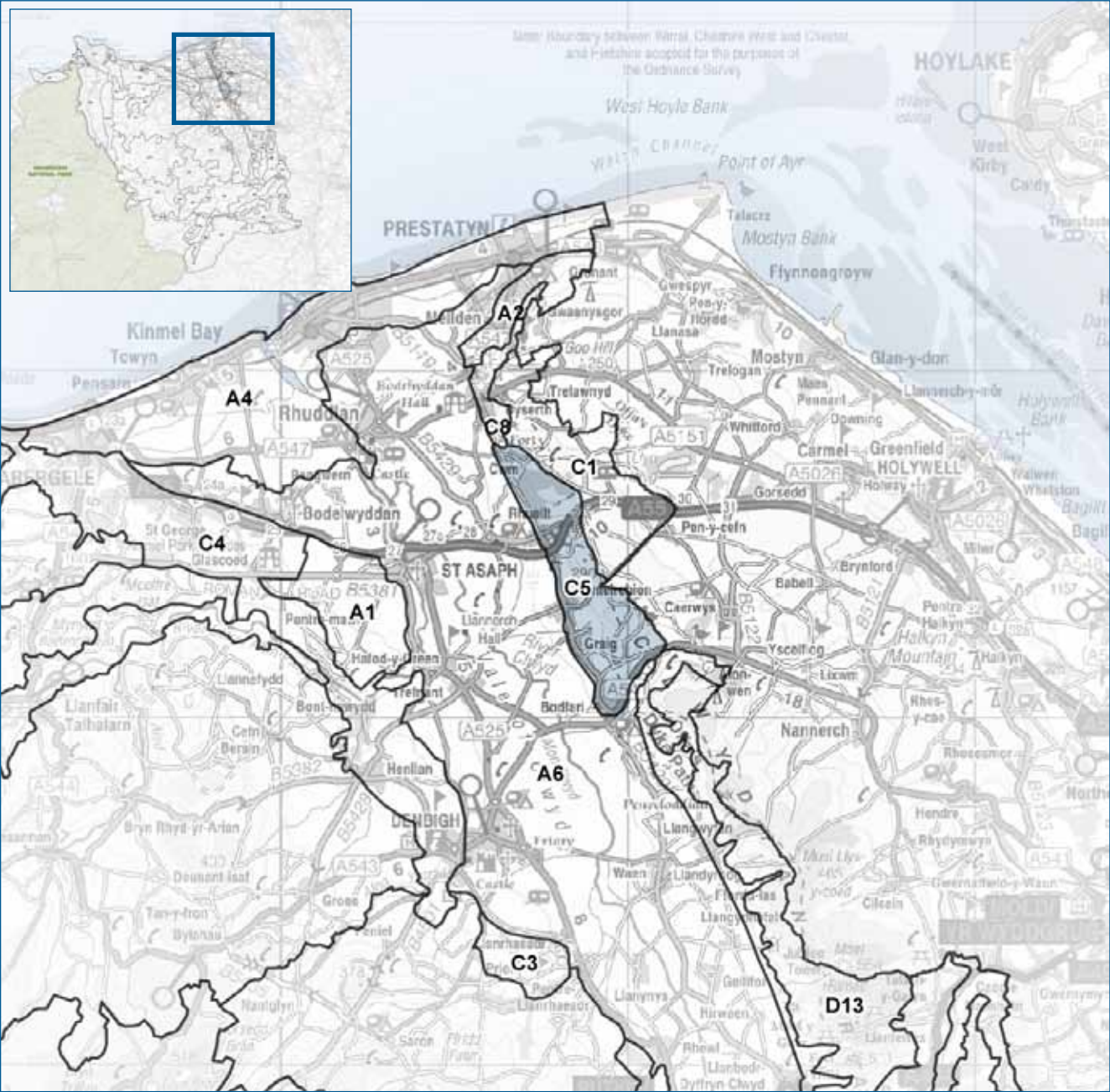
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Numerous properties particularly along the coast and including Colwyn Bay and Abergele - Long distance routes including the Sustrans - North Wales Coast cycle route (NCN Route 5), North Wales Path (part of the Wales Coast Path) and the Clwydian Way - Open Access Areas to the west of Abergele - Local attractions and public rights of way - The A55 tourist route and North Wales Coast Railway - The local road network			
	Intervisibility/Associations with Adjacent Landscapes	Part of this landscape unit comprises a line of hills which are significant in forming the visual backdrop and skyline to the settled coastal plain. Views are typically limited by landform and vegetation; however, more open long distance views out to adjacent landscape units are afforded from areas of higher land and along the coastline.			
	Views to and from Important Landscapes and Cultural Heritage Features	These include: - The Clwydian Range and Dee Valley AONB - Rhyd Y Foel to Abergele SLA - Open Access Areas to the west of Abergele - Registered Parks & Gardens - Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape - Denbigh Castle - The Marble Church (St Margaret's Church, Bodelwyddan) - Hillfort			
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: Low / <u>Moderate</u> / <u>High</u> VS47: Low / <u>Moderate</u> / High VS48: Moderate / High			
	Remoteness / Tranquillity	Away from the developed and busy coastline, the sense of tranquillity increases. VS24: Attractive; Sheltered; Settled / Attractive; Sheltered; Safe; Settled / Unattractive; Noisy; Settled			

Value	Landscape Value	Part of this landscape unit lies within the regionally designated Rhyd Y Foel to Abergele SLA. Nationally designated features include Sustrans - North Wales Coast cycle route (NCN Route 5) and small parts of Open Access Areas to the west of Abergele. Typical Moderate-High LANDMAP evaluation with some areas evaluated as Outstanding. VS50: Low / <u>Moderate</u> / <u>High</u> VS49: Low / Moderate / High LH45: Low / <u>Moderate</u> / High / Outstanding LH42: Low / <u>Moderate</u> / High / Outstanding GL31: Moderate / High / Outstanding GL33: Moderate / High / Outstanding		
	Cultural Heritage Value	Parts of this landscape unit lie within Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes. This area includes Registered Parks & Gardens and a hillfort. Typical Moderate-High LANDMAP evaluation with some Outstanding. HL38: Low / Moderate / <u>High</u> / Outstanding / <u>Unassessed</u> HL35: Low / Moderate / High / Outstanding / Unassessed HL40: Low / Moderate / High / Outstanding		
	Summary of Sensitivity to Wind Energy Developments	The combination of distinctive limestone topography, pastures, woodland and designed landscapes impart a high degree of sensitivity and have resulted in part of the area being regionally designated as the Rhyd Y Foel to Abergele SLA. This sensitivity is further enhanced by proximity to important cultural heritage features. When combined with some sensitive visual receptors, including users of the A55 and North Wales Coast Railway the overall sensitivity of this landscape is considered high.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline and 9 Rhos Hills
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Welsh Seascapes and their Sensitivity to Offshore Developments, No: 2 Regional Seascape Unit Name: Point of Ayr to Colwyn Bay
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd Y Foel to Abergele
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Bodelwyddan and Kimnel Park (Code: D/LC/9); Limestone Ridge and Valleys (Code: D/LC/10); and Denbigh Plateau (Code: D/LC/11)

C5 Limestone Farmlands (Northern Clwydian Range)



Location and Extent

This landscape unit comprises the northern end of the Clwydian Range and extends from the Wheeler Gap at Bodfari northwards to Dyserth near the coast.

Key Characteristics

- Medium scale
- Ridgeline of hills and valleys

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	Landform comprises a series of north-south orientated ridges and valleys . VS4: <u>Hills/Valleys</u> / Levels			
	Landcover Pattern	Mosaic of sloping, mainly pastoral fields with some heathland and a high prevalence of woodland. VS3: <u>Hillside & Scarp Slopes Mosaic</u> / Barren/ Rocky Upland / Urban VS5: Development / Woodland / Field Pattern/ Mosaic			
	Built Environment	The main man-made element is the A55 which runs in a deep cutting through the area. There are few settlements other than scattered farms and rural properties and some small, often historic villages . VS6: Urban / Mixture / <u>Scattered Rural/Farm</u> VS27: Poor / Good / <u>Unassessed</u>			
Visual	Skylines and Settings	This landscape unit forms a prominent skyline at northern end of the Clwydian Range.			
	Movement	The A55 is a busy road but its influence is limited by its location in cutting . Movement within the rest of this landscape unit is much less frequent . VS18: Occasional / <u>Infrequent</u> / Constant			
	Visibility, Key Views, Vistas	Views are variable depending on landform and vegetation. From the higher ridgelines there are some extensive views across adjoining landscape units. VS9: Open / <u>Enclosed</u>			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Historic villages and dispersed properties - Long distance routes including Offa's Dyke Path national trail and the Clwydian Way - Open Access Areas along the Clwydian Range - Local attractions and public rights of way - The A55 historic route - The local road network			
	Intervisibility/ Associations with Adjacent Landscapes	This landscape unit has a strong association with the Vale of Clwyd and Rhos Hills uplands to the west.			

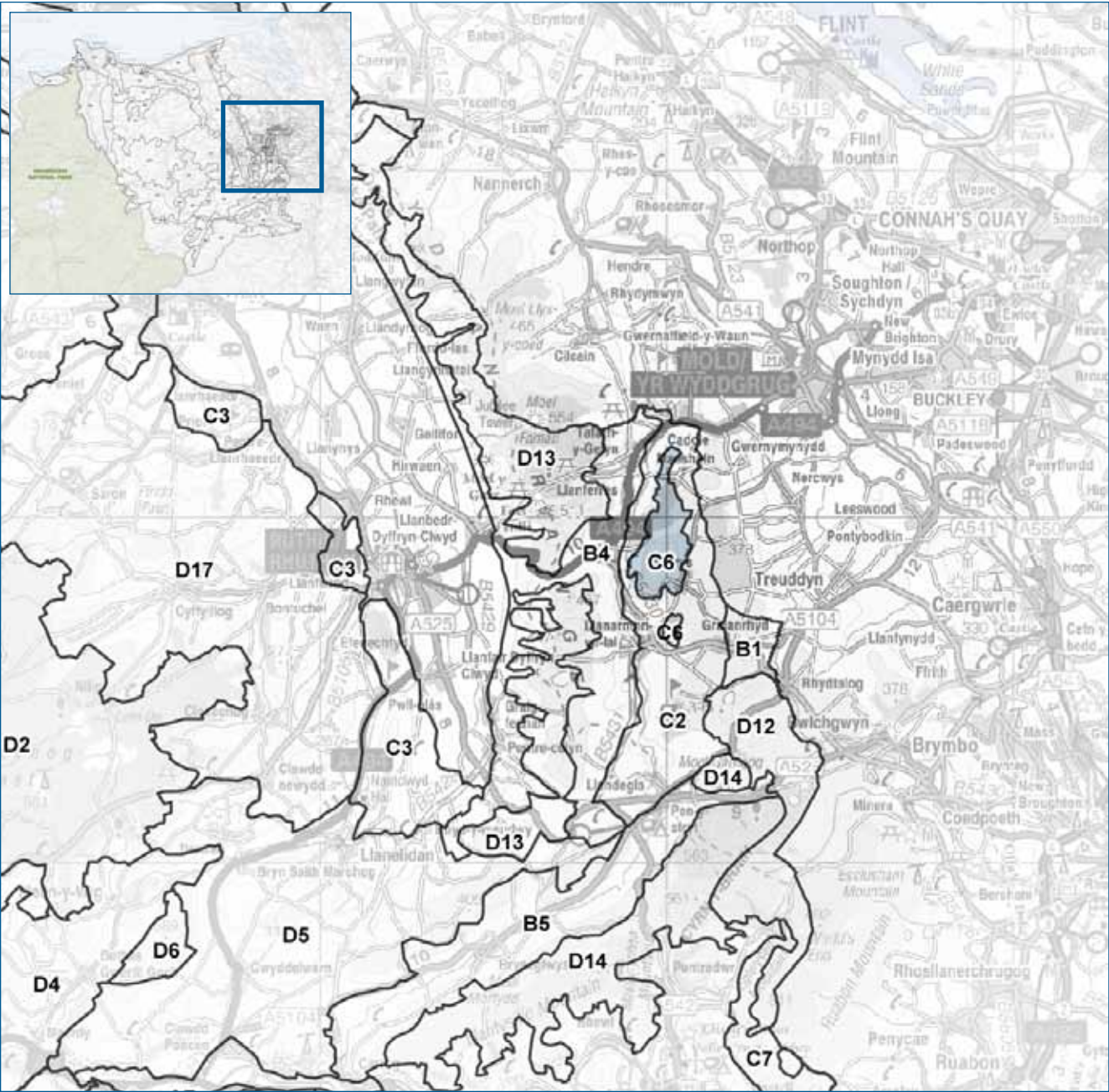
Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas along the Clwydian Range ▪ Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape ▪ Registered Parks and Gardens ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High-Outstanding LANDMAP evaluation. VS46: Low / High / <u>Outstanding</u> VS47: Low / <u>High</u> / Outstanding VS48: Moderate / High / <u>Outstanding</u>		
	Remoteness / Tranquillity	Away from the A55, the lack of settlement and man-made influences impart a sense of remoteness and tranquillity. VS24: Attractive; Tranquil; Exposed; Remote; Spiritual / Attractive; Tranquil; Sheltered; Exposed		
	Landscape Value	This landscape unit lies entirely within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and a small Open Access Area just south of the A55. Typical High LANDMAP evaluation with some Outstanding. VS50: Low / High / <u>Outstanding</u> VS49: High / <u>Outstanding</u> LH45: <u>Low</u> / Moderate / High / Outstanding LH42: <u>Low</u> / Moderate / High / Unassessed GL31: Moderate / High / <u>Outstanding</u> GL33: Moderate / High / <u>Outstanding</u>		
	Cultural Heritage Value	Approximately a third of this landscape unit lies within Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape. Typical High LANDMAP evaluation with some areas Outstanding. HL38: Moderate / High / Unassessed HL35: Low / Moderate / High / Outstanding / Unassessed HL40: Moderate / High / Outstanding		

Summary of Sensitivity to Wind Energy Developments	The natural characteristics of this sparsely settled, mainly tranquil pastoral landscape impart a high degree of sensitivity and have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by its intervisibility with adjoining high value landscapes and by its cultural heritage value. When combined with some sensitive visual receptors, including users of the A5 historic route the overall sensitivity of this landscape is considered very high.	Very High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Clwydian Hills North (Code: D/LC/12); and Graig, Tremeirchion (Code: D/LC/13).
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

C6 Limestone Escarpment and Hills (Bryn Alyn – Maeshafn Escarpment)



Location and Extent

This landscape unit comprises a prominent group of upland hills which lie to the east of the Clwydian Range, just north of Llanarmon-yn-Ial.

Key Characteristics

- Large scale upland hills
- Limestone outcrops and scarp slopes

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale landscape VS8: Large		
	Landform	Limestone outcrops and scarp slopes which are particularly prominent at Bryn Alyn. VS4: <u>High Hills/Mountains</u> / Disturbed		
	Landcover Pattern	Mosaic of pasture and woodland , the former being mainly on the open hill tops and higher land with woodland in the valleys and on the lower slopes. VS3: <u>Hillside & Scarp Slopes Mosaic</u> / Disturbed VS5: <u>Mixture</u> / Development		
	Built Environment	Man-made influences are typically limited to small settlements, scattered rural properties and farms which tend to be found on the lower lying slopes on the outer edges of this landscape unit. A large quarry is present but mostly hidden from view by landform and vegetation is also present. VS6: <u>Scattered Rural/Farm</u> / No Settlements VS27: Unassessed		
Visual	Skylines and Settings	This landscape unit forms a prominent local skyline feature due to the complex and distinctive character of the exposed rock outcrops, open hill tops and scarp slopes. The dramatic skyline of the Clwydian Range to the west is also visible as a backdrop to some outward views		
	Movement	Infrequent traffic on the local road network brings some movement into this otherwise tranquil landscape. VS18: <u>Infrequent</u> / Frequent		
	Visibility, Key Views, Vistas	Open views are afforded to and from the higher parts of this landscape unit. In particular views are afforded to prominent landforms associated with the Clwydian Range. Views into and out of the lower areas are typically restricted by vegetation and landform. VS9: <u>Open</u> / Enclosed		

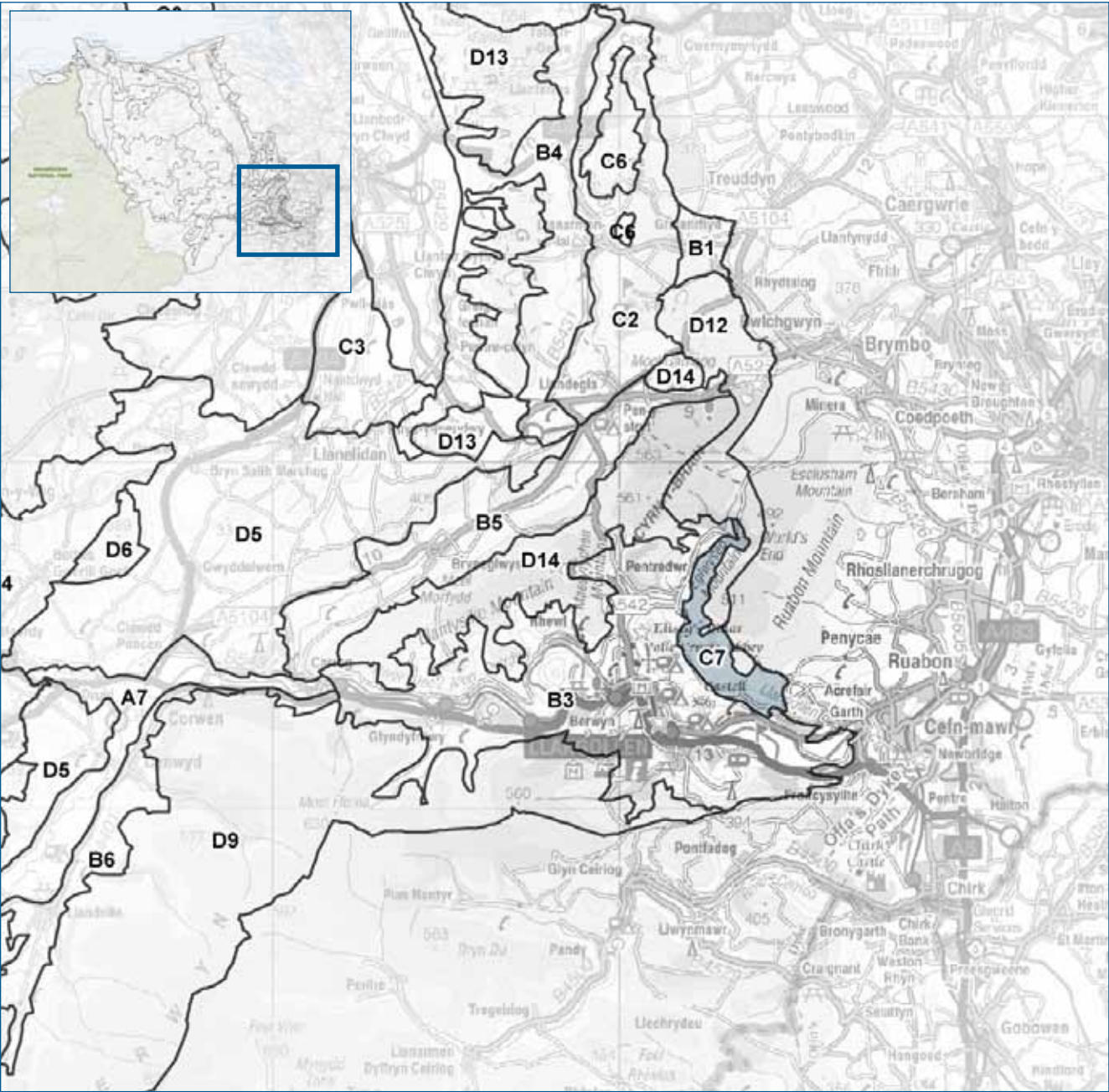
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Small settlements and dispersed properties particularly on the lower lying slopes ▪ Long distance routes including Offa's Dyke Path national trail and the Clwydian Way ▪ Open Access Areas along the Clwydian Range and within this landscape unit ▪ Local attractions and public rights of way ▪ The local road network		
	Intervisibility/Associations with Adjacent Landscapes	Due to the open and elevated nature of this landscape unit, there is a strong association and good intervisibility with the surrounding landscape units (primarily the Clwydian Range).		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas ▪ Vale of Clwyd Registered Historic Landscape ▪ Registered Parks and Gardens ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation with some areas Outstanding. VS46: Moderate / <u>Outstanding</u> VS47: Low / <u>Moderate</u> VS48: Moderate / <u>Outstanding</u>		
	Remoteness / Tranquillity	This landscape unit is mainly tranquil except for in the immediate vicinity of the quarry. The higher slopes away from settlement and roads have a sense of remoteness. VS24: Attractive; Remote; Settled; Wild / Unattractive; Noisy; Threatening / Attractive; Sheltered; Safe; Settled		
Value	Landscape Value	This landscape unit lies entirely within the Clwydian Range and Dee Valley AONB. Nationally designated features also include an Open Access Area to the north of the landscape unit. Typical High-Outstanding LANDMAP evaluation. VS50: Low / <u>Outstanding</u> VS49: Low / <u>Outstanding</u> LH45: Outstanding LH42: Outstanding GL31: High GL33: High		

Value	Cultural Heritage Value	Typical Moderate-High LANDMAP evaluation. HL38: Moderate / High / <u>Unassessed</u> HL35: Moderate / <u>Unassessed</u> HL40: <u>High</u> / Moderate	
Summary of Sensitivity to Wind Energy Developments		The natural characteristics of this sparsely settled, distinctive group of limestone hills impart a high degree of sensitivity and have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by its complex skylines and intervisibility with adjoining high value landscapes. When combined with some sensitive visual receptors the overall sensitivity of this landscape is considered very high.	Very High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Area: Limestone hills and Valleys – Loggerheads and Eryrys (Code: D/LC/19)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

C7 Limestone Escarpment and Hills (Eglwyseg Escarpment)



Location and Extent

This landscape unit comprises the prominent and dramatic upland landscape of limestone cliffs and screes of the Eglwyseg Rocks at the western edge of the Ruabon Moors and Ruabon Mountain upland plateau.

Key Characteristics

- Large scale
- Dramatic upland landscape of limestone cliffs and screes
- Significant cultural heritage and geomorphological interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale landscape. VS8: Large		
	Landform	Upland landscape comprising steep slopes, limestone outcrops, screes and cliffs . An upland plateau extends eastwards from the top of the cliffs. VS4: <u>Plateau</u> / Hills/Valleys		
	Landcover Pattern	Hill and scarp slopes with a mosaic of woodland and pasture and some upland moorland and open land with unenclosed grazing. VS3: <u>Upland Moorland</u> / Hillside & Scarp Slopes Mosaic VS5: <u>Open Land</u> / Field Pattern/Mosaic		
	Built Environment	Notable absence of settlement or other man-made influences. VS6: <u>No Settlements</u> / Scattered Rural/Farm VS27: <u>Fair</u> / Unassessed		
Visual	Skylines and Settings	This landscape unit forms a prominent and complex skyline when viewed from areas to the north and west.		
	Movement	A lack of movement gives this landscape a still character . VS18: <u>Occasional</u> / Frequent		
	Visibility, Key Views, Vistas	Extensive views to and from the higher slopes of this landscape unit, particularly to the north and west. VS9: Enclosed		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional very dispersed properties - Long distance routes including Offa's Dyke Path national trail - Open Access Areas both within this and adjoining landscape units - Local attractions and public rights of way - The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	There is a strong association and good intervisibility with the surrounding landscape units, particularly with the Vale of Llangollen.		

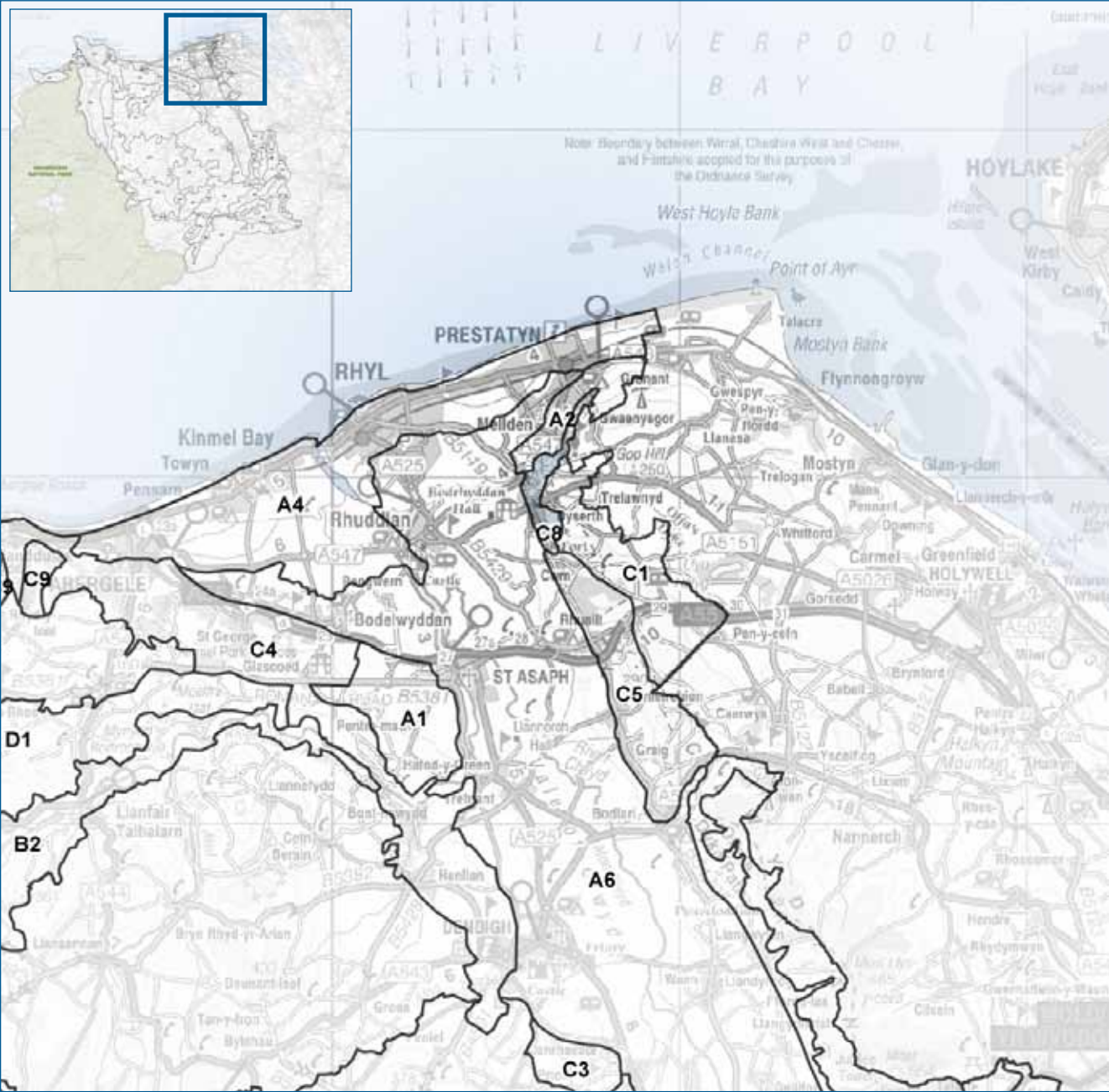
Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Pontcysyllte Aqueduct & Canal World Heritage Site ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscapes ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation with some areas Outstanding. VS46: <u>High</u> / Outstanding VS47: Moderate / <u>High</u> VS48: <u>High</u> / Outstanding		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	The lack of settlement or other man-made influences give this area a strong sense of remoteness and tranquillity, which in places can be quite wild in character. VS24: Attractive; Exposed; Threatening; Remote; Wild; Spiritual / Attractive; Sheltered; Safe; Settled		
	Landscape Value	This landscape unit lies entirely within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and some large Open Access Areas. Typical High-Outstanding LANDMAP evaluation. VS50: <u>High</u> / Outstanding VS49: <u>Moderate</u> / High LH45: Outstanding LH42: High / Outstanding GL31: Outstanding GL33: Outstanding		
Value	Cultural Heritage Value	Much of this landscape unit lies within Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscape, whilst its southernmost section lies within the designated buffer zone of the Pontcysyllte Aqueduct & Canal World Heritage Site. Typical High LANDMAP evaluation. HL38: <u>High</u> / Unassessed HL35: <u>High</u> / Unassessed HL40: Moderate / <u>High</u>		

Summary of Sensitivity to Wind Energy Developments	The spectacular and dramatic limestone cliffs which comprise much of this landscape unit have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by its complex skylines and intervisibility with adjoining high value landscapes. When combined with the presence of important cultural heritage features, including the buffer zone of the Pontcysyllte Aqueduct & Canal World Heritage Site and some sensitive visual receptors, the overall sensitivity of this landscape is considered very high.	Very High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Farmlands
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Countryside Council for Wales, Historic Landscapes Register 40 Vale of Llangollen (HLW (C) 6)
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Ruabon Moors (Code: D/LC/36); and Eglwyseg Rocks (D/LC/39).
- Pontcysyllte Aqueduct & Canal World Heritage Site Supplementary Planning Guidance Note 26

C8 Limestone Escarpment and Hills (Prestatyn - Dyserth Hillside)



Location and Extent

This landscape unit comprises a distinctive group of limestone hills between Prestatyn and Dyserth along the eastern edge of the Vale of Clwyd.

Key Characteristics

- Medium scale
- Prominent landscape feature
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape VS8: Medium			
	Landform	Limestone outcrops and scarp slopes. VS4: <u>Hills/Valleys</u> / Levels			
	Landcover Pattern	Landcover comprises a mosaic of hill slopes, scarp slopes, woodland, pasture and open hill tops. VS3: <u>Hillside & Scarp Slopes Mosaic</u> / Urban / Mosaic Rolling Lowland VS5: <u>Woodland</u> / Development			
	Built Environment	Man-made influences include settlements around the base of the hills and a disused quarry at Dyserth. There is less evidence of man-made influences on the higher slopes. VS6: <u>Mixture</u> / Urban / Scattered Rural/Farm VS27: Poor / Fair / <u>Good</u>			
Visual	Skylines and Settings	These hills form prominent and distinctive skylines when viewed from the large areas of the coastline and the northern end of the Vale of Clwyd and also from Trelawnyd Plateau.			
	Movement	Movement along the hill tops and higher slopes is restricted to pedestrian access only. The lower slopes are busier due to traffic on the local road network. VS18: <u>Infrequent</u> / Constant			
	Visibility, Key Views, Vistas	Expansive views out to sea and westwards over coastal areas to Snowdonia National Park and over the Trelawnyd Plateau, in particular from the viewpoint at Graig Fawr. VS9: Open			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Many properties around the base of the hills - Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), the Clwydian Way, North Wales Path (part of the Wales Coast Path) and the Dyserth Cycleway - Open Access Areas within this landscape unit - Local attractions including Graig Fawr and public rights of way - The A55 tourist route. - The local road network			

Visual	Intervisibility/Associations with Adjacent Landscapes	This landscape unit has a strong association with both adjacent and more distant landscapes , including Snowdonia National Park. There is good intervisibility with the sea, the coastal fringe and the northern end of the Vale of Clwyd.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Distant views from Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas ▪ Registered Parks and Gardens ▪ Hillforts and hill top monuments		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High-Outstanding LANDMAP evaluation. VS46: Low / High / <u>Outstanding</u> VS47: Low / Moderate / <u>High</u> VS48: Moderate / High / <u>Outstanding</u>		
	Remoteness / Tranquillity	The presence of some man-made influences within this landscape unit and particularly in adjacent units reduces the sense of tranquillity and remoteness . VS24: Attractive; Settled; Wild		
Value	Landscape Value	Much of this area lies within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas. Typical High-Outstanding LANDMAP evaluation. VS50: Low / High / <u>Outstanding</u> VS49: Moderate / High / <u>Outstanding</u> LH45: Low / <u>Outstanding</u> LH42: Low / <u>High</u> / Unassessed GL31: Low / Moderate / High / Outstanding GL33: Moderate / High / Outstanding		
	Cultural Heritage Value	The area includes part of a hillfort. Typical High-Outstanding LANDMAP evaluation. HL38: Low / <u>High</u> / <u>Unassessed</u> HL35: Low / <u>Outstanding</u> / <u>Unassessed</u> HL40: Low / Moderate / <u>Outstanding</u> / <u>Unassessed</u>		

Summary of Sensitivity to Wind Energy Developments	Much of this highly attractive landscape of limestone outcrops and scarp slopes is designated within the Clwydian Range and Dee Valley AONB. The landscape unit's sensitivity is further increased by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park. When combined with the presence of important cultural heritage features and many sensitive visual receptors, the overall sensitivity of this landscape is considered very high.	Very High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Escarpment and Hills and Limestone Farmlands
- Regional Landscape Character Map for Wales, RLCA12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Area: Coastal Limestone Hills (Code: D/LC/4)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14

C9 Limestone Escarpment and Hills



Location and Extent

A series of steep hills and cliffs located at Llandulas (Cefn yr Ogof, Rhyd-y-foel and Crag y Forwyn) and Bryn Eurn Hill (between Rhos-on-Sea and Colwyn Bay). These landforms are highly distinctive features located close to the Conwy coastline.

Key Characteristics

- Typically small to medium scale
- Open hills and scarp faces
- Prominent feature in the landscape
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically a small-medium scale landscape VS8: Small / <u>Medium</u>		
	Landform	Steep limestone hills with rock outcrops, distinctive scarp faces and scree slopes. VS4: <u>Hills/Valleys</u> / Rolling/Undulating		
	Landcover Pattern	Landcover comprises a mosaic of wooded hillsides, scarp slopes and pastures. VS3: Wooded Hillside & Scarp Slopes / Mosaic Rolling Lowland / <u>Urban</u> / Hillside & Scarp Slopes Grazing VS5: Field Pattern/Mosaic / <u>Mixture</u> / Development		
	Built Environment	Man-made influences include the settlements that are found around the lower slopes and also in the quarrying at Llandulas. However, with the exception of important historical features, and within the context of the developed coastline, the majority of this landscape unit is relatively undeveloped . VS6: Mixture / <u>Scattered Rural/Farm</u> / Urban VS27: Fair / Good		
Visual	Skylines and Settings	Three hills are highly distinctive and form prominent skylines when viewed from a number of locations along and adjacent to the coastline.		
	Movement	Movement is limited to infrequent traffic on local roads around the base of the hills. The hill tops and higher slopes are very still . VS18: <u>Infrequent</u> / Constant		
	Visibility, Key Views, Vistas	The higher slopes afford open and expansive views out to sea and over coastal areas including the Great Orme Headland, across the Clwydian Range, Denbigh Moors and Snowdonia National Park. Views to and from the lower slopes are more enclosed by landform and vegetation. VS9: <u>Enclosed</u> / Open		

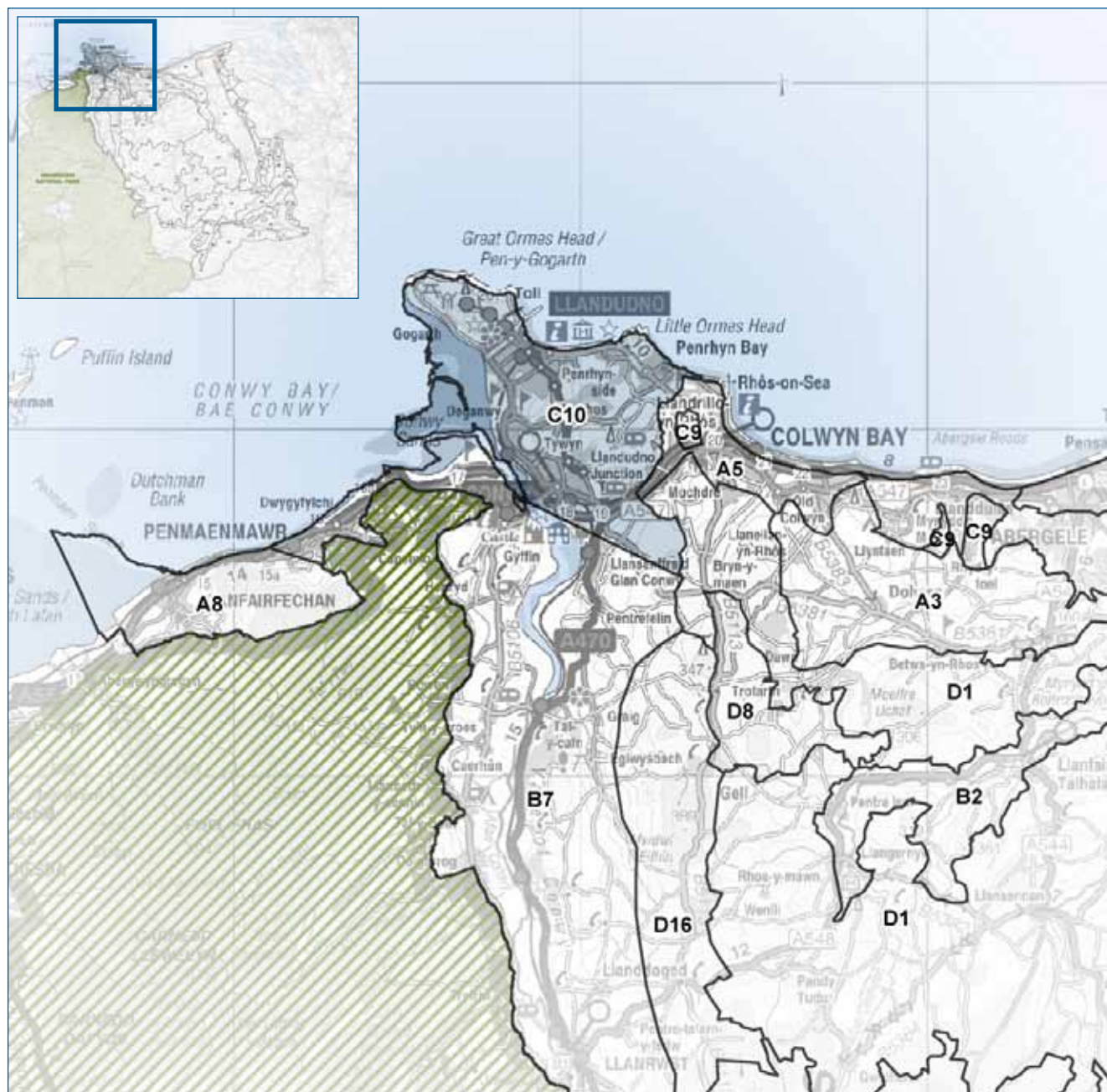
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Properties which are found mainly around the lower slopes - Long distance routes including Offa's Dyke Path national trail, Sustrans - North Wales Coast cycle route (NCN Route 5), the North Wales Path (part of the Wales Coast Path) and the Clwydian Way - Open Access Areas to the east of this landscape unit - Local attractions and public rights of way - The A55 tourist route and North Wales Coast Railway - The local road and network		
	Intervisibility/ Associations with Adjacent Landscapes	This landscape unit has a strong association and intervisibility with both adjacent and more distant landscapes , including Snowdonia National Park.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: - Snowdonia National Park - Clwydian Range and Dee Valley AONB - Great Orme Heritage Coast - Rhyd Y Foel to Abergele SLA - Open Access Areas to the east of this landscape unit - Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape - Registered Parks and Gardens - Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: Low / <u>Moderate</u> / <u>High</u> VS47: Low / <u>Moderate</u> VS48: Low / <u>Moderate</u> / <u>High</u>		
	Remoteness / Tranquillity	This landscape unit is relatively tranquil and remote particularly in comparison to the adjacent densely populated coastline. VS24: Attractive; Exposed / Attractive; Exposed; Wild		

Landscape Value	Much of this landscape unit lies within the regionally designated Rhyd Y Foel to Abergele SLA. Nationally designated features also include Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas (to east of this landscape unit). Typical High LANDMAP evaluation with some Outstanding. VS50: Low / <u>Moderate</u> / <u>High</u> VS49: Moderate / High LH45: Low / Moderate / High / <u>Outstanding</u> LH42: Low / Moderate GL31: Moderate / High GL33: Moderate / High		
Cultural Heritage Value	Part of a Registered Parks and Garden and hillfort lie within the eastern part of this landscape unit. Typical Moderate-High LANDMAP evaluation. HL38: Low / Moderate / <u>High</u> HL35: Low / <u>Moderate</u> HL40: Low / Moderate / <u>High</u>		
Summary of Sensitivity to Wind Energy Developments	The attractive small to medium scale limestone scenery of this landscape unit is regionally designated as part of the Rhyd Y Foel to Abergele SLA. Its sensitivity is further enhanced by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park. When combined with the presence of important cultural heritage features and many sensitive visual receptors, the overall sensitivity of this landscape is considered high.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Limestone Escarpment and Hills
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Unit No: 2 Point of Ayr to Colwyn Bay
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd Y Foel to Abergele
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

C10 Great Orme and Creuddyn Peninsular



Location and Extent

This landscape unit comprises the Great Orme and Creuddyn Peninsular which lie to the north west of Conwy.

Key Characteristics

- Typically small to medium scale
- Dramatic limestone headlands
- Considerable cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower ⇄ Higher	
Landscape	Scale	Typically a small-medium scale landscape VS8: Small / <u>Medium</u>		
	Landform	The landform of the peninsula is varied and comprises dramatic limestone headlands and cliffs with areas of gently rolling land and flatter lowland. VS4: <u>Hills/Valleys</u> / <u>Levels</u> / Rolling/Undulating		
	Landcover Pattern	Mosaic of pastures, woodland, open land, hillsides, scarp slopes and cliffs and urban settlements. VS3: Hillside & Scarp Slopes Grazing / Estuary / Flat Open Lowland Farmland / Urban VS5: Open Land / Mixture / Development		
	Built Environment	With the exception of the Great Orme Headland. Man-made influences are evident across this landscape unit and include the A55 tourist route and North Wales Coast Railway in the south and also the busy urban resort settlements of Conwy, Deganwy, Llandudno, Rhos on Sea and Colwyn Bay and pylon lines that are visible towards the middle of this landscape unit. VS6: Linear / Urban / Scattered Rural/Farm / No Settlements VS27: Fair / Good		
Visual	Skylines and Settings	The Great Orme and Little Orme form a prominent skyline feature . Esgyryn Obelisk is a distinctive monument visible from the south.		
	Movement	Much of this landscape unit is very busy , particularly around the coastal settlements; however there are a number of areas where movement is much less frequent . VS18: <u>Infrequent</u> / Frequent / Constant		
	Visibility, Key Views, Vistas	Expansive views out across the sea, coastline and inland hills from the Great Orme and other high points within this landscape unit. VS9: Exposed / Confined / Enclosed		

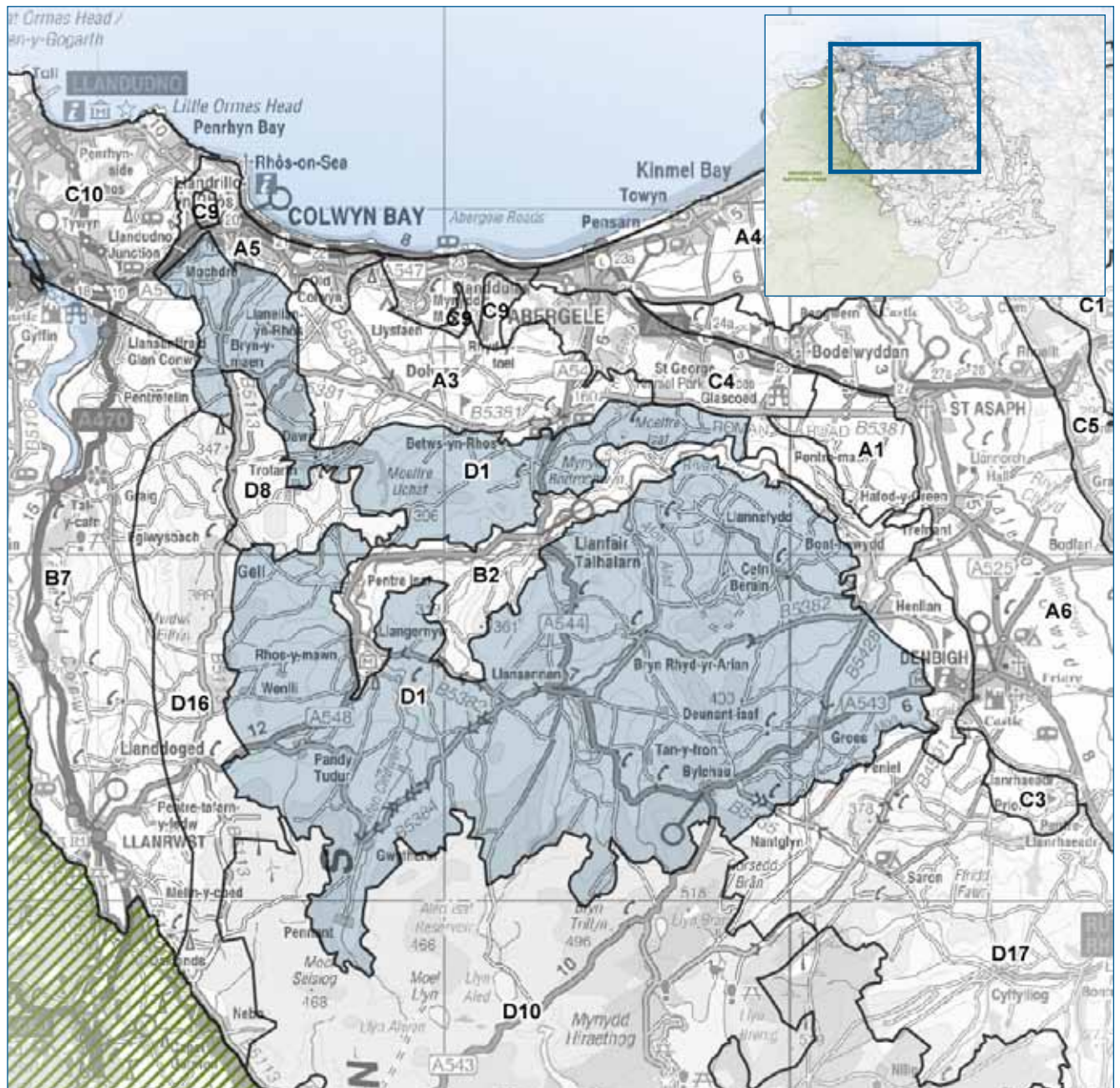
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Numerous properties particularly along the coast and including the towns of Conwy, Deganwy, Llandudno, Rhos on Sea and Colwyn Bay ▪ Long distance routes including Sustrans - North Wales Coast cycle route (NCN Route 5) and the North Wales Path (part of the Wales Coast Path) ▪ Open Access Areas both within this landscape unit and Snowdonia National Park ▪ Coastal attractions including the Great Orme Headland and Country Park and Little Orme ▪ Other local attractions and public rights of way ▪ The A55 tourist route and North Wales Coast Railway ▪ The local road network ▪ Passing ships and ferries.		
	Intervisibility/Associations with Adjacent Landscapes	This landscape unit has strong association and intervisibility with both adjacent and more distant landscapes , including Snowdonia National Park		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ Anglesey Coast AONB ▪ Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site ▪ Great Orme Heritage Coast ▪ Great Orme and Creuddyn Peninsular SLA ▪ Conwy Valley SLA ▪ Open Access Areas ▪ Great Orme Country Park ▪ Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape. ▪ Registered Parks and Gardens ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation with some areas Outstanding. VS46: Low / Moderate / <u>High</u> VS47: Low / <u>Moderate</u> / High VS48: Low / <u>Moderate</u> / <u>High</u> / Outstanding		
Aesthetic, Perceptual and Experiential				

Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	There is a strong and locally important contrast between the busy developed areas of coastline and the tranquil and remote undeveloped parts of the headland. VS24: Attractive; Exposed; Wild; Unattractive; Smell / Attractive; Exposed; Wild / Attractive; Unattractive; Noisy; Settled / Exposed / Attractive; Exposed; Wild / Attractive; Settled; Sheltered; Safe		
Value	Landscape Value	Much of this landscape unit lies within the regionally designated Great Orme and Creuddyn Peninsular SLA and also contains the nationally identified Great Orme Heritage Coast. Nationally designated features also include the Sustrans - North Wales Coast cycle route (NCN Route 5) and Open Access Areas. Typical High LANDMAP evaluation with some areas Outstanding. VS50: Low / Moderate / <u>High</u> VS49: Low / Moderate / <u>High</u> LH45: Low / Moderate / High / Outstanding LH42: <u>Low</u> / Moderate / High / Outstanding GL31: Moderate / High / Outstanding GL33: Moderate / High / Outstanding		
	Cultural Heritage Value	Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site is wholly contained within this landscape unit. Much of this landscape unit lies within Creuddyn a Chonwy (Creuddyn and Conwy) Registered Historic Landscape. A number of Registered Parks and Gardens are also present. Typical High-Outstanding LANDMAP evaluation. HL38: Low / Moderate / <u>High</u> / <u>Outstanding</u> HL35: Low / <u>Moderate</u> / High / <u>Outstanding</u> HL40: Moderate / Outstanding		
Summary of Sensitivity to Wind Energy Developments		The Great Orme and Creuddyn Peninsular is a distinctive and popular section of coastline, which is designated as both Great Orme and Creuddyn Peninsular SLA and nationally identified as the Great Orme Heritage Coast. Its sensitivity is further enhanced by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park. When combined with the presence of important cultural heritage features, including the Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site and the many sensitive visual receptors, the overall sensitivity is considered high.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, 8 Colwyn and Northern Coastline
- Countryside Council for Wales, Historic Landscapes Register: 23 Creuddyn and Conwy (HLW (Gw) 5)
- Welsh Seascapes and their Sensitivity to Offshore Developments, Regional Seascape Units as follows: 3 Rhos Point to Great Ormes Head; 4 Conwy Estuary; and 5 Great Ormes Head to Puffin Island
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 1 Great Orme and Creuddyn Peninsular
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D1 Aled Hiraethog Hills (West)



Location and Extent

This landscape unit comprises the undulating uplands of the Rhos Hills.

Key Characteristics

- Typically medium scale
- Undulating / rolling hills & valleys
- Generally open with a mosaic of grassland, gorse scrub and woodland.

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. VS8: Small / <u>Medium</u> / large			
	Landform	Landform mainly comprises hills and valleys -typically rolling / undulating . VS4: <u>Hills/Valleys</u> / <u>Rolling/Undulating</u> / Levels			
	Landcover Pattern	Mosaic of upland grazing, pastures, gorse scrub and woodland. VS3: Hill & Lower Plateau Grazing / Hill & Lower Plateau Mosaic / Hillside & Scarp Slopes Grazing VS5: <u>Field Pattern/Mosaic</u> / Mixture / Woodland / Development			
	Built Environment	Man-made influences include pylon lines which cross the northern end of this landscape unit in an east west direction. Elsewhere influences are typically limited to scattered rural properties and small settlements which are linked by a few minor roads. VS6: Clustered / Mixture / <u>Scattered Rural/Farm / Village</u> VS27: <u>Unassessed</u> / Poor / <u>Fair</u> / Good			
Visual	Skylines and Settings	Parts of this landscape unit form prominent and uninterrupted skylines .			
	Movement	Local road traffic introduces infrequent movement into the landscape. VS18: Rare / Occasional / <u>Infrequent</u> / Frequent			
	Visibility, Key Views, Vistas	Views are variable depending on the landform and vegetation cover. From the higher more open areas there are expansive views northwards across the sea and coastline and westwards to Snowdonia National Park. Views from lower lying areas are typically contained by intervening landform. VS9: Open / Exposed / Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Small dispersed settlements and properties - Long distance routes including the Clwydian Way - Open Access Areas - Local attractions and public rights of way - The local road network			

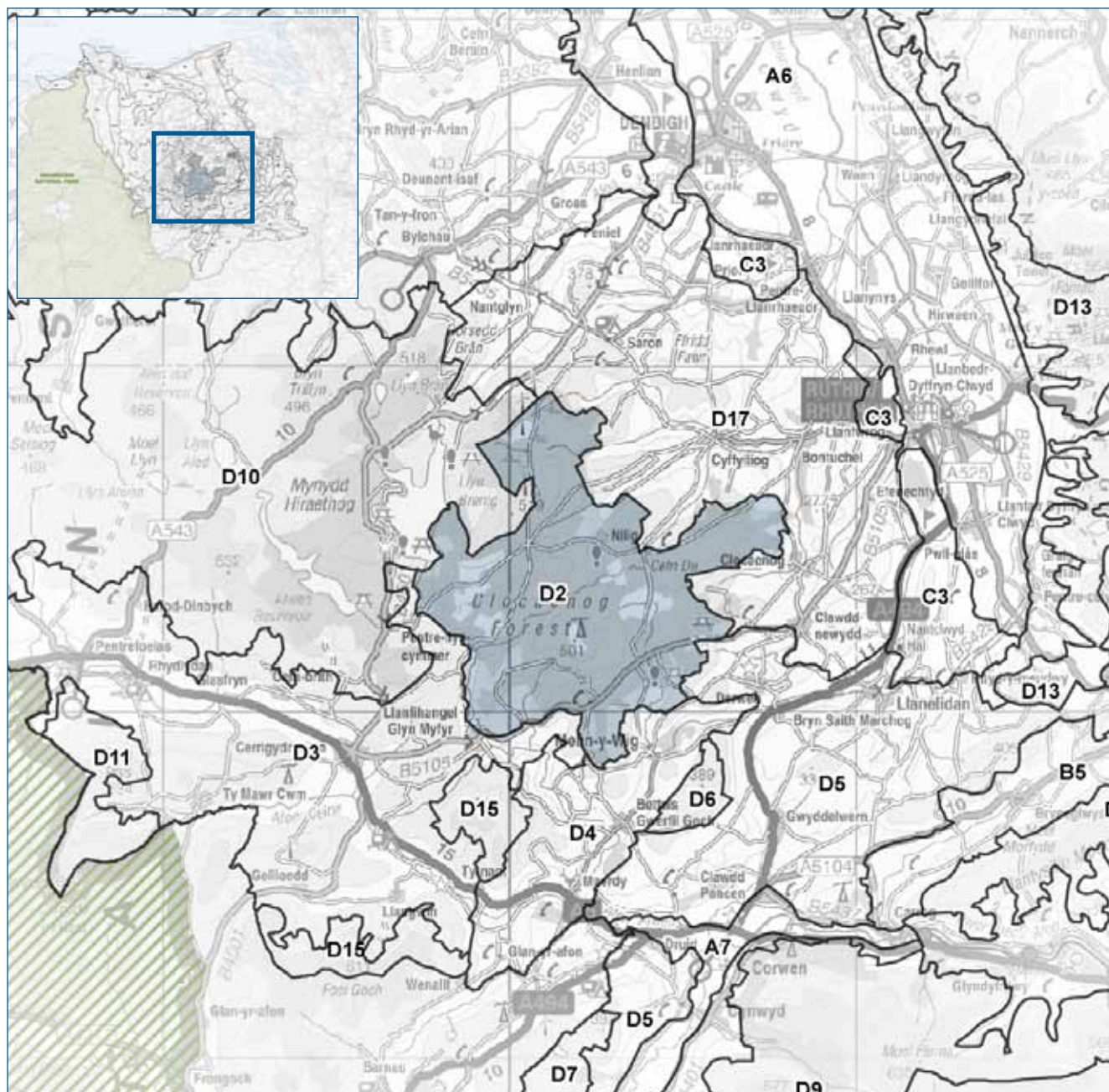
Visual	Intervisibility/ Associations with Adjacent Landscapes	The elevated parts of this landscape unit have a strong association and visibility with surrounding uplands including Snowdonia National Park; whereas lower lying areas are more contained .		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas ▪ Elwy and Aled Valleys SLA ▪ Rhyd Y Foel to Abergele SLA ▪ Conwy Valley SLA ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Elwy (Lower Elwy Valley) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: Low / <u>Moderate</u> / High VS47: Low / Moderate / <u>High</u> VS48: Low / <u>Moderate</u>		
	Remoteness / Tranquillity	Away from settlements and roads, this landscape unit has typically a tranquil and in places remote quality. VS24: Attractive; Sheltered / Attractive; Sheltered; Safe / Attractive; Exposed; Wild; Remote / Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual / Tranquil; Exposed		
Value	Landscape Value	A large part of this landscape unit lies within the regionally designated Elwy and Aled Valleys and Rhyd Y Foel to Abergele SLAs. Several Open Access Areas are also found within this landscape unit. Typical Moderate-High LANDMAP evaluation with some areas Outstanding. VS50: Low / <u>Moderate</u> / High VS49: Low / <u>Moderate</u> / High / Outstanding LH45: Low / <u>Moderate</u> / High / Outstanding LH42: Low / <u>Moderate</u> / <u>High</u> GL31: <u>Moderate</u> / <u>High</u> / Outstanding GL33: <u>Moderate</u> / <u>High</u> / Outstanding		

Value	Cultural Heritage Value	This area includes Registered Parks and Gardens, hillforts and small areas of Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Elwy (Lower Elwy Valley) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes. Typical Moderate LANDMAP evaluation with some areas Outstanding. HL38: <u>Moderate</u> / High / Unassessed HL35: <u>Low</u> / <u>Moderate</u> / High / Unassessed HL40: <u>Moderate</u> / High / Outstanding		
Summary of Sensitivity to Wind Energy Developments		This medium scale landscape of undulating and rolling hills and valleys comprises a farmland mosaic of pastures, scrub and woodland. It is a tranquil and scenic landscape which has resulted in parts of it being regionally designated as Elwy and Aled Valleys and Rhyd Y Foel to Abergele SLAs. Its sensitivity is further enhanced by the number of sensitive visual receptors and by its prominent skylines and intervisibility with adjoining high value landscapes, including Snowdonia National Park.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Aled Hiraethog Hills
- Regional Landscape Character Map for Wales, 9 Rhos Hills and 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, Area 38 Lower Elwy Valley (HLW (C) 4)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 2 Rhyd Y Foel to Abergele and SLA 3 Elwy and Aled Valley
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D2 Hill Forest (Clocaenog Forest)



Location and Extent

This landscape unit falls within both Denbighshire and Conwy and encompasses much of Clocaenog Forest.

Key Characteristics

- Large scale
- Predominantly commercial conifer forest
- A number of existing wind farms

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale landscape. VS8: Large		
	Landform	Landform mainly comprises high hills and slopes which are typically rolling / undulating with some areas of upland plateau . VS4: <u>Rolling/Undulating</u> / Plateau		
	Landcover Pattern	Landcover is dominated by commercial conifer forestry interspersed with pockets of moorland and settled farmland which form breaks within the forest. VS3: <u>Wooded Hillside & Scarp Slopes</u> / Wooded Uplands & Plateaux VS5: Woodland		
	Built Environment	Man-made influences include some large scale wind farms and commercial forestry plantations. There is little settlement and few roads. Much of this landscape unit lies within TAN8 SSAA. VS6: No Settlements VS27: Unassessed / Fair		
Visual	Skylines and Settings	Simple skylines are interrupted by conifer plantations and wind turbines. The forest forms a prominent skyline feature in some views.		
	Movement	Away from the wind turbines, the landscape has a typically still character . VS18: Occasional		
	Visibility, Key Views, Vistas	Views are typically contained by the dense tree stands and in places by the local landform. However, there are some extensive views out across the surrounding uplands where areas of forestry have been felled and also from the higher ground and more open edges of this landscape unit. VS9: Confined		

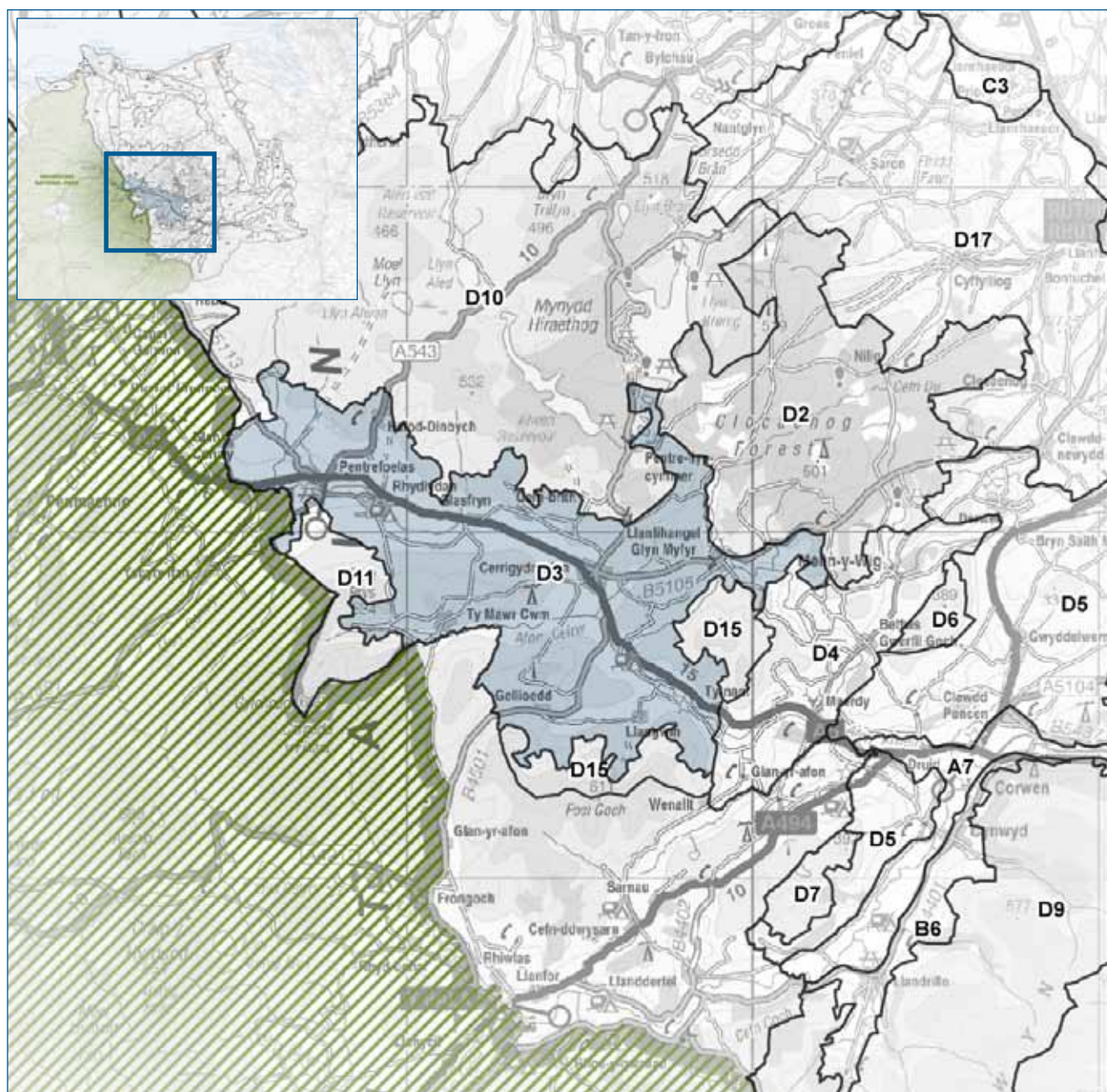
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Properties (mainly located outside this landscape unit) ▪ Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Hiraethog Trail long distance routes ▪ Open Access Areas ▪ Local attractions and public rights of way ▪ The A5 (views towards the southern parts of this landscape unit) ▪ The local road network			
	Intervisibility/ Associations with Adjacent Landscapes	Where views are open, this landscape unit has a strong association and intervisibility with surrounding upland areas. In some places there are attractive views of the woodland edge and rolling landform from adjacent landscape units. This effect is however masked where large scale blanket forestry forms the main component of the view.			
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Cerrigydrudion and A5 Corridor SLA ▪ Dyffryn Clwyd (The Vale of Clwyd) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes ▪ Open Access Areas			
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate LANDMAP evaluation. VS46: Low VS47: Moderate / <u>High</u> VS48: <u>Low</u> / Moderate			
	Remoteness / Tranquillity	Being predominantly unsettled and with relatively few local roads, this landscape unit has a sense of remoteness. The forestry activities and presence of wind turbines locally reduce the sense of tranquillity. VS24: Sheltered; Smell; Other / Unattractive; Remote			

Value	Landscape Value	Typical Moderate LANDMAP evaluation. VS50: Low VS49: Low / <u>Moderate</u> LH45: Low / Moderate / <u>High</u> LH42: Low / <u>Moderate</u> GL31: <u>Moderate</u> / High GL33: <u>Moderate</u> / High		
	Cultural Heritage Value	Part of this landscape unit falls within Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape. Typical High LANDMAP evaluation with some Outstanding . HL38: <u>High</u> / Outstanding / Unassessed HL35: <u>High</u> / Unassessed HL40: Low / Moderate / <u>High</u>		
	Summary of Sensitivity to Wind Energy Developments	Although the presence of commercial forestry and existing wind farm development within this large scale upland landscape lessen sensitivity, the elevation and prominence of the skyline in views from the wider landscape provide a slight counterbalance. Nevertheless the overall sensitivity is still considered low. This is a reflected in the fact that much of the area lies within TAN8 SSAA	Low	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Hill Forest
- Regional Landscape Character Map for Wales, 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 39 Denbigh Moors (HLW (C) 5)
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Area: Clocaenog Forest (Code: D/LC/24)

D3 Cerrig Uplands



Location and Extent

This landscape unit comprises the area of uplands lying between the Denbigh Moors and Snowdonia National Park. The historic route of the A5 runs through this landscape unit, running from Tynan in the south east to Pentrefoelas and Snowdonia National Park in the north west.

Key Characteristics

- Medium to large scale
- Upland landscape
- Predominantly improved pasture

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

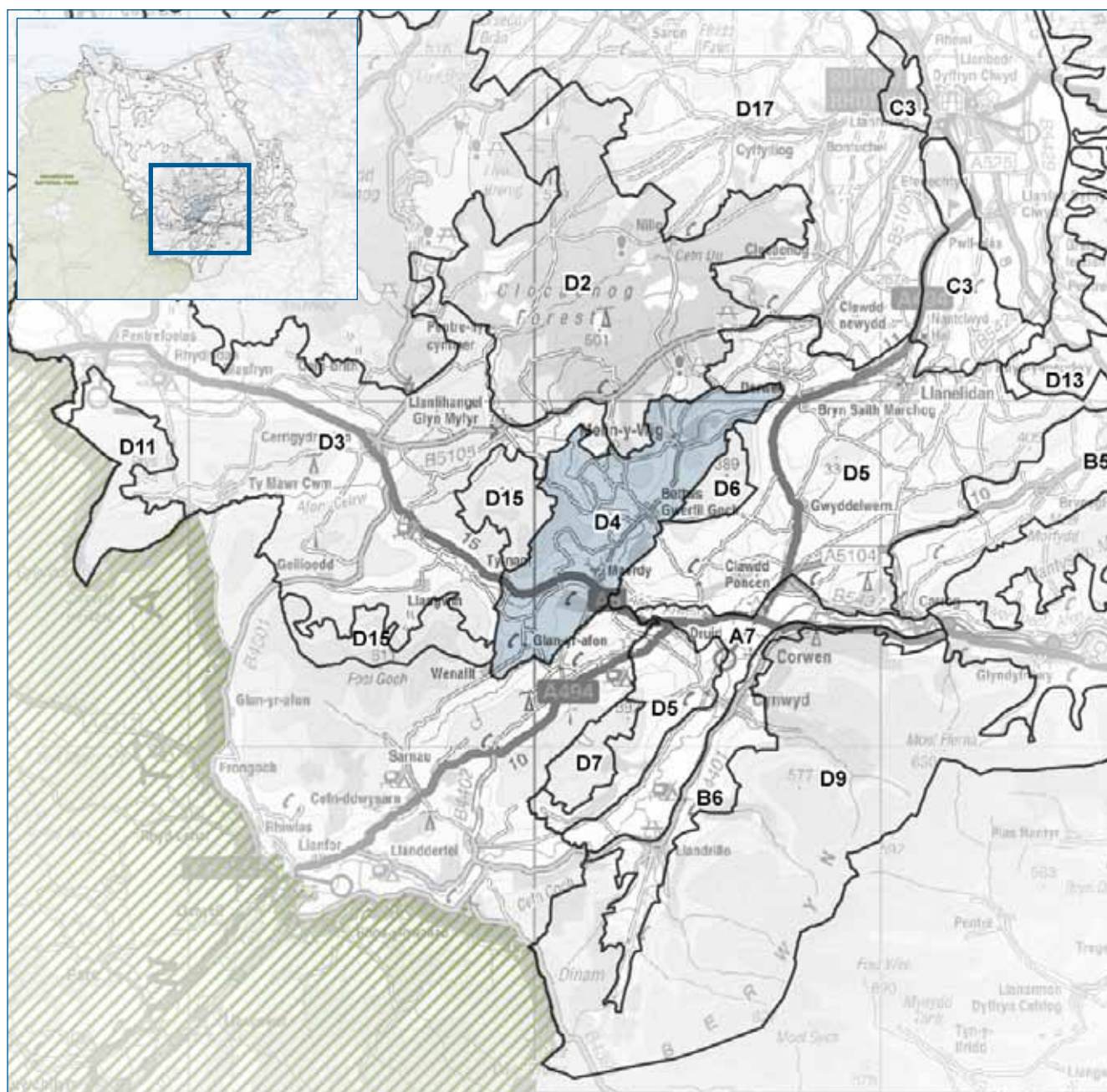
Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium-large scale landscape. VS8: <u>Medium</u> / Large			
	Landform	Upland landscape comprising broad valleys and high hills . VS4: High Hills/Mountains / <u>Hills/Valleys</u> / Levels / Rolling/Undulating			
	Landcover Pattern	Mainly pasture , with some wetlands and rough grassland. Tree cover is sparse and confined to the smaller valleys and shelter belts. VS3: Open Upland Valleys / Hill & Lower Plateau Grazing / Upland Grazing VS5: <u>Field Pattern/Mosaic</u> / Open Land			
	Built Environment	Man-made influences are relatively limited . Small clustered villages are concentrated along the A5, whilst elsewhere there is typically a dispersed pattern of farms and rural properties. Some wind turbines are present in this landscape unit. VS6: Clustered / <u>Scattered Rural/Farm</u> / No Settlements VS27: <u>Fair</u> / Good / Unassessed			
Visual	Skylines and Settings	Simple sweeping skylines are occasionally interrupted by individual field and hedgerow trees, wood poles, dispersed rural properties and occasional wind turbines.			
	Movement	Away from the A5 road corridor, movement in this landscape is relatively infrequent . VS18: Frequent / Infrequent / Occasional			
	Visibility, Key Views, Vistas	This is a typically open and exposed landscape unit with long ranging views, particularly from the more elevated areas. VS9: Open / Exposed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Small villages along the A5 corridor and dispersed individual properties - Long distance routes including the Clwydian Way and Hiraethog Trail - Open Access Areas - Local attractions and public rights of way - The A5 tourist route to regional/national attractions outside this landscape unit - The local road network			

Visual	Intervisibility/ Associations with Adjacent Landscapes	There is a strong association with neighbouring upland areas including Snowdonia National Park, the Berwyn Mountains and the Denbigh Moors.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Hiraethog SLA ▪ Cerrigydrudion and A5 Corridor SLA ▪ Open Access Areas ▪ Y Berwyn (Berwyn) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: Moderate / High VS47: Low / <u>Moderate</u> / High VS48: <u>Moderate</u> / High		
	Remoteness / Tranquillity	Away from the A5 road corridor, this landscape unit has a remote and tranquil character . VS24: Attractive; Tranquil; Exposed / Tranquil; Exposed / Exposed / Settled		
Value	Landscape Value	Much of the south east part of this landscape unit, including east of the A5 lies within the regionally designated Cerrigydrudion and A5 Corridor SLA. Typical Moderate LANDMAP evaluation. VS50: Moderate / High VS49: Low / Moderate / High LH45: Low / <u>Moderate</u> / <u>High</u> LH42: <u>Low</u> / <u>Moderate</u> / High GL31: <u>Moderate</u> / High GL33: <u>Moderate</u> / High		
	Cultural Heritage Value	Typical Moderate-High LANDMAP evaluation. HL38: Low / Moderate / <u>High</u> HL35: <u>Low</u> / Moderate / <u>High</u> HL40: Moderate / High		
Summary of Sensitivity to Wind Energy Developments		Although this large scale highly rural upland landscape has characteristics which lessen its landscape sensitivity, part of it is regionally designated as the Cerrigydrudion and A5 Corridor SLA and it also has a strong association and intervisibility with surrounding high value landscapes and cultural heritage features, particularly with Snowdonia National Park. This increases its overall sensitivity.	High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Cerrig Uplands
- Regional Landscape Character Map for Wales, 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 39 Denbigh Moors (HLW (C) 5)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 4 Hiraethog
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D4 Maerdy Hills



Location and Extent

This landscape unit comprises a series of undulating hills which lie to the south of the Clocaenog Forest and run south from Derwen past Maerdy to the southern boundary of Conwy.

Key Characteristics

- Small to medium scale
- Undulating upland rural landscape

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower ⇌ Higher	
Landscape	Scale	This is a small to medium scale landscape. VS8: Small / Medium		
	Landform	Landform mainly comprises hills and valleys and is typically rolling or undulating . VS4: Hills/Valleys / Rolling/Undulating		
	Landcover Pattern	Mosaic of pastoral farmland and woodland. VS3: Open/Wooded Mosaic Upland Valleys / <u>Hill & Lower Plateau Grazing</u> / Open Upland Valleys VS5: Field Pattern/Mosaic		
	Built Environment	The influence of modern development is limited to the northern half of this landscape unit which lies within TAN 8 SSA A and includes some existing turbines . Elsewhere there is typically a dispersed pattern of isolated farms and rural properties with some small clustered villages along the A5 road corridor. VS6: Scattered Rural/Farm VS27: <u>Unassessed</u> / Fair / Good		
Visual	Skylines and Settings	This landscape unit has some prominent undeveloped skylines .		
	Movement	Away from the A5 road corridor, movement in this landscape is relatively infrequent . VS18: Occasional / <u>Infrequent</u> / Frequent		
	Visibility, Key Views, Vistas	Views within this landscape unit are typically enclosed by landform and vegetation. However, there are some longer views of surrounding uplands to and from the higher ground. VS9: Enclosed		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Small villages along the A5 corridor and dispersed individual properties - Long distance routes including the Clwydian Way and Hiraethog Trail - Open Access Areas - Local attractions and the public rights of way - The A5 tourist route to regional/national attractions outside this landscape unit - The local road network		

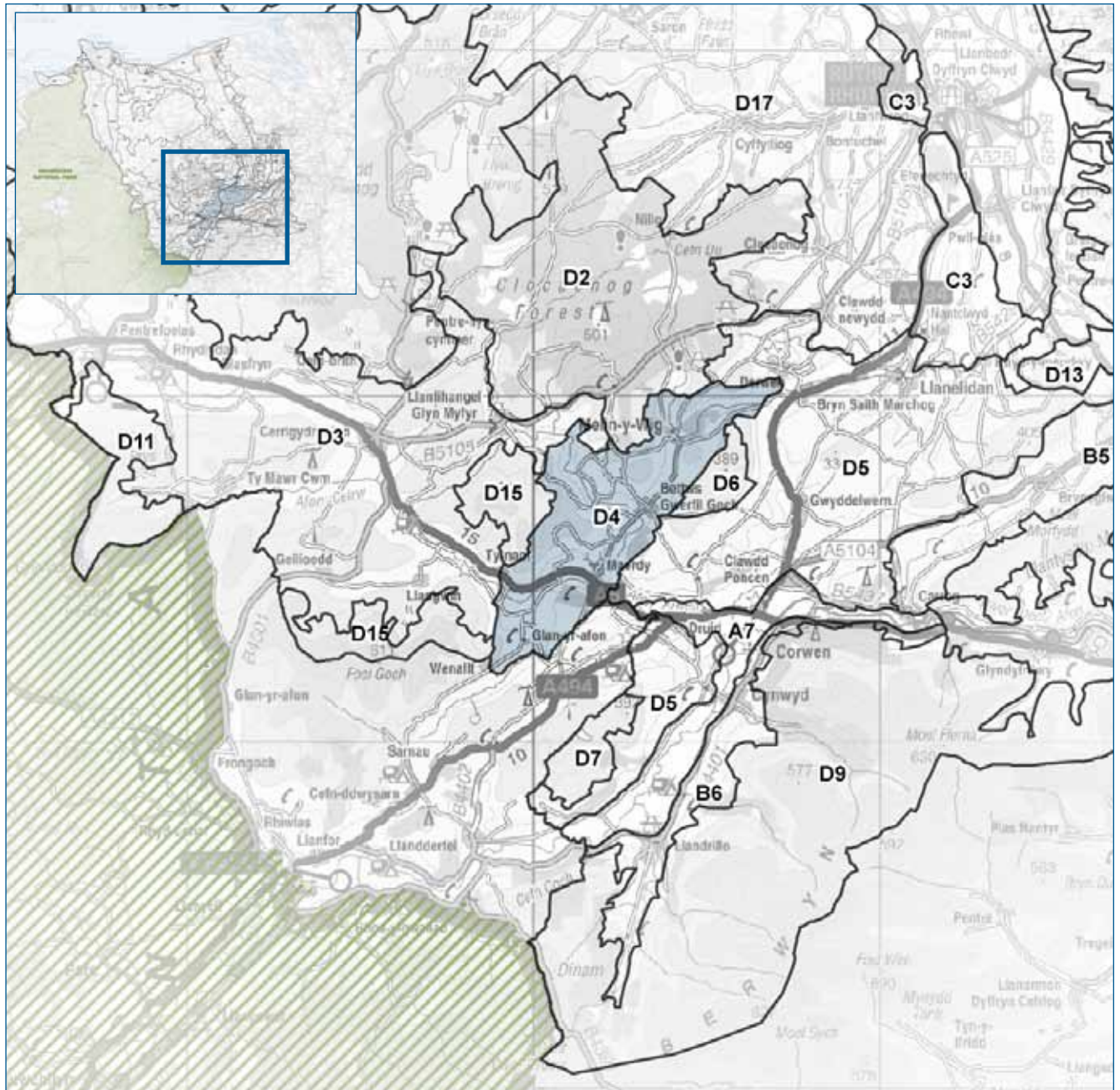
Visual	Intervisibility/ Associations with Adjacent Landscapes	The higher parts of this landscape unit have some intervisibility and association with adjoining landscapes but generally this is a visually contained landscape unit.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Cerrigydrudion and A5 Corridor SLA ▪ Registered Historic Landscapes ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: High VS47: Moderate / <u>High</u> VS48: High		
	Remoteness / Tranquillity	Away from the A5 road corridor this landscape unit typically has a remote and tranquil character. VS24: Attractive; Tranquil; Sheltered; Safe; Settled / Attractive; Safe; Remote; Settled; Wild / Attractive; Tranquil; Exposed		
Value	Landscape Value	The southern part of this landscape unit lies within the regionally designated Cerrigydrudion and A5 Corridor SLA. Typical Moderate-High LANDMAP evaluation. VS50: High VS49: Moderate / <u>High</u> LH45: Low / <u>Moderate</u> / <u>High</u> LH42: Low / <u>Moderate</u> / <u>High</u> GL31: <u>Moderate</u> / High GL33: <u>Moderate</u> / High		
	Cultural Heritage Value	This area includes a scheduled hillfort. Typical Moderate-High LANDMAP evaluation. HL38: <u>Moderate</u> / <u>High</u> / Unassessed HL35: <u>Moderate</u> / <u>High</u> / Unassessed HL40: Moderate / High		

Summary of Sensitivity to Wind Energy Developments	Small to medium scale landscape with a mosaic of pastoral farmland and woodland. The southern part of this unit is regionally designated within the Cerrigydrudion and A5 Corridor SLA. Sensitivity is further enhanced by the presence of sensitive visual receptors, the remote and typically tranquil character and by the fact that the area includes some prominent skylines. Whilst these features all lend a high sensitivity, the northern parts of this landscape unit are within TAN 8 SSAA and include existing wind turbines which lower the sensitivity, particularly to the north.	Medium-High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Maerdy Hills
- Regional Landscape Character Map for Wales, RLCA 10
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012) SLA 5 Cerrigydrudion and A5 Corridor
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Area: Melin-y-wig Hills (Code: D/LC/26)

D5 Edeirnion Hills



Location and Extent

This landscape unit comprises the strongly undulating rural landscape which stretches from Clwydd -newydd southwards to the A5, and includes the hills to the west of Corwen.

Key Characteristics

- Medium scale
- Strongly undulating rural landscape

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: Medium			
	Landform	The complex landform comprises rounded and interlocking strongly undulating hills and valley slopes . VS4: <u>Rolling/Undulating</u> / Hills/Valleys			
	Landcover Pattern	Mosaic of pastoral farmland with some large areas of open hillside and scarp slopes. Woodland blocks are more prevalent in the north and south of this landscape unit. VS3: Hillside & Scarp Slopes Grazing / Hillside & Scarp Slopes Mosaic / <u>Open Hillside & Scarp Slopes</u> VS5: Field Pattern/Mosaic			
	Built Environment	With the exception of the historic village of Gwyddelwern, settlement is limited to remote farms and rural properties which are linked by a dense network of narrow winding lanes. Pylon lines and wind turbines are present to the south, and the main A494 Ruthin to Corwen road runs through this landscape unit. A metal recycling scrap yard locally influences the landscape. VS6: <u>Scattered Rural/Farm</u> / Village / No Settlement VS27: Unassessed			
Visual	Skylines and Settings	This landscape unit has some prominent undeveloped skylines although in places these are interrupted by wind turbines and pylon lines.			
	Movement	Away from the A5 road corridor, movement in this landscape is relatively infrequent . VS18: Infrequent			
	Visibility, Key Views, Vistas	Views within this landscape unit are typically enclosed by landform and vegetation. However, there are some longer views to and from the higher ground. VS9: Open / Enclosed			

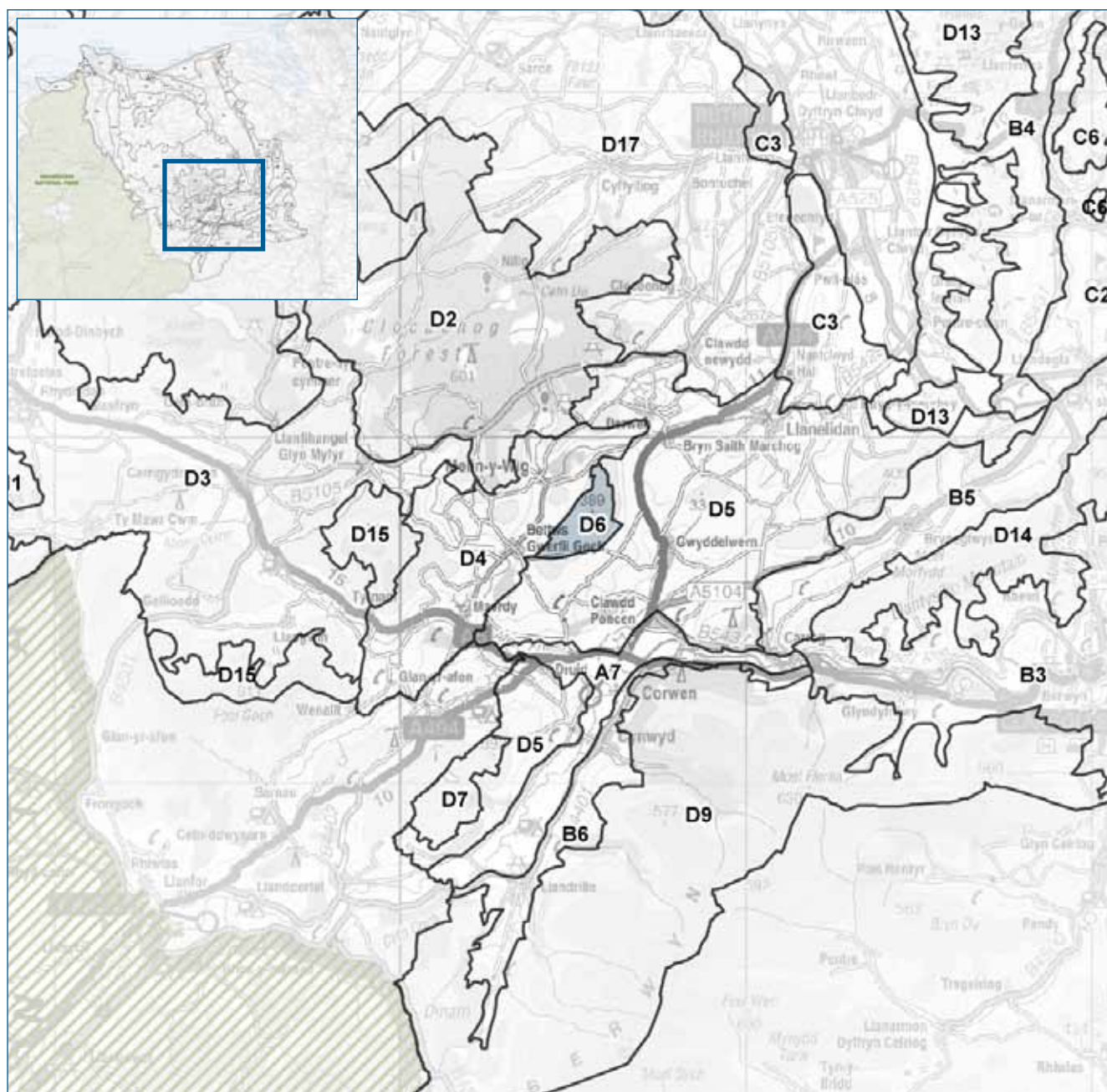
Visual	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ The historic village of Gwyddelwern and dispersed individual properties ▪ Long distance routes including the Clwydian Way, Brenig Way and Dee Valley Way ▪ Open Access Areas ▪ The A5 tourist route to regional/national attractions outside this landscape unit ▪ Local attractions and the public right of way ▪ The local road network			
	Intervisibility/Associations with Adjacent Landscapes	The southernmost part of this landscape unit has strong visual associations with adjacent units; whereas the northern parts are more visually self-contained .			
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Y Berwyn (Berwyn) Registered Historic Landscapes ▪ Hillforts			
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: High VS47: <u>Moderate</u> / High VS48: <u>Moderate</u> / High			
	Remoteness / Tranquillity	Although this landscape is typically tranquil, the well-developed farmed character, presence of settlement and dense network of local roads gives a reduced sense of remoteness. VS24: Attractive; Safe; Settled / Attractive; Sheltered; Settled / Attractive; Tranquil; Safe; Settled			

Value	Landscape Value	The south eastern corner and far eastern part of this landscape unit lie within the Clwydian Range and Dee Valley AONB. There is also a small Open Access Area to the south east. Typical Moderate-High LANDMAP evaluation with some Outstanding areas to the south in relation to geological value. VS50: <u>Moderate</u> / High VS49: Moderate LH45: Moderate LH42: Moderate GL31: <u>Moderate</u> / <u>High</u> / Outstanding GL33: <u>Moderate</u> / High / Outstanding	
	Cultural Heritage Value	The area includes a hillfort and part of the A5 historic route. Typical High LANDMAP evaluation. HL38: Low / Moderate / <u>High</u> / Unassessed HL35: High / Unassessed HL40: Low / Moderate / <u>High</u>	
	Summary of Sensitivity to Wind Energy Developments	This is a medium scale landscape comprising a complex pattern of rounded and interlocking hills and valleys. Part of it lies within the Clwydian Range and Dee Valley AONB which increases sensitivity in that particular locality. Sensitivity is enhanced by a number of sensitive visual receptors and by some prominent skylines and intervisibility with adjoining high value landscapes, including the AONB and Snowdonia National Park The presence of existing wind turbines within both this and adjacent landscapes units slightly reduces the sensitivity of the local landscape to further wind energy development.	Medium-High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Edeirnion Hills
- Regional Landscape Character Map for Wales, 15 Vale of Llangollen and Dee Valley and 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Woodlands South of Ruthin (Code: D/LC/22); Denbigh and Ruthin Hills (Code: D/LC/23); Gwyddelwern Quarries (Code: D/LC/27); Llanellidan and Gwyddelwern Hills (Code: D/LC/28); and Rug Estate Parkland (Code: D/LC/30)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14 (Nb. Area located just outside the AONB)

D6 Upland Plateau (Mynydd Rhyd Ddu)



Location and Extent

A small but distinct upland plateau located to the south east of Clocaenog Forest.

Key Characteristics

- Large scale
- Open hill top plateau

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale landscape. VS8: Large		
	Landform	High slightly rugged undulating, upland plateau . VS4: High Hills/Mountains		
	Landcover Pattern	Landcover comprises upland grazing . VS3: Upland Grazing VS5: Open Land		
	Built Environment	The plateau is largely unsettled ; however much of this landscape unit falls within TAN 8 SSAA and there are a number of existing wind turbines . VS6: No Settlements VS27: Unassessed		
Visual	Skylines and Settings	This landscape unit is rarely seen as a skyline feature with the exception of the existing wind turbines which are located just below the main ridgeline to the north and are visible on the skyline from areas outside this landscape unit.		
	Movement	The rotation of turbine blades introduces movement within this landscape unit. VS18: Occasional		
	Visibility, Key Views, Vistas	The higher more open parts of this landscape unit afford open views to and from surrounding landscape units; whereas views to and from lower areas are more contained. VS9: Open		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional dispersed properties - Long distance routes including the Clwydian Way - Local attractions and the public right of ways - The local road network		
	Intervisibility/Associations with Adjacent Landscapes	The higher more open parts of the area have some intervisibility and association with adjoining landscapes , but generally this is a visually contained landscape unit.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: - Snowdonia National Park - The Clwydian Range and Dee Valley AONB - Cynwyd and Llandrillo AOB - Dyffryn Clwyd (The Vale of Clwyd) and Y Berwyn (Berwyn) Registered Historic Landscapes - Hillforts		

Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: High VS47: Moderate VS48: Moderate		
	Remoteness / Tranquillity	This landscape unit has a remote character , although the presence of wind turbines locally reduces the sense of tranquillity . VS24: Exposed; Remote; Wild; Spiritual		
Value	Landscape Value	Typical Moderate LANDMAP evaluation. VS50: High VS49: High LH45: Moderate LH42: Low GL31: Moderate GL33: Moderate		
	Cultural Heritage Value	Typical Low-Moderate LANDMAP evaluation. HL38: <u>Low</u> / Moderate / High HL35: Low / Moderate / High HL40: <u>Low</u> / <u>Moderate</u> / High		
Summary of Sensitivity to Wind Energy Developments		Although the presence of wind farm development within this large scale upland landscape lessens sensitivity, the presence of sensitive visual receptors and views to and from important landscape and cultural heritage features provide a slight counterbalance. Nevertheless the overall sensitivity is still considered low. This is a reflection of the fact that much of the area lies within TAN 8 SSAA and is affected by existing wind turbines.	Low	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Upland Plateau
- Regional Landscape Character Map for Wales, RLCA 10 Denbigh Moors
- Denbighshire Landscape Strategy 2003, Character Area: Mynydd Rhydd Ddu (Code: D/LC/29)

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale landscape. VS8: Large		
	Landform	Rolling and undulating upland plateau . VS4: Rolling/Undulating		
	Landcover Pattern	Mainly open moorland interspersed with small pockets of deciduous and coniferous woodland. VS3: Upland Moorland VS5: Open Land		
	Built Environment	This landscape is unsettled . Views of nearby wind turbines (located just outside the study area) influence the character of the area. VS6: No Settlement VS27: Unassessed		
Visual	Skylines and Settings	Simple open skylines are interrupted by existing wind turbines located just outside this landscape unit.		
	Movement	With the exception of the movement that the nearby turbines introduce, this landscape is relatively still in character. VS18: Occasional		
	Visibility, Key Views, Vistas	There are open and expansive views across the undulating moorland and the surrounding lowlands and upland landscapes. VS9: Open		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional properties - Long distance routes including the North Berwyn Way - Open Access Areas - Local attractions including Berwyn Mountain and public rights of way - The A5 tourist route to regional/national attractions outside this landscape unit - The local road network		
	Intervisibility/Associations with Adjacent Landscapes	This landscape unit has a moderate association with adjoining landscapes. Intervisibility is notable particularly between this landscape unit and the Berwyn Mountains .		

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Y Berwyn (Berwyn) Registered Historic Landscapes ▪ Hillforts			
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: High VS47: Moderate VS48: High			
	Remoteness / Tranquillity	Although this landscape unit has a remote character, the presence of existing wind turbines nearby reduces the sense of tranquillity. VS24: Attractive; Threatening; Remote; Wild; spiritual			
Value	Landscape Value	Part of this landscape unit comprises an Open Access Area. Typical Moderate-High LANDMAP evaluation. VS50: High VS49: High LH45: <u>Moderate</u> / High LH42: Moderate GL31: Moderate GL33: Moderate			
	Cultural Heritage Value	Typical Low-Moderate LANDMAP evaluation. HL38: <u>Low</u> / High HL35: <u>Moderate</u> / High HL40: <u>Moderate</u> / High			
Summary of Sensitivity to Wind Energy Developments		Although the presence of nearby wind farm development within this large scale simple upland landscape lessens sensitivity, this is counterbalanced by the presence of sensitive visual receptors and views to and from important landscape and cultural heritage features including intervisibility with the Berwyn Mountains.	Medium		

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Upland Plateau
- Regional Landscape Character Map for Wales, 15 Vale of Llangollen and Dee Valley
- Denbighshire Landscape Strategy 2003, Character Area: Mynydd Mynyllod (Code: D/LC/43)

D8 Upland Plateau



Location and Extent

This landscape unit comprises a strongly undulating upland plateau.

Key Characteristics

- Small to medium scale
- Strongly undulating upland plateau

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

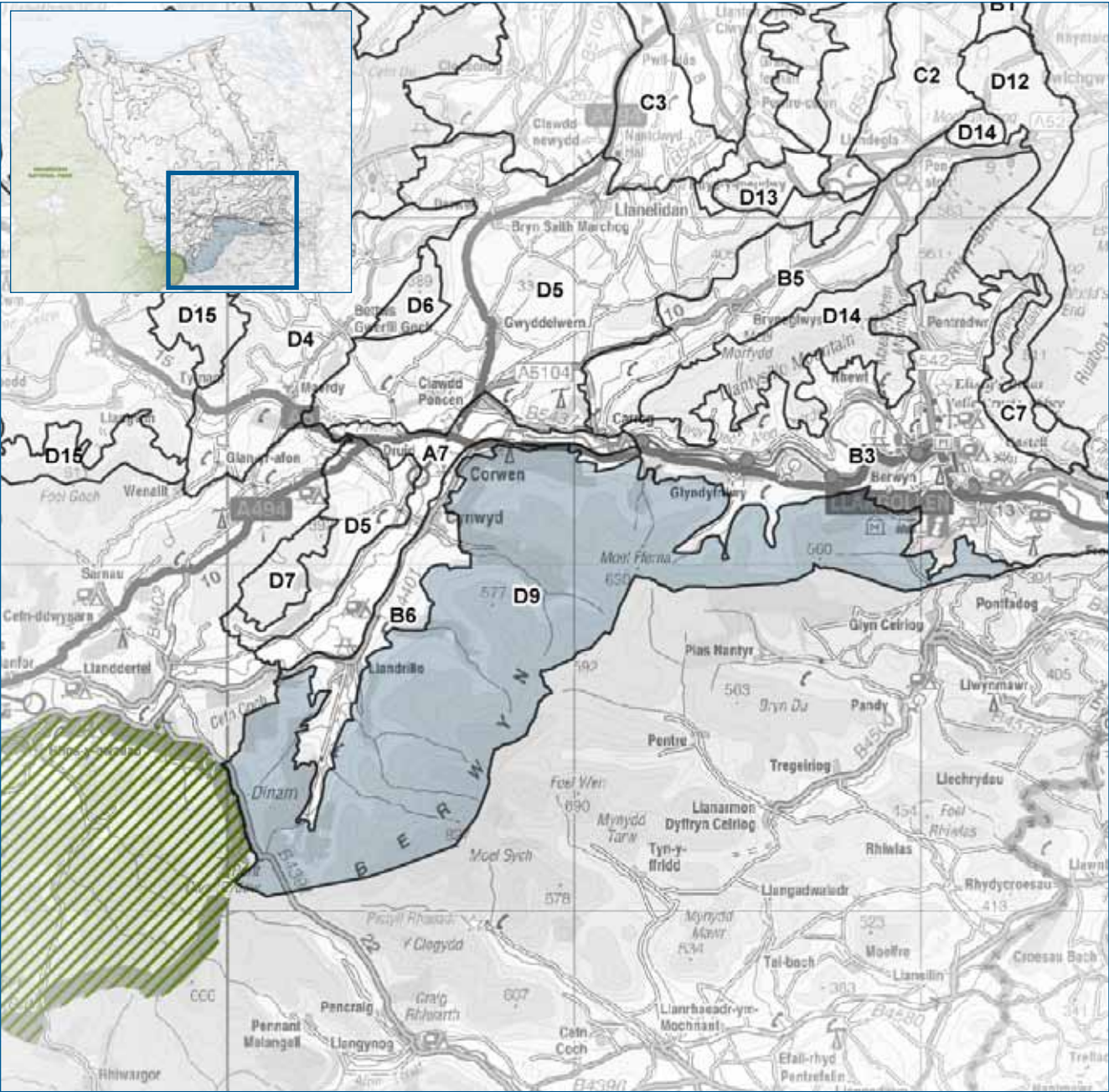
Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Typically a medium scale landscape. VS8: Small / <u>Medium</u>			
	Landform	Strongly undulating, slightly rugged, upland plateau . VS4: Hills/Valleys			
	Landcover Pattern	Mainly upland grazing with pockets of scrub and woodland. VS3: Hill & Lower Plateau Mosaic / Hill & Lower Plateau Grazing VS5: Field Pattern/Mosaic			
	Built Environment	This landscape unit is sparsely settled . Modern development includes pylon lines which cross this landscape unit and are visible from a number of locations. VS6: Scattered Rural/Farm / Clustered VS27: Fair / Good			
Visual	Skylines and Settings	Simple and open skylines are interrupted by pylon lines .			
	Movement	Infrequent movement within this landscape imparts a still character. VS18: Occasional / Infrequent / Frequent			
	Visibility, Key Views, Vistas	Views within this landscape unit are typically enclosed by landform and vegetation . However, there are some expansive views to and from the higher ground. VS9: Open / Enclosed			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional dispersed properties - Local attractions and public rights of way - The local road network			
	Intervisibility/Associations with Adjacent Landscapes	The higher parts of this landscape unit have an association and intervisibility with adjoining upland landscapes, including Snowdonia National Park and the Great Orme Headland .			

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ Great Orme Heritage Coast ▪ Conwy Valley SLA ▪ Elwy and Aled Valleys SLA ▪ Rhyd Y Foel to Abergele SLA ▪ Creuddyn a Chonwy (Creuddyn and Conwy) and Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscapes ▪ Registered Parks and Gardens		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: <u>Moderate</u> / High VS47: <u>Moderate</u> / High VS48: Moderate / <u>High</u>		
	Remoteness / Tranquillity	Although the area typically has a tranquil character, existing pylon lines lessen the sense of remoteness. VS24: Attractive; Tranquil; Sheltered; Safe; Settled; Spiritual / Tranquil; Exposed		
Value	Landscape Value	The very western edges of this landscape unit fall within the regionally designated Conwy Valley SLA. Typical Moderate LANDMAP evaluation. VS50: <u>Moderate</u> / High VS49: Moderate / <u>High</u> LH45: High LH42: Low GL31: <u>Moderate</u> / High GL33: <u>Moderate</u> / High		
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: Moderate HL35: Low / <u>Moderate</u> HL40: Moderate		
Summary of Sensitivity to Wind Energy Developments		The medium-high sensitivity of this open upland plateau arises from the presence of sensitive visual receptors and views to and from important landscape and cultural heritage features including Snowdonia National Park and the Great Orme Headland.	Medium-High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Upland Plateau
- Regional Landscape Character Map for Wales, 9 Rhos Hills
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D9 Moorland Plateau (Y Berwyn)



Location and Extent

This area comprises the western part of the Berwyn Mountains - an extensive and exposed upland moorland plateau.

Key Characteristics

- Upland and moorland plateau
- ‘Wilderness’ character
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Assessed as a large scale landscape by LANDMAP; however in the context of this project the scale of this landscape unit is viewed as vast . VS8: Large		
	Landform	Typically undulating upland plateau . VS4: <u>Plateau</u> / Hills/Valleys		
	Landcover Pattern	Mainly open moorland with some blocks of coniferous forestry plantation around the edges. VS3: <u>Upland Moorland</u> / Wooded Upland Valleys / Hillside and Scarp Slopes Mosaic VS5: <u>Mixture</u> / Field Pattern/Mosaic / Woodland		
	Built Environment	This landscape is typically unsettled and is accessed by a few narrow lanes and tracks. VS6: <u>No Settlements</u> / Scattered Rural/Farm VS27: <u>Unassessed</u> / Poor		
Visual	Skylines and Settings	Skylines are simple, open and uninterrupted and sometimes prominent .		
	Movement	Movement is rare in this landscape unit giving the landscape a still character. VS18: <u>Rare</u> / Occasional / Infrequent		
	Visibility, Key Views, Vistas	There are open and expansive views across the undulating moorland to the surrounding lowlands and upland landscapes. VS9: <u>Exposed</u> / Enclosed		
	Typical Receptors (in broadly descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional properties - Long distance routes including Offa's Dyke Path national trail, the North Berwyn Way, Brenig Way and Llwybr Ceiriog Trail - Open Access Areas both in this and adjoining landscape units - Local attractions and public rights of way - The A5 tourist route to regional/national attractions outside this landscape unit - The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	Parts of landscape unit have an association and intervisibility with adjoining upland landscapes, including the Clwydian Range and Dee Valley AONB and Snowdonia National Park. There is a particularly strong association with the Vale of Llangollen.		

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ Pontcysyllte Aqueduct & Canal World Heritage Site ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Large Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Y Berwyn (Berwyn) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation with some areas Outstanding. VS46: Low / Moderate / <u>High</u> VS47: Low / Moderate / <u>High</u> VS48: Low / Moderate / High / <u>Outstanding</u>		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	The tranquillity and remoteness of this landscape imparts a sense of wilderness. VS24: Attractive; Tranquil; Exposed; Remote; Wild; Spiritual		
	Landscape Value	Much of this landscape unit is included within the Cynwyd and Llandrillo AOB. Nationally designated features include Offa's Dyke Path national trail and large tracts of Open Access Area. Typical High LANDMAP evaluation. VS50: Low / Moderate / <u>High</u> VS49: Low / Moderate / <u>High</u> / Outstanding LH45: Low / Moderate / <u>Outstanding</u> LH42: Low / Moderate / <u>Outstanding</u> GL31: <u>Moderate</u> / Outstanding GL33: <u>Moderate</u> / Outstanding		
Value	Cultural Heritage Value	Approximately a third of this landscape unit lies within Y Berwyn (Berwyn) Registered Historic Landscape. Typical High LANDMAP evaluation. HL38: Moderate / <u>High</u> / Unassessed HL35: Moderate / <u>High</u> / Unassessed HL40: Low / Moderate / <u>High</u>		

Summary of Sensitivity to Wind Energy Developments	This area of upland open moorland is largely unsettled and has a remote and tranquil wilderness character and high scenic quality which is reflected in the regional designation of much of this area as Cynwyd and Llandrillo AOB. There are expansive views to and from important landscapes and cultural heritage features, including Snowdonia National Park, the Clwydian Range and Dee Valley AONB and the Pontcysyllte Aqueduct & Canal World Heritage Site. When combined with a number of sensitive visual receptors this significantly increases the sensitivity of the landscape. In recognition of this, approximately a quarter of this area lies within the Clwydian Range and Dee Valley AONB and a third within the Berwyn Registered Historic Landscape.	Very High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Plateau
- Regional Landscape Character Map for Wales, 16 Y Berwyn
- Countryside Council for Wales, Historic Landscapes Register, 37 Berwyn (HLW (C) 3)
- Denbighshire Landscape Strategy 2003, Character Area: Berwyn Mountains (Code: D/LC/45)

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically vast in scale . VS8: Small / Large / <u>Vast</u>		
	Landform	A rolling upland plateau . VS4: Hills/Valleys / <u>Plateaux</u>		
	Landcover Pattern	Extensive tracts of blanket bog and heather moorland with some wooded areas and large lakes. Coniferous forestry plantation is particularly prevalent in the east. VS3: <u>Upland Moorland</u> / Wooded Upland & Plateaux / Mosaic Upland & Plateaux / Lake VS5: <u>Open Land</u> / Woodland / Water		
	Built Environment	The landscape is unsettled with little modern development other than some wind turbines in the far north west and north eastern parts of the landscape unit. VS6: No Settlement VS27: <u>Fair</u> / Good		
Visual	Skylines and Settings	A plateau landscape with typically simple, open and largely uninterrupted skylines with the exception of existing wind turbines which interrupt the skyline to the far north west and north east.		
	Movement	Movement is rare within this landscape. VS18: <u>Rare</u> / Occasional / Infrequent		
	Visibility, Key Views, Vistas	There are some open and expansive views across the undulating moorland to surrounding uplands including Snowdonia National Park and the Clwydian Range and Dee Valley AONB. VS9: Open / <u>Exposed</u> / Enclosed		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Relatively few properties (located in adjacent landscape units) ▪ Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Hiraethog Trail ▪ Open Access Areas ▪ Local attractions and public rights of way ▪ Local road network		
	Intervisibility/ Associations with Adjacent Landscapes	The higher parts of this landscape unit have an association and intervisibility with adjoining and other upland landscapes, including Snowdonia National Park.		

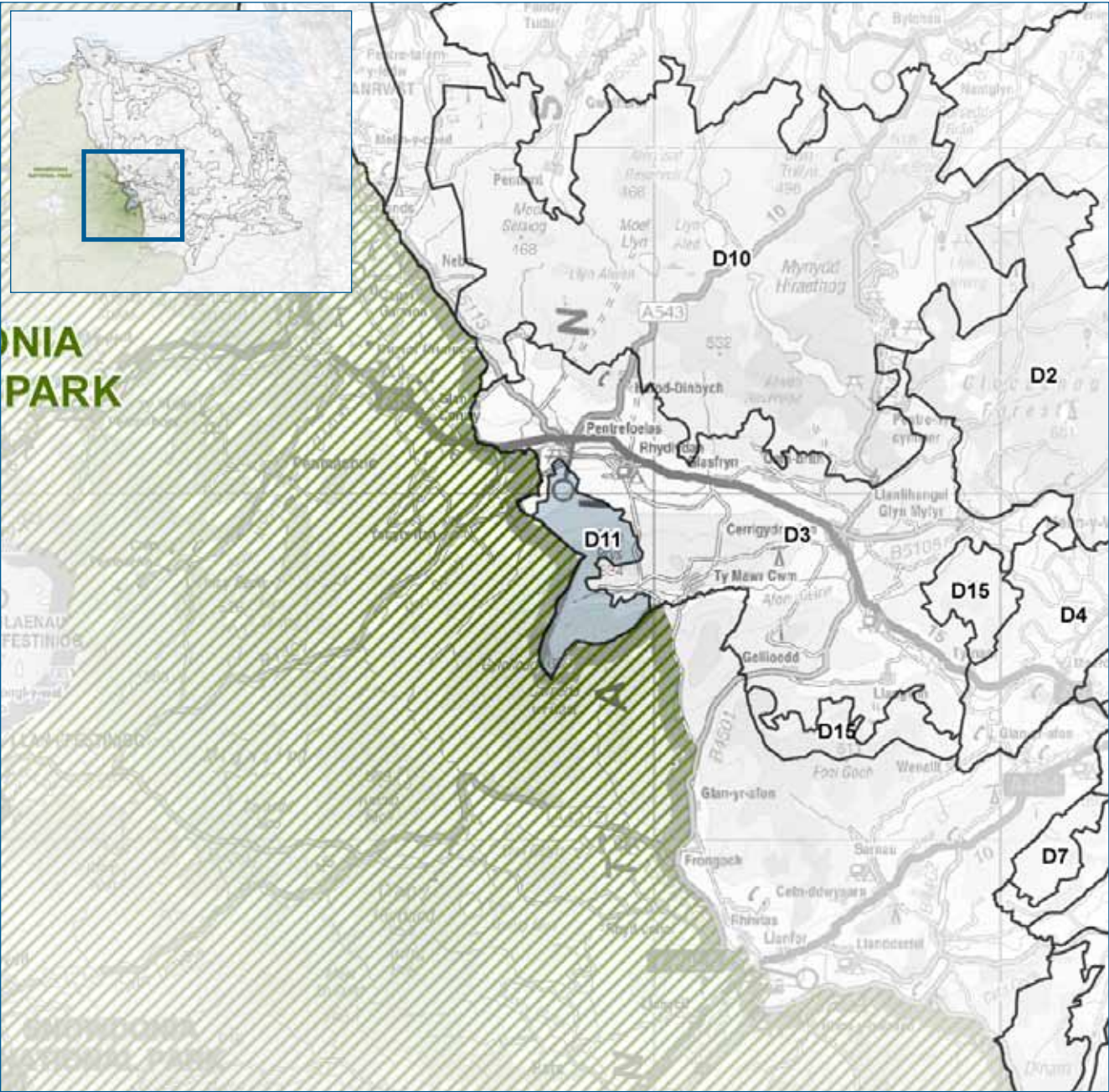
Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Hiraethog SLA ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes ▪ Hillforts		
	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: Low / Moderate / <u>High</u> VS47: Moderate / <u>High</u> VS48: Moderate / <u>High</u>		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	This landscape unit is tranquil and has a remote wilderness quality. VS24: Tranquil; Exposed; Remote; Wild; Spiritual; Threatening		
	Landscape Value	The western part of this landscape unit lies within the regionally designated Hiraethog SLA. Almost half of this landscape unit comprises Open Access Areas. Much of this landscape unit falls within TAN8 SSA A and there are a number of existing wind turbines. Typical High-Outstanding LANDMAP evaluation. VS50: Low / Moderate / <u>High</u> VS49: Low / Moderate / High / <u>Outstanding</u> LH45: Low / Moderate / High / <u>Outstanding</u> LH42: Low / Moderate / <u>High</u> / Outstanding GL31: Moderate / <u>High</u> GL33: Low / Moderate / <u>High</u> / Outstanding		
Value	Cultural Heritage Value	More than half of this landscape unit lies within the Denbigh Moors Registered Historic Landscape. Typical High-Outstanding LANDMAP evaluation. HL38: Moderate / High / <u>Outstanding</u> HL35: Moderate / <u>High</u> HL40: Moderate / High / <u>Outstanding</u>		

Summary of Sensitivity to Wind Energy Developments	A remote, exposed and open landscape with high landscape value reflected in the western half of the area being regionally designated as the Hiraethog SLA. There are expansive views to and from important landscapes and cultural heritage features, including Snowdonia National Park and the Clwydian Range and Dee Valley AONB. Whilst these features all lend a high sensitivity, the northern extent of the area lies within TAN8 SSAA and is likely to have a lower sensitivity.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Plateau
- Regional Landscape Character Map for Wales, 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 39 Denbigh Moors (Mynydd Hiraethog) (HLW (C) 5)
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 4 Hiraethog
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003
- Denbighshire Landscape Strategy 2003, Character Area: Brenig/Forest (Code: D/LC/25)

D11 Moorland Plateau



Location and Extent

Located to the far south west of the study area; this landscape unit lies adjoins the eastern boundary of Snowdonia National Park.

Key Characteristics

- Typically large scale
- High and strongly undulating upland plateau

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

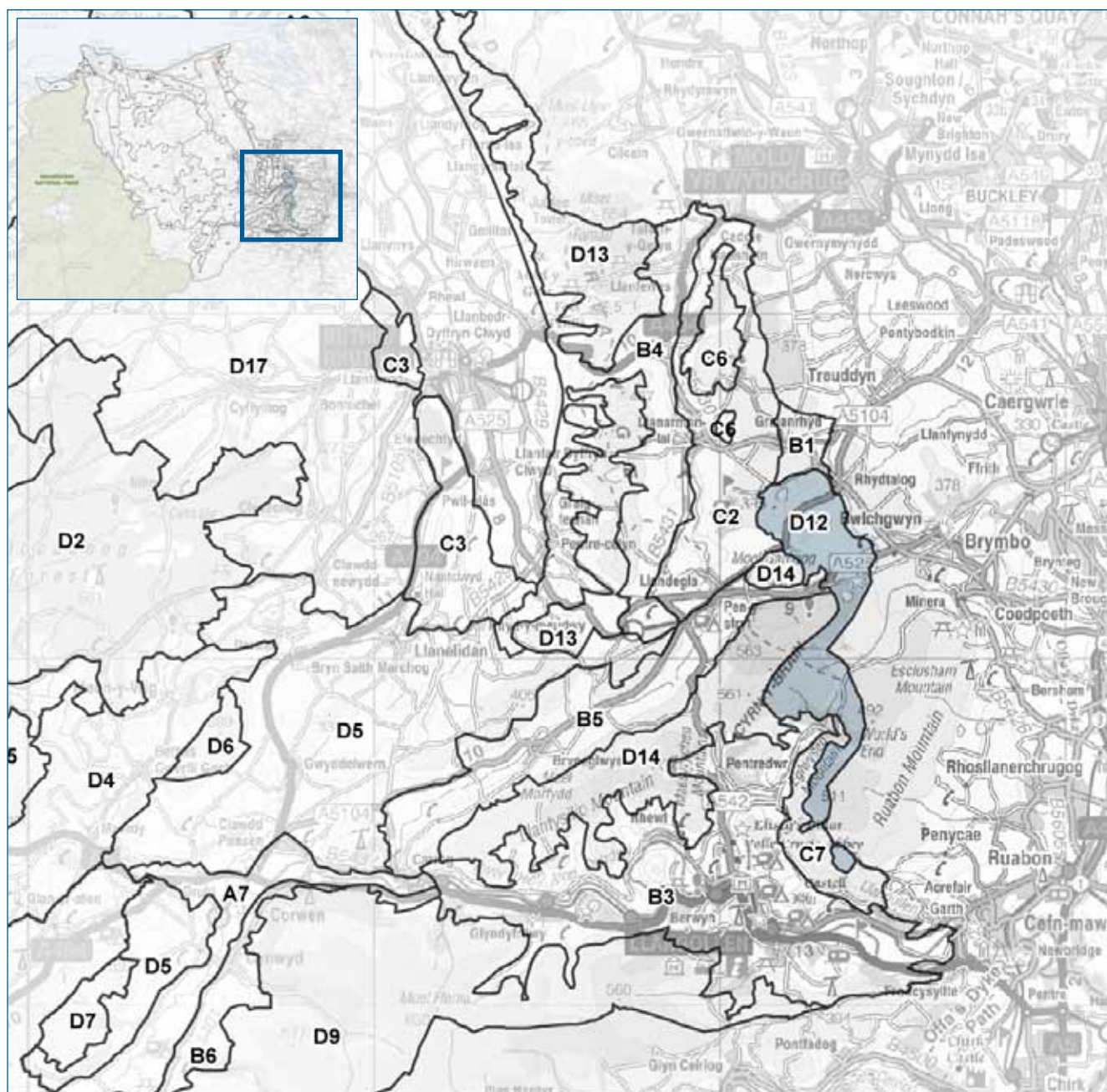
Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically large scale . VS8: Medium / <u>Large</u>		
	Landform	High and strongly undulating upland plateau broken by upland valleys. VS4: Hills/Valleys / <u>High Hills/Mountains</u>		
	Landcover	Extensive tracts of blanket bog and heather moorland with some wooded areas and pastures. VS3: <u>Upland Moorland</u> / Open Upland Valleys VS5: Field Pattern/Mosaic / <u>Open Land</u>		
	Built Environment	The landscape is typically unsettled . VS6: Clustered / <u>No Settlements</u> VS27: <u>Good</u> / Unassessed		
Visual	Skylines and Settings	Garn Prys is a prominent skyline feature which is visible from a number of locations from both within and outside this landscape unit.		
	Movement	With the exception of occasional movement , this landscape unit has a relatively still character . VS18: <u>Occasional</u> / Frequent		
	Visibility, Key Views, Vistas	There are open and expansive views across the undulating moorland to Snowdonia National Park, the Denbigh Moors and intervening areas to the north. VS9: Open / <u>Exposed</u>		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional properties - Open Access Areas - Local attractions and public rights of way - Visitors to regional/national attractions outside this landscape unit travelling along the A5 - The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	The higher parts of this landscape unit have a strong association and intervisibility with adjoining upland landscapes, including Snowdonia National Park .		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: - Snowdonia National Park - Open Access Areas - Hiraethog SLA - Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape		

Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: Moderate / <u>High</u> VS47: Low / <u>High</u> VS48: Moderate / <u>High</u>		
	Remoteness / Tranquillity	This landscape unit typically has a tranquil and remote character . VS24: Tranquil; Exposed; Remote; Threatening		
Value	Landscape Value	This landscape unit adjoins Snowdonia National Park and comprises some Open Access Areas. Typical High-Outstanding LANDMAP evaluation. VS50: Moderate / <u>High</u> VS49: Low / <u>High</u> LH45: Moderate / High / <u>Outstanding</u> LH42: Low / Moderate / <u>Outstanding</u> GL31: Moderate GL33: Moderate		
	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: <u>Low</u> / Moderate HL35: Moderate HL40: <u>Moderate</u> / High		
Summary of Sensitivity to Wind Energy Developments		This area of open upland moorland is largely unsettled and has a remote and tranquil character. There is a strong association and intervisibility with Snowdonia National Park and expansive views to and from other important landscapes and cultural heritage features. When combined with a number of sensitive visual receptors this significantly increases the sensitivity of the landscape.	Very High	

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Plateau
- Regional Landscape Character Map for Wales, RLCA 6 Snowdonia / Eryri and RLCA 10 Denbigh Moors
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D12 Moorland Plateau (Cyrn y Brain – Eglwyseg Mountain)



Location and Extent

This landscape unit comprises the western parts of Ruabon and Llandegla Moors and the far eastern edge of Cyrn-y-Brain Forest (also known as Llandegla Forest).

Key Characteristics

- Typically large scale
- An open expanse of upland moorland separated by an extensive coniferous plantation.

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Large scale. VS8: <u>Large</u> / Small		
	Landform	Typically undulating upland plateau. VS4: <u>Levels</u> / Hills/Valleys		
	Landcover Pattern	Landcover mainly comprises upland moorland with some wooded hillside and scarp slopes and occasional pastures. VS3: <u>Upland Moorland</u> / Wooded Hillside & Scarp Slopes / Upland Grazing VS5: <u>Open Land</u> / Woodland / Field Pattern/ Mosaic		
	Built Environment	The landscape is typically unsettled with little modern development. VS6: <u>No Settlements</u> / Mixture VS27: Poor / <u>Fair</u> / <u>Unassessed</u>		
Visual	Skylines and Settings	Plateau landscape with simple, open and largely uninterrupted skylines. The Ruabon Moors form a prominent and uninterrupted skyline in views from the Wrexham direction.		
	Movement	With the exception of occasional movement this landscape is relatively still in character. VS18: <u>Occasional</u> / Frequent		
	Visibility, Key Views, Vistas	There are open and expansive views across the undulating moorland to the surrounding lowlands and upland landscapes. VS9: Open / <u>Exposed</u> / <u>Enclosed</u> / Confined		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional properties - Long distance routes including Offa's Dyke Path national trail - Open Access Areas - Local attractions and public rights of way - The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	The outer edges of this landscape unit have an association and intervisibility with other upland areas and immediately adjacent lower lying landscapes.		

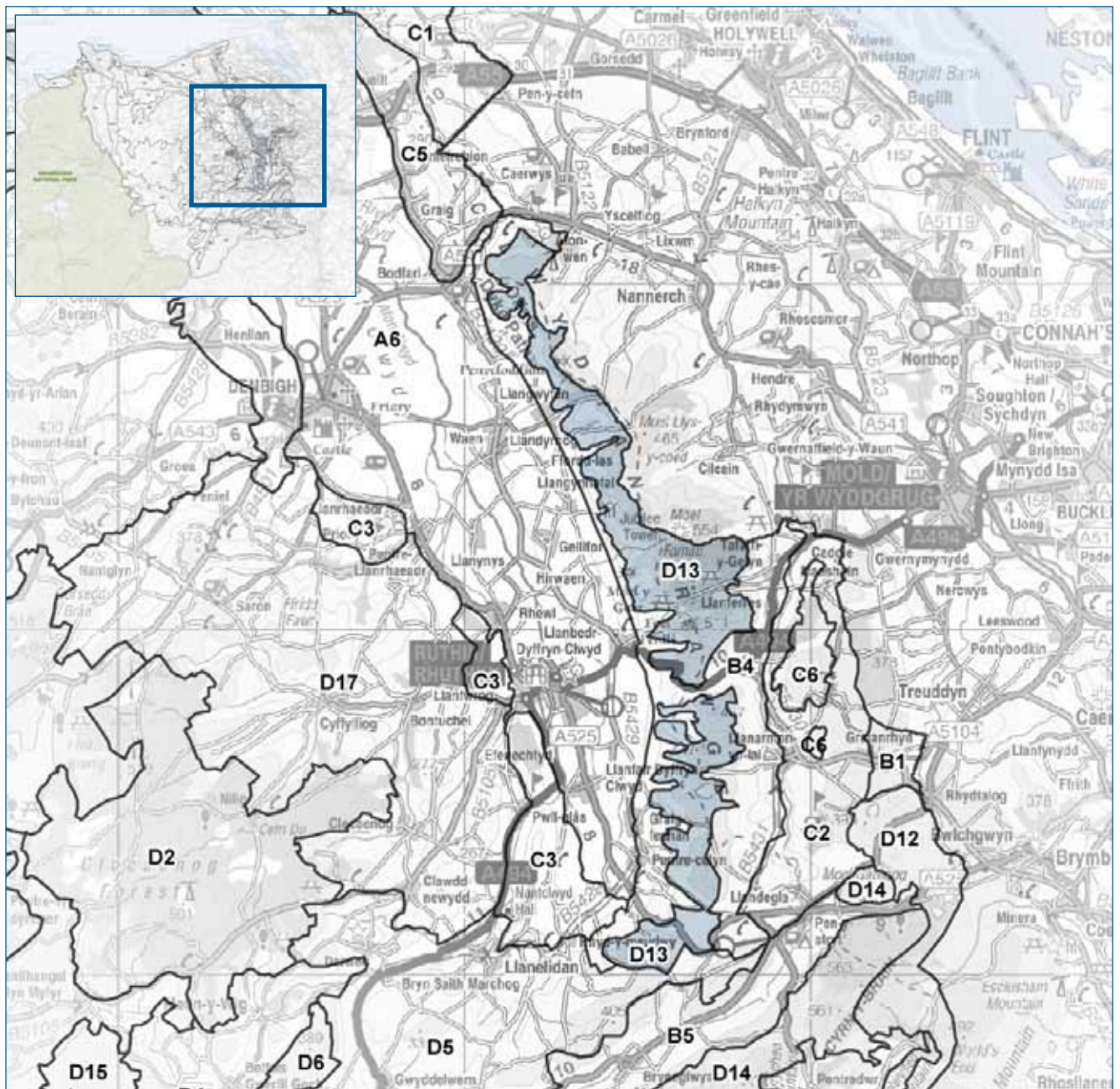
Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Cynwyd and Llandrillo AOB ▪ Pontcysyllte Aqueduct & Canal World Heritage Site ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd), Y Berwyn (Berwyn) and Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscapes		
	Scenic Quality and Character	Typical Moderate-High LANDMAP evaluation. VS46: Low / Moderate / <u>High</u> VS47: Moderate / High VS48: Low / Moderate / <u>High</u>		
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	This landscape unit has a remote and relatively tranquil wilderness character. VS24: Attractive; Exposed; Threatening; Remote; Wild; Spiritual / Threatening; Remote; Wild; Smell		
	Landscape Value	Much of this landscape unit lies within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and large tracts of Open Access Area. Typical High-Outstanding LANDMAP evaluation. VS50: Low / Moderate / <u>High</u> VS49: Low / <u>Moderate</u> LH45: Moderate / <u>Outstanding</u> LH42: Low / Moderate / High / <u>Outstanding</u> GL31: Moderate / <u>Outstanding</u> GL33: Moderate / <u>Outstanding</u>		
Value	Cultural Heritage Value	The south western part of this landscape unit falls within the Vale of Llangollen and Eglwyseg Registered Historic Landscape. Typical Moderate-High LANDMAP evaluation. HL38: Moderate / <u>High</u> HL35: <u>Moderate</u> / High HL40: Moderate / <u>High</u>		

Summary of Sensitivity to Wind Energy Developments	This large scale, open and expansive area of wild and remote moorland lies within the Clwydian Range and Dee Valley AONB. The plateau forms a prominent skyline feature in views from the Wrexham area to the east. The edge of the plateau affords expansive views to and from important landscape and cultural heritage features, including the Clwydian Range and Dee Valley AONB and Pontcysyllte Aqueduct & Canal World Heritage Site. When combined with a number of sensitive visual receptors this significantly increases the sensitivity of the landscape.	Very High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Plateau
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Cynr-y-Brain Forest (Code: D/LC/34); Llandegla Moors (Code: D/LC/35); and Ruabon Moors (Code: D/LC/36)

D13 Moorland Ridge (Clwydian Ridgeline)



Location and Extent

This landscape unit comprises the main ridge of the Clwydian Range to the east of Denbighshire.

Key Characteristics

- Typically vast in scale
- Upland moorland landscape
- Mostly continuous and undulating high ridge
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically vast in scale . VS8: Medium / <u>Vast</u>		
	Landform	A continuous line of rolling hills forms a distinctive and undulating ridgeline broken in places by high east-west valleys. VS4: <u>High Hills/Mountains</u> / Hills/Valleys		
	Landcover Pattern	Landcover mainly comprises upland moorland , rough grazing, pastures and woodland. VS3: Upland Moorland / Hillside & Scarp Slopes Mosaic / Hillside & Scarp Slopes Grazing VS5: <u>Open Land</u> / Woodland / Field Pattern/ Mosaic		
	Built Environment	The landscape is typically unsettled with little modern development . VS6: No Settlements / Scattered Rural/Farm VS27: <u>Unassessed</u> / Fair		
Visual	Skylines and Settings	The distinctive and undulating ridgeline of this landscape unit is a recognisable and prominent skyline feature and forms the backdrop to views from many parts of the study area.		
	Movement	With the exception of occasional movement this landscape unit typically has a relatively still character. VS18: Rare / <u>Occasional</u> / Infrequent / Frequent		
	Visibility, Key Views, Vistas	There are open and expansive views out to the surrounding lowlands and uplands, including Snowdonia National Park . VS9: Open / <u>Exposed</u>		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Numerous properties (outside this landscape unit) - Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Brenig Way - Open Access Areas - Local attractions including Moel Famau Country Park and public rights of way - The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	This area has a strong association with the rest of the Clwydian Range and Dee Valley AONB and intervisibility with much of the surrounding upland areas, including Snowdonia National Park .		

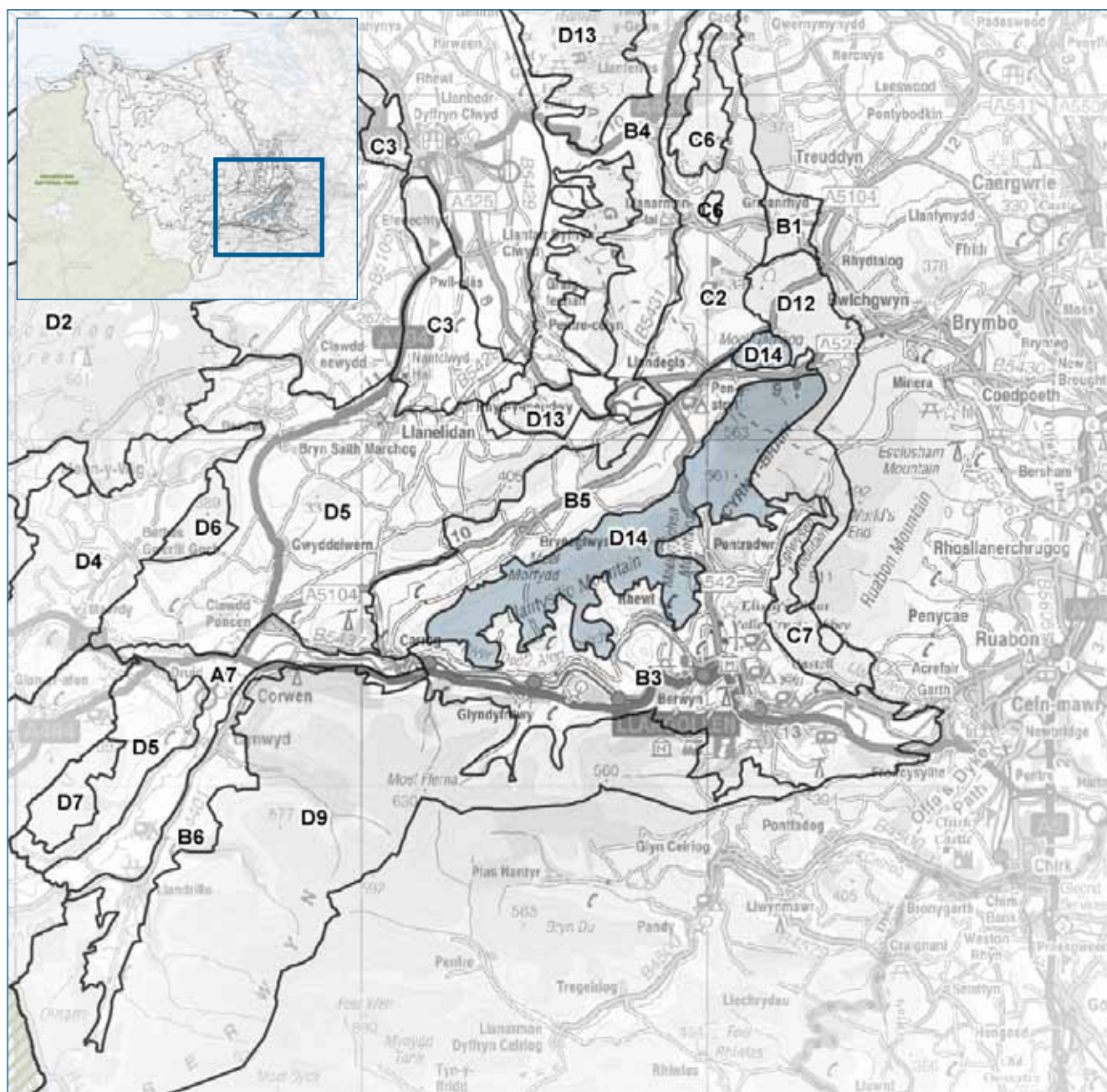
Visual	Views to and from Designated Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Snowdonia National Park ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd), Comin Treffynnon a Mynydd Helygain (Hollywell Common & Halkyn Mountain), Y Berwyn (Berwyn), Mynydd Hiraethog (Denbigh Moors) and Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Denbigh Castle ▪ Hillforts ▪ Heather and Hillforts Landscape Strategy project area ▪ Moel Famau Country Park		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High-Outstanding LANDMAP evaluation. VS46: Moderate / High / <u>Outstanding</u> VS47: Moderate / <u>High</u> VS48: High / <u>Outstanding</u>		
	Remoteness / Tranquillity	The tranquillity and remoteness of this landscape imparts a sense of wilderness in places. VS24: Attractive; Exposed; Threatening; Wild; Spiritual / Attractive; Exposed; Remote; Wild / Safe; Settled		
Value	Landscape Value	This entire landscape unit lies within the Clwydian Range and Dee Valley AONB. Nationally designated features also include Offa's Dyke Path national trail and large Open Access Areas. The beauty of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. Typical Outstanding LANDMAP evaluation. VS50: Moderate / High / <u>Outstanding</u> VS49: Moderate / High / <u>Outstanding</u> LH45: Low / <u>Moderate</u> / High / <u>Outstanding</u> LH42: Low / <u>Moderate</u> / High / <u>Outstanding</u> GL31: Moderate / High / <u>Outstanding</u> GL33: Moderate / High / <u>Outstanding</u>		

Value	Cultural Heritage Value	This entire landscape unit lies within the Vale of Clwyd Registered Historic Landscape. The area also includes scheduled hillforts. The value of the historic and natural heritage of much of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. Typical High-Outstanding LANDMAP evaluation. HL38: Low / Moderate / <u>High</u> / <u>Outstanding</u> / <u>Unassessed</u> HL35: Low / <u>Moderate</u> / <u>High</u> / <u>Outstanding</u> / <u>Unassessed</u> HL40: Low / Moderate / <u>High</u> / <u>Outstanding</u>	
	Summary of Sensitivity to Wind Energy Developments	The natural characteristics of this distinctive and scenic rolling moorland impart a high degree of sensitivity and have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by the beauty, and value of the historic and natural heritage features which have led to its inclusion within the Vale of Clwyd Registered Historic Landscape and the Heather and Hillforts project area. The ridgeline affords extensive views to and from important landscape and cultural heritage features, including Snowdonia National Park, the Vale of Clwyd and Holywell Common and Halkyn Mountain Registered Historic Landscape. This, combined with the high number of sensitive visual receptors, further enhances the sensitivity.	Very High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Ridge
- Regional Landscape Character Map for Wales, 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Clwydian Hills – Main Ridge (Code: D/LC/15)
- Clwydian Range Area of Outstanding Natural Beauty Management Plan 2009/14
- Landscape Strategy Heather and Hillforts 2005

D14 Moorland Ridge (Llantisillio Ridgeline)



Location and Extent

This landscape unit comprises the upland hills of Llantisillio Mountain, Cynr-y-Brain and the distinctive summit of Moel Garegog.

Key Characteristics

- Typically vast in scale
- Upland moorland landscape
- Mostly continuous and undulating high ridge
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically vast in scale . VS8: Small / Large / <u>Vast</u>		
	Landform	An almost continuous line of upland hills which form a distinctive and undulating ridgeline broken in places by high valleys . VS4: <u>Hills/Valleys</u> / Disturbed / Plateaux		
	Landcover Pattern	Landcover mainly comprises extensive tracts of upland heath with a mosaic of heather, bilberry, gorse, bracken and rushes. A large coniferous forestry plantation is located to the north east. VS3: <u>Upland Moorland</u> / Excavation VS5: <u>Open Land</u> / Woodland / Development		
	Built Environment	This landscape unit is unsettled . Limited modern development includes the Ponderosa Café (visitor destination) and some pylon lines. There is also evidence of excavation/ quarrying activities. VS6: No Settlements VS27: Unassessed		
Visual	Skylines and Settings	The distinctive and undulating ridgeline of this landscape unit is a recognisable and prominent skyline feature and forms the backdrop to a wide range of views from many parts of the study area, particularly to the north and south.		
	Movement	Away from the A542 road corridor and the Ponderosa Café, this landscape unit has a relatively still character. VS18: Frequent / <u>Occasional</u>		
	Visibility, Key Views, Vistas	This upland unit is typically open and exposed with views as far afield as Snowdonia National Park, the Clwydian Range and Dee Valley AONB and Berwyn Mountain. VS9: <u>Exposed</u> / Enclosed / Confined		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Numerous residents (outside this landscape unit) ▪ Long distance routes including Offa's Dyke Path national trail, the Clwydian Way and Dee Valley Way and Brenig Way ▪ Open Access Areas ▪ Local attractions and public rights of way ▪ The local road network		

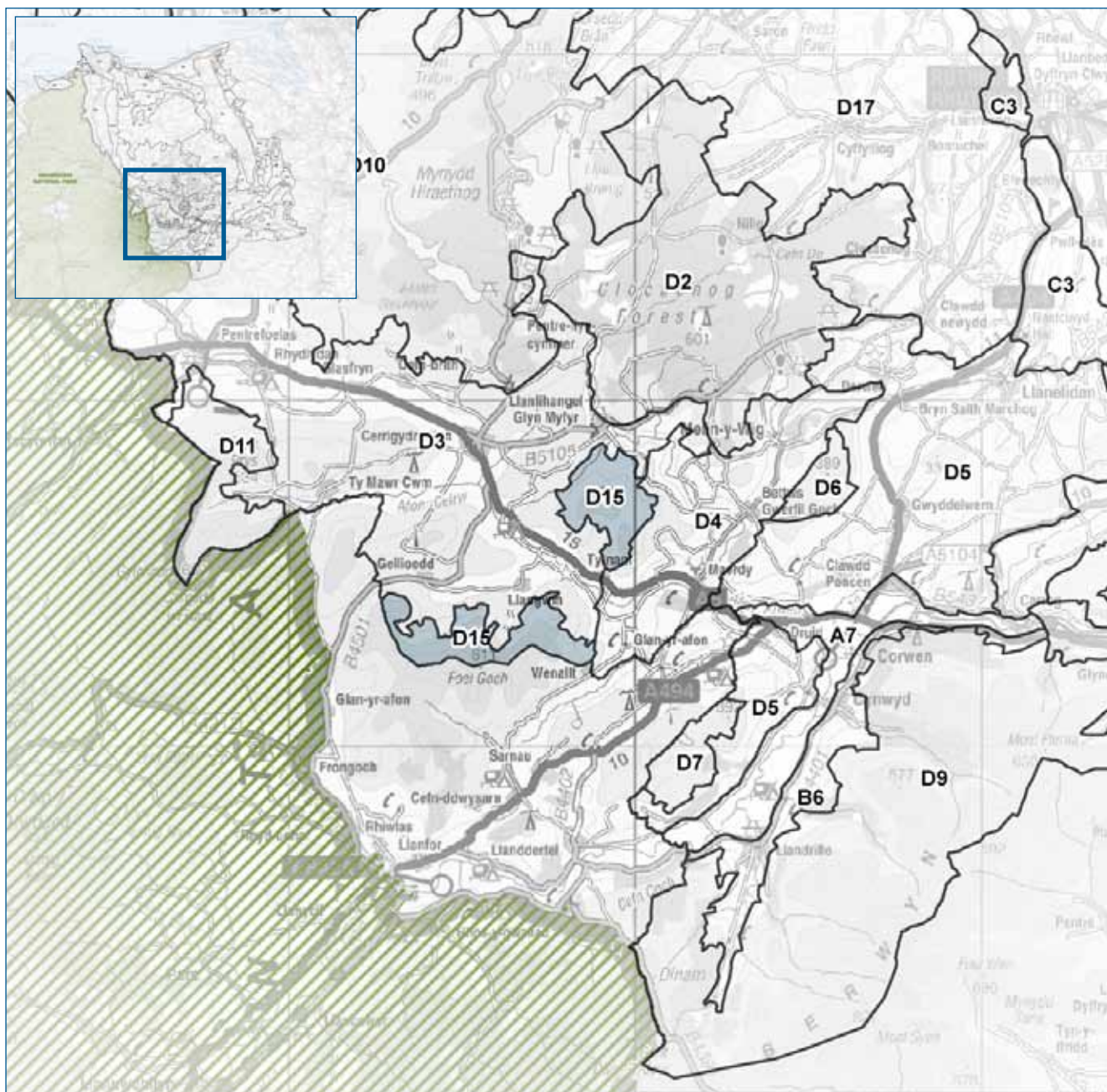
Visual	Intervisibility/ Associations with Adjacent Landscapes	This area has a strong association with the Vale of Llangollen and Berwyn Mountains to the south and the Morwynion Valley and uplands to the north. Intervisibility extends as far as Snowdonia National Park.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Snowdonia National Park ▪ Pontcysyllte Aqueduct & Canal World Heritage Site ▪ Cynwyd and Llandrillo AOB ▪ Open Access Areas, Dyffryn Clwyd (The Vale of Clwyd) and Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Hillforts ▪ Heather and Hillforts Landscape Strategy project area		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation with some Outstanding . VS46: Low / Moderate / <u>High</u> VS47: Low / <u>Moderate</u> / <u>High</u> VS48: <u>Moderate</u> / High / <u>Outstanding</u>		
	Remoteness / Tranquillity	The tranquillity and remoteness of this landscape unit imparts a sense of wilderness in places. VS24: Tranquil; Exposed; Remote; Wild; Spiritual; Smell / Attractive; Exposed; Threatening; Remote; Wild / Threatening; Remote; Wild; Smell		
Value	Landscape Value	Nationally designated features include Offa's Dyke Path national trail. This area also includes large tracts of Open Access Area. The beauty of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. Typical Outstanding LANDMAP evaluation. VS50: Low / Moderate / High / <u>Outstanding</u> VS49: Low / Moderate / <u>Outstanding</u> LH45: <u>Moderate</u> / High / <u>Outstanding</u> LH42: Low / Moderate / <u>Outstanding</u> GL31: Outstanding GL33: Outstanding		

Value	Cultural Heritage Value	Part of this landscape unit lies within the Vale of Llangollen and Eglwyseg Registered Historic Landscape. The value of the historic and natural heritage of much of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. Typical High LANDMAP evaluation. HL38: Moderate / <u>High</u> / Unassessed HL35: <u>Moderate</u> / <u>High</u> / Unassessed HL40: Moderate / <u>High</u>	
Summary of Sensitivity to Wind Energy Developments		The natural characteristics of this distinctive and scenic undulating ridgeline impart a high degree of sensitivity and have resulted in its designation as part of the Clwydian Range and Dee Valley AONB. This sensitivity is further enhanced by the cultural heritage features which have led to its inclusion within the Vale of Llangollen and Eglwyseg Registered Historic Landscape. The beauty and value of the historic and natural heritage of this landscape unit is also recognised by its inclusion within the Heather and Hillforts Landscape Strategy project area. The hills afford extensive views to and from important landscape and cultural heritage features, including Snowdonia National Park and the Pontcysyllte Aqueduct & Canal World Heritage Site. This, combined with the high number of sensitive visual receptors, further enhances the sensitivity.	Very High

Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Ridge
- Regional Landscape Character Map for Wales, RLCA 12 Clwydian Range
- Denbighshire Landscape Strategy 2003, Character Areas as follows: Llantisillio Mountain and Cynr-y-Brain (Code: D/LC/32); Slate Quarries, Horseshoe Pass (Code: D/LC/33); Cynr-y-Brain Forest (Code: D/LC/34); and Llandegla Moors (Code: D/LC/35).
- Landscape Strategy Heather and Hillforts 2005

D15 Moorland Ridge



Location and Extent

This landscape unit comprises distinctive upland hills in Conwy, Mwdwl-eithin to the north of the A5 and Foel Goch and associated hills to the south of the A5.

Key Characteristics

- Typically large scale
- Upland moorland landscape
- Mostly continuous and undulating high ridgelines
- Cultural heritage interest

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower	Higher
Landscape	Scale	Typically a large scale landscape . VS8: Medium / Large / Vast		
	Landform	Strongly undulating upland hills which form distinctive ridgelines . VS4: High Hills/Mountains / Hills/Valleys		
	Landcover Pattern	Landcover mainly comprises upland moorland . VS3: Upland Moorland / Open Upland Valleys VS5: Open Land / Field Pattern/Mosaic		
	Built Environment	This landscape unit is typically unsettled and there is little modern development . VS6: No Settlements / Scattered Rural/Farm VS27: Fair		
Visual	Skylines and Settings	The ridgelines of this landscape unit are distinctive skyline features that form the backdrop to views from lower lying areas.		
	Movement	Although there is occasional movement , this landscape is typically relatively still . VS18: Rare / Occasional		
	Visibility, Key Views, Vistas	There are open and expansive views , including to and from the Clwydian Range and Snowdonia National Park in particular from the south of this landscape unit. VS9: Open / Exposed		
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Occasional properties - Long distance routes including Offa's Dyke Path national trail, the Hiraethog Trail and Clwydian Way - Open Access Areas - Local attractions and public rights of way - Visitors to regional/national attractions outside this landscape unit travelling along the A5 - The local road network		
	Intervisibility/ Associations with Adjacent Landscapes	This landscape unit has strong associations and intervisibility with upland areas, including the Denbigh Moors, Clwydian Range and Dee Valley AONB, Berwyn Mountains and Snowdonia National Park .		

Visual	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Denbigh Moors SLA ▪ Cerrigydrudion and A5 corridor SLA ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd), Mynydd Hiraethog (Denbigh Moors) and Y Berwyn (Berwyn) Registered Historic Landscapes ▪ Hillforts			
	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: High VS47: Moderate VS48: High			
Aesthetic, Perceptual and Experiential	Remoteness / Tranquillity	This landscape unit has a typically tranquil and remote character. VS24: Tranquil; Exposed; Wild; Attractive; Remote / Attractive; Tranquil; Exposed			
	Landscape Value	This landscape unit contains some Open Access Areas. Typical Moderate-High LANDMAP evaluation. VS50: High VS49: Moderate / High LH45: <u>Low</u> / <u>Moderate</u> / High LH42: Low / Moderate GL31: Moderate / High GL33: Moderate / High			
Value	Cultural Heritage Value	Typical Moderate LANDMAP evaluation. HL38: <u>Moderate</u> / High HL35: Low / <u>Moderate</u> / High HL40: <u>Moderate</u> / High			

Summary of Sensitivity to Wind Energy Developments	This area of large scale upland moorland is largely unsettled and has a remote and tranquil character. There is a strong association and intervisibility with the Denbigh Moors, Clwydian Range and Dee Valley AONB, Berwyn Mountains and Snowdonia National Park and extensive views to and from important landscapes and cultural heritage features. When combined with some sensitive visual receptors the sensitivity of the landscape is significantly increased.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Moorland Ridge
- Regional Landscape Character Map for Wales, RLCA 10 Denbigh Moors
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D16 Marginal Upland (East Conwy Valley)



Location and Extent

This landscape unit is situated between the River Conwy valley to the west and Rhos Hills to the east.

Key Characteristics

- Small to medium scale landscape
- Open and exposed uplands
- Mosaic of pasture and woodlands

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity	
			Lower ⇌ Higher	
Landscape	Scale	Small to medium scale landscape. VS8: Small / Medium		
	Landform	Sloping landform rising up to rolling and undulating uplands. VS4: <u>Hills/Valleys</u> / Levels / Rolling/Undulating		
	Landcover Pattern	Landcover comprises a mosaic of pasture and small areas of woodland. VS3: Hill & Lower Plateau Mosaic / Hill & Lower Plateau Grazing VS5: Field Pattern/Mosaic		
	Built Environment	Modern development is evident in the local road network, dispersed settlement pattern and pylon lines that run east to west across this landscape unit and wind turbines to the south. VS6: <u>Clustered</u> / <u>Scattered Rural/Farm</u> / Mixture VS27: <u>Good</u> / <u>Fair</u> / Poor		
Visual	Skylines and Settings	The more elevated parts of this landscape unit form prominent skyline features , particularly in views out of the Conwy Valley and from Snowdonia National Park. Skylines are interrupted by wind turbines and pylon lines in some places.		
	Movement	This landscape is typically still in character, although infrequent traffic on the local road network and more frequent traffic on the A548 introduce some movement . Rotating turbine blades also introduce movement in the south. VS18: Occasional / Infrequent / Frequent		
	Visibility, Key Views, vistas	This landscape unit is typically open and exposed . The more elevated areas afford extensive westerly views to Snowdonia National Park with less prominent southerly views to the Denbigh Moors and distant easterly views to the higher parts of the Clwydian Range. VS9: Open / Exposed		
	Typical Receptors (in broadly descending order of sensitivity)	These include occupiers, users and visitors to the following: ▪ Dispersed settlements ▪ Open Access Areas in adjacent landscape units ▪ Local attractions and public rights of way ▪ The local road network		

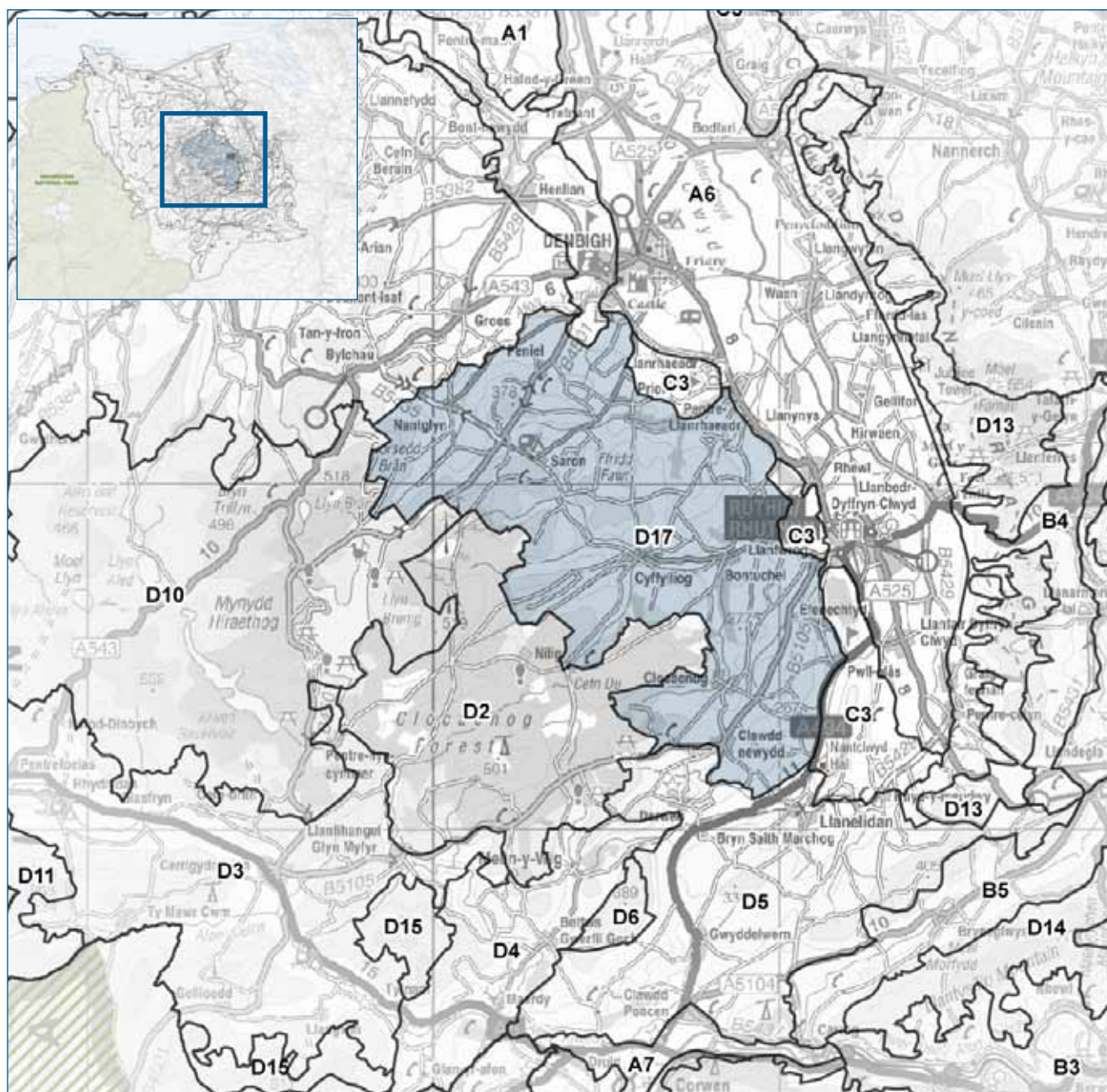
Visual	Intervisibility/ Associations with Adjacent Landscapes	There is a strong association and intervisibility with Snowdonia National Park and to a lesser extent with adjacent upland areas to the south and east and coastal areas to the north.		
	Views to and from Important Landscapes and Cultural Heritage Features	These include: ▪ Snowdonia National Park ▪ The Clwydian Range and Dee Valley AONB ▪ Conwy Valley SLA ▪ Open Access Areas (to the south) ▪ Great Orme Heritage Coast ▪ Dyffryn Clwyd (The Vale of Clwyd), Pen Isaf Dyffryn Conwy (Lower Conwy Valley) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical Moderate - High LANDMAP evaluation. VS46: Moderate / High VS47: Moderate / High VS48: Moderate / High		
	Remoteness / Tranquillity	This landscape unit is typically tranquil and relatively remote in character. VS24: Tranquil; Exposed / Tranquil; Exposed; Threatening		
Value	Landscape Value	Much of this landscape unit lies within the regionally designated Conwy Valley SLA. Typical Moderate-High LANDMAP evaluation with some areas Outstanding . VS50: Moderate / High VS49: Moderate / High LH45: Low / <u>Moderate</u> / Outstanding LH42: Low / <u>Moderate</u> / High GL31: Moderate / High / Outstanding GL33: Moderate / High / Outstanding		
	Cultural Heritage Value	Typical Moderate-High LANDMAP evaluation with some very small sections of Outstanding areas to the south. HL38: <u>Moderate</u> / <u>High</u> / Outstanding HL35: <u>Moderate</u> / High HL40: <u>Moderate</u> / <u>High</u> / Outstanding		

Summary of Sensitivity to Wind Energy Developments	This area of small to medium scale sloping pastures and woodlands is sparsely settled and has a remote and tranquil character, which has resulted in its inclusion within the regionally designated Conwy Valley SLA. The area forms a prominent skyline feature, particularly in from views from the Conwy Valley and from Snowdonia National Park. There is a strong association and intervisibility with Snowdonia National Park and extensive views to and from important landscapes and cultural heritage features, including the Great Orme Heritage Coast. This, combined with the presence of other sensitive visual receptors imparts a high degree of sensitivity.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Regional Landscape Character Map for Wales, 7 Conwy Valley and 9 Rhos Hills
- Welsh Seascapes and their Sensitivity to Offshore Developments, 4 Conwy Estuary and 5 Great Ormes Head to Puffin Island;
- Conwy Deposit Local Development Plan, Revised Background Paper 27 – Special Landscape Areas (August 2012), SLA 6 Conwy Valley
- Conwy Deposit Local Development Plan, Background Paper 27 – Landscape Character Areas (March 2011)
- Conwy Borough Council, A Countryside Strategy for Conwy 1998-2003

D17 Aled Hiraethog Hills (East)



Location and Extent

This landscape unit comprises an extensive upland landscape, rising immediately to the west of the Vale of Clwyd. It extends from Peniel and Nantglyn in the north west to Clwyd-newydd in the south east

Key Characteristics

- Medium scale
- Upland landscape of rounded and undulating hills and valleys
- Predominantly pastoral farmland

Evaluation

The following table illustrates the appraisal of this landscape unit against wind energy development sensitivity criteria.

Sensitivity Criteria		Characteristics of the Landscape Unit	Assessed Sensitivity		
			Lower	↔	Higher
Landscape	Scale	Medium scale landscape. VS8: <u>Medium</u> / Intimate			
	Landform	Upland landscape of rounded and strongly undulating hills and valleys . VS4: <u>Rolling/Undulating</u> / Hills/Valleys			
	Landcover Pattern	Mosaic of pastoral farmland and woodland, both broadleaf and coniferous. VS3: Hillside & Scarp Slopes Grazing VS5: <u>Field Pattern/Mosaic</u> / Woodland / Development			
	Built Environment	Historic settlement pattern of small villages and hamlets and dispersed, scattered stone built farms and cottages, linked by a network of often narrow and winding lanes. VS6: Village VS27: Unassessed			
Visual	Skylines and Settings	The distinctive undulating ridgeline of the Clwydian Range forms a backdrop to views eastwards. The more elevated parts of this landscape unit form prominent skyline features .			
	Movement	This landscape is perceived to be still due to infrequent movement of traffic and because many of the lanes have high banks. VS18: Infrequent			
	Visibility, Key Views, vistas	Views are variable depending on landform and vegetation. The more elevated areas afford expansive views particularly to the north and east. However, within the deep wooded valleys views are much more contained. VS9: Open			
	Typical Receptors (in descending order of sensitivity)	These include occupiers, users and visitors to the following: - Small historic settlements and dispersed properties - Long distance routes including the Brenig Way and Hiraethog Trail - Open Access Areas - Local attractions and public rights of way - The local road network			

Visual	Intervisibility/ Associations with Adjacent Landscapes	There is a strong association and intervisibility with the Clwydian Range and Dee Valley AONB . The north west of the area has good intervisibility with Clocaenog Forest to the west where there are a number of existing wind turbines. The eastern edge of the area forms a backdrop to westerly views from Denbigh.		
	Views to and from important Landscapes and Cultural Heritage Features	These include: ▪ The Clwydian Range and Dee Valley AONB ▪ Open Access Areas ▪ Dyffryn Clwyd (The Vale of Clwyd) and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscapes ▪ Registered Parks and Gardens ▪ Denbigh Castle ▪ Hillforts		
Aesthetic, Perceptual and Experiential	Scenic Quality and Character	Typical High LANDMAP evaluation. VS46: <u>High</u> / Moderate VS47: Moderate VS48: High		
	Remoteness / Tranquillity	This landscape is perceived to be tranquil and relatively remote . VS24: Attractive; Tranquil; Safe; Settled		
Value	Landscape Value	This landscape unit contains some Open Access Areas. Typical Moderate-High LANDMAP evaluation. VS50: <u>High</u> / Moderate VS49: Moderate LH45: <u>Moderate</u> / High LH42: <u>Moderate</u> / High GL31: Moderate / High GL33: Moderate / High		
	Cultural Heritage Value	This landscape unit includes small parts of the western edge of the Vale of Clwyd Registered Historic Landscape and some Registered Parks and Gardens and hillforts. Typical High LANDMAP evaluation. HL38: <u>Unassessed</u> / Low / Moderate / High HL35: <u>Unassessed</u> / Low / Moderate / High HL40: <u>High</u> / Low		

Summary of Sensitivity to Wind Energy Developments	The sensitivity of this strongly undulating upland landscape with its mosaic of pastoral farmland, woodlands and historic settlements is further enhanced by its strong association and intervisibility with the Clwydian Range and Dee Valley AONB and views to and from important landscapes and cultural heritage features, including the historic town of Denbigh. This, combined with the presence of other sensitive visual receptors imparts a high degree of sensitivity.	High
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Key Reference Sources Used for this Evaluation

- LANDMAP
- Clwyd Landscape Assessment 1995, Aled Hiraethog Hills
- Regional Landscape Character Map for Wales, 9 Rhos Hills and 10 Denbigh Moors
- Countryside Council for Wales, Historic Landscapes Register, 1 The Vale of Clwyd (HLW (C) 1)
- Denbighshire Landscape Strategy 2003, Character Area: Denbigh and Ruthin Hills (Code: D/LC/23)

SECTION 5: EVALUATION OF LANDSCAPE STRATEGY AREAS AND CAPACITY ASSESSMENTS

A total of 15 Landscape Strategy Areas were identified across the study area as illustrated in Figure 6. These are listed below in Table 5.1 together with an overall evaluation of their landscape and visual sensitivity in relation to wind energy development.

Table 5.1: Summary of Strategy Areas and Overall Sensitivity

Landscape Strategy Area		Overall Sensitivity	Landscape Strategy Area Location ¹		Page Number
Ref	Name		Conwy	Denbighshire	
1	Clwydian Hills	Very High		100%	198
2	Vale of Clwyd	High	5%	95%	201
3	South Clwydian Hills	Medium-High		100%	204
4	Vale of Llangollen	Very High		100%	208
5	Berwyn Mountains	Very High		100%	212
6	Western Dee Valley	Medium-High		100%	215
7	Clocaenog Forest	Low	50%	50%	218
8	Cerrig Uplands	High	90%	10%	221
9	Denbigh Moors	High	80%	20%	224
10	Rhos Hills	High	60%	40%	227
11	Elwy Valley	High	95%	5%	230
12	Conwy Valley	High	100%		233
13	North West Conwy Coast	High	100%		236
14	Colwyn Coast	High	95%	5%	239
15	Coastal Flats	Medium	45%	55%	242

Approach to Evaluating Landscape Strategy Areas

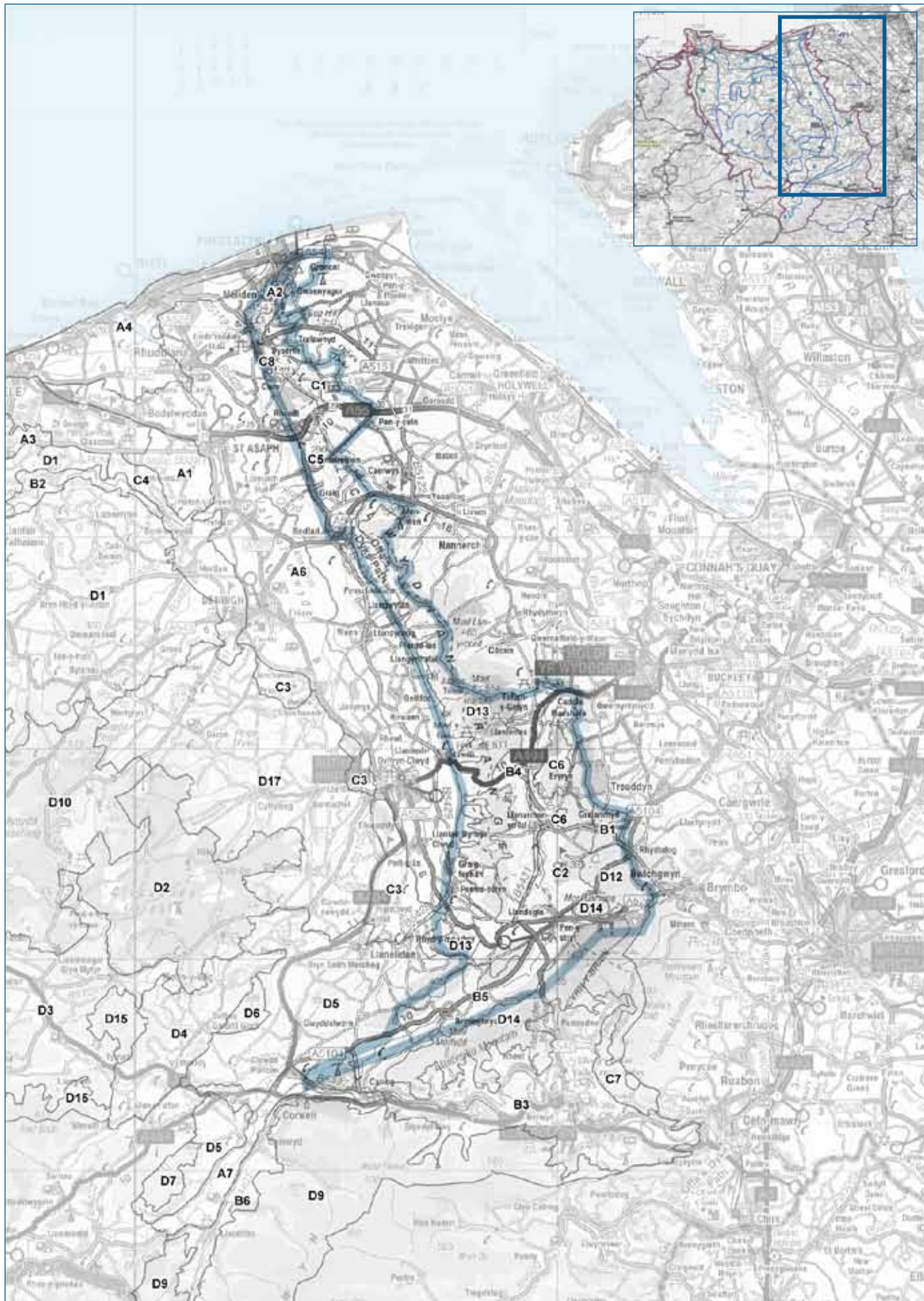
The following text describes the how the evaluation, capacity assessment and guidance notes are presented for each strategy area:

- Each strategy area has a key plan and text describing its location and landscape context.
- The references for the landscape units which are found within each strategy area are also listed.
- A statement of the overall sensitivity of the strategy area in relation to wind energy development is presented, together with a justification of the assessment.
- A list of the landscape, visual and cultural heritage characteristics and qualities which are susceptible to wind energy development is provided for each strategy area. Designated features are listed separately. It should be noted that Registered Historic Landscapes and the Heritage Coast, whilst not statutorily protected, are considered to be of national value and are therefore included within the list of designations for the relevant area.
- The landscape strategy for the area is set out including the landscape objective(s) for the area, a record of operational and consented wind energy development (March 2013), an indication of the relative amounts of wind energy development which might be accommodated (indicative capacity) and area specific guidance notes regarding the scale, design and siting of wind energy developments in relation to each area.

It is important to note that the strategy area evaluation sheets must be read together with the relevant sensitivity evaluation sheets (these are listed before each table and also illustrated on each key plan for ease of reference).

¹ The location of each strategy area is split into approximate percentage coverage where the landscape strategy areas include parts of Conwy and Denbighshire

Strategy Area 1 - Clwydian Hills



Location and Context

Located along the eastern boundary of Denbighshire, the Clwydian Hills strategy area extends south from the urban fringe of Prestatyn on the coast, to the Morwynion Valley which sits below the northern slopes of the Llantysilio and Cynr-y-Brain Mountains. The area comprises the rolling ridgeline of the Clwydian Range - an area of sloping pastures and upland moorland which is a regional and prominent backdrop visible within many local and distant views. In recognition of its scenic beauty much (approximately 95%) of it is located within the Clwydian Range and Dee Valley AONB.

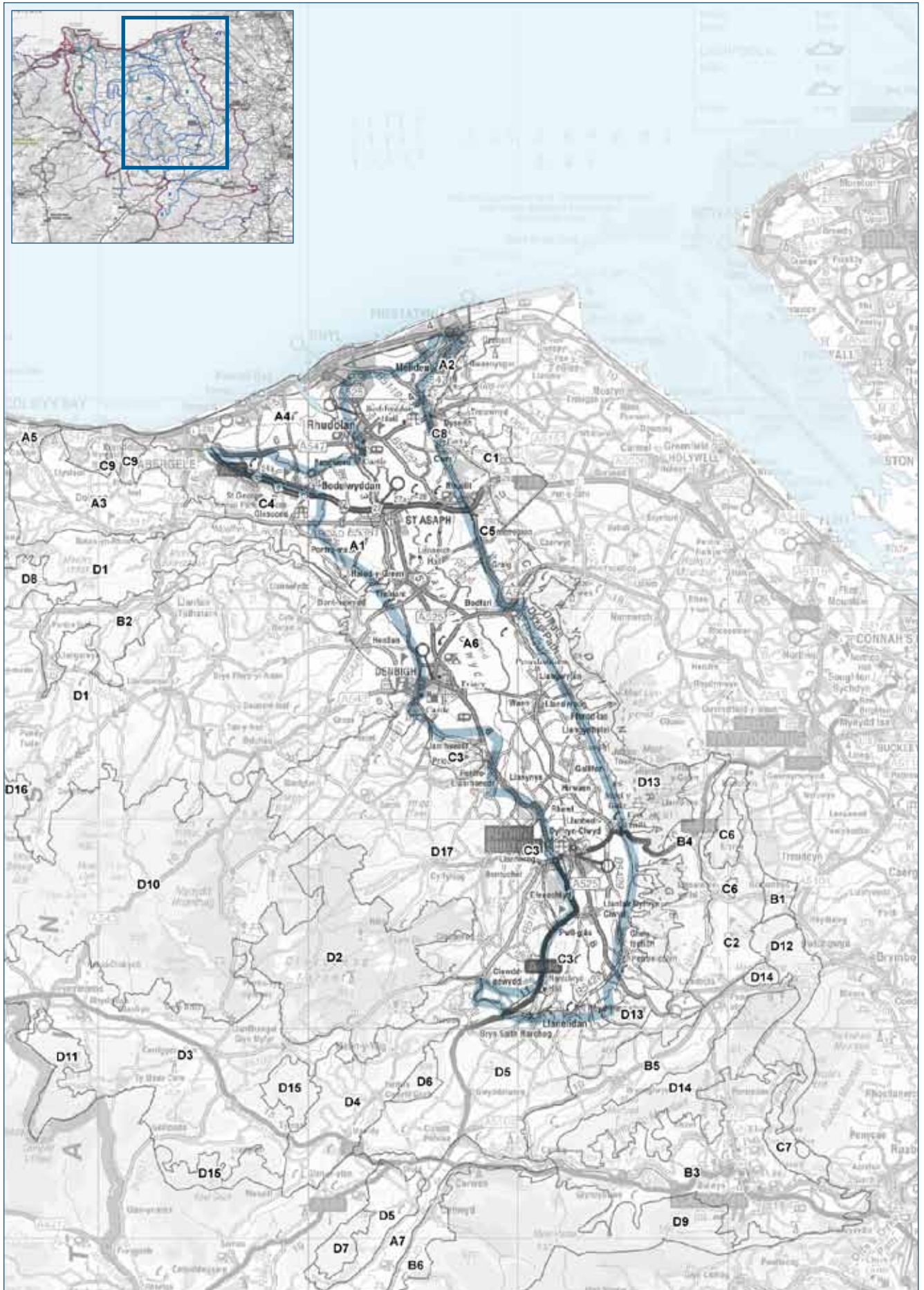
Landscape Units Included within this Strategy Area

A2; B4; B5; C1; C2; C5; C6; C8; D12; D13; and D14

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Very High	This is a highly valued landscape which is recognised by the fact that the majority of this area lies within the Clwydian Range and Dee Valley AONB and includes other important landscape and cultural heritage designations. The area is also highly valued for providing outdoor recreational opportunities. There is an openness and good intervisibility with landscapes outside this area.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 95% of the strategy area is within the Clwydian Range and Dee Valley AONB. ▪ Open Access Land. ▪ Offa's Dyke Path national trail. ▪ Approximately 50% of the strategy area is within Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape.* ▪ Scheduled hillforts. ▪ Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Typically very high scenic quality. ▪ Distinctive and prominent ridgeline with associated hill slopes and side valleys - the distinctive skyline features in many local and distant views. ▪ Large areas of upland moorland which are included within the Heather and Hillforts Landscape Strategy project area. ▪ Wild, remote and often tranquil characteristics which are viewed as special qualities of the AONB landscape. ▪ Setting for frequent access and outdoor recreation, including Offa's Dyke Path, The Clwydian Way, Brenig Way, Open Access Land, Moel Famau Country Park and parts of Loggerheads Country Park. ▪ Openness and intervisibility to and from this landscape - typically vast, open and panoramic views are afforded from the many accessible hilltops, with views as far reaching as Snowdonia National Park, the Cynwyd and Llandrillo AOB and the Dee Estuary. ▪ Historic landscape with a rich time-depth and a number of hilltop features and designed parkland landscapes. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	6 no. micro scale developments, most of which are located to the south west of Llandegla.
Indicative Overall Capacity	Despite the area's AONB status, very high sensitivity and the presence of existing (micro scale) developments to the south east of the ridgeline, there may be some scope for further micro scale development where this relates well to the existing built environment. This could typically comprise single turbines up to 20m blade tip height. However, these should be clearly separated so that their effects remain local and there is no collective defining influence on the landscape.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Clwydian Range and Dee Valley AONB, its special qualities and its wider setting. The effects of development both within and beyond the AONB need to be considered. ▪ Ensure that the developments are clearly separate so that their effect on the perception of landscape remains local and there is no collective / cumulative defining influence on the experience of the landscape. ▪ Avoid siting turbines within the Heather and Hillforts Landscape Strategy project area which has historic and functional coherence and is therefore sensitive to modern development. ▪ Maintain the integrity of Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape. ▪ Protect the settings of designated and other important cultural heritage features; and the key views to and from these features. ▪ Maintain intervisibility between hilltop cultural heritage features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting turbines along the open natural skyline, on open hillsides and within the sight lines of key views. ▪ Avoid cumulative effects on popular routes including Offa's Dyke Path national trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.

Strategy Area 2 - Vale of Clwyd



Location and Context

The Vale of Clwyd strategy area is located between the upland areas of the Clwydian Hills to the east and Rhos Hills to the west. This area extends from the urban fringes of Rhyl and Prestatyn on the coast south to Llanellidan.

Landscape Units Included within this Strategy Area

A1 and A6 with small part of B4; C3; D5 and D17

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This is a highly valued landscape which lies close to and partly within the Clwydian Range and Dee Valley AONB and includes other important landscape and cultural heritage designations. The area is also informally valued as a tranquil and historically settled landscape and provides a number of low key outdoor recreational opportunities. Parts of the area are open and serve as the foreground to views of the AONB and the Rhos Hills.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area - Approximately 2% of the strategy area lies within the Clwydian Range and Dee Valley AONB. - Offa's Dyke Path national trail runs through an urban environment to the far north east)ct the fact it runs through an urban environment in this Area (thus lessening the sensitivity of this feature in this particular area). - Sustrans - North Wales Coast cycle route (NCN Route 5). - Approximately 60% of the strategy area is within Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape.* - Important scheduled monuments including Denbigh Castle, the Marble Church and Rhuddlan Castle. Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features - Broad river valley defined by the Clwydian Range to the east and the Rhos Hills to the west. Scenic landscape back-dropped by views of surrounding hills. - Complex and historic pattern of pastoral farmland, woodland settlements and historic parkland. - Much of this area has a tranquil and undisturbed character. - Although views within and along the valley are often contained by vegetation, from many parts there is good intervisibility with the Clwydian Range and Rhos Hills. - North of the A55 there are typically more open views towards the coast. - High numbers of sensitive visual receptors, including users of the A55 torusit route and visitors to the coast and Rhos Hills, users of Offa's Dyke Path, Brenig Way, Clwydian Way, Dyserth Cycleway, the North Wales Path and the Sustrans - North Wales Coast cycle route (NCN Route 5). Historic landscape with a rich time-depth and a number of important features which are also visitor attractions. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	1 no. micro scale development, located just off the A55 to the east of St Asaph.
Indicative Overall Capacity	Despite this strategy area's partial AONB status and high sensitivity there may be capacity for further micro scale development in addition to the one already present near St Asaph, but only where this relates well to the existing built environment. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the valley and the Clwydian Range and Dee Valley AONB, its special qualities and its wider setting. ▪ Consider the effects of development on the wider setting of the Rhos Hills. ▪ Maintain the tranquillity of the valley and adjoining areas. ▪ Ensure that the developments are clearly separate so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape. ▪ Maintain the integrity of Dyffryn Clwyd (The Vale of Clwyd) Registered Historic Landscape. ▪ Protect the settings and key views to and from important cultural heritage such as Denbigh Castle, the Marble Church and Rhuddlan Castle. ▪ Maintain intervisibility between cultural heritage features on the neighbouring hilltops. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Avoid cumulative effects on the coastline, popular viewpoints and routes such as the A55, A525, Offa's Dyke Path national trail, Brenig Way, Clwydian Way, Dyserth Cycleway, the North Wales Path and the Sustrans - North Wales Coast cycle route (NCN Route 5) – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.

Location and Context

The South Clwydian Hills strategy area is located towards the south of Denbighshire between the Clwydian Range and Dee Valley AONB and Clocaenog Forest.

Landscape Units Included within this Strategy Area

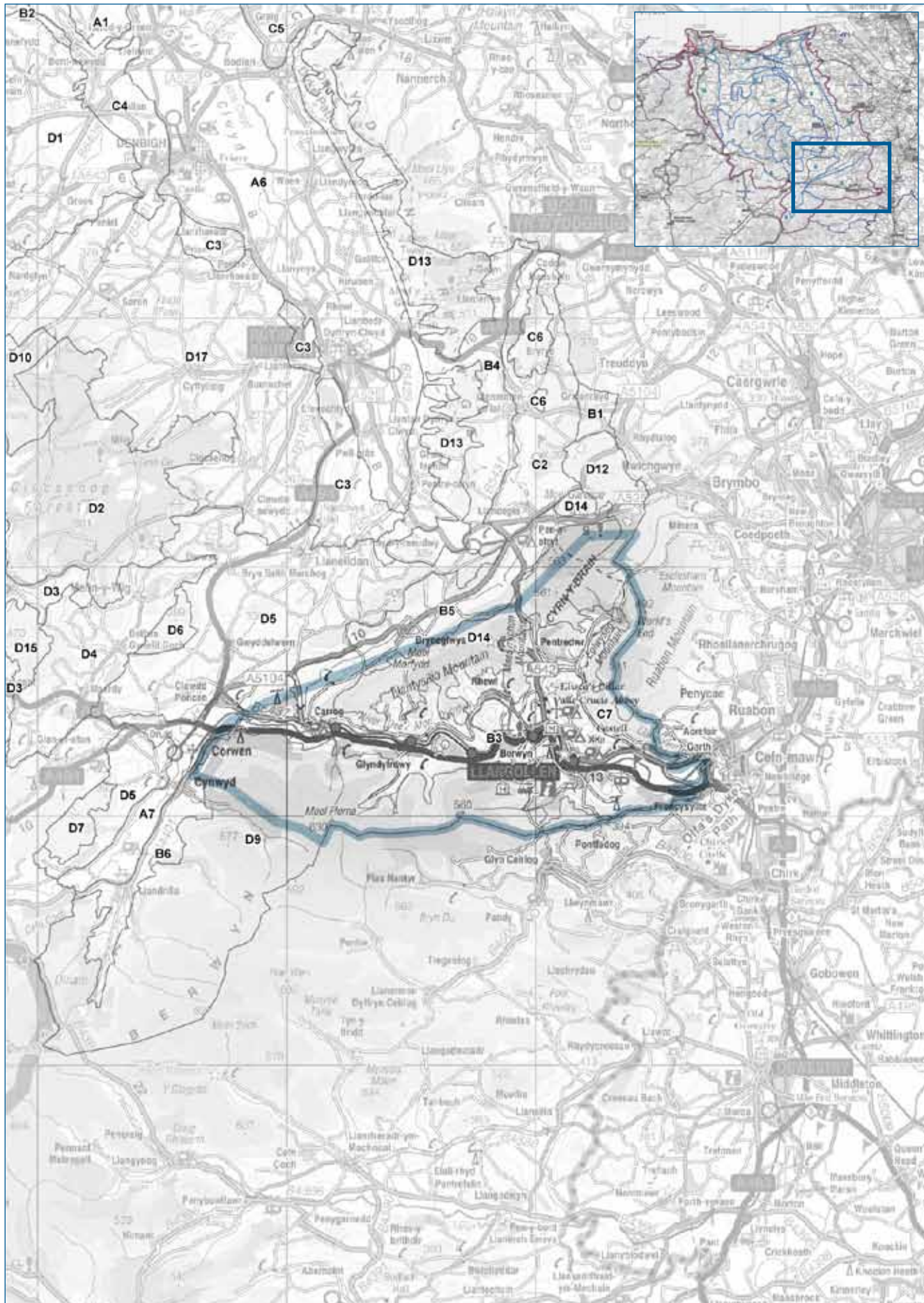
D5 with a small part of D4

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Medium - High	This is a moderately valued landscape which lies close to the western edge of the Clwydian Range and Dee Valley AONB. The south western part of this area lies close to and forms part of the wider setting of the Cerrigydrudion and A5 Corridor Special Landscape Area. The area is also informally valued for its scenic and tranquil rural character and provides a number of outdoor recreational opportunities. There is an openness and visibility to and from the higher ground.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Small Open Access Area to the south east. Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Complex interlocking pattern of strongly undulating and rolling hills and valley slopes. ▪ Complex mosaic of pastoral farmland with some large areas of woodland, open hillside and scarp slopes. ▪ Much of this area has a tranquil and undisturbed character and is informally valued for its low key recreational opportunities. ▪ Although views to and from less elevated parts of this area are typically enclosed by landform and vegetation, long distance and panoramic views are afforded from the higher accessible hilltops, with views to and from Snowdonia National Park and the Clwydian Range and Dee Valley AONB, including from the Caer Drewyn Hillfort.
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection - all areas that lie within or contribute to the outlook and setting of the AONB. Landscape Accommodation - areas that do not contribute to the outlook and setting of the AONB and are outside the AONB.
Current Wind Energy Development (March 2013)	1 no. micro scale development and 3 no. small scale developments located to the east of the A494, near the small settlement of Gwyddelwern.

Indicative Overall Capacity	Strategically this area lies between and serves as a narrow buffer between the areas of wind development proposed within TAN 8 SSA A at Clocaenog Forest and the AONB. Any development within this strategy area may exacerbate the effects of development within the SSA and may harm the special qualities of the AONB. Notwithstanding this, the parts of this strategy area which are not deemed to contribute to the setting or views to and from the AONB may have the capacity for some additional micro/small scale wind energy development. This could typically comprise single turbines up to 50m blade tip height where this relates well to the existing built environment. Developments should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Clwydian Range and Dee Valley AONB, its special qualities and its wider setting. The effect of wind development both within and beyond the AONB needs to be considered using visualisations. This strategy area occupies one of the narrowest stretches of landscape between the developments around Clocaenog Forest and the AONB. Development must avoid creating a sense of unacceptable encroachment, encirclement, prominence, or discordance, individually or cumulatively on the AONB. ▪ Proliferation of smaller-scale wind energy developments can lead to a cumulative impact within such a sensitive landscape. It is therefore important to consider the locations of existing and proposed turbines when planning a new development. ▪ Ensure that any developments are clearly separate so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape. This requires a particularly careful consideration of the cumulative effects of existing and proposed developments. ▪ Conserve the natural beauty of the nearby Cynwyd and Llandrillo AOB, its special qualities (including tranquillity and sense of wilderness) and wider setting. Wind energy development must avoid creating a sense of unacceptable encroachment, encirclement, prominence or discordance in relation to the AOB, either individually or cumulatively. ▪ Ensure that the distinctive pattern and scale of the hills and valleys is not compromised by tall turbines. ▪ Maintain the tranquillity of the landscape and adjoining areas. ▪ Protect key views to and from important cultural heritage features such as Caer Drewyn Hillfort.

Guidance on Siting	▪ Ensure new access tracks do not damage any historic field patterns and replant any hedges affected by construction. ▪ Avoid siting development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Avoid cumulative effects on popular viewpoints, and routes including the A494 and Clwydian Way, Brenig Way and Dee Valley Way long distance routes and visitor attractions such as Llantysilio Mountain to the south – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.
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Strategy Area 4 - Vale of Llangollen



Location and Context

The Vale of Llangollen strategy area is located to the south east of Denbighshire, extending from the Llantysilio and Cynr-y-Brain Mountains south to the Berwyn Mountains, with Ruabon Mountain in the east. This low lying landscape is very important for its scenery and for its cultural heritage features and much of it lies within the **Clwydian Range and Dee Valley AONB** and **Pontcysyllte Aqueduct & Canal World Heritage Site**.

Landscape Units Included within this Strategy Area

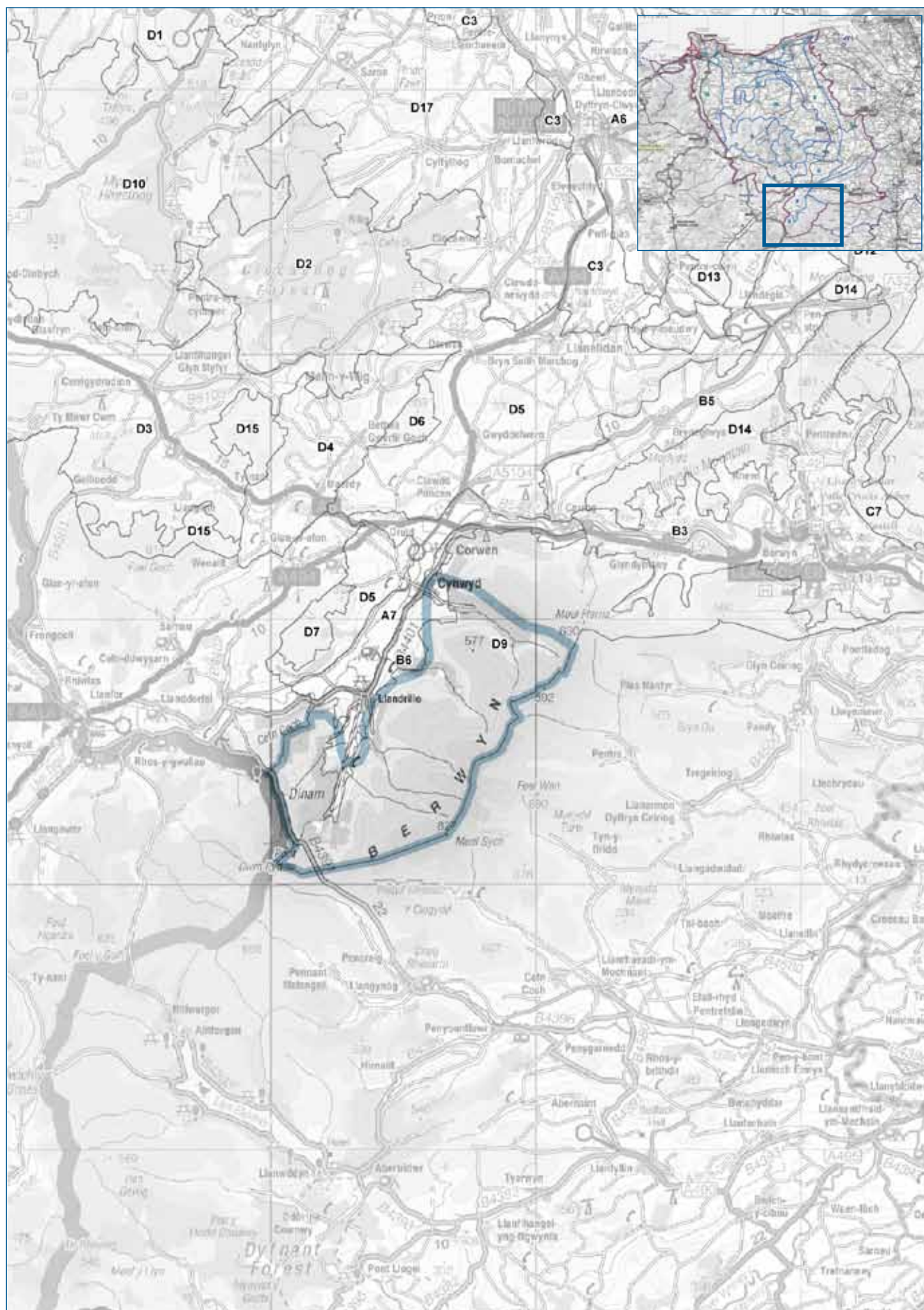
B3; C7; D9; D12 and D14 with small areas of units A7; B5; B6 and D5

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Very High	The Vale of Llangollen is a highly valued landscape which is recognised by the fact that the much of it lies within the Clwydian Range and Dee Valley AONB, the Pontcysyllte Aqueduct & Canal World Heritage Site and the Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscape. The area is also informally valued for its scenic and tranquil rural character and provides a number of outdoor recreational opportunities. There is an openness and notable intervisibility between the higher ground and other highly sensitive landscapes including Y Berwyn and the Clwydian Range outside this area. The dramatic and recognisable skylines which are created by the mountains which surround and enclose the Vale of Llangollen are free from wind energy development.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ 100% of the strategy area is within the Clwydian Range and Dee Valley AONB. ▪ Offa's Dyke Path national trail. ▪ Approximately 15% of the strategy area is within the Pontcysyllte Aqueduct & Canal World Heritage Site. ▪ Approximately 30% of the strategy area is within the Dyffryn Llangollen ac Eglwyseg (Vale of Llangollen and Eglwyseg) Registered Historic Landscape.* ▪ Scheduled hillforts. ▪ Registered Historic Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Distinctive landform comprising a deep and steeply sided major river valley surrounded by the prominent and undulating ridgelines of Llantysilio, Cynr-y-Brain, Ruabon and Berwyn Mountains. ▪ A diverse mosaic of pastoral farmland, rough grassland, bracken, scrub and woodland with some large blocks of conifer forest and extensive areas of upland moorland. ▪ Away from the main visitor attractions, much of this area has a tranquil and undisturbed character which is viewed as a special quality of the AONB landscape. ▪ Remote and wild character of the main ridgelines of Llantysilio, Cynr-y-Brain, Ruabon and Berwyn Mountains. ▪ The landscape is informally valued as a place for outdoor recreation and tourism and a key gateway into Wales.

	▪ High numbers of sensitive visual receptors, including residents and visitors to the various cultural heritage features (ie. Pontcysyllte Aqueduct & Canal World Heritage Site, Valles Crucis Abbey, Castell Dinas Bran, Llangollen Railway, Canal, and Llangollen itself) and visitors to the Clwydian Range and Dee Valley AONB and the surrounding hills. ▪ Although views within and along the valley are often contained by the landform and vegetation, a significant number of views are afforded from important tourist routes, principally the A5 historic route and long distance routes such as Offa's Dyke Path national trail, Clwydian Way, Dee Valley Way and Llwybr Ceiriog Trail, North Berywn Way and Brenig Way and other local attractions. ▪ The higher ground affords open and far reaching views to Snowdonia National Park, the main ridgeline of the Clwydian Range to the north and the Berwyn Mountains to the south. ▪ Historic landscape with many important features, which are also visitor attractions. *(undesigned but recognised as being of national value)
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	There are currently no existing or proposed wind energy developments within this strategy area.
Indicative Overall Capacity	It is considered that this strategy area may have a very limited capacity for micro scale wind energy development where this relates well to the existing built environment. These could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Clwydian Range and Dee Valley AONB, its special qualities and its wider setting. The effects of development both within and beyond the AONB need to be considered. ▪ Maintain the integrity and setting of the Pontcysyllte Aqueduct & Canal World Heritage Site. ▪ Conserve the natural beauty of the nearby Cynwyd and Llandrillo AOB, its special qualities (including tranquillity and sense of wilderness) and wider setting. Wind energy development must avoid creating a sense of unacceptable encroachment, encirclement, prominence or discordance in relation to the AOB, either individually or cumulatively. ▪ Maintain the integrity of the Llangollen and Eglwyseg Registered Historic Landscape. ▪ Protect the settings of designated and other important cultural heritage features and key views to and from these features.

	▪ Maintain intervisibility between hilltop cultural heritage features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting turbines on the surrounding open hilltops, which are currently free from any turbines. ▪ Avoid siting turbines within the sight lines of key views. ▪ Avoid cumulative effects on popular routes including the A5, Offa's Dyke Path national trail, Clwydian Way, Dee Valley Way and Llwybr Ceiriog Trail, North Berywn Way and Brenig Way and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Ensure that the developments are clearly separate so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape. ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ As well as taking into account views from elevated isolated properties, siting should take into consideration important views from the more densely populated settlement of Llangollen. The town has a number of visitor attractions associated with it and a strong connection with the landscape in which it is situated.
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Strategy Area 5 - Berwyn Mountains



Location and Context

The Berwyn Mountains strategy area is located to the far south of Denbighshire, to the east of Llandrillo.

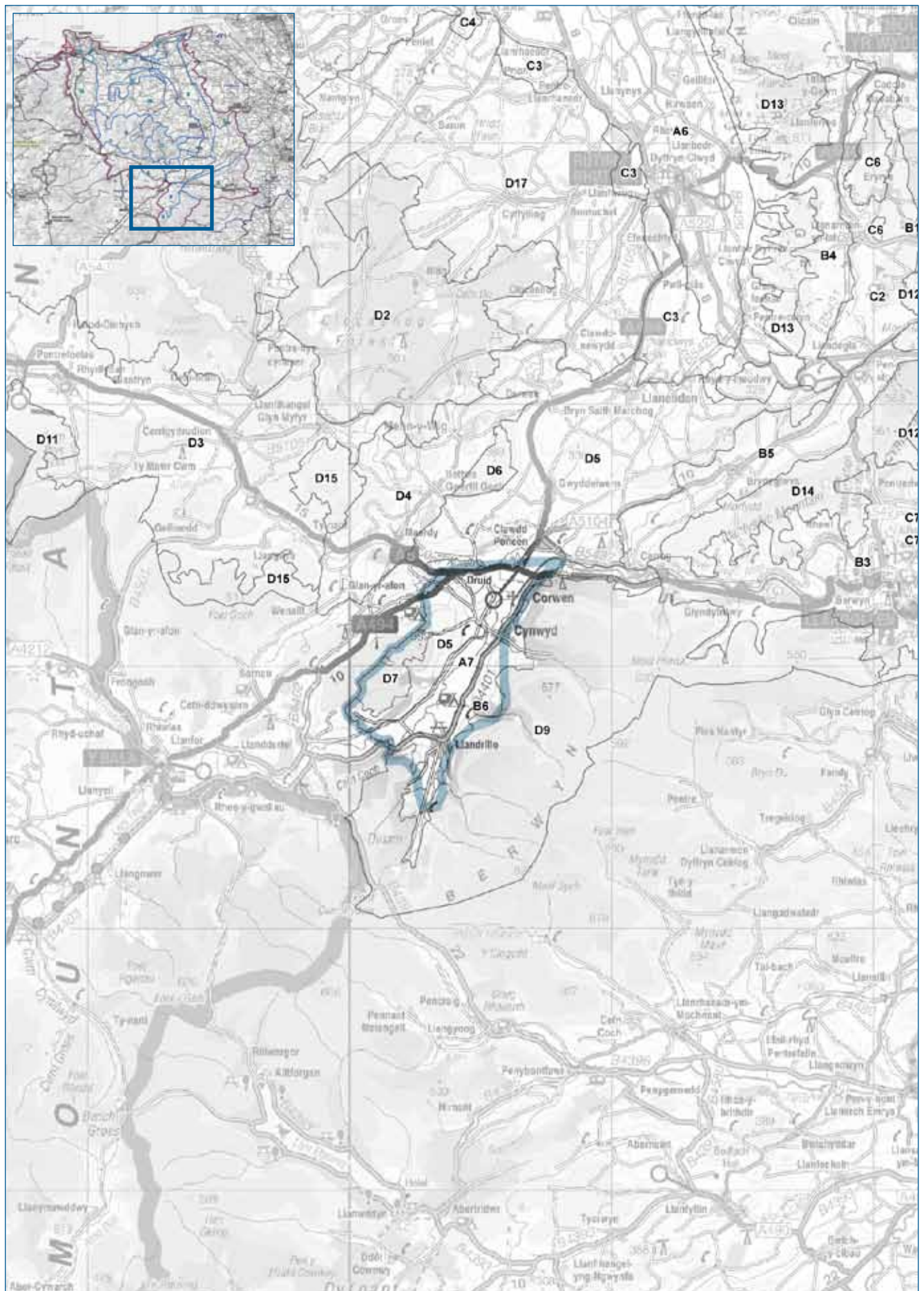
Landscape Units Included within this Strategy Area

Primarily D9 with a small part of B6

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Very High	This is a highly scenic landscape which is recognised by the fact that much of this area lies within the Cynwyd and Llandrillo AOB and Y Berwyn (Berwyn) Registered Historic Landscape. The Berwyn Mountains are a remote, tranquil and sparsely populated upland which are valued for their sense of wilderness. The area is also greatly valued for providing low key outdoor recreational opportunities. There is an openness and notable intervisibility between the higher ground and other highly sensitive landscapes including Snowdonia National Park, the Clwydian Range and Llantysilio Mountain. There is little development within the area and no wind energy development.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 98% of the strategy area is within Cynwyd and Llandrillo AOB (local designation). ▪ Open Access Land. ▪ Approximately 50% of the strategy area is within Y Berwyn (Berwyn) Registered Historic Landscape.* ▪ Scheduled hillforts. Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Typically very high scenic quality. ▪ Upland plateau comprising predominantly open moorland. ▪ Wild, remote and often tranquil landscape. ▪ Open and uninterrupted skylines, which feature in many local and distant views. ▪ Setting for low key outdoor recreation, including the North Berwyn Way and Open Access Land. ▪ Openness and intervisibility to and from this landscape - typically vast, open and panoramic views are afforded from the many accessible hilltops, with views as far reaching as Snowdonia National Park, the Clwydian Range and Dee Valley AONB, and the wider Cynwyd and Llandrillo AOB. ▪ Historic landscape with a number of important hilltop features. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	There are currently no existing or proposed wind energy developments within this strategy area.
Indicative Overall Capacity	The tranquil, remote and wilderness qualities of the Berwyn Mountains and access and appreciation of the area by walkers precludes any form of wind development. The lower settled slopes with enclosed farmland may have a very limited capacity for micro scale wind energy development where this relates well to the existing built environment. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply for any proposed developments on the lower slopes: ▪ Consider the effects of development on Snowdonia National Park, its special qualities and wider setting. ▪ Conserve the natural beauty of the Cynwyd and Llandrillo AOB, its special qualities (including tranquillity and sense of wilderness) and wider setting. Wind energy development must avoid creating a sense of unacceptable encroachment, encirclement, prominence or discordance in relation to the AOB, either individually or cumulatively. ▪ Maintain the integrity of Y Berwyn (Berwyn) Registered Historic Landscape. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Maintain intervisibility between hilltop cultural heritage features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid cumulative effects on popular routes including the North Berwyn Way and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ Ensure that any development on the lower slopes is clearly separated so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape.

Strategy Area 6 - Western Dee Valley



Location and Context

The Western Dee Valley strategy area is located to the far south of Denbighshire, to the west of Llandrillo.

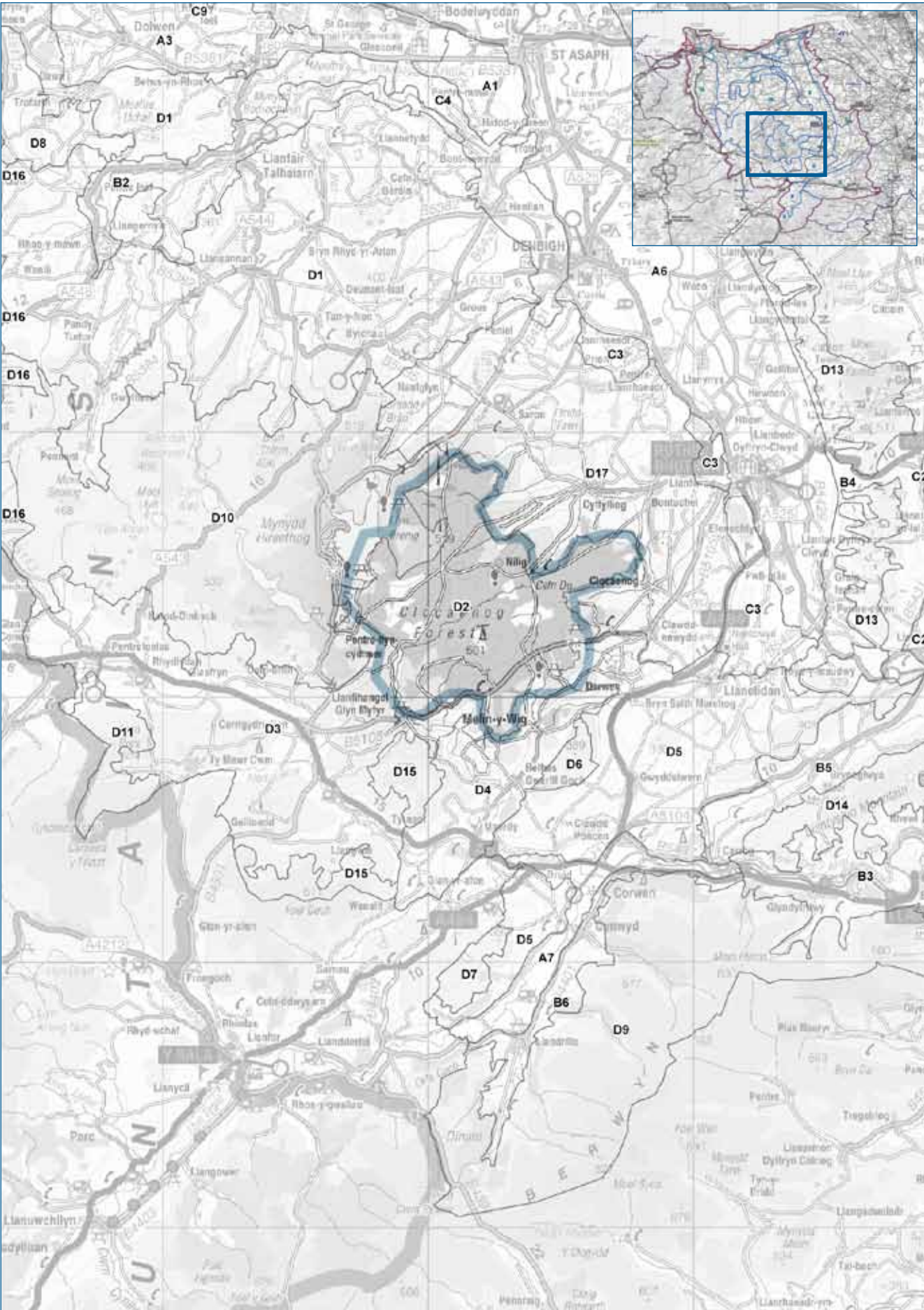
Landscape Units Included within this Strategy Area

A7; B6; D5; and D7

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Medium-High	This is a valued landscape which lies partly within the Cynwyd and Llandrillo AOB and Y Berwyn (Berwyn) Registered Historic Landscape and includes other important cultural heritage designations. The area is also informally valued as a tranquil and relatively remote landscape and provides a number of low key outdoor recreational opportunities. There is an openness and notable visibility to and from the higher ground. Wind energy development is a feature of this strategy area and there are turbines both within it and neighbouring areas to the west.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 20% of the strategy area is within Cynwyd and Llandrillo AOB (local designation). ▪ Open Access Land. ▪ Scheduled hillforts. Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Moderate to high scenic quality. ▪ Broad open valley with a small upland plateau to the north-west. ▪ Pastoral farmland with some large blocks of coniferous forest and a small area of upland moorland. ▪ Informally valued as a relatively remote and tranquil landscape within the wider setting of Snowdonia National Park. ▪ Although views within and along the valley are often contained by landform and vegetation, the highest parts of this landscape afford open and panoramic views to and from Snowdonia National Park to the west and south west and the Berwyn Mountains to the east. ▪ Setting for low key outdoor recreation, including the North Berwyn Way and Clwydian Way long distance routes. ▪ Historic landscape with a number of important hilltop features.

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Accommodation
Baseline Wind Energy Development (March 2013)	1no. large scale development located just outside the study area within Gwynedd to the north west of Llandrillo.
Indicative Overall Capacity	Given this area's sensitivity and the presence of a large scale wind energy development nearby, there is little scope for further wind energy development with the exception of some micro scale development where this would sit well in relation to existing built form and not visually conflict with existing wind energy developments. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that their effects remain local and there is no collective / cumulative defining influence on the landscape. They should also take full consideration of the existing developments to avoid any visual conflicts (with respect to differing turbine dimensions and designs) or cumulative visual effects.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Consider the effects of development on Snowdonia National Park, its special qualities and wider setting. ▪ Conserve the natural beauty of the nearby Cynwyd and Llandrillo AOB, its special qualities (including tranquillity and sense of wilderness) and wider setting. Wind energy development must avoid creating a sense of unacceptable encroachment, encirclement, prominence or discordance in relation to the AOB, either individually or cumulatively. ▪ Maintain the integrity of Y Berwyn (Berwyn) Registered Historic Landscape. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Maintain the tranquillity of the valley and adjoining hillsides. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid cumulative effects on any visitor attractions, routes including the North Berwyn Way and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ Ensure that any developments are clearly separated so that their effect on the perception of landscape remains local and there is no collective defining influence on the experience of the landscape.

Strategy Area 7 - Clocaenog Forest



Location and Context

The Clocaenog Forest strategy area falls within both Denbighshire and Conwy and encompasses the much of Clocaenog Forest.

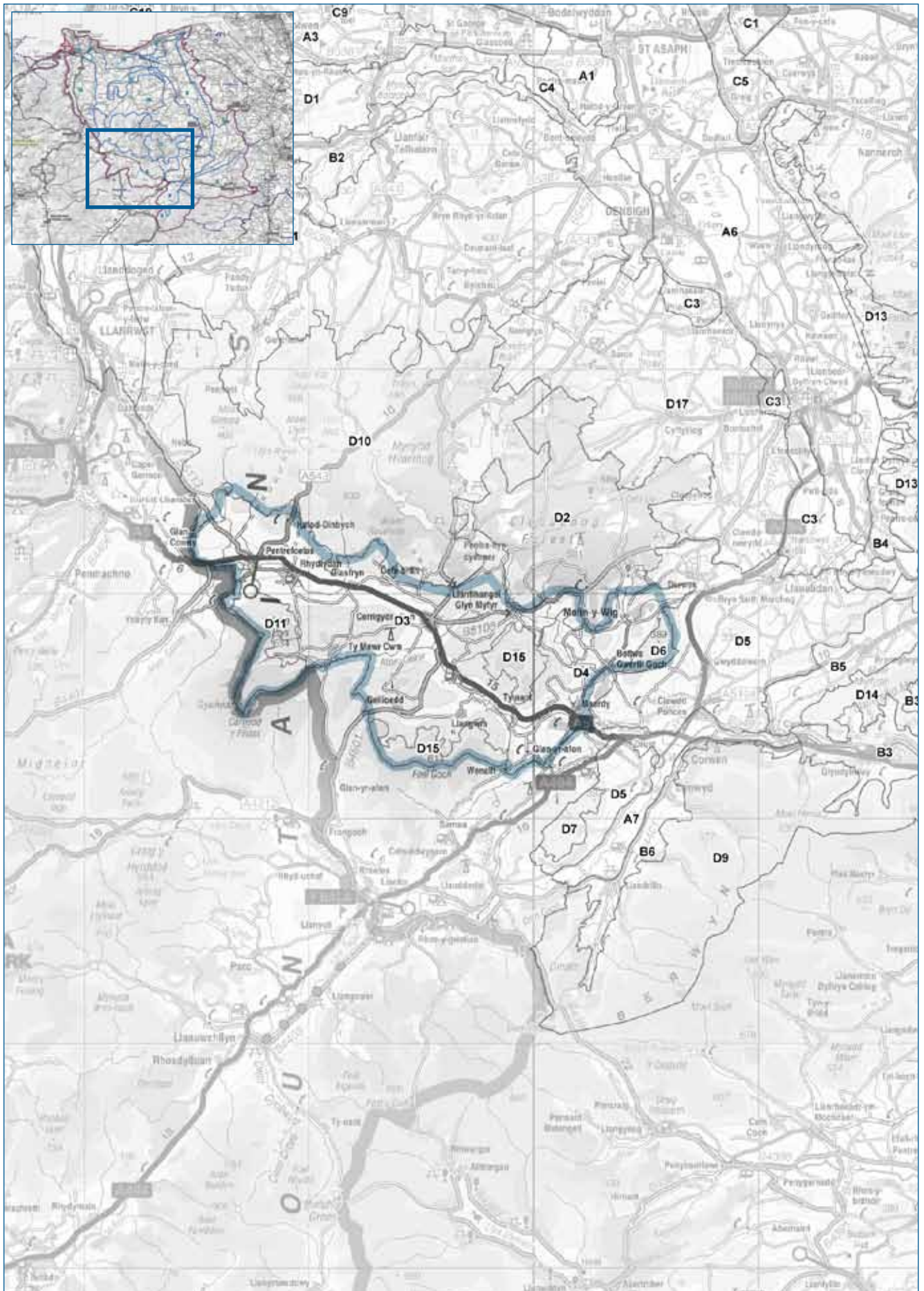
Landscape Units Included within this Strategy Area

D2

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Low	Much of this heavily afforested strategy area lies within TAN 8 SSA A, which means that there is a presumption that the landscape can accommodate a degree of landscape change arising from the wind energy development. There are a number of existing and proposed developments both within it and in neighbouring areas to the west. Therefore it is considered to have a low sensitivity to wind energy development.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area - Approximately 10% of the strategy area is within Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape.* Other Susceptible Landscape, Visual and Cultural Heritage Features - Pockets of moorland and settled farmland which form breaks within the forest. - Relatively remote and in places, tranquil landscape. - The landscape is informally valued as an important place for outdoor recreation. - Although views are typically contained by trees there are some extensive views to and from adjoining upland landscapes. The rolling well-treed skyline is prominent in many views from the surrounding area. - Provides the setting for the Clwydian Way and Hiraethog Trail. Historic landscape with a rich time-depth. *(undesigned but recognised as being of national value)
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	New Landscape There is a presumption in favour of wind energy development in this area.
Baseline Wind Energy Development (March 2013)	The following wind energy developments are present in this strategy area: 1 No. micro scale development 4 No. small scale developments 1 No. medium scale developments 3 No. very large scale development (very large scale wind farm)
Indicative Overall Capacity	The capacity of this area is not considered as part of this study due to its inclusion within TAN8 SSA A. However, any proposed developments within the area would need to consider the following guidance and be subject to review on a case by case basis.

Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Consider the effects of development on views to and from Snowdonia National Park and the Clwydian Range and Dee Valley AONB. ▪ Maintain the integrity of the Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Maintain the tranquillity of the valley and adjoining hillsides. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid cumulative effects on popular routes including the Clwydian Way, Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Consider views from residential receptors, particularly those that already have views of existing wind energy developments within TAN 8 SSAA - siting should aim to avoid overbearing cumulative visual effects.
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Strategy Area 8 - Cerrig Uplands



Location and Context

The Cerrig Uplands strategy area is located along the south western boundary of Conwy, extending from the Denbigh Moors and Clocaenog Forest south to the fringes of Snowdonia National Park.

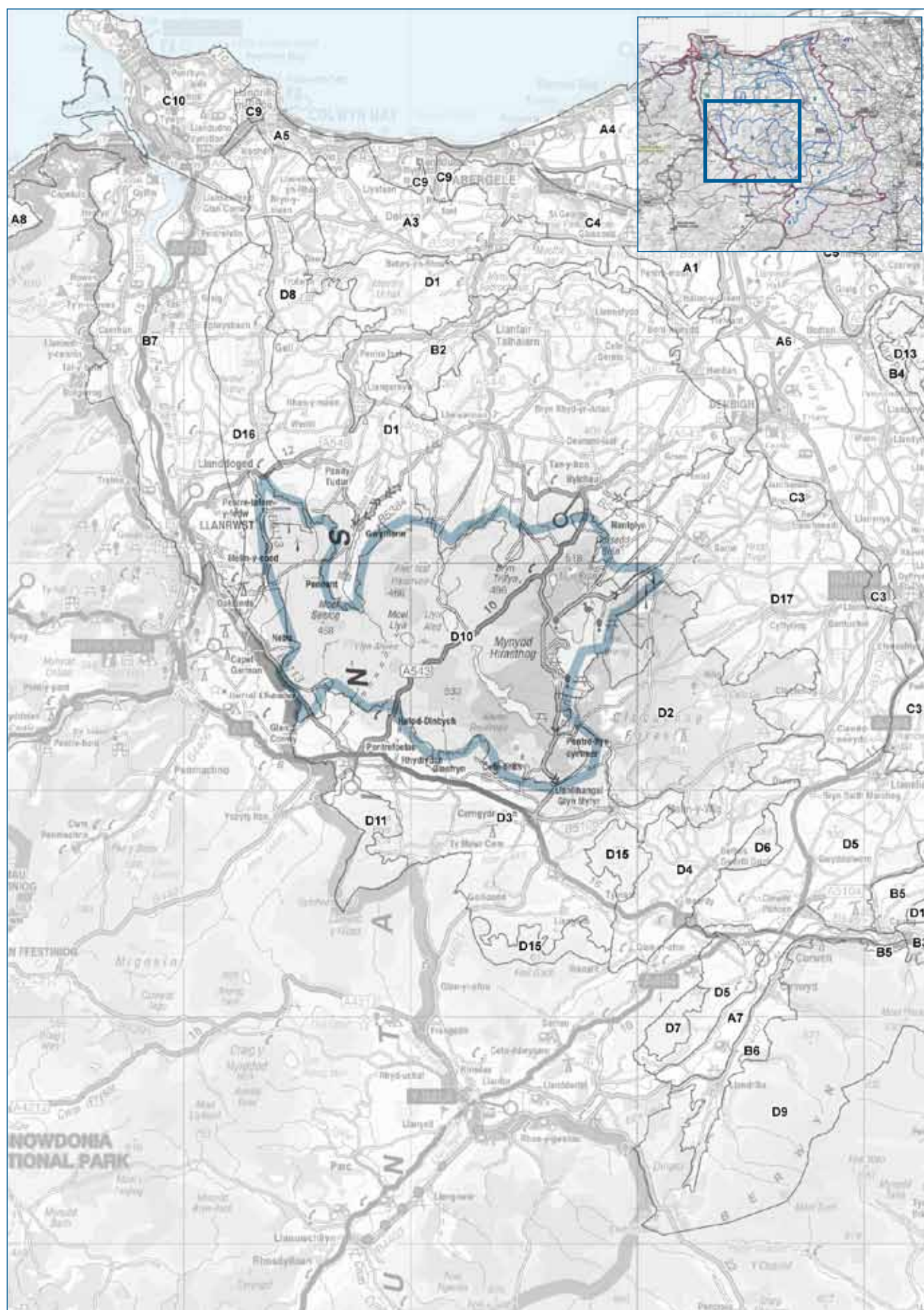
Landscape Units Included within this Strategy Area

D3; D4; D11; and D15

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This is a highly scenic landscape, much of which is locally designated as the Cerrigydrudion and A5 Corridor Special Landscape Area. The remote, tranquil and sparsely populated uplands are informally valued as the 'gateway landscape' to Snowdonia National Park. The area is also valued for providing low key outdoor recreational opportunities. There is an openness and notable intervisibility with highly sensitive landscapes outside this area such as Y Berwyn and particularly with the National Park. The north eastern part of this landscape adjoins Clocaenog Forest and lies within TAN 8 SSA A is of lower sensitivity due to the presence of existing wind turbines.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 30% of the strategy area is within Cerrigydrudion and A5 Corridor Special Landscape Area. ▪ Approximately 5% of the strategy area is within Hiraethog Special Landscape Area. ▪ Open Access Land. Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ High scenic quality. ▪ Open valley with a small upland plateau to the north west. Informally valued as a remote and typically tranquil landscape which forms the gateway to Snowdonia National Park – the A5 historic route is one of the main tourist routes into the Park and has strong cultural associations. ▪ The west and south west part of the area afford extensive panoramic views to and from Snowdonia National Park. ▪ Typically open, expansive and far reaching views into and out of this area from areas of higher ground. ▪ Provides the setting for low key outdoor recreation. ▪ Provides the setting for the Clwydian Way and Hiraethog Trail.

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Three landscape objectives apply within this strategy area, as follows: In areas within TAN 8 SSAA the objective is Landscape Change. This is because it is recognised that there is a presumption in favour of wind energy development in TAN 8 areas. In the Special Landscape Area and areas within close proximity to Snowdonia National Park the objective is Landscape Protection. For all other parts of this strategy area the most appropriate approach is considered to be Landscape Accommodation.
Baseline Wind Energy Development (March 2013)	Within this strategy area the following wind energy developments are mainly located just south of Moel Gwern-nannau, to the south west of Cerrigydrudion: ▪ 4 no. micro scale development ▪ 6 no. small scale developments ▪ 3 no. medium scale developments ▪ 3 no. large scale developments (large scale wind farms)
Indicative Overall Capacity	This strategy area has different landscape objectives and therefore varying capacity to accommodate wind energy development. Outside TAN 8 SSAA it is considered that there may be some capacity for small to medium scale wind energy development although this is likely to be very limited in the Special Landscape Area and close to Snowdonia National Park and will also be dependent on other existing and proposed developments. The overriding aim must be to avoid cumulative effects and protect the setting and views to and from the National Park.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Consider the effects of development on the approach and views to and from Snowdonia National Park. ▪ Conserve the natural beauty of the Cerrigydrudion and A5 Corridor Special Landscape Area, its special qualities and its wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness for which a large part of this area is valued. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Protect the settings of designated and other important cultural heritage features and key views to and from these features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid cumulative effects on popular routes including the A5 historic route, the Clwydian Way, Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Consider views from residential receptors, particularly those that already have views of existing wind energy developments within TAN 8 SSAA - siting should aim to avoid cumulative visual effects.

Strategy Area 9 - Denbigh Moors



Location and Context

The Denbigh Moors strategy area is located to the west of Clocaenog Forest. Its western edge adjoins Snowdonia National Park.

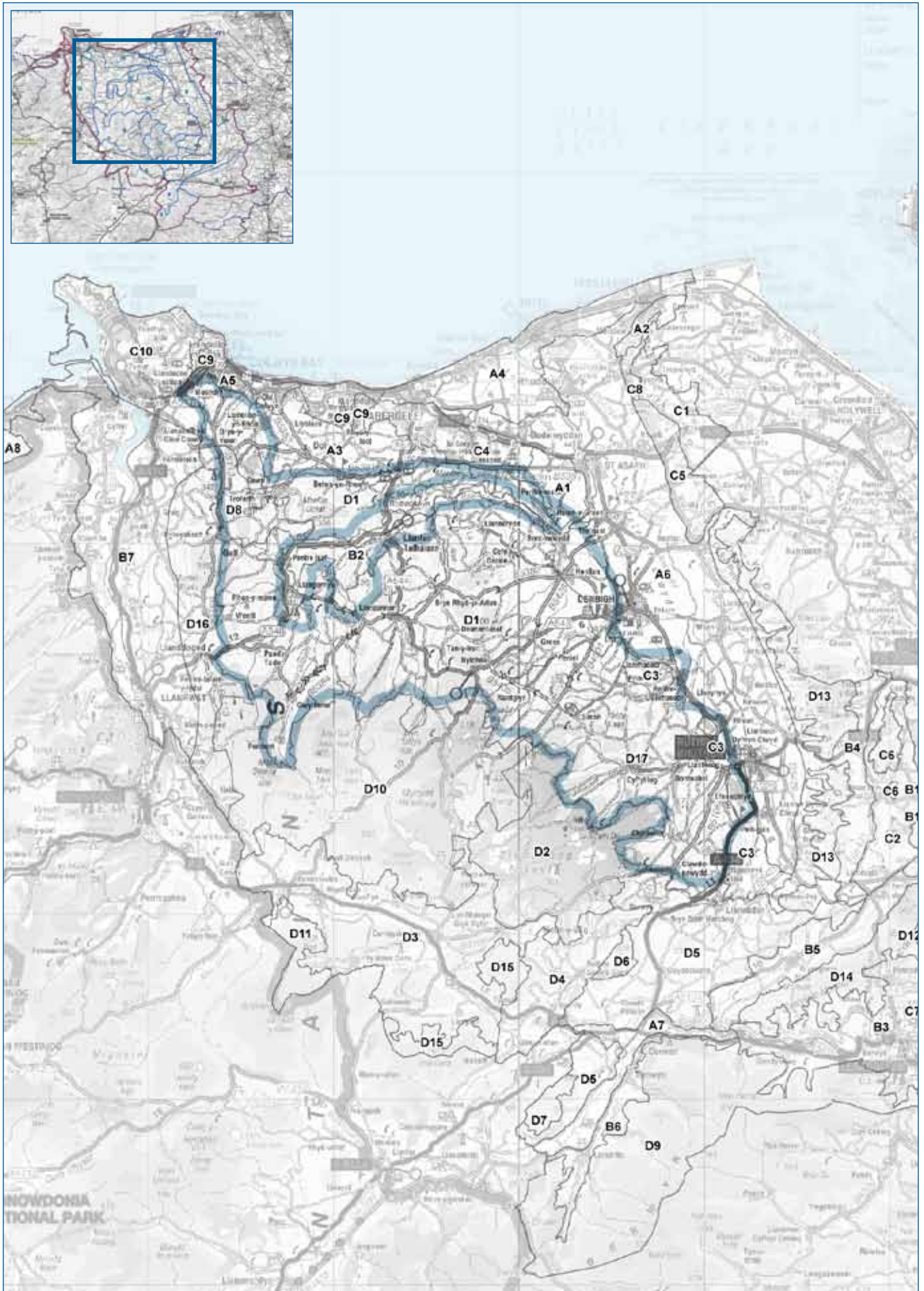
Landscape Units Included within this Strategy Area

D10 and small parts of D16 and D2

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This is a highly scenic and historic upland plateau which lies within the Hiraethog Special Landscape Area and Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape. The moors with their extensive tracts of blanket bog and heather moorland are remote, tranquil and sparsely populated. They are greatly valued for their scenery (particularly in the west) and for providing low key outdoor recreational opportunities. There is an openness and notable invisibility with other highly sensitive landscapes such as Snowdonia National Park and the Clwydian Range. The eastern part of this landscape lies within TAN 8 SSA A and is of lower sensitivity due to the presence of existing wind energy developments.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 60% of the strategy area is within the Hiraethog Special Landscape Area. ▪ Open Access Land. ▪ Approximately 65% of the strategy area is within the Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ High scenic quality. ▪ Extensive tracts of blanket bog and heather moorland. ▪ The overall perceptions of tranquillity and remoteness which are experienced in this area. ▪ Panoramic and far reaching views to and from other highly sensitive landscapes including Snowdonia National Park and more distantly the Clwydian Range and Dee Valley AONB. ▪ Informally valued as a remote and typically tranquil landscape which provides the setting for low key outdoor recreation. ▪ Provides the setting for the Clwydian Way and Hiraethog Trail. ▪ Historic Landscape with a rich time-depth. *(undesigned but recognised as being of national value)
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Two landscape objectives apply within this strategy area, as follows: In areas within TAN 8 SSA A the objective is Landscape Change. This is because it is recognised that there is a presumption in favour of wind energy development in TAN 8 areas. For all other parts of this area the objective is Landscape Protection.

Baseline Wind Energy Development (March 2013)	Within this strategy area the following wind energy developments are mainly located mainly in the north west of the area: ▪ 1 no. micro scale development ▪ 1 no. small scale developments ▪ 4 no. medium scale developments
Indicative Overall Capacity	This strategy area has different landscape objectives and therefore varying capacity to accommodate wind energy development. Outside TAN 8 SSAA it is considered that there may be the capacity for some small to medium scale wind energy developments although this is likely to be very limited in the Special Landscape Area, the Historic Landscape and close to Snowdonia National Park and is also heavily dependent on other existing and proposed developments. The overriding aim must be to avoid cumulative effects and protect the setting and views to and from the National Park. It is also considered important to maintain the general openness and wilderness character of the moors.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ In order to maintain its remote and wild quality, all proposed wind energy development should avoid the open moorland to the north and immediately south of the A543. ▪ Consider the effects of development on views to and from Snowdonia National Park – the skyline created by the moors is important in views from the Park. ▪ Conserve the natural beauty of the Hiraethog Special Landscape Area, its special qualities and its wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness for which a large part of this area is valued. ▪ Maintain the integrity of the Mynydd Hiraethog (Denbigh Moors) Registered Historic Landscape. ▪ Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid cumulative effects on popular routes including the A543, the Clwydian Way and Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ Consider views from residential receptors, particularly those that already have views of existing wind energy developments within TAN 8 SSAA - siting should aim to avoid overbearing cumulative visual effects. ▪ A number of small-scale wind energy developments can quickly give rise to cumulative effects in such an open landscape. It is therefore important to carefully consider the locations of existing and proposed turbines when planning a new development.

Strategy Area 10 – Rhos Hills



Location and Context

The Rhos Hills strategy area is located centrally within the study area and includes part of Conway and Denbighshire.

Landscape Units Included within this Strategy Area

C3; C4; D1; and D8

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This is a highly scenic and historic landscape which lies within the Elwy and Aled Valleys Special Landscape Area, Rhyd Y Foel to Abergele Special Landscape Area and Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. The mosaic of undulating hills and valleys, which are relatively remote, tranquil and sparsely settled are valued for their scenery and for providing low key outdoor recreational opportunities. The area is seen as a line of hills and natural skyline which contains the western edge of the Vale of Clwyd. There is an openness and notable intervisibility with other highly sensitive landscapes including, Snowdonia National Park and the Clwydian Range and Dee Valley AONB. There are some small scale wind energy developments scattered through the area, which locally influence the landscape.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 8% of the strategy area is within the Elwy and Aled Valleys Special Landscape Area. ▪ Approximately 5% of the strategy area is within the Rhyd Y Foel to Abergele Special Landscape Area. ▪ Open Access Land. ▪ Approximately 5% of the strategy area is within Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elw (Lower Elwy Valley) Historic Landscapes.* ▪ Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ High scenic quality. ▪ Mosaic of pastoral farmland, open upland grazing and woodland. ▪ The overall perceptions of tranquillity and remoteness which are experienced in this area. ▪ Although views within the valleys are contained by landform and vegetation, the higher ground provides expansive and far reaching views to and from other highly sensitive landscapes including Snowdonia National Park, the coast and the Clwydian Range and Dee Valley AONB as well as local landmarks such as Denbigh Castle. ▪ Informally valued as a remote and typically tranquil landscape which provides for low key outdoor recreation. ▪ Provides the setting for the Clwydian Way and Hiraethog Trail. ▪ Historic landscape with a rich time-depth and a number of designed parkland landscapes. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Two landscape objectives apply within this strategy area, as follows: In the Special Landscape Areas the objective is Landscape Protection For all other parts of this strategy area, the objective is Landscape Accommodation
Baseline Wind Energy Development (March 2013)	The following wind energy developments are dispersed through this large strategy area: ▪ 4 no. micro scale developments ▪ 4 no. small scale developments
Indicative Overall Capacity	This strategy area has different landscape objectives and therefore varying capacity to accommodate wind energy development. Whilst there may be capacity for some micro scale and small scale wind energy development, this will be very limited within the Special Landscape Areas, Historic Landscapes and in more elevated areas which comprise the line of hills and natural skyline that contain the western edge of the Vale of Clwyd. Overall capacity is also heavily dependent on other existing and proposed developments, but could typically comprise single or small clusters of turbines up to 50m blade tip height. Small scale developments may be more appropriate to the north west where there are fewer receptors in particular in landscape unit D8; whereas micro scale may be more appropriate elsewhere.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Elwy and Aled Valleys Special Landscape Area and Rhyd Y Foel to Abergele Special Landscape Areas, their special qualities and their wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness for which a large part of this area is valued. ▪ Consider the effects of development on views to and from Snowdonia National Park and Clwydian Range and Dee Valley AONB. ▪ Maintain the integrity of Dyffryn Clwyd (The Vale of Clwyd) and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscapes. ▪ This area is seen as a line of hills and natural skyline containing the western edge of the Vale of Clwyd. Avoid siting wind energy development along open natural skylines, open hill slopes and within sight lines of key views. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid cumulative effects on popular routes including the Clwydian Way and Hiraethog Trail and local viewpoints – use visualisations to assess sequential views (including views to existing turbines).

Strategy Area 11 – Elwy Valley



Location and Context

The Elwy Valley strategy area is formed by the valleys of the Rivers Elwy and Aled and is a distinct landscape located within the wider area of the rolling uplands of the Rhos Hills.

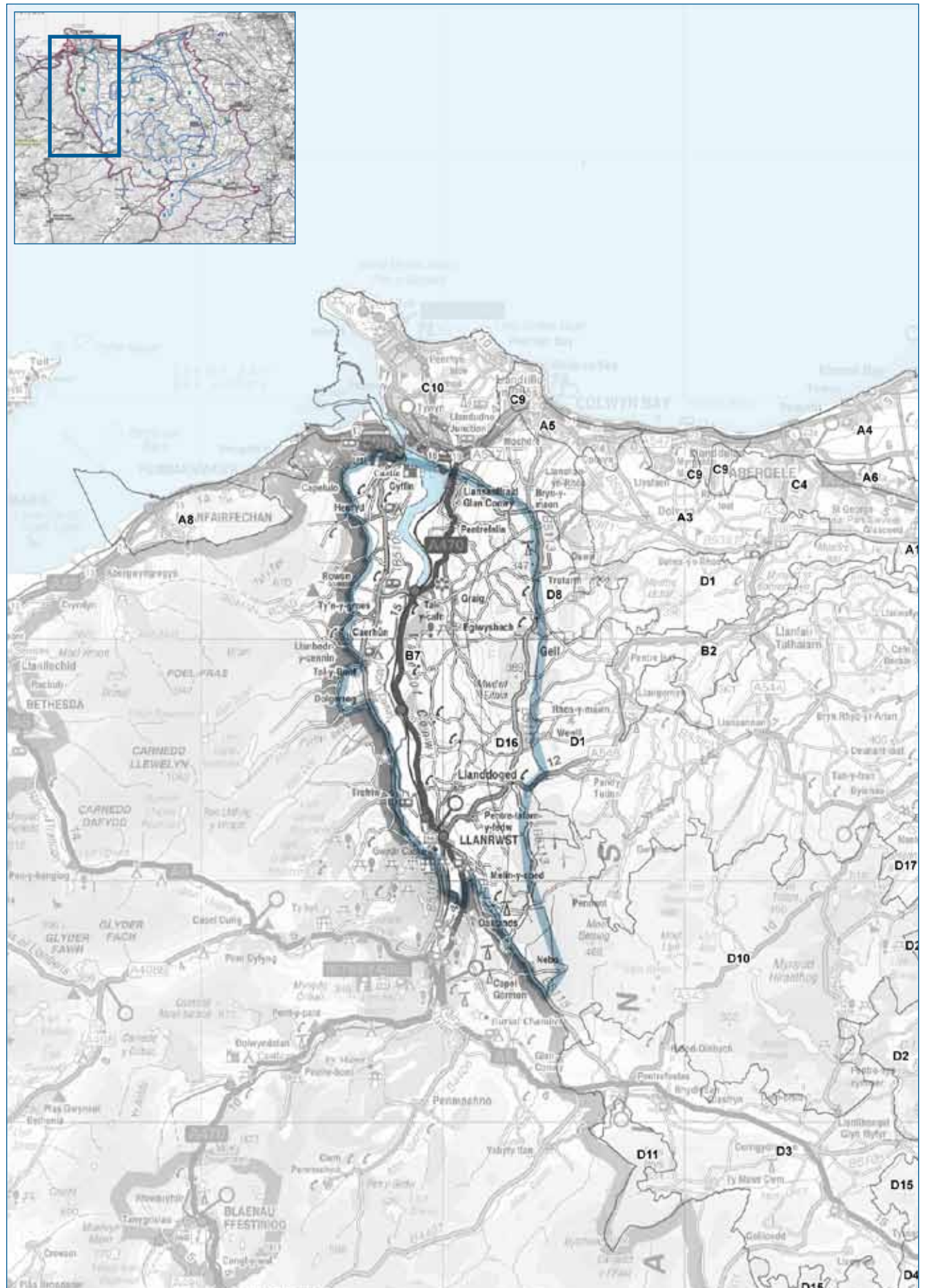
Landscape Units Included within this Strategy Area

B2 and parts of C4 and D1

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This is a scenic and historic landscape which lies within the Elwy and Aled Valleys Special Landscape Area and Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. The deeply incised and unspoilt river valley is remote, tranquil and unspoilt. The higher valley sides afford long views across the Rhos Hills to Snowdonia National Park and the Clwydian Range and Dee Valley AONB.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 70% of the strategy area is included within the Elwy and Aled Valleys Special Landscape Area. ▪ Approximately 5% of the strategy area is included within the Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape.* ▪ Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Highly scenic. ▪ Deeply incised narrow river valley. ▪ Mosaic of pastures, woodland and scrub. ▪ The overall perceptions of tranquillity and remoteness which are experienced in this unspoilt area. ▪ Although views within the valleys are contained by landform and vegetation, the higher ground provides long views to and from other highly sensitive landscapes including the Rhos Hills, Snowdonia National Park and the Clwydian Range and Dee Valley AONB. ▪ Historic landscape with a rich time-depth and a number of designed parkland landscapes. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	There are currently no existing or proposed wind energy developments within this strategy area.
Indicative Overall Capacity	Although this strategy area currently has no wind energy development within it, there may be scope for limited micro scale development on the upper slopes. This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that there is no collective / cumulative defining influence on the landscape. Care must be taken to ensure that there are no adverse effects on the character or views out from the valley.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Elwy and Aled Valleys Special Landscape Area, its special qualities and wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness. ▪ Consider the effects of development on views to and from Snowdonia National Park, the Rhos Hills and the Clwydian Range and Dee Valley AONB. ▪ Maintain the integrity of the Pen Isaf Dyffryn Elwy (Lower Elwy Valley) Registered Historic Landscape. ▪ Avoid diminishing the scale of the valley through inappropriate turbine siting. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics.

Strategy Area 12 – Conwy Valley



Location and Context

The Conwy Valley strategy area is located along the eastern boundary of Denbighshire, extending from Conwy in the north south past Llanrwst.

Landscape Units Included within this Strategy Area

B7 and D16

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This is a highly valued valley landscape, which is enclosed by Snowdonia National Park and the Rhos Hills, lies close to and partly within the Conwy Valley Special Landscape Area and Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscape. The area is also informally valued as a tranquil and relatively remote landscape and provides a number of low key outdoor recreational opportunities. There is openness and intervisibility between the higher ground and Snowdonia National Park, and the landscape serves as part of the wider setting of the Park.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 80% of the strategy area is included within the Conwy Valley Special Landscape Area. ▪ Parts of the essential setting of Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ A small area of Open Access Land to the far west of the area. ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Approximately 20% of the strategy area is included within Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscape.* ▪ Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Highly scenic landscape which serves as part of the wider setting of Snowdonia National Park - the A470 is one of the main tourist routes into the Park. ▪ Well defined broad valley with a flat floodplain and strongly undulating valley sides. ▪ Mosaic of woodland and pasture with numerous field and hedgerow trees. ▪ Informally valued as a remote and typically tranquil landscape. ▪ Some long ranging views are afforded within the valley itself in particular to the north and south along the flat valley floor. ▪ The higher valley sides afford extensive westerly views to and from Snowdonia National Park and more distantly to the Denbigh Moors and the Clwydian Range and Dee Valley AONB. ▪ Informally valued for low key outdoor recreation opportunities including long distance routes such as the North Wales Path (part of the Wales Coast Path). ▪ Historic landscape with a rich time-depth and a number designed parkland landscapes. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	2 no. medium scale developments are located to the south east of this area, adjacent to the Denbigh Moors. There is also one micro scale development just outside this area to the north west within Snowdonia National Park.
Indicative Overall Capacity	This strategy area may have scope for further micro scale development on the higher slopes . This could typically comprise single turbines up to 20m blade tip height. These should be clearly separated so that there is no collective / cumulative defining influence on the landscape. Care must be taken to ensure that there are no adverse effects on the character or views out from the valley.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Conwy Valley Special Landscape Area, its special qualities and wider setting. The siting and design of any proposed wind energy development should not significantly alter the perception of tranquillity and remoteness. ▪ Development should not compromise the natural beauty and wider setting of Snowdonia National Park – the open skylines of this strategy area are an important component of views from the Park and should be protected. ▪ Maintain the integrity of Pen Isaf Dyffryn Conwy (Lower Conwy Valley) Registered Historic Landscape. ▪ Avoid diminishing the scale of the valley through inappropriate turbine siting. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features including Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ Ensure new access tracks do not damage historic field patterns and replant any hedges affected by construction. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Avoid cumulative effects on the A470 and other popular routes and local viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the wider landscape and erosion of rural characteristics. ▪ A number of small-scale wind energy developments can lead to a cumulative effect on such a sensitive landscape. It is therefore important to consider the locations of existing and proposed turbines when planning a new development.

Location and Context

The North West Conwy Coast strategy area is located along northern coastline of Conwy from the western edge of Colwyn Bay to Llanfairfechan in the far west.

Landscape Units Included within this Strategy Area

A8; B7; and C10

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	This highly valued section of coastline comprises the Great Orme Heritage Coast – a series of dramatic limestone headlands and high hills and mountains interspersed with areas of more gentle coastal slopes and flatter lowland. In recognition of its natural beauty and historic value, much of it is designated within the Great Orme and Creuddyn Peninsular Special Landscape Area and Creuddyn a Chonwy (Creuddyn and Conwy) Historic Landscape. It contains Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site and also forms part of the wider setting of Snowdonia National Park at a point where the mountains drop sharply down to meet the coast. One of the defining features of this strategy area is the complex coastal landform which creates locally important contrasts, not only in the scenery but also in the perception of tranquillity, wildness and remoteness within just a short distance.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 20% of the strategy area is included within the Great Orme and Creuddyn Peninsular Special Landscape Area. ▪ Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ Great Orme Heritage Coast.* ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Approximately 70% of the strategy area is included within the Gogledd Arllechwedd (North Arllechwedd) and Creuddyn a Chonwy (Creuddyn and Conwy) Historic Landscapes.* ▪ Scheduled hillforts. ▪ Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ A mix of dramatic limestone headlands and high hills and mountains extending to the sea interspersed with more gentle coastal slopes and flatter lowland. The landform creates some highly distinctive skylines. ▪ Typically small to medium scale. ▪ A mosaic of pastures, woodland, open land, hillside and scarp slopes and cliffs with some large settlements and the A55 tourist route. ▪ This section of the North Wales Coast is a popular tourist destination. ▪ Elevated and panoramic views are afforded out from the Great Orme and other high points within this landscape strategy area to surrounding landscapes and seascapes, including Snowdonia National Park and Anglesey. Likewise views are afforded back to this area (particularly to the higher parts) from both upland and coastal areas. ▪ High numbers of sensitive visual receptors, including users of the A55 tourist route and North Wales Coast Railway and visitors to the coast and Great Orme headland, users of the North Wales Path (part of the Wales Coast Path) long distance route and the North Wales Coast cycle route (NCN Route 5).

	▪ Historic landscape with a rich time-depth and a number of hilltop features and designed parkland landscapes. *(undesigned but recognised as being of national value)
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	The following wind energy developments are located close to the A55: ▪ 2 no. micro scale developments.
Indicative Overall Capacity	This strategy area may have the capacity for further micro scale wind energy development. This could typically comprise single turbines up to 20m blade tip height. Any new development should be very carefully sited to ensure that the special qualities of the area, including Snowdonia National Park are protected. It is recommended that wind energy development avoid the particularly sensitive Great Orme headland in order to minimise potential adverse effects in this area.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Conserve the natural beauty of the Great Orme and Creuddyn Peninsular Special Landscape Area, its special qualities and wider setting. ▪ Development should not compromise the natural beauty and wider setting of Snowdonia National Park – the dramatic skylines of this strategy area are an important component of views from the Park and should be protected. ▪ Maintain the integrity of the Creuddyn a Chonwy (Creuddyn and Conwy) Historic Landscape. ▪ Wind energy development should not interrupt the open skylines or diminish the scale of the limestone headland and cliffs. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features including in particular Conwy Castle, Castles and Town Walls of King Edward in Gwynedd World Heritage Site. ▪ Avoid siting any turbines within the sight lines of key views. ▪ Avoid cumulative effects for users of the A55, the North Coast Railway and other popular routes such as the North Wales Path (part of the Wales Coast Path) and North Wales Coast cycle route (NCN Route 5), local attractions and viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ Site turbines close to existing buildings to avoid the proliferation of development within the more open parts of the landscape and erosion of rural characteristics. ▪ New onshore turbines could create significant cumulative effects between onshore and offshore developments by bringing the offshore ‘wind farm’ seascape towards the landscape - even small-scale wind energy developments when viewed together with the nearby large offshore wind farms could lead to adverse cumulative effects in this area. It is particularly important to use visualisations to assess potential cumulative effects in this area.

Strategy Area 14 – Colwyn Coast



Location and Context

The Colwyn Coast strategy area is located along the northern coastline of Conwy, from Colwyn Bay in the West to Abergele in the east and extends south past Dolwen.

Landscape Units Included within this Strategy Area

A3; A5; C4; and C9

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
High	Although the immediate coastal strip is largely developed for settlement and tourism, further inland a series of low rolling hills comprise a mosaic of pastoral farmland, small woodland blocks, estate woodlands and historic parklands. In recognition of its natural beauty and historic value, much of it is designated within the Rhyd Y Foel to Abergele Special Landscape Area. One of the defining features of this strategy area is the contrast between the busy and developed coastline and the perception of tranquillity and remoteness within just a short distance.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Approximately 50% of the strategy area is included within the Rhyd Y Foel to Abergele Special Landscape Area. ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Bodelwyddan Castle. ▪ Scheduled hillforts. ▪ Registered Parks and Gardens.* Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ Low lying, linear coast backed by steep sided low rolling hills encroach on the low lying coastline. ▪ The developed coastal strip is a popular tourist destination. ▪ Inland mosaic of pastoral farmland, small woodland blocks, estate woodlands and historic parkland landscapes. ▪ The unspoilt, relatively remote and tranquil hills provide a strong contrast to the busy and developed coastal strip. ▪ Views to the sea, coastal fringe and Clwydian Range and Dee Valley AONB are afforded from the higher ground to the south of the area and from the coastline. These include views of large offshore wind farms. ▪ The limestone escarpments of landscape unit C9 are prominent landscape features within this area. ▪ High numbers of sensitive visual receptors, including residents and visitors to the coast and its many attractions and users of the North Wales Path (part of the Wales Coast Path) and North Wales Coast cycle route (NCN Route 5). ▪ Historic landscape with a number of hilltop features and designed parkland landscapes. *(undesigned but recognised as being of national value)

LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Protection
Baseline Wind Energy Development (March 2013)	Within this strategy area the following wind energy developments are located within Colwyn Bay. 1 no. small scale development.
Indicative Overall Capacity	It is considered that this strategy area may have landscape capacity for further micro to small scale wind energy development. This could typically comprise single turbines up to 20m blade tip height. Any new development should be very carefully sited to avoid cumulative effects between onshore and offshore developments.
Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: - Conserve the natural beauty of the Rhyd Y Foel to Abergele Special Landscape Area, its special qualities and wider setting. - Wind energy development should not interrupt the open skylines and the sensitive hillsides in this area. - Wind energy development should not interrupt the open skylines or views to prominent landforms such as the limestone escarpments of landscape unit C9. - Protect the settings of designated and other important cultural heritage features and key views to and from these features. - Avoid siting any turbines within the sight lines of key views, particularly out to sea. - Avoid cumulative effects on views from the A55 tourist route, the North Coast Railway and other popular routes, including the North Wales Path (part of the Wales Coast Path) and North Wales Coast cycle route (NCN Route 5), local attractions and viewpoints – use visualisations to assess sequential views (including views to existing turbines). - In rural areas, site turbines close to existing buildings to avoid the proliferation of development within the more open parts of the landscape and erosion of rural characteristics. - New onshore turbines could create significant cumulative effects between onshore and offshore developments by bringing the offshore ‘wind farm’ seascape towards the landscape - even small-scale wind energy developments when viewed together with the nearby large offshore wind farms could lead to adverse cumulative effects in this area. It is particularly important to use visualisations to assess potential cumulative effects in this area.

Strategy Area 15 – Coastal Flats



Location and Context

The Coastal Flats strategy area is located along the coastline of Denbighshire, extending from Abergele in the west past Prestatyn in the east.

Landscape Units Included within this Strategy Area

A4

OVERALL SENSITIVITY TO WIND ENERGY DEVELOPMENT	
Medium	This strategy area comprises large scale, flat coastal farmland with a narrow settled coastal fringe, which includes a major communications corridor along the A458 and the North Coast Railway. The developed coastline is a popular tourist destination. The area where Gronant Dunes are located is particularly tranquil and scenic and the sensitivity in this locality is therefore considered high.
Key Landscape, Visual and Cultural Heritage Characteristics and Qualities which are Particularly Susceptible to Wind Energy Development	Designated Features within the Strategy Area ▪ Sustrans - North Wales Coast cycle route (NCN Route 5). ▪ Offa's Dyke Path national trail runs through the urban area to the far north east)ct the fact it runs through an urban environment in this Area (thus lessening the sensitivity of this feature in this particular area). Other Susceptible Landscape, Visual and Cultural Heritage Features ▪ The developed coastal strip is a popular tourist destination. ▪ Gronant Dunes are particularly tranquil and scenic natural landscape feature in this area. ▪ Expansive views are afforded to surrounding hills, settled lowlands, coastal fringe and Clwydian Range and Dee Valley AONB. These include views of large offshore wind farms. ▪ High numbers of sensitive visual receptors, including residents and visitors to the coast and its many attractions and users of Offa's Dyke Path, Clwydian Way, North Wales Path (part of the Wales Coast Path) and the North Wales Coast cycle route (NCN Route 5). ▪ Provides the setting for the North Wales Coast cycle route (NCN Route 5), Offa's Dyke Path, the North Wales Path (part of the Wales Coast Path) and the Clwydian Way.
LANDSCAPE STRATEGY AND GUIDANCE FOR SITING WIND TURBINES	
Landscape Objective	Landscape Accommodation
Baseline Wind Energy Development (March 2013)	Within this strategy area the following wind energy developments are mainly located in and around Rhyl. ▪ 3 no. micro scale developments. ▪ 1 no. small–medium scale development (10 no. 18m high turbines. which is classed as 'small–medium' scale due to its low output of 60kW).
Indicative Overall Capacity	It is considered that this strategy area may have landscape capacity for further micro to small scale wind energy development. This could typically comprise single turbines up to 20m blade tip height. Any new development should be very carefully sited to avoid cumulative effects between onshore and offshore developments. Developments on or adjacent to Gronant Dunes should be avoided.

Guidance on Siting	Section 6 of this document provides generic siting and guidance. In addition the following guidance should apply: ▪ Development should not compromise the natural beauty and wider setting of the Gronant Dunes. ▪ Protect the settings of designated and other important cultural heritage features and the key views to and from these features. ▪ Avoid siting any turbines within the sight lines of key views, particularly out to sea. ▪ Avoid cumulative effects on views from the A55 tourist route, the North Coast Railway and other popular routes, including Offa's Dyke Path, Clwydian Way, North Wales Path (part of the Wales Coast Path) and the North Wales Coast cycle route (NCN Route 5), local attractions and viewpoints – use visualisations to assess sequential views (including views to existing turbines). ▪ In rural areas, site turbines close to existing buildings to avoid the proliferation of development within the more open parts of the landscape and erosion of rural characteristics. ▪ New onshore turbines could create significant cumulative effects between onshore and offshore developments by bringing the offshore 'wind farm' seascape towards the landscape - even small-scale wind energy developments when viewed together with the nearby large offshore wind farms could lead to adverse cumulative effects in this area. It is particularly important to use visualisations to assess potential cumulative effects in this area.
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SECTION 6: GUIDANCE FOR WIND ENERGY DEVELOPMENT WITHIN STRATEGY AREAS

The following guidance notes should be read in conjunction with the more specific guidance notes that are included within the descriptions for each strategy area. They are intended to aid the integration of wind turbines into the landscape through good siting and design.

The following notes are summarised from guidelines set out in *Scottish Natural Heritage (2012) Siting and Design of Small Scale Wind Turbines of between 15 and 50 metres in height*.

Useful guidance is also provided in the following documents. Although aimed at larger windfarm developments, the guidance set out in these documents is frequently transferable and should be considered when designing and siting small scale developments:

- Design Commission for Wales (2012) Designing Wind Farms in Wales
- Scottish Natural Heritage (2009) Siting and Designing Wind Farms in the Landscape

Choice of Turbines

Small turbines offer a greater choice of variety, styles, design and colours than large commercial scale turbines and their selection should be carefully considered in relation to the site in which they are to be located. This is particularly important when other turbines are present to ensure that there aren't conflicting styles in the same locality.

Factors Relating to Turbines

Turbine Colour

Turbine colour should be chosen to help blend the structure into the landscape. The same colour should be used for all components of the turbine. A very light grey is commonly used because it minimises the visibility of the turbines when they are seen against the skyline, which is how most large scale turbines are viewed. Smaller scale turbines are more likely to be viewed against a vegetated backdrop and may benefit from being a darker grey green colour. In all cases the aim should be to minimise visibility and reflectivity of the turbine components.

Turbine Size and Scale

Although small scale turbines are likely to have fewer landscape and visual effects than large commercial models, they can still visually dominate nearby landscape features. Identifying the main landscape and visual characteristics of the landscape in which the turbines are to be sited is an important determinant in selecting the most appropriate size. Landscapes with a simple, strong and mainly horizontal form are better able to accommodate taller turbines and large turbine groupings as the height of turbines appears more proportionate to the landscape. Small scale turbines, smaller groupings or individual turbines tend to be better suited to smaller scale, more complex landscapes where there are other features such as buildings, trees or hedges. A useful rule is that turbines should generally be no more than 50% higher than nearby buildings.

Turbine Layout

Although there is scope to present a small group of turbines as a coherent visual image, this may be difficult where there are other built elements such as buildings, wood poles and masts present with the result that visual conflict can arise. Where possible turbine layout should respond to existing landscape patterns, whether field boundaries, building or vegetation patterns.

In all cases, turbine layout should respect the underlying landform.

Micrositing

Micrositing of turbines often takes place during construction due to unforeseen circumstances such as ground conditions. This can affect the original design concept, particularly the relationship with nearby vertical features such as tress and masts. It is preferable if developers undertake pre-application ground surveys to minimise the requirement for micrositing at the construction stage.

Ancillary Infrastructure

Visual impacts of any ancillary developments and visual conflicts with between turbines and ancillary structures should be minimised by:

- Sensitively siting and designing ancillary equipment and infrastructure (e.g. using local landform, locally appropriate materials, architectural style and colours to more successfully integrate them into their surroundings).
- Using turbines with integral transformers.
- Siting turbines as close as possible to the point of use or grid connection to avoid long sections of overhead power lines or cable runs (more applicable to large scale wind farm developments).
- Utilising existing tracks to avoid tree and hedgerow removal, which may have adverse landscape effects. New tracks if required should follow existing landscape features such as field and woodland boundaries.
- Minimising cut and fill operations.
- Designing fencing or walling to fit the local situation, whilst maintaining the required security.
- Identifying locations for new tree and shrub planting to provide long term screening.

Factors Relating to Location

Landscape Character

This sensitivity and capacity study provides the basis for identifying the key landscape characteristics of the site and the wider area. It also identifies the sensitivity of the landscape to turbines and any special qualities which should be protected. However, this is a strategic study and in all cases turbine applications (large or small scale) must be considered on their individual merits and detailed analysis is required to fully appreciate the nature of the development, site and its surroundings.

Impacts on landscape character are likely to be related to:

- Scale of the landscape – whether it is small or large and whether the proposed turbines are of an appropriate scale.
- Influence on the tranquillity of the landscape – turbines creates movement, the amount depending on the particular model.
- Settlement pattern – turbines should be carefully sited in relation to existing buildings.
- Topography – turbines can dominate small scale or intricate landform if not carefully sited.
- Skylines – turbines can affect the simplicity of skyline or ridges even if located below such features.

Areas with a Sense of Wilderness

Rural areas which are particularly valued for their remoteness or wildness can be affected by the introduction of turbines, although this is less likely to be the case if the turbines are located close to farms or other existing buildings. However, incremental erosion of the special qualities of remoteness and wildness should be avoided.

Some locations close to centres of population are valued as an important recreational resource and have a sense of wildness even though they are close to urban areas. Locating turbines in these areas should be very carefully considered.

Valued Landscapes

This report identifies landscapes which are designated for their international, national or regionally valued qualities. Again, however, this is a strategic study and in all cases turbine applications (large or small scale) must be considered on their individual merits and detailed analysis will be required to fully appreciate the nature of the development, site and its surroundings and effect on any locally designated or valued landscapes.

Siting and Design Factors

There are a number of factors to be considered when developing proposals.

Landform

Smaller turbines have more potential to utilise landform (often in conjunction with vegetation) to help lessen their visual impact than larger scale commercial models.

As the viewer's eye tends to be drawn towards the skyline, turbines should be set back from ridges and skylines to reduce their visibility within the wider landscape. Where siting on a skyline is unavoidable then the aim should be to retain a balance of skyline features or to provide a new focal point in an otherwise featureless skyline.

Siting of turbines on distinctive or prominent summits or skylines should generally be avoided. Shallower side slopes or gently undulating landform below ridgelines should be selected where possible.

It is often preferable for wind energy developments to be grouped upon the most level part of the site so the development appears to be less visually confusing when viewed from different elevations and directions.

Landscape Pattern

Turbines can be sited to reflect patterns in the landscape, for example field and woodland boundaries or coastal edges. Conversely, care must be taken not to site turbines so that they conflict with patterns in the landscape.

Groupings of turbines can affect how they appear in the landscape. For example three dispersed turbines could be grouped to form a single feature in a visually complex landscape, whilst in a larger scale landscape, a single turbine with the same generating capacity may be preferable.

Multiples of turbines of a smaller size are most likely to be preferable in more lowland landscapes, where there are many other scale indicators.

Focal Features

Turbines are likely to become focal features in the landscape particularly when new or unfamiliar designs are introduced. Care is required to ensure that they do not cause visual conflict or competition with other focal points. The siting of turbines should therefore be carefully considered to protect views to and from important landscape and cultural heritage features and their wider setting.

Turbines can highlight features which would otherwise be hidden. For example a turbine next to a farm could draw attention to its presence when the farm itself is hidden by buildings or trees.

Perspective

The size of features in the landscape influences the perception of perspective. For example if larger turbines are seen in front of smaller ones, the smaller ones can appear further away than they actually are. Conversely, if smaller turbines are in front of larger ones, the larger ones can appear further away.

Relationship with Settlement and Urban Landscapes

Turbines should be carefully located in relation to nearby settlements, buildings and other structures. In sparsely settled rural landscapes, turbines should be located to existing buildings or structures.

Views to/from, or on the approach to settlements (including dispersed properties) should be carefully considered when siting wind energy developments. Turbines should be located in the least visually prominent location. The type of turbine may be influenced by its proximity to settlement – a two bladed turbine is likely to visually integrate better with a busy urban setting than a calm rural location.

Turbines should be sited to minimise impacts on public viewpoints, roads and public rights of way.

Woodland & Trees

Although trees and woodlands can cause turbulence which interferes with the efficiency or longevity of turbines, in some locations there may be the opportunity to screen small scale turbines close to trees and tall shrubs. Care should be taken to site turbines so that they do not visually dominate or compete with prominent vegetation such as parkland tree, trees on knolls, avenues etc.

Turbines should be located without the need to fell trees and woodlands particularly where they are important features in the local landscape.

Seasonal variation in leaf cover should be considered when using trees to screen turbines as should felling and restocking regimes when considering commercial forestry.

Cumulative Considerations

Potential cumulative landscape and visual effects should be carefully considered on a case by case basis, assisted by production of Zones of Theoretical Visibility (ZTVs) and appropriate visualisations (preferably from agreed viewpoints). Existing, consented and proposed turbines should be taken into account, in addition to any similar developments, which together may give rise to cumulative effects.

Cumulative consideration of new turbine developments should include simultaneous, sequential or combined views.

In Combination with Micro-Renewables

Groups of micro turbines can be prominent in some locations, by drawing the eye to their rotating blades. Rotation speeds vary considerably between small and larger bladed turbines, which if viewed together can create visual disturbance and clutter, rather than balance. Variations in rotor blade diameter should therefore be avoided.

In Combination with Other Small Scale Developments

Multiple small scale developments can dominate the landscape. Turbines should not create visual clutter with existing built development and vertical structures such as high voltage overhead power lines and communications masts. Man-made structures do not all share the same characteristics of scale, shape or form. Visual clutter and cumulative impact can occur when turbines are placed too close to vertical structures of dissimilar character such as electricity pylons and communication masts. To avoid this consider the following principles:

- Avoid inconsistent turbine height, layout and design between multiple wind energy developments.
- Consider associating particular types of turbines with specific situations. For example turbines on lattice towers in rural situations and turbines on tubular towers in urban situations. This helps create some local distinctiveness.
- Identify opportunities to lessen intervisibility between multiple developments – intervening landform and forestry are all useful in this respect.

In Relation to Important Viewpoints

Turbines should be carefully sited in relation to important viewpoints. To ensure a consistent spatial relationship between small scale turbines and other forms of development, especially tall structures such as pylons and masts, where possible ensure that developments are visually linked with landscape features such as forestry, farms, skylines or contours.

In Combination with Larger Turbines in an area

Smaller turbines when seen in combination with large turbines can create a confusing visual image. This can be lessened by:

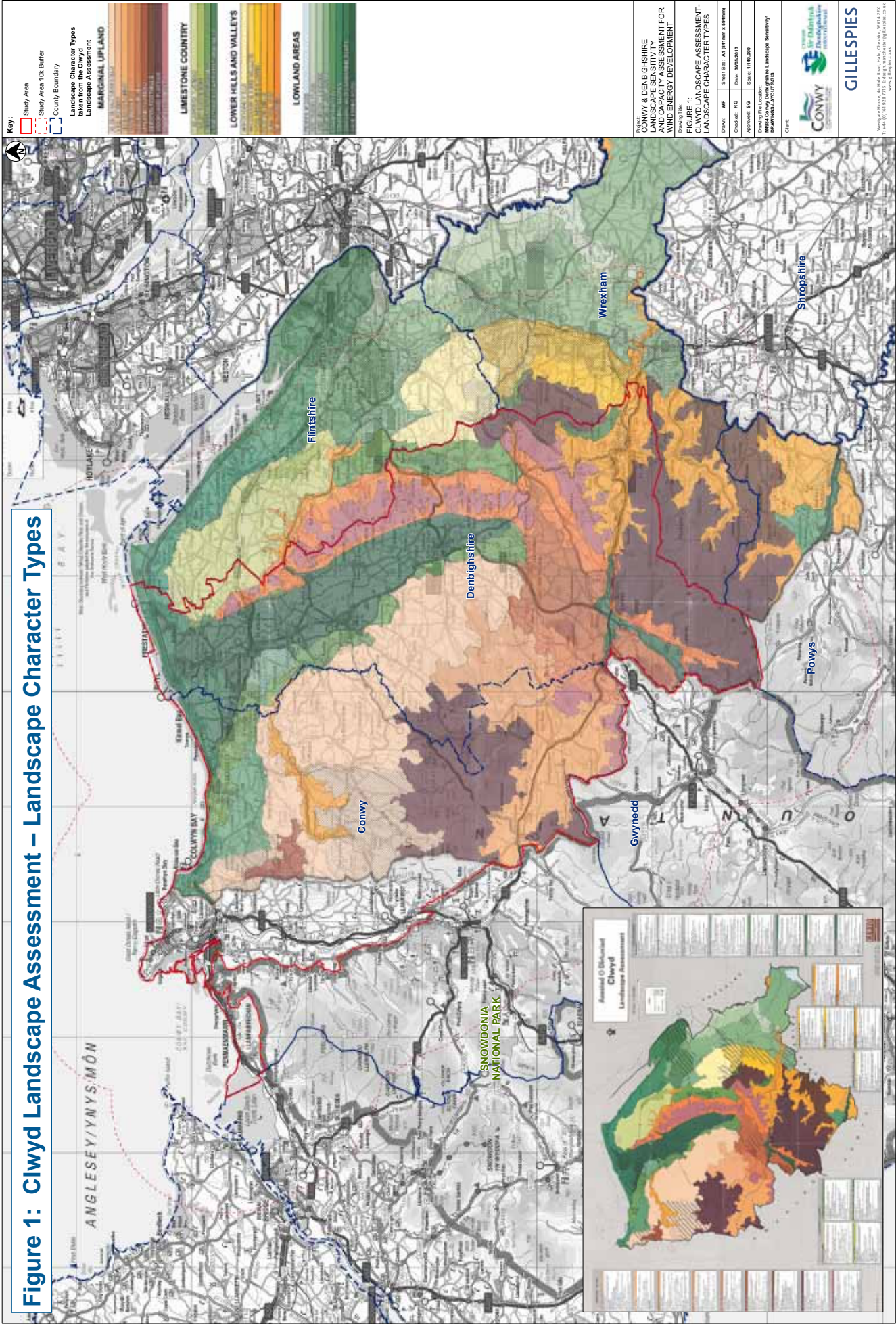
- Using the same type of turbines design where more than one scale is visible.
- Using turbine layouts of a similar arrangement where more than one turbine group is present.
- Avoid situations where turbine rotary speeds are significantly different.

In Combination with Offshore Turbines

Onshore turbines can create visual clutter and confusing perspective when seen in combination with offshore turbines. This should be avoided wherever possible.

Filling in Gaps between Clusters of Wind Turbines

The perception of an area can be altered by introducing small turbines between clusters of windfarms which creates a visual link between all of the developments. Where site analysis indicates that visual separation is desirable, the gap between developments should be maintained.



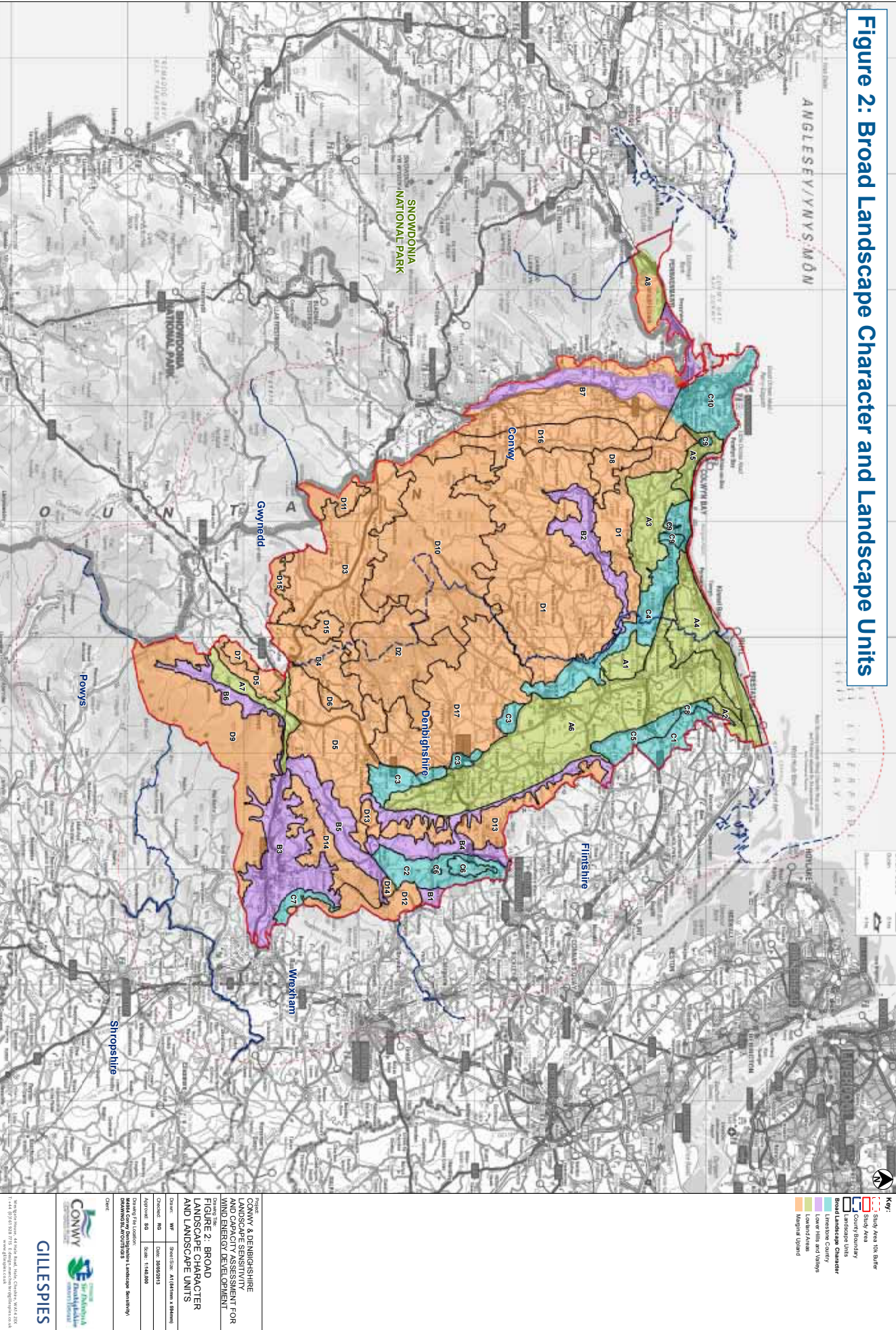
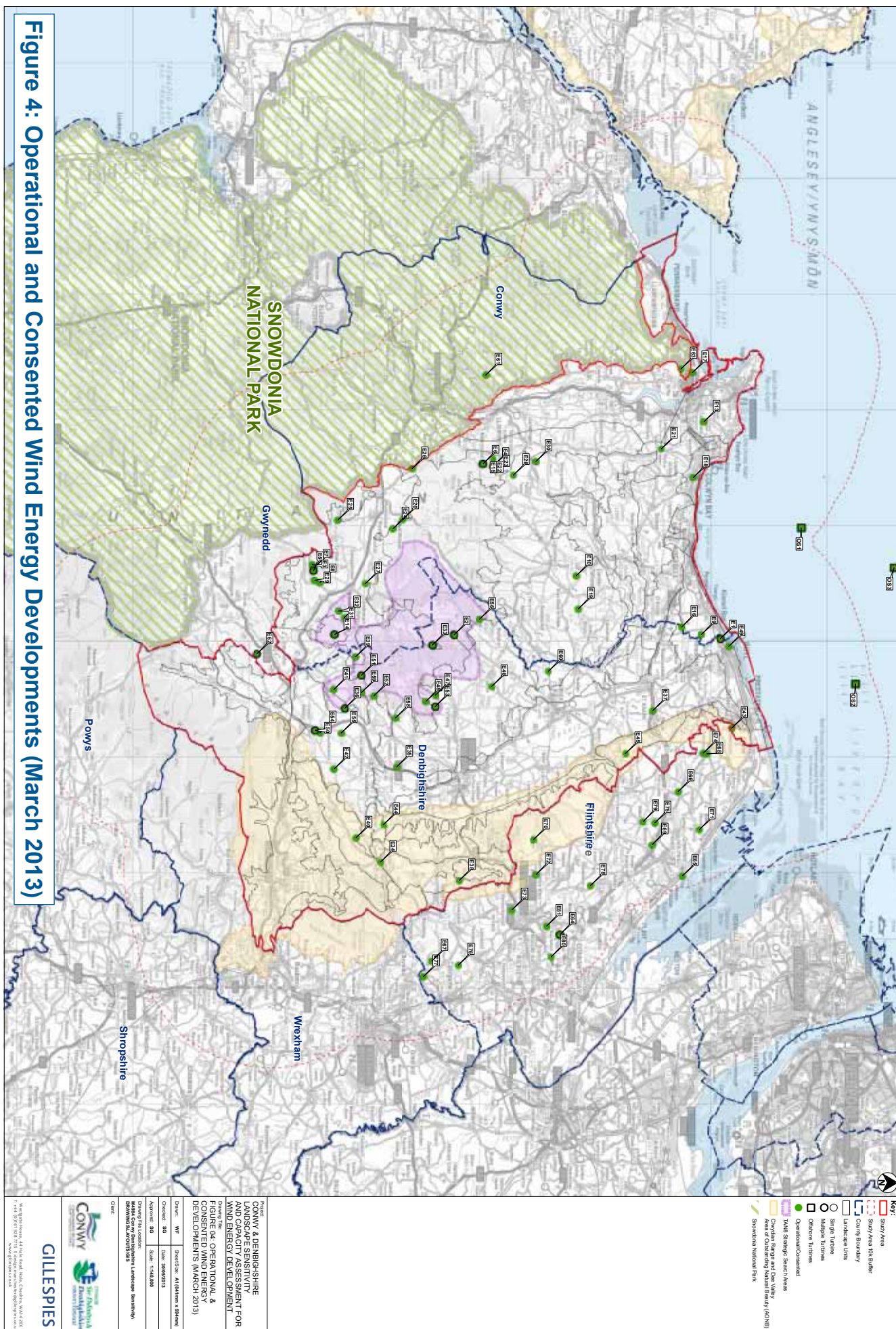
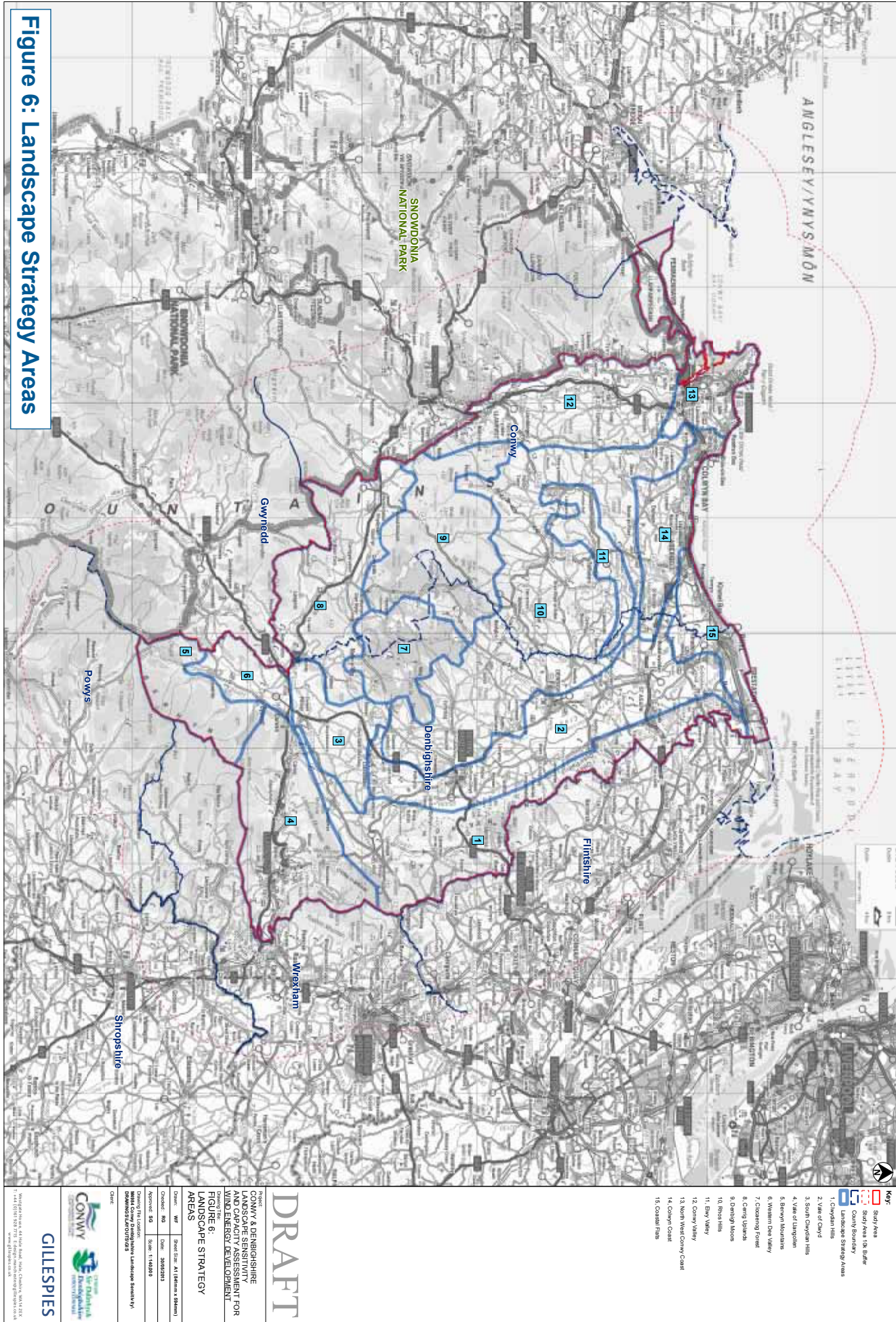




Figure 4: Operational and Consented Wind Energy Developments (March 2013)







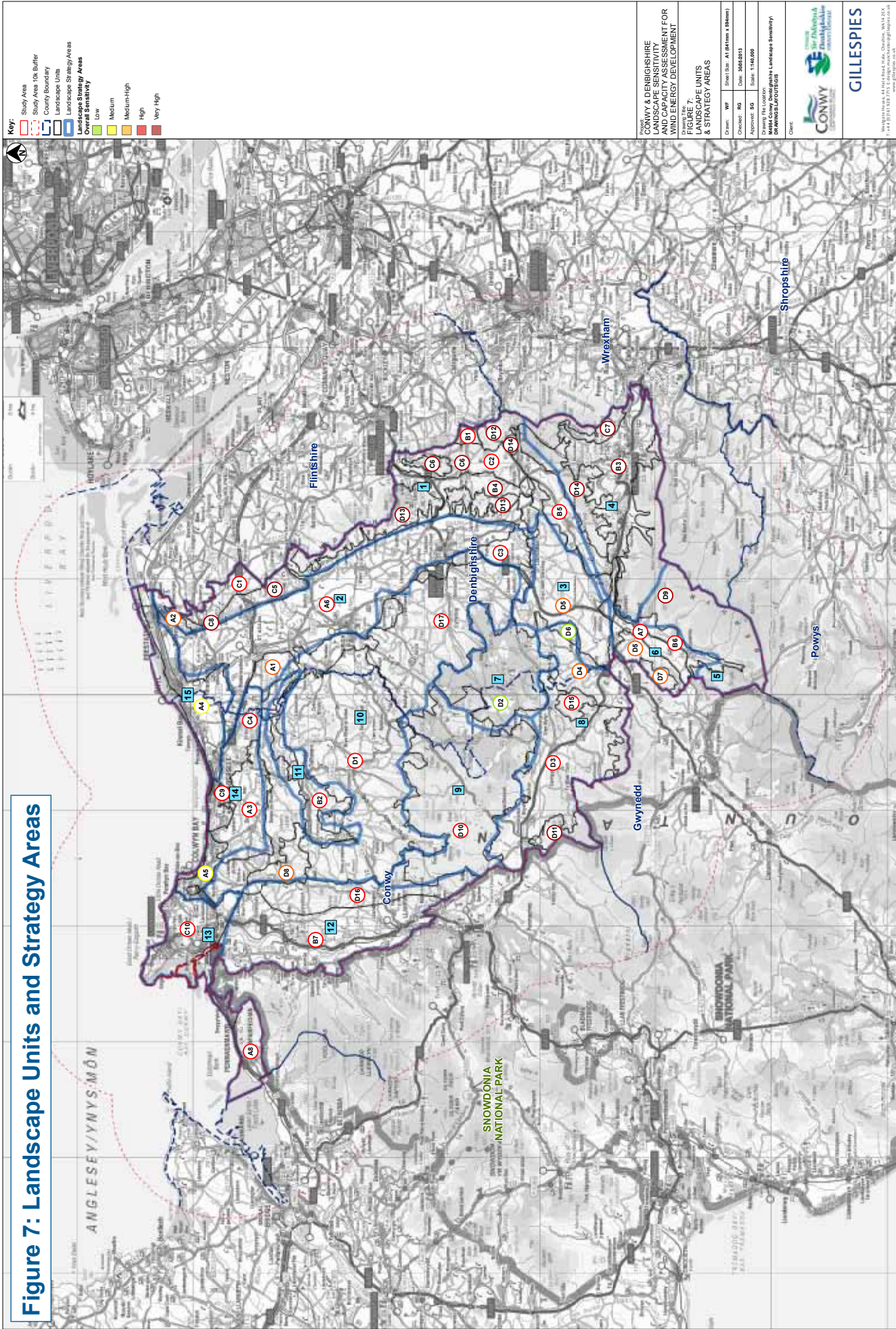
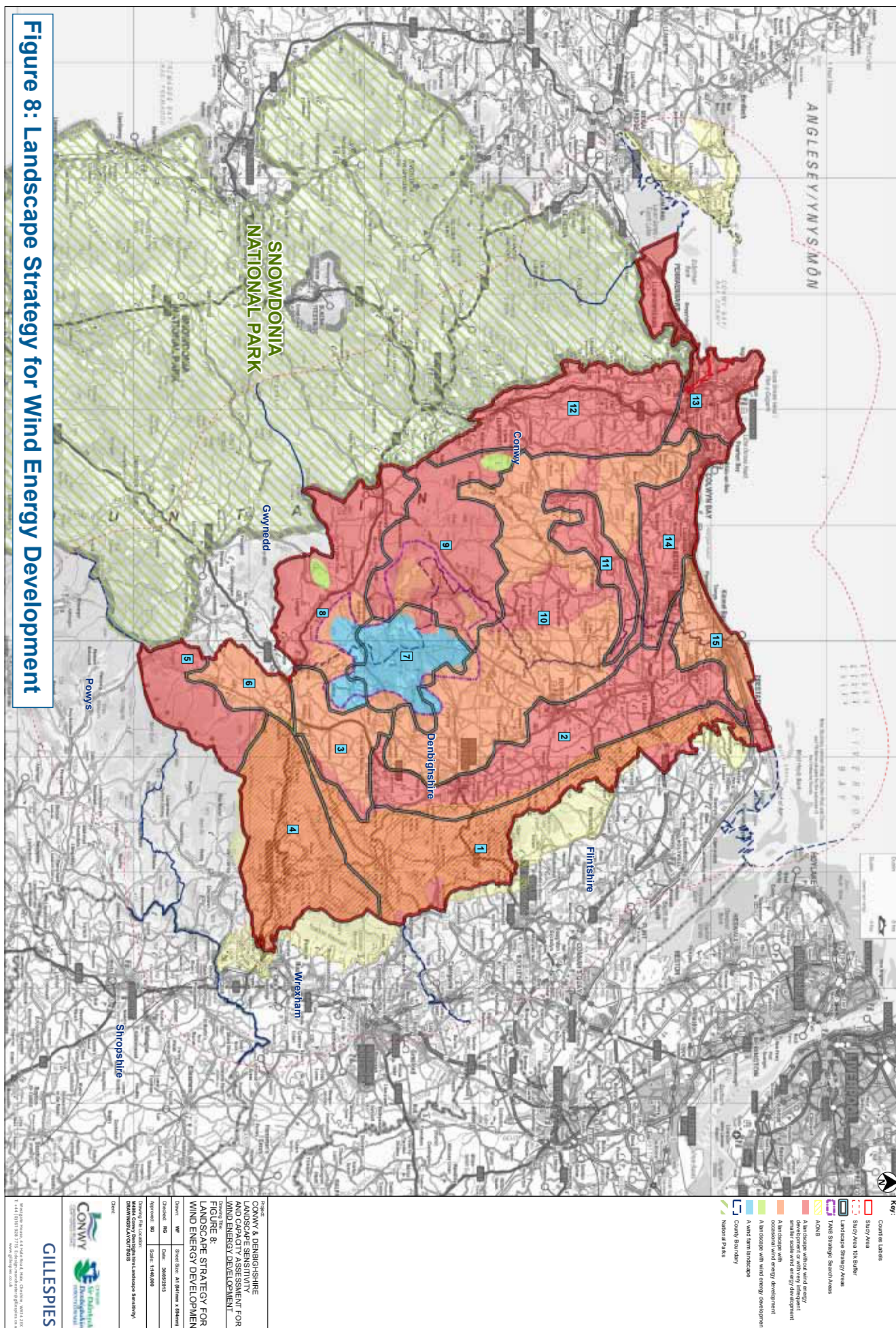


Figure 8: Landscape Strategy for Wind Energy Development





APPENDIX 1

Background Documents

- Cadw (1998) *Register of Landscapes of Outstanding Historic Interest in Wales*
- Cadw (2001) *Register of Landscapes of Special Historic Interest in Wales*
- Cadw (2007) *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*, 2nd (revised) Edition
- Cadw (1998) *Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales*
- Cadw (2004) World Heritage Site Management Plan, The Castles and Town Walls of Edward I in Gwynedd
- The Countryside Agency and Scottish Natural Heritage (2002) *Landscape Character Assessment: Guidance for England and Scotland*
- Clark, J., Darlington, J. & Fairclough, G. (2004) *Using Historic Landscape Characterisation*
- Conwy Borough Council (1998-2003) *A Countryside Strategy for Conwy*
- Countryside Council for Wales (2008) *LANDMAP Methodology: Guidance for Wales*
- Countryside Council for Wales (2008) *LANDMAP Information Guidance Note 1: LANDMAP and Special Landscape Areas*
- Countryside Council for Wales (2010) *LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines*
- Countryside Council for Wales (2010) *Guidance on Assessing Cumulative Landscape and Visual Impact of Wind farms in Wales*
- Countryside Council for Wales (2009) *Seascape Assessment of Wales*
- Countryside Council for Wales (et al) (2011) *Guide to Best Practice in Seascape Assessment*
- Countryside Council for Wales (2009) *Wales Landscape Character Areas*
- Countryside Council for Wales, Cadw and Welsh Assembly Government (2007) *Guide to Good Practice on Using the Register of Landscapes of Historic Interest in Wales in the Planning and Development Process*
- Countryside Council for Wales (2008) *Energy & Natural Heritage. Countryside Council for Wales Policy Position Statement*
- Countryside Council for Wales (2009) *Welsh Seascapes and their Sensitivity to Offshore Developments*. Policy Research Report No. 08/5
- Denbighshire County Council (2003) *Denbighshire Landscape Strategy*
- Denbighshire County Council (2012) *Wind Energy Development Interim Planning Guidance*
- Department of Energy and Climate Change (2009) *Guidance on the Assessment of Cumulative Effects of Onshore Wind Farms. Entec Phase 2 Report 2nd draft*.
- Department of Energy and Climate Change, 2011, Overarching National Policy Statement for Energy (EN-1)
- Department of Energy and Climate Change, 2011, National Policy Statement for Renewable Energy Infrastructure (EN-3)
- Department of Energy and Climate Change (2009) *Guidance on the Assessment of Cumulative Effects of Onshore Wind Farms*. Entec Phase 2 Report 2nd draft

- Department of Energy and Climate Change (2011) *National Policy Statement (NPS) EN1 Overarching Energy*
- Department of Energy and Climate Change (2011) *NPS EN3 Renewable Energy Infrastructure*
- Design Commission for Wales (2012) *Designing Wind Farms in Wales*
- English Heritage & Lancashire County Council Countryside Council for Wales (2008) *LANDMAP Methodology Chapters. Countryside Council for Wales Policy Research Reports*
- The Highland Council (2012) *Interim Supplementary Planning Guidance: Onshore Wind Energy*
- Landscape Institute and the Institute for Environmental Management and Assessment (second edition 2002) *Guidelines for Landscape and Visual Impact Assessment (GLVIA)*. This is the industry standard for landscape and visual impact assessment; the second edition was current at the time that this report was produced. The updated third edition of GLVIA was published and released in April 2013 as this report was being finalised.
- Scottish Natural Heritage (updated March 2009) *Strategic Locational Guidance for Onshore Windfarms*
- Scottish Natural Heritage (2012) *Assessing the Impact of Small Scale Wind Energy Proposals on the Natural Heritage*
- Scottish Natural Heritage (2009) *Siting and Designing Wind Farms in the Landscape*
- Scottish Natural Heritage (2012) *Siting and Design of Small Scale Wind Turbines of between 15 and 50 metres in Height*
- Scottish Natural Heritage (2009) *Assessing the Cumulative Effect of Onshore Wind Energy Developments. Draft for Consultation*
- The Tourism Company (2009) *Clwydian Range AONB Tourism Strategy*
- Welsh Assembly Government (2012) *Planning Policy Wales, Edition 5*
- Welsh Assembly Government (2005) *Technical Advice Note 8: Renewable Energy*

Strategic Landscape Sensitivity and Capacity Studies

- David Tyldsley Associates (2011) *Landscape Capacity Study for Wind Energy Development in West Lothian*
- Gillespies (2004) Scospa Report. Strategic Locational guidance for Wind Energy Development in Respect of the Natural Heritage Report to the Government Office for the North East.
- Gillespies (2010) *Landscape and Visual Sensitivity of Conwy and Denbighshire to 132kV Overhead Line Development. Unpublished Report for SP Manweb*
- Julie Martin Associates (2010), *Landscape Capacity Study for Wind Energy Developments in the South Pennines*
- Land Use Consultants (2009) *Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands*
- Cornwall Council (2012) *Technical Paper E4 (a) An Assessment of the Landscape Sensitivity to Onshore Wind and Large Scale Solar Photovoltaic Development in Cornwall*
- Lovejoy (2005), *Landscape Sensitivity to Wind Energy Developments in Lancashire*
- Ove Arup & Partners (2005) *TAN 8 Annex D Study of Strategic Search Area A – Clocaenog Forest Final Issue Report*

APPENDIX 2

Planning Policy Wales

Relevant policies include the following:

5.3.6 National Parks and AONBs are of equal status in terms of landscape and scenic beauty and both must be afforded the highest status of protection from inappropriate developments. In development plan policies and development management decisions National Parks and AONBs must be treated as of equivalent status. In National Parks and AONBs, development plan policies and development management decisions should give great weight to conserving and enhancing the natural beauty, wildlife and cultural heritage of these areas.

5.3.11 Non-statutory designations, such as Special Landscape Areas or Sites of Interest for Nature Conservation, should be soundly based on a formal scientific assessment of the nature conservation, landscape or geological value of the site. Local non-statutory sites can add value to the planning process particularly if such designations are informed by community participation and reflect community values. Local planning authorities should apply these designations to areas of substantive conservation value where there is good reason to believe that normal planning policies cannot provide the necessary protection. Such designations should not unduly restrict acceptable development.

5.5.6 In National Parks or AONBs, special considerations apply to major development proposals which are more national than local in character. Major developments should not take place in National Parks or AONBs except in exceptional circumstances. This may arise where, after rigorous examination, there is demonstrated to be an overriding public need and refusal would be severely detrimental to the local economy and there is no potential for locating the development elsewhere or meeting the need in some other way.

5.7.2 Development plans should normally only propose coastal locations for development which needs to be on the coast. In particular, the undeveloped coast will rarely be the most appropriate location for development. Where new development requires a coastal location the developed coast will normally provide the best option, provided that due regard is paid to the risks of erosion, flooding or land instability.

5.7.4 Policies should aim to protect or enhance the character and landscape of the undeveloped coastline. Planning policies to be pursued in Heritage Coast areas should be incorporated in development plans. Designation as a heritage coast does not directly affect the status of the area in planning terms. However, the features which contributed to the designation of such areas may be important in formulating planning policies or making development management decisions.

6.5.24 World Heritage Sites are a material consideration to be taken into account by local planning authorities in the determination of planning applications, and by the Welsh Government in determining cases on appeal or following call-in. The impact of development proposals on both the sites and their settings should be carefully considered.

6.5.25 Local planning authorities should protect parks and gardens and their settings included in the first part of the 'Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales'. Cadw should be consulted on planning applications affecting grade 1 and II sites and the Garden History Society should be consulted on all parks and gardens on the Register. Information on the historic landscapes in the second part of the Register should be taken into account by local planning authorities in considering the implications of developments which are of such a scale that they would have a more than local impact on an area on the Register (see para 6.4.9). The effect of proposed development on a park or garden contained in the Register of Landscapes, Parks and Gardens of Special Historic Interest in Wales, or on the setting of such a park or garden, may be a material consideration in the determination of a planning application.*

APPENDIX 3

Extract from LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines

(Edited Temporary Version of June 2012 – Updated version due March 2013)

2.2 Planning Policy for Onshore Wind Energy

2.2.1 In the context of wind farm developments three types of areas have been identified in the Technical Advice Note (TAN) 8 on Renewable Energy (2005) as having differing status (points 1-3 below). However, LANDMAP information should still be used in all three of the TAN 8 contexts below (Welsh Assembly Government 2005, Annex D, section 8.4) to assist in avoiding, minimizing and compensating for impacts.

1) National Parks (NPs) and Areas of Outstanding Natural Beauty (AONBs)

TAN 8 states *“There is an implicit objective in TAN 8 to maintain the integrity and the quality of the landscape within the National Parks / AONBs of Wales i.e. no change in landscape character from wind turbine developments.”* The WAG Policy Statement on National Parks and National Park Authorities in Wales (2007) states *“In line with WAG’s policy on major developments within the Welsh Parks - and as set out in TAN 8 – there should be no significant change in landscape character as a result of wind turbine development within National Parks (or the AONBs). In conjunction with this, it is an aim of WAG that, where feasible, transmission cables should be under-grounded.”*

2) Areas within and immediately adjacent to Strategic Search Areas (SSAs)

TAN 8 Strategic Search Areas (SSAs) are considered the most appropriate locations for large scale wind farm development (Welsh Assembly Government, 2005). Within the SSAs landscape change has been accepted, and the creation of ‘wind farm landscapes’ in these areas acknowledged by Government as an outcome of delivering renewable energy targets, *“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”*.

However, given the height of turbines, the visual impacts of a windfarm inside an SSA, may well affect the character of areas some distance away. Such issues arise most clearly where SSAs are close to National Parks and AONBs. An example is the Hirwaun Inquiry, 2008, where large wind turbines sited within 8km of the National Park boundary were considered to be unduly intrusive.

3) Other areas outside the SSAs

TAN 8 states that *“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”*. Whilst *“most areas outside SSAs should remain free of large wind power schemes”*, wind farm schemes may be proposed on urban/industrial brownfield sites (up to 25MW), as smaller community based schemes (generally less than 5 MW) or as part of the re-powering and/or extension of existing wind farms. The LVIA should help determine if the *“environmental and landscape impacts are acceptable”* (TAN 8 2.11-2.14).

2.2.2 The Ministerial Interim Planning Policy Statement (MIPPS) 01/2005 states that *“renewable energy projects should generally be supported by local planning authorities provided environmental impacts are avoided or minimised”* (12.8.6). However the requirement in MIPPS that *“developers will need to be sensitive to local circumstances, including siting in relation to landform and other planning considerations”*

(12.8.11) means that LANDMAP data will be valuable in understanding and avoiding or mitigating the impact of developments.

2.2.3 Good design principles and micro-siting is relevant in all instances to minimise the landscape and visual impacts of wind farms. When impacts have been minimized (in accordance with advice in MIPPS) the issue of whether the residual impacts are acceptable will have to be decided on a case by case basis.

APPENDIX 4

Operational, Consented and Proposed Wind Energy Developments (March 2013)

Table A4.1 – Operational and Consented Onshore Wind Energy Developments (Source data up to end of March 2013)

This table illustrates the typologies of the operational and consented wind energy developments in relation to each of the strategy areas.

Land- scape Strategy Area	Land- scape Unit	Plan Ref	Name	Status	County	Number of turbines	Height to Blade Tip (m)	Typology Relevant to Study
1	C2	E34	Tyn Llidart	Operational/Consented	Denbighshire	1	18	Micro
1	C6	E38	Foel Gollog	Operational/Consented	Denbighshire	1	15	Micro
1	B5	E40	Plas y Ial	Operational/Consented	Denbighshire	1	18	Micro
1	A2	E43	Penrallt	Operational/Consented	Denbighshire	1	18	Micro
1	D13	E44	Llainwen Ucha	Operational/Consented	Denbighshire	1	20	Micro
1	C1	E45	Cefn Du	Operational/Consented	Denbighshire	1	15	Micro
2	A6	E37	Primrose Cottage	Operational/Consented	Denbighshire	1	11	Micro
3	D5	E42	Maes Truan	Operational/Consented	Denbighshire	1	20	Micro
3	D5	E50	Tyn Y Celyn	Operational/Consented	Denbighshire	2	46	Small
3	D5	E54	Maesgwyn Ucha	Operational/Consented	Denbighshire	1	46	Small
3	D5	E55	Tyddyn Y Cae Hir	Operational/Consented	Denbighshire	1	27	Small
7	D2	E2	Brenig	Operational/Consented	Denbighshire	16	100	Very Large
7	D2	E33	Tir Mostyn	Operational/Consented	Denbighshire	25	75	Very Large
7	D1	E47	Cae Gwyn	Operational/Consented	Denbighshire	1	35	Small
7	D2	E48	Cae'r Weirglodd	Operational/Consented	Denbighshire	1	35	Small
7	D2	E51	Derwydd Bach	Operational/Consented	Denbighshire	10	121	Very Large
7	D2	E52	Cilgoed	Operational/Consented	Denbighshire	1	78	Medium
7	D1	E53	Cerrig Oerion	Operational/Consented	Denbighshire	2	46	Small
7	D1	E58	Maestdyddyn Isa	Operational/Consented	Denbighshire	1	46	Small
7	D4	E59	Dyfannedd	Operational/Consented	Denbighshire	1	19	Micro

8	D3	E3	Hafotty Ucha P1	Operational/Consented	Conwy	1	60	Medium
8	D3	E5	Hafotty Ucha P2	Operational/Consented	Conwy	2	74	Medium
8	D3	E7	Hafotty Ucha P3	Operational/Consented	Conwy	1	86	Large
8	D3	E8	Ffynnon Wen	Operational/Consented	Conwy	1	12	Micro
8	D15	E14	Mwdwl Eithin	Operational/Consented	Conwy	11	100	Large
8	D3	E20	Hafod Dinbych Uchaf	Operational/Consented	Conwy	1	15	Micro
8	D10	E22	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
8	D10	E24	Fron Bella	Operational/Consented	Conwy	1	35	Small
8	D3	E25	Tyn Y Bwlch	Operational/Consented	Conwy	1	15	Micro
8	D3	E27	Tain Y Foel	Operational/Consented	Conwy	1	46	Small
8	D3	E29	Nant Yr Helyg	Operational/Consented	Conwy	1	27	Small
8	D3	E31	Maes Gwyn	Operational/Consented	Conwy	1	22	Small
8	D3	E32	Llechwedd y Gaer	Operational/Consented	Conwy	1	27	Small
8	D6	E36	Wern Ddu	Operational/Consented	Denbighshire	4	90	Large
8	D3	E39	Nant Y Wrach	Operational/Consented	Denbighshire	1	9	Micro
8	D4	E41	Clegir Canol	Operational/Consented	Denbighshire	1	30	Small
9	D10	E4	Moel Maelogen P1	Operational/Consented	Conwy	3	76	Medium
9	D10	E6	Moel Maelogen P2	Operational/Consented	Conwy	9	76	Medium
9	D10	E11	Pant Glas	Operational/Consented	Conwy	1	76	Medium
9	D10	E23	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
9	D10	E26	Cae Haidd	Operational/Consented	Conwy	1	27	Small
9	D10	E56	Wern Uchaf	Operational/Consented	Denbighshire	1	19	Micro
10	D1	E10	Bryn Nantllech	Operational/Consented	Conwy	1	9	Micro
10	D1	E19	Minffordd	Operational/Consented	Conwy	1	15	Micro
10	D1	E21	Crud Y Gwynt Farm	Operational/Consented	Conwy	1	35	Small
10	D1	E28	Brynau Pair Isa	Operational/Consented	Conwy	1	27	Small
10	D1	E30	Foel Fawr	Operational/Consented	Conwy	1	27	Small
10	D1	E35	Llanerchgron Ucha	Operational/Consented	Denbighshire	1	12	Micro
10	D1	E46	Rhiwlas Isa	Operational/Consented	Denbighshire	1	20	Micro
10	D1	E60	Gwaenynog Bach	Operational/Consented	Denbighshire	1	46	Small

12	B7	E12	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
12	B7	E15	Moel Maelogen	Operational/Consented	Conwy	1	76	Medium
13	C10	E13	Gwynfor	Operational/Consented	Conwy	1	Rooftop	Micro
13	B7	E17	Parc Caer Seion	Operational/Consented	Conwy	1	18	Micro
14	A5	E18	Colwyn Leisure Centre	Operational/Consented	Conwy	1	21	Small
15	A4	E1	Ocean Beach Site	Operational/Consented	Denbighshire	10	18	Small-Medium
15	A4	E9	Denbigh Circle	Operational/Consented	Conwy	1	Rooftop	Micro
15	A4	E16	Corsydd	Operational/Consented	Conwy	1	12	Micro
15	A4	E49	Apollo Cinema	Operational/Consented	Denbighshire	1	18	Micro
Within 10km Buffer of Study Area Boundary								
		E61	Castell y Gwynt	Operational/Consented	Conwy SNP	1	14	Micro
		E62	Braich Ddu	Operational/Consented	Gwynedd	3	90	Large
		E63	Tyrau Duon	Operational/Consented	Conwy SNP	Unconfirmed	17	Unknown
		E64	Soughton House	Operational/Consented	Flintshire	2	15	Micro
		E65	Kingspan	Operational/Consented	Flintshire	1	Unconfirmed	Unknown
		E66	Bryn Bella	Operational/Consented	Flintshire	1	9	Micro
		E67	Ael y Bryn	Operational/Consented	Flintshire	1	Rooftop	Micro
		E68	Fron Deg	Operational/Consented	Flintshire	1	9	Micro
		E69	Claremont	Operational/Consented	Flintshire	1	9	Micro
		E70	Tyddyn y Foel	Operational/Consented	Flintshire	1	9	Micro
		E71	Bryn Oer	Operational/Consented	Flintshire	1	10	Micro
		E72	Bryn Coch Farm	Operational/Consented	Flintshire	1	11	Micro
		E73	West Coast Energy	Operational/Consented	Flintshire	1	35	Small
		E74	Pentre Bach	Operational/Consented	Flintshire	1	23	Small
		E75	Racecourse Farm	Operational/Consented	Flintshire	1	19	Micro
		E76	Fron Haul Isa	Operational/Consented	Flintshire	1	Unconfirmed	Unknown
		E77	Cymau Hall Farm	Operational/Consented	Flintshire	1	16	Micro
		E78	Ysgol Rhos Helyg	Operational/Consented	Flintshire	1	20	Micro

		E79	Moss Giel	Operational/Consented	Flintshire	1	15	Micro
		E80	Alltami Depot	Operational/Consented	Flintshire	1	Unconfirmed	Unknown
		E81	Cae March Farm	Operational/Consented	Flintshire	1	15	Micro

Table A4.2: Operational and Consented Offshore Wind Energy Developments (Source data up to end of March 2013)

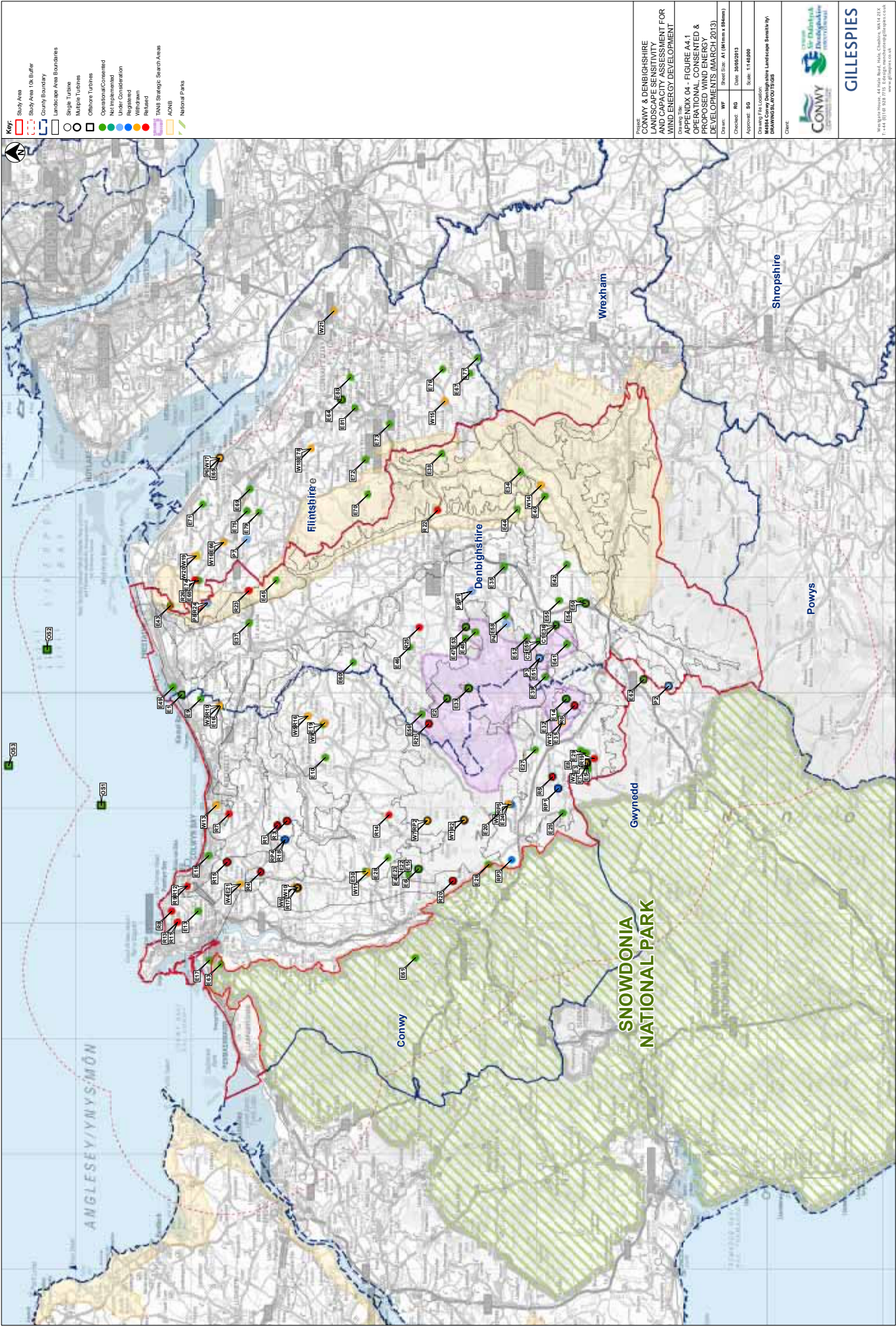
Plan Ref	Name	Status	No. of turbines	Height to Blade Tip (m)
Within 10km Buffer of Study Area Boundary				
OS1	Rhyl Flats	Operational/Consented	25	132
OS2	North Hoyle	Operational/Consented	30	130
Outside 10km Buffer of Study Area Boundary				
OS3	Gwynt y Mor	Operational/Consented	160	165

Table A4.3: Other Wind Energy Development Proposals (Source data up to end of March 2013)

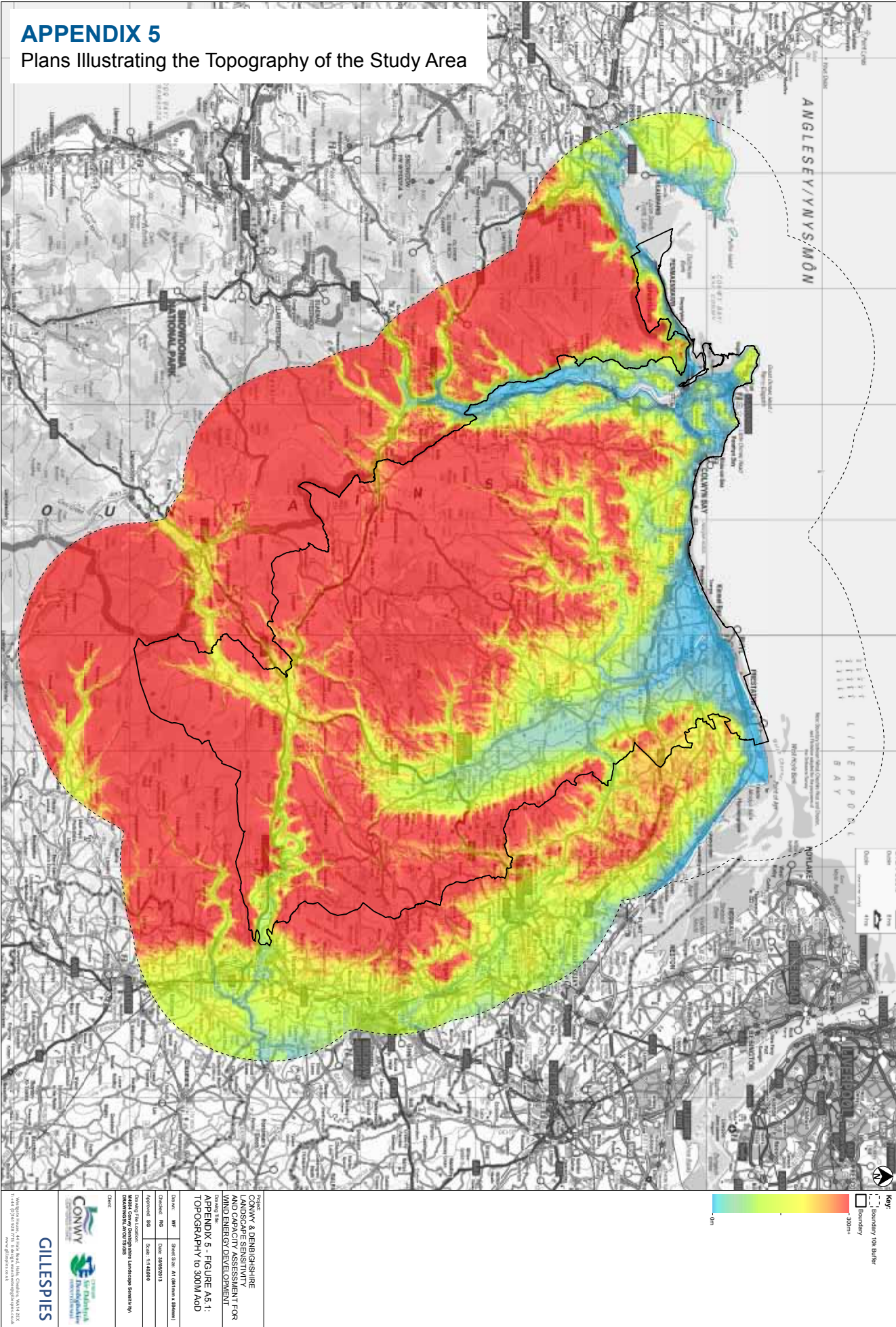
Land- scape Strategy Area	Land- scape Unit	Plan Ref	Name	Status	County	Number of turbines	Height to Blade Tip (m)	Typology Relevant to Study
1	B4	R22	Rhesgoed Farm	Refused	Denbighshire	1	18	Micro
1	C5	R23	Bryntirion Farm	Refused	Denbighshire	1	17	Micro
1	C1	R24	Marian Mawr	Refused	Denbighshire	1	46	Small
1	C1		Marian Mawr	Under Consideration	Denbighshire	1	46	Small
1	B5	W14	The Shippon	Withdrawn	Denbighshire	1	18	Micro
6			D7	P2		Sirior		Under Con- sideration
7			D2	P3		Derwydd Bach		Under Con- sideration
7	D2	P4	Tan y Creigiau	Under Consideration	Denbighshire	1	62	Medium
7	D4	C2	Dyfannedd	Not Implemented	Denbighshire	1	11	Micro

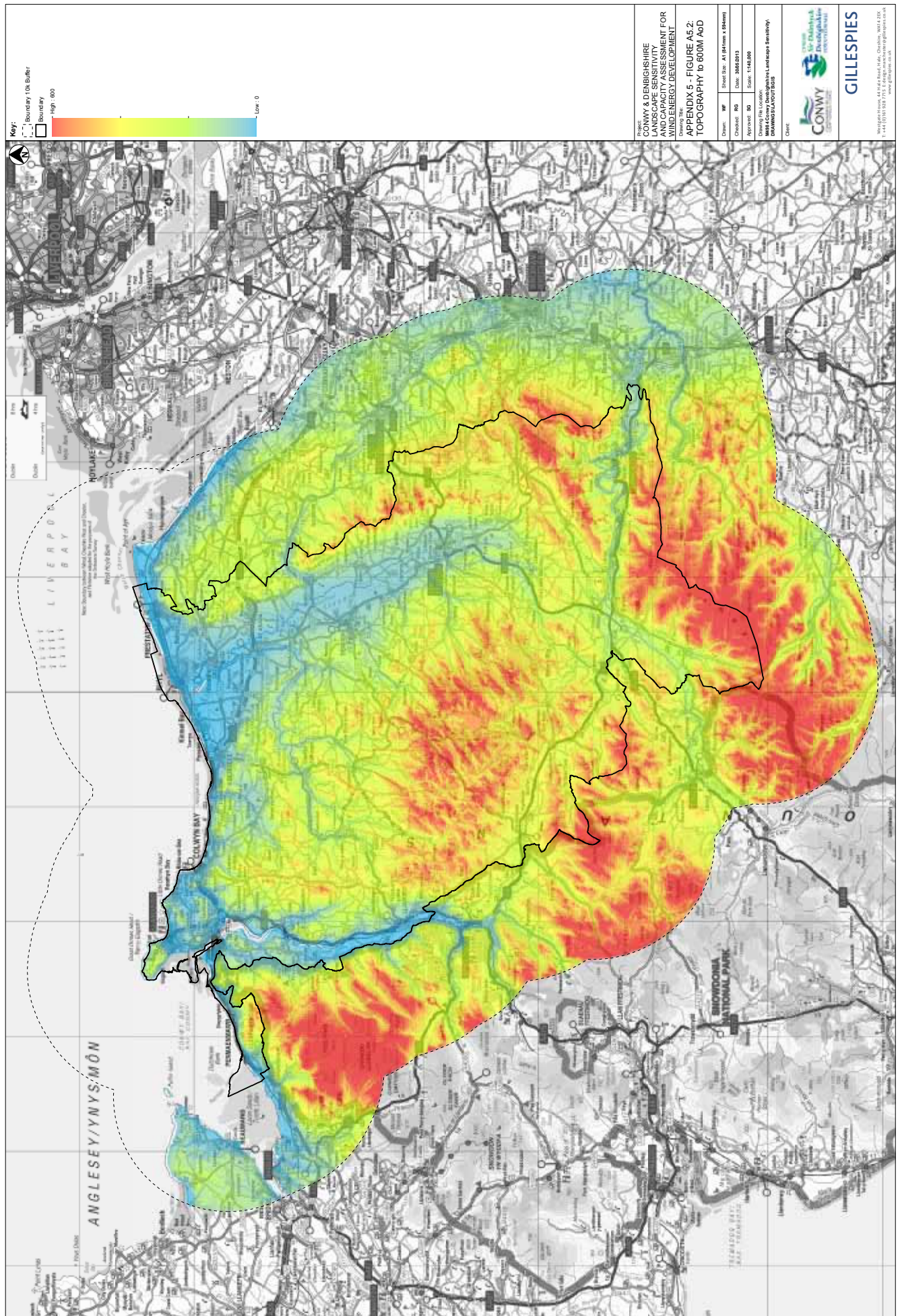
8	D3	RP1	Cwm Pennaner	Registered	Conwy	3	80	Medium
8	D3	RP3	Tyn Y Bryn Farm	Registered	Conwy	1	67	Medium
8	D3	RP5	Fron Isaf	Registered	Conwy	1	34	Small
8	D6	C1	Wern Ddu	Not Implemented	Denbighshire	5	80	Medium
8	D3	R5	Cwm Penanner	Refused	Conwy	8	Unconfirmed	Unknown
8	D15	R6	Mwdwl Eithin	Refused	Conwy	12	100	Large
8	D3	R19	Pen Y Gob	Refused	Conwy	1	27	Small
8	D3	W2	Hafoty Uchaf	Withdrawn	Conwy	3	Unconfirmed	Unknown
8	D3	W8	Fron Bella	Withdrawn	Conwy	1	34	Small
8	D3	W12	Maes Gwyn	Withdrawn	Conwy	1	22	Small
9	D10	RP2	Llys Dymper	Registered	Conwy	10	100	Large
9	D10	R2	Moel Llyn	Refused	Conwy	28	Unconfirmed	Unknown
9	B7	R20	Creigiau Lwrch	Refused	Conwy	2	20	Micro
9	D10	R21	Gorsedd Bran	Refused	Denbighshire	13	125	Very Large
9	D10	W1	Moel Llyn	Withdrawn	Conwy	26	Unconfirmed	Unknown
9	D10	W7	Llys Dymper	Withdrawn	Conwy	17	126	Very Large
10	D8	RP4	Coed Coch	Registered	Conwy	1	34	Small
10	D1	P1	Cil Llwyn	Under Consideration	Denbighshire	1	46	Small
10	D1	P5	Cil Llwyn	Under Consideration	Denbighshire	1	46	Small
10	D1	R1	Mynydd Glyn Lws	Refused	Conwy	6	Unconfirmed	Unknown
10	D1	R3	Mynydd Glyn Lws	Refused	Conwy	3	Unconfirmed	Unknown
10	D8	R4	Mynydd Llanellian	Refused	Conwy	4	Unconfirmed	Unknown
10	D1	R14	Tyn Ddol	Refused	Conwy	1	46	Medium
10	D1	R15	Glyn Farm	Refused	Conwy	2	Unconfirmed	Unknown
10	D8	R18	Coed Coch	Refused	Conwy	2	34	Small
10	D1	R25	Ffridd Fawr	Refused	Denbighshire	1	51	Medium
10	D1	W4	Bryn Y Maen Farm	Withdrawn	Conwy	1	35	Small
10	D1	W5	Tyddyn Ucha	Withdrawn	Conwy	1	32	Small
10	D1	W9	Minffordd	Withdrawn	Conwy	1	46	Small
10	D1	W11	Foel Fawr	Withdrawn	Conwy	1	27	Small

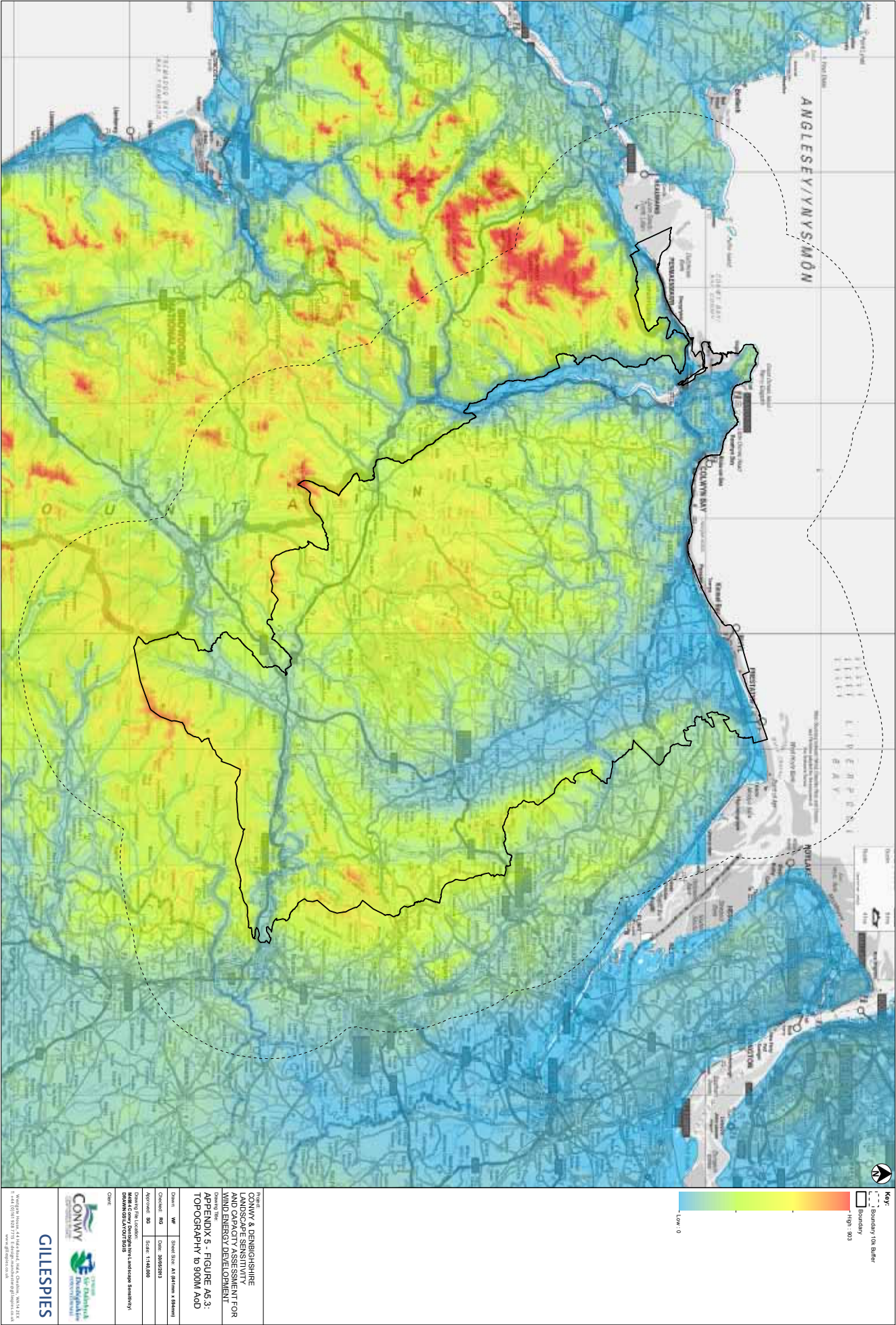
12	B7	R16	Tyddyn Ucha	Refused	Conwy	1	15	Micro
12	B7	R17	Bodlondeb	Refused	Conwy	2	18	Micro
12	B7	W6	Llecyn	Withdrawn	Conwy	1	17	Micro
12	B7	W10	Bodlondeb	Withdrawn	Conwy	2	18	Micro
13	C10	R8	Bryn Gwynt Lane	Refused	Conwy	1	10	Micro
13	C10	R11	Tan Y Coed	Refused	Conwy	1	17	Micro
13	C10	R13	Tan Y Coed	Refused	Conwy	1	15	Micro
14	A3	R7	Bryn Celyn	Refused	Conwy	1	11	Micro
14	C9	R9	Princess Avenue	Refused	Conwy	1	18	Micro
14	C9	R12	Princess Avenue	Refused	Conwy	1	Rooftop	Micro
14	C4	W13	Llanddulas Quarry	Withdrawn	Conwy	1	18	Micro
15	A4	R10	Corsydd	Refused	Conwy	1	12	Micro
15	A4	W3	Corsydd	Withdrawn	Conwy	1	12	Micro
Within 10km Buffer of Study Area Boundary								
		R26	Fron Deg	Refused	Flintshire	1	Unconfirmed	Unknown
		W15	Ysgol Terrig	Withdrawn	Flintshire	1	Unconfirmed	Unknown
		W16	Bryn Bella	Withdrawn	Flintshire	1	10	Micro
		W17	Kingspan	Withdrawn	Flintshire	1	138	Very Large
		W18	Ysgol Rhos Helyg	Withdrawn	Flintshire	1	15	Micro
		W19	Bryn Hedydd	Withdrawn	Flintshire	1	15	Micro
		W20	Bryn Hedydd	Withdrawn	Flintshire	1	15	Micro
		W21	Gop Farm	Withdrawn	Flintshire	1	20	Micro
		P6	Kingspan	Under Consideration	Flintshire	2	Unconfirmed	Unknown
		P7	Ty Coch	Under Consideration	Flintshire	1	Unconfirmed	Unknown



APPENDIX 5
Plans Illustrating the Topography of the Study Area







APPENDIX 6

LANDMAP Data in Relation to the Study Area (March 2013)

The digital plans contained on the Appendix 6 CD illustrate the range of LANDMAP data which was used to inform the evaluations of sensitivity to wind energy developments for each of the landscape units. Information from the following 21 LANDMAP layers (Evaluated Aspect layers) was overlaid onto the study area and represents the LANDMAP data as at March 2013:

Visual & Sensory Datasets

VS3: Land Cover
VS4: Topographic Form
VS5: Land Cover Pattern
VS6: Settlement Pattern
VS8: Scale
VS 9: Enclosure
VS18: Level of Human Access
VS24: Perceptual and Sensory Qualities
VS27: Condition
VS46: Scenic Quality
VS47: Integrity
VS48: Character Sense of Place
VS49: Rarity
VS50: Overall Evaluation

Historic Landscape Datasets

HL35: Integrity
HL38: Rarity
HL40: Overall Evaluation

Geological Landscape Datasets

GL31: Rarity / Uniqueness
GL33: Overall Evaluation

Landscape Habitats Datasets

LH42: Connectivity / Cohesion
LH45: Overall Evaluation

Cultural Landscape Datasets

Although GVLIA recommends that data from all five LANDMAP layers should be used in any assessment, the Cultural Landscape information provided in the Cultural Landscape layer was not sufficiently detailed to be useful for this study¹.

¹ LANDMAP Information Guidance Note 3 doesn't identify any specific evaluation criteria for Cultural Landscape

APPENDIX 7

Glossary & Definitions

Glossary

Table A7.1 below provides a glossary of the abbreviations used in the guidance. It is followed by definitions of key words used within this report for clarity.

Table A7.1: Glossary Table

AOB	Area of Outstanding Beauty
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
DCfW	Design Commission for Wales
GLVIA	Guidelines for Landscape and Visual Impact Assessment ²
kW	Kilowatt
LCA	Landscape Character Area
LCT	Landscape Character Type
LDP	Local Development Plan
LSA	Landscape Strategy Area
LU	Landscape Unit
MW	Megawatt
NRW	Natural Resources Wales (formerly the Countryside Council for Wales (CCW))
PPW	Planning Policy Wales
SLA	Special Landscape Area
SNH	Scottish Natural Heritage
SPG	Supplementary Planning Guidance
SSA	Strategic Search Area
SSA A	Strategic Search Area A (Clocaenog Forest)
TAN	Technical Advice Note
ZTV	Zone of Theoretical Visibility

Definitions

For the purposes of this study, the following definitions are taken from (or closely based on) the guidance referred to in Stage One of the Methodology (Section 2) :

Landscape is an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.³ GLVIA notes that the term does not only mean landscapes that are recognised as being special or valuable but is also about the ordinary and the everyday landscapes where people live and work, and spend their leisure time. This includes rural landscapes, seascapes and townscape.

Landscape Sensitivity is related to landscape character and how susceptible this is to change. Landscapes which are highly sensitive are at risk of having their key characteristics fundamentally

² Guidelines for Landscape and Visual Impact Assessment Second edition (GLVIA) (The Landscape Institute and the Institute for Environmental Management and Assessment 2002) replaced by GLVIA Third Edition in April 2013

³ Council of Europe, 2000 as set out in GLVIA Guidelines for Landscape and Visual Impact Assessment Second edition (GLVIA) (The Landscape Institute and the Institute for Environmental Management and Assessment 2002) replaced by GLVIA Third Edition in April 2013

altered, leading to a different landscape character. Sensitivity varies according to the type of development proposed (in this case wind energy) and the landscape's individual elements, features and characteristics.

Landscape Strategy Areas are relatively large geographical areas that have been identified in order to assign broad landscape objectives and to assess indicative overall capacity for wind energy developments. The evolution of the Landscape Strategy Areas was informed by the sensitivity assessments, supplemented by an analysis of intervisibility, key visual receptors, topography (including ridgelines and water-sheds based on LANDMAP information), Ordnance Survey and GIS data, landscape character, observations made during field studies and discussions with the Steering Group.

Visual Sensitivity reflects the views people have of the landscape and the effects of change on those views. When a landscape is changed, there is a probability that it will be seen by someone and often by several groups of people. This may affect both specific views and have an effect on the overall outlook (visual amenity) that people enjoy. Visual sensitivity depends both on the nature of the potential development as well as the nature of peoples' specific views and visual amenity. It also reflects the numbers and types of people who are likely to perceive the landscape and the extent to which they can accept change without perceiving effects upon their view to be negative.

Landscape Value is defined as the relative value that is attached to different landscapes by society and is often reflected in designation. Where this is the case it is important to understand what aspects of the landscape led to its designation and how these might be affected by potential development.

Landscape Capacity relates to how much change arising from wind energy development can be accommodated without unacceptable adverse effects on the character or perception of the landscape and without compromising any values attached to it.

Landscape Scale in relation to the evaluation of landscape units relates to the relationship of key elements or spaces of each landscape unit, such as woodland or open space, within the whole landscape. This does not refer merely to the size of the landscape unit. It may be that a small landscape unit is assessed to be vast in scale as it is a small part of a continuous whole such as a mountain range or extensive forest. In contrast smaller scale landscapes may typically comprise elements and spaces of a community scale such as hamlets, woodland clearings, small field or woodland units.

Cumulative Effects 'the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments taken together'.

Cumulative Landscape Effects 'can impact on either the physical fabric or character of the landscape, or any special values attached to it'.

Cumulative Visual Effects can be caused by combined visibility, which 'occurs where the observer is able to see two or more developments from one viewpoint' and/or sequential effects which 'occur when the observer has to move to another viewpoint to see different developments'⁴.

Tranquillity is defined as the quality of calm experienced in places with mainly natural features and activates, free from disturbance from manmade ones⁵

⁴ Cumulative Effects, Cumulative Landscape Effects and Cumulative Visual Effects definitions taken from SNH (2012) Assessing the cumulative impact of onshore wind energy development, Inverness: Scottish Natural Heritage

⁵ <http://en.wiktionary.org/wiki/tranquillity>



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