APPENDIX 6 LANDSCAPE AND VISUAL ASSESSMENT

Appendix 6.1: Outline Construction Environmental Management Plan (CEMP)

1.1 Introduction

- **1.1.1** The following information sets out the methodology for the Landscape and Visual Impact Assessment (LVIA) and Cumulative Landscape and Visual Impact Assessment (CLVIA) for the proposed Garn Fach Wind Farm.
- **1.1.2** Landscape and visual assessments are separate, although linked, processes considering landscape and visual effects separately, followed by an assessment of cumulative landscape and visual effects where relevant.
- 1.1.3 LVIA therefore considers the likely effects of a proposed development on:
- Landscape as a resource in its own right (caused by changes to the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape); and
- Views and visual amenity as experienced by people (caused by changes in the appearance of the landscape).

1.2 Guidance

- **1.2.1** This methodology has been developed by Chartered Landscape Architects (Chartered Members of the Landscape Institute (CMLI), who have extensive experience in the assessment of landscape and visual effects arising from wind energy development, amongst a wide range of other types and scales of development.
- **1.2.2** The methodology has been developed primarily in accordance with the principles contained within the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)¹. Natural Resources Wales (NRW) Guidance Note 46² informs the approach to LANDMAP in relation to LVIA, and NatureScot cumulative guidance³ informs the approach to the assessment of cumulative landscape and visual effects in relation to onshore wind energy development.

1.3 Scope of Assessment

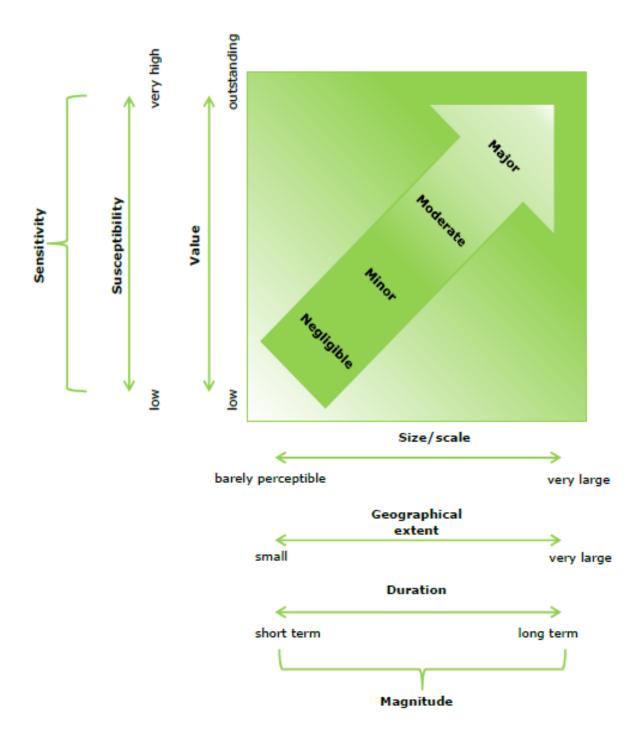
- **1.3.1** The LVIA considers physical changes to the landscape as well as changes in landscape character. It also considers changes to areas designated for their scenic or landscape qualities, and visual impacts as perceived by people.
- **1.3.2** All likely significant landscape and visual effects (including cumulative effects) are examined, including those relating to construction, operation and decommissioning.
- **1.3.3** The assessment has allowed for any necessary micrositing (i.e. the impact of moving turbines up to 50m as part of micrositing has been considered for each landscape and visual receptor and it is judged that this would not change the results reported in the LVIA).

1.4 Judging the Significance of Effects

- 1.4.1 An assessment of landscape or visual effects requires consideration of the nature of the receptor (sensitivity of receptor) and the nature of the effect on the receptor (magnitude of change). GLVIA3 states that the nature of receptors, commonly referred to as their sensitivity, should be assessed in terms of the susceptibility of the receptor to the type of change proposed, and the value attached to the receptor. The nature of the effect on each landscape or visual receptor, commonly referred to as its magnitude, should be assessed in terms of size and scale of effect, geographical extent, duration and reversibility.
- **1.4.2** Sensitivity and magnitude are then considered together, to form a judgement regarding the overall significance of effects (GLVIA3, Figure 3.5, Page 39). This determination requires the application of professional judgement and experience to

take on board the many different variables which need to be considered, and which may be given different weight according to site-specific and location-specific considerations. In this assessment judgements are made on a case by case basis, guided by the principles set out in **Figure 6-1.1**.

Appendix 6: Landscape and Visual Assessment



¹ The Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition.

² Natural Resources Wales (2021) LANDMAP Guidance Note 46: Guidance for Wales, Using LANDMAP in Landscape and Visual Impact Assessments.

³ NatureScot (2021) Guidance: Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments.

1.5 Assessing Significance of Landscape Effects

- **1.5.1** For the purpose of this LVIA, landscape receptors are landscape units based on the Visual & Sensory aspect area (VSAA) of LANDMAP as explained in **Appendix 6-3.**
- **1.5.2** Judging the significance of landscape effects requires consideration of the nature of the landscape receptors (sensitivity) and the nature of the effect on those landscape receptors (magnitude).

Landscape Sensitivity

1.5.3 The sensitivity of a landscape receptor to change is based on combining professional judgements on susceptibility and value as illustrated in **Table 6-1.1**.

Table 6-1.1: The principle of judging landscape sensitivity

	Higher	←→	Lower
Susceptibility	The landscape is less able to accommodate wind energy development without undue negative consequences to the baseline situation. Attributes (as set out below in Table 6-1.2) that make up the character of the landscape offer very limited opportunities for the accommodation of change without key characteristics being fundamentally altered by wind energy development, leading to a different landscape character.	*	The landscape is more able to accommodate wind energy development without undue negative consequences to the baseline situation. Attributes (as set out below in Table 6-1.2) that make up the character of the landscape are more resilient to being changed by wind energy development.
Value	Landscapes with higher scenic quality, conservation interests, recreational value, cultural associations or rarity or uniqueness. Areas designated at a national level e.g. National Parks or AONBs with national policy level protection. LANDMAP aspect areas with higher overall evaluation scores.	↔	Landscapes of limited aesthetic qualities, low conservation interest, little recreational value, few cultural associations or of character that is frequent/ widespread. Areas or features that are not formally designated. LANDMAP aspect areas with lower overall evaluation scores.

Susceptibility of the Landscape Receptor

- **1.5.4** Susceptibility means "the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies" (GLVIA3 paragraph 5.40).
- **1.5.5** For wind energy development, a series of criteria are used to evaluate susceptibility of landscape character types or areas to wind energy development as set out in the table below. These criteria are drawn from a range of published sources relating to wind farm development, including Siting and Designing Windfarms in the Landscape (SNH, 2017) and GLVIA3.

Table 6-1.2: Criteria to determine susceptibility to wind energy development

Characteristic / attribute	Aspects indicating lower susceptibility to wind energy development		Aspects indicating higher susceptibility to wind energy development
Scale	Large scale	←→	Small scale
Landform	Absence of strong topographical variety, featureless, convex or flat	←→	Presence of strong topographical variety or distinctive landform features
Land cover and landscape pattern/ complexity	Simple Regular or uniform	*	Complex Rugged and irregular

Characteristic / attribute	Aspects indicating lower susceptibility to wind energy development	←→	Aspects indicating higher susceptibility to wind energy development
Historic landscape/ time depth	Absence of time depth and historic features	←→	Presence of historic landscapes with great time depth with a high density of historic landscape features
Settlement and manmade influences	Presence of contemporary structures e.g. utility, infrastructure or industrial elements	←→	Absence of modern development Presence of small scale, historic or vernacular settlement
Skylines	Non-prominent/screened skylines or skylines that are less important in views Presence of existing modern man-made features	**	Distinctive, undeveloped skylines Skylines that are highly visible over large areas or exert a large influence on landscape character Skylines with important historic landmarks
Inter-visibility with adjacent landscapes	Little inter-visibility with adjacent sensitive landscapes or viewpoints	←→	Strong inter-visibility with sensitive landscapes Forms an important part of a view from sensitive viewpoints
Perceptual aspects	Presence of visible or audible signs of human activity and development. Lacking in naturalness. Threatening; unattractive; noisy. High levels of light pollution / doesn't experience dark skies	*	Remote from visible or audible signs of human activity and development. High levels of naturalness evident. Tranquil; wild; spiritual; attractive; peaceful Low levels of light pollution / experiences dark skies

1.5.6 Information contained in the five LANDMAP aspect layers, as shown in **Table 6-1.3** below, can also be used to inform susceptibility.

Table 6-1.3: Attributes recorded in LANDMAP aspects layers that inform susceptibility

Aspect layer	Relevant information from survey details/ collector record	Relevant attributes from Table 6-1.2
Visual and sensory	Summary description (Q3)	
	Topographic form (Q4), scale (Q8), sense of enclosure (Q9)	Scale; Landform; Skylines;
	Landcover pattern (Q5), boundary type (Q7), diversity, texture, lines, colour, balance, unity and pattern (Q10-Q16),	Landcover and landscape pattern/ complexity;
	Settlement pattern (Q6), level of human access (Q18) and use of construction materials (Q20)	Settlement and man-made influence;
	Attractive views (Q22) and detractive views (Q23)	Inter-visibility with adjacent landscapes;
	Night time light pollution (Q19), perceptual and other sensory qualities (Q24)	Skylines
	Schooly quanties (Q2+)	Perceptual aspects
Cultural landscape	Dominant cultural context (Q4)	Landscape pattern and complexity; Settlement and man-made influence; Perceptual aspects
Geological landscape	Geographical and topographical character (Q4 & 5)	Scale; Landform; Landscape pattern and complexity; Skylines; Manmade influence (e.g. quarries)

Aspect layer	Relevant information from survey details/ collector record	Relevant attributes from Table 6-1.2
Historic landscape	Dominant historic pattern (Q4 & 5), dominant chronological period (Q14) Presence of historic landscape features (Q16-22)	Historic landscape / time depth Settlement and man-made influence
Landscape habitats	Habitat types present (Q5), and biodiversity character (Q24)	Landcover and landscape pattern/ complexity; Naturalness

1.5.7 As set out in Appendix 6-3, landscape units have considered aspect areas relating to all aspect layers or some of them depending on the distance of the landscape unit from the outermost turbines of the Project. For landscape units that consider aspect areas from all five aspect layers, all of the characteristics / attributes in Table 6-1.2 have been applied in the assessment. For landscape units where aspect areas for the Geological Landscape and Landscape Habitats aspect layers have not been considered, the landform, landcover and landscape pattern characteristics / attributes have been considered to a lesser degree than the other characteristics / attributes in Table 6-1.2. For landscape units which only consider the Visual and Sensory aspect area they are based on, the assessment has focused on scale, skylines, intervisibility and perceptual aspects.

1.5.8 Landscape susceptibility is defined as very high, high, medium or low according to Table 6-1.4.

Table 6-1.4: Definition of landscape susceptibility

Landscape susceptibility	Description	
Very high	The landscape is not able to accommodate the type of development proposed without undue negative consequences to the baseline situation, e.g. this may include:	
	landscapes that are small in scale or complex and distinctive topographical features;	
	absence of any modern development and/or presence of historic landscape with great time depth and a high density of historic features.	
	distinctive, undeveloped skylines and/ or skylines that are highly visible over large areas or exert a large influence on landscape character (which may include important historic landmarks);	
	strong inter-visibility with highly sensitive landscapes or forms an important part of a view from highly sensitive viewpoints;	
	very high sense of remoteness/ wildness with no visible or audible signs of human activity and development, and experiences dark skies.	
High	The landscape is less able to accommodate the type of development proposed without undue negative consequences to the baseline situation, e.g. this may include:	
	landscapes that are smaller in scale or exhibiting some complexity, perhaps with some distinctive topographical features;	
	general absence of modern development and/ or presence of historic landscape with a degree of time depth.	
	 relatively undeveloped skylines and/ or skylines that are visible and exert an influence on landscape character (which may include some historic landmarks); 	
	■ may be inter-visible with sensitive landscapes or forms an important part of a view;	
	has a sense of remoteness/ tranquillity with few visible or audible signs of human activity and development, and experiences dark skies	
Medium	The landscape is able to accommodate the type of development proposed to some extent without undue negative consequences to the baseline situation, e.g. this may include:	
	medium scale landscapes which may have some topographical variety or features present	

Landscape susceptibility	Description			
	may be some man-made features and/ or contemporary structures present			
	skylines may be present but not likely to be the most important skylines in a region – there could be some visibility of the skyline from sensitive landscapes or views			
	some visible or audible signs of human activity and development, but may also be some sense of tranquillity and experiences some dark skies			
	■ Medium can also be a balance of indicators associated with high and low susceptibility.			
Low	The landscape is more able to accommodate the type of development proposed without undue negative consequences to the baseline situation, e.g. this may include: large scale landscapes with absence of strong topographical variety and a simple form regular or uniform landcover patterns			
	presence of man-made features and/ or contemporary structures e.g. utility, infrastructure or industrial elements			
	skylines that are not prominent or less important in views			
	less visible from sensitive landscapes or views			
	presence of visible or audible signs of human activity and development, and doesn't experience dark skies			
	lack of tranquillity			

Value of the landscape receptor

- **1.5.9** Landscape value, for the purposes of the LVIA, is determined with reference to:
- review of designations and the level of policy importance that they signify (such as landscapes designated at international or national level⁴);
- application of criteria that indicate value (such as scenic quality, rarity, recreational value, representativeness, conservation interests, perceptual aspects and artistic associations) as described in GLVIA3, paragraphs 5.44 5.47; and
- review of relevant LANDMAP evaluation information for the visual and sensory aspect layer (predominantly relating to the 'overall evaluation' score but also a consideration of 'scenic quality' and 'character' which influence the 'overall evaluation' score.
- **1.5.10** For the purposes of this assessment, landscape value is recorded as **outstanding**, **high**, **medium** or **low**.

Table 6-1.5: Definition of landscape value

Landscape Value	Description
Outstanding	This may include:
	 landscapes designated at national level (e.g National Parks, AONBs) or Registered Landscapes of Outstanding Historic Interest;
	landscapes that are in outstanding condition, have outstanding scenic quality, are rare, have outstanding recreational value, outstanding conservation interests, are particularly remote/ tranquil and/or have outstanding/ internationally recognised associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area;
	landscapes that have an 'outstanding' LANDMAP overall evaluation for the Visual & Sensory aspect layer where the reason provided applies to this assessment.

⁴ Powys County Council does not designate landscapes at the local level.

Landscape Value	Description	
High	This may include:	
	 landscapes designated at national level (e.g National Parks, AONBs) or Registered Landscapes of Special Historic Interest; 	
	landscapes that are in good condition, have high scenic quality, are rare, have high recreational value, high conservation interest, are remote/ tranquil and/or have high/ nationally recognised associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area;	
	landscapes that have a 'high' LANDMAP overall evaluation for the Visual & Sensory aspect layer where the reason provided applies to this assessment.	
Medium	This may include:	
	landscapes that are in a moderate condition, that have a moderate scenic quality, may have some rarity value at a local level, have some recreational value, some conservation interest, have a degree of rurality (but not a great sense of tranquillity/ remoteness) and/or have locally recognised associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area;	
	landscapes that have a 'moderate' LANDMAP overall evaluation for the Visual & Sensory aspect layer where the reason provided applies to this assessment.	
Low	This may include:	
	landscapes that are in less good condition, have a low scenic quality, are not rare, lacking recreational value or conservation interest, unlikely to exhibit a sense of tranquillity/ remoteness and have no notable associations with artists, writers or events in history that contribute to perceptions of the natural beauty of the area;	
	landscapes that have a 'low' LANDMAP overall evaluation for the Visual & Sensory aspect layer where the reason provided applies to this assessment.	

Combining landscape susceptibility and value judgements

- **1.5.11** An overall judgement of landscape sensitivity is derived by combining the separate judgements on landscape susceptibility and landscape value, as per the 'sequential combination' approach referred to in GLVIA 3 (para 5.55). The process of combining the judgements of susceptibility and value is one of professional judgement. The starting point is an even weighting given to susceptibility and value, but each situation is different and there may be instances where susceptibility or value has more influence. In each case the judgement has been clearly explained.
- **1.5.12** Landscape sensitivity of a landscape receptor to change is expressed as **very high**, **high**, **medium** or **low** (or the intermediate levels of **low-medium** and **medium-high**).

Nature of Landscape Effect (Magnitude of Landscape Change)

1.5.13 The magnitude of landscape change is based on combining professional judgements on size and scale; geographical extent; duration and reversibility as set out below. Further information on each criterion is provided in **Table 6-1.6**.

Table 6-1.6: The principle of judging the nature of the landscape effect (magnitude of landscape change)

	Higher	←→	Lower
Size/scale	Extensive loss of landscape features (and) or elements, and/or change in, or loss of key landscape characteristics, and/or creation of new key landscape characteristics.	←→	Some loss of landscape features (and) or elements, and/or change in or loss of some secondary landscape characteristics.
Geographical extent	Larger area across which there will be a change in landscape features and/or character.	←→	Smaller area across which there will be a change in landscape features and/or character.

Duration	Changes over a longer period.		Changes over a shorter period.
Reversibility	Change to features, elements or character which are not reversible.	+	A landscape change which is reversible.

Size and Scale Effect

- **1.5.14** For landscape elements/features this depends on the extent of existing landscape elements that will be lost or changed, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape.
- **1.5.15** In terms of landscape character, this reflects the degree to which the character of the landscape will change by removal or addition of landscape components, and how the changes will affect key characteristics.
- **1.5.16** This assessment of size/scale is described as being **very large**, **large**, **medium**, **small** or **barely perceptible** according to **Table 6-1.7**.

Table 6-1.7: Size / scale of landscape change

Size / scale	Definition	
Very large	Complete loss or modification of landscape elements and features, or addition of new elements and features, which completely alter the key characteristics and character of the landscape (including perceptual character).	
Large	Loss or modification of landscape elements and features, or addition of new elements and features, which result in a large change to the key characteristics and character of the landscape (including perceptual character).	
Medium	Loss of landscape elements and features, or addition of new ones, which result in discernible changes to landscape characteristics and character (including perceptual character).	
Small	A perceptible but small change to landscape characteristics and character (including perceptual character) as a result of the loss of landscape elements and features or addition of new ones.	
Barely perceptible	A barely perceptible change to landscape characteristics and character.	

Geographical Extent of Effect

1.5.17 The geographical extent over which the effect on landscape character will be felt is determined by considering the extent of direct and indirect (perceptual) changes. Extent is described as being small (up to 5km² of the landscape unit affected), medium (5-10km²), large (10-15km²), or very large (15km² and above).

Duration of Effect

- **1.5.18** GLVIA3 states that "Duration can usually be simply judged on a scale such as short term, medium term or long term". For the purposes of this assessment, duration will be determined in relation to the length of phases of the development, as follows:
- short-term effects generally last 0-5 years e.g. resulting from construction activities or presence of temporary structures;
- medium-term effects generally last 5-10 years e.g. resulting from longer construction periods or operational effects that may cease on growth of planting mitigation; and
- long-term effects generally last over 10 years e.g. resulting from the presence of turbines or other operational structures lasting more than 10 years

Reversibility of Effect

1.5.19 In accordance with the principles contained within GLVIA3, reversibility is reported as reversible, partially reversible or not reversible, and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e. at the end of the construction or at the end of the operational lifespan of the development).

Combining magnitude of landscape change judgments

- **1.5.20** An overall judgement for the magnitude of landscape change is derived by combining the separate judgements on size/scale, geographical extent, duration and reversibility, as per the 'sequential combination' approach referred to in GLVIA 3 (para 5.55). In most cases, size/scale of change tends to have the largest influence on overall magnitude.
- **1.5.21** The magnitude of landscape change is expressed as **very high**, **high**, **medium**, **low** or **barely perceptible** (or the intermediate levels of **low-medium** and **medium-high**).

Table 6-1.8: Definitions of magnitude of landscape change

Magnitude of landscape change	Definition			
Very high	This may include:			
	 a very large change in landscape features, characteristics and character resulting in the creation of a new landscape character type 			
	Likely to be widespread (e.g. over an area above 15km²).			
	Likely to be long term and not reversible.			
High	This may include:			
	 an obvious (large scale) change in landscape features, characteristics and character potentially resulting in the creation of a new landscape character type 			
	Likely to affect a larger geographical extent (e.g. over an area between 10km² and 15km²).			
	Likely to apply to obvious changes over the long or medium term, but could apply to very large changes over a short term			
Medium	This may include:			
	discernible (medium scale) changes to landscape features, characteristics and character			
	■ Likely to affect a moderate geographical extent (e.g. over an area between 5km² and 10km²).			
	Likely to apply to discernible changes over a long or medium term, but could include obvious changes for a short term			
Low	This may include:			
	a perceptible but small change to landscape features, characteristics and character			
	■ Likely to be a lesser geographical extent (e.g. over an area up to 5km²).			
	■ Likely to apply to small changes over the long or medium term, but could apply to discernible (medium scale) changes over a short term			
Barely	This may include:			
perceptible	an imperceptible/barely perceptible change to landscape features, characteristics and character over any extent and for any duration.			

Judging Levels of Landscape Effect and Significance

- **1.5.22** Judgements on landscape sensitivity and magnitude of landscape change are combined to assess the overall significance of each effect, guided by the principles set out in **Figure 6-1.1**
- 1.5.23 Sensitivity and magnitude are typically weighted evenly so that a medium sensitivity and medium magnitude will result in a moderate overall effect, while a high sensitivity combined with a high magnitude will result in a major effect and a low sensitivity combined with a low magnitude will result in a minor effect. However, there are many possible combinations and in some cases a weighting to either sensitivity or magnitude may be required to come to an overall level of effect e.g. a high sensitivity combined with a low-medium magnitude could result in either a moderate or a moderate-major effect. In these finely balanced cases magnitude tends to influence the overall level of effect slightly more than sensitivity.

1.5.24 Levels of effect are identified as **negligible**, **minor**, **moderate** or **major** (or the intermediate levels of **minor-moderate** and **moderate-major**) where effects of 'moderate' and above are considered **significant** in the context of the EIA Regulations.

Appendix 6: Landscape and Visual Assessment

Direction of Effects

1.5.25 The direction of landscape effects (beneficial, adverse or neutral) is determined in relation to the degree to which the proposal fits with landscape character and the contribution to the landscape that the development makes. For the purpose of this LVIA, all effects are considered to be adverse during construction due to the fact that construction activities do not contribute positively to landscape character. During operation the presence of the turbines is considered to be adverse because they are not installed for the benefit of landscape character and adverse covers the worst case. As effects are assumed to be adverse, the direction of effects has not been reported for each individual receptor in the assessment.

1.6 Assessing Significance of Visual Effects

- **1.6.1** Visual effects are experienced by people at different locations around the study area. Visual receptors are the people who will be affected by changes in views of visual amenity at different places, and they are usually grouped by what they are doing at that place (residents, road users, recreational users etc.).
- **1.6.2** Judging the significance of visual effects requires consideration of the nature of the visual receptors (sensitivity) and the nature of the effect on those receptors (magnitude).

Visual Sensitivity

1.6.3 The sensitivity of a visual receptor to change is based on combining professional judgements on susceptibility and value as set out in **Table 6-1.9** below. Further information on each criterion is also provided below this table.

Table 6-1.9: The principle of judging visual sensitivity

	Higher	←→	Lower
Susceptibility	Viewers whose attention or interest is focused on their surroundings including communities/ individual residential receptors/ people engaged in outdoor recreation/ visitors to heritage assets or other attractions where views of the surrounding area are an important contributor to experience.	←→	People whose attention is not on their surroundings (and where setting is not important to the quality of working life) such as commuters/ people engaged in outdoor sports/ people at their place of work.
Value	Views recorded in management plans or guide books. Views associated with nationally designated landscapes; notable views from a National Trail or promoted route; or designed views (vistas) recorded in citations for historic parks, gardens/scheduled monuments etc.		Views which are not documented or protected. Views which are more incidental, and less likely to be associated with somewhere people travel to or stop.

Susceptibility of the Visual Receptor

1.6.4 The susceptibility of visual receptors to changes in views/visual amenity is a function of the occupation or activity of people experiencing the view and the extent to which their attention is focused on views (GLVIA3, paragraph 6.32).

Table 6-1.10: Definition of visual susceptibility

Susceptibility	Receptor group		
Very high	Viewers whose attention or interest is highly focused on their surroundings, including:		
	 Communities with outstanding views of the highest scenic quality (e.g. towards or within/ across nationally designated landscapes); 		
	People engaged in outdoor recreation with outstanding views of the highest scenic quality (for example users of rights of way including national trails and promoted routes with views within, across, or of nationally designated landscapes); and		
	Visitors to heritage assets or other attractions where views are of the highest scenic quality and an important contributor to experience.		

Susceptibility	Receptor group			
High	Viewers whose attention or interest is focused on their surroundings, including:			
	 Communities where views contribute to the landscape setting enjoyed by residents; 			
	People engaged in outdoor recreation (for example users of rights of way including national trails and promoted routes, whose interest is likely to be focused on the landscape, or views from nationally designated landscapes); and			
	 Visitors to heritage assets or other attractions where views of surrounding are an important contributor to experience; 			
	People travelling on scenic routes and tourist routes, where attention is focused on the surrounding landscape.			
Medium	Viewers whose attention or interest is focused on their surroundings to some extent, including:			
	People travelling on local road routes, where attention may be focused on the surrounding landscape, but is transitory;			
	People at their place of work whose attention is focused on the surroundings and where setting is important to the quality of working life.			
Low	Viewers whose attention or interest is less focused on their surroundings, including			
	 People travelling more rapidly on major road, rail or transport routes (not recognised as scenic routes); 			
	People engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape;			
	People at their place of work whose attention is not on their surroundings (and where setting is no important to the quality of working life).			

Value of the Views Experienced from the Visual Receptor

- 1.6.5 Recognition of the value of views experienced from the visual receptor is determined with reference to:
- planning designations specific to views;
- whether it is recorded as important in relation to designated landscapes (such as views specifically mentioned as part of the special qualities of a National Park or an AONB);
- whether it is a notable view from a National Trail;
- whether it is recorded as important in citations (such as designed views recorded for Registered Parks and Gardens, or views recorded as of importance in Conservation Area Appraisals);
- the value attached to views by visitors, for example a designated viewpoint advertised on OS maps and in tourist information, or which is a significant destination, such as a popular hill summit, or a viewpoint which has facilities for enjoyment of the view, or and a view familiar from photographs or paintings; and
- 'attractiveness' of the views as referenced in existing information, such as LANDMAP/ judged on site.

The value of views experienced from the visual receptor is recorded as **outstanding**, **high**, **medium** or **low** in accordance with **Table 6-1.11** below.

Table 6-1.11: Definitions of value attached to views

Value of views experienced from the visual receptor	Description
Outstanding	This may include:

Value of views experienced from the visual receptor	Description
	 outstanding quality views associated with nationally designated landscapes (perhaps identified in management plans), or outstanding views from National Trails;
	 outstanding designed views recorded in citations for historic parks and gardens;
	 outstanding views from conservation areas, as recorded in a Conservation Area Appraisal;
	outstanding views that are regularly used in guide books for that part of the country.
High	This may include:
	 high quality views associated with nationally designated landscapes (perhaps identified in management plans), or high-quality views from National Trails;
	designed views recorded in citations for historic parks and gardens;
	■ valued views from conservation areas, as recorded in a Conservation Area Appraisal
	high quality views that are regularly used in guide books for that part of the country.
Medium	This may include:
	non-designated views, which may be noted in landscape character assessments or within LANDMAP information.
Low	This may include:
	other non-designated views (these may not be documented views but may nevertheless be valued by the local community who experience them).

Combining visual sensitivity judgements

- **1.6.6** An overall judgement of visual sensitivity is derived by combining the separate judgements on visual susceptibility and the value of views experienced from the visual receptor, as per the 'sequential combination' approach referred to in GLVIA 3 (para 6.43). The process of combining the judgements of susceptibility and value is one of professional judgement. The starting point is an even weighting given to susceptibility and value, but each situation is different and there may be instances where susceptibility or value has more influence. If an even weighting is not applied, the reason for this is explained.
- **1.6.7** Visual sensitivity of a visual receptor to change is expressed as very high, high, medium or low (or the intermediate levels of low-medium and medium-high).

Nature of Visual Effect (Magnitude of Visual Change)

1.6.8 The magnitude of visual change is based on combining professional judgements on size and scale; geographical extent; duration and reversibility, the principle of which is set out in **Table 6-1.12** below. Further information on each criterion is also provided below this table.

Table 6-1.12: The principle of judging the nature of visual effects (magnitude of visual change)

	Higher	←→	Lower
Size/scale	A large visual change resulting from the development is the most notable aspect of the view perhaps as a result of the development being in close proximity, or because a substantial part of the view is affected, or because the development introduces a new focal point and/or provides contrast with the existing view and/or changes the scenic qualities of the view.	*	A small or some visual change resulting from the development as a minor or generally unnoticed aspect of the view perhaps as a result of the development being in the distance, or because only a small part of the view is affected, and/or because the development does not introduce a new focal point or is in contrast with the existing view and/ does not change the scenic qualities of the view.

Geographical extent	The changes would be visible over a large area/ affect a large part of the receptor/ a large number of people.		The changes would be visible over a small area/ affect a small part of the receptor/ affect a few people
Duration	Visual change experienced over 10 years or more.	←→	Visual change experienced over a short period of up to 5 years.
Reversibility	A permanent visual change which is not reversible or only partially reversible following decommissioning of the development.	*	A temporary visual change which is reversible following the completion of construction or decommissioning of the development.

Size and Scale of Visual Effect

- 1.6.9 The size/scale of visual effect depends on:
- the scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the development;
- the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and
- the nature of the view of the development, in terms of whether views will be fully open, partially open, glimpsed or oblique.
- **1.6.10** This assessment of size/scale is described as being **very large**, **large**, **medium**, **small** or **barely perceptible** according to **Table 6-1.13**.

Table 6-1.13: Size/ scale of visual change

Size/ scale	Description
Very large	A very large change in the available view, perhaps where the development surrounds a receptor and is in very close proximity, entirely changing the available view in all directions.
Large	Large change in the available view, perhaps where the development is in relatively close proximity in a direct line of vision, or affecting a substantial part of the view, or providing contrast with the existing view.
Medium	Clearly perceptible change in the available view, perhaps where the development is relatively close but at an oblique angle or further away in the direct line of vision, creating a distinct new element in the view.
Small	Small change in the available view, perhaps where the development is at a distance or oblique angle, or where the scale of the landscape absorbs the development well.
Barely perceptible	Change in the available view which is barely perceptible or the change may go unnoticed.

1.6.11 All effects are assumed to be during winter, being the 'worst case' situation with minimal screening by vegetation and filtering of views by deciduous trees. While coniferous forest plantations may provide some screening it is recognised that they are not always permanent features in the landscape, so the assessment has considered the 'worst-case' situation of them not being present.

Geographical Extent of Effect

- **1.6.12** This records the extent of the area over which the changes would be visible e.g. whether there is only one point from where the development can be glimpsed, or whether it represents a large area from which similar views are gained, i.e. the number of people who will see the change (in general rather than specific numbers).
- **1.6.13** The geographical extent is described as being **small** (only small part of the receptor from where the development can be glimpsed / seen by few people), **medium** (part of the receptor has views/ a medium number of people are affected), **large** (a large part of the receptor is affected by views / seen by many people), or **very large** (all of the receptor is affected/ a very large number of people are affected by the change).
- **1.6.14** For hill summits and specific viewpoints geographical extent does not apply as these are point locations where emphasis is on the scale of effect.

Duration of Effect

1.6.15 Duration is reported as short term, medium term or long term, as defined for landscape.

Reversibility of Effect

1.6.16 Reversibility is reported as **reversible**, **partially reversible** or **not reversible** (i.e. permanent) and is related to whether the change can be reversed at the end of the phase of development under consideration (i.e. at the end of the construction or at the end of the operational lifespan of the development).

Combining magnitude of visual change judgements

- **1.6.17** An overall judgement for the magnitude of visual change is derived by combining the separate judgements on size/scale, geographical extent, duration and reversibility, as per the 'sequential combination' approach referred to in GLVIA 3 (para 6.43).
- **1.6.18** The magnitude of visual change is expressed as **very high**, **high**, **medium**, **low** or **barely perceptible** (or the intermediate levels of **low-medium** and **medium-high**).

Table 6-1.14: Definitions of magnitude of visual change

Table 0-1.14. De	initions of magnitude of visual change
Magnitude of change	Definition
Very high	This may include:
	a very large change in available views, perhaps where the development surrounds a receptor and is in very close proximity, entirely changing the view.
	Likely to affect a long length of a linear receptor or many people.
	Likely to be long term.
High	This may include:
	a large change in available views, perhaps where the development is in close proximity in a direct line of vision, or affecting a substantial part of the view, or providing contrast with the existing view.
	Likely to affect a long length of a linear receptor or many people, or a very large change affecting shorter lengths of a linear receptor/ fewer people.
	Likely to apply to large changes over the long or medium term, but could apply to very large changes over a short term.
Medium	This may include:
	a clearly perceptible change in view, perhaps where the development is relatively close but at an oblique angle or further away in the direct line of vision, creating a distinct new element in the view.
	Likely to affect a moderate number of people, or a large change affecting fewer people.
	Likely to apply to clearly perceptible changes over a long or medium term, but could include large changes for a short term.
Low	This may include:
	a small change in view, perhaps where the development is at a distance or oblique angle, or where the scale of the landscape absorbs the development well – affecting any number of people, or a medium change affecting few people.
	Likely to apply to small changes over the long or medium term, but could apply to clearly perceptible changes over a short term.
Barely perceptible	A change in view which is barely perceptible or may go unnoticed, affecting any number of people over any timescale

Judging the Level of Visual Effect and Significance

- **1.6.19** Judgements on visual sensitivity and magnitude of visual change are combined to assess the significance of each effect, guided by the principles set out in **Figure 6-1.1**.
- 1.6.20 Sensitivity and magnitude are typically weighted evenly so that a medium sensitivity and medium magnitude will result in a moderate overall effect, while a high sensitivity combined with a high magnitude will result in a major effect and a low sensitivity combined with a low magnitude will result in a minor effect. However, there are many possible combinations and in some cases a weighting to either sensitivity or magnitude may be required to come to an overall level of effect e.g. a high sensitivity combined with a low-medium magnitude could result in either a moderate or a moderate-major effect. In these finely balanced cases magnitude tends to influence the overall level of effect slightly more than sensitivity.
- **1.6.21** Levels of effect are identified as **negligible**, **minor**, **moderate** or **major** (or the intermediate levels of **minor-moderate** and **moderate-major**) where effects of 'moderate' and above are considered **significant** in the context of the EIA Regulations.

Direction of Effects

1.6.22 The direction of visual effects (**beneficial**, **adverse** or **neutral**) is determined in relation to the degree to which the development fits with the view and the contribution to the view that the development makes. For the purpose of this LVIA, construction effects are considered to be adverse because construction activity and equipment does not contribute positively to visual amenity. Whilst people have differing opinions in terms of how they perceive operational wind turbines in views, adverse covers the 'worst case' for the operational phase. As effects are assumed to be adverse, the direction of effects has not been reported for each receptor in the assessment.

1.7 Cumulative Landscape & Visual Impact Assessment

- 1.7.1 GLVIA 3 states "The most significant cumulative landscape effects are likely to be those that would give rise to changes in the landscape character of the study area of such an extent as to have major effects on its key characteristics and even, in some cases, to transform it into a different landscape type. This may be the case where the project being considered itself tips the balance through its additional effects. The emphasis must always remain on the main project being assessed and how or whether it adds to or combines with the others being considered to create a significant cumulative effect" (para 7.28 GLVIA 3).
- **1.7.2** The purpose of a Cumulative Landscape and Visual Impact Assessment (CLVIA) is to 'describe, visually represent and assess the ways in which a proposed wind farm would have additional impacts when considered with other consented or proposed windfarms. It should identify the significant cumulative impacts arising from the proposed wind farm' (Page 8, NatureScot, 2021).
- **1.7.3** The detailed assessment tables therefore focus on the assessment of additional cumulative effects, i.e. the effect of adding the proposed development to a baseline of other built or unbuilt wind farms.
- **1.7.4** The assessment also refers to total (also referred to as combined) cumulative effects at the end of the assessment (i.e. this will consider the effects of all current and future proposals, as well as Garn Fach, against the existing baseline).
- 1.7.5 As with an LVIA, a CLVIA deals with cumulative landscape and visual effects separately.

Types of Cumulative Visual Effects

- **1.7.6** Three types of cumulative effects on visual amenity are referred to in the assessment: combined, successive and sequential:
- Combined effects occur where a static viewer is able to view two or more wind farms from a viewpoint within the viewers same arc of vision (assumed to be about 90 degrees for the purpose of the assessment);
- Successive effects occur where a static viewer is able to view two or more wind farms from a viewpoint, but needs to turn to see them; and
- Sequential effects occur when a viewer is moving through the landscape from one area to another, for instance when a person is travelling along a road or footpath and is able to see two or more wind farms at the same, or at different times as they pass along the route. Frequently sequential effects occur where wind farms appear regularly, with short time lapses between points of visibility. Occasionally sequential effects occur where long periods of time lapse between views of wind farms, depending on speed of travel and distance between viewpoints.

Approach to assessment of additional cumulative effects

- **1.7.7** Although LVIA and CLVIA both look at the effects of a proposed development on the landscape and on views, there are differences in the baseline against which the assessments are carried out.
- 1.7.8 For the LVIA, the baseline includes existing developments which are present in the landscape at the time of undertaking the assessment, which may be either operational or under construction, as they form a part of the baseline situation. Their presence has the potential to influence the assessment of effects on landscape character and the assessment of effects on views. For the additional CLVIA the baseline is partially speculative and includes (in addition to existing wind farms):
- Wind farms which have been granted planning consent but are not yet constructed (consented); and
- Submitted valid wind farm applications which are currently awaiting determination by the relevant consenting authority, including those at appeal (proposed).
- **1.7.9** In accordance with NatureScot guidance⁵ this assessment considers two scenarios for the additional cumulative assessment.
- Scenario A is a more certain scenario (which also adds consented schemes to those included in the LVIA baseline); and
- **Scenario B** is a less certain scenario (which also adds undetermined planning applications and consented schemes to those included in the LVIA baseline).
- **1.7.10** The susceptibility and value of the landscape and visual receptors remain the same as for the LVIA. The magnitude of change is judged using the same criteria as for the LVIA (taking into account the size/scale of additional effect, the geographical extent of the additional effect and the duration).
- 1.7.11 The cumulative landscape assessment will consider:
- The position of the wind farms within the landscape, e.g. in similar landscape or topographical context;
- The relationship between the scale and layout of the wind farms, including turbine size/proportion/number of turbines;
- The distances between wind farms, and their distance and direction from the receptor; and
- The cumulative effect of ancillary development, e.g. access tracks
- **1.7.12** The cumulative visual assessment will consider:
- The arrangement of wind farms in the landscape or view e.g. developments seen in one direction or part of the view (combined views), or seen in different directions (successive views in which the viewer must turn) or developments seen sequentially along a route;
- The relationship between the scale and layout of the wind farms, including turbine size/proportion/number of turbines;
- The position of the wind farms within the landscape, e.g. in similar landscape or topographical context; or within the view, e.g. on the skyline, against the backdrop of land;
- The distances between wind farms, and their distance and direction from the viewer; and
- In the case of routes, the relative duration of views of wind farms from routes.
- **1.7.13** As for the LVIA, judging the significance of cumulative landscape and visual effects requires consideration of the sensitivity (nature of the receptor) and the magnitude of effect on those receptors (nature of the effect), guided by the same principles as set out in **Figure 6-1.1**.
- **1.7.14** Cumulative landscape or visual effect are described as **negligible**, **minor**, **moderate** or **major** (or the intermediate levels of **minor-moderate** and **moderate-major**) where cumulative landscape or visual effects of 'moderate' and above are considered **significant** in the context of the EIA Regulations.

Approach to assessment of total (combined) cumulative effects

1.7.15 The assessment of *total* (also referred to as *combined*) cumulative effect considers the effect on landscape and views if all current, and future proposals, including Garn Fach, are implemented when compared to the existing baseline. GLVIA3 (paragraph 7.13) acknowledges that "assessing combined effects involving a range of different proposals at different stages in the planning process can be very complex" and it is acknowledged that there is a relatively high level of uncertainty regarding

⁵ NatureScot (2021) Guidance: Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments

what the future scenario will look like. It is not up to one developer to assess all other developers' projects and this is also recognised in paragraph 7.13 of GLVIA3: "the assessor will not have assessed the other schemes and cannot therefore make a fully informed judgement." A judgement of the significance of the total cumulative effect is provided in Section 6.8 of the LVIA; however, this should have a limited influence on decision making given the uncertainty of the future scenario and therefore the unreliability of the judgement.

Appendix 6.2: ZTV Mapping and Visualisation Methodology

- **1.1.1** This appendix sets out the approach to the production of the visualisations which accompany the Garn Fach Wind Farm Landscape and Visual Impact Assessment (LVIA) and Cumulative Landscape and Visual Impact Assessment (CLVIA). Figures referred to in this appendix are located in the **Figures volume** and **Appendix 6-6: Residential Visual Amenity Assessment (RVAA).**
- **1.1.2** The methodology for the production of visualisations was based on current good practice guidance from NatureScot (formerly SNH)¹ and the Landscape Institute². Further information about the approach is provided below.

Maps Used for Field Work and Desk-based Study

- Ordnance Survey (OS) Maps:
 - Landranger 1:50,000 Scale; and
 - Explorer 1:25,000 Scale.
- Online map search engines:
 - Bing, mapping website (Online Available at: www.bing.com/maps); and
 - Google, mapping website (Online Available at: www.maps.google.com).

Data Used for Digital Terrain Modelling (DTM)

- OS Terrain® 5 mid-resolution height data (DTM) (5m grid spacing, 2.5 metres RMSE); and
- OS Terrain® 50 mid-resolution height data (DTM) (50m grid spacing, 4 metres RMSE)

Digital Base Mapping

- Ordnance Survey 1:25,000 raster data (to provide detailed maps for viewpoint locations);
- Ordnance Survey 1:50,000 raster data (to show surface details such as roads, forest and settlement detail equivalent to the
 1:50,000 scale Landranger maps); and
- Ordnance Survey 1:250,000 raster data (to provide a more general location map).

1.2 Zone of theoretical visibility (ZTV) mapping

- **1.2.1** Evaluation of the theoretical extent to which the Project would be visible across the Study Area was undertaken by establishing a ZTV using computer software designed to calculate the theoretical visibility of the proposed turbines within their surroundings. ESRI's ArcMap 10.5.1 software was used to generate the ZTV. The Viewshed tool, found in the Spatial Analyst Toolbox within the ArcMap software was used to calculate the theoretical visibility. The tool calculates areas from which the turbine hubs and maximum blade tip height are potentially visible. This is performed on a 'bare ground' computer generated terrain model, which does not take account of potential screening by buildings or vegetation. It should be noted that the software uses raster³ height data, but while it is displayed as continuous data (with each grid square referred to as a 'cell'), it assumes a single height value from the centre of that cell for the whole cell. Therefore, any height variations between centre points and edges of cells will not be recognised.
- **1.2.2** The DTM used for the LVIA analysis is OS Terrain® 5 height data, obtained from Ordnance Survey in 2020. The root-mean-square error (RMSE) of this data is 2.5m. The DTM data is represented by 5x5m grids, which means that the software calculates the number of turbines visible from the centre point of each 5x5m grid/square area. This data was used to calculate visibility within the 40km Study Area. Visibility beyond the 40km buffer (which has been included to avoid an abrupt edge to the ZTV in the associated figures) was based on the OS Terrain® 50 height data (25m contour).
- **1.2.3** The DTM data has not been altered (i.e. by the addition of local surface screening features) for the production of the ZTV. The effect of earth curvature and light refraction has been included in the ZTV analysis and a viewer height of 2m above ground level has been used. As it uses a 'bare ground' model, it is considered to over emphasise the extent of visibility of the Project and therefore

represents a 'maximum potential visibility' scenario. The ZTV is used as a starting point in the assessment to provide an indication of theoretical visibility.

Appendix 6: Landscape and Visual Assessment

- **1.2.4** The ZTV was calculated to show the potential number of turbines visible to maximum blade tip height (149.9m) and maximum hub height (83.5m). The ZTV calculated to hub height is shown in **Figures 6-2a** and **6-2b** and the ZTV calculated to tip height is shown on **Figure 6-C.3a** and **6-C.3b**. Subsequent figures which include the ZTV make use of the ZTV to maximum blade tip height.
- 1.2.5 To construct cumulative ZTVs (CZTVs) to illustrate the cumulative visibility of the Project in conjunction with other wind energy developments, the ZTV to tip height of each wind energy development was generated (based on the tip height of each turbine to an applicable maximum radius in accordance with the current guidance (SNH, 2017)), and then combined with the Project ZTV (40km radius). The CZTVs are colour coded to distinguish between areas where the Project is predicted to be visible (either on its own, or in conjunction with other wind energy developments), and areas where other wind energy developments would be visible, but the Project would not.

1.3 Viewpoint photography

- **1.3.1** The methodology for photography is in accordance with guidance from Scottish Natural Heritage⁴ and the Landscape Institute⁵. Photography was undertaken by LUC between May 2018 and March 2021. A Nikon D750 and a D700 full frame sensor digital single lens reflex (SLR) camera, with a fixed 50mm focal length lens, was used to undertake photography from the majority of viewpoint locations (Viewpoints 1-22).
- **1.3.2** A tripod with vertical and horizontal spirit levels was used to provide stability and to ensure a level set of adjoining images. The camera was orientated to take photographs in portrait format from Viewpoint 1, given its location within the Site and close proximity to proposed turbines, and in landscape format from Viewpoints 2 22. A panoramic head was used to ensure the camera rotated about the no-parallax point of the lens in order to eliminate parallax errors⁶ between the successive images and enable accurate stitching of the images. The camera was moved through increments of 15° (degrees) for Viewpoint 1 and 24° for Viewpoints 2 22. The camera was rotated through a full 360° at each viewpoint. 24 photographs were taken for each 360° view in portrait format, and 15 photographs for each 360° view in landscape format.
- **1.3.3** The location of each viewpoint and information about the conditions was recorded in the field in accordance with NatureScot (SNH, 2017) and LI guidance (LI, 2019).
- 1.3.4 Weather conditions and visibility were considered an important aspect of the field visits for the photography. Where possible, visits were planned around clear days with good visibility, although weather conditions can change quickly in this part of the UK. Viewpoint locations were visited at times of day to ensure, as far as possible, that the sun lit the scene from behind, or to one side of the photographer. Photography opportunities facing into the sun were avoided where possible to prevent the wind turbines appearing as silhouettes. Adjustments to lighting of the turbines were made in the rendering software to make the turbines appear realistic in the view under the particular lighting and atmospheric conditions present at the time the photography was taken.

1.4 Visualisations

Photographic Stitching, Wirelines and Photomontages

- **1.4.1** Wirelines are computer generated line drawings which show outlines of the proposed turbines and the bare earth topography. Photomontages are computer generated images of the proposed development modelled into the actual baseline photography. Wirelines and photomontages are assessment tools and are not a substitute for site visits. They don't convey turbine movement and are representative of views but can't represent visibility at all locations.
- **1.4.2** Photographic stitching software PTGui© 11.19 was used to stitch together adjoining frames to create panoramic baseline photography. A selection of identical control points was created within each of the adjoining frames to increase the level of accuracy when stitching the 360° panoramic photography.
- 1.4.3 The software package ReSoft© WindFarm version 4.2.5.3 was used to create a digital terrain model (DTM) from OS Terrain® 5 height data. The DTM included the Site, viewpoint locations and all landform visible within the baseline photography. Turbine and viewpoint location coordinates were entered. Photomontages were constructed to show the candidate turbine with the specified tip and hub height. A default viewer height of 1.5m above ground level was set in the ReSoft© software, however on limited

¹ Scottish Natural Heritage (2017). Visual Representation of Wind Farms, Version 2.2.

² Landscape Institute (2019). Advice Note 01/11 Photography and photomontage in landscape and visual impact assessment

³ Raster data is a matrix of cells (or pixels) which contain a value representing information

⁴ Scottish Natural Heritage (2017). Visual Representation of Wind Farms, Version 2.2.

⁵ Landscape Institute (2019). Advice Note 01/11 Photography and photomontage in landscape and visual impact assessment.

⁶ Parallax is the difference in the position of objects when viewed along two different lines of sight. In the case of a camera this would occur if the rotation point of the lens was not constant and would result in stitching errors in the panorama.

occasions this viewer height was increased by a small increment to achieve a closer match between the terrain data and photographic landform content⁷. Any discrepancies between the 1.5m viewer height and the changes to that in the ReSoft© software are down to the resolution of the terrain data used in the ReSoft© software. This is the same issue with the ZTV data where the software will approximate the modelled terrain for every cell based on the value of the centre point. Deviations of height values that are different to that centre point across the cell would not be picked up, therefore is not a 1:1 match of the real world. Any adjustments made to the viewer height in the ReSoft© software account for this.

- 1.4.4 Wind farm layouts included within the cumulative assessment were added to the ReSoft© WindFarm model.
- 1.4.5 The Panoramic baseline photographic images were imported into ReSoft® WindFarm software. From Viewpoints 1-22 the wireline views of the landform model with the proposed turbines were carefully adjusted to obtain a match between the viewpoint photography and the terrain model. Adjustments made relate to view direction, viewer height, viewpoint position and micrositing to account for GPS margins of error. Fixed features on the ground, such as buildings and roads, were located in the model and used as markers to help with the alignment process where necessary. Each view was rendered taking account of the sunlight and the position of the sun in the sky at the time the photograph was taken. The rendering process aims to replicate how the turbines will look in terms of materiality and colour from the viewpoints presented, taking into account the lighting conditions at the time the viewpoint photography is taken. The ReSoft® software determines the lighting conditions based on inputs and some manual adjustments were made in the software depending on how bright/cloudy conditions are. Hues were also be taken from existing turbines in the view. For these reasons, some turbines might be less readable than others. Blade angle and orientation adjustments were also made to the turbines in the scene to represent a realistic wind direction.
- **1.4.6** The exported renders were imported into Adobe Photoshop© where they were aligned and composited with the baseline photography. Turbines or sections of turbines which were located behind foreground elements in the photograph were masked out (removed) to create the photomontage.
- **1.4.7** Infrastructure associated with the Project has been modelled into photomontages from viewpoints where it will be visible (Viewpoints 1, 3, 8, 15 and 16).
- **1.4.8** Shapefiles of the infrastructure footprints were used to model the associated permanent infrastructure into the chosen photomontages, inclusive of access tracks, substation, battery storage compound and borrow pits. These were modelled using specialist 3D software (Topos) and placed on a bare-earth, topographical model, created from OS Terrain® 5 height data. The substation and battery storage compound were extruded to heights of 10m and 3m respectively, providing a 3D block representation of these two infrastructure elements.
- **1.4.9** Representative viewpoints were modelled into Topos using the same parameters as the corresponding views in Resoft. Exported images from each of the viewpoints were then aligned with the relevant viewpoint photomontages in Adobe Photoshop© and infrastructure located behind foreground elements was masked. A sequence of effects was then applied to each of the visible infrastructure elements to give a realistic representation of the infrastructure in each of the chosen views. The modelled block representation of the substation and battery storage compound was maintained to present the maximum-case scenario.
- 1.4.10 Finally, the 53.5° images were converted from Cylindrical Projection to Planar Projection using PTGui© 11.19 software.

Presentation of Visualisations

- 1.4.11 The visualisation pages produced in accordance with NatureScot requirements are presented in the **Figures volume** and **Appendix 6-6: Residential Visual Amenity Assessment (RVAA)**
- **1.4.12** Adobe InDesign© software was used to present the visualisation pages. The dimensions for each image (printed height and field of view) are in accordance with NatureScot requirements. Photography information and viewing instructions are provided on each page where relevant.

Presentation of Viewpoint Visualisations in the Figures volume

- **1.4.13** The elongated A3 height /A1 width format pages for Viewpoints 1-22 in the **Figures volume** are set out as follows. This follows NatureScot visualisation standards:
- The first elongated A3 height/ A1 width page contains an OS 1:50,000 scale map showing the viewpoint location, direction of the 90° baseline photography, wireline views and 53.5° photomontage view(s). Wind turbine locations for the Project are also shown in the map view. A second map is also presented at a much smaller scale, zoomed into the viewpoint location and shows the ZTV;

⁷ An altered height above ground level was used for mountain summits where local topography did not match the wireframes due to data resolution

- The following pages contain 90° baseline photography and a corresponding wireline below to illustrate the wider landscape and visual context including cumulative schemes. These are shown in cylindrical projection and presented on A1 width pages up to 360°; and
- The subsequent pages show a 53.5° wireline followed by a 53.5° photomontage. These images are both shown in planar projection and presented on an A1 width page in accordance with NatureScot requirements.

1.4.14 For Viewpoints 23-27 the following format has been applied:

- The first elongated A3 height/ A1 width page contains an OS 1:50,000 scale map showing the viewpoint location and direction of the 90° wireline view. Wind turbine locations for the Project are also shown in the map view. A second map is also presented at a much smaller scale, zoomed into the viewpoint location and shows the ZTV;
- The following page contains a 90° wireline based on a bare ground digital terrain model and centred on the windfarm. The wirelines illustrates the wider landscape and visual context including cumulative schemes.

Presentation of Wirelines from Residential Viewpoints in Figure Volume

1.4.15 The elongated A3 height/ A1 width format pages for each residential property viewpoint in **Figures 6-51 to 6-71** show 90° wirelines based on a bare ground digital terrain model and centred on the windfarm (they are not representative of the primary outlook of the property). The top image shows Garn Fach Wind Farm only while the image underneath shows the cumulative scenario.

1.1.8 The assessment of landscape units is provided in Appendix 6-4.

Appendix 6.3: Scoping of LANDMAP Aspect Areas

- **1.1.1** LANDMAP is a GIS (Geographical Information System) based landscape resource where landscape characteristics, qualities and influences on the landscape are recorded and evaluated into a nationally consistent data set. LANDMAP separates information into five 'aspect layers' as follows:
- Geological Landscape: identifies those landscape qualities which are linked to the control or influence exerted by bedrock, surface processes, landforms and hydrology;
- Landscape Habitats: identifies the characteristics and spatial relationships of habitats and vegetation;
- Visual & Sensory: identifies perceptual landscape qualities as well as including information on individual physical attributes of landform and land cover, and the relationships between them;
- Historic Landscape: identifies those qualities that depend on key historic land uses, patterns and features; and
- **Cultural Landscape**: includes information on the relationship between people and places, meaning of places to people, how landscape has shaped peoples' actions and how peoples' actions have shaped the landscape.
- **1.1.2** LANDMAP also includes overall evaluation scores which are defined as 'Outstanding' (important at an international or national level), 'High' (regional or county level), 'Moderate' (local level), or 'Low' (little or no importance).
- **1.1.3** As agreed with consultees, this LVIA considers:
- Aspect areas directly affected / 'hosting' the Project for Geological Landscape;
- Aspect areas directly affected / 'hosting' the Project for Landscape Habitats;
- Aspect areas directly affected and intervisible with the Project within 15km for Visual & Sensory, as well as those between 15km and 20km that have an 'Outstanding' evaluation score;
- Aspect areas directly affected and intervisible with the Project within 5km for Historic Landscape; and
- Aspect areas directly affected and intervisible with the Project within 5km for Cultural Landscape.
- 1.1.4 Aspect areas for all aspect layers are mapped in Figures 6-11a to 6-11e.

Scoping of LANDMAP Aspect Areas

1.1.5 Based on the study areas set out above, the relevant LANDMAP aspect areas within each respective aspect layer are listed in **Table 1.1** below. The theoretical intervisibility of the proposed turbine blade tips, as shown on **Figure 6-3a and Figure 6-3b**, is used as a means of identifying which aspect areas require further assessment and which can be scoped out because they are unlikely to experience significant impacts arising from the Project.

Identifying Landscape Units for Assessment

- 1.1.6 As the guidance on using LANDMAP in LVIA was updated during the course of this project, both NRW's LANDMAP Guidance Note 3¹ (2013) and NRW Guidance Note 46² (2021) informed the approach to defining landscape units for assessment, in consultation with Powys County Council (via Enplan). Both guidance notes recommend that LANDMAP is used as a starting point for creating suitably scaled character-based reporting units and suggests that reporting units may be LANDMAP visual and sensory aspect areas. This recommended approach has been applied to this LVIA and 'landscape units' have been identified based on visual and sensory aspect areas. The landscape units that have been considered for assessment (based on the results of the scoping exercise in **Table 6-3.1** below) are indicated on **Figures 6-12a, 6-12b and 6-12c.**
- 1.1.7 In accordance with the Study Areas set out in paragraph 1.1.3, landscape units directly affected / 'hosting' the Project have considered aspect areas from all five aspect layers. Landscape units that are indirectly affected (i.e. do not host the development but will have theoretical visibility of the project) up to 5km (from the outermost turbines of the Project) have considered aspect areas from the Historic Landscape and Cultural Landscape aspect layers (in addition to Visual and Sensory). Landscape units beyond 5km only consider the Visual and Sensory aspect area they are based on. This therefore means that the depth of information considered for each landscape unit differs, and as such, the criteria used to assess landscape susceptibility and landscape value will either be fully considered or partially considered. This is explained further in **Appendix 6-1: LVIA and CLVIA Methodology.**

¹ Natural Resources Wales (2013) LANDMAP Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines

² Natural Resources Wales (2021) Guidance Note 46: Using LANDMAP in Landscape and Visual Impact Assessments (LVIA)

Table 6-3.1: Scoping of aspect areas for inclusion in the landscape assessment

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)		
Visual & Sensory					
Directly affected by the proposed development					
MNTGMVS443 Warn Ddubarthog Wind Farm	High	Turbines within aspect area	8 turbines are located within this area. Consider within assessment.		
RDNRVS123 Improved upland, west of upper Ithon	Moderate	Turbines within aspect area	4 turbines are located within this area. Consider within assessment.		
RDNRVS115 Upland moor, north & west of Abbeycwmhir	Moderate	Turbines within aspect area	5 turbines are located within this area. Consider within assessment.		
Within 15 km					
RDNRVS125 Bryn-y-Sarnau forest slopes and fields	Moderate	108	Theoretical visibility indicated across the area.		
			Consider within assessment.		
MNTGMVS254 Kerry Ridgeway	High	135	Theoretical visibility indicated across the area.		
			Consider within assessment.		
MNTGMVS438 Old Chapel Hill Mosaic	High	1779	Theoretical visibility indicated across the majority of the area. Consider within assessment.		
MNTOM/COOZ Orfo Come and War and all lilled a	Madagata	4050			
MNTGMVS227 Cefn Carnedd Wooded Hillside	Moderate	1959	Theoretical visibility indicated across the area. Consider within assessment.		
RDNRVS136 Valley slopes, west Ithon	Moderate	2176	Theoretical visibility indicated across the area.		
			Consider within assessment.		
RDNRVS114 Upland moor, west of Ithon	High	2286	Theoretical visibility indicated across the majority of the area.		
			Consider within assessment.		
MNTGMVS212 Llandinam Hill and Scarp Mosaic	High	3006	Some theoretical visibility indicated within the area.		
			Consider within assessment.		
RDNRVS137 Valleys/basins north of Abbeycwmhir	Moderate	3052	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.		
MNTGMVS865 Caersws River Bowl	Moderate	3278	Limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km.		
			Not considered further.		
RDNRVS140 Wye & Ithon valley floors, north	High	3525	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km.		
			Not considered further.		
RDNRVS122 Improved upland, south of Kerry Hills	Moderate	3799	Theoretical visibility indicated across the majority of the area.		
			Consider within assessment.		
RDNRVS135 Rolling hills, between Ithon & Wye	Moderate	3995	Theoretical visibility indicated across the area. Consider within assessment.		
			Consider within assessing it.		
RDNRVS128 Upland valleys south of Kerry Hills	High	4149	Very limited theoretical visibility indicated across the area.		
			Not considered further.		
RDNRVS111 Upland moor, Kerry Hills	High	4206	Theoretical visibility indicated across the area.		
			Consider within assessment.		

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)
MNTGMVS946 Llandyssil Hill and Scarp Grazing	Moderate	4469	Some theoretical visibility indicated across the area. Consider within assessment.
RDNRVS130 Ridge & valley, Ithon sides	Moderate	4586	Theoretical visibility indicated across the area. Consider within assessment.
MNTGMVS204 Llanidloes Farmland	Moderate	4626	Theoretical visibility indicated across the majority of the area. Consider within assessment.
RDNRVS124 Improved upland, between Wye & Ithon	Moderate	4637	Theoretical visibility indicated across the area. Consider within assessment.
MNTGMVS211 Llandinam	Moderate	4759	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
MNTGMVS907 Wye Valley	Moderate	6267	Some theoretical visibility indicated across the area. Consider within assessment.
RDNRVS143 Abbeycwmhir valley	High	6452	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
RDNRVS110 Upland moor, Beacon Hill & Gors Lydan	High	6649	Theoretical visibility indicated across the area. Consider within assessment.
RDNRVS117 Moorland, east of Ithon	Moderate	7034	Some theoretical visibility indicated across the area. Consider within assessment.
RDNRVS133 Rolling hills, central south-east	Moderate	7047	Some theoretical visibility indicated across the area. Consider within assessment.
MNTGMVS551 Llanidloes	High	7506	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
MNTGMVS465 Stepaside	Moderate	7554	Theoretical visibility indicated across the majority of the area. Consider within assessment.
RDNRVS102 Mountain plateau with windfarm	Moderate	7931	Theoretical visibility indicated across the area. Consider within assessment.
MNTGMVS541 Newtown	Low	8089	Theoretical visibility indicated across the majority of the area. Consider within assessment.
MNTGMVS420 Upper Severn Valley	High	8206	Theoretical visibility indicated across the area. Consider within assessment.
MNTGMVS575 Caersws	Moderate	8313	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
MNTGMVS695 Trannon Uplands Bryn Crugog	Moderate	8708	Theoretical visibility indicated across the majority of the area. Consider within assessment.
MNTGMVS457 Clywedog Upland Grazing	High	8745	Some theoretical visibility indicated within the area.

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)
			Consider within assessment.
MNTGMVS232 Wye Valley Uplands	Moderate	9107	Theoretical visibility indicated across the majority of the area.
			Consider within assessment.
MNTGMVS899 Tregynon Rolling Hills	High	9286	Theoretical visibility indicated across the area.
			Consider within assessment.
MNTGMVS316 Kerry Ridgeway Woodland	Moderate	9607	Some theoretical visibility indicated within the area.
			Consider within assessment.
MNTGMVS758 Trefeglwys	Moderate	9799	Theoretical visibility indicated across the majority of the area.
			Consider within assessment.
RDNRVS113 Upland moor, east of Wye	High	9871	Some theoretical visibility indicated across the area.
			Consider within assessment.
RDNRVS142 Lugg & Teme floors	High	10347	ZTV output indicates no theoretical visibility from this area within 15 km.
			Not considered further.
RDNRVS138 Valley slopes, Wye north of Rhayader	High	10563	Very limited theoretical visibility indicated across the area.
			Not considered further.
MNTGMVS235 Carno Mosaic	Moderate	10742	Pocket of theoretical visibility indicated from the eastern part the area.
			Consider within assessment.
MNTGMVS733 Esgair Cwmowen Uplands	High	10845	Theoretical visibility indicated across the area. Consider within assessment.
RDNRVS145 Lower Ithon valley	Moderate	10890	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
MNTGMVS776 Cefn Coch Rolling Pasture	Moderate	10901	Some theoretical visibility indicated across the area.
WINT GWIV 3776 Celli Coch Rolling Fasture	Moderate	10901	Consider within assessment.
RDNRVS144 Ithon at Alpine Bridge	High	11352	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km.
NEWIXVO 144 Ithor at Alpine Bridge	i ngii	11002	Not considered further.
RDNRVS105 Cambrian Mountain edge	High	11399	Very limited theoretical visibility indicated across the area.
			Not considered further.
MNTGMVS650 River Severn Flood plain	Moderate	11718	Limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km.
			Not considered further.
RDNRVS101 Cambrian Mountains plateau tops	High	11835	Theoretical visibility indicated across the area.
			Consider within assessment.
RDNRVS119 Improved upland, Radnor Forest	Moderate	11845	Some theoretical visibility indicated across the area.
			Consider within assessment.
RDNRVS153 Rhayader	Moderate	11883	ZTV output indicates no theoretical visibility from this location.
			Not considered further.

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)
RDNRVS131 Ridge & valley, north Teme side	Moderate	12085	Very limited theoretical visibility indicated across the area. Not considered further.
MNTGMVS589 Llangurig	Moderate	12277	Theoretical visibility indicated across the area. Consider within assessment.
MNTGMVS683 Kerry	Moderate	12375	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
MNTGMVS833 Llyn Clywedog	High	12520	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
MNTGMVS179 Trannon Moors	Moderate	12601	Some theoretical visibility indicated within the area. Consider within assessment.
RDNRVS141 Wye floor, south of Rhayader	High	12756	ZTV output indicates no theoretical visibility from this location. Not considered further.
RDNRVS139 Basin west of Rhayader	High	12786	Very limited theoretical visibility indicated across the area. Not considered further.
RDNRVS147 Broad valley, south of Rhayader	Moderate	13003	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
MNTGMVS672 Trannon Woodlands	Moderate	13021	Limited theoretical visibility indicated (and of only a small number of turbines) across the area within 15 km. Not considered further.
RDNRVS132 Ridge & valley, around Knucklas	High	13511	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
MNTGMVS694 Carno Uplands	Moderate	13769	Only a small part of the area lies within 15 km, however theoretical visibility is indicated for a large number of turbines. Consider within assessment.
MNTGMVS200 Esgair Ychion	Low	13833	Very limited theoretical visibility indicated across the area within 15 km. Not considered further.
RDNRVS121 Improved upland, between Lugg & Teme	Moderate	13863	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
RDNRVS162 Crossgates	Low	13877	Theoretical visibility indicated across the area. Consider within assessment.
RDNRVS146 Dolau valley	Moderate	14114	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
BRCKNVS160 River Wye	Outstanding	14572	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
BRCKNVS709 Lower Elan Valley	Moderate	14584	Some theoretical visibility indicated within the area. Consider within assessment.
RDNRVS104 Cambrian Mountain open valley	High	14638	ZTV output indicates no theoretical visibility from this area within 15 km.

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)
			Not considered further.
RDNRVS134 Rolling hills, east	Moderate	14849	ZTV output indicates no theoretical visibility from this area within 15 km.
			Not considered further.
MNTGMVS556 Carno	Low	14905	ZTV output indicates no theoretical visibility from this area within 15 km. Not considered further.
DDNDV0407 Pinar War	Outstanding	44005	
RDNRVS167 River Wye	Outstanding	14995	ZTV output indicates no theoretical visibility from this area. Not considered further.
Between 15 and 20 km (with an 'outstanding' overall evaluatio	n score)		
RDNRVS100 Elan Valley reservoirs	Outstanding	15525	ZTV output indicates no theoretical visibility from this area within 20 km.
			Not considered further.
MNTGMVS910 Plynlimon Moorlands	Outstanding	15655	Pockets of theoretical visibility indicated from this area within 20 km.
			Consider within assessment.
BRCKNVS114 Caban-Coch Reservoir	Outstanding	18397	ZTV output indicates no theoretical visibility from this area within 20 km.
			Not considered further.
CRDGNVS331 Upper Ystwyth Valley	Outstanding	18840	ZTV output indicates no theoretical visibility from this area within 20 km. Not considered further.
CDDCNI/(CF00 Combridge Mayortains (north)	Outstanding	10500	
CRDGNVS508 Cambrian Mountains (north)	Outstanding	19560	ZTV output indicates no theoretical visibility from this area within 20 km. Not considered further.
Geological Landscape			
Directly affected by the proposed development			
MNTGMGL938 Penstrowed	Outstanding	Turbines within aspect area	8 turbines are located within this area. Consider within assessment .
RDNRGL422 Pistyll-Ddyle	High	Turbines within aspect area	9 turbines are located within this area. Consider within assessment .
Landscape Habitat			
Directly affected by the proposed development			
MNTGMLH050 Mosaic	Moderate	Turbines within aspect area	8 turbines are located within this area. Consider within assessment .
RDNRLH012 Mosaic	Moderate	Turbines within aspect area	9 turbines are located within this area. Consider within assessment.
Historic Landscape			
Directly affected by the proposed development			
MNTGMHL661 Waun Lluestowain	Moderate	Turbines within aspect area	8 turbines are located within this area. Consider within assessment.
RDNRHL997 Pen Ithon	Moderate	Turbines within aspect area	3 turbines are located within this area. Consider within assessment.
RDNRHL975 Bwlch-y-Sarnau	Moderate	Turbines within aspect area	6 turbines are located within this area. Consider within assessment.
Within 5 km			
MNTGMHL789 Mochdre	High	1073	Theoretical visibility indicated across the area.

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)
			Consider within assessment.
MNTGMHL124 Kerry Hills	Outstanding	1924	Theoretical visibility indicated across the majority of the area that lies within 5 km.
			Consider within assessment.
RDNRHL285 Afon Marteg	High	2559	Theoretical visibility indicated across the majority of the area within 5 km.
			Consider within assessment.
RDNRHL808 Brynhafod	Low	2668	ZTV output indicates no theoretical visibility from this location.
DDNDIII 040 III		0740	Not considered further.
RDNRHL613 Upper Ithon	High	2740	Theoretical visibility indicated across the area. Consider within assessment.
RDNRHL123 Cwmhir	Outstanding	3009	Very limited theoretical visibility indicated (and of only a small number of turbines) across the area within 5 km.
KBINKIE 120 GWIIIIII	Culturing	3003	Not considered further.
MNTGMHL989 Upper Severn valley	High	3509	Pocket of theoretical visibility indicated from the central part of the area.
			Consider within assessment.
MNTGMHL970 Gelli Hill	High	4148	Only a small part of the area lies within 5 km, where theoretical visibility is indicated for only a small number of turbines.
			Not considered further.
MNTGMHL952 Lower Clywedog / Upper Severn	High	4527	Only a very small part of the area lies within 5 km, where theoretical visibility is indicated for only a small number of turbines.
			Not considered further.
MNTGMHL902 Caersws basin	Outstanding	4779	ZTV output indicates no theoretical visibility from the very small part of the area that lies within 5 km.
			Not considered further.
Cultural Landscape			
Directly affected by the proposed development			
MNTGMCL017 Windfarms	Outstanding	Turbines within aspect area	8 turbines are located within this area. Consider within assessment.
RDNRCL023 Wind Farm Landscape	High	Turbines within aspect area	7 turbines are located within this area. Consider within assessment.
RDNRCL007 Uplands & Lowlands	High	Turbines within aspect area	2 turbines are located within this area. Consider within assessment.
Within 5 km			
MNTGMCL051 Rural Landscapes	High	2382	Theoretical visibility indicated across the area.
			Consider within assessment.
RDNRCL010 River Ithon Valley & Tributaries	Outstanding	2991	Theoretical visibility indicated across the area.
			Consider within assessment.
MNTGMCL013 Caersws Basin	Outstanding	4403	ZTV output indicates no theoretical visibility from this area within 5 km.
			Not considered further.
MNTGMCL048 Kerry and Dolfor	High	4532	Only a very small part of the area lies within 5 km, however theoretical visibility is indicated for a large number of turbines.
			Consider within assessment.
RDNRCL024 Llanbadarn Fynydd	High	4660	Theoretical visibility indicated across the area.

Aspect Area Code and Name	LANDMAP Overall Evaluation	Distance to Nearest Turbine (m)	Theoretical Visibility of the Proposed Development (ZTV coverage)
			Consider within assessment.
MNTGMCL049 Llandinam	High	4662	ZTV output indicates no theoretical visibility from this area within 5 km. Not considered further.
MNTGMCL016 Clywedog Valley	Outstanding	4746	Only a very small part of the area lies within 5 km, where theoretical visibility is indicated for only a small number of turbines. Not considered further.
RDNRCL009 Abbey Cwmhir Landscape	Outstanding	4981	Theoretical visibility indicated across the area. Consider within assessment.

Appendix 6.4: Landscape Assessment Tables

Landscape Units (within 5km)

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Warn Ddubarthog Wind	Farm (MN)	rgmvs443)				
Location	Encompasses most of the	e northern p	arcel of the Site, as well as the landscape immediately to the north and north-west of the Site which accommodates the existing Llandinam wind farm.				
Summary Description of VSAA (taken from Q3 of VSAA Survey)			d with a significant number of wind turbines running along the ridgeway. Open skies, exposure and remoteness dominate with dramatic views gained over the surrounding mosaic fren) valley. Vegetation largely bracken/heather scrub and moorland with no or little boundary definition."				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ¹ (Summary descriptions taken from their	Geological Landscape as (GLAA):	pect area	Penstrowed (MNTGMGL938) "Major NNE-SSW ridge of Wenlock sandstones (Middle Silurian) dissected by cwms. Very steep sided escarpment in central western area, with flattened plateau above and major wind farm. This area also includes well developed surface ridges, again with a NNE-SSW structural orientation. NNE part lower and descend towards valley to the north."				
respective LANDMAP surveys)	Landscape Habitats aspe (LHAA):	ect area	Mosaic (MNTGMLH050) "A mosaic of upland vegetation types including improved and unimproved grasslands and heath land. There is also a traditional hay meadow of significant interest in Caeau Cwm Ffrwd SSSI. Much of the area is also common land. Some of the steeper hillside are covered in bracken or have some woods present."				
	Historic Landscape aspect (HLAA):	ct area	Waun Lluestowain (MNTGMHL661) "Enclosed marginal land and moorland south-east of Llandinam with straight-sided and irregular boundaries probably of later medieval and post-medieval date, including a relatively high proportion of registered common land. A large 20th-century windfarm covers much of the central part of the area. Early settlement and land use indicated by isolated Neolithic to Bronze Age hilltop burial mounds. The Roman road south from Caersws and part of an early medieval short dyke system cross the area. Later settlement and land use indicated by abandoned medieval and post-medieval house sites, field systems and peat cutting."				
	Cultural Landscape aspec (CLAA):	ct area	Windfarms (MNTGMCL017) "The three windfarms identified as components of a single Aspect Area designation visually dominate both the adjacent and distant landscapes within the Study Area At present they are Waun Dduberthog and Waun Lluestowain, Cemmaes and Bryn Titli Plans for the creation of additions to existing and construction of new windfarms have recently been announced (mid-2005) at Carno North, Nnat y Moch and Netown South, Situated for practical reasons on high ground, all the windfarms in the Study Area have been built on landscapes bearing evidence of (largely) prehistoric occupation, and which have historically been used for grazing"				
Description of Landscape Unit ²	 A large-scale expose 	d area of up	oland plateau on a ridge of Wenlock sandstones.				
(based on the criteria for determining susceptibility to wind energy development –	Largely marginal land with a simple landscape pattern and dominated by bracken/heather scrub and moorland, with no or little boundary definition.						
see Table 1.2 within Appendix 6-1: LVIA and	A relatively high proportion of registered common land and evidence of early settlement and land use indicated by isolated Neolithic to Bronze Age hilltop burial mounds.						
CLVIA Methodology)	■ Generally unsettled with little man-made influence except for a large number of turbines associated with the Llandinam wind farm which form features on the skyline.						
	■ Intervisibility with surrounding lower lying mosaic farmland landscapes, and the River Severn (Afon Hafren) valley from northern parts of the landscape unit.						
	The area has a sense of remoteness from populations and dark skies, although is affected by the presence of the existing wind farm.						
Judgement on Landscape Susceptibility			andscape unit is judged to be medium due to a balance of indicators of lower susceptibility (large scale, simple plateau landform, simple landcover pattern, and presence of existing				
(see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	wind energy generation) a	and indicato	ors of higher susceptibility (presence of heritage features, visible skylines/ inter-visibility and sense of remoteness/ dark skies).				
Judgement on Landscape Value			f medium value, as it is not designated but has some indicators of value, including being in a reasonable condition, is recorded in LANDMAP as having high scenic quality, some				
(see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	`	•	tture of prehistoric and post medieval assets), and some recreational value (with public rights of way running through it and large areas being designated as open access land). ic quality, character and overall evaluation taken from the LANDMAP VSAA survey:				
OLVIN Memodology)	Evaluation Criteria	Score	Justification				
	Q46 Scenic quality	High	"N/A"				
	. ,						
	Q48 Character Q50 Overall Evaluation	High High	"Display a very clear sense of place and distinctive character." "The juxtaposition of modern vertical elements of the turbines and natural low growing vegetation contrast and complement each other emphasising the sense of place and uniqueness of the area.				
	Q00 Overall Evaluation	riigii	Dramatic views are available out of the aspect area into the surrounding landscape and the presence of the wind turbines in turn provides a dramatic visual link looking into the area."				

¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ² Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

	complement each other emphasising the sense of place and uniqueness of the area" and "the presence of the wind turbines in turn provides a dramatic visual link looking into the area". These reasons are not considered to elevate the value above medium in the context of this assessment for further wind energy development.												
Judgement on Landscape Sensitivity	By combining the separate judgen	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium .											
	Low	Low - Medium	Mediun	1	Medium - High		High	Very High					
Judgement on Magnitude of Landscape Change (see Tables A.6 - A.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be d northern temporary compound, tra by the works, declining with distant	cks between turbines, and											
	Direct operational effects will arise as a result of eight turbines, crane pads, substation, tracks and restored borrow pits being introduced within this landscape unit, while the remaining nine turbines that are located adjacent to the landscape unit will result in indirect effects. The turbines and infrastructure will be located within an area of large scale unenclosed upland plateau, avoiding the seve pervironmental constraints. The development will not affect the heritage features noted as important characteristics of the area in LANDMAP, the landscover will largely remain between the turbines and tracks (see Chapter 8: Ecological Assessment for further information), and aviation lighting is not required. The Garn Fach development will add turbines and tracks to a landscape unit that already contains turbines and tracks associated with Llandinam Wind Farm, although the turbines at Llandinam are smaller and so the Garn Fach turbines would change the skyline and extend the man-made influence associated with the existing wind farm development, However, the area's sense of remoteness from populations and dark skies will remain, along with other key characteristics such as the exposed upland nature of the plateau, the presence of marginal land, the high proportion of registered common land, evidence of early settlement and land use indicated by isolated Neolithic to Bronze Age hilltop burial mounds, and intervisibility with surrounding lower lying mosaic farmland landscapes. Nevertheless, the wind farm will result in a very large change in the visual and sensory character of the area directly affected, changing this area to a wind farm landscape. The scale of effect will reduce with distance from the development with the wind farm resulting in a large change in character up to 1-1.5km from the turbines and reducing further beyond that. **Geographical extent** The landscape unit covers an area of approximately 18km². The very large direct effect will occur over approximately 7.5km² i.e. a small geographical ext												
	The very large scale of effect over a small geographical area / large scale of effect over a medium geographical extent (over a long term) is judged to result in an overall high magnitude of change to the central, southern and eastern parts of this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be high .												
	During Construction												
	Barely perceptible	Low	Low – Medium	Medi		- Hign	High	Very High					
	During Operation							_					
	Barely perceptible	Low	Low – Medium	Medi	um Medium	- High	High	Very High					
Overall Level of Effect and Significance	A medium sensitivity combined with a high magnitude is judged to result in a moderate-major effect.												
		During Construction											
	Negligible	Minor	Minor - Mod	erate	Moderate (Significant)	Modera	ate-Major (Significant)	Major (Significant)					
			<u>.</u>	During O	peration								
	Negligible	Minor	Minor - Mod	erate	Moderate (Significant)	Modera	ate-Major (Significant)	Major (Significant)					
Additional Cumulative Effects (see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)	Scenario A: The consented Llandinam Repowheight) with 34 no. turbines at an icharacter in the cumulative baselin Llandinam turbines. Nevertheless,	ncreased tip height of 121n ne scenario. The scale of G	n, therefore resulting in a fewer no arn Fach turbines beside the rep	mber of larger- wered Llandina	scale turbines. The change in t am turbines would be more com	urbine scale will patible than the	I result in a greater influence e scale of the Garn Fach turb	from Llandinam on landscape nes beside the existing					

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Improved upland, west	of upper Ithor	n (RDNRVS123)						
Location	Encompasses a small part of land within the middle parcel of the Site (west of Ddullui Bank and Custogion), as well as the landscape immediately to the east of the Site across part of the Ithon valley.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	where areas the intrinsic i	moorland land	lcover has been agriculturally im	proved & converted to grassland. The	rive pattern of straight shelter belts wh e large scale regular fields enclosed b a a very occasional wind turbine lands	y fences often look unnatural in asso			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ³	Geological Landscape as (GLAA):	pect area	Pistyll-Ddyle (DRDNRGL422)	Prominant scarp and ridge formed of	Pentrowed Grits Formation (Silurian,	Wenlock), levelling off to form a narro	ow plateau."		
(Summary descriptions taken from their respective LANDMAP surveys)	Landscape Habitats aspe (LHAA):		Mosaic (RDNRLH012) "A large improved grassland."	upland area mainly over 400 metres,	mosaic of improved marshy and unin	nproved acid grassland. Some heathl	and habitats to the west. 49%		
	Historic Landscape aspec (HLAA):	1	hedges or post-and-wire fences.	Later prehistoric activity indicated by	nd common around the headwaters of numerous flint scatters and disperse ries. Dispersed farms largely of 19th-o	d burial mounds. Medieval and post-i	medieval settlement and land use		
			suggested by scattered earlier p	rehistoric hilltop burial mounds. Medie	century upland commons to the east eval and early post-medieval activity s s. Scattered farmsteads of possibly la	uggested by scattered abandoned he	ouse platforms and house sites.		
	Cultural Landscape aspect (CLAA):				ensive upland and lowland landscape al and present dominant agricultural p		of land use from prehistory,		
		Wind Farm Landscape (RDNRCL023) "20th/21st century response to generation of sustainable energy and, also economic regeneration, together with locally substantial changes to the appearance of the landscape."							
Description of Landscape Unit ⁴	A large-scale landscape with gently rolling hills and plateau.								
(based on the criteria for determining susceptibility to wind energy development –	A matrix of upland grassland habitats including improved and unimproved grassland, moorland and wetland vegetation, with large scale regular fields defined by fences and shelterbelts.								
see Table 1.2 within Appendix 6-1: LVIA and	■ Mainly enclosed upland common of 19 th century origin.								
CLVIA Methodology)	■ Modern influence is limited to 19 th century scattered farmsteads, the hamlets of Llaithddu and David's Well, a small quarry at Penygarreg, some modern planted forestry/shelterbelts and two small wind turbines at Esgairdraenllwyn.								
	Skylines are undeveloped	oped, marked	by woodland and distinctive stra	ight lines of shelterbelts.					
	Limited intervisibility with surrounding landscapes due to undulating topography and woodland cover.								
	A tranquil and undisturbed landscape with limited signs of human development and which experiences dark skies.								
	Representative views	from this land	dscape unit are illustrated by Vie	wpoints 3 and 5.					
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)					lower susceptibility (large scale, regul e rolling hills, some variety in landcov				
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and	This landscape unit is judged to be of medium value as it is not designated and is limited in conservation interest but is recorded in LANDMAP as having moderate scenic quality, has some recreational value (with public rights of way running through it) and a sense of rurality.								
CLVIA Methodology)	The following table sets o	ut the scenic o	quality, character and overall ev	aluation taken from the LANDMAP VS	SAA survey:				
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality	Moderate	"Not particularly attractive due to	patterns of straight lines."					
	Q48 Character	High	"Distinctive patterns of straight s	nelterbelts."					
	Q50 Overall Evaluation	Moderate	"Not very attractive, but quite cor	spicuous landscape pattern of shelterbelt	s of rolling hills"				
Judgement on Landscape Sensitivity	By combining the separat	e judgements	on landscape susceptibility and	landscape value, the sensitivity of thi	s landscape is judged to be medium .				
	Low		Low - Medium	Medium	Medium - High	High	Very High		

³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁴ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

Judgement on Magnitude of Landscape Scale of effect Change During construction there will be direct effects upon this landscape unit as a result of the four turbines that will be erected within it, the implementation of crane pads, the construction of the southern temporary compound and the tracks between turbines. The scale of landscape change at construction is judged to be very large within the area directly affected by the works, declining with distance from the works. (see Tables A.6 - A.8 within Appendix 6-1: LVIA and CLVIA Methodology) Direct operational effects will arise as a result of four turbines, crane pads and tracks being introduced within this landscape unit, while some of the remaining 13 turbines that are located adjacent to the landscape unit will result in indirect effects. The turbines and infrastructure will be located within larger scale upland areas, avoiding the settled lower lying and smaller scale areas, and avoiding key environmental constraints. The development will not affect the shelterbelt features noted as important characteristics of the area in LANDMAP, the landcover will largely remain between the turbines and tracks (see Chapter 8: Ecological Assessment for further information), and aviation lighting is not required. The wind farm will however increase the presence of modern human development within the landscape and add built features to the skyline, affecting the limited modern influence/ sense of rurality and undeveloped skylines that are noted as characteristics of the landscape, particularly in the area directly affected. The large-scale rolling hills, matrix of upland habitats, settlement pattern of farms, hamlets and roads, and dark skies will continue to give the area its distinctive character. Nevertheless, the wind farm will result in a very large change in the visual and sensory character of the area directly affected, changing some of the currently undeveloped upland pastures/ moorland edge to a wind farm landscape. The scale of effect will reduce with distance from the development with the wind farm resulting in a large change in character up to 1-1.5km from the turbines and reducing further beyond that. **Geographical extent** The landscape unit covers an area of approximately 14km². The very large direct effect will occur over approximately 0.6km², i.e. a small geographical extent, and the large change to the visual and sensory character of the landscape, which is likely to extend some 1-1.5km from the turbines, will occur over approximately 4km², also a **small** geographical extent. The ZTV indicates that lesser indirect changes to the visual and sensory character outside the 1.5km zone from the turbines will occur over an area of approximately 8km², i.e. a medium geographical extent. **Duration/reversibility** During construction the changes to the landscape character would be short-term (up to 5 years) and largely reversible. During operation the borrow pits (within adjacent landscape units) will be reinstated, but other parts of the development will remain for the long-term (beyond 10 years). The long-term changes will be partially reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased, and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level. Overall Judgement on Magnitude of Landscape Change The very large scale of effect over a small geographical area/ large scale effect over another 4km²(over a long term) is judged to result in an overall **high** magnitude of change to the central and western parts of this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be high. **During Construction** Low - Medium High Barely perceptible Low Medium Medium - High Very High **During Operation Barely perceptible** Low Low - Medium Medium Medium - High High Very High Overall Level of Effect and Significance A medium sensitivity combined with a high magnitude is judged to result in a moderate-major effect. **During Construction** Negligible Minor Minor - Moderate **Moderate (Significant)** Moderate-Major (Significant) Major (Significant) **During Operation** Negligible Minor Minor - Moderate **Moderate (Significant) Moderate-Major (Significant)** Major (Significant) **Additional Cumulative Effects** Scenario A: (see 'Cumulative Landscape & Visual Impact The operational twin turbine development at Esgairdraenllwyn (35m tip height) and the consented single turbine at Ddulley Bank (20m tip height) are located within this landscape unit, situated approximately 3.3km and Assessment 'section in Appendix 6-1: LVIA 0.9km respectively to the east of the nearest Garn Fach turbine. The small scale of the single turbine at Ddulley Bank will not notably change the cumulative baseline scenario within this landscape unit. Llandinam and CLVIA Methodology which includes Repowering (consented) is located approximately 1km to the north-west of this landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit, definition of Scenario A and B) becoming visible from areas within it. The introduction of Garn Fach will still result in a large scale of effect to approximately 4km² of the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above. Not applicable as there are no undetermined planning applications within or near to this landscape unit. **Landscape Unit** Upland moor, north & west of Abbeycwmhir (RDNRVS115) (based on the Visual & Sensory aspect area (VSAA) of LANDMAP) Location This landscape unit is made up of three separate parts, which are geographically separate from each other. The north-eastern part of the landscape unit encompasses most of the middle parcel of the Site and the entire southern parcel. The western part of the landscape unit is approximately 4km to the west of the nearest Garn Fach turbine (east of Nantgwyn) and the southern part of the parcel lies approximately 4.4km south of the

nearest Garn Fach turbine extending between St Harmon and Abbeycwmhir.

Appendix 6: Landscape and Visual Assessment

Summary Description of VSAA (taken from Q3 of VSAA Survey)			ore forested hills. There are no di cover, plus areas of fields."	istinct hills. Areas of large fields are in	terspersed with open land. Wild, open	, exposed upland plateau and ridge	es with a smooth & rounded profile		
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁵	Geological Landscape asp (GLAA):	oect area	Pistyll-Ddyle (DRDNRGL422)	"Prominant scarp and ridge formed of	Pentrowed Grits Formation (Silurian,	Wenlock), levelling off to form a nai	rrow plateau."		
(Summary descriptions taken from their respective LANDMAP surveys)	Landscape Habitats aspec (LHAA):	ct area	Mosaic (RDNRLH012) "A large improved grassland."	upland area mainly over 400 metres,	mosaic of improved marshy and unim	proved acid grassland. Some heat	hland habitats to the west. 49%		
	Historic Landscape aspec (HLAA):	t area	suggested by scattered earlier p	i) "Extensive and remote area of 19th- prehistoric hilltop burial mounds. Media ucleated settlement at Bwlch-y-sarnau	eval and early post-medieval activity s	uggested by scattered abandoned	house platforms and house sites.		
	Cultural Landscape aspec (CLAA):	t areas		LOO7) "The Aspect Area contains extended a contain to the historical contains are the historical contains are the historical contains and the historical contains are the			on of land use from prehistory,		
			Wind Farm Landscape (RDNR to the appearance of the landsc	RCL023) "20th/21st century response tape."	to generation of sustainable energy ar	nd,also economic regeneration, tog	ether with locally substantial changes		
Description of Landscape Unit ⁶	■ A large-scale open an	d exposed u	ıpland plateau with gently rounde	ed ridges formed by Silurian and Wenl	ock sandstones.				
(based on the criteria for determining susceptibility to wind energy development –	Large fields interspers	ed with a sir	mple landscape pattern of semi-r	natural grassland and rough moorland					
see Table 1.2 within Appendix 6-1: LVIA and	Extensive area of 19 th	century upla	and common with evidence of ea	rly prehistoric activity (e.g presence o	f hilltop burial mounds including Fowle	er's Armchair within the Site).			
CLVIA Methodology)	■ Settlement is limited to	o 19 th centur	y farmsteads scattered across th	ne landscape.					
	Intervisibility with surrounding rural landscapes including the lower-lying Marteg valley.								
	Skylines within this upland plateau landscape are expansive and generally undeveloped, sometimes marked by the tops of coniferous plantation woodland.								
	■ This is a wild, open and exposed landscape with a strong sense of remoteness from populations and dark skies, although its northern part is affected by the presence of the nearby Llandinam Wind Farm to the north-west.								
	Representative views from this landscape unit are illustrated by Viewpoints 1 and 2 .								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)				ium due to a balance of indicators of l presence of heritage features, visible			er pattern, and presence of existing		
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and	This landscape unit is judged to be of medium value as it is not designated but is recorded in LANDMAP as having moderate scenic quality, has some conservation interest (prehistoric assets and important habitats including the small Rhos Cwmderw SSSI in the north). It also has some recreational value (with public rights of way running through it and areas designated as open access land) and a sense of rurality (although tranquillity is slightly reduced by the presence of existing wind energy generation nearby).								
CLVIA Methodology)	The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:								
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality	Moderate	"Generally attractive but not spec	cial"					
	Q48 Character	Moderate	"Not particularly distinctive"	 					
			<u> </u>						
	Q50 Overall Evaluation Moderate "Not particularly distinctive""								
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium.								
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be direct effects upon the north-eastern parcel of this landscape unit as a result of the five turbines that will be erected within it, the implementation of crane pads, the tracks between turbines, and the excavations associated with two borrow pits. The scale of landscape change at construction is judged to be very large within the area directly affected by the works, declining with distance from the works.								
	the landscape unit will res constraints. The developm approximately 380m away	ult in indirect ent will not o), the landco	t effects. The turbines and infrast directly affect the heritage feature over will largely remain between t	ds, tracks and restored borrow pits be tructure will be located within larger so es noted as important characteristics of the turbines and tracks (see Chapter to the landscape and add built feature.	ale upland areas, avoiding the settled of the area in LANDMAP, including the B: Ecological Assessment for further	lower lying and smaller scale arease Fowler's Armchair scheduled mon information), and aviation lighting	s, and avoiding key environmental nument (nearest turbine being is not required. Nevertheless, the		

⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁶ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

noted as characteristics of the landscape, particularly in the area directly affected. The large-scale upland plateau landform, semi-natural grassland and rough moorland habitats, common, settlement pattern of 19th century farmsteads, wild, open and exposed nature sense of remoteness from populations and dark skies will continue to give the area its distinctive character. The wind farm will result in a **very large** change in the visual and sensory character of the area directly affected, changing some of the currently undeveloped moorland/upland pastures to a wind farm landscape. The scale of effect will reduce with distance from the development with the wind farm resulting in a **large** change in character up to 1-1.5km from the turbines and reducing further beyond that.

Geographical extent

The landscape unit covers an area of approximately 27km². The very large direct effect will occur over approximately 0.5km², i.e. a **small** geographical extent, and the large change to the visual and sensory character of the landscape, which is likely to extend some 1-1.5km from the turbines, will occur over approximately 6km² i.e. a **medium** geographical extent. The ZTV indicates that lesser indirect changes to the visual and sensory character outside the 1.5km zone from the turbines will occur over an area of approximately 9.5km², i.e. a **medium** geographical extent.

Duration/reversibility

During construction the of changes to the landscape character would be short-term (up to 5 years) and largely reversible.

During operation the borrow pits will be reinstated, but other parts of the development will remain for the **long-term** (beyond 10 years). The long-term changes will be **partially reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased, and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level.

Overall Judgement on Magnitude of Landscape Change

The very large scale of effect over a small geographical area / large scale of effect over a medium geographical extent (over a long term) is judged to result in an overall **high** magnitude of change to the north-eastern part of this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **high**.

	During Construction										
Barely perceptible Low Low – Medium Medium Medium - High High Ve											
	During Operation										
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High					

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a high magnitude is judged to result in a moderate-major effect.								
			During Co	onstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
		During Operation								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment 'section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The operational single turbine developments at Bailey Bog (20m tip height) and Garth Fawr (21m tip height) are located nearby, situated approximately 3.5km to the south and 4.8km to the west of the nearest Garn Fach turbine respectively. The consented single turbine at Ddulley Bank (20m tip height) is also located near to the landscape unit, approximately 0.9km to the east of the nearest Garn Fach turbine. The small scale of this turbine will not notably change the cumulative baseline scenario within this landscape unit. Llandinam Repowering (consented) is located approximately 800m to the north-west of the northern part of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a large scale of effect to approximately 6km² of the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Bryn-y-Sarnau forest slo	ppes and field	ds (RDNRVS125)						
Location	This landscape unit is made up of three separate parts, with the largest part enclosing the western edge of the Site's southern parcel and extending southwards to around Abbeycwmhir. The other two parts are smaller and are situated closer to the Site, with the northern part encompasses a small area of the Site's northern parcel (containing upland pastures) and the Garn Fach plantation. The other part lies west of the Iton valley and close to the eastern boundary of the Site's southern parcel, containing a plantation (Red Lion Hill) and Bwlch-y-sarnau Hill.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)		es in the undu			& ridges which have been more than 5 sive landscapes in parts. Felling of the				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁷ (Summary descriptions taken from their	Historic Landscape aspect (HLAA):	1	hedges or post-and-wire fences.	Later prehistoric activity indicated by	and common around the headwaters of numerous flint scatters and dispersed ries. Dispersed farms largely of 19th-c	l burial mounds. Medieval and post-	medieval settlement and land use		
respective LANDMAP surveys)			suggested by scattered earlier p	rehistoric hilltop burial mounds. Medie	century upland commons to the east c eval and early post-medieval activity s u. Scattered farmsteads of possibly late	uggested by scattered abandoned h	nouse platforms and house sites.		
	Cultural Landscape aspect (CLAA):			CL023) "20th/21st century response to landscape (Garn Fach plantation)"	to generation of sustainable energy an	d, also economic regeneration, toge	ether with locally substantial		
					ensive upland and lowland landscape a al and present dominant agricultural pi		n of land use from prehistory,		
			Abbey Cwmhir Landscape (RL Llewelyn the Last prince of Wale		y the presence of the iconic site of the	Welsh foundation of the Cistercian	Abbey Cwmhir, last resting place of		
Description of Landscape Unit ⁸	A large-scale landsca	pe, comprisin	g a complex and strongly undula	ating landform with scarps, ridges and	l plateaus.				
(based on the criteria for determining susceptibility to wind energy development –	Largely covered by coniferous plantation and with a large upland area covered by a mosaic of improved and unimproved grassland.								
see Table 1.2 within Appendix 6-1: LVIA and CLVIA Methodology)	■ Predominantly 19 th century upland common with evidence of medieval settlement in the form of scattered flintstones, burial mounds and house platforms. Surviving medieval park boundaries at Great Park in the south.								
	Modern influence is li	mited to scatte	ered farmsteads, the small nucle	eated roadside settlement at Bwlch-y-s	sarnau and small single turbine at Bail	ey Bog.			
	Skylines often contair	conifer plant	ations which cut across hillsides	, minimising the presence of the near	by Llandinam windfarm.				
	Intervisibility with surr	ounding uplar	nd farmland is often limited by to	pography and plantations, although th	nere are some views to adjacent valley	/S.			
	There is some sense of remoteness and dark skies in areas away from populations, but extensive conifer forest plantations provide human influence. In contrast the Marteg valley is more open and its semi-natural land cover and agriculture provide a sense of rurality in comparison to the majority of its surrounding landscape.								
	Representative views	from this land	dscape unit are illustrated by Vie	ewpoints 4 and 7.					
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 1-A: LVIA and CLVIA Methodology)	The landscape susceptibi limited intervisibility) and i	ity of this land	dscape unit is judged to be medi igher susceptibility (distinctive la	i um due to a balance of indicators of l indform features, presence of heritage	lower susceptibility (large scale, simple e features, sense of remoteness/ dark	e landcover pattern, human influenc skies).	e from conifer forest plantations,		
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value as it is not designated and is recorded in LANDMAP as having moderate scenic quality, has some conservation interest (medieval assets) and has some recreational value (with public rights of way running through it including the Glyndwr's Way national trail and areas designated as open access public forest). The landscape unit also includes the upper Marteg valley which contrasts in character from much of the landscape unit, with indicators of higher value (notably for its scenic quality, rurality and tranquillity). However, the Marteg valley is not a designated landscape and these reasons are not considered to elevate the value above medium in the context of the whole landscape unit.								
	The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:								
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality	Moderate		ed by oppressive forestry blocks"					
	Q48 Character	Moderate	"Character defined by forestry"						
	Q50 Overall Evaluation	Moderate	"Rather unattractive & unnatural	landscape due to extensive conifer forests	s which are not particularly well related to to	ppography and stifle underlying intrinsic	characteristics"		
Judgement on Landscape Sensitivity	By combining the separat	e judgements	on landscape susceptibility and	landscape value, the sensitivity of this	s landscape is judged to be medium .				
	Low		Low - Medium	Medium	Medium - High	High	Very High		

⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁸ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

Judgement on Magnitude of Landscape Change

Scale of effect

(see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)

During construction there will be direct effects from construction activity associated with the widening of an existing forestry track that links the northern and middle Site parcels, and some new track along small sections of it. There will also be indirect effects from nearby construction activities associated with the 17 turbines, the implementation of crane pads, the construction of the substation in the north and tracks between turbines and the excavations associated with borrow pits. The scale of landscape change at construction is judged to be **medium**.

During operation, indirect effects will arise as a result of turbines and tracks being introduced within adjacent landscape units. The proximity of the turbines to parts of the landscape unit within the Garn Fach plantation is less than 150m in some cases, however forestry will limit the perception of the turbines from this area. The only area within 1.5km from the turbines that will experience a **large** scale of effect are the limited open areas between the forest plantations. The scale of effect will reduce to **medium** beyond 1.5km from the turbines and up to 2.5km. In these areas the presence of the Garn Fach turbines nearby will increase the presence of modern human development seen from the landscape affecting the limited modern influence and rurality that are noted as characteristics of the landscape. However, the large-scale landform, landcover (including commercial forestry) and the sense of remoteness/ dark skies in areas away from populations would continue to give the area its distinctive character. The southern half of the landscape unit, much of which lies outside of the ZTV, would largely remain unaffected by the Project.

Geographical extent

The landscape unit covers an area of approximately 41km². The large change to the visual and sensory character of the landscape, which is likely to extend some 1-1.5km from the turbines, will occur over approximately 1.3km² (this excludes the areas of forestry within 1.5km from turbines), i.e. a **small** geographical extent, and the medium change will occur over approximately 4.5km² i.e. a **small** geographical extent, The ZTV indicates that lesser indirect changes to the visual and sensory character outside the 2.5km zone from the turbines will occur over an area of approximately 16.5km², i.e. a **very large** geographical extent.

Duration/reversibility

During construction the changes to the landscape character would be **short-term** (up to 5 years) and largely **reversible**.

During operation the borrow pits (within adjacent landscape units) will be reinstated, but other parts of the development will remain for the **long-term** (beyond 10 years). The long-term changes will be **partially reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased, and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level.

Overall Judgement on Magnitude of Landscape Change

Although there will be a **large** scale of effect to parts of this landscape unit, it will only extend across a very small geographical extent (over a long term). There will also be a medium scale of effect over a small geographical extent. The overall magnitude of change is therefore judged to be **low-medium** to the northern and central parts of this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **low-medium** for the northern and central parts of this landscape unit.

	During Construction												
Barely perceptible Low Low – Medium Medium Medium - High High Very High													
			During Operation										
Barely perceptible	Low	Low - Medium	Medium	Medium - High	High	Very High							

Overall Level of Effect and Significance	A medium sensitivity combined with a low-medium magnitude is judged to result in a minor-moderate effect									
			During Co	nstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
			During O	peration						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

Additional Cumulative Effects

Landscape Unit

Scenario A:

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B) The operational single turbine at Bailey Bog (20m tip height) is located within this landscape unit. Other nearby operational schemes include the twin turbine developments at Esgairdraenllwyn (35m tip height) and Brynddu (20m tip height), situated 3.3km to the east and 4.3km to the south-east of the nearest Garn Fach turbine, respectively. The single operational turbine at Garth Fawr (21m tip height) is located 4.8km to the west, along with at Bryn Cwmrhiewdre (35m tip height) and Dugwm Farm (35m tip height), which are located 3.7km and 3.4km to the north-east of the nearest Garn Fach turbine respectively. The consented single turbine at Ddulley Bank (20m tip height) is located 0.9km to the east of the nearest Garn Fach turbine. The small scale of this consented turbine will not notably change the cumulative baseline scenario within this landscape unit. Llandinam Repowering (consented) is located approximately 600m to the west of the northern part of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit, becoming visible from areas within it. The introduction of Garn Fach will still result in a medium scale of effect to approximately 4.5km² of the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Kerry Ridgeway (MNTGMVS254)
	A convoluted area located mainly to the east and partly to the north of the Site. The northern section wraps around the existing Llandinam Wind Farm and is 135m from the nearest Garn Fach turbine, while the eastern part stretches as far as the English border approximately 12km from the Site. A very small part of this area falls within the Site boundary but is not directly affected by the proposed development.

Summary Description of VSAA (taken from Q3 of VSAA Survey)	"An open and broad expanse of upland grazing with dominant open skies and wind exposure. Occasional attractive views available over the Church Stoke farmland and rolling lowland farmland to the north and dramatic upland grazing views to the south. Tranquil/spiritual setting derived from the historical drove route along the ridgeway, Offas Dyke path and the infrequent passage of traffic. Two separate single turbines hillsides are visible in the area close to the large windfarm to west (Llandinam)."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁹ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspect areas (HLAA):	Waun Lluestowain (MNTGMHL661) "Enclosed marginal land and moorland south-east of Llandinam with straight-sided and irregular boundaries probably of later medieval and post-medieval date, including a relatively high proportion of registered common land. A large 20th-century windfarm covers much of the central part of the area. Early settlement and land use indicated by isolated Neolithic to Bronze Age hilltop burial mounds. The Roman road south from Caersws and part of an early medieval short dyke system cross the area. Later settlement and land use indicated by abandoned medieval and post-medieval house sites, field systems and peat cutting."						
		Kerry Hills (MNTGMHL124) "Predominantly straight-sided fieldscapes representing post-medieval enclosure on the upland ridge of the Kerry Hills along the border with Radnorshire and Shropshire, with large blocks of 20th-century conifer woodland. Early settlement and land use indicated by clusters of Neolithic to Bronze Age burial and ritual monuments. The area is crossed by the early medieval Offa"s Dyke boundary and by several other early medieval short dyke systems. Dispersed farms and houses of medieval and post-medieval origin, with some abandoned house sites of medieval and post-medieval date."						
		Mochdre (MNTGMHL789) "Irregular fieldscapes probably predominantly of medieval and earlier post-medieval date with some straight-sided enclosures of probably later 18th and 19th-century date on the flanks of the hills and lower valley sides of the Severn valley and the valley of the Mochdre Brook to the south-west of Newtown. Earlier prehistoric land use and settlement indicated by scattered lithic sites and burial mounds. Later prehistoric settlement and land use indicated by sparse small defended enclosed settlements. The Roman road southwards from Caersws to Castell Collen crosses the area. Medieval settlement and land use indicated by earthen castle sites at The Moat and Bronfelin. Dispersed farmsteads of medieval to post-medieval origin. Small nucleated church settlement of medieval origin at Mochdre and small nucleated settlement of 18th-century origin at Stepaside. Small blocks of 20th-century conifer plantation on some steeper hillslopes, and strips of probably residual ancient broadleaved woodland along some steep-sided stream valleys. Small 19th-century country house and registered garden at Plas Dinam, overlooking the Severn valley."						
	Cultural Landscape aspect areas (CLAA):	Windfarms (MNTGMCL017) "The three windfarms identified as components of a single Aspect Area designation visually dominate both the adjacent and distant landscapes within the Study AreaAt present they are Waun Dduberthog and Waun Lluestowain, Cemmaes and Bryn Titli Plans for the creation of additions to existing and construction on new windfarms have recently been announced (mid-2005) at Carno North, Nnat y Moch and Netown South, Situated for practical reasons on high ground, all the windfarms in the Study Area have been built on landscapes bearing evidence of (largely) prehistoric occupation, and which have historically been used for grazing."						
		Kerry and Dolfor (MNTGMCL048) "This intensely rural landscape lies to the east of of the A483 trunk road in the rolling hills extendeding from the southern Vale of Montgomery to the English border. This "hidden" landscape bears extensive mapped evidence of evolved occupation and exploitation from prehistory to the present day, including Bronze Age funerary sites, tumulti, dykes, Norman mottes, manor houses, farmsteads and small attractive settlements. These special qualities have been recognised through the designation of high numbers of Conservation Areas."						
		Rural Landscapes (MNTGMCL051) "The Aspect Area is essentially a catch-all of landscapes surrounding other Aspect Areas. It reveals an eclectic mix of landscape type, from fertile lowlands to bleak moorlands, and forms a buffer between oither Aspect Areas that are more culturally distinctive or diverse. Surprisingly, there are few statutorily protected landscape types - such as SSSIs or SLAs within the area. Nevertheless, Rural Landscapes forms the background to the more detailed painting on the canvas of Montgomeryshire, contributing greatly to the county"s soubriquet of Powis paradwys Cymru."						
Description of Landscape Unit ¹⁰	A medium-scale upland landscape of rolling hills and plateau with the distinctive slopes of the Kerry Ridgeway.							
(based on the criteria for determining susceptibility to wind energy development –	Landcover consists mainly of im	proved grassland used for upland grazing, and rectilinear field patterns exist on lower slopes.						
see Table 1.2 within Appendix 6-1: LVIA and CLVIA Methodology)	■ Early settlement is indicated by prehistoric burial and ritual monuments. Historical drove route runs along the ridgeway and the area is crossed by the Crugyn Bank Dyke, Two Trumps Dyke and momentarily by the early medieval Offa's Dyke boundary.							
	Modern development is general	ly absent, with settlement limited to scattered farmsteads across the landscape.						
	Strong intervisibility as the expansive and generally undeveloped skylines afford long views over rolling upland and mosaic farmland landscapes. Scenic views over Wales and England from the elevated ridgeline make the area popular for recreational activities.							
	A strongly rural landscape with a sense of remoteness away from populations, experiencing tranquillity and dark skies, although is affected by the presence of the nearby wind farm at Llandinam and small section of the A483.							
	Representative views from this	landscape unit are illustrated by Viewpoints 8 and 16.						
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	The landscape susceptibility of this inter-visibility, rural and tranquil land nearby and small section of A483).	landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (distinctive landform features, presence of heritage features, visible skylines/scape with minimal human influence, sense of remoteness / dark skies). In comparison there are very few indicators of low susceptibility (presence of existing wind energy generation						

⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

¹⁰ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology) This landscape unit is judged to be of **high** value as although it is not designated (apart from a small part in the east being located within a Registered Landscape of Outstanding Historic interest), it is recorded in LANDMAP as having high scenic quality (including well documented outstanding views from the ridgeway), has high conservation interest (the ancient drovers route of Kerry Ridgeway is of particular historic interest as well as a mixture of prehistoric and medieval assets) and high recreational value (with public rights of way running through it including the Kerry Ridgeway long-distance footpath, a small section of the Offa's Dyke national trail and some areas designated as open access land). It also has a sense of rurality (although tranquillity is slightly reduced by the presence of the existing wind energy development close by).

The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:

Low - Medium

Evaluation Criteria	Score	Justification
Q46 Scenic quality	High	"N/A"
Q48 Character	High	"N/A"
Q50 Overall Evaluation	High	"A network of grazed upland farmland running along the distinct topographical feature of the Kerry Ridgeway forming a transitional area between the rolling upland and higher ground in Shropshire to the south and the drop down into the rolling mosaic farmland and valley bottom leading to Church Stoke. The proximity of upland on the Shropshire boundary lends the area a distinct character of being on the edge of the wilds".

Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)

By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be high.

Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)

Scale of effect

Low

During construction there will be indirect effects from nearby construction activities associated with the 17 turbines, the implementation of crane pads, the construction of the substation in the north and tracks between turbines and the excavations associated with borrow pits. The scale of landscape change at construction is judged to be **medium**.

Medium - High

High

Medium

During operation, indirect effects will arise as a result of the 17 turbines and tracks being introduced within adjacent landscape units. The proximity of the development to parts of the landscape unit (less than 150m in some cases) will result in a **large** change in the visual and sensory character in the area up to 1-1.5km from turbines 1-4, declining to **medium** for between 1.5km, and reducing further beyond this. In these areas the presence of the Garn Fach turbines nearby will increase the presence of modern human development seen from the landscape affecting the minimal human influence and rurality that are noted as characteristics of the landscape (although the western part of the landscape unit is already influenced by the existing Llandinam Wind Farm). However, the medium scale landform (including distinctive landform features of rolling hills and the Kerry Ridgeway), landcover (including improved grassland), evidence of early settlement and land use indicated by prehistoric burial and ritual monuments, the historical drove route and dykes, strong intervisibility with surrounding rolling upland and mosaic farmland landscapes, and the sense of remoteness/ dark skies in areas away from populations will continue to give the area its distinctive character. The northern part of the landscape unit, much of which lies outside of the ZTV, would largely remain unaffected by the Project.

Geographical extent

The landscape unit covers an area of approximately 64km². The large change to the visual and sensory character of the landscape, which is likely to extend some 1-1.5km from the turbines, will occur over approximately 1.5km² i.e. a **small** geographical extent. The medium change within the 1.5-2.5km zone will occur over approximately 2.4km² i.e. a **small** geographical extent. The ZTV indicates that lesser indirect changes to the visual and sensory character outside the 2.5km zone from the turbines will occur over an area of approximately 22.1km², i.e. a **very large** geographical extent.

Duration/reversibility

During construction the changes to the landscape character would be **short-term** (up to 5 years) and largely **reversible**.

During operation the borrow pits will be reinstated (within adjacent landscape units), but other parts of the development will remain for the **long-term** (beyond 10 years). The long-term changes will be **partially reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased, and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level.

Overall Judgement on Magnitude of Landscape Change

The large scale of effect over a small geographical area / medium scale of effect over a small geographical extent (over a long term) is judged to result in an overall **low-medium** magnitude of change to the parts of the landscape unit within 2.5km of turbines 1-4. The scale of effect will reduce beyond this distance. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **low - medium** for the same area.

	During Construction											
Barely perceptible Low Low – Medium Medium Medium - High High Very High												
	During Operation											
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High						

Overall Level of Effect and Significance A high sensitivity combined with a low-medium magnitude is judged to result in a moderate effect for the parts of this landscape unit within 2.5km of turbines 1-4 (i.e., approximately 6% of the entire landscape unit). Effects beyond this distance will not be significant. During Construction Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)

Very High

	During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
					·					
Additional Cumulative Effects	Scenario A:									
(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)	Garn Fach turbine. The operational t Repowering (consented) is located a resulting in a fewer number of larger turbines beside the repowered Lland in a medium scale of effect to appro and above those set out in the LVI	win turbine development at Esgaird adjacent to the northern part of the lasscale turbines. The change in turbilinam turbines would be more comp ximately 2.4km² of the landscape upon turbines would be more comp	Iraenllwyn (35m tip height) is also loca andscape unit. This will replace the 1 ne scale will result in a greater influer atible than the scale of the Garn Fact	ated nearby, situated approximately : 02 no. existing turbines (45.5m tip hence from Llandinam on landscape ch turbines beside the existing Llandir	discape unit, located 3.7km and 3.4km to 3.3km to the east of the nearest Garn Feight) with 34 no. turbines at an increas aracter in the cumulative baseline scennam turbines. Nevertheless, the introducen Wind Farm so there will be no addi	each turbine. Llandinam ed tip height of 121m, therefore ario. The scale of Garn Fach ction of Garn Fach will still result				
	Scenario B: Not applicable as there are no undet	ermined planning applications within	n or near to this landscape unit							

Landscape Unit											
(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Old Chapel Hill Mosaic	(MNTGMV	S438)								
Location	Approximately 1.8km we	proximately 1.8km west of the nearest Garn Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	Strong visual links toward	stinct and relatively unusual landscape type for the Study Area, upland area displaying the small to medium scale irregular field patterns and hedgerow boundaries more typical of the mid Montgomeryshire region. In providing the small state of the state of the state of the southern border of the aspect. Settled with an element of remoteness and wilderness brought about by the general and borrowed from the adjacent wind farm.									
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ¹¹ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspect area (HLAA): Mochdre (MNTGMHL789) "Irregular fieldscapes probably predominantly of medieval and earlier post-medieval date with some straight-sided enclosures of probably later 19th-century date on the flanks of the hills and lower valley sides of the Severn valley and the valley of the Mochdre Brook to the south-west of Newtown. Earlier prehistor use and settlement indicated by scattered lithic sites and burial mounds. Later prehistoric settlement and land use indicated by sparse small defended enclosed settlement Roman road southwards from Caersws to Castell Collen crosses the area. Medieval settlement and land use indicated by earthen castle sites at The Moat and Bronfelin. Dispersed farmsteads of medieval to post-medieval origin. Small nucleated church settlement of medieval origin at Mochdre and small nucleated settlement of 18th-century at Stepaside. Small blocks of 20th-century conifer plantation on some steeper hillslopes, and strips of probably residual ancient broadleaved woodland along some steeper stream valleys. Small 19th-century country house and registered garden at Plas Dinam, overlooking the Severn valley."										
	Cultural Landscape aspect area (CLAA):		fertile lowlands to bleak moorlands, a	nd forms a buffer between other SLAs within the area. Neverthele		distinctive or diverse. Surprisingl					
Description of Landscape Unit ¹²	 A large-scale undula 	ting landfor	m.								
(based on the criteria for determining susceptibility to wind energy development –	A mixed field pattern	of small to	medium scale irregular fields bound ma	nly by hedgerows, with fencing i	n some places.						
see Table1A.2 within Appendix 6-1: LVIA and	Modern developmen	t is general	ly absent, with settlement limited to scat	ered farmsteads across the land	scape.						
CLVIA Methodology)	Intervisibility with the	surroundin	ng landscape, particularly with the existin	g wind farm developments of Lla	ndinam to the east and Bryn Titli to the	south-west.					
	There is a sense of r	emoteness	away from populations and dark skies,	although is affected by the prese	nce of existing wind energy generation	nearby and the gravel / mineral	workings at Brynposteg.				
	Representative view	from this la	andscape unit is illustrated by Viewpoint	9.							
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)			andscape unit is judged to be medium of workings) and indicators of higher susc								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)			of high value as although it is not design ublic rights of way running through it incl								
0211111100110001093)	The following table sets of	out the scer	nic quality, character and overall evaluati	on taken from the LANDMAP VS	SAA survey:						
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	High	"N/A".								
	Q48 Character	High	"N/A".								
	Q50 Overall Evaluation	High	"Distinct and relatively unusual landscape Montgomeryshire region".	type for the Study Area, upland area	displaying the small to medium scale irregu	llar field patterns and hedgerow bou	ndaries more typical of the mid				
Judgement on Landscape Sensitivity By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium-high .											
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape	Scale of effect	I					1				
Change	During construction there		irect effects from construction activities a on is judged to be barely perceptible .	s a result of the views (3-12km t	o the east) towards the upper parts of o	cranes that will feature on the sk	yline. The scale of landscape change				

¹¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ¹² Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

(see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)

During operation, there will be limited views of turbines throughout the landscape unit. The ZTV indicates that only a few turbines will be seen from within the eastern part of the landscape unit (at a distance between 3-7km) but these will be limited to blade tips due to the intervening topography of the Waun Ddubarthog ridge (as a result of the proposed Garn Fach turbines being set back from the break of the slope and into the interior of the plateau). Most of the blade tips that are visible will be seen beyond the Llandinam turbines and would therefore blend into this existing development. The ZTV indicates that the western part of the landscape unit will see a greater number of turbines, however they will be seen as a distant element 7-12km to the east and in context of the existing Llandniam turbines. At this distance, the key characteristics and character of this landscape unit will be unaffected while there will be only a **barely perceptible** change to visual and sensory characteristics. The absence of modern development within the landscape unit, intervisibility with the surrounding landscape, sense of remoteness away from populations and dark skies will continue to contribute to the area's distinctive character. The existing Bryn Titli wind farm will have a greater influence on this area than the proposed Garn Fach turbines.

Geographical extent

Not applicable as the scale of effect is judged to be barely perceptible.

Duration/reversibility

During construction the changes to the landscape character would be short-term (up to 5 years) and largely reversible.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.

During Construction											
Barely perceptible Low Low – Medium Medium Medium - High High Very High											
			During Operation								
Barely perceptible Low Low – Medium Medium Medium - High High Very High											

Overall Level of Effect and Significance

A medium-high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.

During Construction

Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
		During C	Operation		
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

The operational turbine at Garth Fawr (21m tip height) is located within this landscape unit, situated 4.3km to the south-east of the nearest Garn Fach turbine. Bryn Titli Wind Farm (13 turbines at 54m tip height) is situated adjacent to the south-western corner of this landscape unit, approximately 10.8km to the south-west of the nearest Garn Fach turbine. Llandinam Repowering (consented) is located approximately 1.2km to the east of the landscape unit. This will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater influence from Llandinam on landscape character in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a barely perceptible scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

Landscape Unit										
(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Cefn Carnedd Wooded I	Hillside (MNT	GMVS227)							
Location	Approximately 2km north-	approximately 2km north-west of the nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	medium sized woodland b	olocks betwee	n areas of cultivation. Woodland	d is predominantly mixed deciduous bro	old boundaries have a high proportion of padleaf woodland. Area exhibits a strong ing floodplain / valley bottom and toward	sense of settled domesticity t	hrough cultivation and relative			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit 13 (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspec (HLAA):	Mochdre (MNTGMHL789) "Irregular fieldscapes probably predominantly of medieval and earlier post-medieval date with some straight-sided enclosures of probably later 18th and 19th-century date on the flanks of the hills and lower valley sides of the Severn valley and the valley of the Mochdre Brook to the south-west of Newtown. Earlier prehistoric land use and settlement indicated by scattered lithic sites and burial mounds. Later prehistoric settlement and land use indicated by sparse small defended enclosed settlements. The Roman road southwards from Caersws to Castell Collen crosses the area. Medieval settlement and land use indicated by earthen castle sites at The Moat and Bronfelin. Dispersed farmsteads of medieval to post-medieval origin. Small nucleated church settlement of medieval origin at Mochdre and small nucleated settlement of 18th-century origin at Stepaside. Small blocks of 20th-century conifer plantation on some steeper hillslopes, and strips of probably residual ancient broadleaved woodland along some steep-sided stream valleys. Small 19th-century country house and registered garden at Plas Dinam, overlooking the Severn valley."								
	Cultural Landscape aspect (CLAA):		within the Study Area At p construction of new windfarms l	present they are Waun Dduberthog and have recently been announced (mid-20	onents of a single Aspect Area designat Waun Lluestowain, Cemmaes and Bryr 05) at Carno North, Nnat y Moch and N idence of (largely) prehistoric occupatio	Titli Plans for the creation etown South, Situated for prac	on of additions to existing and tical reasons on high ground, all the			
Description of Landscape Unit ¹⁴	A small-scale undulate	ting landscape	e on the valley sides of the Rive	r Severn.						
(based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and	A mosaic of small fields, irregular in size and shape. Field boundaries are formed by hedgerows, trees and small areas of mixed woodland. Blocks and bands of mixed broadleaf woodlands are a regular feature of the landscape.									
CLVIA Methodology)	Late prehistoric activity indicated by the Cefn Carnedd hillfort and other smaller defended enclosures. Medieval settlement and land use in parts of the area is indicated by the Pen y Castell motte and bailey castle.									
	■ Modern influence is limited to scattered farmsteads and cottages, and the town of Llandiloes is directly adjacent to the south-west of the landscape unit.									
	■ Intervisibility with surrounding floodplain and valley bottom landscapes, as well as towards the existing Llandinam Wind Farm upon the Waun Ddubarthog ridge.									
			s away from populations and da existing wind energy generation		eximity of Llandiloes, the A470 trunk roa	d (which runs along the valley	floor between Llandiloes and			
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)				lium due to a balance of indicators of loe features, some sense of remoteness/	wer susceptibility (presence of nearby edark skies).	xisting wind energy generation	n, Llandiloes and the A470 trunk road)			
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	LANDMAP as having high	n scenic qualit ugh it includin	y (although no justification is prog g the Severn Way long-distance	ovided). It also has some conservation	th-west being located within a Registere interest (including a mixture of prehistor the Glyndwr's Way national trail), and a	ic and medieval assets), has s	ome recreational value (with public			
	The following table sets o	ut the scenic o	quality, character and overall ev	valuation taken from the LANDMAP VS	AA survey:					
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	High	"N/A"							
	Q48 Character	High	"N/A"							
	Q50 Overall Evaluation	Moderate	"An area of higher incidence of boundaries to the west of the ar	small/medium sized wooded areas associate ea are patchy and would benefit from mediu	ed with a relatively intimate field pattern than m to long term management to raise the ove	is common elsewhere within the S all value of the area".	Study Area, however many of the field			
Judgement on Landscape Sensitivity	By combining the separat	e judgements	on landscape susceptibility and	d landscape value, the sensitivity of this	landscape is judged to be medium .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change	Scale of effect During construction there will be indirect effects from construction activities as a result of the limited views (2.5-8km to the south-east) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at construction is judged to be barely perceptible.									

¹³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

¹⁴ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

(see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)

During operation, there will be limited views of turbines throughout the landscape unit. The ZTV indicates that only a few turbines will be seen from the landscape unit (at a distance between 2.5-8km) but these will generally be limited to blade tips due to the intervening topography of the Waun Ddubarthog ridge (as a result of the proposed Garn Fach turbines being set back from the break of the slope and into the interior of the plateau). Views will be limited further by the extensive coverage of woodland blocks across the landscape unit that provide screening. Most of the blade tips that are visible will be seen beyond the Llandinam turbines and would therefore blend into this existing development. The key characteristics and character of this landscape unit will be unaffected while there will be only a **barely perceptible** change to visual and sensory characteristics. The landscape unit's small-scale landform, presence of heritage features, sense of remoteness away from populations and dark skies will continue to contribute to the area's distinctive character.

Geographical extent

Not applicable as the scale of effect is judged to be barely perceptible.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.

	During Construction										
Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High High Very High										
			During Operation								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High					

Overall Level of Effect and Significance

A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.

During Construction								
Negligible Minor		Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
	During Operation							
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. Llandinam Repowering (consented) is located approximately 1km to the east of the southern part of the landscape unit. This will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater influence from Llandinam on landscape character in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Valley slopes, west Ithon (RDNRVS136)							
Location	Approximately 2.2km east of the nearest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Single area. Important component of attractive view from busy A483 in valley. Moderately sloping valley sides & shoulders forming a transition zone between upland moor & hills and valley floor, with a mixture of seminatural rough grassland, wetland, improved & traditional pastures, scattered scrub, woodland & trees, and some craggy parts."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ¹⁵ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspec		Upper Ithon (RDNRHL613) "Extensive, irregular fieldscape encompassing the tributaries of the upper Ithon valley. Mixed, medium-sized fields, predominantly enclosed by hedged boundaries, including irregular field patterns of medieval and early post-medieval origin together with areas of more regular, straight-sided fields probably representing 19th-century enclosure of former commons. Isolated residual areas of common land. Earlier prehistoric activity suggested by scattered chance finds. Medieval settlement and land use denoted by small nucleated, valley-bottom, medieval church settlements at Llanbadarn Fynydd, Llananno and Llanbister, masonry castle occupying site of later prehistoric hillfort at Castelltinboeth, and by dispersed abandoned house platforms and existing farmsteads. Isolated areas of abandoned ridge and furrow cultivation on the margins of the uplands. Dispersed farmsteads, former watermills and small stone quarries of post-medieval date." Uplands and Lowlands (RDNRCL007) "The Aspect Area contains extensive upland and lowland landscape areas that demonstrate the evolution of land use from prehistory,					
	Cultural Landscape aspe (CLAA):				extensive upland and lowland landscap ical and present dominant agricultural pi		volution of land use from prehistory,	
Description of Landscape Unit ¹⁶ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 61A: LVIA and CLVIA Methodology) A medium-scale sloping valley side of the Ithon Valley. Medium-sized mixed fields typically bound by hedgerows. Occasional scattered farmsteads, but settlement is mainly confined to the valley bottom (outside of landscape unit). Intervisibility is limited by enclosing hillsides that provide an attractive backdrop to the A483. Hedgerows, scrub, woodland & trees also create a sense of enclosure. An attractive valley landscape which experiences some dark skies in areas away from the A483. Sense of tranquillity is degraded in part by the constant traffic flow of the A483.								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	The landscape susceptibility of this landscape unit is judged to be low due to the indicators of lower susceptibility (limited intervisibility, limited historic features, human influence from busy road). In comparison there are only a few indicators of higher susceptibility (attractiveness, some dark skies).							
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value as it is not designated and is limited in conservation interest but is recorded in LANDMAP as having high scenic quality, has some recreational value (with public rights of way running through it including being crossed by the Glyndwr's Way national trail) and a sense of rurality (although tranquillity is reduced by the busy A483 close by). The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey.							
	Evaluation Criteria	Score	Justification					
	Q46 Scenic quality	High	"Attractive enclosing hillsides that are highly visible".					
	Q48 Character	Moderate	"Generally quite clearly part of distinct valley landscape".					
	Q50 Overall Evaluation	Q50 Overall Evaluation Moderate "This is a diverse reasonably coherent transitional or edge landscape".						
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be low-medium .							
	Low		Low - Medium	Medium	Medium - High	High	Very High	
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction, indirect effects will arise as a result of the 17 turbines being constructed within adjacent and nearby landscape units. The construction of turbines will be seen 2.5-7.5km to the west. The proceonstruction activity to parts of the landscape unit (approximately 2.5km in some cases) will result in a small change in the visual and sensory character for the area within the northern part of this landscape unit of Llanbadarn Fynydd), During operation, indirect effects will arise as a result of the 17 turbines being introduced within adjacent and nearby landscape units. The Garn Fach Wind Farm will add a new feature to the skyline (although the skies will be unaffected as aviation lighting is not required). The proximity of the development to parts of the landscape unit (approximately 2.5km in some cases) will result in a small change in the visual and see character for the area within the northern part of this landscape unit (north of Llanbadarn Fynydd). The presence of the Garn Fach turbines nearby will increase the presence of modern human development seer the landscape affecting the attractive enclosing hillsides that are noted as characteristics of the landscape. However, the medium-scale landform, attractive valley landscape and dark skies will continue to give the its distinctive character. The remainder of the landscape unit that extends to the south of Llanbadarn Fynydd lies mostly outside of the ZTV and would largely remain unaffected.						thern part of this landscape unit (north ature to the skyline (although the dark nall change in the visual and sensory odern human development seen from	
	Geographical extent							

¹⁶ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ¹⁶ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

The landscape unit covers an area of approximately 11km². The ZTV indicates that the small change to the visual and sensory character will occur over an area of approximately 4km², although vegetation is likely to reduce views from the lower-lying areas of the valley. The geographical extent of this small effect is therefore **small**.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a small geographical area (over a long term) is judged to result in an overall **low** magnitude of change to the northern part of this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **low** for the area within the northern part of this landscape unit.

During Construction									
Barely perceptible	Low	Low – Medium	Low - Medium Medium - High		High	Very High			
During Operation									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance	A low-medium sensitivity combined with a low magnitude is judged to result in a minor effect.							
	During Construction							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		
	During Operation							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

The operational twin turbine development at Brynddu (20m tip height) is located within this landscape unit, situated 4.3km to the south-east of the nearest Garn Fach turbine. The operational twin turbine development at Esgairdraenllwyn (35m tip height) is also located nearby, situated approximately 3.3km to the east of the nearest Garn Fach turbine. The single operational turbines at Bryn Cwmrhiewdre (35m tip height) and Dugwm Farm (35m tip height) are also nearby, located 3.7km and 3.4km to the north-east of the nearest Garn Fach turbine respectively. The existing Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is located approximately 3.8km to the east of the landscape unit. The consented single turbine at Ddulley Bank (20m tip height) is nearby and located 0.9km to the east of the nearest Garn Fach turbine. The small scale of this consented turbine will not notably change the cumulative baseline scenario within this landscape unit. Llandinam Repowering (consented) is located approximately 3km to the north-west of the northern part of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit, becoming visible from within it. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind energy developments listed above, as well as the proposed nearby development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, approximately 3.8km to the east of the landscape unit. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Appendix 6: Landscape and Visual Assessment

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Upland moor, west of Itl	Jpland moor, west of Ithon (RDNRVS114)									
Location	Approximately 2.3km sou	th-east of	he nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Three north-south aligne	d areas of	hills overlooking Ithon Valley, formin	ng skyline. Wild, open, exposed up	land hills and ridges with a smooth & ro	unded profile and semi-natural rou	igh moorland landcover."				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ¹⁷ (Summary descriptions taken from their	Historic Landscape aspect (HLAA):	ct area	suggested by scattered earlier p	rehistoric hilltop burial mounds. Me	th-century upland commons to the east dieval and early post-medieval activity s nau. Scattered farmsteads of possibly la	suggested by scattered abandoned	d house platforms and house sites.				
respective LANDMAP surveys)	Cultural Landscape aspec (CLAA):	ct area			s extensive upland and lowland landscapical and present dominant agricultural p		plution of land use from prehistory,				
Description of Landscape Unit ¹⁸ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and CLVIA Methodology)	 There is no settlemer Early prehistoric settl The hills are a skyline Strong intervisibility w A wild, open and exp Strong sense of trance 	arry prehistoric settlement indicated by presence of scattered burial mounds. Medieval settlement and land use in parts of the area is indicated by the Tomen Bedd Ugre motte and bailey castle. The hills are a skyline feature seen from the A483 and provide an attractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide an attractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide an attractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide an attractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide an attractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide an attractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlements. The hills are a skyline feature seen from the A483 and provide and tractive backdrop to nearby settlem									
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		he landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (distinctive landform features, presence of heritage features, strong tervisibility, wild and tranquil landscape with minimal human influence, sense of remoteness / dark skies). In comparison there are very few indicators of low susceptibility (presence of A483 to the east).									
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of high value, as although it is not designated, it is recorded in LANDMAP as having high scenic quality, has some conservation interest (including a mixture of prehistoric and medieval assets), has some recreational value (with public rights of way running through it including the Glyndwr's Way national trail and being mostly designated as open access land), and a strong sense of rurality and tranquillity (although slightly reduced by the presence of the A483 close by). The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:										
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	High	"High scenic quality due to attractive	wild moorland hills with distinctive roun	ded topography clothed in diverse semi- nate	ural vegetation mosaic. Seen as skylin	e from main road".				
	Q48 Character	High	"Strong, distinct character".								
	Q50 Overall Evaluation	High	"Attractive wild areas, seen from main	n road".							
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be high .										
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction, indirect effects will arise as a result of the 17 turbines being constructed within adjacent and nearby landscape units. The construction of turbines will be seen 2.5-10km to the north-west, towards the upper parts of cranes that will feature on the skyline. The proximity of construction activity to parts of the landscape unit (approximately 2.5km in some cases) will result in a small change in the visual and sensory character. During operation, indirect effects will arise as a result of the 17 turbines being introduced within adjacent and nearby landscape units. The Garn Fach Wind Farm will add a new feature to the skyline (although the dark skies will be unaffected as aviation lighting is not required). The proximity of turbines within the central parcel of the Site to the landscape unit (approximately 2.5km in some cases) will result in a small change in the visual and sensory character. The presence of the Garn Fach turbines nearby will increase the presence of modern human development seen from the landscape affecting the strong sense of tranquillity and remoteness from human activity that are noted as characteristics of the landscape. However, the large scale wild, open and exposed upland moor landscape (with distinct hills), early prehistoric settlement and land use indicated by the presence of scattered burial mounds, strong intervisibility with surrounding landscapes and dark skies will continue to give the area its distinctive character.										
	Geographical extent										

¹⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

¹⁸ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

The landscape unit covers an area of approximately 8km². The ZTV indicates that the small change to the visual and sensory character will occur over an area of approximately 4km². The geographical extent of this small effect is therefore small. **Duration/reversibility** During construction changes to the landscape character would be short-term (up to 5 years) and reversible. During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased. **Overall Judgement on Magnitude of Landscape Change** The small scale of effect over a small geographical area (over a long term) is judged to result in an overall low magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation. **During Construction** Low Low - Medium **Barely perceptible** Medium Medium - High High Very High **During Operation Barely perceptible** Low Low - Medium Medium Medium - High High Very High

Overall Level of Effect and Significance	A high sensitivity combined with a lo	high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.							
			During Co	onstruction					
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
		During Operation							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The operational twin turbine development at Brynddu (20m tip height) is located nearby, situated 4.3km to the south-east of the nearest Garn Fach turbine. The existing Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is located approximately 4.9km to the north-east of the landscape unit. The consented single turbine at Ddulley Bank (20m tip height) is located nearby, situated 0.9km to the east of the nearest Garn Fach turbine. The small scale of this consented turbine will not notably change the cumulative baseline scenario within this landscape unit. Llandinam Repowering (consented) is located approximately 4.8km to the north-west of the north-mest of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind energy developments listed above, as well as the proposed nearby development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, approximately 5km to the north-east of the landscape unit. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area	Llandinam Hill and Scar	rp Mosaic	(MNTGMVS212)					
(VSAA) of LANDMAP)		• • •						
Location	Approximately 3km north	of the nea	rest Garn Fach turbine.					
Summary Description of VSAA (taken from Q3 of VSAA Survey)					oodland lines many of the watercourses ed the overall field pattern. Strong sense			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ¹⁹ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspect (HLAA):	Mochdre (MNTGMHL789) "Irregular fieldscapes probably predominantly of medieval and earlier post-medieval date with some straight-sided enclosures of probably later 18th 19th-century date on the flanks of the hills and lower valley sides of the Severn valley and the valley of the Mochdre Brook to the south-west of Newtown. Earlier prehistoric land use and settlement indicated by scattered lithic sites and burial mounds. Later prehistoric settlement and land use indicated by sparse small defended enclosed settlements. The Roman road southwards from Caersws to Castell Collen crosses the area. Medieval settlement and land use indicated by earthen castle sites at The Moat and Bronfelin. Dispersed farmsteads of medieval to post-medieval origin. Small nucleated church settlement of medieval origin at Mochdre and small nucleated settlement of 18th-century origin at Stepaside. Small blocks of 20th-century conifer plantation on some steeper hillslopes, and strips of probably residual ancient broadleaved woodland along some steep-sided stream valleys. Small 19th-century country house and registered garden at Plas Dinam, overlooking the Severn valley."						
	Cultural Landscape aspec (CLAA):	Rural Landscapes (MNTGMCL051) "The Aspect Area is essentially a catch-all of landscapes surrounding other Aspect Areas. It reveals an eclectic mix of landscape type, from fertile lowlands to bleak moorlands, and forms a buffer between oither Aspect Areas that are more culturally distinctive or diverse. Surprisingly, there are few statutorily protected landscape types - such as SSSIs or SLAs within the area. Nevertheless, Rural Landscapes forms the background to the more detailed painting on the canvas of Montgomeryshire, contributing greatly to the county's soubriquet of Powis paradwys Cymru."						
Description of Landscape Unit ²⁰	■ Small-scale rolling me	osaic farm	land landscape.					
(based on the criteria for determining	■ Irregular, small-scale field pattern with boundaries strongly defined by a network of hedgerows and trees.							
susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and	Indication of medieval settlement in scattered lithic sites and burial mounds. Later prehistoric settlement and land use indicated by sparse small defended enclosed settlements.							
CLVIA Methodology)	Dispersed settlement	t pattern of	traditional farmsteads and small	l, nucleated settlements at Mochdre	nd Stepaside.			
	There is some intervisibility with surrounding rural landscapes although undeveloped skylines, rolling topography and woodland cover create an intimate landscape with a strong sense of place.							
	■ There is some sense	of remote	ness away from populations and	dark skies, although is affected by the	e proximity of the A489 (which bounds th	ne north of the landscape unit).		
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		The landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (limited intervisibility, human influence from nearby A489) and indicators of higher usceptibility (small scale, presence of heritage features, some sense of remoteness/ dark skies).						
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of high value as although it is not designated (apart from a small area in the west being located within a Registered Landscape of Special Historic interest), it is recorded in LANDMAP as having high scenic quality (although no justification is provided) and has some conservation interest (including a mixture of prehistoric and medieval assets). It also has some recreational value (with public rights of way running through it) and a sense of rurality (although tranquillity is reduced by the presence of the A489 close by).							
	The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:							
	Evaluation Criteria	Score	Justification					
	Q46 Scenic quality	High	"N/A"					
	Q48 Character	High	"N/A"					
	Q50 Overall Evaluation	High	"The aspect displays a fine exam	ple of the small wooded and mosaic field	pattern that is an integral part of Montgomerys	shires landscape character in the easter	n and central areas".	
Judgement on Landscape Sensitivity	By combining the separat	te judgeme	ents on landscape susceptibility a	and landscape value, the sensitivity o	this landscape is judged to be medium	high.		
	Low		Low - Medium	Medium	Medium - High	High	Very High	
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be indirect effects from construction activities as a result of the limited views (4-8km to the south) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at construction is judged to be barely perceptible.							
Lent and Olent Moundalogy)	limited to blade tips due to the blade tips that are visit	o the intervible will be	vening topography of the Waun E seen beyond or adjacent to the	Odubarthog ridge. Views will be limite Llandinam turbines and would theref	The ZTV indicates that only a few turbing further by the extensive coverage of wo are blend into this existing development. The landscape unit's small scale rolling most are the control of the landscape unit's small scale rolling most are the landscape unit's small scale rolling unit are the landscape unit's small scale rolling unit are the landscape	oodland blocks across the landscap The key characteristics and charact	e unit providing screening. Most of ter of this landscape unit will be	

¹⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ²⁰ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

remoteness away from populations and dark skies will continue to contribute to the area's distinctive character. The western part of the landscape unit, much of which lies outside of the ZTV, would largely remain unaffected.

Geographical extent

Not applicable as the scale of effect is judged to be barely perceptible. <u>Duration/reversibility</u>

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.

	During Construction										
Barely perceptible	Low	Low Low - Medium Medium Medium - High High Very High									
	During Operation										
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High					

Overall Level of Effect and Significance	A medium-high sensitivity combine	A medium-high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.								
			During Co	nstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
		During Operation								
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 61A: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The operational single turbine at Dugwm Farm (35m tip height) is located nearby, situated 3.4km to the north-east of the nearest Garn Fach turbine. Llandinam Repowering (consented) is located approximately 1km to the south of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Improved upland, south	mproved upland, south of Kerry Hills (RDNRVS122)								
Location	Approximately 3.8km eas	t of the neares	st Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)					cale valleys which they overlook. Uplar fences often look unnatural in associat					
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ²¹ (Summary descriptions taken from their	Historic Landscape aspec (HLAA):		hedges or post-and-wire fences.	Later prehistoric activity indicated by	and common around the headwaters of numerous flint scatters and dispersed ries. Dispersed farms largely of 19th-c	l burial mounds. Medieval and post-	medieval settlement and land use			
respective LANDMAP surveys)	Cultural Landscape aspe (CLAA):	Cultural Landscape aspect area (CLAA): Uplands and Lowlands (RDNRCL007) "The Aspect Area contains extensive upland and lowland landscape areas that demonstrate the evolution of land use from prehistory, through the small-scale but numerous quarrying efforts to the historical and present dominant agricultural practice of sheep farming."								
Description of Landscape Unit ²²	Large scale upland p	lateau landsca	ape incised by small stream valle	eys.						
(based on the criteria for determining	 Large-scale rectangular 			•						
susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and	■ Prehistoric settlemen									
CLVIA Methodology)	■ Modern development is generally absent except for the large-scale turbines associated with the Garreg Lwyd Hill Wind Farm. Settlement is limited to dispersed pattern of 19 th century farmsteads across the landscape.									
	Strong intervisibility with surrounding landscapes with long views within and out of the landscape, including to higher Kerry Hills and across small valleys.									
	An open and exposed landscape with some sense of remoteness and dark skies in areas away from populations, however intensive farming has eroded the inherent wild upland open moorland character. The presence of the existing wind farm also reduces levels of tranquillity.									
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 61A: LVIA and CLVIA Methodology)		ne landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (large scale, human influence from intensive farming and existing wind energy generation) and indicators of higher susceptibility (presence of heritage features, strong intervisibility to higher Kerry Hills and across small valleys, sense of remoteness / dark skies).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value as although it is not designated and is recorded in LANDMAP as having low scenic quality, it has some conservation interest (including a mixture of prehistoric and medieval assets), some recreational value (with public rights of way running through it including the Glyndwr's Way national trail) and a sense of rurality (although tranquillity is reduced by the existing wind energy development). The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:									
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Low	"Visually unattractive due to inte	nsive farming"						
			-	-						
	Q50 Overall Evaluation	Q48 Character Low "Lacking in strong, well defined, well composed elements". Q50 Overall Evaluation Moderate "Landscape value has been degraded by intensive farming with conversion of rough grassland/moorland areas to improved grassland fields by drainage, enlargement and reseeding, plus fencing. Not particularly memorable".								
Judgement on Landscape Sensitivity	By combining the separa	te judgements	on landscape susceptibility and	landscape value, the sensitivity of thi	is landscape is judged to be medium .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change	Scale of effect									
(see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, indirect effects will arise as a result of the 17 turbines being constructed within nearby landscape units. The construction of turbines will be seen as a relatively distant element 4-11km to the west. At this distance, the key characteristics and character of this landscape unit will be unaffected while there will be only a small change to visual and sensory characteristics. During operation, indirect effects will arise as a result of the 17 turbines being introduced within nearby landscape units. The Garn Fach Wind Farm will add a new feature to the skyline (although the dark skies will be									
. ,	unaffected as aviation lig	hting is not red	quired). The proposed wind farm	will be seen as a relatively distant ele	ement 4-11km to the west. At this dista out 7km from the turbines (being the ar	ince, the key characteristics and cha	aracter of this landscape unit will be			
	medieval settlement, stro	ng intervisibilit	y with surrounding landscapes (including the long views extending to	the large-scale open and exposed upl wards the higher Kerry Hills and across vill have a greater influence on this are	s small valleys), sense of remotene	ss / dark skies in areas away from			
	Geographical extent									

²¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
²² Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

The landscape unit covers an area of approximately 19km². The ZTV indicates that visibility will be patchy across the unit, with some parts of the unit not affected by any visibility. Visibility from the area that lies within 7km of the turbines (and likely to experience a small change to perceptual character) is about 5.2km² i.e. a **medium** geographical extent.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a medium geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation.

During Construction									
Barely perceptible Low Low – Medium Medium Medium - High High Very High									
During Operation									
Barely perceptible Low Low – Medium Medium Medium - High High Very High									

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
			During Co	onstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
		During Operation								
	Negligible Minor Minor Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

The operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is located within this landscape unit, situated approximately 8.2km east of the nearest Garn Fach turbine. The operational twin turbine developments at Brynddu (20m tip height) and Esgairdraenllwyn (35m tip height) are also located nearby to the landscape unit, situated 4.3km to the south-east and 3.3km east of the nearest Garn Fach turbine. Llandinam Repowering (consented) is located approximately 4km to the north-west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional** cumulative effects over and above those set out in the LVIA above.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind farms listed above, as well as the proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm within the landscape unit. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Rolling hills, between It	thon & Wye (RDNRVS135)							
Location	Approximately 4km south	n-west of the r	nearest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)			n & upper Wye valleys. Includes s s. Mainly scattered farms."	some distinct hills & some recent field e	enclosures. Gently rolling lowland hills	& valleys with strong pastoral field	patterns, wooded watercourses			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ²³ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspectification (HLAA):	ct area	of regular field pattern represent St Harmon and evidence of relic	ndulating upland valley with predomina ting 19th-century enclosure of former o at settlement around the upland fringe. It settlement suggested by scattered ch	pen commons. Medieval settlement a The modern settlement pattern is pre	nd land use represented by the sm dominantly one of dispersed farms	nall nucleated church settlement at			
	Cultural Landscape aspe (CLAA):	ct area		RCL007) "The Aspect Area contains ex erous quarrying efforts to the historical			tion of land use from prehistory,			
Description of Landscape Unit ²⁴	Medium scale gently	Medium scale gently rolling lowland hills & valleys landscape.								
(based on the criteria for determining susceptibility to wind energy development –	■ Traditional pastoral la	Traditional pastoral landscape with medium-sized, regular fields, often defined by hedgerows.								
see Table 1.2 within Appendix 6-1: LVIA and	Medieval settlement	Medieval settlement and land use represented by the small, nucleated church settlement at St Harmon and evidence of relict settlement around the upland fringe.								
CLVIA Methodology)	Settlement pattern of	ettlement pattern of dispersed farmsteads and small hamlets.								
		Vooded watercourses scattered trees and untrimmed hedgerows create a sense of intimacy in the valleys.								
		Intervisibility with surrounding landscapes is limited as undeveloped skylines are well wooded (with little modern development) and provide a contained rural backdrop for settlements in the area.								
	Representative views from this landscape unit are illustrated by Viewpoints 10, 11 and 17.									
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		The landscape susceptibility of this landscape unit is judged to be medium due a balance of indicators of lower susceptibility (limited intervisibility, human influence from busy road), medium susceptibility (medium landscape scale, rolling landform) and indicators of higher susceptibility (attractiveness, general absence of modern development, presence of heritage features and dark skies).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)		val assets), s	ome recreational value (with publ	ot designated it is recorded in LANDM/ lic rights of way running through it inclu						
CEVIA Methodology)		•	· ·	aluation taken from the LANDMAP VSA	AA survey:					
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Moderate	"Pleasant pastoral farmland gene	erally".						
	Q48 Character	Moderate	"Not very distinctive".							
	Q50 Overall Evaluation	Moderate	"Attractive traditional pastoral lan	ndscape with strong field pattern, often with	well laid hedges. Similar to large areas of	the county."				
Judgement on Landscape Sensitivity	By combining the separa	te judgement	s on landscape susceptibility and	landscape value, the sensitivity of this	landscape is judged to be medium .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape	Scale of effect	<u>'</u>								
Change (see Tables 1.6 - 1.8 within Appendix 6-1:	During construction there will be relatively distant views (4-11km to the north-east) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at construction is judged to be small .									
(see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology) During operation, there will be limited views of turbines from upland locations, with a fewer number of turbines also visible from towards the bottom of valleys where vegetation allows. The Garn a new feature to the skyline (although the dark skies will be unaffected as aviation lighting is not required). The proposed wind farm will be seen as a distant element in views from elevated parts 11km to the north-east. At this distance, the key characteristics and character of this landscape unit will be unaffected while there will be only a small change to visual and sensory characteristic 7km from the turbines. The presence of the Garn Fach turbines will increase the presence of modern human development seen from the landscape affecting the rurality of the landscape. However, landform, pastoral character, early medieval settlement, sense of intimacy in the valleys, and dark skies will continue to give the area its distinctive character.							evated parts of the unit between 4- naracteristics from areas up to about			

²³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
²⁴ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

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Appendix 6: Landscape and Visual Assessment

Geographical extent

The landscape unit covers an area of approximately 86km². The ZTV indicates that visibility will be patchy across the unit, with many parts of the unit not affected by any visibility. Visibility from the area that lies within 7km of the turbines (and likely to experience a small change to perceptual character) is about 7.7km² i.e. a **medium** geographical extent.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a medium geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation,

During Construction										
Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High High Very High									
	During Operation									
Barely perceptible Low Low - Medium Medium Medium - High High Very High										

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
			During Co	onstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
		During Operation								
Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Majo										

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby development of Bryn Titli (13 turbines at 54m tip height). Llandinam Repowering (consented) is located approximately 4.2km to the north-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Upland moor, Kerry Hill	Jpland moor, Kerry Hills (RDNRVS111)								
Location	Approximately 4.2km eas	st of the nea	arest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)					minor roads. Provides long views, especia file and semi-natural rough moorland lando		ey lowlands. This plateau forms the			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ²⁵ (Summary descriptions taken from their	Historic Landscape aspe- (HLAA):	ct area	hedges or post-and-wire fences. L	ater prehistoric activity indicated	pland common around the headwaters of the by numerous flint scatters and dispersed b arries. Dispersed farms largely of 19th-cen	urial mounds. Medieval and post-	medieval settlement and land use			
respective LANDMAP surveys)	Cultural Landscape aspe (CLAA):	ect area	Uplands and Lowlands (RDNRCL007) "The Aspect Area contains extensive upland and lowland landscape areas that demonstrate the evolution of land use from prehistory, through the small-scale but numerous quarrying efforts to the historical and present dominant agricultural practice of sheep farming."							
Description of Landscape Unit ²⁶ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and CLVIA Methodology)	 The area is unsettled Early land use indica The hills are a skylin Strong intervisibility to 	arge scale upland plateau landscape with gently rounded hills. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area is unsettled apart from very occasional isolated farmsteads. The area isolated farmsteads. The area isolated farmsteads apart farmsteads. The area isolated farmsteads apart farmsteads apart farmsteads apart farmsteads. The area isolated farmsteads apart farmsteads apart farmsteads apart farmsteads apart farmsteads apart farmsteads apa								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		he landscape susceptibility of this landscape unit is judged to be high due to the indicators of higher susceptibility (distinctive landform feature, presence of heritage features, strong intervisibility with the Severn Valley owlands, wild and tranquil landscape with minimal human influence, sense of remoteness / dark skies). In comparison there are very few indicators of low susceptibility (large scale).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of high value, as although it is not designated, it is recorded in LANDMAP as having high scenic quality, has some conservation interest (including a mixture of prehistoric and post medieval assets), has some recreational value (with public rights of way running through it and being mostly designated as open access land), and a strong sense of rurality and tranquillity. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey: Evaluation Criteria Score Justification									
	Q46 Scenic quality	High	"High scenic quality due to attractive wild moorland hills with distinctive rounded topography clothed in diverse semi- natural vegetation mosaic".							
	Q48 Character	High	"Strong, distinct character".	The modification with distinctive round	natural management of the second second material	Togotation modulo .				
	Q50 Overall Evaluation	High		, natural, diverse, tranquil upland mod	orland which is generally well managed".					
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be high .									
a angular angu	Low	jg	Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape	Scale of effect									
Change (see Tables 1.6 - 1.8 within Appendix 6-1:	During construction, indirect effects will arise as a result of the 17 turbines being constructed within nearby landscape units. The construction of turbines will be seen as a distant element 4-11km to the west. At this distance, the key characteristics and character of this landscape unit will be unaffected while there will be only a small change to visual and sensory characteristics.									
LVIA and CLVIA Methodology)	During operation, indirect effects will arise as a result of the 17 turbines being introduced within nearby landscape units. The Garn Fach Wind Farm will add a new feature to the skyline (although the dark skies will be unaffected as aviation lighting is not required). The proposed wind farm will be seen as a relatively distant element 4-11km to the west. At this distance, the key characteristics and character of this landscape unit will be unaffected while there will be only a small change to visual and sensory characteristics from up to about 7km from the turbines. The presence of the Garn Fach turbines will increase the presence of modern human development seen from the landscape affecting the hills as a skyline feature of the landscape. However, the large-scale wild, open and exposed upland moor landscape, early settlement indicated by scattered burial mounds, strong intervisibility with surrounding landscapes (including the long views extending across the Severn Valley lowlands), and remoteness / dark skies will continue to give the area its distinctive character.									
			of approximately 11km². The ZTV indier) is only about 3.5km² i.e. a small ge		ot affected by any visibility. Visibility from t	he area that lies within 7km of the	e turbines (and likely to experience a			
	<u>Duration/reversibility</u>									

²⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ²⁶ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

Barely perceptible

Low

High

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**.

During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a small geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation,

During Construction

Barely perceptible Low Low Medium Medium Medium - High High Very High

During Operation

Low - Medium

Overall Level of Effect and Significance	A high sensitivity combined with a lo	A high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
			During Co	nstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
	During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the existing Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height), located approximately 2.7km to the south of the landscape unit. Llandinam Repowering (consented) is located approximately 4km to the west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **small** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Medium

Medium - High

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind energy development listed above, as well as the proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, approximately 1.9km south of the landscape unit. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Very High

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Llandyssil Hill and Scar	p Grazing (M	NTGMVS946)								
Location	Approximately 4.5km nor	th-east of the ı	nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)			e on an intricate patchwork of sma rlooking the flat open farmland of		edgerows Majority of the area is of a m	ore open nature with larger graze	d and cultivated fields and				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ²⁷ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspect (HLAA):	Historic Landscape aspect area (HLAA): Mochdre (MNTGMHL789) "Irregular fieldscapes probably predominantly of medieval and earlier post-medieval date with some straight-sided enclosures of probably later 18th and 19th-century date on the flanks of the hills and lower valley sides of the Severn valley and the valley of the Mochdre Brook to the south-west of Newtown. Earlier prehistoric land use and settlement indicated by scattered lithic sites and burial mounds. Later prehistoric settlement and land use indicated by sparse small defended enclosed settlements. The Roman road southwards from Caersws to Castell Collen crosses the area. Medieval settlement and land use indicated by earthen castle sites at The Moat and Bronfelin. Dispersed farmsteads of medieval to post-medieval origin. Small nucleated church settlement of medieval origin at Mochdre and small nucleated settlement of 18th-century origin at Stepaside. Small blocks of 20th-century conifer plantation on some steeper hillslopes, and strips of probably residual ancient broadleaved woodland along some steep-sided stream valleys. Small 19th-century country house and registered garden at Plas Dinam, overlooking the Severn valley."									
	Cultural Landscape aspect area (CLAA): Rural Landscapes (MNTGMCL051) "The Aspect Area is essentially a catch-all of landscapes surrounding other Aspect Areas. It reveals an eclectic mix of landscape type, from fertile lowlands to bleak moorlands, and forms a buffer between oither Aspect Areas that are more culturally distinctive or diverse. Surprisingly, there are few statutorily protected landscape types - such as SSSIs or SLAs within the area. Nevertheless, Rural Landscapes forms the background to the more detailed painting on the canvas of Montgomeryshire, contributing greatly to the county"s soubriquet of Powis paradwys Cymru."										
Description of Landscape Unit ²⁸ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and CLVIA Methodology)	 Extensive patchwork Settlement comprises Late prehistoric activ Some intervisibility w 	A medium scale rolling upland landscape of mixed arable and livestock farming. Extensive patchwork of small to medium sized fields, some of which have been amalgamated to form larger parcels. Fields are bound by hedgerows with frequent hedgerow trees. Settlement comprises the village of Llandyssil to the north, and a scattered pattern of traditional farmsteads. Late prehistoric activity indicated by the Cefn Llan hillfort and other smaller defended enclosures. Some intervisibility with surrounding landscapes including long views extending over the flat open farmland of the Severn Vale. A settled rural landscape with some sense of remoteness and dark skies in areas away from populations, although with some disturbance around the settlement edge of Newtown and through arable cultivation that									
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		lity of this land			lower susceptibility (human influence anigher susceptibility (presence of heritage						
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value as it is not designated but has some conservation interest (including a mixture of prehistoric, medieval and post medieval assets), has some recreational value (with public rights of way running through it), and a sense of rurality (although tranquillity is reduced in areas near to Newtown). Although it is recorded in LANDMAP as having high scenic quality (although no justification is provided), the overall evaluation is judged to be moderate. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:										
	Evaluation Criteria	Score	Justification		,						
	Q46 Scenic quality	High	"N/A".								
	Q48 Character	Moderate	"N/A".								
	Q50 Overall Evaluation										
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium .										
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1:					andscape units. The construction of turb e only a small change to visual and sen		ent 5-22km to the south-west. At				
LVIA and CLVIA Methodology)	unaffected as aviation light characteristics and chara	nting is not rec cter of this lan	uired). The proposed wind farm w dscape unit will be unaffected whi	rill be seen as a distant element in a le there will be only a small change	scape units. The Garn Fach Wind Farm views from elevated parts of the unit bet e to visual and sensory characteristics from vever, the medium scale rolling landform	ween 5-22km to the south-west. A om areas up to about 7km from the	t this distance, the key e turbines. The presence of the				

²⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ²⁸ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

pattern, late prehistoric activity, intervisibility with surrounding landscapes (including the long views extending over the Severn Vale), and remoteness / dark skies in areas away from populations will continue to give the area its distinctive character.

Geographical extent

The landscape unit covers an area of approximately 63km². The ZTV indicates that visibility will be patchy across the unit, with many parts of the unit not affected by any visibility. Visibility from the area that lies within 7km of the turbines (and likely to experience a small change to perceptual character) is only about 1.7km² i,e. a **small** geographical extent.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a small geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation.

During Construction								
Barely perceptible	otible Low Low – Medium Medium - High High Very High							
			During Operation					
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		

Overall Level of Effect and Significance	A high sensitivity combined with a k	high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
			During Co	nstruction						
	Negligible Minor Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									
	During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The existing Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is located approximately 6km to the south of the landscape unit; however, the ZTV indicates that visibility of this development from the landscape unit is obscured by the Kerry Hills. Llandinam Repowering (consented) is located approximately 3.5km to the south-west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind farms listed above. The proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm approximately 6km south of the landscape unit, will be obscured by the Kerry Hills. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Ridge & valley, Ithon si	Ige & valley, Ithon sides (RDNRVS130)										
Location	Approximately 4.6km sou	ıth-east of the	nearest Garn Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)					eams. Pastoral hill land ridges & alternating onal fields on the valley slopes. An attractive		ttled valleys with a distinct south west to					
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ²⁹ (Summary descriptions taken from their respective LANDMAP surveys)	Historic Landscape aspe (HLAA):	ct area	boundaries, including irregular f century enclosure of former con denoted by small nucleated, vai at Castelltinboeth, and by dispe	ield patterns of medieval and early nmons. Isolated residual areas of c ley-bottom, medieval church settle	npassing the tributaries of the upper Ithon of post-medieval origin together with areas of ommon land. Earlier prehistoric activity sugments at Llanbadarn Fynydd, Llananno and existing farmsteads. Isolated areas of a of post-medieval date."	f more regular, straight-sided t ggested by scattered chance fi d Llanbister, masonry castle o	fields probably representing 19th- inds. Medieval settlement and land use ccupying site of later prehistoric hillfort					
	Cultural Landscape aspe (CLAA):	ct area			s extensive upland and lowland landscape rical and present dominant agricultural pra		volution of land use from prehistory,					
Description of Landscape Unit ³⁰	Small scale rolling la	ndscape of va	alleys and ridges.									
(based on the criteria for determining susceptibility to wind energy development –	■ Field pattern of large	r improved fie	elds on the ridges and smaller fie	lds on the valley slopes, defined by	hedgerows. Blocks of woodland are found	d in the valleys.						
see Table 1.2 within Appendix 6-1: LVIA and	Modern development is generally absent with settlement comprising scattered farmsteads concentrated in the valleys.											
CLVIA Methodology)	Remains of Tinboeth Castle indicates medieval settlement.											
	Some intervisibility with surrounding landscapes (including across the Wye valley to wider hills), although views are mostly towards small valleys and ridges within the landscape unit.											
	Strongly rural character of attractive traditional farmland with sense of remoteness and dark skies away from populations (although with some disturbance from the presence of the adjacent A483 and the nearby Garreg Lwyd Hill Wind Farm).											
	Representative view	from this land	dscape unit is illustrated by View	point 12.								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)					of indicators of higher susceptibility (small some of low susceptibility (limited intervisibility)							
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value as it is not designated but has some conservation interest (medieval assets), has some recreational value (with public rights of way running through it including being crossed momentarily by the Glyndwr's Way national trail), and a sense of rurality (although tranquillity is slightly degraded by the adjacent A483 and nearby wind farm). Although it is recorded in LANDMAP as having high scenic quality, the overall evaluation is judged to be moderate. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:											
		out the scenic	quality, character and overall ev	aluation taken from the LANDMAF	VSAA survey:							
	Evaluation Criteria	Score	Justification									
	Q46 Scenic quality	High	"Very attractive "traditional" farn	nland".								
	Q48 Character	Moderate	"Not particularly distinctive".									
	Q50 Overall Evaluation	Moderate	"Rolling pastoral landscape is ty	pical of much of the County but more p	ronounced ridge & valley landform makes area	distinct".						
Judgement on Landscape Sensitivity	By combining the separa	te judgement	s on landscape susceptibility and	landscape value, the sensitivity o	this landscape is judged to be medium-hi	gh.						
	Low		Low - Medium	Medium	Medium - High	High	Very High					
During construction, there will be distant views (5-9km to the north-west) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at conjudged to be small . During construction, there will be distant views (5-9km to the north-west) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at conjudged to be small . During operation, there will be limited views of turbines from upland locations, with a fewer number of turbines also visible from along the bottom of valleys where vegetation allows. The Garn Fach Winnew feature to the skyline (although the dark skies will be unaffected as aviation lighting is not required). The proposed wind farm will be seen as a distant element in views from elevated parts of the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at conjudged to be small . During operation, there will be limited views of turbines from upland locations, with a fewer number of turbines also visible from along the bottom of valleys where vegetation allows. The Garn Fach Winnew feature to the skyline (although the dark skies will be unaffected as aviation lighting is not required). The proposed wind farm will be seen as a distant element in views from elevated parts of the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at conjudged to be small . During operation, there will be distant views (5-9km to the north-west) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at conjudged to be small .												

²⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
³⁰ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

Wye valley to wider hills), and remoteness / dark skies in areas away from populations will continue to give the area its distinctive character. The existing Garreg Lwyd Hill Wind Farm will have a greater influence on this area than the proposed Garn Fach turbines.

Geographical extent

The landscape unit covers an area of approximately 12km². The ZTV indicates that visibility will be patchy across the unit, with many parts of the unit not affected by any visibility. Visibility from the area that lies within 7km of the turbines (and likely to experience a small change to perceptual character) is only about 3.5km² i.e. a **small** geographical extent.

Duration/reversibility

During construction changes to the landscape character would be short-term (up to 5 years) and reversible.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a small geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation,

During Construction									
Barely perceptible	perceptible Low Low - Medium Medium - High High Very High								
			During Operation						
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance	A medium-high sensitivity combined	A medium-high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.							
			During Co	nstruction					
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (S								
		During Operation							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The existing Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is located less than 500m to the north-east of the landscape unit. Llandinam Repowering (consented) is located approximately 7.2km to the north-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind farms listed above. The proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, is located less than 600m west of the landscape unit. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Llanidloes Farmland (M	Llanidloes Farmland (MNTGMVS204)									
Location	Approximately 4.6km nor	h-west of th	e nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)		ered settlem		field pattern Grazed fields associated with the former small scale mining of the							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ³¹ (Summary descriptions taken from their respective LANDMAP surveys)	Cultural Landscape aspect (CLAA):	ct area	fertile lowlands to bleak moorlar landscape types - such as SSSI	L051) "The Aspect Area is essentially ands, and forms a buffer between oither less or SLAs within the area. Nevertheless y"s soubriquet of Powis paradwys Cym	Aspect Areas that are more culturally s, Rural Landscapes forms the backs	distinctive or diverse. Surprisingly,	there are few statutorily protected				
Description of Landscape Unit ³²	A small-scale undula	small-scale undulating and enclosed landscape.									
(based on the criteria for determining susceptibility to wind energy development –	■ Largely grazed land \	vith a well-d	efined small to medium irregular f	ield pattern. Field boundaries formed by	y hedgerows, trees and small mixed	woodland blocks.					
see Table 1.2 within Appendix 6.1: LVIA and	Evidence of former m	ining and qu	uarrying activity with some relic fe	atures.							
CLVIA Methodology)	Small-scale clustered	and scatter	ed settlement pattern, that has be	ecome eroded slightly by modern expar	nsion/ development.						
		ome intervisibility with surrounding landscapes.									
	A rural landscape of a settlement).	rural landscape of attractive traditional farmland with sense of remoteness and dark skies away from populations (although with some disturbance from past mining and quarrying and expanded modern ettlement).									
	Representative view	from this lan	dscape unit is illustrated by View	point 13.							
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		The landscape susceptibility of this landscape unit is judged to be medium due to the balance of indicators of lower susceptibility (modern development / human influences) and indicators of higher susceptibility (small-scale, historic mining relics, intervisibility, some sense of remoteness/ dark skies).									
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	(although no justification i	s provided),		s within the Clywedog Valley Registered ue (with public rights of way running thr (pansion/ development).							
GEVIA Methodology)	The following table sets o	ut the scenic	c quality, character and overall ev	aluation taken from the LANDMAP VSA	AA survey:						
	Evaluation Criteria	Score	core Justification								
	Q46 Scenic quality	Moderate	"N/A".								
	Q48 Character	High	"Small mixed woodland parcels	and relict mining/quarrying features/settleme	ents".						
	Q50 Overall Evaluation Moderate "A relatively small aspect containing a diverse range of vegetation cover and land use, small scale residential settlements that have had additional cul-de-sac development/expansion are at odds with the existing settlement pattern however of limited impact on the overall aspect".										
Judgement on Landscape Sensitivity	By combining the separat	e judgemen	ts on landscape susceptibility and	I landscape value, the sensitivity of this	landscape is judged to be medium .						
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape	Scale of effect										
Change (see Tables 1.6 -1A.8 within Appendix 6-1:	During construction there will be distant views (5-12km to the south-east) towards the upper parts of cranes that will feature on the skyline. The scale of landscape change to perceptual character at construction is judged to be small .										
LVIA and CLVIA Methodology)	During operation, there will be distant views of turbines from upland locations. The proposed wind farm will be seen as a distant element 5-12km to the south-east. The Garn Fach Wind Farm will add a new feature to the skyline (although the dark skies will be unaffected as aviation lighting is not required). At this distance, the key characteristics and character of this landscape unit will be unaffected while there will be only a small change to visual and sensory characteristics from areas up to about 7km from the turbines. The presence of the Garn Fach turbines will increase the presence of modern human development seen from the landscape affecting the rurality of the landscape. However, the small-scale undulating landform, small to medium irregular field pattern, historic mining relics, intervisibility with surrounding landscapes, and remoteness / dark skies in areas away from populations will continue to give the area its distinctive character.										
	Geographical extent										

³¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

³² Drawing from information within LANDMAP aspect area survey(s) and site visits.

The landscape unit covers an area of approximately 15km². The ZTV indicates that parts of the unit will not be affected by any visibility. Visibility from the area that lies within 7km of the turbines (and likely to experience a small change to perceptual character) is only about 2km² i,e. a **small** geographical extent.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a small geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation,

	During Construction									
Barely perceptible	Low	Low Low - Medium Medium - High High Very High								
	During Operation									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.							
			During Co	onstruction					
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
		During Operation							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The existing Bryn Blaen Hill Wind Farm (6 turbines at 100m tip height) is located approximately 5km to the south-west of the landscape unit. Carno I (56 turbines at 54m tip height) and Carno II (12 turbines at 80m tip height) are located 6km and 9km to the north-west of the landscape unit, respectively; however, intervening landform restricts views towards these developments from areas within the landscape unit. Llandinam Repowering (consented) is located approximately 4km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind farms listed above. The proposed development of Carno II (13 turbines at 149.9m tip height), which will form an extension to the south of Carno I Wind Farm, is located approximately 5km north-west of the landscape unit. However, intervening landform will largely restrict views of it from within the landscape unit. The Project. will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional** cumulative effects over and above those set out in the LVIA above.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Improved upland, betwee	mproved upland, between Wye & Ithon (RDNRVS124)								
Location				ographically separate from each other. km south-west of the nearest Garn Fac						
Summary Description of VSAA (taken from Q3 of VSAA Survey)				ye and the Ithon valleys. Upland platea oclosed by fences often look unnatural						
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ³³ (Summary descriptions taken from their	Historic Landscape aspect area (HLAA): Bwlch-y-Sarnau (RDNRHL9750) "Extensive and remote area of 19th-century upland commons to the east of the Marteg valley. Early prehistoric settlement and land use suggested by scattered earlier prehistoric hilltop burial mounds. Medieval and early post-medieval activity suggested by scattered abandoned house platforms and house sites. Small post-medieval roadside nucleated settlement at Bwlch-y-sarnau. Scattered farmsteads of possibly later medieval and post-medieval origin."									
respective LANDMAP surveys)	Cultural Landscape aspect (CLAA):	area L	Jplands & Lowlands (RDNF	RCL007)" The Aspect Area contains ex	tensive upland and lowland landscape	areas that demonstrate the evolution				
Description of Landscape Unit ³⁴ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)										
	Q50 Overall Evaluation	Moderate	ate "Not very distinct character". ate "Intrinsically higher landscape value has been degraded by insensitive intensive farming with conversion of rough grassland/moorland areas to improved grassland fields by drainage, enlargement and reseeding, plus fencing - resulting in disturbed messy rather barren unattractive landscape".							
Judgement on Landscape Sensitivity	By combining the separate	judgements	on landscape susceptibility a	and landscape value, the sensitivity of t	his landscape is judged to be medium	l.				
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	distance, the key character During operation, indirect e unaffected as aviation light characteristics and charact	istics and cha effects will aris ing is not requer of this land	aracter of this landscape unit se as a result of the 17 turbir uired). The proposed wind fa dscape unit will be unaffected	bines being constructed within nearby twill be unaffected while there will be ones being introduced within nearby land arm will be seen as a relatively distant of while there will be only a small chang yelopment seen from the landscape aff	nly a small change to visual and sens Iscape units. The Garn Fach Wind Far Element in views from elevated parts or the to visual and sensory characteristics	ory characteristics. m will add a new feature to the skylii f the unit between 5-11km to the nor s from areas up to about 7km from th	ne (although the dark skies will be h-east. At this distance, the key le turbines. The presence of the			

³³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

³⁴ Drawing from a combination of LANDMAP aspect area survey(s) and site visits.

Appendix 6: Landscape and Visual Assessment

grassland landcover, early prehistoric settlement indicated by hilltop burial mounds, intervisibility with surrounding lower-lying valley landscapes and remoteness / dark skies in areas away from populations will continue to give the area its distinctive character. The existing Bryn Titli Wind Farm will have a greater influence on this area than the proposed Garn Fach turbines.

Geographical extent

The landscape unit covers an area of approximately 15km². The ZTV indicates that visibility will be patchy across the unit, with many parts of the unit not affected by any visibility. Visibility from the area that lies within 7km of the turbines (and likely to experience a small change to perceptual character) is only about 2.7km² i,e. a **small** geographical extent.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

The small scale of effect over a small geographical area (over a long term) is judged to result in an overall **low** magnitude of change to this landscape unit. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is judged to be the same as at operation, .

During Construction								
Barely perceptible	otible Low Low – Medium Medium - High High Very High							
			During Operation					
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		

Overall Level of Effect and Significance	A medium sensitivity combined with	a low magnitude is judged to result i	n a minor-moderate effect.						
		During Construction							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
	During Operation								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. The existing Bryn Titli Wind Farm (13 turbines at 54m tip height) is located less than 500m to the south-west of the northern part of the landscape unit and Bryn Blaen Hill Wind Farm (6 turbines at 100m tip height) is located approximately 5km to the north-west. Llandinam Repowering (consented) is located approximately 4.8km to the north-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a small scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Landscape Units (5-10km)

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Wye Valley (MNTGMVS	907)					
Location	Approximately 6.3km wes	st of the neare	est Garn Fach turbine.				
Summary Description of VSAA					enclose much of the aspect with the valle		
(taken from Q3 of VSAA Survey)					ale regular field patterns dominate the va scrubThe eastern valley is of a wider m		
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ³⁵	Not applicable as other L	ANDMAP asp	ect areas fall outside of the study	areas considered for the aspect la	ayers.		
(Summary descriptions taken from their respective LANDMAP surveys)							
Description of Landscape Unit ³⁶	■ Limited intervisibility	with surround	ing landscapes as views are cont	ained by steep valley sides and fo	cused along the valley floor.		
(based on the criteria for determining susceptibility to wind energy development –	An attractive valley la	andscape whic	ch experiences dark skies in area	s away from Llanidloes and Llangu	ırig.		
see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)		_	part by the constant traffic flow o	f the A44 and A470.			
CEVIA Methodology)	Bryn Titli Wind Farm		•				
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)				ue to the indicators of lower susce ceptibility (attractiveness and dark	ptibility (limited intervisibility, human influe skies).	ence from busy roads and presenc	e of existing wind energy
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)		ity is reduced			alue (with public rights of way running throwelopment close by). Although it is recorded		
	The following table sets of	ut the scenic	quality, character and overall eva	luation taken from the LANDMAP	VSAA survey:		
	Evaluation Criteria	Score	Justification				
	Q46 Scenic quality	High	"Attractive valley landscape."				
	Q48 Character	Moderate	Not provided.				
	Q50 Overall Evaluation	Moderate	"Displays a wide range of land me the A44 (T) and some small scale	anagement practices and vegetation co afforestation out of keeping with the la	over that is of high quality and representative of andform on upper slopes and the brooding pres	the Study Area, but is degraded in so sence of the Bryn Titli Wind Farm."	me part by the constant traffic flow of
Judgement on Landscape Sensitivity	By combining the separa	te judgements	s on landscape susceptibility and	andscape value, the sensitivity of	this landscape is judged to be low - medi	um.	
	Low		Low - Medium	Medium	Medium - High	High	Very High
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1:) towards the upper parts of cranes sides and focused along the valle	s on the skyline in upland locations. The s / floor.	cale of effect to the character of th	ne landscape at construction is
LVIA and CLVIA Methodology)		the east. At	this distance, the scale of effect to		nes also visible from along the valley floor octer of this landscape is judged to be bar		
	Geographical extent						
		le of effect is j	judged to be barely perceptible.				
	Duration/reversibility During construction chan	ges to the land	dscape character would be short	-term (up to 5 years) and reversi t	ile		
		_	•	` ' '	rsible as the turbines will be dismantled a	and removed from the Site once the	ne operational period has ceased.
	Overall Judgement on I	•		, , , , ,			
	As the scale of effect is b	arely percepti	ble, so is the overall magnitude o	f change, both at construction and	during operation.		

³⁶ Refer to Appendix 63E: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

³⁶ Drawing from information within LANDMAP aspect area survey(s) and site visits.

			During C	construction						
	Barely perceptible	Low	Low – Medium Me	edium Medium - Hi	gh High	Very High				
			During	Operation						
	Barely perceptible	Low	Low – Medium Me	edium Medium - Hi	gh High	Very High				
	,	<u>, </u>	<u>, </u>	,	<u></u>	,				
Overall Level of Effect and Significance	A low-medium sensitivity combine	A low-medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.								
			During C	construction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
			During	Operation	,					
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby development of Bryn Titli (13 turbines at 54m tip height), as well as Bryn Blaen (7 turbines at 100m tip height). Llandinam Repowering (consented) is located approximately 5km to the north-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Upland moor, Beacon H	lill & Gors Ly	dan (RDNRVS110)							
Location	Approximately 6.6km eas	t of the neare	st Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Two areas in north east	of county, bet	ween Wye and Teme valleys. Rela	tively gentle slopes. Line of wild,	exposed upland hills, with smooth & round	ed profile and semi-natural rough	moorland landcover."			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ³⁷ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other L	ANDMAP asp	ect areas fall outside of the study a	areas considered for the aspect la	ayers.					
Description of Landscape Unit ³⁸	Strong intervisibility v	vith surroundir	ng landscapes with attractive long v	views to and from surrounding ru	ral areas.					
(based on the criteria for determining	A wild, open and exp	osed upland r	noor landscape which experiences	dark skies.						
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	Strong sense of trans	quility due to tl	ne landscape's remoteness from hi	uman activity or development.						
CLVIA Methodology)	Turbines at Garreg L	wyd Hill Wind	Farm punctuate the skyline to the	north-west.						
	Representative view	from this land	scape unit is illustrated by Viewpo	int 15.						
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)					f indicators of higher susceptibility (strong i lity (presence of existing wind energy gene		dscape with minimal human			
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)		-	-	-	IAP as having high scenic quality, has some sense of rurality and tranquillity (although	, ,				
	The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:									
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	High	"High scenic quality due to attra	active wild moorland hills with dis	tinctive rounded topography clothed in dive	rse semi- natural vegetation mos	aic"			
	Q48 Character	Moderate	"Not very distinctive"							
	Q50 Overall Evaluation	High	"Good example of wild, open, s	pacious, natural, diverse, tranqui	il upland moorland which is generally well n	nanaged"				
Judgement on Landscape Sensitivity	By combining the separa	te judgements	on landscape susceptibility and la	ndscape value, the sensitivity of	this landscape is judged to be high .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	landscape including its re During operation, there w	moteness fror ill be distant v	n human activity is judged to be b iews of turbines from west facing h	arely perceptible at this distance are are are are are are are are are ar	yline from west facing hillsides and hill sum e. pposed wind farm will be seen as a distant <u>e</u> at this distance. The existing Garreg Lwy	element 7-15km to the west. The	scale of effect on the fundamental			
	proposed Garn Fach turb	ines will.								
	Geographical extent									
		le of effect is j	udged to be barely perceptible.							
	Duration/reversibility	gos to the less	dscape character would be short-t	orm (up to 5 years) and reversit	nio.					
	During construction chan	yes to the land	uscape character would be snort-t	erm (up to 5 years) and reversit	JIE.					

³⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

³⁸ Drawing from information within LANDMAP aspect area survey(s) and site visits.

	During operation the changes to the	ne landscape character would be lor	ng-term (beyond 10 years) and revers	sible as the turbines will be dismant	ed and removed from the Site once the c	perational period has ceased.
	Overall Judgement on Magnitud	e of Landscape Change				
	As the scale of effect is barely per	ceptible, so is the overall magnitude	of change, both at construction and d	uring operation.		
			During C	onstruction		
	Barely perceptible	Low	Low – Medium Me	dium Medium - F	ligh High	Very High
		,	,	-		-
	Barely perceptible	Low	Low - Medium Me	dium Medium - H	ligh High	Very High
					<u> </u>	1
Overall Level of Effect and Significance	A high sensitivity combined with a	barely perceptible magnitude is judo	ged to result in a negligible effect.			
			During C	onstruction		
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
			During	Operation		
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby development of Garreg Lwyd Hill (17 turbines at 126.5m tip height). Llandinam Repowering (consented) is located approximately 8.3km to the north-west of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The landscape unit will mostly be affected by visibility of the Garreg Lwyd Hill Wind Farm, as well as the proposed nearby development of Bryngydfa (12 turbines at 126.5m tip height) which will be seen as an extension to Garreg Lwyd Hill. The Project will not result in a perceptible *additional* change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area	Moorland, east of Ithon (RDNI	RVS117)								
(VSAA) of LANDMAP)	Moonand, east of Ithon (INDIN	(45117)								
Location	Approximately 7.1km south-eas	t of the nearest Gar	n Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Six areas of fairly flat land. Min There is an increase in gorse ar				ith a mosaic of semi-natural rough mo	oorland, grassland, wetland, scrub &	bracken, mainly common land.			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ³⁹	Not applicable as other LANDM	AP aspect areas fa	Il outside of the study are	eas considered for the aspect laye	ers.					
(Summary descriptions taken from their respective LANDMAP surveys)										
Description of Landscape Unit ⁴⁰	Some intervisibility with sur	rounding landscape	es, but often limited by lo	cal undulations.						
(based on the criteria for determining	An attractive, open and wild									
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	A rural landscape with a str		•							
CLVIA Methodology)		-		I backdrop to surrounding settlem	ents.					
	Representative view from the	nis landscape unit is	s illustrated by Viewpoin	t 14.						
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1			to the presence of a number of ir ators of lower susceptibility (limita	ndicators of higher susceptibility (attractions to intervisibility).	ctive views, wild and tranquil landsca	ape with minimal human influence,			
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	through it and being mostly des	cape unit is judged to be of medium value as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality, has some recreational value (with public rights of way running and being mostly designated as open access land) and a sense of rurality (although tranquillity is slightly reduced by minor disturbance around the settlement of Penybont). In table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:								
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Moderate	"moderately attractiv	e hilly landscape with reasonable	diversity"					
	Q48 Character	Moderate	"nothing striking nor	visually intrusive- but overall sligh	tly degraded by overgrazing"					
	Q50 Overall Evaluation	Moderate	"pleasant moderately	y attractive open commons with fa	ir diversity, integrity""					
Judgement on Landscape Sensitivity	By combining the separate judg	ements on landsca	pe susceptibility and land	dscape value, the sensitivity of this	s landscape is judged to be medium-	high.				
	Low	Low	- Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape	Scale of effect	·								
Change (see Tables 1.6 - 1.8 within Appendix 6-1:				parts of cranes on the skyline from nce is judged to be barely percep	n north-west facing slopes and hill sun ptible at this distance.	nmits. The scale of effect on the fund	damental character of the			
LVIA and CLVIA Methodology)	1				es and hill summits. The proposed wi d limited human influence is judged to					
	Geographical extent									
	Not applicable as the scale of e	ffect is judged to be	barely perceptible.							
	<u>Duration/reversibility</u>									
	During construction changes to	the landscape char	acter would be short-te i	rm (up to 5 years) and reversible						
	During operation the changes to	the landscape cha	racter would be long-te	rm (beyond 10 years) and reversi	ble as the turbines will be dismantled	and removed from the Site once the	e operational period has ceased.			
	Overall Judgement on Magnit	ude of Landscape	Change							

³⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

40 Drawing from information within LANDMAP aspect area survey(s) and site visits.

	As the scale of effect is barely per	ceptible, so is the overall magn	nitude of change, both at cons	truction and du	ring operation.						
				During Co	nstruction						
	Barely perceptible	Low	Low – Medium	Med	lium	Medium - Hi	gh High	Very High			
		<u>'</u>		During C	peration						
	Barely perceptible	Low	Low – Medium	Med	lium	Medium - Hi	gh High	Very High			
							'	1			
Overall Level of Effect and Significance	A medium-high sensitivity combin	A medium-high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.									
				During Co	nstruction						
	Negligible	Minor	Minor - Mo	lerate	Moderate	e (Significant)	Moderate-Major (Significant)	Major (Significant)			
				During C	peration						
	Negligible	Minor	Minor - Mo	lerate	Moderate	e (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Not applicable as there are no existing or consented wind energy developments located within or near to this landscape unit. Llandinam Repowering (consented) is located beyond 10km from the landscape unit.

<u>Scenario B:</u>

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Rolling hills, central sou	th-east (RDN	RVS133)						
Location	Approximately 7km south-	east of the ne	earest Garn Fach turbine.						
Summary Description of VSAA (taken from Q3 of VSAA Survey)	=		·	an distinct hills and valleys, in centre eys with strong pastoral field patterns,	-				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁴¹ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LA	NDMAP aspe	ect areas fall outside of the study	areas considered for the aspect laye	rs.				
Description of Landscape Unit ⁴² (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	A strongly rural landsoThe area experiences	cape with a se dark skies wi	ense of tranquillity away from mainth only slight disturbance around	ews across the traditional pastoral land in roads and settlements. I Llandrindod Wells and Builth Wells. ews out and create a sense of intimat		s and across valleys.			
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)			Iscape unit is judged to be medi t g intervisibility, sense of remoten	um due to a balance of indicators of loess / dark skies).	ower susceptibility (human influence	from activity along the A483 trunk ro	oad and around settlements).and		
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	through it) and a sense of	ndscape unit is judged to be of medium value as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality, has some recreational value (with public rights of way running it) and a sense of rurality (although tranquillity is reduced by human activity and development in the valleys and around larger settlements).							
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality Moderate "pleasant archetypal pastoral farmland with various attractive corners"								
	Q48 Character	Moderate	"not particularly distinct"						
	Q50 Overall Evaluation Moderate "attractive traditional pastoral landscape with strong field pattern, often with well laid hedges typifies Radnor - and results in overall moderate values as it is not unusual or particularly distinctive"								
Judgement on Landscape Sensitivity	By combining the separate	judgements	on landscape susceptibility and I	andscape value, the sensitivity of this	s landscape is judged to be medium.				
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	including its rurality and st During operation, there wil	rong sense of Il be limited vi	tranquillity is judged to be barel ews of turbines from upland loca	tions and hill summits. The proposed	wind farm will be seen as a distant e		·		
	Geographical extent Not applicable as the scale Duration/reversibility During construction chang	e of effect is ju	udged to be barely perceptible. Iscape character would be short	sense of tranquillity is judged to be ba -term (up to 5 years) and reversible. once the operational period has ceas	During operation the changes to the	landscape character would be long	ı -term (beyond 10 years) and		

⁴¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁴² Drawing from information within LANDMAP aspect area survey(s) and site visits.

	Overall Judgement on Magnitud	e of Landscape Chang	<u>16</u>									
	As the scale of effect is barely per	ceptible, so is the magn	itude of change, both at construction	and operation.								
		During Construction										
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	Very High						
				During Operation								
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	Very High						
						·						
Overall Level of Effect and Significance	A medium sensitivity combined wi	th a barely perceptible n	nagnitude is judged to result in a ne g	ligible effect.								

	During Construction							
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
		During O	peration					
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind farms located within or close to this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby development of Hendy Wind Farm (7 turbines at 110m tip height) which is under-construction. Llandinam Repowering (consented) is located approximately 9.8km to the north-west of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above** those set out in the LVIA above.

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Stepaside (MNTGMVS465)									
Location	Approximately 7.6km north-e	ast of the near	est Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Dispersed outlier settlement traditional building materials.		o centre and amenities Re	latively modern development, unifo	rm generally single storey and bungalo	w development with little reference	to local vernacular detailing or			
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁴³ (Summary descriptions taken from their	Not applicable as other LAN	DMAP aspect a	reas fall outside of the study	areas considered for the aspect la	/ers.					
respective LANDMAP surveys) Description of Landscape Unit ⁴⁴ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	 Topography and woodla A small-scale, intimate la A rural landscape with a Sense of tranquillity is de Views across the valley 	andscape on the strong sense o egraded in part	e valley sides of the Mochdre f enclosure and which exper by the proximity to Newtown	e Brook. iences some dark skies in areas aw	vay from Newtown.					
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	-	of this landscap	pe unit is judged to be mediu		f lower susceptibility (limited intervisibili	ity, presence of human developmen	t around Newtown) and indicators of			
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	National Cycle Network route	is landscape unit is judged to be of medium value as although it is not designated and is recorded in LANDMAP as having low scenic quality, it does have some recreational value (provided by a sectional Cycle Network route 81 which runs through the village) and some sense of rurality (although tranquillity is reduced by human activity and development in the village and further afield towards Ne e following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:								
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Low	"N/A"							
	Q48 Character	Low	"N/A"							
	Q50 Overall Evaluation	Moderate	"Unremarkable settleme	nt with no distinct focus but no spec	ific detractors""					
Judgement on Landscape Sensitivity	By combining the separate ju	udgements on la	andscape susceptibility and I	andscape value, the sensitivity of the	nis landscape is judged to be medium .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	across the valley is judged to 8km to the south-east. The single Geographical extent Not applicable as the scale of Duration/reversibility During construction changes these will be comparable to the	be barely percent of effect is judged to the landscape he operational of the landscape of t	ceptible at this distance. Due the fundamental character of the barely perceptible. The character would be short effects. The character would be long	ring operation, there will be limited of the landscape including its ruralited in the landscape including its ruralited. -term (up to 5 years) and reversible	e scale of effect on the fundamental cheviews of turbines from across the lands by and the undeveloped views across the lands. e. Although there will be the presence sible as the turbines will be dismantled.	scape unit. The proposed wind farm ne valley is judged to be barely per of partially constructed turbines thro	will be seen as a distant element 7-ceptible at this distance. bughout the construction period,			

⁴³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁴⁴ Drawing from information within LANDMAP aspect area survey(s) and site visits.

	During Construction										
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High					
	During Operation										
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High					

	Overall Level of Effect and Significance	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.						
				During Co	nstruction			
		Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)	
				During Operation				
		Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)	

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. Llandinam Repowering (consented) is located approximately 5km to the south-west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Mountain plateau with wind	Mountain plateau with windfarm (RDNRVS102)							
Location	Approximately 7.9km south-v	roximately 7.9km south-west of the nearest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)		e area, to east of Wye Valley in north of county. Mainly open, with parts comprising large regular fields. Windfarm, which can be glimpsed from main road in valley below, is spread along top. Exposed open rian Mountain with generally smooth profile above 350m & steep edges with semi-natural rough moorland and grassland cover."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁴⁵	Not applicable as other LANI	DMAP aspect a	reas fall outside of the stud	ly areas considered for the aspect laye	ers.				
(Summary descriptions taken from their respective LANDMAP surveys)									
Description of Landscape Unit ⁴⁶	 An open and exposed up 	An open and exposed upland landscape with attractive long views in most directions from the hill tops.							
(based on the criteria for determining	■ The smooth hills provide an attractive, undeveloped backdrop to surrounding landscapes.								
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	Generally unsettled with	little man-made	influence except for turbin	nes associated with the Bryn Titli Wind	Farm which form features on the skylin	e.			
CLVIA Methodology)	The area has a sense of	remoteness fro	m populations and dark sk	ies, although is affected by the presen	ce of the existing wind farm.				
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	andscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (large scale landscape, presence of existing wind energy generation) and indicators of susceptibility (visible skylines/ inter-visibility, sense of remoteness/ dark skies).							
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	through it and being mostly d	lesignated as o	pen access land) and a ser		MAP as having moderate scenic quality, educed by the existing wind energy dev		h public rights of way running		
	Evaluation Criteria	ion Criteria Score Justification							
	Q46 Scenic quality	Moderate	"Mix of recent enclosures and windfarm detract"						
	Q48 Character	Moderate	"Mountain scenery but not distinctly different"						
	Q50 Overall Evaluation	Moderate	"Attractive but not of particular landscape merit"						
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium .								
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape	Scale of effect	•							
Change (see Tables 1.6 - 1.8 within Appendix 6-1:	During construction there will be very distant views (8-11km) towards the upper parts of cranes on the skyline from north-east facing slopes and hill summits. The scale of effect on the fundamental character of the landscape including its little man-made influence is judged to be barely perceptible at this distance.								
LVIA and CLVIA Methodology)	During operation, there will be limited views of turbines from north-east facing slopes and hill summits. The proposed wind farm will be seen as a distant element 8-11km to the north-east. The scale of effect on the fundamental character of the landscape including its little man-made influence is judged to be barely perceptible at this distance. The existing Bryn Titli Wind Farm will has a greater influence on this area than the proposed Garn Fach turbines will.								
	Geographical extent								
	Not applicable as the scale of	f effect is judge	d to be barely perceptible.						
	Duration/reversibility								
	During construction changes these will be comparable to t			rt-term (up to 5 years) and reversible	. Although there will be the presence of	partially constructed turbines thro	oughout the construction period,		
	During operation the change	s to the landsca	pe character would be lon	g-term (beyond 10 years) and reversi	ble as the turbines will be dismantled a	nd removed from the Site once the	ne operational period has ceased		

⁴⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁴⁶ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Overall Judgement on Magnitude of Landscape Change As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation. **During Construction Barely perceptible** Low Low - Medium Medium Medium - High High Very High **During Operation Barely perceptible** Low Low - Medium Medium Medium - High High Very High

Overall Level of Effect and Significance	evel of Effect and Significance A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect						
			During Co	nstruction			
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)	
	During Operation						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)	

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Bryn Titli Wind Farm (13 turbines at 54m tip height) is located within this landscape unit. Llandinam Repowering (consented) is located approximately 8.1km to the north-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Newtown (MNTGMVS54	11)							
Location	Approximately 8.1km nor	th-east of the i	nearest Garn Fach turbine.						
Summary Description of VSAA (taken from Q3 of VSAA Survey)	development within Mont surrounding it this area re (Mochdre, St Giles and V	ving market / commercial town lying within the River Severn (Afon Hafren) floodplain, has a close relationship with the river which winds through the centre of town The principal commercial and business elopment within Montgomeryshire, Newtown also serves as an administrative centre The core of the older development is concentrated around the main river crossing, Broad Street and a tight network of streets bunding it this area retains much of the original market town character New developments surround the outskirts with light industrial development predominating on the southern, northern and eastern approaches where the character of the contracter of the centre of the town is bypassed leaving the casual visitor with little idea of the character of the centre of town In gration as a new town and subsequent 60's/70's development has degraded the original market town character."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁴⁷ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other L	ANDMAP asp	ect areas fall outside of the study a	areas considered for the aspect l	ayers.				
Description of Landscape Unit ⁴⁸ (based on the criteria for determining susceptibility to wind energy development — see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	One of the main urbaExperiences a limited	Visible skylines of surrounding hills and farmland, which provide an attractive rural backdrop to the town. One of the main urban settlements within Montgomeryshire, which experiences high volumes of trade and tourist traffic. Experiences a limited sense of tranquillity. Modern infill housing and industrial estates detract from the Victorian market town character of the town centre.							
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	I	e landscape susceptibility of this landscape unit is judged to be low due to the presence of a number of indicators of lower susceptibility (prominent and detracting modern development, huma influence throughout, ited tranquillity). In comparison there are only a few indicators of higher susceptibility (visible skylines / intervisibility)							
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of low value as it is not designated, and tranquillity is limited by the presence of modern development and other human influences which detract from the historic character of the town centre. There is some recreational value (provided by a section of the Severn Way national trail which runs through the town). Although it is recorded in LANDMAP as having moderate scenic quality, the overall evaluation is judged to be low. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey								
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality	Moderate	"N/A"						
	Q48 Character	Low	"N/A"						
	Q50 Overall Evaluation	Low	"Original market town character tha	at typifies larger settlements within M	ontgomeryshire has been degraded by bland cha	racterless modern housing and indu	strial developments = Low"		
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be low-medium .								
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be very distant views (8-13km) towards the upper parts of cranes on the skyline. The scale of effect on the fundamental character of the landscape including its visible skylines of surrounding hills and farmland is judged to be barely perceptible at this distance. During operation, there will be limited views of turbines from within the town centre. The proposed wind farm will be seen as a distant element 8-13km to the south-west. The scale of effect on the fundamental character of the landscape including its visible skylines of surrounding hills and farmland is judged to be barely perceptible at this distance. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. Duration/reversibility								
	these will be comparable	to the operation	onal effects.		ble. Although there will be the presence of persible as the turbines will be dismantled ar	•			

⁴⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁴⁸ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Overall Judgement on Magnitude of Landscape Change									
As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation.									
During Construction									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
During Operation									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
	As the scale of effect is judged Barely perceptible	As the scale of effect is judged to be barely perceptible, so is a Barely perceptible Low	As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change Barely perceptible Low Low – Medium	As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and dur During Construction	As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation. During Construction	As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation. During Construction			

Overall Level of Effect and Significance	A low sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.								
	During Construction								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
	During Operation								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind energy developments located within this landscape unit. Llandinam Repowering (consented) is located approximately 5.9km to the south-west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Upper Severn Valley (MNT)	GMVS420)							
Location	Approximately 8.2km north-w	oximately 8.2km north-west of the nearest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	T	ntively steep sided valley complex containing the upper Severn and Trannon rivers. The valley sides are generally well wooded with a well defined network of field patterns running at right angles to the river e. Woodland is a well balanced mixed of broadleaf and deciduous species with oak dominant. Settled and domestic setting acting as a contrast with the upland grazing and open farming of the upper slopes and elywedog reservoir above."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁴⁹ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LANI	oplicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.							
Description of Landscape Unit ⁵⁰ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	The area has a stronglySkylines are generally un	tervisibility limited by intervening landform and vegetation. The area has a strongly rural character with a strong sense of tranquillity and dark skies. The sylines are generally undeveloped and often well-wooded. The properties punctuate skylines to the north (Carno I Wind Farm) and south (Bryn Blaen Wind Farm).							
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	ne landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (limited intervisibility, presence of existing wind energy generation) and indicators of gher susceptibility (undeveloped skylines, sense of remoteness/ dark skies).							
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of high value as although it is not designated (apart from a small area in the south being located within a Registered Landscape of Special Historic interest), it is recorded in LANDMAP as having high scenic quality (although no justification is provided) and has some recreational value (with public rights of way running through it including sections of the Severn Way and Glnydwrs Way long distance trails) and a sense of rurality (although tranquillity is slightly degraded around the settlement edge of Llanidloes and from the presence of nearby wind energy development). The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:								
	Evaluation Criteria Score Justification								
	Q46 Scenic quality	High	"N/A"						
	Q48 Character	High	"N/A"						
	Q50 Overall Evaluation	High	"Well wooded with small scale	well defined field patterns, unus	sual to see a valley complex this well woode	d within the Study Area"			
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium-high .								
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be distant views (9-16km) towards the upper parts of cranes on the skyline from upper valley slopes. The scale of effect to the character of the landscape at construction is judged to be barely perceptible as views are contained by the steep, well wooded valley sides. During operation, there will be some distant views of turbines from upper slopes of the valleys. The proposed wind farm will be seen as a distant element 9-16km to the south-east. At this distance, the scale of effect to the key characteristics and character of this landscape unit is judged to be barely perceptible as views are contained by the steep, well wooded valley sides. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. Duration/reversibility								
	these will be comparable to t			riii (up to 5 years) and reversii	ole. Although there will be the presence of pa	artially constructed turbines thro	oughout the construction period,		

⁴⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁵⁰ Drawing from information within LANDMAP aspect area survey(s) and site visits.

During operation the changes to	the landscape character w	vould be long-term (beyond 10 ye	ars) and reversible as the turbi	nes will be dismantled and remove	ed from the Site once the ope	rational period has ceased	
Overall Judgement on Magnitu	Overall Judgement on Magnitude of Landscape Change						
As the scale of effect is judged to	As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation.						
	During Construction						
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High	
During Operation							
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High	

Overall Level of Effect and Significance	A medium-high sensitivity combined	d with a barely perceptible magnitude	e is judged to result in a negligible ef	fect.				
	During Construction							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		
	During Operation							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no wind farms located within this landscape unit. The area will mostly be affected by visibility of other wind farms, notably the nearby development of Bryn Blaen (6 turbines at 100m tip height). Llandinam Repowering (consented) is located approximately 7.4km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative** effects over and above those set out in the LVIA above.

Scenario B:

The area will mostly be affected by visibility of Bryn Blaen Wind Farm, as well as the proposed nearby development of Carno III (13 turbines at 150m tip height). The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit in combination with other existing, consented and proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Trannon Uplands Bryn Crug	gog (MNTGMV	/S695)							
Location	Approximately 8.7km north-we	est of the near	est Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	patchwork of mixed vegetation and well maintained marginal and has clear views available a strongly vegetated course a upper reaches of open margin	area spreading over the gently rolling hill and scarp slopes that form the upper reaches and valley sides of the Trannon valley complex. The aspect contains an intimate and small scale field pattern with a rich chwork of mixed vegetation cover and well defined hedgerow with hedgerow trees. Small incidental parcels of mixed woodland are also present. Domestic in settlement scale with a scattered rural farmstead pattern well maintained marginal farming landscape. Field pattern is typified by overgrown hedgerows and wire fences and containing a proportion of bracken and gorse scrub. The area is predominantly southerly facing lands clear views available from within the dense field pattern over the surrounding valley bottoms. A number of small winding stream valleys and networks of narrow twisting lanes typify the area, many of which have been trongly vegetated course and in the case of the stream courses often run through the incidental woodland parcels. There is a strong physical and visual contrast between the lower lying and winding lanes and the large reaches of open marginal farmland. Good long distance views from the upper reaches of the aspect area with clear and open views to the south and eaast. Views on the plateau edge are drawn towards the veement of the wind turbines on the Trannon Moors."								
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁵¹	Not applicable as other LAND	applicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.								
(Summary descriptions taken from their respective LANDMAP surveys)										
Description of Landscape Unit ⁵² (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	The absence of modern of the them.There are long and open	Some intervisibility with surrounding landscapes, although outward views are often screened by woodland and topographical variation. The absence of modern development results in a strongly rural character with sense of remoteness and dark skies. There are long and open views south and east from elevated parts of the landscape unit. Carno I and Carno II wind farms on Trannon Moor are prominent on skylines to the north west.								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	The landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (limited intervisibility, presence of existing wind energy generation) and indicators of higher susceptibility (absence of modern development, long uninterrupted views south and east, sense of remoteness / dark skies).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value as it is not designated (apart from a very small part in the east being located within a Registered Landscape of Special Historic Interest) but is recorded in LANDMAP as having high scenic quality, has some recreational value (with public rights of way running through it), and a strong sense of rurality (although tranquillity is slightly reduced by the presence of existing wind energy development close by).									
	The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:									
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	High	"Attractive and intimate scale rural aspect area displaying a number of common attractive and "traditional rural farming characteristics. Views within and to the surroundings areas maintain a high aesthetic appearance"							
	Q48 Character	Moderate "Exhibits a number of common characteristics - topography, stream courses within wooded valleys and scattered farm holdings that all contribute towards a relatively strong sense of place and overall character but not one that is unique within the Study Area"								
	Q50 Overall Evaluation	Moderate	number of common of	pattern that typifies much of mid Montgo characteristics - topography, stream cou verall character but not one that is uniq	urses within wooded valleys and scatte	ered farm holdings that all contribute				
Judgement on Landscape Sensitivity	By combining the separate jud	e separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be medium .								
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	construction is judged to be b	arely percepti ws. The propos	ible as views are generally sed wind farm will be seen	ards the upper parts of cranes on the sk or contained by the rolling topography ar as a distant element 9-15km to the sou	nd woodland cover. During operation, t	here will be limited views of turbine	s from upper south-east facing			

⁵¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁵² Drawing from information within LANDMAP aspect area survey(s) and site visits.

Appendix 6: Landscape and Visual Assessment

The existing Carno I and Carno II wind farms will have a greater influence on this area than the proposed Garn Fach turbines.

Geographical extent

Not applicable as the scale of effect is judged to be barely perceptible.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation.

	During Construction								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
During Operation									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance

A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.

During	Const	ruction

Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
During Operation					
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no wind farms located within this landscape unit. The area will mostly be affected by visibility of other wind farms, notably the nearby development of Carno I (6 turbines at 100m tip height) and Carno II (12 turbines at 80m tip height). Llandinam Repowering (consented) is located approximately 7.4km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The area will mostly be affected by visibility of the Carno I and Carno II wind farms, as well as the proposed nearby development of Carno III (13 turbines at 150m tip height). The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit in combination with other existing, consented and proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Clywedog Upland Grazi	ng (MNTG	6MVS457)						
Location	Approximately 8.7km nor	proximately 8.7km north-west of the nearest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	vegetation cover - margin	al upland	=	ith rock exposure and relict mining	yfi catchments. Slightly bleak and remote ι excavation present adjacent to Dylife. Two ndscape."		=		
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁵³	Not applicable as other L	applicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.							
(Summary descriptions taken from their respective LANDMAP surveys)									
Description of Landscape Unit ⁵⁴	Some intervisibility w	ith surroun	nding landscapes although limited by	topography.					
(based on the criteria for determining	Sparsely settled with	a strong ru	ural character and some sense of re	moteness and dark skies in areas	away from populations.				
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	Skylines are often ma	Skylines are often marked by conifer plantations and are generally undeveloped, with the exception of a transmission mast near Staylittle. There are occasional views of Carno I, Carno II and Bryn Blaen wind farms from parts of the landscape unit.							
CLVIA Methodology)	There are occasional								
	Representative view	Representative view from this landscape unit is illustrated by Viewpoint 19 .							
Judgement on Landscape Susceptibility		he landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (limited intervisibility, presence of existing wind energy generation close by) and indicators							
(see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	of higher susceptibility (u	f higher susceptibility (undeveloped skylines, absence of modern development, sense of remoteness / dark skies).							
Judgement on Landscape Value	This landscape unit is jud	ged to be	of high value as it is mostly within a	Registered Landscape of Special	Historic Interest, is recorded in LANMAP a	s having high scenic quality, has	some recreational value (with public		
(see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	rights of way running thro existing wind energy deve	-		and scattered areas designated as	s open access land), and a strong sense o	f rurality (although tranquillity is sl	ightly reduced by the presence of		
	The following table sets o	ut the scei	nic quality, character and overall eva	aluation taken from the LANDMAP	VSAA survey:				
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality	High	"N/A"						
	Q48 Character	High	"N/A"						
	Q50 Overall Evaluation	High			the development of the landscape charact anoramic views available at points within th		hat makes a positive not negative		
Judgement on Landscape Sensitivity	By combining the separat	te judgeme	ents on landscape susceptibility and	landscape value, the sensitivity of	this landscape is judged to be medium-hi	gh.			
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape	Scale of effect	l .		1					
Change		During construction there will be distant views (9-22km) towards the upper parts of cranes on the skyline. The scale of effect to the character of the landscape at construction is judged to be barely perceptible as views							
(see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	to the south-east. The sc	the south-east. The scale of effect on the fundamental character of the landscape including its rurality is judged to be barely perceptible at this distance. The existing Carno I, Carno II and Bryn Blaen wind farms are greater influence on this area than the proposed Garn Fach turbines will.							
	Geographical extent								
	-	le of effect	is judged to be barely perceptible.						
	Duration/reversibility								

⁵³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁵⁴ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Appendix 6: Landscape and Visual Assessment

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change both at construction and during operation.

During	Construction
Duiling	OUIISH UCHOII

			g			
Barely perceptible	Low Low – Medium		Medium Medium - High		High	Very High
			During Operation			
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High

Overall Level of Effect and Significance

A medium-high sensitivity combined with a barely perceptible magnitude is judged to result in a **negligible** effect.

During Construction

Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
		During C	Operation		
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no wind energy developments located within this landscape unit. The area will mostly be affected by visibility of other wind farms, notably the nearby development of Carno I (6 turbines at 100m tip height), Carno II (12 turbines at 80m tip height) and Bryn Blaen Hill Wind Farm (6 turbines at 100m tip height). Llandinam Repowering (consented) is located approximately 7.7km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a barely perceptible scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The area will mostly be affected by visibility of the Carno I, Carno II and Bryn Blaen Hill wind farms, as well as the proposed nearby development of Carno III (13 turbines at 150m tip height). The Project will not result in a perceptible *additional change* in the character and characteristics of this landscape unit in combination with other existing, consented and proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Wye Valley Uplands (MN	NTGMVS232)								
Location	Approximately 9.1km nort	proximately 9.1km north-west of the nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	trees. Vegetation cover la strong/dramatic views into	area to the upper slopes of the Wye Valley comprising small to medium scale field systems of upland grazing. Weakly enclosed in places by fences and managed hedgerows there is a general absence of mature. Vegetation cover largely rough grazing with marginal upland grazing dominated by bracken and gorse scrub belying the areas proximity to the exposed upland areas of Plynlimon. Open exposed with g/dramatic views into the Wye Valley and over the mosaic farmland of the Upper Severn Valley, strong visual link with Bryn Titli Wind Farm. Two separate single turbines are apparent on the hillsides making the a landscape with very occasional wind turbines."								
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁵⁵ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other L	oplicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.								
Description of Landscape Unit ⁵⁶ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	Generally unsettled w south of Llangurig.Skylines are largely u	nes are largely undeveloped (except for existing wind energy developments) and provide a rural setting to the small settlements and farmsteads in the area. area has a sense of remoteness from populations and dark skies, although is affected by the constant traffic flow of the A44 and A470 trunk roads which pass through Lllangurig and the presence of existing								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		ne landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (disturbance from busy roads, presence of existing wind energy generation) and indicators higher susceptibility (strong intervisibility, undeveloped skylines, some dark skies).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	(with public rights of way corridor running through i	running through t and the preser	it including part of the Wye Nace of existing wind energy d	not designated, is recorded in LANDM Valley Walk national trail and areas des evelopment). valuation taken from the LANDMAP VS	signated as open access land), and a s		,			
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Moderate	"N/A"							
	Q48 Character	Moderate	"N/A"							
	Q50 Overall Evaluation	Moderate	"Upland grazing with an u Area"	nusual small scale field pattern and wid	de variety of vegetation cover in a rela	tively small area and is typical of th	e upper reaches of the Study			
Judgement on Landscape Sensitivity	By combining the separat	e judgements o	n landscape susceptibility an	d landscape value, the sensitivity of thi	is landscape is judged to be medium .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	man-made influence is jud 16km to the south-east. T	le of effect ing construction there will be distant views (9-16km) towards the upper parts of cranes on the skyline from upper valley slopes. The scale of effect on the fundamental character of the landscape including its little n-made influence is judged to be barely perceptible at this distance. During operation, there will be limited views of turbines from upper valley slopes. The proposed wind farm will be seen as a distant element 9-m to the south-east. The scale of effect on the fundamental character of the landscape including its little man-made influence is judged to be barely perceptible at this distance. The existing Bryn Blaen and Bryn wind farms have a greater influence on this area than the proposed Garn Fach turbines will.								
		le of effect is jud	lged to be barely perceptible							

⁵⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁵⁶ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Duration/reversibility

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change both at construction and during operation.

D	0 4 4!	
Durina	Construction	

			<u> </u>			
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High
			During Operation			
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High

Overall Level of Effect and Significance

A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.

During Construction

		During Co	onstruction		
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
		During C	Operation		
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Bryn Blaen Wind Farm (6 tubines at 100m tip height) is located within this landscape unit. The area is also affected by visibility of existing wind farms outside the landscape unit, notably the nearby Bryn Titli Wind Farm (22 turbines at 53.5m tip height). Llandinam Repowering (consented) is located approximately 8.1km to the east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Tregynon Rolling Hills (MN	TGMVS899)						
Location	Approximately 9.3km north-6	pproximately 9.3km north-east of the nearest Garn Fach turbine.							
Summary Description of VSAA (taken from Q3 of VSAA Survey)	views are limited / insignifica	n extensive area of rolling hillsides and pasture land with gently sloping sides and rounded tops. Views across the area are generally from a succession of rolling ridges and due to the size of the area long distance was are limited / insignificant to far distant ridgelines of upland areas. Sense of place is settled, safe and relatively intimate. Vegetation is predominantly Oak/mixed broadleaf woodland patched with a strong field ttern defined by hedgerows. General landscape character is defined strongly by the rolling farmed landscape with traditional farming techniques common ie hedge laying and few intensive farming practices aployed."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁵⁷ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LAN	ot applicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.							
Description of Landscape Unit ⁵⁸ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	 A strongly rural landscap Sparsely settled with lim Skylines are undevelope 	Limited intervisibility with adjacent landscape units due to the rolling topography. There are occasional long views out to distant hills. A strongly rural landscape with sense of remoteness and dark skies. Sparsely settled with limited intrusion by modern development, apart from the settlement edge of Newtown. Skylines are undeveloped and often marked by woodland. Representative view from this landscape unit is illustrated by Viewpoint 18.							
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		ne landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (undeveloped skylines, limited modern development, sense of remoteness/ark skies). In comparison there are only a few indicators of lower susceptibility (limited intervisibility, human influence around Newtown).							
Judgement on Landscape Value (see Table 1.5 within Appendix 61A: LVIA and CLVIA Methodology)	rights of way running through	it including	part of the Severn Way long of	~	MAP as having high scenic quality (althours) as having high scenic quality (although tranquillity is slightly recovery).		· · · · · · · · · · · · · · · · · · ·		
	Evaluation Criteria	Score	Justification						
	Q46 Scenic quality	High	"N/A"						
	Q48 Character	High	"N/A"						
	Q50 Overall Evaluation	High	"An extensive area of well- modern development = Hig		pe, high aesthetic qualities with well-de	fined field boundaries and wooded	areas and limited intrusion by		
Judgement on Landscape Sensitivity	By combining the separate ju	ıdgements c	on landscape susceptibility and	I landscape value, the sensitivity of	f this landscape is judged to be high .				
	Low		Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be distant views (9-21km) towards the upper parts of cranes on the skyline from elevated ridges and hill summits. The scale of effect to the character of the landscape at construction is judged to be barely perceptible as a result of the rolling topography and large scale of the landscape. During operation, there will be limited distant views of turbines from hill summits and upper slopes, where vegetation allows. The proposed wind farm will be seen as a distant element 9-21km to the south. The scale of effect on the fundamental character of the landscape including its rurality and limited intrusion by modern development is judged to be barely perceptible at this distance. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. Duration/reversibility								
	these will be comparable to t	he operatior	nal effects.		ble. Although there will be the presence				
	During operation the change	s to the land	scape character would be ion	g-term (beyond 10 years) and rev	ersible as the turbines will be dismantle	eu anu removeu irom the Site once	ше орегацопаг регоо nas ceased		

⁵⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁵⁸ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Overall Judgement on Magnitude of Landscape Change As the scale of effect is barely perceptible, so is the overall magnitude of change both at construction and during operation. **During Construction Barely perceptible** Low Low - Medium Medium Medium - High High Very High **During Operation Barely perceptible** Low Low - Medium Medium Medium - High Very High High

Overall Level of Effect and Significance	A high sensitivity combined with a b	high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect								
			During Co	nstruction						
	Negligible	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								
		During Operation								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no wind energy developments within this landscape unit. The area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby Mynydd Clogau Wind Farm (17 turbines at 66m tip height). Llandinam Repowering (consented) is located approximately 6.4km to the south-west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit

Appendix 6: Landscape and Visual Assessment

Kerry Ridgeway Woodland	(MNTGMVS31	6)						
Approximately 9.6km north-e	ast of the neare	st Garn Fach turbine.						
	lominated by large coniferous plantations with isolated expanses of upland grazing. Broad expanse of rolling uplands and peaks to the south and infrequent human traffic lends the area a remote and isolated ter. In unwooded areas open skies dominate. The plantations are on the skyline in places. Significant felling has been carried out and some is very apparent on the skyline with abrupt edges."							
Not applicable as other LANI	applicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.							
surrounding landscapes. A remote and isolated up	emote and isolated upland landscape with little disturbance and a strong sense of wilderness, remoteness and dark skies.							
	andscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (undeveloped skylines, limited modern development, strong sense of eness/ dark skies). In comparison there are very few indicators of lower susceptibility (limited intervisibility).							
This landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality (although no justification is provided), has some recreational value (with public rights of way running through it including the Kerry Ridgeway long distance footpath and around half of the landscape unit being designated open access public forest), and a strong sense rurality. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:								
Evaluation Criteria	Score	Justification						
Q46 Scenic quality	Moderate	"N/A"						
Q48 Character	Low	"N/A"						
Q50 Overall Evaluation	Moderate	"Within the area the scer	ic quality is of limited interest howev	er the borrowed views from the adjac	cent rolling upland benefit the area as	s a whole"		
By combining the separate ju	dgements on la	ndscape susceptibility and I	andscape value, the sensitivity of thi	s landscape is judged to be medium	-high.			
Low		Low - Medium	Medium	Medium - High	High	Very High		
to be barely perceptible as views will largely be screened and wilderness is judged to be Geographical extent Not applicable as the scale of Duration/reversibility During construction changes these will be comparable to the	views are larged by vegetation the barely percent of effect is judged to the landscaphe operational of	y contained by the extensive The proposed wind farm wi ptible at this distance. d to be barely perceptible. e character would be short- effects.	e confer plantation coverage within the libe seen as a distant element 10-15 element to 5 years) and reversible	nis landscape unit. During operation, to the west. The scale of effect on the west. The scale of effect on the west. The scale of effect on the west.	there will be some limited views of to n the fundamental character of the la of partially constructed turbines thro	urbines from upper slopes, although andscape including its remoteness ughout the construction period,		
	Approximately 9.6km north-e "Area dominated by large concharacter. In unwooded area Not applicable as other LANE Limited intervisibility with surrounding landscapes. A remote and isolated up Skylines are undevelope The landscape susceptibility remoteness/ dark skies). In concentration of the following table sets out to the following table sets	Approximately 9.6km north-east of the neare "Area dominated by large coniferous plantatic character. In unwooded areas open skies do Not applicable as other LANDMAP aspect and Intervisibility with surrounding land surrounding landscapes. A remote and isolated upland landscape Skylines are undeveloped and provide and The landscape susceptibility of this landscape remoteness/ dark skies). In comparison there This landscape unit is judged to be of medicular (with public rights of way running through it in the following table sets out the scenic quality Evaluation Criteria Score Q46 Scenic quality Moderate Q48 Character Low Q50 Overall Evaluation Low Scale of effect During construction there will be very distant to be barely perceptible as views are largel views will largely be screened by vegetation. and wilderness is judged to be barely perce Geographical extent Not applicable as the scale of effect is judged Duration/reversibility During construction changes to the landscap these will be comparable to the operational extent.	Not applicable as other LANDMAP aspect areas fall outside of the study Limited intervisibility with surrounding landscapes due to extensive of surrounding landscapes. A remote and isolated upland landscape with little disturbance and a Skylines are undeveloped and provide a wooded backdrop to the surroundeness/ dark skies). In comparison there are very few indicators of left in the public rights of way running through it including the Kerry Ridgeway. The following table sets out the scenic quality, character and overall evaluation Criteria Q46 Scenic quality Moderate Within the area the scenic quality and left in the work of effect. By combining the separate judgements on landscape susceptibility and left in the barely perceptible as views are largely contained by the extensive views will largely be screened by vegetation. The proposed wind farm with and wilderness is judged to be barely perceptible at this distance. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. During construction changes to the landscape character would be short-these will be comparable to the operational effects.	Approximately 9.6km north-east of the nearest Garn Fach turbine. "Area dominated by large coniferous plantations with isolated expanses of upland grazing. Broad expanse of character. In unwooded areas open skies dominate. The plantations are on the skyline in places. Significant is places. Significant is unwooded areas open skies dominate. The plantations are on the skyline in places. Significant is unwooded areas open skies dominate. The plantations are on the skyline in places. Significant is unwooded areas of the study areas considered for the aspect layer. In the landscape as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layer. It is unrounding landscapes. In the landscape are undeveloped and provide a wooded backdrop to the surrounding area. The landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of it remoteness/ dark skies). In comparison there are very few indicators of lower susceptibility (limited intervisible with public rights of way running through it including the Kerry Ridgeway long distance footpath and around in the following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP visible. Evaluation Criteria Score Justification Q46 Scenic quality Moderate "Within the area the scenic quality is of limited interest however the scenic quality in the separate judgements on landscape susceptibility and landscape value, the sensitivity of this Low Low-Medium Medium Scale of effect During construction there will be very distant glimpsed views (10-15km) towards the upper parts of cranes on to be barely perceptible as views are largely contained by the extensive confer plantation coverage within it views will largely be screened by vegetation. The proposed wind farm will be seen as a distant element 10-18 and wilderness is judged to be barely perceptible at this distance. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. Durati	Approximately 9.6km north-east of the nearest Gam Fach turbine. **Area dominated by large conferous plantations with isolated expanses of upland grazing. Broad expanse of rolling uplands and peaks to the soun character. In unwooded areas open skies dominate. The plantations are on the skyline in places. Significant felling has been carried out and some character. In unwooded areas open skies dominate. The plantations are on the skyline in places. Significant felling has been carried out and some character. In unwooded areas open skies dominate. The plantations are on the skyline in places. Significant felling has been carried out and some character. In unwooded by the standard plantation is surrounding landscapes. Limited intervisibility with surrounding landscapes due to extensive conifer plantations which dominate landcover and views within the landscape surrounding landscapes. A remote and isolated upland landscape with little disturbance and a strong sense of wilderness, remoteness and dark skies. Skylines are undeveloped and provide a wooded backdrop to the surrounding area. The landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (und remoteness) dark skies). In comparison there are very few indicators of lower susceptibility (limited intervisibility). This landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality for following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP vSAA survey: Evaluation Criteria Score Justification Q48 Character Low "N/A" Q48 Character Low "N/A" Q48 Character Low "N/A" Q50 Overall Evaluation Moderate "Within the area the scenic quality is of limited interest however the borrowed views from the adject of the plantation coverage within this landscape in judged to be medium to be barely perceptible as views are largely contained by the extensive corler planta	Approximately 9.6km north-east of the nearest Gam Fach furbine. **Trea dominated by large conference plantations with isolated expanses of upland grazing. Broad expanse of rolling uplands and peaks to the south and infrequent human traffic fends character. In intercolored areas open sixes dominate. The plantations are on the skyline in places. Significant felling has been carried out and some is very apparent on the skyline with the plantations are on the skyline with the plantations are on the skyline with the appetual planta and some is very apparent on the skyline with the appetual planta and some is very apparent on the skyline with the plantations of the study areas considered for the aspect layers. **Limited intervisibility with surrounding landscapes due to extensive consider plantations which dominate landscover and views within the landscape unit. Where woodland is absent surrounding landscapes. **A remote and isolated uplantal landscape with little disturbance and a strong sense of wilderness, remoteness and dark skies. **Skylines are undeveloped and provide a wooded backdrop to the surrounding area. **The landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (undeveloped skylines, limited modern de remoteness) dark skies). In comparison there are very few indicators of lower susceptibility (limited intervisibility). **This landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality (hardwood with the landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality (hardwood with its landscape unit is judged to be medium-high. **Evaluation Criteria*** Score*** Justification** **Q48 Character*** Low **VA*** **Q48 Character*** Low **VA*** **Q50 Overall Evaluation*** Moderate*** Low **Medium*** Medium **Medium*** Medium*** Medium** High **High*** **Scal		

⁵⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁶⁰ Drawing from information within LANDMAP aspect area survey(s) and site visits.

	As the scale of effect is barely per	the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.								
		During Construction								
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
		During Operation								
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
Overall Level of Effect and Significance	A medium-high sensitivity combine	ed with a barely perceptib	le magnitude is judged to result in	a negligible effect						
				During Construction						

Minor - Moderate

Minor - Moderate

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Negligible

Negligible

There are no wind energy developments located within or near to this landscape unit. Llandinam Repowering (consented) is located approximately 8.4km to the south-west of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

During Operation

Moderate (Significant)

Moderate (Significant)

Moderate-Major (Significant)

Moderate-Major (Significant)

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Minor

Minor

Major (Significant)

Major (Significant)

Landscape Unit											
(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Trefeglwys (MNTGMVS)	'58)									
Location	Approximately 9.8km nor	h-west of the n	earest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Dispersed farming based	l settlement witi	h local amenities including sci	hool and church."							
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁶¹	Not applicable as other L	ANDMAP aspec	ct areas fall outside of the stud	dy areas considered for the aspect la	yers.						
(Summary descriptions taken from their respective LANDMAP surveys)											
Description of Landscape Unit ⁶² (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	The area has a senseA static caravan park	limited intervisibility with adjacent landscape units, however in some places, long views extend across open fields to wooded hills. a has a sense of tranquillity and experiences some dark skies, despite the presence of modern development. caravan park to the south of the area detracts from the rural character. within the village comprise rooftops of houses and farm buildings.									
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	T	scape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (modern development, disturbance from human activity, developed skylines, limited lity) and indicators of higher susceptibility (rural character, some long views out to wooded hills, sense of tranquillity/ some dark skies).									
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	recreational value and vie	nis landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality (although no justification is provided). The landscape unit is limited in creational value and views of a local static caravan park detract from the rural character. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:									
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	Moderate	"N/A"								
	Q48 Character	Moderate	"N/A"								
	Q50 Overall Evaluation	Moderate	"Small scale farming based settlement with some older built development that reflects the local vernacular style and materials but is also associated with recreational medium scale development of caravan parks that is out of keeping with the landscape type"								
Judgement on Landscape Sensitivity	By combining the separat	e judgements o	n landscape susceptibility an	d landscape value, the sensitivity of the	nis landscape is judged to be medium .						
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	views are often contained	by vegetation.	During operation, there will be	e distant views of turbines from upper	line. The scale of effect to the characte slopes, where vegetation allows. The lity is judged to be barely perceptible	proposed wind farm will be seen as					
	Not applicable as the sca	le of effect is jud	dged to be barely perceptible.								
	Duration/reversibility										
	these will be comparable	to the operatior	nal effects.		e. Although there will be the presence						
				ng-term (beyond 10 years) and rever	sible as the turbines will be dismantled	I and removed from the Site once th	ne operational period has ceased				
	Overall Judgement on M										
	As the scale of effect is b	arely perceptible	e, so is the overall magnitude	of change, both at construction and o	pperation.						

⁶¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁶² Drawing from information within LANDMAP aspect area survey(s) and site visits.

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

				During Const	ruction									
	Barely perceptible	Low	Low – Medium	Medium	n Medium -	High High	Very High							
				During Oper	ration	·								
	Barely perceptible	Low	Low – Medium	Medium	n Medium -	High High	Very High							
					·									
Overall Level of Effect and Significance	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect													
		During Construction												
	Negligible Mino		Minor - Mo	Moderate (Significant)		Moderate-Major (Significant)	Major (Significant)							
	During Operation													
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)							
			1	L										
Additional Cumulative Effects	Scenario A:													
(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes	There are no wind energy developments located within or near to this landscape unit. Llandinam Repowering (consented) is located approximately 8.6km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a barely perceptible scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above .													
definition of Scenario A and B)	Scenario B:													

Appendix 6: Landscape and Visual Assessment

Landscape Unit												
(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Upland moor, east of Wye (I	RDNRVS113	3)									
Location	Approximately 9.9km south-w	est of the ne	arest Garn Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Four distinct, separate, hog-b rounded profiles and craggy a		alongside the Wye Valley, betwe	een Newbridge and Rhayader. (Overlooking the A470 road along the Wye va	alley. Wild, open, exposed upland	d hills with a mix of smooth and					
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁶³ (Summary descriptions taken from their	Not applicable as other LAND	MAP aspect	areas fall outside of the study a	areas considered for the aspect	layers.							
respective LANDMAP surveys)												
Description of Landscape Unit ⁶⁴	■ There is some intervisibili	intervisibility with views in from the adjacent valley and out to lower farmland and valleys.										
(based on the criteria for determining susceptibility to wind energy development –	A wild and exposed lands	cape (espec	cially on the hill tops), with some	sense of remoteness and dark	skies.							
see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	-	the valley road detracts from the sense of tranquillity. s of the hills form the skylines of adjacent landscape units and provide an attractive setting to the A470 Road along the Wye Valley.										
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		pe susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (intervisibility, undeveloped skylines, sense of remoteness/ dark skies). In there are only a few indicators of lower susceptibility (disturbance from human activity).										
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	including the Wye Valley Wall	long distan	ce footpath and areas designate	_	MAP as having high scenic quality, has som sense of rurality (although tranquillity is slight VSAA survey:	• •						
	Evaluation Criteria	Score	Justification									
	Q46 Scenic quality	High	"high scenic quality due to attractive wild moorland hills seen from main road"									
	Q48 Character	High	"strong, distinct character"									
	Q50 Overall Evaluation	Q50 Overall Evaluation High "Attractive wild areas seen from main road"										
Judgement on Landscape Sensitivity	By combining the separate jud	lgements or	landscape susceptibility and la	ndscape value, the sensitivity o	f this landscape is judged to be high .							
	Low		Low - Medium	Medium	Medium - High	High	Very High					
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be very distant glimpsed views (11-15km) towards the upper parts of cranes on the skyline from upper north-east facing slopes. The scale of effect on the fundamental character of the landscape including its wildness and remoteness is judged to be barely perceptible at this distance During operation, there will be some very distant views of turbines from the exposed upper north-east facing slopes. Views from lower slopes are likely to be partially screened by intervening woodland. The proposed wind farm will be seen as a distant element 11-15km to the north-east. The scale of effect on the fundamental character of the landscape including its wildness and remoteness is judged to be barely perceptible at this distance. The existing Bryn Titli Wind Farm has a greater influence on this area than the proposed Garn Fach turbines will.											
	Geographical extent Not applicable as the scale of	effect is jud	ged to be barely perceptible.									
	Duration/reversibility											
	During construction changes t these will be comparable to the			erm (up to 5 years) and revers	ible. Although there will be the presence of	partially constructed turbines thro	oughout the construction period,					
	During operation the changes	to the lands	cape character would be long-	term (beyond 10 years) and rev	ersible as the turbines will be dismantled a	nd removed from the Site once th	ne operational period has ceased					

⁶³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁶⁴ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Overall Judgement on Magnitude of Landscape Change As the scale of effect is judged to be barely perceptible, so is the overall magnitude of change, both at construction and during operation **During Construction Barely perceptible** Low Low - Medium Medium Medium - High High Very High **During Operation Barely perceptible** Low Low - Medium Medium Medium - High High Very High

Overall Level of Effect and Significance	A high sensitivity combined with a k	A high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect									
			During Co	nstruction							
Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant)											
	During Operation										
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no wind farms located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby development of Bryn Titli (13 turbines at 54m tip height). Llandinam Repowering (consented) is located beyond 10km from the landscape unit. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing or consented schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Appendix 6: Landscape and Visual Assessment

Landscape Units (10-15km)

Landscape Unit

(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Carno Mosaic (MNTGMVS23	5)										
Location	Approximately 10.7km north o	f the nearest Gar	n Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	the boundaries. The area form	s part of the A47 small, clustered	0 transport corridor and and and other than Carno in	as such is an important thoroughfare	d managed hedgerow boundaries with and tourist route. Grazing types range ties. Some new development has taker	from semi improved grassland to	marginal grazing on the upper					
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁶⁵ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LANDI	MAP aspect area	s fall outside of the study	y areas considered for the aspect laye	ers.							
Description of Landscape Unit ⁶⁶	■ Some intervisibility with su	ırrounding landsc	apes although often limi	ted by surrounding hills and the rolling	g topography of the landscape.							
(based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	 An attractive settled lands Sense of tranquillity is degaccess to North Wales. 	ttractive settled landscape which experiences dark skies in some areas, away from Carno and Clatter. se of tranquillity is degraded in part by disturbance from the busy transport corridor comprising the A470 trunk road and railway line running through centre of area, which is a popular tourist route providing ss to North Wales. nes are largely undeveloped and provide a rural setting to the small settlements and farmsteads in the area. Turbines on Trannon Moor (Carno Wind Farm) punctuate the skyline to the west.										
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		ndscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (limited intervisibility, human influence from busy transport corridor and presence of g wind energy generation) and indicators of higher susceptibility (attractiveness, undeveloped skylines and some dark skies).										
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of medium value, as it is not designated (apart from a very small part in the south-east being located within a Registered Landscape of Special Historic Interest) but is recorded in LANDMAP as having moderate scenic quality, has some recreational value (with public rights of way running through it), and a sense of rurality (although tranquillity is reduced by the busy transport corridor running through it and the presence of existing wind energy development close by). The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:											
	Evaluation Criteria Score Justification											
	Q46 Scenic quality	Moderate	Not provided									
	Q48 Character	Moderate	Not provided									
	Q50 Overall Evaluation	Moderate		arming landscape of the mid and east 0(T) transport corridor and tourist rou	ern extents of the Study Area exhibiting te to North Wales"	g some degradation through pres	ssure from development due to its					
Judgement on Landscape Sensitivity	By combining the separate jud	gements on land	scape susceptibility and	landscape value, the sensitivity of thi	s landscape is judged to be medium .							
	Low	L	.ow - Medium	Medium	Medium - High	High	Very High					
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be some very distant views (11-17km) towards the upper parts of cranes on the skyline from upper valley slopes. The scale of effect to the character of the landscape at construction is judged to be barely perceptible as views are contained by the rolling topography of the surrounding landscape. During operation, there will be limited views of turbines from upper valley slopes where vegetation allows. The proposed wind farm will be seen as a distant element 11-17km to the south. The scale of effect on the fundamental character of the landscape including its undeveloped skylines and rurality is judged to be barely perceptible at this distance. The existing Carno Wind Farm has a greater influence on this area than the proposed Garn Fach turbines will. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. Duration/reversibility											

⁶⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁶⁶ Drawing from information within LANDMAP aspect area survey(s) and site visits.

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects. During operation the changes to the landscape character would be **long-term** (beyond 10 years) and **reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased. **Overall Judgement on Magnitude of Landscape Change**

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.

	During Construction											
Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High High Very High											
			During Operation									
Barely perceptible	Low Low - Medium Medium Medium - High High Very High											

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect									
			During Co	enstruction							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					
		During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are no existing wind farms located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby operational developments of Carno I (56 turbines at 54m tip height), Carno II (12 turbines at 80m tip height), Tirgwynt (12 turbines at 116m tip height) and Mynydd Clogau (17 turbines at 66m tip height). Llandinam Repowering (consented) is located approximately 8.7km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a barely perceptible scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

The landscape unit will mostly be affected by visibility of the other wind farms listed above, as well as the proposed nearby developments of Carno III (13 turbines at 150m tip height) and Esgair Cwmowen (18 turbines at 125m tip height). The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Appendix 6: Landscape and Visual Assessment

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Esgair Cwmowen Uplands	(MNTGMVS7	733)								
Location	Approximately 10.8km north	of the neares	t Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	woodland. Exposure and win	d are domina le turbine is d	ant features with isolated more on the hillside below Llyn y Gr	e intimate areas with small irregular in intimate areas with small irregular in interest. It is not the north.	ken, irregular field patterns running with t hedged fields in sheltered areas to the ed There is also a further smaller single turk scribed as a landscape with wind farms/t	lge of the area. Mynydd y Clog bine associated with a farm. Vi	gau wind farm is located in the area to				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁶⁷ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LAN	DMAP aspect	areas fall outside of the study	y areas considered for the aspect la	yers.						
Description of Landscape Unit ⁶⁸	 Strong intervisibility with 	surrounding	upland landscape and adjace	ent lowland.							
(based on the criteria for determining	■ Largely influenced by pr	esence of win	nd energy development, which	n form features on the skyline.							
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	An exposed and wild lar	dscape with s	some sense of remoteness / o	dark skies, although detracted by the	presence of wind turbines.						
CLVIA Methodology)				s within adjacent landscape unit to the	ne south.						
	Representative view from	presentative view from this landscape unit is illustrated by Viewpoint 22.									
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)		he landscape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (presence of wind energy generation, human activity) and indicators of higher usceptibility (strong intervisibility, wilderness, sense of remoteness/ dark skies).									
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	LANDMAP as having high so of rurality (although tranquilli	enic quality (ty is slightly re	although no justification is pro educed by the presence of exi	- · · · · · · · · · · · · · · · · · · ·	• ,	-	•				
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	High	"N/A"								
	Q48 Character	High	"N/A"								
I	Q50 Overall Evaluation	High		vork upland grazing that is character	ised by the field patterns and land use en	nulating the topography"					
			1	, 5 5	, , ,	5 / 5 m					
Judgement on Landscape Sensitivity	By combining the separate j	ıdgements or	n landscape susceptibility and	landscape value, the sensitivity of the	nis landscape is judged to be medium-hi	gh.					
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape	Scale of effect	l .					1				
Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction there will wildness is judged to be bar south. The scale of effect on	construction there will be some very distant views (11-22km) towards the upper parts of cranes on the skyline from upper slopes. The scale of effect on the fundamental character of the landscape including its is judged to be barely perceptible at this distance. During operation, there will be distant views of turbines from upper valley slopes. The proposed wind farm will be seen as a distant element 11-22km to the ne scale of effect on the fundamental character of the landscape including its wildness is judged to be barely perceptible at this distance. The existing Mynydd y Clogau, Tirgwynt and Carno II ns have a greater influence on this area than the proposed Garn Fach turbines will.									
	Geographical extent										
	Not applicable as the scale of	f effect is jud	ged to be barely perceptible.								
	<u>Duration/reversibility</u>										

⁶⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁶⁸ Drawing from information within LANDMAP aspect area survey(s) and site visits.

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.

	During Construction											
Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High High Very High											
			During Operation									
Barely perceptible	Low	Low - Medium Medium - High High										

Overall Level of Effect and Significance

A medium-high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect

During Construction

		During Co	onstruction		
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
		During C	Operation		
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are two existing wind farms located within this landscape unit: Mynydd y Clogau (17 turbines at 66m tip height) and Tirgwynt (12 turbines at 116m tip height). The area is also affected by visibility of existing wind farms outside the landscape unit, notably the nearby operational developments of Carno I (56 turbines at 54m tip height) and Carno II (12 turbines at 80m tip height). Llandinam Repowering (consented) is located approximately 8.7km to the south-east of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a barely perceptible scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The landscape unit will mostly be affected by visibility of the wind farms listed above, as well as by the proposed developments of Esgair Cwmowen (18 turbines at 125m tip height) within the landscape unit, the nearby Carno III (13 turbines at 150m tip height) and Llanbrynmair (30 turbines at 126.5m tip height). The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Cefn Coch Rolling Pasture (MNTGMVS776)								
Location	Approximately 10.9km north o	f the nearest G	arn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)		of wooded are	as - tree cover is confined	d to hedgerow boundaries. Relatively o	dgelines rising to higher upland grazing a open aspect due to lesser amount of tree	=					
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁶⁹ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LAND	MAP aspect are	eas fall outside of the stud	dy areas considered for the aspect lay	ers.						
Description of Landscape Unit ⁷⁰ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)		scape with limiten and undevelo	ed intrusion by modern d	evelopment and sense of remoteness	y upland landscape to the south and easwith dark skies.	st. The limited tree cover affords	long views over fields.				
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	scape susceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower susceptibility (large scale, presence of wind energy generation nearby) and higher susceptibility (visible / intervisibility, limited modern development, sense of remoteness/ dark skies).									
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)					all part in the south being located within a ugh it), and a sense of rurality (although	-	,				
	The following table sets out the	e scenic quality	, character and overall ev	valuation taken from the LANDMAP V	SAA survey:						
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	Moderate	"N/A"								
	Q48 Character	Q48 Character Moderate "N/A"									
	Q50 Overall Evaluation Moderate "An extensive area of well defined traditional farming landscape, that would benefit from further enhancement of the field boundaries through supplementary plantings. Limited intrusion by modern development but where occurring needs to be integrated into the existing landscape character"										
Judgement on Landscape Sensitivity	By combining the separate jud	lgements on lar	ndscape susceptibility and	d landscape value, the sensitivity of th	is landscape is judged to be medium .						
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be some very distant views (12-21km) towards the upper parts of cranes on the skyline. The scale of effect to the character of the landscape at construction is judged to be barely perceptible as views from lower elevations are contained by the rolling topography. During operation, there will be limited views of turbines from upper valley slopes where vegetation allows. The proposed wind will be seen as a distant element 12-21km to the south. The scale of effect on the fundamental character of the landscape including its limited intrusion by modern development is judged to be barely perceptible distance. The existing Mynydd y Clogau and Tirgwynt Wind Farms have a greater influence on this area than the proposed Garn Fach turbines will. Geographical extent Not applicable as the scale of effect is judged to be barely perceptible. Duration/reversibility During construction changes to the landscape character would be short-term (up to 5 years) and reversible. Although there will be the presence of partially constructed turbines throughout the construction period these will be comparable to the operational effects.										

⁶⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁷⁰ Drawing from information within LANDMAP aspect area survey(s) and site visits.

During operation the changes t	uring operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.										
Overall Judgement on Magni	verall Judgement on Magnitude of Landscape Change										
As the scale of effect is barely	s the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.										
	During Construction										
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High					
			During Operation								
Barely perceptible											

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect									
		During Construction									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					
		During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There is no existing wind energy development located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby operational developments of Mynydd y Clogau (17 turbines at 66m tip height) and Tirgwynt (12 turbines at 116m tip height). Llandinam Repowering (consented) is located approximately 8.1km to the south of the landscape unit and will result in a greater influence of wind energy development on the surrounding character of the landscape unit. The introduction of Garn Fach will still result in a **barely perceptible** scale of effect to the landscape unit when considered against a baseline containing the repowered Llandinam Wind Farm so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The landscape unit will mostly be affected by visibility of the wind farms listed above, as well as the proposed development of Esgair Cwmowen (18 turbines at 125m tip height) to the west. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no** additional cumulative effects over and above those set out in the LVIA above.

Landscape Unit											
(based on the Visual & Sensory aspect area	Cambrian Mountains plateau to	ops (RDNR\	/S101)								
(VSAA) of LANDMAP)	· ·										
Location	Approximately 11.8km south-wes	t of the near	rest Garn Fach turbine.								
Summary Description of VSAA	"Two extensive areas, west of W	ye Valley, di	vided by upper Elan Valley,	continuing westward beyond into Ce	redigion. Very remote area with one	minor road, having few paths and open	access. Summits are over 500m				
(taken from Q3 of VSAA Survey)	high. This area is very bleak and	exposed wit	th extensive views in all dire	ctions. Cambrian Mountain plateau h	as generally smooth profiles above	350m with semi-natural rough moorland	& grassland cover."				
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁷¹	Not applicable as other LANDMA	P aspect are	eas fall outside of the study	areas considered for the aspect layer	S.						
(Summary descriptions taken from their respective LANDMAP surveys)											
Description of Landscape Unit ⁷²	Strong intervisibility with adja	intervisibility with adjacent landscapes from the elevated mountain plateau.									
(based on the criteria for determining	■ Modern development limited	to a radio m	ast in the south and some v	riews to existing wind energy generat	ion nearby.						
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	A wild mountainous landscap	e with limite	ed human influence and a st	rong sense of remoteness and which	experiences dark skies.						
CLVIA Methodology)	Undeveloped skylines which	have open a	and expansive views in all d	irections.							
Judgement on Landscape Susceptibility	1	ape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (strong intervisibility, open and undeveloped skylines, limited modern									
(see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	development, strong sense of rer	opment, strong sense of remoteness/ dark skies). In comparison there are only a few indicators of lower susceptibility (large scale).									
Judgement on Landscape Value		is landscape unit is judged to be of high value, as although it is recorded in LANDMAP as having moderate scenic quality, around half of it is within the Elan Valley Registered Landscape of Special Historic Interest									
(see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	,			and being mostly designated as oper	,	f rurality.					
GEVIA Methodology)	The following table sets out the s	cenic quality	, character and overall eval	uation taken from the LANDMAP VS	AA survey:						
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	Moderate	"Rather featureless"								
1	Q48 Character	High	"Distinctive and large sca	ale wilderness"							
	Q50 Overall Evaluation	High	"Generally high because	of extensive unspoilt area" "a wilderr	ess mountain landscape of high val	ue"					
Judgement on Landscape Sensitivity	By combining the separate judge	ments on la	ndscape susceptibility and la	andscape value, the sensitivity of this	landscape is judged to be high .						
	Low		Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape	Scale of effect										
Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	wildness and limited human infludistant element 12-22km to the n	ence is judge orth-east. Th	ed to be barely perceptible ne scale of effect on the fund	at this distance. During operation, th	ere will be very limited views of turb	e of effect on the fundamental characterines from upper valley slopes. The proper man influence is judged to be barely pe	osed wind farm will be seen as a				
	Geographical extent	J									
	Not applicable as the scale of eff	ect is judged	I to be barely perceptible.								
	Duration/reversibility	, ,	• • •								
	During construction changes to the these will be comparable to the o	-		term (up to 5 years) and reversible.	Although there will be the presence	of partially constructed turbines through	nout the construction period,				
	During operation the changes to	the landscap	pe character would be long-	term (beyond 10 years) and reversi	ole as the turbines will be dismantle	d and removed from the Site once the o	perational period has ceased.				
	Overall Judgement on Magnitu	de of Lands	scape Change								

⁷¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁷² Drawing from information within LANDMAP aspect area survey(s) and site visits.

	As the scale of effect is barely per	rceptible, so is the overall magnitud	de of change, both at construction	on and during opera	ation.								
		During Construction											
	Barely perceptible	Low	Low - Medium	Medium	Medium - Hi	gh High	Very High						
		During Operation											
	Barely perceptible	Low	Low - Medium	Medium	Medium - Hi	gh High	Very High						
			1		,	1	,						
Overall Level of Effect and Significance	A high sensitivity combined with a	A high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect											
		During Construction											
	Negligible	Minor	Minor - Moderate	Мо	oderate (Significant)	Moderate-Major (Significant)	Major (Significant)						
		During Operation											

Minor - Moderate

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Negligible

There is no existing wind energy generation located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the nearby operational development of Bryn Titli (13 turbines at 54m tip height). Llandinam Repowering (consented) is located beyond 13km from the landscape unit. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing or consented schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Moderate (Significant)

Moderate-Major (Significant)

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Minor

Major (Significant)

Landscape Unit													
(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Improved upland, Radnor Fo	orest (RDNRVS	6119)										
Location	Approximately 11.8km south-e	ast of the near	est Garn Fach turbine.										
Summary Description of VSAA	"Six areas on fringes of Radno	or Forest, includ	ling either side of A44.Upl	and plateaux & shoulders where area	s of intrinsic moorland landcover has bee	n agriculturally improved & conv	verted to grassland, where the large						
(taken from Q3 of VSAA Survey)	scale regular fields enclosed b	y fences often	look unnatural in associat	ion with the remnant semi-natural mo	orland and wetland vegetation."								
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁷³	Not applicable as other LANDI	MAP aspect are	eas fall outside of the stud	y areas considered for the aspect lay	ers.								
(Summary descriptions taken from their respective LANDMAP surveys)													
Description of Landscape Unit ⁷⁴	■ There is some intervisibilit	y with adjacent	landscapes, with long vie	ws over lower farmland and to open I	nills beyond.								
(based on the criteria for determining	A degraded moorland land	dscape with so	me disturbance through a	rable cultivation that has led to some l	oss of character.								
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	Some sense of remotenes	ss and dark ski	es, especially on the hill to	ps.									
CLVIA Methodology)	There are some detracting		-										
	Skylines are undeveloped	ndeveloped and provide a rural backdrop for nearby settlements.											
Judgement on Landscape Susceptibility	_ · · · · · · · · · · · · · · · · · · ·	ceptibility of this landscape unit is judged to be medium due to a balance of indicators of lower sensitivity (loss of character from arable cultivation, views of nearby roads) and indicators of higher g intervisibility, undeveloped skylines, some sense of remoteness/ dark skies).											
(see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	susceptibility (strong intervisible	llity, undevelop	ed skylines, some sense (of remoteness/ dark skies).									
Judgement on Landscape Value	This landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality, has some recreational value (with public rights of way running												
(see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	through it and a small area being designated as 'public forest' open access land in the east), and some sense rurality (although tranquillity is reduced by nearby roads).												
o	The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:												
	Evaluation Criteria Score Justification												
	Q46 Scenic quality	Moderate	"Part of distinctive hills but spoilt by "unnatural" enclosures that detract"										
	Q48 Character	Low	"lacking in strong, well defined, well composed elements - appears messy, fragmented and unnatural"										
	Q50 Overall Evaluation	Moderate	"intrinsically higher landscape value has been degraded by insensitive intensive farming with conversion of rough grassland/moorland areas to improved grassland fields by drainage, enlargement and reseeding, plus fencing -resulting in disturbed messy rather barren unattractive landscape"										
Judgement on Landscape Sensitivity	By combining the separate jud	gements on la	ndscape susceptibility and	landscape value, the sensitivity of th	is landscape is judged to be medium .								
	Low		Low - Medium	Medium	Medium - High	High	Very High						
Judgement on Magnitude of Landscape	Scale of effect												
Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	sense of remoteness is judged	I to be barely p posed wind far	perceptible at this distanc m will be seen as a distan	e. During operation, there will be limit t element 12-25km to the north-east.	ne. The scale of effect on the fundamenta ed views of turbines from upper valley slo The scale of effect on the fundamental ch	pes where vegetation allows, wi	th some screening provided by						
	Geographical extent												
	Not applicable as the scale of effect is judged to be barely perceptible.												
	<u>Duration/reversibility</u>												
	During construction changes to these will be comparable to the	•		rt-term (up to 5 years) and reversible	e. Although there will be the presence of p	artially constructed turbines thro	oughout the construction period,						
	During operation the changes	to the landscap	oe character would be lon	g-term (beyond 10 years) and revers	sible as the turbines will be dismantled and	d removed from the Site once th	ne operational period has ceased.						

⁷³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁷⁴ Drawing from information within LANDMAP aspect area survey(s) and site visits.

	Overall Judgement on Magnitude	e of Landscape Change									
	As the scale of effect is barely perc	ceptible, so is the overall magnitude	of change, both at construction ar	d during operation.							
			Durin	g Construction							
	Barely perceptible	Low	Low – Medium	Medium	Medium - Hi	gh High	Very High				
		During Operation									
	Barely perceptible	Barely perceptible Low Low – Medium Medium - High High									
		,									
Overall Level of Effect and Significance	A medium sensitivity combined wit	h a barely perceptible magnitude is	judged to result in a negligible ef	ect.							
		During Construction									
	Negligible	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant									

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Negligible

Not applicable as there are no existing or consented wind energy developments within or near to this landscape unit. Llandinam Repowering (consented) is located beyond 15km from the landscape unit.

Minor - Moderate

During Operation

Moderate (Significant)

Moderate-Major (Significant)

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Minor

Major (Significant)

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Llangurig (MNTGMVS589)											
Location	Approximately 12.3km west	of the nearest (Garn Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Relatively dispersed, cluster A44 passes through and bise			e built buildings ie village hall and sc	hool room towards the centre and an	infill of more modern development b	eyond. No evident centre as the					
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁷⁵ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LANI	icable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.										
Description of Landscape Unit ⁷⁶	Intervisibility with the sur	rounding rolling	g farmland levels and up tow	vards the rising valley sides and ridge	S.							
(based on the criteria for determining	Sense of tranquillity is di	sturbed by the	A44 road which passes thro	ugh the settlement.								
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and	A traditional valley village		-									
CLVIA Methodology)	Skylines are undevelope	d apart from a	transmission mast on Llwyn	-gwyn to the south west.								
Judgement on Landscape Susceptibility				um due to a balance of indicators of l	ower susceptibility (human influence	from busy road, limited sense of tran	nquillity) and indicators of higher					
(see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	susceptibility (intervisibility, u	bility (intervisibility, undeveloped skylines).										
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	follows the road through the	village) and so	me sense of rurality (althoug	ot designated, it is recorded in LAND in tranquillity is reduced by disturband aluation taken from the LANDMAP VS	e from traffic on the A44).	lity, has limited recreational value (Na	ational Cycle Network route 81					
	Evaluation Criteria	Score	Justification									
	Q46 Scenic quality	Moderate	"No distinct centre due to	A44 bisecting village"								
	Q48 Character	Moderate	"No distinct character"									
	Q50 Overall Evaluation	Moderate	"One of many similar settlements typical of the valley bottoms and associated with transport routes found throughout the Study Area Llangurig has had some infill development but this is largely limited and well vegetated and away from the main road. One of many similar settlements typical of valley bottoms and associated with transport routes found throughout the Study Area, however the village has no distinct centre or significant character = Moderate"									
Judgement on Landscape Sensitivity	By combining the separate ju	idgements on I	landscape susceptibility and	landscape value, the sensitivity of thi	s landscape is judged to be medium .							
	Low		Low - Medium	Medium	Medium - High	High	Very High					
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	longer views are contained by farm will be seen as a distant distance. The existing turbine Geographical extent Not applicable as the scale of Duration/reversibility	y the rising val t element 12-13 es at Bryn Blae f effect is judge to the landsca	lley sides. During operation, 3km to the east. The scale of the wind Farm has a greater it ed to be barely perceptible. The properties of the side of	he upper parts of cranes on the skylir there will be very limited views of turb f effect on the fundamental character nfluence on this area than the propos t-term (up to 5 years) and reversible	ines from the village, however interve of the landscape including its limited ed Garn Fach turbines will.	ening woodland is likely to provide so modern influence and rurality is judg	ome screening. The proposed wind ged to be barely perceptible at this					

⁷⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁷⁶ Drawing from information within LANDMAP aspect area survey(s) and site visits.

Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High High Very High									
			During Operation							
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				
	During Construction									
As the scale of effect is bar	s the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.									
Overall Judgement on Ma	verall Judgement on Magnitude of Landscape Change									
During operation the chang	uring operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.									

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.									
			During Co	nstruction							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					
	During Operation										
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There is no existing wind energy development located within this landscape unit. However, the area is affected by visibility of existing wind farms outside the landscape unit, notably the operational development at Bryn Blaen (7 turbines at 100m tip height). Llandinam Repowering (consented) is located beyond 11km from the landscape unit. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing or consented schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Trannon Moors (MNTGMVS	\$179)										
Location	Approximately 12.6km north	west of the nea	rest Garn Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	predominant with bracken an	ated area of upland moorland more usually found to the southern and western borders of the Study Area. Open, exposed and wide open skies dominate with heather/bilberry and rough unimproved grassland nant with bracken and gorse growth to lower edges adjacent upland grazing. An extensive wind farm, Carno 1, development dominates the central and southern half of the area and provides a dramatic feature nerwise open but dramatic landscape. Carno 2 extends wind energy development to the west and has larger additional turbines, more widely spaced. Both developments are accessed by a pattern of access upland."										
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁷⁷ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LANI	OMAP aspect a	reas fall outside of the study	areas considered for the aspect laye	ers.							
Description of Landscape Unit ⁷⁸ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	A wild and exposed landExpansive skylines with	intervisibility with surrounding landscapes with attractive views in and out. and exposed landscape with a strong sense of remoteness and which experiences dark skies. asive skylines with long views. I and Carno II wind farm form a prominent man-made feature in the landscape and dominates skylines to the north and north-west.										
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	andscape susceptibility of this landscape unit is judged to be medium due to indicators of lower susceptibility (large scale, presence of existing wind energy generation) and indicators of higher susceptibility visibility, expansive open skylines, strong sense of remoteness/ dark skies).										
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	has a sense of remoteness (the overall evaluation is judge	although tranqu ed to be modera	illity is slightly by the presenate.	_	al value (with public rights of way runn n). Although it is recorded in LANDMA AA survey:		- ,					
	Evaluation Criteria	Score	Justification									
	Q46 Scenic quality	High	"N/A"									
	Q48 Character	Moderate	"N/A"									
	Q50 Overall Evaluation	Moderate	"Upland moorland that s	uffers from some degradation due to	the extensive forestry adjacent to the	south and extensive wind farm dev	velopment"					
Judgement on Landscape Sensitivity	By combining the separate ju	ıdgements on la	indscape susceptibility and l	andscape value, the sensitivity of this	s landscape is judged to be medium .							
	Low		Low - Medium	Medium	Medium - High	High	Very High					
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	including its expansive skyling forestry is likely to provide so expansive skylines and long turbines will. Geographical extent Not applicable as the scale of	es and long vieome screening. views is judged	ws is judged to be barely p o The proposed wind farm will to be barely perceptible at	erceptible at this distance. During op be seen as a distant element 12-19k	e from upper south-east facing hill slo eration, there will be limited views of m to the south-east. The scale of effe at Carno I and Carno II wind farms ha	turbines from upper south-east facil act on the fundamental character of	the landscape including its					
	<u>Duration/reversibility</u>											

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⁷⁷ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.
⁷⁸ Drawing from information within LANDMAP aspect area survey(s) and site visits.

During construction changes to the landscape character would be short-term (up to 5 years) and reversible. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects. During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased. **Overall Judgement on Magnitude of Landscape Change** As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation. **During Construction Barely perceptible** Low Low - Medium Medium Medium - High High Very High **During Operation Barely perceptible** Low Low - Medium Medium Medium - High High **Very High**

Overall Level of Effect and Significance A medium sensitivity combined with a barely perceptible magnitude is judged to result in a **negligible** effect. **During Construction Negligible** Minor Minor - Moderate Moderate (Significant) **Moderate-Major (Significant)** Major (Significant) **During Operation** Negligible Minor Minor - Moderate Moderate (Significant) **Moderate-Major (Significant)** Major (Significant)

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There are two existing wind farms located within this landscape unit: Carno I (56 turbines at 54m tip height) and Carno II (12 turbines at 80m tip height). Llandinam Repowering (consented) is located beyond 10km from the landscape unit. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing or consented schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Scenario B:

The landscape unit will mostly be affected by visibility of the wind farms listed above, as well as the nearby proposed development of Carno III (13 turbines at 150m tip height). The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Carno Uplands (MNTGMVS	694)										
Location	Approximately 13.8km north-	west of the near	est Garn Fach turbine.									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	metres AOD. The openness	sly small area of upland to the north of Carno which forms the visual backdrop to both the settlement and Carno valley itself. A series of rounded peaks -Allt Fawr, Cryniarth and Yr Allt-rising in places to 450 DD. The openness is somewhat compromised by the presence of large blocks of conifer plantations with hard often angular edges which pay little respect to landform and landscape character. The area is by a number of streams and small watercourses inc. Nant Cwmgerwyn."										
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁷⁹ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LANI	licable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.										
Description of Landscape Unit ⁸⁰ (based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)	Traffic on the A470 detraSkylines are generally un	e intervisibility with surrounding landscapes including towards existing wind turbines. The undulating hills form an attractive rural setting to the settlement of Carno. c on the A470 detracts from the sense of tranquillity. nes are generally undeveloped. e are some longer views out from open higher ground. Lower views are often screened by vegetation (including conifer plantations).										
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	scape susceptibility of this landscape unit is judged to be medium due to indicators of lower susceptibility (large scale, presence of existing wind energy generation nearby) and indicators of higher susceptibility bility, expansive open skylines, strong sense of remoteness/ dark skies).										
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	through it and a small area d	nis landscape unit is judged to be of medium value, as although it is not designated, it is recorded in LANDMAP as having moderate scenic quality, has some recreational value (with public rights of way running rough it and a small area designated as open access land) and some sense of rurality (although tranquillity is slightly degraded by traffic noise from the nearby A470 road and existing wind energy generation). ne following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:										
	Evaluation Criteria	Score	Justification									
	Q46 Scenic quality	Moderate	"Underlying upland la	andscape type compromised by planta	tions"							
	Q48 Character	48 Character Moderate "Mixed with no discernable overall character"										
	Q50 Overall Evaluation	Moderate	ate "Typical of much of the area with open heath and moor adversely affected by conifer plantations."									
Judgement on Landscape Sensitivity	By combining the separate ju	idgements on lar	ndscape susceptibility and	d landscape value, the sensitivity of thi	s landscape is judged to be medium	l.						
	Low		Low - Medium	Medium	Medium - High	High	Very High					
Judgement on Magnitude of Landscape Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	Scale of effect During construction there will be very distant views (13-16km) towards the upper parts of cranes on the skyline. The scale of effect to the character of the landscape at construction is judged to be barely perce views are contained by the surrounding undulating hills. During operation, there will be some distant views of turbines from upper slopes and hill summits, although intervening forestry is likely to provide some screening. The proposed wind farm will be seen as a dist element 13-16km to the south-east. The scale of effect on the fundamental character of the landscape including its undeveloped skylines is judged to be barely perceptible at this distance. The existing turbine Tirgwynt and Mynydd Clogau have a greater influence on this area than the proposed Garn Fach turbines will.											
	Geographical extent Not applicable as the scale of Duration/reversibility During construction changes these will be comparable to the	to the landscape	e character would be sho	rt-term (up to 5 years) and reversible	. Although there will be the presence	of partially constructed turbines thro	ughout the construction period,					

⁷⁹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers. ⁸⁰ Drawing from information within LANDMAP aspect area survey(s) and site visits.

During operation the changes to	the landscape character	would be long-term (beyond 10 year	ars) and reversible as the turk	pines will be dismantled and remove	ed from the Site once the op	erational period has ceas				
Overall Judgement on Magnit	verall Judgement on Magnitude of Landscape Change									
As the scale of effect is barely p	s the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.									
	During Construction									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				
			During Operation							
Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High High Very High									

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.									
			During Co	nstruction							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					
		During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There is no existing wind energy development within this landscape unit. The area will mostly be affected by visibility of other wind farms, notably the nearby development of Tirgwynt (12 turbines at 116m tip height) and Mynydd Clogau (17 turbines at 66m tip height). Llandinam Repowering (consented) is located beyond 11km from the landscape unit. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing or consented schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Scenario B:

The landscape unit will mostly be affected by visibility of the wind farms listed above, as well as the proposed Esgair Cwmowen (18 turbines at 125m tip height) nearby to the east. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing, consented or proposed schemes, and so there will be **no** additional cumulative effects over and above those set out in the LVIA above.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Crossgates (RDNRVS162)	rossgates (RDNRVS162)								
Location	Approximately 13.9km south	oximately 13.9km south-east of the nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	"Small village at busy north-s	all village at busy north-south/east-west crossroads on slopes of Ithon valley. Dominated by roads, railway and recent housing estates and business developments."								
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁸¹	Not applicable as other LANI	pplicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.								
(Summary descriptions taken from their respective LANDMAP surveys)										
Description of Landscape Unit ⁸²	■ There are some intermit	ent views o	ut to undeveloped hills and farmlan	d of adjacent landscape units.						
(based on the criteria for determining susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)		strongly urban landscape with little sense of tranquillity. ylines generally contain man-made features associated with industrial estates on the outskirts of the settlement.								
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	_ · · · · · · · · · · · · · · · · · · ·	andscape susceptibility of this landscape unit is judged to be low due to the presence of a number of indicators of lower susceptibility (presence of man-made features, urban character, limited sense of tranquillity). mparison there are only a few indicators of higher susceptibility (some intervisibility with surrounding landscapes).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	This landscape unit is judged to be of low value, as it is not designated, and is recorded in LANDMAP as having low scenic quality. It has little recreational value and exhibits a low sense of tranquillity. The following table sets out the scenic quality, character and overall evaluation taken from the LANDMAP VSAA survey:									
e_vn(men.easieg))	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Low	"Not attractive"							
	Q48 Character	Low	"Roundabout is only distinguishing feature"							
	Q50 Overall Evaluation Low "few quality elements/generally indistinct/incoherent with spreading transport & agricultural related uses & buildings that have just happened rather than being planned"									
Judgement on Landscape Sensitivity	By combining the separate ju	ıdgements o	on landscape susceptibility and land	Iscape value, the sensitivity of t	his landscape is judged to be low .					
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape	Scale of effect									
Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	perceptible as views are ge	nerally limite some scre	ed by infrastructure within the settle ening. The proposed wind farm will	ment. During operation, there w	he skyline. The scale of effect to the chara vill be some limited distant views of turbine 4-15km to the south-east. At this distance	s from more open areas of the s	ettlement, although intervening			
	Geographical extent									
	Not applicable as the scale of	f effect is ju	dged to be barely perceptible.							
	<u>Duration/reversibility</u>									
	During construction changes to the landscape character would be short-term (up to 5 years) and reversible . Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects.									
				m (beyond 10 years) and reve	rsible as the turbines will be dismantled a	nd removed from the Site once the	he operational period has ceased.			
	Overall Judgement on Mag	nitude of L	andscape Change							

⁸¹ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

82 Drawing from information within LANDMAP aspect area survey(s) and site visits.

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.										
		During Construction								
	Barely perceptible	Barely perceptible Low Low – Medium Medium Medium - High				High	Very High			
	During Operation									
	Barely perceptible	Low	Low – Medium	Medium Medium - High		High	Very High			
						,	1			
Overall Level of Effect and Significance	A low sensitivity combined with a	barely perceptible magnitud	de is judged to result in a negligible eff	ect.						
			D	uring Construction						
	Negligible	Minor	Minor - Moderate	Modera	ate (Significant)	Moderate-Major (Significant)	Major (Significant)			
		During Operation								
	Negligible	Minor	Minor - Moderate	Modera	ate (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Not applicable as there are no existing or consented wind energy developments within or near to this landscape unit. Llandinam Repowering (consented) is located beyond 16km from the landscape unit.

Scenario B

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Landscape Unit (based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Lower Elan Valley (BRCKN	VS709)								
Location	Approximately 14.6km south	roximately 14.6km south-west of the nearest Garn Fach turbine.								
Summary Description of VSAA (taken from Q3 of VSAA Survey)	strong riparian vegetation of valley sides the fields reduce	t of wider pastoral valley landscape with steep valley sides falling from Carn Gafallt at around 380mAOD to the relatively wide and flat valley floor of the Elan at around 190mAOD. The stony upland river has a riparian vegetation of alders/willows. The fields on the valley floor are drained by ditches and are enclosed by fences and outgrown hedges in places, dominated by willow,pollarded in places. Further up the ry sides the fields reduce in size and are enclosed by outgrown hedges. Further enclosure is offered by deciduous woodland blocks and a small coniferous plantation. Settlement consists of scattered farmsteads a minor road and footpaths pass through the area. Overall, the area is quiet,away from main roads, and sheltered."								
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁸³ (Summary descriptions taken from their respective LANDMAP surveys)	Not applicable as other LANI	pplicable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers.								
Description of Landscape Unit ⁸⁴	■ Limited intervisibility with	surrounding	landscapes due to the steeply slo	oping topography.						
(based on the criteria for determining	A tranquil landscape with	limited mode	ern human influence. The area ex	periences dark skies.						
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)			alley, along the river, and to slop ape unit are illustrated by Viewp	• •						
Judgement on Landscape Susceptibility (see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	1	e landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (limited modern influence, sense of remotenss/ dark skies, attractive views) d few indicators of lower susceptibility (limited intervisibility with adjacent landscapes).								
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	through it including the Wye	/alley Walk lo		sense rurality (although tranquilli	DMAP as having moderate scenic quality, ty is slightly degraded by traffic noise fron SAA survey:		th public rights of way running			
	Evaluation Criteria	Score	Justification							
	Q46 Scenic quality	Q46 Scenic quality Moderate Not provided								
	Q48 Character	Q48 Character Moderate Not provided								
	Q50 Overall Evaluation Moderate "The contrast of the steep, wooded valley sides and flat pastoral bottom with the river course is attractive with some scenic quality."									
Judgement on Landscape Sensitivity	By combining the separate ju	dgements on	landscape susceptibility and land	dscape value, the sensitivity of th	nis landscape is judged to be medium-hig	jh.				
	Low		Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Landscape	Scale of effect	•	<u> </u>							
Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction there will be some very distant views (14-15km) towards the upper parts of cranes on the skyline. The scale of effect to the character of the landscape at construction is judged to be barely perceptible due to the steeply sloping topography. During operation, there will be some distant views of turbines from elevated north-facing slopes. The proposed wind farm will be seen as a distant element 14-15km to the north-east. The scale of effect on the fundamental character of the landscape including its limited modern influence is judged to be barely perceptible at this distance.									
	Geographical extent									
	Not applicable as the scale of	f effect is jud	ged to be barely perceptible.							
	<u>Duration/reversibility</u>									
	these will be comparable to t	ne operationa	l effects.		e. Although there will be the presence of բ	•				
	During operation the change	to the lands	cape character would be long-te	rm (beyond 10 years) and revers	sible as the turbines will be dismantled ar	nd removed from the Site once th	e operational period has ceased.			

⁸³ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

⁸⁴ Drawing from information within LANDMAP aspect area survey(s) and site visits.

	Overall Judgement on Magnitud	Overall Judgement on Magnitude of Landscape Change								
	As the scale of effect is barely per	As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.								
		During Construction								
	Barely perceptible	Low	Low - Medium Mo	edium Medium - H	igh High	Very High				
	During Operation									
	Barely perceptible	Low	Low - Medium Me	edium Medium - H	igh High	Very High				
Overall Level of Effect and Significance	A medium-high sensitivity combine	ed with a barely perceptible magnitu	ide is judged to result in a negligible	effect.						
		During Construction								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Negligible

Not applicable as there are no existing or consented wind energy developments within or near to this landscape unit. Llandinam Repowering (consented) is located beyond 15km from the landscape unit.

Minor - Moderate

During Operation

Moderate (Significant)

Moderate-Major (Significant)

Scenario B

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Minor

Major (Significant)

Landscape Units (15-20km with an 'outstanding' overall evaluation score)

Landscape Unit											
(based on the Visual & Sensory aspect area (VSAA) of LANDMAP)	Plynlimon Moorlands (MNT	nlimon Moorlands (MNTGMVS910)									
Location	Approximately 15.6km west	ximately 15.6km west of the nearest Garn Fach turbine									
Summary Description of VSAA (taken from Q3 of VSAA Survey)	including the source of the R	tensive complex of open moorland that occupies much of the borderlands between Ceredigion and Montgomeryshire. Wide expanses of heather and bilberry low vegetation with numerous stream courses and the source of the River Severn and River Wye, exposed rock outcrops and screes are frequent features in the higher areas. Open, exposed wide skies dominate with long distance dramatic views north stream to the upland peaks of SNP, Cadair Idris and west to Plynlimon in Ceredigion. Cefn Croes wind farm is highly visible from the southern parts of the area."									
Other relevant LANDMAP aspect areas that fall within this Landscape Unit ⁸⁵	Not applicable as other LANI	cable as other LANDMAP aspect areas fall outside of the study areas considered for the aspect layers									
(Summary descriptions taken from their respective LANDMAP surveys)											
Description of Landscape Unit ⁸⁶	 Strong intervisibility with 	surrounding lands	scapes as a result of the el	evated topography.							
(based on the criteria for determining	A wild and remote landse	cape with a strong	sense of tranquillity and w	vhich experiences dark skies.							
susceptibility to wind energy development – see Table 1.2 within Appendix 6.1: LVIA and CLVIA Methodology)		pen, exposed, and undeveloped skylines afford long views to distant hills. Trbines at Cefn Croes Wind Farm punctuate skylines to the south.									
Judgement on Landscape Susceptibility	The landscape susceptibility	of this landscape	unit is judged to be high d	ue to the presence of a number of	f indicators of higher susceptibility (unde	eveloped skylines, strong sense o	of tranquillity, intervisibility with				
(see Table 1.4 within Appendix 6-1: LVIA and CLVIA Methodology)	surrounding landscapes, dar	landscape susceptibility of this landscape unit is judged to be high due to the presence of a number of indicators of higher susceptibility (undeveloped skylines, strong sense of tranquillity, intervisibility with ounding landscapes, dark skies). In comparison there are only a few indicators of lower susceptibility (large scale, presence of existing wind energy generation nearby).									
Judgement on Landscape Value (see Table 1.5 within Appendix 6-1: LVIA and CLVIA Methodology)	Historic Interest), it is recorded	ed in LANDMAP as	s having outstanding scen	ic quality (although no justification	y small area in the west of the landscap is provided), has high recreational valu urality (although tranquillity is slightly de	e (with public rights of way runnir	ng through it including the Severn Way,				
	The following table sets out t	he scenic quality,	character and overall eval	uation taken from the LANDMAP	VSAA survey:						
	Evaluation Criteria	Score	Justification								
	Q46 Scenic quality	Outstanding	"N/A"								
	Q48 Character	Outstanding	Outstanding "N/A"								
	Q50 Overall Evaluation	Q50 Overall Evaluation Outstanding "Outstanding area of remote upland moorland with dramatic views to the upland peaks to the north and west, however the aspect has suffered in areas through the introduction of large scale forestry which subdivided the area."									
Judgement on Landscape Sensitivity	By combining the separate judgements on landscape susceptibility and landscape value, the sensitivity of this landscape is judged to be High .										
	Low	ı	Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Landscape	Scale of effect										
Change (see Tables 1.6 - 1.8 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction there will be very distant views (16-23km) towards the upper parts of cranes on the skyline from upper east-facing slopes. The scale of effect on the fundamental character of the landscape including its wildness and undeveloped skylines is judged to be barely perceptible at this distance. During operation, there will be some distant glimpsed views of turbines from elevated east-facing slopes, although intervening vegetation, especially conifer plantations, are likely to provide some screening. The proposed wind farm will be seen as a distant element 16-23km to the east. The scale of effect on the fundamental character of the landscape including its wildness and undeveloped skylines is judged to be barely perceptible at this distance. The existing Cefn Croes and Bryn Blaen wind farms have a greater influence on this area than the proposed Garn Fach turbines will.										
	Geographical extent										
	Not applicable as the scale of	f effect is judged t	o be barely perceptible.								
	<u>Duration/reversibility</u>										

⁸⁵ Refer to Appendix 6-3: Scoping of LANDMAP Aspect Areas for explanation of the LANDMAP aspect areas that have been considered in the LVIA and the study areas considered for the aspect layers.

86 Drawing from information within LANDMAP aspect area survey(s) and site visits.

During construction changes to the landscape character would be **short-term** (up to 5 years) and **reversible**. Although there will be the presence of partially constructed turbines throughout the construction period, these will be comparable to the operational effects.

During operation the changes to the landscape character would be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased.

Overall Judgement on Magnitude of Landscape Change

As the scale of effect is barely perceptible, so is the overall magnitude of change, both at construction and during operation.

During Construction									
Barely perceptible	Barely perceptible Low Low – Medium Medium – H				High	Very High			
During Operation									
Barely perceptible	Low	Low – Medium	Medium	Medium – High	High	Very High			

Overall Level of Effect and Significance

A very high sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.

During Construction

	Zamiig Constitution								
Negligible Minor		Minor – Moderate Moderate (Significant)		Moderate-Major (Significant)	Major (Significant)				
During Operation									
Negligible	Negligible Minor		Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

There is no existing wind energy development within this landscape unit. The area will mostly be affected by visibility of other wind farms, notably the nearby development of Cefn Croes (39 turbines at 100m tip height) and Bryn Blaen (6 turbines at 100m tip height). Llandinam Repowering (consented) is located beyond 14km from the landscape unit. The Project will not result in a perceptible additional change in the character and characteristics of this landscape unit when considered against a baseline containing other existing or consented schemes, and so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Scenario B:

Not applicable as there are no undetermined planning applications within or near to this landscape unit.

Appendix 6.5: Visual Assessment Tables

Local Communities (within 5km)

Visual Receptor	David's Well								
Location of Visual Receptor	hown on Figure 6-13a and Figure 6-14a								
Representative Viewpoints	Viewpoint 3: Minor Road at Davids Well (1.1km from the nearest turbine – T17)								
Description of Visual Receptor	David's Well is a rural linear hamlet comprising dispersed properties along an unnamed road running along the valley floor of the Llaithddu Brook. Access to these scattered properties is from the unnamed road, which neets the A483 approximately 4.8 km north-east of the settlement. This road also connects the A483 with Bwlch-y-Sarnau, located further to the south-west. Views from residential properties are partially screened by neets and west are afforded. From these locations the operational Llandinam Wind Farm (102 turbines at 45.5m tip height) is seen in relatively listant views (approximately 4km to the north-west), although partially screened by intervening landform and woodland. The Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is located approximately 7km to the east; however intervening vegetation and landform obscure views towards it.								
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	ne visual susceptibility of this receptor is judged to be high as local communities have an interest in their surroundings, and views from this settlement are enjoyed by residents and contribute to the landscape setting the settlement.								
Judgement on the Value of Views experienced by the Visual Receptor	iews experienced by this receptor are judged to be of medium value as although they are not protected or designated, the <i>Improved upland, west of upper Ithon</i> VSAA notes the area as having attractive views "out cross hills", but with the presence of Llandinam Wind Farm detracting from views.								
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on Visual Sensitivity	By combining the separate judgements on visual susceptibility and the val	lue of views experienced by the visu	ual receptor, the sensitivity of this visual	receptor is judged to be medium	-high.				
	Low Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect				1				
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, cranes erecting the turbines will be visible on the skyl tracks and the southern temporary compound affecting rural views. The solution operation, turbines will be seen to occupy 68 degrees of the availate seen extending across much of the ridgeline above the Llaithddu Brook vaturbines further to the north but tower hubs and blade tips will be prominer overlapping of turbine blades when viewed from David's Well (specifically be oblique when travelling along the unnamed road through the hamlet. The Project to this hamlet (between 945m and 1.2km) and the extent of turbine Individual properties have variable view directions and different levels of sof the turbines). Geographical Extent As indicated by the ZTV and confirmed through ground-truthing, views of the Duration/reversibility During construction the changes in views experienced by this receptor will buring operation the changes in views resulting from turbines will be long the operational period has ceased and the crane pads and other above ground-truthing of Visual Change	cale of visual effect from David's We able views of the skyline to the west a calley and direct views into the middle nt on the skyline. Although all 17 turb T5, T7, T9, T10 and T3, T6, T11). The scale of visual effect during operationes on the skyline which will affect screening (see Appendix 6-6: Residual the Project will be experienced from the best between the best will be short-term (up to 5 years) and the project will be years). The long-term (beyond 10 years). The long-time the project will be years).	ell is judged to be large. and north-west from within David's Wel e parcel of the Site will be afforded (Vie bines will be visible, spacing will be rela The nature of the views will vary dependation is judged to be large where veget et the rural views that are experienced be dential Visual Amenity Assessment (a number of locations within David's Wellargely reversible. term changes will be partially reversible	as shown on the visualisation for wpoint 3). Intervening landform watively consistent and even. There ling on the receptor's position with ation does not screen the view, gives y residents and contribute to the land RVAA) for assessment of effects of the line. The geographical extent of the left as the turbines will be dismant.	Viewpoint 3. The Project will be will partially screen the bases of will however be some 'stacking' or an in the settlement but will generally even the relatively close proximity of andscape setting of the settlement. On individual properties within 2km are large effect is therefore medium.				

Negligible

Negligible

Major (Significant)

Major (Significant)

Moderate-Major (Significant)

Moderate-Major (Significant)

	The large scale of effect over a medium geographical extent (over a long term) is judged to result in an overall medium-high magnitude of change. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be medium-high .								
		During Construction							
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		
	During Operation								
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		
Overall Level of Effect and Significance	A medium-high sensitivity comb	ined with a medium-high mag	nitude is judged to result in a mo	derate-major effect.					
		During Construction							

Minor

Minor

Minor - Moderate

Minor - Moderate

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (4-5km to the north-west) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a large scale of visual effect over a medium geographical extent to the local community when considered against a baseline containing these consented schemes, so there will be no additional cumulative effects over and above those set out in the LVIA above.

During Operation

Moderate (Significant

Moderate (Significant)

There will be no **successive** cumulative effects as there will be no additional consented schemes visible from this local community to those mentioned above (i.e. outside of the 90 degrees arc of vision).

Scenario B:

Not applicable as there are no undetermined planning applications visible from this local community. The proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, is located approximately 8.3km to the east; however intervening vegetation and landform will obscure views towards it.

Visual Receptor	Pentre									
Location of Visual Receptor	Shown on Figure 6-13a and Figure	hown on Figure 6-13a and Figure 6-14a								
Representative Viewpoints	Viewpoint 23: Pentre (4.2km from	the nearest turbine – T1)								
Description of Visual Receptor	and Stepaside to the north, and Se residential properties and lanes to woodland. Where outward views as settlement towards the Severn Vall obscured by the church building an The operational single turbine at Diheight) are barely perceptible again	ven Wells and Bryn Dadlau the east and west of the set re afforded, landform to the ey. A church and graveyard d vegetation. ugwm Farm (34.4m tip heig ast the skyline beyond inter	properties located on upper slopes of the value in the south, in addition to a number of dispositement. Views from residential properties are west, south and east forms the skyline in the are located in the north-east of the settlement) is evident on the skyline approximately 75 tening landform in views south-west from the ible on the skyline of views to the north-west	ersed residential pee partially screene middle distance cent, with relatively common south of the seestlement. The been seestlement.	roperties and farmsteads. A nu d by intervening vegetation, ind if available views. More distant open views afforded from the g ettlement. The blade tips of the	Imber of local footpaths provoluding hedgerows located a views are afforded looking raveyard looking west and not operational Llandinam Windon	ride access to dispersed along the road and areas of morth and north-east from the orth-east. Views to the south are			
Judgement on Visual Susceptibility	The visual susceptibility of this rece	eptor is judged to be high a	s local communities have an interest in their	surroundings, and	views from this settlement are	enjoyed by residents and co	ontribute to the landscape setting			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	of the settlement.			_						
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor farmland to the north" in this area.	are judged to be of mediu	n value as although they are not protected o	or designated, the <i>l</i>	Kerry Ridgeway VSAA notes "b	proad dramatic views to upla	nd to the south and rolling			
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on Visual Sensitivity	By combining the separate judgem	ents on visual susceptibility	and the value of views experienced by the v	isual receptor, the	sensitivity of this visual receptor	or is judged to be medium-r	nigh.			
	Low	Low - Medium	Medium	Med	ium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect	,				,				
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)		cross the Site will be obscur	per parts of cranes that will feature on the sk ed by intervening landform along the north-e nall.							
	north-eastern Site boundary. The h be visible beyond intervening landf of this turbine, those associated with where intervening vegetation and co	ubs and blade tips of turbin orm. Turbines will be seen a th Garn Fach will appear sir other buildings do not obscu be small , as the introduction	skyline in available views to the south-west. es located in the north of the northern parcel as part of a separate development occupying nilar in scale. The nature of the views will vare views, and direct (in the direction of travel n of the Project will result in a small change afform.	(T1, T2, T3, T4) a g a different angle or ry depending on th) for receptors trav	nd the blade tips of a further 3- of the view than the operationa e receptor's position within the elling south on the unnamed ro	-4 turbines (dependent on lo I single turbine at Dugwm Fa settlement but will be partia pad that passes through the	cation within the settlement) will arm, however given the proximity lly open from some locations, settlement. The scale of visual			
	Geographical extent									
			g, views of the Project will be experienced fro e views are likely to be seen by a few numb							
	<u>Duration/reversibility</u>									
	During construction the changes in	views experienced by this	eceptor will be short-term (up to 5 years) a	nd largely reversi k	ole.					
	During operation the changes in vie	ews resulting from turbines	will be long-term (beyond 10 years) and rev	ersible as the turb	ines will be dismantled and re	moved from the Site once th	e operational period has ceased.			
	Overall Judgement on Magnitude	e of Visual Change								
	The small scale of effect over a sm duration, the nature of construction settlement.	all geographical extent (ove can be more detracting tha	r a long term) is judged to result in an overal n at operation because of on-site activity and	ll low magnitude o d part-built structur	f change in views from the loca es. Therefore, the overall mag	al community. Although the c nitude of effect at construction	construction period is shorter in on is also judged to be low for the			
			During (Construction						
	Barely perceptible	Low	Low – Medium M	edium	Medium - High	High	Very High			

	During Operation											
	Barely perceptible	arely perceptible Low Low – Medium Medium Medium - High High Very High										
Overall Level of Effect and Significance	A medium-high sensitivity com	A medium-high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.										
		During Construction										
	Negligible	Minor	Minor - Mo	derate Mod	erate (Significant)	Moderate-Major (Significant)	Major (Significant)					
		During Operation										
	Negligible	Minor	Minor - Mo	derate Mod	erate (Significant)	Moderate-Major (Significant)	Major (Significant)					
	•	•			1							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (2km to the south-west) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario, with the turbines of Llandinam Repowering occupying a wide angle of skyline in available views from the settlement. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect over a medium geographical extent to the local community when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no successive cumulative effects as there will be no additional consented schemes visible from this local community (i.e. outside of the 90 degrees arc of vision).

Scenario B:

Not applicable as there are no undetermined planning applications visible from this local community.

Visual Receptor	Bwlch-y-Sarnau									
Location of Visual Receptor	Shown on Figure 6-13a and Figure	Shown on Figure 6-13a and Figure 6-14a								
Representative Viewpoints	Viewpoint 4: Glyndwr's Way, Bwlch-y-Sarnau (4.1km from the nearest turbine – T17)									
	Viewpoint 7: Minor Road West of	Bwlch-y-Sarnau (4.1km	from the nearest turbine – T15)							
Description of Visual Receptor	as well as via Llwybr Y Gath which on northern edge of Bwlch-y-Sarnau. A chapel which are more elevated with The single operational turbine at Badistant views (approximately 5.6km)	the hamlet of Bwlch-y-Sarnau is situated on the middle slopes of the Afon Marteg valley. Access to this settlement is from an unnamed road that connects to Pant-y-dwr in the east and Abbeycwmhir in the south-east, well as via Llwybr Y Gath which connects to Davids Well in the north-east. The Glyndwr's Way long distance footpath and national trail crosses through the settlement and local footpaths meet this route at the orthern edge of Bwlch-y-Sarnau. A cluster of properties are situated along the unnamed road and are typically enclosed by vegetation from within their curtilages. The hamlet also features a community centre and apel which are more elevated with limited boundary vegetation resulting in open views across the valley and towards the Site. The operational turbine at Bailey Bog (20m tip height) is seen in close views (approximately 750m to the north-east). The operational Llandinam Wind Farm (102 turbines at 45.5m tip height) is seen in relatively stant views (approximately 5.6km to the north-west) from the western extents of the hamlet but obscured by intervening landform when viewed from areas within the east. The operational Bryn Titli Wind Farm (22 tribines at 54m tip height) is seen against the skyline in long-distance views (approximately 8.1km to the west) and the operational Bryn Blaen Wind Farm (6 turbines at 100m tip height) is barely perceptible in long-transcent views (approximately 1.1km to the porth west).								
Judgement on Visual Susceptibility	The visual susceptibility of this rece	otor is judged to be high	as local communities have an ir	nterest in their surroundings, and	d views from this settlement are	enjoyed by residents and cont	ribute to the landscape setting			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	of the settlement.									
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor attractive to and from valleys adjace					d fields VSAA notes the views	in this area as "moderately			
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on Visual Sensitivity	By combining the separate judgeme	nts on visual susceptibilit	ty and the value of views experie	enced by the visual receptor, the	e sensitivity of this visual recepto	or is judged to be medium - hi	gh.			
	Low	Low - Medium	Mediu	ım Med	dium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect		-	•		,				
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, cranes erecting activities that are at ground level ac ridge. The scale of visual effect at c During operation, turbines will be se	oss the Site will be limite onstruction within views for	ed, obscured mainly by the landform along the northern edge of	orm of the Site and partially by i the settlement is judged to be m	ntervening vegetation including ledium.	coniferous plantations on the s	slopes of the Brondre-fawr			
	shown on the visualisations for View tips), spacing will be relatively consi along the northern edge of the ham visual effect during operation is judg from some parts of the settlement.	vpoint 4 and 7 which is fi stent and even, resulting et (e.g. within the ground	rom the northern edge of the se in a balanced visual arrangeme Is to the rear of the chapel and c	ttlement and approach road to the titlement and approach road to the views will viscommunity centre) and glimpsed	he west respectively. Although a vary depending on the receptors /oblique when travelling along the	II 17 turbines will be visible to position within the settlement ne road that passes through the	an extent (T12 limited to blade but will generally be open from e settlement. The scale of			
	Geographical extent									
	As indicated by the ZTV and confirm this small settlement. The geograph			ge from open views on the north	ern side of the hamlet, glimpsed	I views from its centre and no	views from the south-east of			
	<u>Duration/reversibility</u>									
	During construction the changes in	views experienced by this	s receptor will be short-term (up	o to 5 years) and largely reversi	ble.					
	During operation the changes in vie	ws resulting from turbines	s will be long-term (beyond 10 y	years) and reversible as the tur	bines will be dismantled and rer	noved from the Site once the o	operational period has ceased.			
	Overall Judgement on Magnitude									
	The medium scale of effect over a r duration, the nature of construction									
				During Construction						
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
				During Operation						

	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High
					·		
Overall Level of Effect and Significance			de could result in either a moder A Methodology) and therefore in			tends to have a greater influen	ce on the overall judgement
				During Construction			
	Negligible	Minor	Minor - Mo	derate Model	rate (Significant) Mode	rate-Major (Significant)	Major (Significant)
			·	During Operation			
	Negligible	Minor	Minor - Mo	derate Mode	rate (Significant) Mode	rate-Major (Significant)	Major (Significant)
	1		1				
Additional Cumulative Effects	Scenario A:						
(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)	fewer number of larger-scale to Llandinam turbines would be n effect over a medium geograph	urbines. The change in turbine nore compatible than the scale nical extent to the local comm	(5.6km to the north) will replace e scale will result in a greater visue of the Garn Fach turbines besidunity when considered against a eplaced by the repowering scher	ial influence from Llandinam i le the existing Llandinam turb baseline containing the repov	n the cumulative baseline scenar ines. Nevertheless, the introduct vered Llandinam Wind Farm and	io. The scale of Garn Fach tur on of Garn Fach will still result the operational developments	in a medium scale of visual considered in the LVIA
			be no additional consented sche the operational wind farm at Bry				l be close views of the
	Scenario B:						
	Not applicable as there are no	undetermined planning applic	cations visible from this local com	munity.			

Local Communities (5-10km)

Visual Receptor	Pant-y-dwr (small village)									
Location of Visual Receptor	Shown on Figure 6-13a and Figure 6-14a									
Representative Viewpoints	Viewpoint 24: Pant-y-dwr (7.	0km from the nearest turbine -	- T15)							
Description of Visual Receptor	the east as steep valley slopes towards the prominent hills of partially screened by interveni	s enclose the settlement, altho the Nant Tawelan. An inn, cha ng landform, vegetation (includ	ugh views open up across the M pel and parish hall are located ii ling hedgerow and woodland) a	Marteg Valley towards the south In the southern end of the settle Ind other built form within the so		are mainly focused west across and west are afforded. Longe	ss a rolling landscape and er-distance views north-east are			
	height) is barely perceptible in			ely distant feature (approximat	ely 6.4km to the north-east). The	operational Tirgwynt Wind Fari	m (12 turbines at 116m tip			
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	The visual susceptibility of this of the settlement.	receptor is judged to be high	as local communities have an ir	nterest in their surroundings, a	nd views from this settlement are	enjoyed by residents and cont	ribute to the landscape setting			
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this recuiews".	eptor are judged to be of medi	um value as although they are i	not protected or designated, th	e Rolling hills between Ithon & W	ye VSAA notes that the area h	as "generally pleasant rural			
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on Visual Sensitivity	By combining the separate jud	gements on visual susceptibili	ty and the value of views experi	enced by the visual receptor, t	ne sensitivity of this visual receptor	or is judged to be medium-hig	h.			
	Low	Low - Medium	Mediu	um M	edium - High	High	Very High			
Judgement on Magnitude of Visual Change (see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	vegetation allows affecting runsmall. During operation, turbines will intervening landform at Pistyll. The elevation of turbines apperent from some positions given the during operation is judged to be given the intervening distance Geographical Extent As indicated by the ZTV and cobstruct views. The Project wifew number of people. The geographical Extent During construction the change During operation the changes Overall Judgement on Magnation and provided the small scale of effect over	al views. Visibility of other consocupy a relatively small angle. The hubs and blade tips of fivers to slightly vary with T15 sit screening by intervening landers as small, as the introduction of from which few turbines will be confirmed through ground-truth. I not be visible from the north a cographical extent of the small site in views resulting from turbine itude of Visual Change.	struction activities will be limited at the available views of the ske turbines in the south of the Sitting higher than other turbines. form), and oblique when travelling the Project will result in only a se seen. In views of the Project will be and centre of the settlement due scale of visual effect is therefore as receptor will be short-term (ups will be long-term (beyond 10 over a long term) is judged to res	cyline in distant views north-eare's middle parcel (T13-T17) with a nature of the views will varied on the B4518 that passes the small change to the rural views experienced from the southernes to intervening landform and be small. The nature of the views will varied to the rural views experienced from the southernes to intervening landform and be small. The to 5 years) and largely reversions as the truly tin an overall low magnitude and part-built structures. Therefore	, , , , , , , , , , , , , , , , , , ,	e village, although turbines will pacing of turbines, where visib sition within the settlement but n places by roadside vegetations (and contribute to the landscontribute to the landscontribute) settlement where intervening local community and therefore moved from the Site once the contribute to the landscontribute to the landscontribute intervening local community and therefore	be partially screened by ole, will appear relatively even. will be partially open (limited n). The scale of visual effect ape setting of the settlement), buildings and vegetation do not views are likely to be seen by a operational period has ceased.			
	Barely perceptible	Low	Low – Medium	During Construction Medium	Medium - High	High	Very High			
	Daiety perceptible		Low - Mediani	During Operation	mediam - ingn	l light	very riigii			
	l .									

	Barely perceptible	Low	Low – Medium	Mediun	m Medium - Hig	jh	High	Very High			
	_										
Overall Level of Effect and Significance	A medium-high sensitivity com	nbined with a low magnitude is ju	udged to result in a minor-mod	erate effect.							
		During Construction									
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Maj	or (Significant)	Major (Significant)			
				During Oper	ration						
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Maj	or (Significant)	Major (Significant)			
	1				1						
Additional Cumulative Effects	Scenario A:										
(see 'Cumulative Landscape & Visual Impact	Combined: The consented LI	andinam Repowering scheme (6	6.4km to the north-east) will rep	lace the 102 no. exi	isting turbines (45.5m tip height) wi	ith 34 no. turbine:	s at an increased tip he	ight of 121m, therefore			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B) Combined: The consented Llandinam Repowering scheme (6.4km to the north-east) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent to the local community when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no **successive** cumulative effects as there will be no additional consented schemes visible from this local community (i.e. outside of the 90 degrees arc of vision). There will be distant views towards the operational Tirgwynt Wind Farm, but this has been considered in the baseline for the LVIA above already.

Scenario B:

There will be no combined cumulative effects as there will be no undetermined planning applications visible from this local community within the 90 degrees arc of vision.

Successive: The proposed development of Esgair Cwmowen (30 turbines at 126.5m tip height) is located approximately 24km to the north; however, it will be barely perceptible at this distance. The Project will not result in a perceptible additional visual change to the local community when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be no additional cumulative effects over and above those set out in the LVIA above.

Visual Receptor	St Harmon (small village)									
Location of Visual Receptor	Shown on Figure 6-13a and Figure	Shown on Figure 6-13a and Figure 6-14a								
Representative Viewpoints	Viewpoint 11: B4518 at St Harmo	Viewpoint 11: B4518 at St Harmon (7.9 km from the nearest turbine – T15)								
Description of Visual Receptor	The small village of St Harmon is a perpendicular to the B4518 toward run to the north-east and east of the Afon Marteg towards a backdroalong the course of the Afon Marted. The operational Llandinam Wind Farea around some peripheral properties.	Is the A470. A local PRoW pa ne settlement towards the Gly op of more distant hills. Whils og as it cuts through a landsca farm (102 turbines at 45.5m ti	sses from the settlement up the ndwr's Way national trail and the t being more enclosed to the e ape of rolling hills.	e valley side towards elevated ne wider network of PRoWs. F ast from the slopes associated	landform at Pyllau Clais, to the rom the northern cluster of prop with Moel Hywel, the southern	e west and north-west of the sperties, views are afforded ear cluster experiences some of	settlement. A number of PRoWs ast looking across the flat plain of pen views to the west, looking			
Judgement on Visual Susceptibility	The visual susceptibility of this rec	eptor is judged to be high as	local communities have an inte	erest in their surroundings, and	d views from this settlement are	enjoyed by residents and co	ontribute to the landscape setting			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	of the settlement.									
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this recepto views".	r are judged to be of medium	value as although they are no	t protected or designated, the	Rolling hills, between Ithon & V	Vye VSAA notes the area as	having "generally pleasant rural			
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on Visual Sensitivity	By combining the separate judgem	nents on visual susceptibility a	and the value of views experier	ced by the visual receptor, the	e sensitivity of this visual recept	or is judged to be medium-h	igh.			
	Low	Low - Medium	Medium	Med	dium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect		•							
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, there will be li level across the Site will be obscur perceptible beyond intervening lan During operation, the Project will be landform. The hub and blade tips of Intervening landform at Moelfre an operational turbines at Llandinam Pistyll, and partially screened by in of the settlement, and oblique for refew turbines (limited mostly to blade few turbines).	red by intervening landform, in dform during construction. The e seen to occupy 22 degrees of one turbine (T15) and blade d Pistyll will screen views of the Wind Farm. Turbines in the souther tervening woodland and fore eceptors travelling on the B4 result in only a small change	ncluding at Moelfre and Pistyll. The scale of visual effect during of the available views of the set ips of a further seven turbine turbines located within the cent outh of the Site's middle parcelestry. The nature of the views we self that passes through the se	Partially constructed structure construction is judged to be sr cyline to the north-east, as illusts (T2-T3, T5, T12-T14, T17) were of the Site's middle parcel. (T12, T13, T14, T15, T17) will vary depending on the receptulement (glimpsed in places be	s will largely be screened by intinall. strated in the visualisation for Vill be seen against the skyline in Turbines in the north of the clust appear as a separate cluster cotors position within the settlem y roadside vegetation). The sca	iewpoint 11. Turbines will be n distant views from the north ter (T2, T3, T5) will appear of development, separated by ent but will be partially open alle of visual effect during ope	the base of T15 will be barely e mostly screened by intervening hern extents of the village. comparable in scale to the the landform of Moelfre and from areas in the north and south tration is judged to be small , as			
	Geographical Extent									
	As indicated by the ZTV and confir settlement. This is a relatively quie									
	<u>Duration/reversibility</u>									
	During construction the changes in			, ,						
	During operation the changes in vi	· ·	ill be long-term (beyond 10 ye	ars) and reversible as the tur	bines will be dismantled and re	moved from the Site once the	e operational period has ceased.			
	Overall Judgement on Magnitud									
	The small scale of effect over a sm construction period is shorter in du is also judged to be low for localise	ration, the nature of construc	a long term) is judged to resultion can be more detracting that	in an overall low magnitude on at operation because of on-	of change to the northern and siste activity and part-built struct	outhern extents of this local oures. Therefore, the overall r	community. Although the nagnitude of effect at construction			
				During Construction						
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
			1	During Operation	•	•	·			

	Barely perceptible	Low	Low - Medium	Mediun	m Medium - High	High	Very High					
				•			•					
Overall Level of Effect and Significance	A medium-high sensitivity com	bined with a low magnitude is ju	dged to result in a minor-mod	lerate effect.								
		During Construction										
	Negligible	Minor	Minor - Mo	oderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					
		During Operation										
	Negligible	Minor	Minor - Mo	oderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					
						L						
Additional Cumulative Effects	Scenario A:											
(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)	resulting in a fewer number of repowered Llandinam turbines visual effect over a small geog	Combined: The consented Llandinam Repowering scheme (8.3km to the north-east) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore esulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the epowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of isual effect over a small geographical extent to the local community when considered against a baseline containing the repowered Llandinam Wind Farm, so there will be no additional cumulative effects over and above.										
	There will be no successive of	umulative effects as there will be	no additional consented sche	emes visible from thi	is local community (i.e. outside of the	90 degrees arc of vision).						
	Scenario B:											
	Not applicable as there are no	undetermined planning applicat	ons visible from this local com	nmunity.								

Visual Receptor	Llanbister (small village)										
Location of Visual Receptor	Shown on Figure 6-13a and Figure	Shown on Figure 6-13a and Figure 6-14a									
Representative Viewpoints	Viewpoint 25: Llanbister (8.3km fr	rom the nearest turbine – T1	7)								
Description of Visual Receptor	The small village of Llanbister is a list sides and elevated landform located its north-eastern part), allows for so junction of the B4356 and a minor related tips of the operational Llandir (approximately 11.3km and 4.3km to blade tips of Llandinam Wind Farm	d south and east of the settle me views north and west ac oad. Given the location of th nam Wind Farm (102 turbine o the north-west respectively	ement. Much of the settlement cross the valley floor towards p e church and graveyard at a s es at 45.5m tip height) and twir	is enclosed by vegetation as rominent hilltops including at lightly elevated position within turbine development at Bryr	sociated with roads and gardens; Ysgwd-ffordd. Llanbister Church n the settlement, relatively open v nddu (20m tip height) are barely p	however the elevated nature of and graveyard are located in the iews north-west to south-west a erceptible beyond intervening la	the settlement (particularly at east of the settlement at the afforded.				
Judgement on Visual Susceptibility	The visual susceptibility of this rece		local communities have an in	coract in their curroundings, a	nd views from this sottlement are	onioved by residents and centri	huto to the landscape setting				
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	of the settlement.	ptor is judged to be ingri as	local communities have an in	lerest in their surroundings, a	nu views iloni uns settlement ale	enjoyed by residents and contin	bute to the landscape setting				
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor throughout" and outward views "to s		n value as although they are n	ot protected or designated, th	e Wye & Ithon valley floors, north	VSAA notes the area has "attra	active views in from main roads				
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)											
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility a	and the value of views experie	nced by the visual receptor, t	he sensitivity of this visual recept	or is judged to be medium-high					
	Low	Low - Medium	Mediu	m M	edium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect										
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, there will be lin and north-east of the settlement (in and Castle Bank. The scale of visua	cluding Llanbister church an	d graveyard). Visibility of othe								
	During operation, turbines will be set six turbines (T1, T4, T12-14, T16) we nature of the views will vary depend Llanbister church and graveyard) and fully screen outward views. The (and contribute to the landscape set)	vill slightly breach the skyline ding on the receptors position and glimpsed (by surrounding scale of visual effect during	e above intervening landform, n within the settlement but will rvegetation) for receptors trav operation is judged to be sm a	including Moel Dod and Cast generally be partially open a elling north-west on sections all, as the introduction of the l	le Bank. However much of the Prond direct from around properties lengther the B4356 that passes through Project will result in only a small c	oject will be entirely screened by ocated in the south and north-ea the settlement, where interveni	r intervening landform. The ast of the settlement (including ng vegetation and buildings do				
	Geographical Extent										
	As indicated by the ZTV and confirm sections of the B4356 that passes t					h and north-east of the settleme	nt and glimpsed views from				
	<u>Duration/reversibility</u>										
	During construction the changes in			, , ,							
	During operation the changes in vie	•	vill be long-term (beyond 10 y	ears) and reversible as the t	urbines will be dismantled and rei	moved from the Site once the op	perational period has ceased.				
	Overall Judgement on Magnitude			lk in			l				
	intermittent sections of the B4356.	The small scale of effect over a small geographical extent (over a long term) is judged to result in an overall low magnitude of change to the southern and north-eastern extents of this local community, and from intermittent sections of the B4356. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be low for localised extents of the settlement.									
				During Construction							
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				
				During Operation	·						
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				

Overall Level of Effect and Significance	A medium-high sensitivity combined	A medium-high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.									
		During Construction									
	Negligible	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									
	During Operation										
	Negligible										

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (11.1km to the north-west) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent to the local community when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no successive cumulative effects as there will be no additional consented schemes visible from this local community to those mentioned above (i.e. outside of the 90 degrees arc of vision).

Scenario B:

Not applicable as there are no undetermined planning applications visible from this local community.

Visual Receptor	Newtown (town)										
Location of Visual Receptor	Shown on Figure 6-13a and Figure	Shown on Figure 6-13a and Figure 6-14a									
Representative Viewpoints	Viewpoint 26: Newtown (10.6km f	(iewpoint 26: Newtown (10.6km from the nearest turbine – T1)									
Description of Visual Receptor	Newtown is a large town located all that surround the settlement, as we provide a backdrop to many of the footprint of NCN Route 81 to the so	Il as by the high density of building views. NCN Route 81 passes throu uth of its crossing over the River S	s that make up the tow gh the town on a south evern.	n. There are some views along -west to north-east alignment a	the valley floor, which is flanked and The Severn Way Path passe	I by steep slopes to the north a es through the northern extents	and south, forming hill tops that s of the town, following the				
	as a relatively distant feature beyor		int) is barely perceptible	an long-distance views (approx	Minately 7-9Min to the South-Wes	ty from the northern extents of	tile settlement. Turbines appear				
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	The visual susceptibility of this rece of the settlement.	ptor is judged to be high as local o	communities have an in	terest in their surroundings, an	d views from this settlement are	enjoyed by residents and cont	ribute to the landscape setting				
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor farmland and rising upland beyond						into the surrounding rolling				
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)											
Judgement on Visual Sensitivity	By combining the separate judgement	ents on visual susceptibility and the	e value of views experie	enced by the visual receptor, th	e sensitivity of this visual recepto	or is judged to be medium-hig	h.				
	Low	Low - Medium	Mediu	m Me	dium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect										
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction there will be dis rural views from some parts of the intervening landform of the Site and	own (particularly from the slightly e	elevated northern edge	of the settlement). Visibility of o	other construction activities that a	are at ground level across the	Site will be obscured by the				
	During operation, turbines will be so be visible against the skyline, with the barely perceptible beyond forest settlement but will generally be particularly settlement. The scale of visual effections are settlement.	pases of turbines partially screened and landform. Turbines will appear a tially open from around properties l at during operation is judged to be	l by landform. The blad as a compact cluster al ocated in the northern small as the introduction	e tip of T5 will breach the skylir though with relatively even spa extents of the village, and obliq on of the Project will result in or	ne and be seen above intervenin cing. The nature of the views wil ue/glimpsed by receptors travelli	g landform whilst the blade tip I vary depending on the receping on the A4811 and the local	s of two turbines (T9, T10) will tors position within the minor road network through the				
	Geographical Extent										
	As indicated by the ZTV and confirm obstruct views. The geographical e			mited from the northern extents	s of this settlement (north of the	A4811) where intervening build	dings and vegetation do not				
	<u>Duration/reversibility</u>										
	During construction the changes in	views experienced by this receptor	will be short-term (up	to 5 years) and largely revers	ible.						
	During operation the changes in vie	ews resulting from turbines will be I	ong-term (beyond 10 y	rears) and reversible as the tu	rbines will be dismantled and rer	moved from the Site once the o	operational period has ceased.				
	Overall Judgement on Magnitude										
	shorter in duration, the nature of co	The small scale of effect over a small geographical extent (over a long term) is judged to result in an overall low magnitude of change to the northern extents of this local community. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be low for localised extents of the settlement.									
				During Construction							
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				
				During Operation							
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				

Overall Level of Effect and Significance	A medium-high sensitivity combined	A medium-high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
		During Construction								
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									
	During Operation									
	Negligible	Negligible Minor Minor Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (6km to the south-west) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent to the local community when considered against a baseline containing the repowered Llandinam Wind Farm, so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no successive cumulative effects as there will be no additional consented schemes visible from this local community to those mentioned above (i.e. outside of the 90 degrees arc of vision).

Scenario B:

Not applicable as there are no undetermined planning applications visible from this local community.

Local Communities (10-15km)

Visual Receptor	Crossgates (large village)	Crossgates (large village)						
Location of Visual Receptor	Shown on Figure 6-13a and Figure	e 6-14a						
Representative Viewpoints	Viewpoint 27: Crossgates (14.0kr	Viewpoint 27: Crossgates (14.0km from the nearest turbine – T17)						
Description of Visual Receptor		rossgates is a large nucleated village located along the A483 and A44, situated to the east of the Clywedog Brook, on its lower slopes. Views are mostly limited by vegetation, particularly that associated with the lywedog Brook to the west, railway line to the south and mature field boundaries to the north. Views are therefore more focused to the east, looking across the Ithon Valley towards the hills associated with the Radnor orest in the distance.						
	Blade tips of the under-construction	n Hendy Wind Farm (7 turbin	es at 100m tip height) are ba	rely perceptible beyond in	ntervening landform in views (approximately 5.5km to the south-	east).	
Judgement on Visual Susceptibility		eptor is judged to be high as	local communities have an ir	nterest in their surroundin	gs, and views from this settler	nent are enjoyed by residents and	contribute to the landscape setting	
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	of the settlement.							
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor community who experience them.	are judged to be of low valu	ie. Views are not protected o	designated and the <i>Cro</i>	ssgates VSAA notes that there	are "no good views out". Neverth	eless, they are valued by the local	
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)								
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility a	and the value of views experi	enced by the visual recep	otor, the sensitivity of this visua	ıl receptor is judged to be mediu n	n.	
	Low	Low - Medium	Mediu	ım	Medium - High	High	Very High	
Judgement on Magnitude of Visual Change	Scale of effect			<u>'</u>	-		-	
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction there will be lim level across the Site will be obscure distance views are afforded. The so	ed, partially by intervening ve	egetation (including woodland	associated with Clywedo				
	During operation, turbine blade tips settlement but will generally be glim places by roadside vegetation). The the Project will be seen.	npsed (between vegetation) f	from around a limited number	of residential properties,	or oblique for receptors trave	ling on the A483 that passes thro	ugh the settlement (glimpsed in	
	Geographical Extent							
	Not applicable as the scale of effec	t is judged to be barely perce	eptible.					
	<u>Duration/reversibility</u>							
	During construction the changes in		. , .	, ,				
	During operation the changes in vie	_	ill be long-term (beyond 10 y	/ears) and reversible as	the turbines will be dismantle	d and removed from the Site once	the operational period has ceased.	
	Overall Judgement on Magnitude As the scale of effect is barely perc		unitude of change, both at cor	estruction and during one	ration			
	As the scale of effect is barely perc	eptible, so is the overall may	initiate of change, both at cor					
		1		During Constructi				
	Barely perceptible	Low	Low – Medium	Medium	Medium - Hig	h High	Very High	
				During Operation	n			
	Barely perceptible	Low	Low - Medium	Medium	Medium - Hig	h High	Very High	

Overall Level of Effect and Significance	A medium sensitivity combined with a barely perceptible magnitude is judged to result in a negligible effect.
	During Construction

Negligible	Minor	Minor - Moderate	Moderate (Significant	Moderate-Major (Significant)	Major (Significant)		
	During Operation						
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		

(see 'Cumulative Landscape & Visual Impact Assessment ' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Not applicable as there are no consented schemes visible from this local community. There will be limited views towards the under-construction Hendy Wind Farm, but this has been considered in the baseline for the LVIA above already.

Scenario B:

Not applicable as there are no undetermined planning applications visible from this local community.

Road Users (within 10km)

Visual Receptor	Motorists on the minor road netwo	ork around the eastern side of the Si	te (between the Site and the A483)					
Location of Visual Receptor	Shown on Figure 6-13a and Figure	re 6-14a						
Representative Viewpoints	Viewpoint 2: Minor Road near Bwlch-y-Sarnau Hills (1.9 km from the nearest turbine – T17) Viewpoint 3: Minor Road at Davids Well (1.1 km from the nearest turbine – T11) Viewpoint 5: Minor Road near Ddullui Bank (1.7 km from the nearest turbine – T11)							
Description of Visual Receptor	The minor road network around th local footpaths which tend to run fit to the south-west, following the coafforded with varying levels of enchedgerows and post and wire fend and extend towards the east or we to the north-eastern corner of the sit allows open views along most of There are also some views of the Llaithddu, particularly where lanes from the minor road as it approach	he minor road network around the eastern side of the Site typically comprises rural lanes that connect to/from the A483 in the east and provide linkages between small communities. They also provide access points to be local footpaths which tend to run from one lane to another. The main route within this immediate network is a minor road that leaves the A483 at Esgairdraenllwyn (approximately 4km to the east of the Site) and heads to the south-west, following the course of the Llaithddy Brook. It passes by the small hamlets / farmsteads of Pen-y-cwm, Llaithddu and David's Well before joining the hamlet of Bwlch-y-sarnau in the south. The road is forded with varying levels of enclosure with high hedgebanks providing immediate containment along its northern extent before opening up more between Llaithddu and Bwlch-y-sarnau through a combination of lower edgerows and post and wire fencing. This results in varying open and enclosed views along the Llaithddy valley to the south and east, including some views towards the Site. Other narrow lanes adjoin this minor road and extend towards the east or west, often terminating at local farms, from which there are some open views (including towards the Site). There is another narrow lane that extends westwards from the A483 at Gwynant to the north-eastern corner of the Site. It passes by the excess to the existing Llandinam Wind Farm (102 turbines at 45.5m tip height) and turbines associated with this development are visible from parts of this road, as allows open views along most of its length. Llandinam Wind Farm is also visible from other parts of the minor road network although partially screened by intervening landform and vegetation. There are also some views of the twin turbine operational development at Esgairdraenllwyn (35m tip height) and the single operational turbine at Bryn Cwmrhiewdre (34m tip height) from the minor road network, there is limited visibility of the single operational turbine at Bailey Bog (20m tip height) om the minor road as it approaches Bwl						
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	The visual susceptibility of this rec	The visual susceptibility of this receptor is judged to be medium as people travelling on local road routes are likely to have some attention focused on the surrounding landscape, but views are transitory.						
Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)	network) notes the area as having	Views experienced by this receptor are judged to be of medium value as although they are not protected or designated, the <i>Improved upland, west of upper Ithon</i> VSAA (which encompasses most of the minor road network) notes the area as having attractive views "out across hills", but with the presence of Llandinam wind farm detracting from views. The narrow lane that extends westwards from the A483 at Gwynant to the northeastern corner of the Site falls within the <i>Kerry Ridgeway</i> VSAA which notes the area as having "broad dramatic views to upland to the south and rolling farmland to the north".						
Judgement on Visual Sensitivity	By combining the separate judgen	ments on visual susceptibility and the	e value of views experienced by the visu	al receptor, the sensitivity of this visu	al receptor is judged to be medi u	um.		
	Low	Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Visual Change	Scale of effect							
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	Llaithddu and Bwlch-y-sarnau (inc activities relating to the implement be limited by intervening vegetation westwards from the A483 at Gwyrnetwork, but from the stretches of be large. During operation, turbines will be sections of the minor road network Viewpoint 5) while from other are vegetation provide screening. From incidents of stacking will occur who relatively close proximity of the Pro-	During construction, cranes erecting the turbines will be visible on the skyline, affecting rural transitory views from parts of the minor road network, particularly from the sections of road between the southern edge of Llaithddu and Bwlch-y-sarnau (including around David's Well), between the northern edge of Llaithddu and Pen-y-cwm Farm, and the lanes running towards the west. There will also be some visibility of construction activities relating to the implementation of crane pads, tracks and the southern temporary compound from areas where views are more open (i.e. between the southern edge of Llaithddu and Bwlch-y-sarnau) but this will be limited by intervening vegetation and landform from other parts of the minor road network. There will also be some road widening works and construction vehicles visible along the narrow lane that extends westwards from the A483 at Gwynant to the north-eastern corner of the Site to facilitate the access into the Site from the A483. The scale of visual effect at construction will vary from different parts of the minor road network, but from the stretches of road between the southern edge of Llaithddu and Bwlch-y-sarnau, between the northern edge of Llaithddu and Pen-y-cwm Farm and from the lanes that run to the west, it is judged to						
			oad network, actual visibility will be limite y-sarnau, between the northern edge of l					

During construction the changes in views experienced by this receptor will be **short-term** (up to 5 years) and largely **reversible**.

During operation the changes in views resulting from turbines will be **long-term** (beyond 10 years). The long-term changes will be **partially reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level.

Overall Judgement on Magnitude of Visual Change

The large scale of effect over a medium geographical extent (over a long term) is judged to result in an overall **medium-high** magnitude of change. Although the construction period is shorter in duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **medium-high**.

	During Construction									
Barely perceptible Low Low – Medium Medium Medium - High High Very High										
	During Operation									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High				

Overall Level of Effect and Significance

A medium sensitivity combined with a medium-high magnitude is judged to result in a **moderate-major** effect.

,										
During Construction										
Negligible	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant)									
	During Operation									
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together and in the same direction of view from much of the minor road network where intervening vegetation does not obstruct views. Ddulley Bank (20m tip height) will also be seen in combination with Garn Fach and Llandinam Repowering from a relatively small part of the route, particularly where a lane extending to the west passes near to this turbine. Nevertheless, the introduction of Garn Fach will still result in a **large** scale of visual effect over a medium geographical extent to the minor road network when considered against a baseline containing these consented schemes and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

There will be occasional sequential effects from the proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm and seen intermittently 5.8 – 8.5km to the east (in the opposite direction to Garn Fach) as the receptor moves along the minor road network. However, the introduction of Garn Fach will still result in a **large** scale of visual effect over a medium geographical extent to the minor road network when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional** cumulative effects over and above those set out in the LVIA above.

Overall Judgement on Magnitude of Visual Change

The medium scale of visual effect over a medium geographical extent during operation (over a long term) is judged to result in an overall medium magnitude of change. Although the construction period is shorter in

duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be medium.

During Construction							
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High	
	During Operation						
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High	

Overall Level of Effect and Significance	A medium sensitivity combined with a medium magnitude is judged to result in a moderate effect.								
			During Co	nstruction					
	Negligible Minor Minor - Moderate Moderate (Significant)) Moderate-Major (Significant) Major (Significant)								
		During Operation							
	Negligible	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together and in the same direction of view from intermittent sections of the minor road network between Bwlch-y-Sarnau and Pant-y-dwr where the intervening landform of Pistyll and vegetation do not obstruct views. Nevertheless, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a medium geographical extent to the minor road network when considered against a baseline containing the consented Llandinam Repowering scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

Not applicable as there are no undetermined planning applications visible from this minor road network. Although the proposed Carno III (13 turbines at 149.9m tip height) is shown as theoretically visible (approximately 21km to the north-west) from this minor road network, in reality vegetation will obscure views towards it.

Visual Receptor	Motorists on the A483								
Location of Visual Receptor	Shown on Figure 6-13a and Figure	e 6-14a							
Representative Viewpoints	None from the road itself (nearest is VP 8: Footpath North-east of Devil's Elbow)								
Description of Visual Receptor	the Site at Crossgates and the A48 Dolfor and Newtown. Between Crosfrom the road vary but are occasion Crossgates, where glimpsed oblique and north-east looking across the Serom parts of the road to the north twin turbine operational developme	The A483 is a major road which connects Swansea (south Wales) to Chester (north-west England). The road passes approximately 3.3km to the east of the Site at its nearest point, connecting to the A44 to the south of the Site at Crossgates and the A489 to the north of the Site at Newtown. The road passes a number of small settlements and hamlets including Crossgates, Fron, Llanddewi Ystradenni, Llanbister, Llanbadarn Fynydd, Dolfor and Newtown. Between Crossgates and Newtown, the road generally passes on a north-south alignment and follows the Ithon Valley from Llanddewi Ystradenni northwards. Within the Study Area, outward views rom the road vary but are occasionally obscured by intervening mature woodland associated with the River Ithon and hedgerow field boundaries. Distant views are afforded from sections of the road, including near Crossgates, where glimpsed oblique views north-west are afforded towards distant hills associated with the Radnor Forest, and to the south of Newtown, where oblique and direct views from the road are focused north and north-east looking across the Severn Valley. From parts of the road to the north of Llanbadarn Fynydd, the operational Llandinam Wind Farm (102 turbines at 45.5m tip height) is seen in long-distance views west from the road. There are also some views of the win turbine operational development at Esgairdraenllwyn (35m tip height) and the single operational turbine at Bryn Cwmrhiewdre (34m tip height). The road passes approximately 1km to the east of the twin turbine operational development at Brynddu (20m tip height) however views of its turbines are afforded from very limited extents of the road (including glimpsed oblique views near Rhydmoelddu).							
Judgement on Visual Susceptibility	The visual susceptibility of this rece	ptor is judged to be low as people tra	avelling more rapidly on major road ro	outes are less likely to have interest or	attention focused on their surrou	indings.			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on the Value of Views experienced by the Visual Receptor	from the nearest Garn Fach turbine) notes the area as having attractive v				sses most of the road within 10km falls within the <i>Kerry Ridgeway</i> VSAA			
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)	willion flotes the area as having bit	ad diamant views to upland to the st	outh and rolling familiand to the north						
Judgement on Visual Sensitivity	By combining the separate judgeme	y combining the separate judgements on visual susceptibility and the value of views experienced by the visual receptor, the sensitivity of this visual receptor is judged to be low-medium.							
	Low	Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect								
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	of the A483 near Gwynant will be us will be evident in views from this str and the implementation of crane pa effect at construction will vary from	sed by construction vehicles in order etch of the A483 which is afforded wi ds, tracks, substation and northern te different parts of the road, but from lo	to join onto the access road that runs th relatively open views. There will al emporary compound; albeit seen as o ocalised extents of the road near Gwy	s westwards towards the Site. The wid	lening of this access road and the ssociated with the two borrow pits oximately 4.5-6.6km to the west a scale of visual effect at constructi	within the northern parcel of the Site, and south-west. The scale of visual on will reduce with distance from the			
	between 4.7km and 6.7km, with tra- leave scars in the early years. The	cks seen between the turbines in the Project will be seen partially in front o	middle and northern parcels of the S of the operational turbines at Llandina	sperienced from limited extents of the lite (T1-T12) and the substation visible im Wind Farm and will also increase the ar Gwynant where rural transitory view	in the north. The borrow pits will ne horizontal extent of wind farm	be restored at operation but may development to the south. The scale			
	A483 at Gwynant, there will be a sr	nall scale of visual effect in relatively	distant views where turbines will app	m (to the west of the road) provide into bear on the skyline but will be partially ove intervening landform (such as fron	screened by intervening landform	n and vegetation such as near			
	Geographical extent								
				ng vegetation, including woodland ass isual effect will occur intermittently acr					
	<u>Duration/reversibility</u>								
	During construction the changes in	views experienced by this receptor w	vill be short-term (up to 5 years) and	largely reversible.					
				(beyond 10 years). The long-term chaind infrastructure (excluding tracks) wi					
	Overall Judgement on Magnitude	of Visual Change							

		/ small scale of effect over a med acting than at operation because				
	During Construction					
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High
			During Operation			
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High

Overall Level of Effect and Significance	A low-medium sensitivity combined with a low-medium magnitude is judged to result in a minor-moderate effect.							
			During Co	nstruction				
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)							
		During Operation						
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique views (and in the same direction) from intermittent sections of the road where intervening vegetation does not obstruct views. The scale of Garn Fach turbines will appear slightly larger than the scale of the Llandinam Repowering turbines and they will increase the horizontal extent of turbines in views from intermittent sections of the road, including near Gwynant and Crochran. However, there will be sections of the road from which the Llandinam Repowering turbines will appear more prominent than those of Garn Fach, including near Dolfor and a stretch of the road to the south of Gwynant where intervening landform will partially screen views of Garn Fach. Nevertheless, the introduction of Garn Fach will still result in a medium scale of visual effect over a small geographical extent / small scale of visual effect over a medium geographical extent when considered against a baseline containing the consented Llandinam Repowering scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above).

Scenario B:

There will be occasional sequential effects from the proposed Carno III Wind Farm (13 turbines at 149.9m tip height) and Esgair Cwmoen Wind Farm (18 turbines at 125m tip height), although these developments will be barely perceptible in distant views north-west from limited extents of the road between Dolfor and Newtown and seen in a different direction of view to Garn Fach as the receptor moves along the road. However, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent / **small** scale of visual effect over a medium geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Visual Receptor	Motorists on the B4518								
Location of Visual Receptor	Shown on Figure 6-13a and Figure	Shown on Figure 6-13a and Figure 6-14a							
Representative Viewpoints	Viewpoint 11: B4518 at St Harmo Viewpoint 17: B4518 South of St	Viewpoint 10: B4518 at Nantgwyn (6.6km from the nearest turbine – T15) Viewpoint 11: B4518 at St Harmon (7.9km from the nearest turbine – T15) Viewpoint 17: B4518 South of St Harmon (9.7km from the nearest turbine – T15) Viewpoint 19: Llyn Clywedog Roadside Viewpoint (13.3km from the nearest turbine – T2)							
Description of Visual Receptor	including Elan Village, Rhayader, of the road between St. Harmon and foreshortened by intervening landful Llandiloes, landform to the west of Oldchapel Hill screens many of the passes through steep rolling landful The operational Llandinam Wind Fof the road. The operational Bryn Bobscure views. The operational Care	B4518 is a relatively long minor road connecting Elan Village and Llanbrynmair. The road provides access to a number of dispersed residential properties, small communities and settlements from the A470 ding Elan Village, Rhayader, St Harmon, Pant-y-dwr, Nantgwyn, Llanidloes and Llanbrynmair. A number of lanes and footpaths connect farmsteads and properties to the east and west of the road. From a section e road between St. Harmon and Nantgwyn, outward views are afforded looking across the flat plain of the Afon Marteg and towards more distant landform to the east. Views to the west are more frequently thortened by intervening landform. Views are occasionally screened by mature hedgebanks, woodland and buildings where the road passes through communities. From the part of the road between Nantgwyn and diloes, landform to the west of the road becomes slightly steeper and more rolling, and often screens distant views west. Intervening vegetation, including woodland and hedgerow, and the intervening landform of hapel Hill screens many of the views east from this road, however occasional glimpsed views of more distant landform to the north-east are afforded from parts of the road. To the north of Llanidloes, the road es through steep rolling landform with occasional screening by intervening woodland and forestry. Here views are focused west looking across the Llyn Clywedog reservoir. Operational Llandinam Wind Farm (102 turbines at 45.5m tip height) and the single operational turbine at Garth Fawr (20.9m tip height) are seen as relatively distant features in views north-east from parts to poperational Bryn Blaen Wind Farm (6 turbines at 100m tip height) is seen in distant views north-east from limited extents of the road between Nantgwyn and Llanidloes where intervening features do not ure views. The operational Carno I (56 turbines at 54m tip height) forms a distant feature in views north from intermittent sections of the road.							
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	The visual susceptibility of this rec	e visual susceptibility of this receptor is judged to be medium as people travelling on local road routes are likely to have some attention focused on the surrounding landscape, but views are transitory.							
Judgement on the Value of Views experienced by the Visual Receptor			ue as although they are not protected or d asant rural views within but not many note		Ithon & Wye VSAA (which encom	npasses the section of road between			
(see Table 1.11 within Appendix 6-A: LVIA and CLVIA Methodology)									
Judgement on Visual Sensitivity	By combining the separate judgen	nents on visual susceptibility and t	he value of views experienced by the visu	al receptor, the sensitivity of this visu	ual receptor is judged to be mediu	ım.			
	Low	Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect					- 1			
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	between the south of St. Harmon a From parts of the road further nort road, but from localised extents of During operation, turbines will be s Harmon and Pant-y-dwr, as illustra northern parcel and at times lead t	During construction, there will be limited distant views (approximately 6-12km) towards the upper parts of cranes that will feature on the skyline, affecting rural transitory views north-east and east from parts of the road between the south of St. Harmon and Nantgwyn, Visibility of other construction activities that are at ground level across the Site will be obscured by intervening landform, including by the hills of Moelfre and Pistyll. From parts of the road further north of Nantgwyn, views of cranes erecting the turbines become more intermittent due to intervening landform. The scale of visual effect at construction will vary from different parts of the road, but from localised extents of the road between the south of St Harmon and Nantgwyn, it is judged to be small , but will reduce with distance from the Project. During operation, turbines will be seen on the skyline (approximately 6-12km) and will occupy between 10-22 degrees of available oblique views to the north-east from sections of the road between the south of St Harmon and Pant-y-dwr, as illustrated in the visualisations for Viewpoint 11 and Viewpoint 17 . Intervening landform at Moelfre and Pistyll will partially screen views of turbines located within the Site's middle and northern parcel and at times lead to the perception of two separate clusters of development. The Project will be seen in combination with the turbines at Llandinam and will increase the horizontal extent of wind farm development to the south. The scale of visual effect at operation will vary from different parts of the road, but from localised extents of the road between the south of St Harmon and Pant-y-dwr where rural transitory							
	The scale of visual effect will reduce with distance from the development and where vegetation and landform (to the east of the road) provide intervening elements within views. Beyond the localised section of the B4518 between St Harmon and Pant-y-dwr, the blade tips of turbines will become barely perceptible above intervening landform (near Nantgwyn and to the south-east of Llanidloes) in relatively distant oblique views from the road as illustrated in the visualisation for Viewpoint 10 . In more distant views from parts of the road to the north-west of Llanidloes, including near the Llyn Clywedog reservoir (beyond 10km), the Project will form a distant feature on the skyline, partially screened by intervening landform (as illustrated in the visualisation for Viewpoint 19), and seen in combination with the operational Llandinam Wind Farm in direct views in the direction of travel (south-east) on the road. The scale of visual effect at operation from these parts of the road is judged to be barely perceptible .								
	Geographical extent								
			actual visibility will be limited to some deg d between St Harmon and Pant-y-dwr, i.e.		east. From much of the road the e	effect will be barely perceptible and the			
	<u>Duration/reversibility</u>								
	During construction the changes in	views experienced by this recept	tor will be short-term (up to 5 years) and	largely reversible .					

During operation the changes in views resulting from turbines will be long-term (beyond 10 years) and reversible as the turbines will be dismantled and removed from the Site once the operational period has ceased. Overall Judgement on Magnitude of Visual Change The small scale of effect over a small geographical extent (over a long term) is judged to result in an overall low magnitude of change. Although the construction period is shorter in duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of change at construction is also judged to be low. **During Construction** Low **Barely perceptible** Low - Medium Medium - High High Very High Medium **During Operation** Low Low - Medium High **Barely perceptible** Medium Medium - High Very High

Overall Level of Effect and Significance	A medium sensitivity combined with	medium sensitivity combined with a low magnitude of change is judged to result in a minor-moderate effect.								
			During Co	nstruction						
Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)										
	During Operation									
	Negligible Minor Minor Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique distant views (and in the same direction) from intermittent sections of the road where intervening vegetation does not obstruct views. The scale of Garn Fach turbines will be comparable to the scale of the Llandinam Repowering turbines, however they will increase the horizontal extent of turbines in views from intermittent sections of the road between the south of St. Harmon and Pant-y-dwr. In views from sections of the road between Nantgwyn and Llanidloes, the proposed turbines of Garn Fach will appear barely perceptible beyond the turbines of Llandinam Repowering, which will appear prominently against the skyline. Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing the consented Llandinam Repowering scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be occasional sequential effects from the proposed Carno III Wind Farm (13 turbines at 149.9m tip height) and Esgair Cwmoen Wind Farm (18 turbines at 125m tip height), although these developments will be seen in distant views (10-13km to the north-west and 16-18km to the north respectively) from limited extents of the road to the south of Llanidloes and seen in a different direction of view to Garn Fach as the receptor moves along the road. The introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Visual Receptor	Motorists on the B4569								
Location of Visual Receptor	Shown on Figure 6-13a and Figur	e 6-14a							
Representative Viewpoints									
Description of Visual Receptor	The B4569 is a relatively short min Cerist and Trannon Valleys. The roand small communities, including Communities	ad then runs broadly para Cerist and Trefeglwys. A no e views are focused towar non Valleys, views are focu	illel to Colwyn Brook before reac umber of minor roads, lanes and ds containing landform to the so used north-east along the valley	hing Caersws in the Carno Vall footpaths connect to further re- uth of the Severn Valley, with o floors. Intervening landform scr	ey. The road provides access fr sidential properties and farmste ccasional woodland and mature eens more distant views south	om the A470 for a number of dis ads to the north and south of the e hedgerows screening oblique v from this part of the road. Where	spersed residential properties e road. From the south- views. Where the road e the road slightly gains in		
	The operational Bryn Blaen Wind F and south of Cerist). The operation feature on the skyline, partially screen the road north-east of Trefeglwys.	al Llandinam Wind Farm (eened by intervening landf	102 turbines at 45.5m tip height orm. The operational Bryn Titli V) is seen in oblique views south Vind Farm (22 turbines at 53.5n	and south-east from much of the tip height) is barely perceptible	ne road; however, turbines appe e against the skyline in more dis	ar as a relatively distant		
Judgement on Visual Susceptibility	The visual susceptibility of this rece	eptor is judged to be medi	um as people travelling on local	road routes are likely to have s	ome attention focused on the s	urrounding landscape, but views	s are transitory.		
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor Caersws) notes the area as having				Caersws River Bowl VSAA (wh	ich encompasses sections of ro	ad between Cerist and		
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on Visual Sensitivity	By combining the separate judgem	By combining the separate judgements on visual susceptibility and the value of views experienced by the visual receptor, the sensitivity of this visual receptor is judged to be medium .							
	Low	Low - Medium	Mediu	m Med	dium - High	High	Very High		
Judgement on Magnitude of Visual Change	Scale of effect								
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction there will be diviews from intermittent sections of limited, obscured mainly by the lan north of Cerist and to the north-eas	the road to the north-east dform of the Waun Dduba	of Trefeglwys, north of Cerist an rthog ridge. The scale of visual e	d to the north-east of Llanidloes	s. Visibility of other construction	activities that are at ground leve	el across the Site will be		
	During operation, turbines will be s Cerist and to the north-east of Llan blade tips of a further four to seven turbines of the Project, located in the Turbines will appear to fill a gap be turbines at Llandinam. Overall, it is	idloes. Depending on the turbines (including those he south of the middle pare tween the two clusters of	viewing location from the road, the located in the northern parcel and cel of the Site, will be screened by turbines forming the operational	ne hubs of three to five turbines d northern extents of the middl by intervening landform. Turbine Llandinam Wind Farm layout; h	(including T1, T2, T3, T4, T5) was parcel of the Site) seen againse spacing will be relatively consioners, the scale of turbines of	will be seen sitting just above int st the skyline beyond intervening stent and even, resulting in a ba f the development will appear pe	tervening landform and the glandform. The southernmost alanced visual arrangement. erceptibly larger than the		
	Geographical extent								
	Whilst the ZTV indicates theoretica The geographical extent of the small			ach will be from intermittent sec	tions of the road north-east of 1	refeglwys, north of Cerist and to	o the north-east of Llanidloes.		
	<u>Duration/reversibility</u>								
	During construction the changes in	views experienced by this	s receptor will be short-term (up	to 5 years) and largely reversi	ble.				
	During operation the changes in vie	ews resulting from turbines	s will be long-term (beyond 10 y	ears) and reversible as the tur	bines will be dismantled and re	moved from the Site once the or	perational period has ceased.		
	Overall Judgement on Magnitude	e of Visual Change							
	The small scale of effect over a me detracting than at operation because						ter in duration, it can be more		
				During Construction					
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		

		During Operation							
	Barely perceptible	Low	Low – Medium	Med	lium Medium - H	igh High	Very High		
Overall Level of Effect and Significance	A medium sensitivity combined	A medium sensitivity combined with a low-medium magnitude of change is judged to result in a minor-moderate effect.							
	During Construction								
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		
		During Operation							
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique distant views (and in the same direction) from intermittent sections of the road where intervening vegetation does not obstruct views. Whereas the proposed turbines of Garn Fach will be partially screened by intervening landform, the north-western turbines of the consented Llandinam Repowering will at times appear prominent along the containing ridgeline. The Project will occupy a smaller angle of the view than Llandinam Repowering and will appear to fill a gap in the middle of the Llandinam layout, improving the overall composition of wind farm development. Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a medium geographical extent when considered against a baseline containing the consented Llandinam Repowering scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be occasional sequential effects from the proposed Carno III Wind Farm (13 turbines at 149.9m tip height), although turbine blade tips of this development will be barely perceptible in views north and north-west from the B4569. The introduction of Garn Fach will still result in a **small** scale of visual effect over a medium geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Visual Receptor	Motorists on B4355								
Location of Visual Receptor	Shown on Figure 6-13a and Figure	e 6-14a							
Representative Viewpoints									
Description of Visual Receptor	The B4355 is a long minor road that the road crosses south-west across	t connects Dolfor and King rolling farmland towards t	ton. From the A483 at Dolfor th he River Lugg Valley at Prestieç	e road passes broadly on a gne and crosses the Hindwe	north-west to south-east alignm ell Brook shortly thereafter. The ı	ent following the River Teme Valle oad then crosses rolling farmland	ey to Knighton. From Knigton, and meets the A44 at Kington.		
	Within 10km of the Site, views from boundaries. There is a brief open a					nsteads and residential properties	s and mature hedgerow field		
		e operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is prominent in views (2.8km to the south) from a localised extent of the road near Ddol. The operational Llandinam Wind Farm (102 pines at 45.5m tip height) is barely perceptible against the skyline in distant views from the open area near Cider House.							
Judgement on Visual Susceptibility	The visual susceptibility of this rece	ptor is judged to be medi u	m as people travelling on local	road routes are likely to hav	ve some attention focused on the	surrounding landscape, but view	s are transitory.		
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on the Value of Views experienced by the Visual Receptor		iews experienced by this receptor are judged to be of medium value as although they are not protected or designated, the section of road near Cider House falls within the <i>Kerry Ridgeway</i> VSAA which notes the area shaving "broad dramatic views to upland to the south and rolling farmland to the north".							
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on Visual Sensitivity	By combining the separate judgement	combining the separate judgements on visual susceptibility and the value of views experienced by the visual receptor, the sensitivity of this visual receptor is judged to be medium .							
	Low	Low - Medium	Mediu	n	Medium - High	High	Very High		
Judgement on Magnitude of Visual Change	Scale of effect	Scale of effect							
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, there will be lir road near Cider House, affecting ru this localised extent of the road is ju	ral transitory views. Visibili	imately 7km to the south-west) ty of other construction activities	towards the upper parts of o s that are at ground level ac	cranes and partially built structur cross the Site will be limited main	es that will feature on the skyline ly due to distance. The scale of v	from the localised extent of the sual effect at construction from		
	During operation, turbines will exter transitory views but only for a very operation from this localised extent	orief moment as woodland	framing the open view near Cid						
	Geographical extent								
	Whilst the ZTV indicates theoretica in only a very brief view. The geogr			a length of approximately 2k	m), actual visibility will be very li	mited by intervening vegetation a	nd localised landform, resulting		
	<u>Duration/reversibility</u>								
	During construction the changes in	views experienced by this	receptor will be short-term (up	to 5 years) and largely reve	ersible.				
	During operation the changes in vie	ws resulting from turbines	will be long-term (beyond 10 y	ears) and reversible as the	turbines will be dismantled and	removed from the Site once the o	perational period has ceased.		
	Overall Judgement on Magnitude	of Visual Change							
	The small scale of effect over a sm than at operation because of on-sit						on, it can be more detracting		
				During Construction					
	Barely perceptible	Low	Low - Medium	Medium	Medium - High	High	Very High		
				During Operation					
	Barely perceptible	Low	Low - Medium	Medium	Medium - High	High	Very High		

Overall Level of Effect and Significance

A medium sensitivity combined with a low magnitude of change is judged to result in a **minor-moderate** effect.

	During Construction							
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
	During Operation							
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique distant views (and in the same direction) from the localised extent of road near Cider House where intervening vegetation does not obstruct views. The scale of Garn Fach turbines will be comparable to the scale of the Llandinam Repowering turbines, however they will increase the horizontal extent of turbines in views. Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing the consented Llandinam Repowering scheme, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) will form an extension to the north and south of Garreg Lwyd Hill Wind Farm and will be seen in direct views (2.5km) to the south from the localised extent of the road near Ddol, although seen in a different direction of view to Garn Fach. This development will increase the prominence and visibility of turbines in views south from this section of the road, however, there will not be any interactions with Garn Fach due to the intervening distance between developments and different angles of views in which the developments are experienced. The introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no** additional cumulative effects over and above those set out in the LVIA above.

Although the proposed Carno III (13 turbines at 149.9m tip height), Esgair Cwmoen (18 turbines at 125m tip height) and Llanbrynmair (30 turbines at 126.5m tip height) wind farms are shown as theoretically visible (between 17-24km to the north-west) from some of this road, in reality vegetation and localised landform will obscure views towards them.

Visual Receptor	Motorists on B4356									
Location of Visual Receptor	Shown on Figure 6-13a and Figure	6-14a								
Representative Viewpoints										
Description of Visual Receptor	pastoral fields with occasional pock the A483 and A488 to a number of and properties located on either sidelevation to the east of Llanbister, vigenerally open from the western pascreens views west, whilst open directly screens outward views from much ovalley and intervening vegetation. From the western parts of the road, north-west. The road passes approximate in the process of the road, north-west.	B4356 is a medium length minor road which connects Llanbister and Presteigne. From the A483 at Llanbister, the road ascends the eastern slopes of the Ithon Valley and passes broadly east through rolling toral fields with occasional pockets of woodland and scrub. From The Pound, the road crosses south-east towards Gravel and Crug and then follows the Lugg Valley to Presteigne. The road provides access from A483 and A488 to a number of small communities, including Llanbister, Llangunllo, Whitton and Presteigne, dispersed residential properties and farmsteads. A number of lanes and footpaths connect farmsteads properties located on either side of the road. Given the relatively higher elevation of the road above the Ithon valley and north-east towards distant views are afforded from sections of the road. As the road rises in ation to the east of Llanbister, views are focused towards the containing landform to the west of the Ithon Valley and north-east towards distant landform including Gors Lydan and Newhouse Hill. Outward views are erally open from the western part of the road with occasional screening by vegetation associated with residential properties and farmsteads. As the road approaches The Pound, localised intervening landform eners views west, whilst open direct views are focused north-east and east towards elevated landform including Tylcau Hill and Beacon Hill. Intervening vegetation, including woodland and mature hedgerows, eners outward views from much of the road between The Pound and Gravel. Where the road passes at a lower elevation through the Lugg Valley, views are generally more contained by landform on either side of the ey and intervening vegetation. In the western parts of the road, the operational Llandinam Wind Farm (102 turbines at 45.5m tip height) and twin turbine development at Brynddu (20m tip height) are seen against the skyline in distant views to the h-west. The road passes approximately 4km to the south of the operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip heigh								
Judgement on Visual Susceptibility	The visual susceptibility of this rece	otor is judged to be medium as pe	ople travelling on local road routes are	likely to have some attention focused	on the surrounding landscape, but vie	ews are transitory.				
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on the Value of Views experienced by the Visual Receptor		vs experienced by this receptor are judged to be of medium value as although they are not protected or designated, the <i>Ridge & valley, Ithon sides</i> VSAA notes the area as having attractive views "from small roads ugh area to small valleys and ridges" and the Moorland, east of Ithon VSAA notes that there are "Generally pleasant views to and from adjacent farmland." Together these VSAAs encompass the section of road								
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)	between Llanbister and The Pound.	petween Llanbister and The Pound.								
Judgement on Visual Sensitivity	By combining the separate judgeme	nts on visual susceptibility and the	value of views experienced by the visu	ual receptor, the sensitivity of this visu	al receptor is judged to be medium.					
	Low	Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect									
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	road to the north-east of Llanbister, Bank. Limited glimpsed views of the	During construction, there will be limited distant views (approximately 8-10km to the north-west) towards the upper parts of cranes and partially built structures that will feature on the skyline for approximately 2km of the road to the north-east of Llanbister, affecting rural transitory views. Visibility of other construction activities that are at ground level across the Site will be obscured by intervening landform including Moel Dod and Castle Bank. Limited glimpsed views of the upper parts of cranes and partially built structures will be afforded in between intervening vegetation near Crossways, however outward views north-west are generally screened from this part of the road. The scale of visual effect at construction will vary from different parts of the road, but from localised extents of the road (for 2km to the north-east of Llanbister), it is judged to be small , but will reduce with distance from the Project.								
	During operation, turbines will extend across part of the skyline in distant oblique views north-west from the western extents of the road between the properties of Brynwydoc and Bryn-du. All 17 turbines of the development will be seen to some extent affecting rural transitory views, although some will be partially screened by intervening landform resulting in the hubs of eight turbines to be visible against the skyline (the remining turbines being limited to blade tips). Turbines will be seen in combination with the operational Llandinam Wind Farm and will slightly increase the horizontal extent and prominence of wind farm development in views. The scale of visual effect at operation will vary from different parts of the road, but from localised extents of the road between the properties south of Brynwydoc and Bryn-du, it is judged to be small .									
	towards Llanbister, turbines will occ	upy a smaller angle of the view due and intermittent glimpsed views be	ere vegetation and steep sided landford to screening by intervening landform. etween Brynmelyn and Crossways, how will reduce to barely perceptible.	The development will be seen in dista	ant views in the direction of travel (nor	th-west) from a short section of				
	Geographical extent									
	Whilst the ZTV indicates theoretical properties of Brynwydoc and Bryn-c		tual visibility will be limited by interveni	ng vegetation. The small scale of visu	al effect will occur only at the localised	d extent of road between the				
	<u>Duration/reversibility</u>									
	During construction the changes in	views experienced by this receptor	will be short-term (up to 5 years) and	largely reversible.						
	During operation the changes in vie	ws resulting from turbines will be Ic	ong-term (beyond 10 years) and rever	rsible as the turbines will be dismantle	ed and removed from the Site once the	e operational period has ceased.				
	Overall Judgement on Magnitude	of Visual Change								

	he small scale of visual effect over a small geographical extent (over a long term) is judged to result in an overall low magnitude of change. Although the construction period is shorter in duration, it can be more etracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of change at construction is also judged to be low .							
	During Construction							
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		
During Operation								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.							
			During Co	nstruction					
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								
		During Operation							
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in distant views from intermittent sections of the road, including for approximately 2km of the road to the north-east of Llanbister, between Brynmelyn and Crossways and to the north-west of Gravel. The turbines at Garn Fach and Llandinam Repowering will be seen extending across a similar angle of the view, with those at Garn Fach slightly increasing the prominence and horizontal extent of turbines further south. Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing the consented Llandinam Repowering scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be frequent sequential effects from the proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm. This development will be seen in oblique views (4-5km) to the north from all of the road between Llanbister and The Pound, although seen in a different direction of view to Garn Fach as the receptor moves along the road. Bryngydfa Wind Farm will increase prominence and visibility of turbines in views north and north-east from this section of the road, however, interactions with Garn Fach will be minimal given the intervening distance between developments and different angles of views in which the developments are experienced. The introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Users of Recreational Routes (within 15km)

Visual Receptor	Users of PRoWs and open access	and within the Site								
Location of Visual Receptor	Shown on Figure 6-13b and Figure	e 6-14b								
Representative Viewpoints	Viewpoint 1: Bridleway at Banc D	u / Fowler's Arm Chair (375m fron	n the nearest turbine – T14)							
Description of Visual Receptor	(connecting to Glyndwr's Way in the panoramic views including across the turbines from the existing Llandinar west. One of the bridleways runs all distance panoramic views extend a ln addition to the turbines at Llandir Garreg Lwyd Hill Wind Farm (17 turtip height). The under-construction	e west) across this parcel of the Site ne Ithon valley to the east and along in Wind Farm form prominent feature ong the top of the Brondre-fawr ridg cross the surrounding valleys, with value, with value, and the stam, there are views of several othe bines at 126.5m tip height), and the Hendy Wind Farm (7 turbines at 100	including along its highest part (approgramment) including along its highest part (approgramment) including across the highest part (50 views across the Marteg valley opening wind energy developments due to the are limited long-distance views (18-0) in tip height) is barely perceptible in lot	grazing and a large proportion is design oximately 520m AOD). Users of the ope is to the north and west are immediately arcel is also designated as open access 03m AOD), and passes by the Fowler's g up more to the south and east. The elevated nature of the Site. There are also the to the north-west from the higher ong-distance views (approximately 19.5 win turbine development at Esgairdraer	en access land and the bridleways contained by rising slopes to the V land and footpaths and bridleways. Arm Chair scheduled monument. E views from across most of the Sit parts of the northern parcel tows 1-25km to the south-east) from the	are afforded long distance Vaun Ddubarthog ridge, and s cross it from north-south and east- Like the northern parcel, long- te (8-9.7km to the east) towards rards Tirgwynt (12 turbines at 116m highest parts of the Site. The single				
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	The visual susceptibility of this rece the middle parcel of the Site will inc the nearest bridleway).	visual susceptibility of this receptor group is judged to be high as people's interest is likely to be focused on the landscape as they engage in outdoor recreation. Users of the open access land and bridleway within niddle parcel of the Site will include those visiting the Fowler's Armchair scheduled monument (although it is acknowledged that this feature is not publicly accessible and is located approximately 60m to the west of nearest bridleway).								
Judgement on the Value of Views experienced by the Visual Receptor				red or designated, the Warn Ddubartho						
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)		ite) notes that "Dramatic views are available out of the aspect area into the surrounding landscape" and the Upland moor, north & west of Abbeycwmhir VSAA (that encompasses most of the middle parcel of the ite) notes there are "Pleasant rural views in and out".								
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the	value of views, the sensitivity of this vi	isual receptor group is judged to be me	dium-high.					
	Low	Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect		•							
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)				ncluding excavations for borrow pits, im rural views (albeit containing some exis		_				
	will also be very visible, and the sub areas within the southern extent of	estation and energy storage facility which the Site's middle parcel. There will rethe bridleway close to the Fowler's a	will be visible from PRoWs and open a emain open views between the turbine Arm Chair scheduled monument (Viev	nanoramic views, and will surround the raccess land within the northern parcel of es so that the long-distance views to sur wpoint 1). Nevertheless, the scale of vis	f the Site. There will also be views rrounding landscapes can continue	of the cycle path car park from e to be appreciated, including south-				
	Geographical extent									
	As indicated by the ZTV and confirm	ned through ground-truthing, views	of the Project would be experienced fr	rom all of the receptor group i.e. a very	large geographical extent.					
	<u>Duration/reversibility</u>									
	During construction the changes in	views experienced by this receptor	would be short-term (up to 5 years) a	and largely reversible .						
	= :		_	parts of the Project will remain for the I sed and the crane pads and other abov		= = = = = = = = = = = = = = = = = = = =				
	Overall Judgement on Magnitude	of Visual Change								
				n overall very high magnitude of chang overall magnitude of effect at constructi						

During Construction									
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
	During Operation								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance	A medium-high sensitivity combined	A medium-high sensitivity combined with a very large magnitude is judged to result in a major effect.								
			During Co	nstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				
	During Operation									
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)									

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together from much of the routes that cross the Site and areas designated as open access land where intervening vegetation do not obstruct views. The consented single turbine at Ddulley Bank (20m tip height) will also be seen together with Garn Fach and Llandinam Repowering from across much the middle parcel of the Site. Nevertheless, the introduction of Garn Fach will still result in a **very large** scale of visual effect over a very large geographical extent when considered against a baseline containing these consented schemes and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be frequent sequential effects from the proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm and seen 8-10km to the east with regular interactions with Garn Fach. There will also be some occasional sequential effects with the proposed developments at Esgair Cwmowe (18 turbines at 125m tip height) and Llanbrynmair (30 turbines at 126.5m tip height), although turbines from these developments will be barely perceptible within most views (due to distances of over 17km and 24km to the north-west respectively). The introduction of Garn Fach will still result in a **very large** scale of visual effect over a very large geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Visual Receptor	Users of PRoWs and open access	land within 5km of the turbines								
Location of Visual Receptor	Shown on Figure 6-13b and Figur	e 6-14b								
Representative Viewpoints	Viewpoint 8: Footpath North-eas	of Devil's Elbow (5.5km from the	nearest turbine – T1 and 4.9km from th	he Site boundary)						
	Viewpoint 9: Footpath North of C	ld Chapel Hill (5.4km from the nea	rest turbine – T5 and 5km from the Site	e boundary)						
Description of Visual Receptor	area is designated as open access residential properties, and crossing	land, including open country, comm from lower elevations (including fro	nd moorland vegetation, improved graz ion land and public forest. A number of m Glyndwrs Way) towards elevated lan ews are partially or fully screened, incl	f footpaths and bridleways are located ndform. From elevated sections, long of	within this area, connecting small distance panoramic views are affor	l settlements and dispersed orded, including across the Ithon				
	of the Site, in addition to areas of d developments due to the elevated it turbines at 100m tip height), Bryn T north-west and west of the Site. Th Footpaths and bridleways pass with	bines of the operational Llandinam Wind Farm (102 turbines at 45.5m tip height) are evident across the skyline in views from PRoWs in this area, particularly from footpaths and bridleways to the west and north-west he Site, in addition to areas of designated open country and common land which partially cover the Llandinam Wind Farm site. In addition to the turbines at Llandinam, views are afforded of several other wind energy velopments due to the elevated nature of the receptor. The wind farms of Tirgwynt (12 turbines at 116m tip height), Carno I (56 turbines at 54m tip height) and Carno II (12 turbines at 80m tip height), Bryn Blaen (6 bines at 100m tip height), Bryn Titli (22 turbines at 53.5m tip height) and Cefn Croes (39 turbines at 110m tip height) form distant features in views north-west and west from PRoWs and public access land to the thewest and west of the Site. The operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) forms a relatively distant feature in views north-east from footpaths and bridleways to the east of the Site. Obspaths and bridleways pass within close proximity of the single operational turbines of Bailey Bog (20m tip height) and Bryn Cwmrhiewdre (34.4m tip height), Garth Fawr (20.9m tip height) as well as the twin turbine wellopments at Esgairdraenllwyn (34.6m tip height) and Brynddu (20.4m tip height), which feature in views from intermittent sections of PRoWs to the south-west and east of the Site.								
Judgement on Visual Susceptibility	The visual susceptibility of this rece	e visual susceptibility of this receptor is judged to be high as people's interest is likely to be focused on the landscape as they engage in outdoor recreation.								
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on the Value of Views experienced by the Visual Receptor		Views experienced by this receptor are judged to be of medium value as although they are not protected or designated, they are experienced from a variety of VSAAs which note generally attractive views along valleys, across rolling upland and toward more distant hills.								
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on Visual Sensitivity	By combining the separate judgem	ents on visual susceptibility and the	value of views experienced by the visu	ual receptor, the sensitivity of this visua	al receptor is judged to be mediu l	m-high.				
	Low	Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect									
(see Tables 1.12 – 1.14 within Appendix 6-A: LVIA and CLVIA Methodology)	substation in the north), affecting ruviews with the operational Llandina east and south-west of the Site, ho to the north, east and west of the Sintervening landform and vegetation	ral views from footpaths, bridleways m Wind Farm, which is evident in vi- wever intervening landform and fore ite, the scale of visual effect at const n, the scale of visual effect at constr	, •	ely 1km to the east, south-west and no ews of construction activity will be affor g ground level activities. In views from er, where views of construction activity	rth of the Site. However, constructed from footpaths and bridleway limited sections of common land will be seen at a greater interveni	ction activity will be seen in combined ys beyond this distance to the north, footpaths and bridleways within 1km ing distance or partially screened by				
	the Site, views of turbines, tracks be extend across a wide angle of the voperation is judged to be large , affer and south-west, turbines will be particular to the south-west and south-west.	etween turbines and the substation riew from these locations. In views frecting the rural views experienced but tially screened by intervening landforms.	kyline in views from footpaths, bridlews will be open and seen in combined vier rom limited sections of common land, f y people as they engage in outdoor record orm and vegetation, including forestry. seen at greater intervening distance fr	ews with Llandinam Wind Farm, which footpaths and bridleways within 1km to creation. In views from footpaths, bridl Views form these extents will remain i	is evident in views from these are the north, east and west of the S eways and common land beyond relatively open, however the prom	as. Turbine hubs and blade tips lite, the scale of visual effect at approximately 1km to the north, west				
	Geographical extent									
	access land. Open access land to tapproximately 1km to the west and	he south of the Site is public dedica north of the Site is limited by interve	of the development would be experien ted forest; outward views towards the l ening landform. The large scale of visu distant and partially screened views w	Project would be screened by intervential effect will be experienced from limit	ing vegetation in views from this a ed extents of common land, footp	area. Visibility from areas beyond aths and bridleways within 1km to the				
	<u>Duration/reversibility</u>									

During construction the changes in views from this receptor would be **short-term** (up to 5 years) and largely **reversible**.

During operation the borrow pits will be reinstated, but other parts of the development will remain for the **long-term** (beyond 10 years). The long-term changes will be **partially reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level.

Overall Judgement on Magnitude of Visual Change

The large scale of visual effect over a small geographical extent/ medium scale of visual effect over a large geographical extent (over a long term) is judged to result in an overall **medium-high** magnitude of change. Although the construction period is shorter in duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **medium-high**.

During Construction								
Barely perceptible	perceptible Low Low – Medium Medium Medium - High High Very High							
During Operation								
Barely perceptible	Low	Low - Medium	Medium	Medium - High	High	Very High		

Overall Level of Effect and Significance	A medium-high sensitivity combined with a medium-high magnitude is judged to result in a moderate-major effect.								
		During Construction							
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								
		During Operation							
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together from much of the common land, footpaths and bridleways where intervening vegetation do not obstruct views. They will also be seen with the consented single turbine at Ddulley Bank (20m tip height) from across footpaths and bridleways to the north and east of the Site. Nevertheless, the introduction of Garn Fach will still result in a large scale of visual effect over a small geographical extent/ medium scale of visual effect over a large geographical extent, when considered against a baseline containing these consented schemes and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

There will be frequent sequential effects from the proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm. There will also be some sequential effects with the proposed developments at Llanbrynmair (30 turbines at 126.5m tip height) and Esgair Cwmowen (18 turbines at 125m tip height) although turbines from these developments will be barely perceptible within most views. The introduction of Garn Fach will still result in a large scale of visual effect over a small geographical extent/ medium scale of visual effect over a large geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be no additional cumulative effects over and above those set out in the LVIA above.

Visual Receptor	Users of PRoWs and open access	land within 5-15km of the turbines							
Location of Visual Receptor	Shown on Figure 6-13b and Figure 6-14b								
Representative Viewpoints	Viewpoint 8: Footpath North-east of Devil's Elbow (5.5km from the nearest turbine – T1)								
	Viewpoint 9: Footpath North of Old Chapel Hill (5.4km from the nearest turbine – T5)								
	Viewpoint 18: Minor Road, Pen-shwa Lane, North of Newtown (12.3km from the nearest turbine – T1)								
Description of Visual Receptor	number of footpaths, bridleways an connections to dispersed residentia Way, Severn Way, Wye Valley Wal and vegetation. Where footpaths at A number of operational wind energy	The area within 5-15km of the Site is predominantly characterised by upland moorland vegetation, improved grazing, conifer forestry (to the south and east of the Site) and occasional pockets of woodland. There are a umber of footpaths, bridleways and areas designated as open access land located across this area. Footpaths and bridleways generally cross from lower elevations, including from settlements, and provide onnections to dispersed residential properties and areas of elevated landform/uplands. Some footpaths and bridleways also provide connections to the long-distance routes which cross the area, including Glyndwrs Vay, Severn Way, Wye Valley Walk and Kerry Ridgeway. Lower-lying footpaths and bridleways in this area follow both intimate and broad valleys, where outward views are partially screened by intervening landform of vegetation. Where footpaths and bridleways cross at higher elevation, more open views are afforded looking across river valleys, rolling pastoral fields and towards more distant landform. In number of operational wind energy developments are located within 5-15km of the Site and are evident in close proximity views from footpaths, bridleways and areas of open access land. The wind farms of Tirgwynt							
	west and north of the Site. Bryn Bla located approximately 8.2km to the	en (6 turbines at 100m tip height) ar east of the Site. Receptors travelling	nd Bryn Titli (22 turbines at 53.5m tip g across open access land and on tr	height), and Mynydd Clogau (17 turbines p height) wind farms are located approxim he footpaths and bridleways in this area a Llandinam Wind Farm (102 turbines at 45	nately 11-12km to west of the Site re likely to have close and longer	. Garreg Lwyd Hill Wind Farm is			
Judgement on Visual Susceptibility	The visual susceptibility of this rece	ptor is judged to be high as people'	's interest is likely to be focused on the	he landscape as they engage in outdoor	recreation.				
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced from by this rec valleys, across rolling upland and to		alue as although they are not protec	ted or designated, they are experienced f	rom a variety of VSAAs which not	te generally attractive views along			
(see Table 1.11 within Appendix 1-A: LVIA and CLVIA Methodology)									
Judgement on Visual Sensitivity	By combining the separate judgem	ents on visual susceptibility and the	value of views experienced from the	visual receptor, the sensitivity of this visu	ual receptor is judged to be medi u	ım-high.			
	Low	Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect								
(see Tables 1.12 – 1.14 within Appendix 1-A: LVIA and CLVIA Methodology)	views from limited extents of the for Site, and the implementation of cra effect at construction will vary from areas of public access land, footpa	During construction, the upper parts of cranes erecting turbines and partially built structures will form distant features on the skyline, affecting rural views from footpaths, bridleways and areas of open access land. In views from limited extents of the footpaths and bridleways to the north-east and south-east of the Site, there will also be some visibility of excavations associated with the two borrow pits within the northern parcel of the Site, and the implementation of crane pads, tracks, substation and northern temporary compound; albeit seen as distant elements in views approximately 5-6.5km to the south-west and north-west. The scale of visual effect at construction will vary from different parts of the PRoW and public access land network, however from localised extents to the north-east and south-east of the Site, it is judged to be medium . In views from other areas of public access land, footpaths and bridleways within 5-15km of the Site, visibility of other construction activities that are at ground level across the Site will be obscured by intervening landform, or, where visible will be barely perceptible given the intervening distance. Beyond the localised extents to the north-east of the Site, the scale of visual effect at construction from open access land, footpaths and bridleways within 5-15km of the Site is judged to be small .							
	During operation, all 17 turbines will extend across the skyline in views from footpaths and bridleways to the north-east and south-east of the Site (as illustrated in the visualisation for Viewpoint 8). Turbines will be seen alongside the operational Llandinam Wind Farm (102 turbines at 45.5m tip height) and the operational twin turbine development at Esgairdraenllwyn (35m tip height), however proposed turbines will appear perceptibly larger in scale than these operational turbines and will increase the horizontal extent of turbines in views. In views from these localised areas, turbines, tracks between turbines and the substation will be seen at distances of approximately 5.5-7.9km. The scale of visual effect at operation will vary from different parts of the PRoW and public access land network, however from the localised extents to the north-east and south-east of the Site it is judged to be medium , affecting the rural views experienced by people as they engage in outdoor recreation.								
	visible, will appear as a relatively d	In views from other areas of public access land, footpaths and bridleways within 5-15km of the Site, turbines will be partially screened by intervening landform (as illustrated in the visualisation for Viewpoint 9) or, where visible, will appear as a relatively distant feature across a small angle of the skyline (as illustrated in the visualisation for Viewpoint 18). Tracks between turbines and the substation will be screened by intervening landform from these locations. The scale of visual effect at operation from these areas is judged to be small .							
	Geographical extent								
	does not screen outward views. Th	e medium scale of visual effect will b	be experienced from localised section	of the areas of public access land, local forms of the public footpath and bridleway no north, west and more distant views to the	etwork to the north-east and south	n-east of the Site, i.e. a small			
	<u>Duration/reversibility</u>								
	During construction the changes in	views from this receptor will be sho	rt-term (up to 5 years) and largely re	eversible.					
	During operation the changes in vie	ews resulting from turbines will be lo	ng-term (beyond 10 years) and reve	ersible as the turbines will be dismantled	and removed from the site once t	the operational period has ceased.			

Overall Judgement on Magnitude of Visual Change

The medium scale of effect over a small geographical extent / small scale of effect over a large geographical extent (over a long term) is judged to result in an overall **low-medium** magnitude of change. Although the construction period is shorter in duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of change at construction is also judged to be **low-medium**.

	During Construction								
Barely perceptible Low Low – Medium Medium Medium - High Very									
	During Operation								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance

A medium-high sensitivity combined with a low-medium magnitude of change is judged to result in a **moderate** effect. However a significant effect is judged to only apply to the views experienced from open elevated sections of public access land, footpaths and bridleways that are within 5.5-8km to the north-east and south-east of the Site. All other views from public access land, footpaths and bridleways within 5-15km of the Site are judged to not be significant.

	During Construction								
Negligible	Negligible Minor Minor - Moderate (Significant) Moderate-Major (Significant) Major (Significant)								
	During Operation								
Negligible	Minor	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)					

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in distant views from intermittent sections of public access areas and the local footpath and bridleway network. The scale of Garn Fach turbines will be comparable to the scale of the Llandinam Repowering turbines, however the proposed Garn Fach turbines will increase the horizontal extent of turbines in some views. Nevertheless, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent/ **small** scale of visual effect over a large geographical extent, when considered against a baseline containing this consented scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be frequent sequential effects from the proposed development of Bryngydfa (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm. There will also be some sequential effects with the proposed developments at Llanbrynmair (30 turbines at 126.5m tip height) and Esgair Cwmowen (18 turbines at 125m tip height), however interactions between these developments and Garn Fach will be limited given the intervening distances between the developments. The introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent/ **small** scale of visual effect over a large geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional** cumulative effects over and above those set out in the LVIA above.

Visual Receptor	Users of Glyndŵr's Way long distance footpath and national trail (between Waun Marteg and Abbeycwmhir)								
Location of Visual Receptor	Shown on Figure 6-13b and Figure 6-14b								
Representative Viewpoints	Viewpoint 4: Glyndwr's Way, Bwld	Viewpoint 4: Glyndwr's Way, Bwlch-y-Sarnau (4.1km from the nearest turbine – T17)							
Description of Visual Receptor	south of the Site. The section of the Bryn y Wyntyll, passing south-east t into more coniferous forestry to the screens outward views from section. The single operational turbine at Ba distant views (approximately 5.6km skyline in long-distance views (approximate in long-distance views (approximate).	Glyndŵr's Way is a long distance footpath and national trail which passes 217km between Knighton and Welshpool. Within the Study Area the route broadly crosses from east to west, and passes to the east, west and south of the Site. The section of the route crosses through an area of coniferous forestry at Bryn y Wyntyll, passing south-east through the hamlet of Bwlch-y-Sarnau before climbing up onto rolling farmland at Upper Esgair Hill (450m AOD). The route then crosses the minor road near Y Glog before passing near once coniferous forestry to the north of Abbeycwmhir. Views are relatively open from sections of the route passing near Waun Marteg and at higher elevation near Upper Esgair Hill, however intervening vegetation screens outward views from sections of the route as it approaches the minor road and where it passes through coniferous forestry to the north of Abbeycwmhir. The single operational turbine at Bailey Bog (20m tip height) is evident in views east and north from this section of the route. The operational Llandinam Wind Farm (102 turbines at 45.5m tip height) is seen in relatively listant views (approximately 5.6km to the north-west) from the section of the route near Bwlch-y-sarnau. The operational Bryn Titli Wind Farm (22 turbines at 54m tip height) is seen against the skyline in long-distance views (approximately 9km to the west) from these same sections. From the section of the route near Upper Esgair Hill, Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is visible on the distant skyline approximately 12km to the north-east and the under-construction Hendy Wind Farm (7 turbines at 100m tip height) is barely perceptible 16km to the south-east.							
Judgement on Visual Susceptibility	The visual susceptibility of this recep	tor is judged to be high as people's	s interest is likely to be focused on the	e landscape as they engage in outdoo	or recreation.				
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor	are judged to be of high value as th	ney are seen from a national trail.						
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on Visual Sensitivity	By combining the separate judgeme	nts on visual susceptibility and the v	value of views experienced by the visu	ual receptor, the sensitivity of this visu	ual receptor is judged to be high.				
	Low	Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect								
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	east of Wuan Marteg. Visibility of oth coniferous plantations on the slopes judged to be medium . From availab will be fully screened. The scale of v During operation, turbines will be se route near Bwlch-y-Sarnau, as show Wuan Marteg, the hubs and blade ti intervening landform. Turbines locat but will generally be oblique as they from these sections of the route is justice From available views near Upper Estips of a further three turbines glimps Geographical extent Whilst the ZTV indicates visibility froworking forestry). The medium scal experienced from a very limited extent Duration/reversibility During construction the changes in very limited construction the changes in very limited extent of the slope	the construction activities that are at of the Brondre-fawr ridge. The scal be views near Upper Esgair Hill, interioral effect for this section of the role of the occupy a part of the skyline from on the visualisation for Viewpoin os of six turbines within the middle ped in the northern parcel are screen travel along the northeast-southwest dged to be medium as there will be gair Hill, intervening landform will see the desired beyond intervening landform. The much of this section of the route, are of visual effect will be experienced int of the route near Upper Esgair Hill riews from this receptor will be short we resulting from turbines will be lore.	om available views to the north, exten t 4. From this section of the route, all parcel of the Site will be evident again	imited, obscured mainly by the landfon views from along the route passing rtially screen views of cranes erecting adding across most of the ridge that is valued to turbines will be visible to an extensist the skyline (including T10, T12-T1) bute. The nature of the views towards on that approaches Bwlch-y-sarnau frog a distinct element within rural views the hubs of two turbines (T15, T17) to from this section of the route is judged ents of this section will be limited by car Wuan Marteg and Bwlch-y-Sarnau, mall geographical extent.	rm of the Site and partially by interventhrough Bwlch-y-sarnau and to the sign the turbines and visibility of other convisible between Brondre-fawr and Crit (T12 limited to blade tips). In views 7) with just the blade tips of addition the Project will vary depending on the most the south-west. Overall, the scale that are experienced by walkers as that will be glimpsed for very limited and to be small. Oniferous forestry (although will vary i.e. a small geographical extent. The	ening vegetation including south-east of Wuan Marteg, is onstruction activities at ground level rugyn Llwyd from sections of the from sections of the route near al turbines visible beyond he receptors position along the route of visual effect during operation they engage in outdoor recreation. extents of the route and the blade			

The medium scale of effect over a small geographical extent/ small scale of effect over a small geographical extent (over a long term) is judged to result in an overall low-medium magnitude of change for this section of Glyndŵr's Way. Although the construction period is shorter in duration, the nature of construction can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be low-medium .							
	During Construction						
Barely perceptible Low Low – Medium Medium Medium - High High Very High							
	During Operation						
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High	

Overall Level of Effect and Significance	A high sensitivity combined with a low-medium magnitude of change is judged to result in a moderate effect.								
	During Construction								
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								
	During Operation								
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)								

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together from limited sections of the route near Bwlch-y-sarnau where intervening landform and vegetation do not obstruct views. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent when viewed from this section of the route, when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional** cumulative effects over and above those set out in the LVIA above.

Scenario B:

There will be occasional sequential effects from the proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, although this development will be seen in distant oblique views 12km to the north-east and will be seen from limited sections of the route near Upper Esgair Hill. Interactions between this development and Garn Fach will be minimal given the intervening distance between the developments. The proposed Carno III Wind Farm (13 turbines at 149.9m tip height) will be barely perceptible in distant views 22km to the north-west from a very limited section of the route to the south-west of Bwlch-y-sarnau. The introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent/ **small** scale of visual effect over a small geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Visual Receptor	Users of Glyndŵr's Way long distar	Users of Glyndŵr's Way long distance footpath and national trail (between Ysgwd-ffordd and A483)						
Location of Visual Receptor	Shown on Figure 6-13b and Figure	e 6-14b						
Representative Viewpoints	Viewpoint 6: Glyndwr's Way at U	pper Lethr (3.6km from the nearest to	urbine – T17)					
Description of Visual Receptor	south of the Site. The section of the relatively open, and are focused so towards the A483 where intervening. The operational Garreg Lwyd Hill W views 4-7.5km north-east. The open respectively) from limited extents of	ndŵr's Way is a long distance footpath and national trail which passes 217km between Knighton and Welshpool. Within the Study Area the route broadly crosses from east to west, and passes to the east, west and the of the Site. The section of the route between Ysgwd-ffordd and the A483 (near Llanbadarn Fynydd) passes through undulating pastoral fields, upland moor and occasional pockets of woodland. Views are invely open, and are focused south-west towards rolling landform and the incised Abbeycwmhir Vallley and north-west across plateau landform. Outward views become slightly more contained on the descent ards the A483 where intervening vegetation and landform screen views south and west. Views from this section of the route are instead focused north looking across the wooded Ithon Valley. operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is seen from much of this section of the route, with turbine hubs and blade tips extending across a small angle of the skyline in distant views 4-7.5km north-east. The operational Bryn Titli (22 turbines at 53.5m tip height) and Cefn Croes (39 turbines at 110m tip height) Wind Farms are barely perceptible in combined distant views (15km and 25km west sectively) from limited extents of the route north of Ysgwd-ffordd. The route passes within approximately 650m of the twin turbine development at Brynddu (20m tip height), which is evident in intermittent views north-wast from intermittent ions of the route.						
Judgement on Visual Susceptibility	The visual susceptibility of this rece	eptor is judged to be high as people's	interest is likely to be focused on the	e landscape as they engage in outdoo	r recreation.			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)								
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor	are judged to be of high value as alth	nough they are seen from a national	trail.				
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)								
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the va	alue of views experienced by the visu	ual receptor, the sensitivity of this visu	al receptor is judged to be high.			
	Low	Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Visual Change	Scale of effect							
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	parts of the route near Upper Lethr at construction will vary from differer route near the A483, the scale of vintering operation, turbines will be so in the south of the middle parcel of partially screened by intervening later Turbines will be seen within the sar perceptibly larger than the turbines	ews towards the upper parts of cranes and Ysgwd-ffordd. Visibility of other cent parts of the route, but from the sec sual effect at construction is judged to een on the skyline at a distance of 3.6 the Site (T12-T17) are evident across ndform at Castle Bank. In views from the angle of the view as the operation at Llandinam. The Project will form a	construction activities that are at grountion of the route near Upper Lethr are to be small . 6-6.2km in views looking to the northethe skyline (as illustrated in the visus the route near Ysgwd-ffordd, all 17 to all Llandinam Wind Farm, and will application of the distinct new element in views experi	and level across the Site will be limited by the Medical Ysgwd-ffordd it is judged to be medical was from sections of the route. In vigilalisation for Viewpoint 6). Turbines is urbines of the Project are visible, how pear to fill a gap between two clusters enced at distances of 3.6-6.2km. The	d, obscured mainly by the landform of dium. In more distant and partially sews from the route near Upper Lethran the north of the middle parcel and ever turbine bases are partially screes of turbines. However, the scale of the dium.	of the Site. The scale of visual effect creened views from sections of the state of the section of the section of the section of turbines northern parcel of the Site are seened by intervening landform. Starbines of Garn Fach will appear		
	From sections of the route near the	he rural views experienced by walkers A483, the hubs and blade tips of thre			be glimpsed just above intervening	landform. The scale of visual effect		
	during operation from this section of	of the route will reduce to small .						
		med through ground-truthing, the Proj I, i.e. a small geographical extent. Th						
	<u>Duration/reversibility</u>							
	During construction the changes in	views from this receptor will be short	-term (up to 5 years) and largely rev	versible.				
	During operation the changes in vie	ews resulting from turbines will be lon	g-term (beyond 10 years) and rever	rsible as the turbines will be dismantle	ed and removed from the Site once	the operational period has ceased.		
	Overall Judgement on Magnitude	e of Visual Change						
		small geographical extent/ small scale ration, it can be more detracting than a						
			During Co	nstruction				

Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High
During Operation						
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High

Overall Level of Effect and Significance	A high sensitivity combined with a love	A high sensitivity combined with a low-medium magnitude of change is judged to result in a moderate effect.						
			During Co	nstruction				
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		
	During Operation							
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in views north-west from intermittent sections of the route. The turbines of Llandinam Repowering will appear beyond Garn Fach as a more distant feature on the skyline; however, the scale of Garn Fach turbines will be more compatible to the scale of the Llandinam Repowering turbines than the operational Llandinam turbines. Both developments will be seen within a similar angle of the view and the turbines of Garn Fach will appear to fill a gap in the middle of the Llandinam layout, improving the overall composition of wind farm development in views from Upper Lethr and Ysgwd-ffordd. Nevertheless, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent when viewed from these sections of the route (and a small scale of visual effect over a small geographical extent for sections of the route near the A483) when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be frequent sequential effects between Garn Fach and the proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm. This development will be seen across a small angle of the skyline in distant views north-east from much of this section of the route. Garn Fach and the proposed Bryngydfa will be seen in different angles of the view, and interactions between this development and Garn Fach will be minimal given the intervening distance between the developments. The introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent/ **small** scale of visual effect over a small geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Visual Receptor	Users of Glyndŵr's Way long distar	sers of Glyndŵr's Way long distance footpath and national trail (between A483 and B4355)						
Location of Visual Receptor	Shown on Figure 6-13b and Figure	e 6-14b						
Representative Viewpoints	Viewpoint 12: Glyndwr's Way fro	m Top (6.5km from the nearest turbir	ne – T16)					
Description of Visual Receptor	Glyndŵr's Way is a long distance footpath and national trail which passes 217km between Knighton and Welshpool. Within the Study Area the route broadly crosses from east to west, and passes to the east, west and south of the Site. The section of the route between the A483 (at Llanbadarn Fynydd) and B4355 passes rolling upland, pastoral fields and occasional pockets of woodland. From the A483, the route passes on a minor road, ascending the containing western slope of the Ithon Valley and passes through pastoral fields towards the Fron Top ridgeline. Outward views from this section of the route are occasionally screened by mature hedgerows and occasional woodland; however, more distant views of elevated landform to the west are afforded. To the north-east of the Fron Top ridgeline, the route passes north-east from the minor road through rolling upland fields. The route passes east on a minor road and tracks, leading to Hope's Castle Farm and passing Rhuvid Bank. Near the named residential property of Rhuvid and on approach to the B4355, outward views from the road are more often contained by intervening woodland; however, glimpsed views east overlook the Teme Valley. The route passes 170m to the west of the operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) from its nearest turbine and is prominent in close and middle-distance views from much of this section of the route. The operational Llandinam Wind Farm (102 turbines at 45.5m tip height) is seen in relatively distant views (8.2-10.4km) north-west from Rhuvid Bank and the western extents of this section of the route. Smaller operational developments including the single operational turbine at Bryn Cwmrhiewdre (34m tip height), twin turbine development at Brynddu (20m tip height) and the twin turbines at 66m tip height) are barely perceptible in distant views north-west from the western extents of this section of the route. Tirgwynt Wind Farm (12 turbines at 116m tip height) and Mynydd Clogau (17 turbines at 66m tip height) are barely p							
Judgement on Visual Susceptibility	The visual susceptibility of this rece	ptor is judged to be high as people's	interest is likely to be focused on the	e landscape as they engage in outdoo	r recreation.			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)								
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this receptor	iews experienced by this receptor are judged to be of high value as although they are seen from a national trail.						
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)								
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the v	ralue of views experienced by the visu	ual receptor, the sensitivity of this visu	al receptor is judged to be high.			
	Low	Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Visual Change	Scale of effect							
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	nearest the A483 and at the Fron T 5.6km-8.8km to the west and north-judged to be medium . In more distant of visual effect at construction from During operation, turbines will be seturbines of the Project will be seen, Llandinam Wind Farm and will also	op ridgeline. Ground level construction west. The scale of visual effect at content views from sections of the route puthese extents of the route is judged to the across part of the skyline approximate with tracks between the turbines for increase the horizontal extent of wind the skyline approximate.	on activities including the implemental instruction will vary from different part passing Cwm Rhos-goch, Bryngydfa at to be small. Implementation of the second of the	e skyline, affecting rural views looking tion of crane pads, tracks, and souther its of the route, but from localised externand Rhuvid Bank, views of construction of the visualisation for Viewpoint 12). The scale of visual effect at operation will be scale of visual effect at operati	ern temporary compound will be seen nts of the route between the A483 and an activities will be partially screened of the route between the A483 and the The Project will be seen partially in for I vary from different parts of the route	n as distant elements approximately and the Fron Top ridgeline, it is by intervening landform. The scale the Fron Top ridgeline, all 17 front of the operational turbines at e, but from localised extents of the		
				rienced by walkers as they engage in e partially screens views of turbines. T				
	Geographical extent							
	views of turbines from sections of the	ne route. The medium scale of visual	effect will be experienced from the w	ections of the route. Localised interver resternmost parts of this section of the ear Cwm Rhos-goch, Bryngydfa and R	route, between the A483 and the Fi	ron Top ridgeline, i.e. a small		
	<u>Duration/reversibility</u>							
	During construction the changes in	views from this receptor will be shor	t-term (up to 5 years) and largely rev	versible.				
	During operation the changes in vie	ws resulting from turbines will be lon	ng-term (beyond 10 years) and rever	rsible as the turbines will be dismantle	ed and removed from the Site once t	he operational period has ceased.		
	Overall Judgement on Magnitude	of Visual Change						

Appendix 6: Landscape and Visual Assessment

Overall Level of Effect and Significance	A high sensitivity combined with a low-medium magnitude of change is judged to result in a moderate effect.								
			During Co	nstruction					
	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major					Major (Significant)			
		During Operation							
	Negligible	Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in views west and north-west from intermittent sections of the route. The turbines of Llandinam Repowering will appear beyond Garn Fach as a more distant feature on the skyline; however, the scale of Garn Fach turbines will be more compatible to the scale of the Llandinam Repowering turbines than the operational Llandinam turbines. Both developments will be seen within a similar angle of the view and the turbines of Garn Fach will appear to fill a gap in the middle of the Llandinam layout, improving the overall composition of wind farm development in views near the A483 and at the Fron Top ridgeline. Nevertheless, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent when viewed from these sections of the route (and a small scale of visual effect over a small geographical extent for sections of the route passing Cwm Rhos-goch, Bryngydfa and Rhuvid Bank) when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) will form an extension to the north and south of Garreg Lwyd Hill Wind Farm and will be located less than 300m from Glyndŵr's Way where it passes Bryngydfa and Rhuvid Bank, although seen in a different direction of view to Garn Fach. There will not be any interactions with Garn Fach due to the intervening distance between developments and different angles of views in which the developments are experienced. There will also be some occasional sequential effects with the proposed developments at Esgair Cwmowe (18 turbines at 125m tip height) and Llanbrynmair (30 turbines at 126.5m tip height), although turbines from these developments will be barely perceptible within most views (due to distances of over 23km and 29km to the north-west respectively). The introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent/ **small** scale of visual effect over a small geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Appendix 6: Landscape and Visual Assessment

Visual Receptor	Users of The Severn Way long dis	tance footpath						
Location of Visual Receptor	Shown on Figure 6-13b and Figu	re 6-14b						
Representative Viewpoints	Viewpoint 13: Severn Way North	of Llanidloes (6.5km from the near	rest turbine – T2)					
Description of Visual Receptor	Site at its closest point. From the watto the A470 towards Caersws. Fro broadly parallel to the A483 along passes at relatively low elevation was Sections of the route, including to A number of operational wind enerol height). Intervening landform screen skyline in more distant views south 11km south-east, south and south	The Severn Way is a long distance footpath which follows the River Severn for approximately 360km through Mid Wales and western England. The route passes approximately 5km to the north and north-west of the Site at its closest point. From the west, the route starts at the source of the River Severn and crosses through the Hafren Forest and the Plynlimon plateau. The route passes through Llanidloes, running broadly parallel to the A470 towards Caersws. From Caersws, it passes through rolling pastoral fields and occasional pockets of woodland at Melin-y-gloch and Bryn-y-pentre Wood. The route passes Newtown and from which it runs proadly parallel to the A483 along the floor of the Severn Valley north-east towards Berriew/Abberriw and Welshpool. Apart from the westernmost extents of the route nearest the source of the River Severn, the route passes at relatively low elevation with outward views occasionally screened by intervening vegetation and woodland associated with the river and built form at the settlements situated along the valley floor and sides. Sections of the route, including to the north-east of Llanidloes and Caersws, pass through rolling pastoral fields on the sides of the valley, from which outward views are slightly more open. A number of operational wind energy developments are visible from intermittent extents of the route, however turbine hubs and blade tips are occasionally visible beyond intervening landform and against the kyline in more distant views south from the route. The operational Llandinam Wind Farm (102 turbines at 45.5m tip height) forms a relatively distant feature extending across a medium angle of the skyline in views 8-1km south-east, south and south-west from intermittent extents of the route between Llanidloes and Newtown. The operational Carno I (56 turbines at 54m tip height) and Carno II (12 turbines at 80m tip height), 12 turbines at 116m tip height) and Mynydd Clogau (17 turbines at 66m tip height) wind farms are barely perceptible in long-distance views north-west fro						
Judgement on Visual Susceptibility	The visual susceptibility of this rec	eptor is judged to be high as people	's interest is likely to be focused on the	landscape as they engage in outdoor	recreation.			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)								
Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)	views "down valley slope over Llar floodplain / valley bottom and towa moderate interest within the aspec hills and traditionally farmed pastu	iews experienced by this receptor are judged to be of medium value as although they are seen from a promoted route, they are not protected or designated. The <i>Upper Severn Valley</i> VSAA notes there are attractive ews "down valley slope over Llanidiloes and the patchwork of fields and woodland". The Cefn Carnedd Wooded Hillside VSAA states that views are "extensive from within the field system over the surrounding bodplain / valley bottom and towards the dramatic upland windfarm at Waun Ddubarthog". The Caersws River Bowl VSAA notes there attractive "open and expansive views to surrounding higher ground" but "of noderate interest within the aspect itself" and "some limited detractive views to industrial areas associated with Caersws". The Tregynon Rolling Hills VSAA notes there are attractive views "over a succession of rolling that traditionally farmed pasture/woodland, and beyond to distant upland". Together these VSAAs encompass the route of The Severn Way which falls within the Study Area. Part of the route near Caersws crosses by trough an area designated as the Caersws Basin Registered Landscape of Special Historic Interest.						
Judgement on Visual Sensitivity	By combining the separate judgen	nents on visual susceptibility and the	value of views experienced by the visu	ual receptor, the sensitivity of this visu	al receptor is judged to be medi u	ım-high.		
	Low	Low - Medium	Medium	Medium - High	High	Very High		
Judgement on Magnitude of Visual Change	Scale of effect		,			,		
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	Llanidloes (5-9km to the north-west Project). Visibility of other construct turbines will become more glimpse Llanidloes and to the north-west of During operation, turbines will be sto the north-east of Llanidloes (as Further turbine blade tips will be so views from sections of the route to perceptibly larger than these turbing projects.	st of the outermost turbine of the Projection activities that are at ground leveled and intermittent due to intervening f Newtown, it is judged to be small , because on the skyline and will occupy a dillustrated in the visualisation for Viewteen beyond intervening landform acrothe north-east of Llanidloes, Garn Fines. The scale of visual effect at open	er parts of cranes and partially built structed) and from localised extents of the relacross the Site will be obscured by in landform. The scale of visual effect at out will reduce with distance from the P small part of available oblique views swpoint 13) and to the north-west of Ne oss a small angle of the skyline in view ach turbines will appear to fill a gap be ration will vary from different parts of the ecting the rural views experienced by w	route to the north-west of Newtown (ap ntervening landform to the south of the construction will vary from different poly Project. South-east, south and south-west from ewtown, the hubs of three to six turbing as south-east and south-west. The Pro- tween the two clusters of turbines of L ne route, but from sections of the route	pproximately 10.8km to the north- Severn Valley. From other parts arts of the route, but from localise intermittent sections of the route es will be seen above landform (i ject will be seen in combination valled landinam; however, the scale of to the north-east of Llanidloes a	e-east of the outermost turbine of the of the route, views of cranes erecting ed extents to the north-east of e. From localised sections of the route including T1, T3, T4, T9, T10, T12) with the turbines at Llandinam. In turbines of the Project will appear		
	More distant views of the Project v beyond intervening landform in the		of the route to the north-east of Newton	wn and west of Llanidloes, however, to	ırbines blade tips will be barely ı	perceptible against the skyline		
	Geographical extent							
	Newtown, and from some lower-ly					oral fields between Llanidloes and ections of the route to the north-east of		
	<u>Duration/reversibility</u>							
			will be short-term (up to 5 years) and	• ,				
			ong-term (beyond 10 years) and revers	sible as the turbines will be dismantle	d and removed from the Site onc	ce the operational period has ceased.		
	Overall Judgement on Magnitud	e ot Visual Change						

	The small scale of effect over a small geographical extent (over a long term) is judged to result in an overall low magnitude of change. Although the construction period is shorter in duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of change at construction is also judged to be low .					
	During Construction					
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High
	During Operation					
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High

Overall Level of Effect and Significance	A medium-high sensitivity combined with a low magnitude of change is judged to result in a minor-moderate effect.								
			During Co	nstruction					
Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant) Noderate (Significant)				Major (Significant)					
		During Operation							
	Negligible	Negligible Minor Minor Moderate Moderate (Significant) Moderate-Major (Significant) Major (Significant)							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique distant views south-east, south and south-west from intermittent sections of the route. Whereas the proposed turbines of Garn Fach will be partially screened by intervening landform, the north-western turbines of the consented Llandinam Repowering will at times appear prominently along the containing ridgeline. The proposed turbines of Garn Fach will occupy a smaller angle of the view than Llandinam Repowering. In views from the route to the north-east of Llanidloes, the turbines of Garn Fach will appear to fill a gap in the middle of the Llandinam layout, improving the overall composition of wind farm development. Combined views of Garn Fach and the consented Llandinam Repowering will be experienced from intermittent sections of the route from the west of Llanidloes to the north-east of Newtown. Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

The proposed Carno III Wind Farm (13 turbines at 149.9m tip height) will form a distant feature (approximately 15km from the outermost turbine of the Project), increasing the prominence and horizontal extent of wind farm development in views north-west from limited extents of the route, including to the north-east of Llanidloes and to the east and west of Caersws. The introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Visual Receptor	Users of Kerry Ridgeway long dista	nce footpath								
Location of Visual Receptor	Shown on Figure 6-13b and Figure	e 6-14b								
Representative Viewpoints	Viewpoint 16: Kerry Ridgeway ne	ear Two Tumps (8.1km from the ne	arest turbine – T1)							
Description of Visual Receptor	approximately 7km to the north-eas but the route generally follows track a scenic outlook with interpretation From the minor road at Kerry Pole,	t of the Site. It crosses at relatively is, rural roads and bridleways. From boards. The bridleway soon turns to the route then follows a rural lane the	high elevation along ridgelines throug the west, the route starts at a car par tracks, which cross the B4368 near I prough the Ceri Forest (which occasio	the market town of Bishop's Castle, over h open moorland, heaths and occasional rk and picnic area located on the B4355 i Block Wood and follows a track along the nally screens outward views north and se stry does not screen outward views, dista	woodland and forestry, including the mear Cider House and follows a bride southern edge of this woodland, wouth from this section of the route)	he Ceri Forest. Terrain is varied, dleway to Kerry Hill, where there is which obscures views to the north. before leaving the Study Area				
	where outward oblique views south western extents of the route with tu (35m tip height) are seen in a simil height) and Carno II (12 turbines at height), Tirgwynt (12 turbines at 110	number of operational wind energy developments are visible from intermittent sections of the route. The operational Garreg Lwyd Hill Wind Farm (17 turbines at 126.5m tip height) is visible from much of the route where outward oblique views south are afforded, and seen at a distance of approximately 5km. The operational Llandinam Wind Farm (102 turbines at 45.5m tip height) is seen in direct views 7-9km south-west from the vestern extents of the route with turbines appearing as relatively distant features The single operational turbine at Bryn Cwmrhiewdre (34.4m tip height) and the twin turbine operational development at Esgairdraenllwyn are seen in a similar angle of the view as the Project, and appear as relatively distant features (4km and 5km respectively) backclothed by landform. The operational Carno I (56 turbines at 54m tip eight) and Carno II (12 turbines at 80m tip height) wind farms are barely perceptible in long-distance oblique views north-west from the western extents of the route. The operational Cemmaes 2 (18 turbines at 66m tip eight), Tirgwynt (12 turbines at 116m tip height), Mynydd Clogau (17 turbines at 66m tip height) Wind Farms are also seen in distant oblique views north-west. These developments appear against the skyline within a imilar angle of the view, however a clear separation exists between clusters of turbines. The operational Cefn Croes Wind Farm (39 turbines at 100m tip height) is barely perceptible beyond the turbines of Llandinam Vind Farm.								
Judgement on Visual Susceptibility	The visual susceptibility of this rece	sual susceptibility of this receptor is judged to be high as people's interest is likely to be focused on the landscape as they engage in outdoor recreation.								
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on the Value of Views experienced by the Visual Receptor	section between B4355 and Block \	Nood) notes there are "broad drama	atic views to upland to the south and r	moted route, they are not protected or de colling farmland to the north" in this area.	The Kerry Ridgeway Woodland VS	AA (which encompasses the				
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)	remainder of the route within the Study Area) states that there are "expansive views available to the south over the adjacent rolling upland and peaks" although there are also "monotonous views within coniferous forestry".									
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the	value of views experienced by the vis	ual receptor, the sensitivity of this visual	receptor is judged to be medium-h	nigh.				
	Low	Low - Medium	Medium	Medium - High	High	Very High				
Judgement on Magnitude of Visual Change	Scale of effect				<u> </u>					
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	at a distance of approximately 7-10 and the construction of temporary of westernmost extents of the route) it and for longer extents of the route is	km. Ground level construction actively compounds will be seen as distant entity is judged to be medium. Beyond the sind ged to be small .	ities including excavations associated lements. The scale of visual effect at his section of the route, intervening lar	e skyline, affecting rural views from interr with borrow pits, the implementation of c construction will vary from different parts ndform partially screens views of the Site	crane pads and tracks, the construct of the route, but from localised exten- The scale of visual effect will redu	etion of the substation in the north ents (approximately 1.7km of the ace with distance from the Project,				
	During operation, turbines will be seen on the skyline within available views south-west from limited extents, i.e. approximately 1.7km of the westernmost extents of the route. All 17 turbines will be visible at a distance approximately 7-10km (as illustrated in the visualisation for Viewpoint 16). Tracks between the turbines and the substation will form distant features. The Project will be seen partially in front of the operational turbine at Llandinam Wind Farm and will also increase the horizontal extent of wind farm development to the south. The scale of visual effect at operation will vary from different parts of the route, but from localised sections of the westernmost extent, it is judged to be medium , affecting the rural views experienced by walkers as they engage in outdoor recreation. The scale of visual effect will reduce with distance from the Project and when vegetation, including coniferous forestry, provide intervening elements within views. Beyond this localised section of the route, there will be a small scale of visual effect in relatively distant views, where turbines will appear on the skyline but will be partially screened by intervening landform, including localised rolling landform near the route such as Bryn Coch and Citfaesty Hill.									
	Geographical extent	Language of the second								
		westernmost extents of the route, i	e. a small geographical extent. The s	ning vegetation including coniferous fores small scale of visual effect will occur inter						
	<u>Duration/reversibility</u>									

During construction the changes in views experienced by this receptor will be **short-term** (up to 5 years) and largely **reversible**.

During operation the borrow pits will be reinstated, but other parts of the Project will remain for the **long-term** (beyond 10 years). The long-term changes will be **partially reversible** as the turbines will be dismantled and removed from the Site once the operational period has ceased and the crane pads and other above ground infrastructure (excluding tracks) will be broken down below ground level.

Overall Judgement on Magnitude of Visual Change

The medium scale of visual effect over a small geographical extent/ small scale of visual effect over a medium geographical extent (over a long term) is judged to result in an overall **low-medium** magnitude of change. Although the construction period is shorter in duration, it can be more detracting than at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of effect at construction is also judged to be **low-medium**.

	During Construction								
Barely perceptible Low Low – Medium Medium Medium - High High Very High						Very High			
			During Operation						
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance

A medium-high sensitivity combined with a low-medium magnitude is judged to result in a moderate effect.

During Construction								
Negligible	Minor Minor - Moderate		Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
During Operation								
Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

Additional Cumulative Effects

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in direct distant views south-west from intermittent sections of the route. The scale of Garn Fach turbines will appear slightly larger than the scale of the Llandinam Repowering turbines and they will increase the horizontal extent of turbines in views from the westernmost extents of the route, and in more distant views where the proposed Garn Fach turbines are partially screened by intervening landform. However, the horizontal extent of the view occupied by turbines will not vary substantially from that of Garn Fach in combination with the operational Llandinam Wind Farm (as assessed in the LVIA above). Nevertheless, the introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent / **small** scale of visual effect over a medium geographical extent when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be occasional sequential effects from the proposed Carno III Wind Farm (13 turbines at 149.9m tip height), Esgair Cwmoen Wind Farm (18 turbines at 125m tip height) and Llanbrynmair Wind Farm (30 turbines at 126.5m tip height), although these developments will be barely perceptible in distant views north-west from the route. The addition of these proposed wind farms will consolidate the operational Carno I and Carno II, Cemmaes 2, Tirgwynt and Mynydd Clogau wind farms into two distinct clusters of development. The proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height), which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm, will be seen in views south and south-west from the route, within perceptibly closer distance (within approximately 4.2km) and in a different angle of the view than the turbines of Garn Fach. Bryngydfa Wind Farm will increase prominence and visibility of turbines in views north and north-east from this section of the road, however, interactions with Garn Fach will be minimal given the intervening distance between developments and different angles of views in which the developments are experienced. The introduction of Garn Fach will still result in a **medium** scale of visual effect over a small geographical extent / **small** scale of visual effect over a medium geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Visual Receptor	Users of Wye Valley Walk long dista	ance footpath					
Location of Visual Receptor	Shown on Figure 6-13b and Figure	e 6-14b					
Representative Viewpoints	Viewpoint 21: Wye Valley Walk so	outh of Rhayader (16km from the ne	earest turbine – T17)				
Description of Visual Receptor	Within the Study Area, much of the However, sections of the route cros Llanwrthwl and south of Builth Wells	route follows the floor and lower slops at higher elevation on the valley si More distant outward views are af	pes of the Wye Valley, where outward des and across mountainous section forded from sections of the route whice	nd the Hafen Forest. The route passes and views are largely contained by the land south of Llach cross at higher elevation, including veroute passes through a varied landsca	dform of the valley sides and wood ngurig, to the north of Rhayader, n iews looking across the Wye Valley	lland associated with the river. orth-west and south-east of y to more distant landform to the	
	From intermittent sections of the route to the south and west of Llangurig, the operational Bryan Blaen Wind Farm (6 turbines at 100m tip height) is seen on the skyline in views 2-3km north and north-east. Sor glimpsed views of the operational Llandinam Wind Farm (102 turbines at 45.5m tip height) are experienced from intermittent sections of the route north of Rhayader and south and west of Llangurig, from which farm appears as a distant feature (11-12km) and is partially screened by intervening landform and vegetation. The route passes within 900m of the operational Bryn Titli wind farm (22 turbines at 53.5m tip height) however views nearest the wind farm are partially screened by intervening landform and vegetation. Bryn Titli is more evident in open views afforded from elevated sections of the route near Esgair y Graig, Lla and Llwyn-gwyn.						
Judgement on Visual Susceptibility	The visual susceptibility of this rece	ptor is judged to be high as people's	s interest is likely to be focused on the	e landscape as they engage in outdoor	recreation.		
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)							
Judgement on the Value of Views experienced by the Visual Receptor	"along the valley floor farmland and	from the upper slopes into the valle	<i>y".</i> The <i>W</i> ye <i>Valley Uplands</i> VSAA st	moted route, they are not protected or d tates that it is "open exposed with strong	g/dramatic views into the Wye Valle	ey and over the mosaic farmland of	
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)	within the Study Area	ng hills, between Ithon & Wye VSAA	A notes the area as having " <i>generally</i>	pleasant rural views". Together these \	/SAAs encompass the majority of t	he Wye Valley Walk which falls	
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the v	value of views experienced by the vis	sual receptor, the sensitivity of this visua	I receptor is judged to be medium-	-high.	
	Low	Low - Medium	Medium	Medium - High	High	Very High	
Judgement on Magnitude of Visual Change	Scale of effect		1				
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	During construction, there will be limited distant (direct and oblique) views towards the upper parts of cranes and partially built structures that will feature on the skyline from localised sections of the route affecting rural views, including to the north of Rhayader (approximately 10.6km south-west of the outermost turbine of the Project), north-west and south-east of Llanwrthwl (approximately 15-16km south-west of the outermost turbine of the Project) and south of Llangurig (approximately 14.2km west of the outermost turbine of the Project). Visibility of other construction activities that are at ground level across the Site will be obscured by intervening landform. More distant views of the Project are afforded from limited extents of the route to the south of Builth Wells, however the upper parts of cranes and partially built structures will be barely perceptible from this distance. The scale of visual effect at construction will vary from different parts of the route, but from localised extents of the route (north of Rhayader, north-west and south-east of Llanwrthwl and south of Llangurig) it is judged to be small but will reduce with distance from the Project.						
	During operation, turbines will extend across a small part of the skyline in distant direct views from localised sections of the route to the south-west of the Site (as illustrated in the visualisation for Viewpoint 21) and distant oblique views from localised sections of the route to the west of the Site, turbines in the northern parcel will be partially screened by intervening landform. The hubs and blade tips of five to nine turbines located in the middle parcel of the Site will form a distant feature on the skyline of views north-east. In views from localised sections of the route to the west of the Site, turbines are partially screened by intervening landform with blade tips appearing as a distant and small scale change in the view. In views from the south and south-west of the Site, the Project will increase the horizontal extent of the operational Llandinam Wind Farm further south-east. The scale of visual effect at operation will vary from different parts of the route, but from localised elevated sections of the route north of Rhayader, north-west and south-east of Llanwrthwl and south of Llangurig, it is judged to be small , affecting the rural views experienced by walkers as they engage in outdoor recreation						
	More distant views of the Project wi	Il be afforded from limited sections o	of the route to the south of Builth Well	s; however, turbines will be barely pero	ceptible against the skyline in these	e distant glimpsed views.	
	Geographical extent						
	As indicated by the ZTV and confirmed through ground-truthing, intermittent visibility of the Project will be experienced from localised sections of the route which pass at higher elevation across mountainous landform and on the upper sides of the valley (north of Rhayader, north-west and south-east of Llanwrthwl and south of Llangurig). The geographical extent is considered to be small .						
	<u>Duration/reversibility</u>	<u>ration/reversibility</u>					
			will be short-term (up to 5 years) and	•			
	During operation the changes in vie	ws resulting from turbines will be lor	ng-term (beyond 10 years) and reve	rsible as the turbines will be dismantled	I and removed from the Site once t	he operational period has ceased.	
	Overall Judgement on Magnitude	of Visual Change					
	o total oddgomont on magnitude	ooudi ondingo					

	he small scale of effect over a small geographical extent (over a long term) is judged to result in an overall low magnitude of change. Although the construction period is shorter in duration, it can be more detracting nan at operation because of on-site activity and part-built structures. Therefore, the overall magnitude of change at construction is also judged to be low .								
	During Construction								
Barely perceptible	Barely perceptible Low Low - Medium Medium Medium - High High Very High								
	During Operation								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance	A medium-high sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
			During Co	nstruction					
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
	During Operation								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique distant views from intermittent sections of the route. The scale of Garn Fach turbines will be comparable to the scale of the Llandinam Repowering turbines, however they will increase the horizontal extent of turbines in views from intermittent sections of the route to the south-west of the Site (as illustrated in the visualisation for **Viewpoint 21**). In views from the route to the west of the Site, the proposed turbines of the Project will appear barely perceptible beyond the turbines of Llandinam Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be occasional sequential effects from the proposed Carno III (13 turbines at 149.9m tip height) and Esgair Cwmowen (18 turbines at 125m tip height) Wind Farms, which will be seen in glimpsed distant views north and north-east from limited extents of the route to the south, west and north-west of Llangurig, although in an opposite direction of view to Garn Fach. In views from limited extents of the route to the south-west of the Site the proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) will be barely perceptible alongside the operational Garreg Lwyd Hill Wind Farm in distant views (as illustrated in the visualisation for Viewpoint 21). The proposed Bryngydfa Wind Farm will be seen in a similar angle of the view as Garn Fach, however a clear separation will be seen between the two clusters of development. The introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent when considered against a baseline containing these undetermined proposed schemes in addition to those in Scenario A, so there will be no additional cumulative effects over and above those set out in the LVIA above.

Visual Receptor	Users of National Cycle Network Ro	oute 81							
Location of Visual Receptor	Shown on Figure 6-13b and Figure	6-14b							
Representative Viewpoints	None from the NCN itself (nearest is	Viewpoint 13: Severn Way Nort	n of Llanidloes)						
Description of Visual Receptor	north-west of the Site. Within 10km follows rural roads to Caersws before The Severn Valley is relatively broat views are occasionally screened by Severn Way, with both routes follows. A number of operational wind energy against the skyline from intermittent forms a relatively distant feature (6.5 operational Carno I (56 turbines at 8.5).	of the Site, the route passes north- re crossing south-east towards Stell d in this part of the Study Area, and intervening vegetation, including w ing the same alignment from Newtony y developments are visible from into sections of the route including 1km 5-7.5km) extending across a medius fam tip height) and Carno II (12 turk	oodland and mature hedgerows, rollin own to the north-east along the valley. ermittent extents of the route. The rou	along the lower slopes and floor of the ewtown and then through the Severn \orded looking across the valley floor and glocalised landform and buildings as te passes close by to the operational approximately 7km to the south-west. The east, south and south-west from interrange 18 turbines at 66m tip height), Tirgwyn	Severn Valley broadly parallel to /alley before leaving the Study Are nd towards the enclosing ridgeline sociated with settlements. The rou Bryn Blaen Wind Farm (6 turbines The operational Llandinam Wind Finittent extents of the route between	the A470, A489 and A483. The route ea and heading towards Welshpool. It is on either side of the valley. Outward it is also runs broadly parallel to the es at 100m tip height) which is seen farm (102 turbines at 45.5m tip height) in Llanidloes and Newtown. The			
Judgement on Visual Susceptibility	The visual susceptibility of this rece	otor is judged to be medium as cyc	lists travelling on local road routes are	e likely to be focused on the surroundi	ng landscape, but are transitory.				
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)									
Judgement on the Value of Views experienced by the Visual Receptor	views are "extensive from within the	field system over the surrounding	floodplain / valley bottom and towards	the dramatic upland windfarm at Wau	in Ddubarthog". The Caersws Rive				
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)		e". Together these VSAAs encomp	ound". The Llandinam Hill and Scarp ass the majority of NCN Route 81 whi						
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the	value of views experienced by the visi	ual receptor, the sensitivity of this visu	al receptor is judged to be mediu	m.			
	Low	Low - Medium	Medium	Medium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect								
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	north-east of Llanidloes. Visibility of cranes erecting turbines will become	Ouring construction, there will be limited distant views approximately 7.2km to the south-east towards the upper parts of cranes that will feature on the skyline and affect rural views from sections of the route to the orth-east of Llanidloes. Visibility of other construction activities that are at ground level across the Site will be obscured by intervening landform to the south of the Severn Valley. From other parts of the route, views of ranes erecting turbines will become more glimpsed and intermittent due to intervening landform. The scale of visual effect at construction will vary from different parts of the route, but from localised extents to the north ast of Llanidloes, it is judged to be small, but will reduce with distance from the Project.							
	to the north-east of Llanidloes (appr tips will be seen beyond intervening appear to fill a gap between the two	During operation, turbines will be seen on the skyline and will occupy a small part of available oblique views south-east, south and south-west from intermittent sections of the route. From localised sections of the roth to the north-east of Llanidloes (approximately 7.2km north-west of the outermost turbine of the Project), the hubs of three turbines will be seen (T1, T2, T3) sitting just above intervening landform. Further turbine bit tips will be seen beyond intervening landform across a small part of the skyline in views south-east and south-west. The Project will be seen in combination with the turbines at Llandinam, and Garn Fach turbines was appear to fill a gap between the two clusters of turbines of this development; however, the scale of turbines of the Project will appear perceptibly larger than them. The scale of visual effect at operation will vary from different parts of the route, but from sections of the route to the north-east of Llanidloes the scale of visual effect in distant oblique views is judged to be small , affecting the rural views experienced by cyclists as the engage in outdoor recreation.							
	intervening landform across a small	part of the skyline. More distant vie	tte near Stepaside (approximately 7.1kews of the Project will be afforded from stant glimpsed views. The scale of visi	n limited sections of the route to the no	orth-east of Newtown, however, tui	rbines blade tips will be barely			
	Geographical extent								
	As indicated by the ZTV and confirm Stepaside and to the north-east of N	ned through ground-truthing, the Pr lewtown. The small scale of visual	oject will be visible from intermittent se effect will be experienced from localise	ections of the route, including as it pas ed section of the route to the north-ea	sses through rolling pastoral fields st of Llanidloes i.e. a small geogra	to the north-east of Llanidloes, near aphical extent.			
	<u>Duration/reversibility</u>								
	During construction the changes in	views experienced by this receptor	will be short-term (up to 5 years) and	largely reversible.					
	During operation the changes in vie	ws resulting from turbines will be Ic	ng-term (beyond 10 years) and rever	rsible as the turbines will be dismantle	ed and removed from the Site once	e the operational period has ceased.			
	Overall Judgement on Magnitude	of Visual Change							
			term) is judged to result in an overall I herefore, the overall magnitude of cha			duration, it can be more detracting			

During Construction								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		
	During Operation							
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High		

Overall Level of Effect and Significance	A medium sensitivity combined with	A medium sensitivity combined with a low magnitude of change is judged to result in a minor-moderate effect.								
			During Co	nstruction						
	Negligible	Minor	Minor - Moderate	Moderate (Significant	Moderate-Major (Significant)	Major (Significant)				
	During Operation									
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)				

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in oblique distant views from intermittent sections of the route to the south-east, south and south-west. Whereas the proposed turbines of Garn Fach will be partially screened by intervening landform, the north-western turbines of the consented Llandinam Repowering will at times appear prominently along the containing ridgeline, and will therefore occupy a larger angle of the view than Garn Fach. In views from the route to the north-east of Llandines, the turbines of Garn Fach will appear to fill a gap in the middle of the Llandinam layout, improving the overall composition of wind farm development. Combined views of Garn Fach and the consented Llandinam Repowering will be experienced from intermittent sections of the route to the north-east of Llandines and near Stepaside. Nevertheless, the introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent) when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Scenario B:

There will be occasional sequential effects from the proposed Carno III Wind Farm (13 turbines at 149.9m tip height) which will form a fairly distant feature, increasing the prominence and horizontal extent of wind farm development in views north-west from limited extents of the route, including to the north-east of Llanidloes and to the south of Caersws. The introduction of Garn Fach will still result in a **small** scale of visual effect when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above**.

Visual Receptor	Users of National Cycle Network Ro	ute 825				
Location of Visual Receptor	Shown on Figure 6-13b and Figure	6-14b				
Representative Viewpoints	Viewpoint 14: NCN Route 825 No	th of Llanbister (7.8km from the ne	earest turbine – T17)			
Description of Visual Receptor	Rhayader and crossing the A483 to heads west towards the A481 near and Knighton passes approximately nearest Rhayader, is at relatively lo and occasional open areas of rough elevation, distant outward views from elevation to the east of the A483, on the route passes approximately 4.3 the route between Llananno and the the skyline in views 11-14km to the	the north of Llanbister. The route for Hundred House before running north 3km to the south of the Site at its now elevation, following watercourses grazing. On approach to the B4356 methe route are relatively enclosed butward distant views are afforded to km to the south of the operational Callanister Road Train Station. The conorth-west from sections of the route.	bllows the Teme Valley to Knighton, we have to Brynthomas and west again to encearest point. The route primarily runs and river valleys. To the east and we have rouge, the road passes at lower intervening landform and vegetation the west overlooking the Ithon Valley bearreg Lwyd Hill Wind Farm (17 turbing perational Llandinam Wind Farm Farm E. The twin turbine development at Bi	mately 107km between Rhayader and here the direction shifts south-east and at the B4358 to the west of Llandring along rural lanes and minor roads, wist of the A483, the route passes at high relevation through the Lugg Valley and, including blocks of forestry, woodla and north-east towards distant landforces at 126.5m tip height), which is evicent (102 turbines at 45.5m tip height) frynddu (20m tip height) is also seen inght); from extents of the route to the east 126.5m tip height); from extents of the route to the	d south, passing Presteigne and Kindod Wells. The northernmost section th some traffic free sections. The norther elevation through a landscape and Teme Valley to Knighton. From section and mature hedgerow. From section to glimpsed oblique and direct vorms a relatively distant feature which views 3-6km north-west from section.	ngton. From Kington, the route on of the route between Rhayader orth-eastern section of the route, of rolling enclosed pastoral fields sections of the route at a lower stions of the route at at higher views north from limited extents of ch extends across a small angle of ons of the route. The route passes
Judgement on Visual Susceptibility	The visual susceptibility of this rece	otor is judged to be medium as cyc	lists travelling on local road routes are	e likely to be focused on the surroundi	ng landscape but are transitory.	
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)						
Judgement on the Value of Views experienced by the Visual Receptor	the area as having "generally pleas	ant rural views". The Valleys/basins	north of Abbeycwmhir VSAA notes th	noted cycle route, they are not protect at there are attractive views "along va	lleys and to wooded hills" although	"dense forests may be considered
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)				all roads through area to small valleys f NCN Route 825 which falls within the		t of itnon VSAA notes that there are
Judgement on Visual Sensitivity	By combining the separate judgeme	ents on visual susceptibility and the	value of views experienced by the vis	ual receptor, the sensitivity of this visu	al receptor is judged to be medium	1.
	Low	Low - Medium	Medium	Medium - High	High	Very High
Judgement on Magnitude of Visual Change	Scale of effect					
(see Tables 1.12 – 1.14 within Appendix 1-A: LVIA and CLVIA Methodology)	east of the A483 (approximately 7-9 Project). Visibility of other construct the route to the east of Llandrindod distance. The scale of visual effect it is judged to be small but will redu During operation, turbines will exter some extent, although some will be in the visualisation for Viewpoint 14 . The scale of visual effect at operations they engage in outdoor recreation including forested landform at Cefn-More distant views of the Project wi	km south-east of the outermost turb on activities that are at ground level Wells (approximately 16-18km to that construction will vary from difference with distance from the Project. d across part of the skyline in distar partially screened by intervening lart. Turbines will be seen in combination will vary from different parts of the n. In views from extents of the route crin. There is theoretical visibility of I be afforded from limited sections of	oine of the Project) and approximately across the Site will be obscured by it is south of the outermost turbine of the parts of the route, but from localised in the oblique views (7-9km to the north-windform resulting in the hubs of eight to the west of Abbeycwmhir, the black the hubs of six turbines located within	built structures that will feature on the 1km of the route to the west of Abbeyntervening landform. More distant viewed Project), however the upper parts of diextents of the route (for 2km of the route) from approximately 2km of the route in the syline (visiting from and will slightly increase the ections of the route east of the A483, if the tips of turbines in the northern parch the middle parcel of the Site, however wells; however, turbines will be bareleptible.	rowmhir (approximately 7km south- vs of the Site are afforded from limit cranes and partially built structures oute to the east of the A483 and 1km bute to the east of the A483. All 17 to bility of the remaining turbines being horizontal extent and prominence of it is judged to be small , affecting the ele of the Site will be barely perceptibles intervening coniferous forestry is	west of the outermost turbine of the ted extents (approximately 3.6km) of a will be barely perceptible from this m of the route west of Abbeycwmhir) wrbines of the Project will be seen to g limited to blade tips, as illustrated of wind farm development in views. It is a rural views experienced by cyclists ble beyond intervening landform, likely to limit views of these too.
	Geographical extent					
	Whilst the ZTV indicates theoretical approximately 2km east of the A483		tual visibility will be limited by interver	ing vegetation including coniferous fo	restry at Cefn-crin. The small scale	of visual effect will occur only for
	<u>Duration/reversibility</u>					
			will be short-term (up to 5 years) and	5 ,		
	During operation the changes in vie	ws resulting from turbines will be lo	ng-term (beyond 10 years) and rever	rsible as the turbines will be dismantle	ed and removed from the Site once	the operational period has ceased.
	Overall Judgement on Magnitude	of Visual Change				

	er a small geographical extent (ov f on-site activity and part-built stru				tion period is shorter in duratior	i, it can be more detracting			
	During Construction								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			
	During Operation								
Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

Overall Level of Effect and Significance	A medium sensitivity combined with a low magnitude is judged to result in a minor-moderate effect.								
			During Co	nstruction					
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			
	During Operation								
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)			

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6.1: Methodology which includes definition of Scenario A and B)

Scenario A:

Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together from intermittent sections of the route, including approximately 2km of the route to the east of the A483, approximately 1km of the route to the west of Abbeycwmhir and more distant views from sections of the route to the east of Llandrindod Wells. The turbines at Garn Fach and Llandinam Repowering will be seen extending across a similar angle of the view, with those at Garn Fach slightly increasing the prominence and horizontal extent of turbines further south. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

There will be occasional sequential effects between Garn Fach and the proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) which will form an extension to the north and south of Garreg Lwyd Hill Wind Farm. This development will be seen in views looking north from the route, in a different direction of view than Garn Fach and Llandinam Repowering (consented). Turbines of Bryngydfa Wind farm will be evident in oblique views north, at distances of approximately 3.4-5km from the section of the route to the east of the A483, at distances of approximately 12.9-14km from the section of the route to the west of Abbeycwmhir (although limited further by intervening coniferous forestry) and more distant views from sections of the route to the east of Llandrindod Wells. Bryngydfa Wind Farm will increase the prominence and visibility of turbines in views north and north-east from this section of the route, however, interactions with Garn Fach will be minimal given the intervening distance between developments and different angles of views in which the developments are experienced. The introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be no additional cumulative effects over and above those set out in the LVIA above.

Visitors to summits reached by recreational routes and to other attractions

Visual Receptor	Visitors to Gors Lydan									
Location of Visual Receptor	Shown on Figure 6-13b and Fi	gure 6-14b								
Representative Viewpoints	Viewpoint 15: Gors Lydan (8.	1km from the nearest turbir	ne – T16)							
Description of Visual Receptor	of 529m AOD, forms the highes	t hilltop out of these. The s		pen to all traffic (BOAT) wh	n a series of other neighbouring hillich connects a bridleway in the nor Ithon valley towards the Site.					
	Bryn Titli (22 turbines at 53.5m	tip height), Cefn Croes (39 9km respectively. Turbines	turbines at 100m tip height), Tirgv	vynt (12 turbines at 116m ti _l	15.5m tip height) is visible at a dista o height) and Mynydd Clogau (19 to s at 126.5m tip height) are relativel	rbines at 50m tip height) wind fa	arms are barely perceptible at			
Judgement on Visual Susceptibility			jh as people's interest is likely to b	e focused on the landscape	e as they engage in outdoor recrea	ion. Views of the surroundings a	are an important contribution			
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	towards the experience afforder	d to those at the summit.								
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by this rece views to surrounding rural area		dium value as although they are	not protected or designated	the Upland moor, Beacon Hill & G	ors Lydan VSAA notes that there	e are "Generally attractive long			
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)										
Judgement on Visual Sensitivity	By combining the separate judg	ements on visual susceptik	oility and the value of views experi	enced by the visual recepto	r, the sensitivity of this visual recep	tor is judged to be medium-high	1.			
	Low	Low - Mediu	ım Mediu	ım	Medium - High	High	Very High			
Judgement on Magnitude of Visual Change	Scale of effect									
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	level construction activities inclu	uding excavations associate	-	ation of crane pads and tra	ines and partially built structures ocks, the construction of the substat					
	distance of views (approximate the northern parcel of the Site v would be seen to add to the exi visitors as they engage in outdo	ring operation, turbines will be seen to occupy 24 degrees (and only 7 degrees when viewed from the BOAT) of the available panoramic views of the skyline and will form a feature on the plateau within the middle tance of views (approximately 8.1km to the north-west). The number of turbines visible would be dependent on the position of the viewer, as intervening landform from the summit would obscure the turbines within northern parcel of the Site when viewed from the BOAT (e.g. Viewpoint 15), whereas more open views of all 17 turbines are afforded when stood further to the west. Nevertheless, the turbines from the Project uld be seen to add to the existing turbines at Llandinam that can be seen on the distant skyline, increasing the horizontal extent of wind farm development to the south and affecting the scenic views experienced by itors as they engage in outdoor recreation. The proposed turbines would be evenly spaced resulting in a balanced visual arrangement. The scale of visual effect during operation is judged to be small-medium with Project being a discernible feature within panoramic views albeit seen at a distance.								
	Geographical extent									
	For hill summits the geographic	al extent does not apply as	these are point locations where e	mphasis is on the scale of	effect.					
	<u>Duration/reversibility</u>									
			his receptor would be short-term							
					0 years). The long-term changes wucture (excluding tracks) will be bro		turbines will be dismantled			
	Overall Judgement on Magnit	ude of Visual Change								
			ged to result in an overall low-med ore, the overall magnitude of effec		Although the construction period is ged to be low-medium.	shorter in duration, it can be mo	ore detracting than at operation			
				During Construction	1					
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High			

	During Operation								
	Barely perceptible	Low	Low – Medium	Medi	ium Medium - Hi	gh High	Very High		
Overall Level of Effect and Significance	A medium-high sensitivity com	bined with a low-medium magr	nitude is judged to result in a mod	erate effect.					
				During Cor	nstruction				
	Negligible	Minor	Minor - Mod	erate	Moderate (Significant))	Moderate-Major (Significant)	Major (Significant)		
		•		During O	peration				
	Negligible	Minor	Minor - Mod	erate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)		

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (11km to the north-west) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small-medium scale of visual effect from the summit when considered against a baseline containing this consented scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no successive cumulative effects as there will be no additional consented schemes visible from this summit to those mentioned above (i.e. outside of the 90 degrees arc of vision).

Scenario B:

Combined: The proposed Esgair Cwmowen (18 turbines at 125m tip height) and Llanbrynmair (30 turbines at 126.5m tip height) wind farms will be barely perceptible at distances of 26km and 33km to the north-west respectively. Nevertheless, the introduction of Garn Fach will still result in a **small-medium** scale of visual effect from the summit when considered against a baseline containing these proposed schemes, in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Successive: The proposed development of Bryngydfa (12 turbines at 126.5m tip height) will form an extension to the north and south of Garreg Lwyd Hill Wind Farm and seen <2km north-east from the summit. However, the introduction of Garn Fach will still result in a **small-medium** scale of visual effect to the summit when considered against a baseline containing this undetermined proposed scheme in addition to Garreg Lwyd Hill Wind Farm, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Appendix 6: Landscape and Visual Assessment

	Barely perceptible	Low	Low – Medium	Mediu	m Medium - Hig	h High	Very High
Overall Level of Effect and Significance	A medium-high sensitivity com	bined with a low magnitude is jud	lged to result in a minor-mod	erate effect.			
				During Cons	truction		
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)
			'	During Ope	eration		
	Negligible	Minor	Minor - Mo	derate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (12.8km to the south-east) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect from the summit when considered against a baseline containing this consented scheme and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no successive cumulative effects as there will be no additional consented schemes visible from this summit to those mentioned above (i.e. outside of the 90 degrees arc of vision).

<u>Scenario B:</u>

Combined: The proposed development of Bryngydfa (12 turbines at 126.5m tip height) will form an extension to the north and south of Garreg Lwyd Hill Wind Farm but will be barely perceptible at a distance of 21km to the south-east from the summit. The introduction of Garn Fach will still result in a small scale of visual effect from the summit when considered against a baseline containing this proposed scheme, in addition to those in Scenario A. so there will be no additional cumulative effects over and above those set out in the LVIA above.

Successive: The proposed Esgair Cwmowen (18 turbines at 125m tip height) will form an extension to the south of Tirgwynt Wind Farm and seen approximately 2km to the north from the summit. The proposed developments at Llanbrynmair (30 turbines at 126.5m tip height) and Carno III (13 turbines at 149.9m tip height) will be seen approximately 8km to the north-west and south-west respectively. However, the introduction of Garn Fach will still result in a small scale of visual effect to the summit when considered against a baseline containing these undetermined proposed schemes in addition to those considered in the LVIA, so there will be no additional cumulative effects over and above those set out in the LVIA above.

Representative Viewpoints Description of Visual Receptor Llyn Clywedog B4518 and this convoluted wat The operations approximately Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Visual Sensitivity By combining to Scale of effective Clywedog Uplands Sensitivity Judgement on Magnitude of Visual Change (see Tables 1.12 – 1.14 within Appendix 6-1: During constru		r Severn, located near to the town ccess to the north-eastern shore nceals parts of it. The Site is visil m tip height) can be seen on this in (39 turbines at 100m tip height) as views of the surrounding area. h value as it is a designated view anoramic views from high points	n of Llanidloes. A designated of the reservoir via a PRoW. ble to the south-east, seen alcomplete skyline at a distance of approxis seen at a distance of 13.2km are an important contributor appoint advertised on OS maps along its western edge over March 19.00 and 19	Views from the designated viewpoing a small section of skyline that it by simulately 12km. Bryn Blaen Wind Fixm to the south-west. It to the experience when stopping a sand located within the Clywedog wild Wales and over the surrounding	int/ picnic area are focused so is framed by foreground landforearm (6 turbines at 100m tip heat this roadside viewpoint. Valley Registered Landscape in grolling mosaic farmland".	outhwards and look over the orm surrounding the reservoir. neight) is also visible					
Description of Visual Receptor Llyn Clywedog B4518 and this convoluted wat The operations approximately Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Visual Sensitivity By combining to Scale of effective (see Tables 1.12 – 1.14 within Appendix 6-1: During constru	is a reservoir on the head-waters of the River area provides parking, picnic benches and acer body and the distinctive landform which coll Llandinam Wind Farm (102 turbines at 45.5r 5.9km to the south and Cefn Croes Wind Fam eeptibility of this receptor is judged to be high increased by this receptor is judged to be of high and Grazing VSAA notes that there are "fine page to be separate judgements on visual susceptibility of separate judgements on visual susceptibility of the River and Arabic Samuel S	r Severn, located near to the town ccess to the north-eastern shore nceals parts of it. The Site is visil m tip height) can be seen on this in (39 turbines at 100m tip height) as views of the surrounding area. h value as it is a designated view anoramic views from high points	n of Llanidloes. A designated of the reservoir via a PRoW. ble to the south-east, seen alcomplete skyline at a distance of approxis seen at a distance of 13.2km are an important contributor appoint advertised on OS maps along its western edge over March 19.00 and 19	Views from the designated viewpoing a small section of skyline that it by simulately 12km. Bryn Blaen Wind Fixm to the south-west. It to the experience when stopping a sand located within the Clywedog wild Wales and over the surrounding	int/ picnic area are focused so is framed by foreground landforearm (6 turbines at 100m tip heat this roadside viewpoint. Valley Registered Landscape in grolling mosaic farmland".	outhwards and look over the orm surrounding the reservoir. neight) is also visible					
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Visual Sensitivity By combining to Scale of effective (see Tables 1.12 – 1.14 within Appendix 6-1: During constru	area provides parking, picnic benches and acter body and the distinctive landform which con Llandinam Wind Farm (102 turbines at 45.5r 5.9km to the south and Cefn Croes Wind Farm septibility of this receptor is judged to be high ind Grazing VSAA notes that there are "fine parties separate judgements on visual susceptibility of the separate judgements on visual susceptibility of t	ccess to the north-eastern shore nceals parts of it. The Site is visim tip height) can be seen on this in (39 turbines at 100m tip height) as views of the surrounding area. h value as it is a designated view anoramic views from high points	of the reservoir via a PRoW. ble to the south-east, seen ald skyline at a distance of approsis seen at a distance of 13.2kd are an important contributor appoint advertised on OS maps along its western edge over Market and the second	Views from the designated viewpoing a small section of skyline that it by simulately 12km. Bryn Blaen Wind Fixm to the south-west. It to the experience when stopping a sand located within the Clywedog wild Wales and over the surrounding	int/ picnic area are focused so is framed by foreground landforearm (6 turbines at 100m tip heat this roadside viewpoint. Valley Registered Landscape in grolling mosaic farmland".	outhwards and look over the orm surrounding the reservoir. neight) is also visible					
(see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Visual Sensitivity By combining to Scale of effective (see Tables 1.12 – 1.14 within Appendix 6-1: During constru	ienced by this receptor is judged to be of higl nd Grazing VSAA notes that there are "fine pa	h value as it is a designated view anoramic views from high points	/point advertised on OS maps along its western edge over N	s and located within the Clywedog \ Mid Wales and over the surrounding	Valley Registered Landscape ng rolling mosaic farmland".	of Special Historic Interest. The					
CLVIA Methodology) Judgement on the Value of Views experienced by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Visual Sensitivity By combining to Scale of effective (see Tables 1.12 – 1.14 within Appendix 6-1: During constru	nd Grazing VSAA notes that there are "fine pa	anoramic views from high points	along its western edge over N	Mid Wales and over the surrounding	ng rolling mosaic farmland".	of Special Historic Interest. The					
by the Visual Receptor (see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology) Judgement on Visual Sensitivity By combining to Scale of effective (see Tables 1.12 – 1.14 within Appendix 6-1: During constru	nd Grazing VSAA notes that there are "fine pa	anoramic views from high points	along its western edge over N	Mid Wales and over the surrounding	ng rolling mosaic farmland".	of Special Historic Interest. The					
CLVIA Methodology) By combining to the combin		ity and the value of views experie	and had the second		nie Sieden das he blieb						
Judgement on Magnitude of Visual Change (see Tables 1.12 – 1.14 within Appendix 6-1: During constru		ty and the value of views experie	mbining the separate judgements on visual susceptibility and the value of views experienced by the visual receptor, the sensitivity of this visual receptor is judged to be high .								
Judgement on Magnitude of Visual Change (see Tables 1.12 – 1.14 within Appendix 6-1: During constru	Low Low - Medium Medium Medium - High High Very High										
(see Tables 1.12 – 1.14 within Appendix 6-1: During constru		Mediu	m M	edium - High	High	Very High					
	·	<u>.</u>	·								
roadside viewp oblique and inc	During construction, there will be limited distant views (approximately 13.3km to the south-east) towards the upper parts of cranes and partially built structures that will feature on the skyline affecting rural views. This construction activity will be seen on the skyline that is framed by distinctive landform features which surround the reservoir in the foreground (and which effectively enhance the view towards the Site). However, at this roadside viewpoint, the receptor is likely to be focusing on more scenic views that look south across Llyn Clywedog as they engage in outdoor recreation, and therefore views south-east towards the Site are likely to be oblique and incidental. Visibility of other construction activities that are at ground level across the Site will be obscured by intervening landform including the Waun Ddubarthog ridge along the north-western Site boundary. The scale of visual effect at construction is judged to be small .										
four turbines w turbines at Llar more scenic vio	During operation, turbines will be seen to extend across 14 degrees of the skyline affecting rural views. Only turbines within the northern parcel of the Site will be visible although mostly limited to blade tips excellent four turbines where hubs breach the skyline. Turbines within the middle parcel of the Site will be obscured by intervening landform. The turbines from the Project would be seen at an equivalent scale to the exist turbines at Llandinam and would be evenly spaced, infilling gaps between clusters of the Llandinam turbines, resulting in a balanced visual arrangement. At this roadside viewpoint, the receptor is likely to be formore scenic views that look south across Llyn Clywedog as they engage in outdoor recreation, and therefore views south-east towards the Site are likely to be oblique and incidental. The scale of visual effect a operation is judged to be small . Geographical extent										
Geographical											
For designated	For designated viewpoints the geographical extent does not apply as these are point locations where emphasis is on the scale of effect.										
<u>Duration/reve</u>	sibility										
During constru	ction the changes in views experienced by this	s receptor will be short-term (up	to 5 years) and largely rever	sible.							
During operation	n the changes in views resulting from turbine	s will be long-term (beyond 10 y	vears) and reversible as the t	urbines will be dismantled and rem	noved from the Site once the o	operational period has ceased.					
Overall Judge	ment on Magnitude of Visual Change										
	of effect (over a long term) is judged to resul t-built structures. Therefore, the overall magn			ction period is shorter in duration,	it can be more detracting than	at operation because of on-site					
			During Construction								
Barely pe	ceptible Low	Low – Medium	Medium	Medium - High	High	Very High					
			During Operation								
Barely pe		Low - Medium	Medium	Medium - High	High	Very High					

Appendix 6: Landscape and Visual Assessment

Overall Level of Effect and Significance	Although the receptor is of high sensitivity, the overall effect is judged to be minor-moderate as the magnitude of visual change is considered to be so low and views of the project will be incidental as receptors focus on views across Llyn Clywedog (in a different direction of view to the Project).					
	During Construction					
Negligible Minor Minor - Moderate Moderate (Significant) Moderate-Major (Significant)						Major (Significant)
	During Operation					
	Negligible	Minor	Minor - Moderate	Moderate (Significant)	Moderate-Major (Significant)	Major (Significant)

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B)

Scenario A:

Combined: The consented Llandinam Repowering scheme (12.3km to the south-east) will replace the 102 no. existing turbines (45.5m tip height) with 34 no. turbines at an increased tip height of 121m, therefore resulting in a fewer number of larger-scale turbines. The change in turbine scale will result in a greater visual influence from Llandinam in the cumulative baseline scenario. The scale of Garn Fach turbines beside the repowered Llandinam turbines would be more compatible than the scale of the Garn Fach turbines beside the existing Llandinam turbines. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect from the designated viewpoint / picnic area when considered against a baseline containing this consented scheme, so there will be no additional cumulative effects over and above those set out in the LVIA above.

There will be no **successive** cumulative effects as there will be no additional consented schemes visible from the designated viewpoint / picnic area to those mentioned above (i.e. outside of the 90 degrees arc of vision).

Scenario B:

Not applicable as there are no undetermined planning applications visible from the designated viewpoint / picnic area.

Designated Landscapes

Visual Receptor	Residents of / visitors to Shropshire Hills AONB						
Location of Visual Receptor	Shown on Figure 6-13b and Fig	gure 6-14b					
Representative Viewpoints	Viewpoint 20: Intersection of Minor Roads at Black Mountain, Shropshire AONB (14.1km from the nearest turbine – T11)						
Description of Visual Receptor	of the AONB falls within the Stuand Clun valleys. The B4368 ru 40km east of the Study Area). S road network comprising rural lawhich afford elevated panoramic From upland locations facing we	The Shropshire Hills area is in the English county of Shropshire and designated as an Area of Outstanding Natural Beauty (AONB). It is located in the south of the county, extending to its border with Wales. A small part of the AONB falls within the Study Area, approximately 12km from the outermost turbines of the Project. This area comprises rolling hills with regular fields of pasture and blocks of woodland, situated between the Teme and Clun valleys. The B4368 runs along the River Clun through the area providing a connection between the A489 near Newtown (approximately 4km to the north-west of the area) and the A489 near Bridgnorth (over 40km east of the Study Area). Settlements within the area are limited to the small village of Bettws-y-crwyn, the small hamlets of Quabbs and Anchor, and with occasional scattered farmsteads connected via a minor road network comprising rural lanes. The Kerry Ridgeway long-distance footpath runs along the northern boundary of the area and other PRoWs are located throughout, traversing steep hillsides and crossing plateaus, which afford elevated panoramic views including westwards towards the SIte. Views from lower-lying areas are often contained by landform. From upland locations facing westwards, the operational Garreg Lwyd Hill (17 turbines at 126.5m tip height) is visible approximately 5km to the south-west. The operational Llandinam Wind Farm (102 turbines at 45.5m					
					views 14km to the west and 25km to		
Judgement on Visual Susceptibility (see Table 1.10 within Appendix 6-1: LVIA and CLVIA Methodology)	The visual susceptibility of this r	The visual susceptibility of this receptor is judged to be high as communities, people in engaged in outdoor recreation and users of the local roads have views from this nationally designated landscape.					ited landscape.
Judgement on the Value of Views experienced by the Visual Receptor	Views experienced by the recep	Views experienced by the receptors are judged to be of high value as they are high quality views associated with this nationally designated landscape.					
(see Table 1.11 within Appendix 6-1: LVIA and CLVIA Methodology)							
Judgement on Visual Sensitivity	By combining the separate judg	ements on visual susceptibili	y and the value of views experie	enced by the visual recep	tor, the sensitivity of this visual recept	or is judged to be high .	
	Low	Low - Medium	Mediu	m	Medium - High	High	Very High
Judgement on Magnitude of Visual Change	Scale of effect		,				
(see Tables 1.12 – 1.14 within Appendix 6-1: LVIA and CLVIA Methodology)	Visibility of other construction as Study Area. During operation, 16 out of the	During operation, 16 out of the 17 turbines of the Project will be seen across part of the skyline in views 13-20km to the west as illustrated in the visualisation for Viewpoint 20. Turbines will be seen in combination with					visual receptors within the will be seen in combination with
	turbines at Garreg Lwyd Hill will evenly spaced resulting in a bal	the operational Garreg Lwyd Hill Wind Farm and will increase the horizontal extent and prominence of wind farm development, which will affect the rural and often panoramic views experienced by visitors. However, the turbines at Garreg Lwyd Hill will be perceptually larger than the turbines at Garn Fach as they are closer to the AONB (approximately 5km to the south-west from the nearest point). The proposed turbines would be evenly spaced resulting in a balanced visual arrangement. The scale of visual effect during operation is judged to be small for visual receptors within the Study Area, with the Project seen at a distance and in the context of the existing wind farm at Garreg Lwyd Hill.					roposed turbines would be
	Geographical extent						
	As indicated by the ZTV and co- intervening vegetation does not	5 5	•	ct will be experienced fro	m limited extents of the AONB within	the Study Area (from west facir	ng slopes and hilltops) where
	<u>Duration/reversibility</u>						
	During construction the changes	s in views experienced by this	receptor will be short-term (up	to 5 years) and largely r	eversible.		
	During operation the changes in	views resulting from turbines	s will be long-term (beyond 10 y	rears) and reversible as	the turbines will be dismantled and re	moved from the Site once the o	operational period has ceased.
	Overall Judgement on Magnit	ude of Visual Change					
					itude of change. Although the construstruction is also judged to be low.	ction period is shorter in durati	on, it can be more detracting
				During Construction	on		
	Barely perceptible	Low	Low – Medium	Medium	Medium - High	High	Very High
			_	During Operation	1	•	•

	Barely perceptible	Low	Low - Medium	Medium	Medium - High	High	Very High
			<u>, </u>				
Overall Level of Effect and Significance	Although the receptors are of high Garreg Lwyd Hill.	Although the receptors are of high sensitivity, the overall effect is judged to be minor-moderate as the magnitude of visual change is considered to be so low and influenced by the context of the existing wind to Garreg Lwyd Hill.					
		During Construction					
	Negligible	Minor	Minor - Moderate	Moderate	(Significant) Mode	erate-Major (Significant)	Major (Significant)
		During Operation					
	Negligible	Minor	Minor - Moderate	Moderate	(Significant) Mode	erate-Major (Significant)	Major (Significant)
Additional Cumulative Effects	Scenario A:						
(and 10 months in Landagene 9 Viewal Iran							

(see 'Cumulative Landscape & Visual Impact Assessment' section in Appendix 6-1: LVIA and CLVIA Methodology which includes definition of Scenario A and B) Both Garn Fach and the consented Llandinam Repowering (34 turbines at 121m tip height) will be seen together in distant views west from limited areas of the AONB within the Study Area. The scale of Garn Fach turbines will appear slightly larger than the scale of the Llandinam Repowering turbines and they will increase the horizontal extent of turbines in views. Nevertheless, the introduction of Garn Fach will still result in a small scale of visual effect over a small geographical extent when considered against a baseline containing the repowered Llandinam Wind Farm and the operational developments considered in the LVIA (excluding the existing Llandinam Wind Farm which will be replaced by the repowering scheme), so there will be no additional cumulative effects over and above those set out in the LVIA above.

Scenario B:

The proposed Bryngydfa Wind Farm (12 turbines at 126.5m tip height) will form an extension to the north and south of Garreg Lwyd Hill Wind Farm and will be seen in direct views (3-10km) to the south-west. This development will increase the prominence and visibility of turbines in views seen from the AONB. The introduction of Garn Fach will still result in a **small** scale of visual effect over a small geographical extent when considered against a baseline containing this undetermined proposed scheme in addition to those in Scenario A, so there will be **no additional cumulative effects over and above those set out in the LVIA above.**

Appendix 6.6: Residential Visual Assessment Tables

1.1 Introduction

- **1.1.1** GLVIA3 notes that effects on private property are frequently dealt with through a 'residential amenity assessment' (GLVIA3, Page 107, Para. 6.17). Such studies can include an assessment of visual effects.
- **1.1.2** This Residential Visual Amenity Assessment (RVAA) describes the change in view likely to be experienced by residents at the closest properties to the proposed Garn Fach Wind Farm (the Project). The RVAA should be read in conjunction with **Chapter 6: Landscape and Visual Impact Assessment (LVIA).**
- **1.1.3** The RVAA has been undertaken in accordance with the principals contained within the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) and Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (LI TGN 2/19). The approach has also been informed by numerous decisions made following public inquiries into wind energy proposals in the UK.
- **1.1.4** LI TGN 2/19 explains that: "the purpose of RVAA is to provide an informed, well-reasoned answer to the question: "is the effect of the development on Residential Visual Amenity of such nature and / or magnitude that it potentially affects 'living conditions' or 'Residential Amenity'?" (LI TGN 2/19, Page 5, Para. 2.1).
- **1.1.5** The RVAA does not consider other components of residential amenity, such as noise, dust or shadow flicker, which are dealt with in the appropriate chapters of the EIA Report.
- **1.1.6** The methodology for the RVAA is set out below along with the scope of the assessment. The findings of the assessment are presented in tabular format and the assessment concludes with a summary of the findings.
- **1.1.7** The results allow for any necessary micrositing (i.e. the impact of moving turbines up to 50m as part of micrositing has been considered for each property and it is judged that this would not change the results reported).

Elements of the Project that could have Potential Impacts on Visual Amenity

1.1.8 The proposed turbines are most likely to impact upon views but other components of the wind farm, such as tracks, substation, and borrow pits may also impact upon views. Aircraft warning lights will be infrared (IR) and as a result will not be visible to the naked eye.

1.2 Methodology

- **1.2.1** The methodology can be summarised as follows:
- Step 1: Identification of properties to be considered (defining the Study Area and scope);
- Step 2: Evaluation of baseline visual amenity from each property;
- Step 3: Assessment of likely change to visual amenity of properties; and
- Step 4: Forming the RVAA judgement (the Residential Visual Amenity Threshold).
- 1.2.2 The following section sets out the methodology and the factors considered in more detail.

Step 1: Study Area and Identification of Properties to Assess

- **1.2.3** The assessment includes consideration of the changes in views and visual amenity from all properties within approximately 2km of the proposed turbines. Although there is the potential for significant visual effects to occur beyond this distance, such effects are not considered likely to affect 'living conditions'. This opinion has been informed by experience, observations made on site and an understanding of the Project.
- 1.2.4 Properties were identified using Ordnance Survey (OS) AddressBase Plus data as a starting point and verified in the field. In this case it was found that one of the 'properties' was in fact a maintenance building for the P&L wind farm, and there were two additional properties not in the OS data. These were: a derelict cottage called Pabyllwyd Ganol at grid reference 305044, 282403 and Maens Cottage (a landowner property) at grid reference 305570, 280570. In addition, it appeared that the properties known as Pabyllwyd and Pabyllwyd Barn were in fact one property and so were treated as one. The location of the Upper Llaithddu property on the address base was incorrect, stated at grid reference 306549, 279368. The location of the property has therefore been corrected for the purpose of the RVAA to be situated at the correct grid reference of 306550, 279369. Figure 6-48 shows the properties within 2km of a turbine.

1.2.5 The bare ground Zone of Theoretical Visibility (ZTV) for the turbines was then overlaid onto the amended property map (see **Figure 6-49** for hub height ZTV and **Figure 6-50** for tip height ZTV). Properties with no theoretical visibility (as indicated by the ZTV) were excluded from the RVAA. A total of 20 properties were identified as being within 2km of the proposed turbines and having a potential view of the turbines. These are listed in **Table 6-6.2**.

Step 2: Evaluation of baseline visual amenity from each property

- **1.2.6** Step 2 involves describing and evaluating the baseline visual conditions at the properties to be included, informed by desk study and fieldwork.
- **1.2.7** For the purposes of this RVAA, the visual amenity experienced at a property is made up of a combination of the type, nature, extent and quality of views that may be available from the property and its domestic curtilage (e.g. gardens and access drives).
- 1.2.8 OS maps, aerial imagery and Google Streetview and field survey were used to record information such as:
- the location of the residential elements of each property,
- the orientation and likely views from each property (including principal/primary aspects and presence of windows);
- Layout and orientation of the gardens and property curtilage;
- Access location, and likely views from private or shared driveways or access tracks;
- The nature of existing views from the properties and their gardens, including the proximity and relationship of the properties to surrounding landform, landcover and visual foci and the scenic quality of views; and
- Potential screening provided by local variations in topography, the built environment and vegetation/tree cover within the surrounding landscape.
- **1.2.9** In considering baseline visual amenity, the following were examined:
- The nature and extent of the available existing views (including main/principal and secondary/ peripheral views) from the property and its garden/ domestic curtilage, including the proximity and relationship of the property to surrounding landform, landcover and visual foci; and
- Views experienced when approaching or departing from the property via its driveway and/or access roads, if applicable.
- **1.2.10** Field work was undertaken in February 2020 and February 2021. This enabled the 'maximum case' scenario to be assessed, on the basis that any available screening offered by deciduous vegetation was at a minimum during winter months.
- **1.2.11** The Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (LI TGN 2/19) considers residential receptors to be of high visual sensitivity.

Preparation of Accompanying Wireline Visualisations

- **1.2.12** On the basis of guidance included in LI TGN 2/19, indicative wireline visualisations based on a bare ground digital terrain model were generated from all individual properties using Resoft Windfarm software. They were centred on the windfarm, included the full extent of the wind farm and generated from a 2m viewing height. The wirelines are not necessarily representative of the primary outlook of the property and do not show features such as buildings and trees that may provide screening or filtering of views. It should therefore be noted that these indicative wireline visualisations represent a 'maximum visibility scenario' which may potentially be experienced from the property or its curtilage and this should be borne in mind when viewing the images.
- **1.2.13** The illustrative wireline visualisations show the turbines numbered for ease of reference and include the existing Llandinam turbines. They do not show ancillary development or tracks, but these are taken into account in the assessment and described where they will be visible.
- **1.2.14** Consented cumulative schemes (in this case Llandinam repowering) have been included in place of the existing Llandinam turbines in a second set of wireline visualisations to show the potential cumulative scenario.

Other illustrative material

1.2.15 Aerial photographs and site photography support the assessment.

Step 3: Assessment of likely change to visual amenity of properties

- **1.2.16** A judgement on the magnitude of visual change which will be experienced has been made, and the change in views summarised, with reference to the following factors:
- the distance of the property to the wind turbines and the visibility of turbines in views from the property;
- the number and extent of turbines visible, and their position within views from the property e.g. whether in key views from the property, secondary views, gardens and/ or private drives;
- the proportion of the skyline occupied by the development and whether turbines would be visible on more than one side of the property;
- the extent of external and internal areas of the property affected by views of turbines;
- the likely presence of other ancillary elements in the view from the property, for example access tracks, substation or borrow pits;
- consideration of cumulative effects (as a separate judgement).
- **1.2.17** The description of magnitude of visual change considers views from all parts of the property and forms a judgement in the round, focussing on how the development would impact on the visual amenity of residents.
- **1.2.18** In locations where the Garn Fach Forest provides an element of screening, consideration has been given to how views would change if the forest were to be felled according to the Garn Fach Felling Plans.
- 1.2.19 Magnitude of visual change is expressed on a relative scale, as set out in Table 6-6.1 below.

Table 6-6.1: Magnitude of change in views and visual amenity

Table 0-0.1. Magnitude of Change III views and visual amenity				
Magnitude of Change in Visual Amenity	Description			
Very High	The property is affected by a very large change to views/ visual amenity in the round. For example, the proposed development will be a key/defining element in the main (and possibly only) view from the property and garden, or will be prominent in views from multiple aspects (including the main aspect of the property). Ancillary wind farm elements other than turbines are also likely to be prominent in these views.			
High	The property is affected by a large change to views/ visual amenity in the round. For example, the proposed development will be a key/defining element in a view from the property and garden (does not have to be the main view), or will affect views from more than one aspect (including the main aspect of the property). Ancillary wind farm elements other than turbines may also be prominent in these views.			
Medium	The property is affected by a moderate change to views/ visual amenity in the round. For example, the proposed development will be clearly discernible from at least one aspect of the house and/ or garden, but will not be the key defining feature of views experienced from the property (either because of the distance from the turbines or the presence of screening). Ancillary wind farm elements other than turbines may also be visible but not prominent in these views.			
Low	The property is affected by a small change to views/ visual amenity in the round, For example, the wind farm is at some distance or mostly screened/ has little influence on views from the house and/or garden.			
Barely Perceptible	The proposed development may go unnoticed, or is not visible.			

Step 4: Forming the RVAA Judgement (the Residential Visual Amenity Threshold)

1.2.20 The Residential Visual Amenity Threshold "is the threshold at which the visual amenity of a residential property is changed and adversely affected to the extent that it may become a matter of Residential Amenity and which, if such is the case, competent, appropriately experienced planners will weigh this effect in their planning balance" (LI Technical Guidance Note 2/19 Residential Visual Amenity Assessment).

As stated in the RVAA guidance, RVAA is only concerned with those properties in the highest magnitude and therefore only properties predicted to experience a **very high** or **high** magnitude of change need to be assessed in terms of potential effect on 'living conditions'. This judgement is intended to assist the decision maker in coming to the wider planning judgement on overall residential amenity, when considered within the context of other components (e.g. noise, shadow flicker, dust and vibration). A property experiencing significant visual effects will not necessarily experience effects on residential visual amenity which are judged to breach the Residential Visual Amenity Threshold. The Residential Visual Amenity Threshold is judged by considering whether the development, for example:

- blocks the only available view from a property; or
- is overwhelming views in all directions; or
- is unpleasantly encroaching; or
- is inescapably dominant from the property.

1.3 Study Findings

1.3.1 Table 6-6.2 lists the properties assessed as part of this study. For each, it contains a reference number (which correlates to those shown on **Figure 6-48**), the property name (as informed by OS AddressBase Plus data), and reference to relevant assessment tables.

Table 6-6.2: Properties Considered in Assessment

Ref	Name	Full assessment table number
1	Custogion	Table 6-6.3
2	Fwnog	Table 6-6.4
3	Ddulley Bank	Table 6-6.5
4	Ffordd Las	Table 6-6.6
5	Maens Cottage	Table 6-6.7
6	Pabyllwyd Ganol	Table 6-6.8
7	The Barns	Table 6-6.9
8	Lower Nanthir	Table 6-6.10
9	Rock House	Table 6-6.11
10	Upper Maens Cottage	Table 6-6.12
11	Great Meadows	Table 6-6.13
12	Pabyllwyd Barn	Table 6-6.14
13	Upper Nanthir	Table 6-6.15
14	Green Meadow	Table 6-6.16
15	Brondre Fawr	Table 6-6.17
16	Brondre Fawr Bungalow	Table 6-6.18
17	Waen Llydan	Table 6-6.19
18	Waun Cottage	Table 6-6.20
19	Upper Llaithddu	Table 6-6.21
20	Fferm Ganol	Table 6-6.22

Property 1: Custogion



View to the north-west and south-west façades of the property from a track to the west (within the Site)



View to the north-eastern and north-western façades of the property from near Custogion Brook

Table 6-6.3: Custogion

Property 1: Custogion					
Direction to Site	North-west, west, south-west	Number of turbine hubs theoretically visible	16		
Distance to nearest turbine	801 m	Number of turbine tips theoretically visible	17		
Nearest turbine	T13	Primary view direction	Unclear (but the 'front' appears to face towards the farm yard to the SE)		

Description of property, location and existing context:

Custogion (a landowner property) consists of a two-storey farmhouse with a roof that continues down below the main eaves' height to the rear. The curtilage of the property includes several farm buildings directly to the south and south-east, enclosed by post and wire fencing. Access is provided by a long track which joins a rural lane around 500m to the north of the property.

The property is situated at an elevation of 400m AOD, on an area of gently sloping land (sloping up to the south-west). A small tributary of the Custogion Brook runs to the south-east of the property.

Fields surrounding the property are pasture grazed and moderate in scale, bound by a combination of hedgerows and shelter belts. A block of conifer plantation woodland is situated to the south of the property [NB the woodland to the north-west and north-east of the property shown in the aerial photo has been felled with only a small area of conifers remaining to the north].

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

Property 1: Custogion

Windows on the north-west facing aspect of the property, towards the site, are limited with only one window on the ground floor due to the low eaves. Views in this direction are across the Custogion Brook valley to the hills on which the Garn Fach plantation lies. It is likely there are windows on both storeys of the south-east facing aspect of the property (although this side of the property could not be accessed). Views in this direction are away from the Site and across the agricultural yard to the agricultural buildings which enclose the yard. The undeveloped hill (marked 'Foel' on the OS map) is likely to be visible in the backdrop. Windows occur on both storeys of the north-eastern aspect of the property, although this faces away from the Site and across the Custogion Valley from where there are attractive views across pastoral fields backdropped by low hills. On the south-west facing aspect of the property there are three windows (including an attic room window). Rural views are likely from this façade towards the Brondre-fawr ridge including 'Fowler's Arm Chair' and 'Fowler's Horse Block'.

Appendix 6: Landscape and Visual Assessment

It is not clear whether there is a primary' or 'predominant' direction of view from the property, but the 'front' appears to face towards the farm yard. Views from the curtilage of the property extend in all directions except for the north where a small remaining block of conifer plantation screens views. Attractive views from the access track are likely to extend along the course of the Custogion Brook (which it crosses on a small bridge) to the east and west.

To the west-north-west turbines of the existing Llandinam wind farm are just visible on the horizon in clear conditions, although due to the distance (2,989m) and the small scale (31m hub height) of these turbines they are not prominent.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-51a and 6-51b

The wirelines indicate that the blades of all 17 of the Garn Fach turbines will be potentially visible from the property, occupying a 129 degree field of view. The wireframes show the lower portion of turbines T1 to T9 will be screened by landform. However, in reality the Garn Fach plantation is likely to screen views to these turbines further, so only the blades of the turbines are visible over the tree line. The Garn Fach Plantation would screen views to the hubs of turbines T2, T3, T5 and T6. Turbine T9 is likely to remain prominent above the tree line as it is situated on higher lying land behind the Garn Fach plantation. The nearest turbine to the property (T13) is situated 801m to the south-west.

There will be direct views to the Garn Fach turbines T12 to T17 from the south-west facing aspect of the property, these turbines will be prominent in views as they will be between 800m and 1,612m away and situated on more elevated land (between 450m to 500m AOD). This will change the views from rural and undeveloped to rural with turbines forming moving features in views. It is likely that access tracks on the open sloping land between turbines T10 and T11 to the north-west, and between T11 and T13 to the west will also be visible from the property. There may be some views to the borrow pit situated on sloping ground 792m to the west-north-west, particularly during construction. During construction the crane pad for T11 may also be visible to the north-west of the property.

Open views to turbines T9 toT12 will be possible from the north-west facing aspect of the property as well as views to the blades of T1 to T8 over the Garn Fach Plantation. This will introduce dynamic features to an otherwise fairly rural view (albeit with a manmade plantation).

Views to all 17 turbines will be available from the curtilage of the property where not screened by the property itself or agricultural outbuildings, as boundary features are limited. Turbines T10 to T17 are also likely to be visible from the majority of the access track, resulting in the introduction of large structures with moving blades into rural views.

The Garn Fach development would become a prominent feature in views from two aspects of the property that are currently rural in nature (although these do not appear to be 'primary' viewing directions) as well as being visible from much of the access track and curtilage of the property.

The magnitude of change in views and visual amenity is assessed to be <u>High due to the horizontal extent of, and proximity</u> to, turbines and one borrow pit (noting that these will not be in obvious 'primary' views from the property).

According to NRW's Garn Fach Felling Plan the coup that partially screens views north-west towards T1 to T8 will be felled in 2032-2036. If the forest were to be felled, a slightly greater proportion of turbines T1 to T8 may be visible, however this would not change the magnitude of change.

Conclusion with respect to the potential effects on Living Conditions:

All turbines are likely to be at least partially visible from either the north-west or south west facing windows and curtilage of this property, which currently experiences rural views across farmland and moorland. However, there is no evidence that these are the primary or predominant directions of view from the property, and there will still be undisturbed and rural views from the north-eastern and south-eastern aspects of the property (most notably the attractive views across the Custogion Valley). The development will not block the only available view from the property or be overwhelming in views in all directions. Although the nearest turbine will be located 800m to the west-south-west, this distance is far enough that the turbines should not feel unpleasantly encroaching or inescapably dominant when viewed from the property in the context described above.

For these reasons it is considered that the Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-51a and 6-51b

Property 1: Custogion

If the repowered Llandinam turbines were in place, around eight of these turbines would be visible in place of the existing Llandinam turbines to the north-west (nearest turbine 2.8km to the west-north-west of the property). In this context, the Garn Fach turbines will have a greater influence on the view that the Llandinam repowered turbines. The magnitude of change resulting from adding Garn Fach to a baseline containing the repowered turbines will remain the same as a baseline containing the existing Llandinam turbines i.e. <u>High.</u>

Although there will be a large number of turbines visible from the property if both schemes are developed (covering a 145 degree field of view) the Project would not be considered to surpass the residential visual amenity threshold in the cumulative scenario, as the turbines would be no closer or more dominant than those arising from Garn Fach in the existing baseline scenario.

Property 2: Fwnog



View of property showing the south-east 'front' façade and Garn Fach Forest behind.



View of the property from the gated drive showing the south-east 'front' façade.

Table 6-6.4: Fwnog

Property 2: Fwnog						
Direction to Site	South, west and north-west	Number of turbine hubs theoretically visible	13			
Distance to nearest turbine	811m	Number of turbine tips theoretically visible	17			
Nearest turbine	Т9	Primary view direction	North-east			
Description of property, location	Description of property, location and existing context:					

Property 2: Fwnog

Fwnog is a detached and isolated single storey property, accessed via a track which runs north-south. The property is situated at an elevation of around 450m AOD, on a gentle slope which rises up to the west. The curtilage of the property includes a garden to the north-west and south-east, enclosed by a post and wire fence and some mature garden vegetation and trees.

Directly behind the property (to the north) lies the Garn Fach coniferous plantation woodland and there is substantial vegetation surrounding the property. The property is more open to the east.

Fields surrounding the property to the south are pasture grazed and bound by post and wire fencing. In some places there are also hedgerows and shelterbelts

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Description of existing views and visual amenity:

The main opportunities for views are those to the north-east where the curtilage of the property is marked by only a post and wire fence, allowing long views to the rural and scenic landscape beyond. The main windows are on the south-eastern and north-western façades. To the south-east garden vegetation largely encloses views, although there filtered views in winter months to pastoral fields. Garn Fach, a coniferous plantation, lies behind the property to the north-west which provides a backdrop to short views in this direction. The south-western gable end is contained by vegetation and an outbuilding along the roadside.

There are no views of the existing Llandinam wind farm turbines.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-52a and 6-52b

The wireline shows that the hubs of 13 turbines are theoretically visible from the location of the property with the blades of the additional four turbines also visible over the skyline. However, the presence of Garn Fach plantation to the north and west means turbines T1 toT8 will be completely screened, with views to the lower section of T9 also likely to be screened. This means that in reality, there will only be views to 9 of the Garn Fach turbines (T9 to T17) from the property and its curtilage, occupying a 62 degree field of view from the south to south-west, and these will be filtered by mature vegetation within and just beyond the garden of the property. It is possible that there may be some oblique filtered views of turbines from windows on the south-eastern aspect of the property and from the curtilage of the property (in winter) to turbine (T10) at a distance of 877m which would add built features between the existing mature trees. It is possible that there could also be some views to parts of the access tracks on sloping land between T11 and T12 although these will also be filtered by intervening vegetation. No other ancillary features (substation or borrow pits) are likely to be visible. The attractive primary views to the north-east will remain un-altered.

The magnitude of change to the visual amenity experienced from this property in the round is judged to be **Medium** due to the proposed development being relatively close, but filtered, in views from the house and drive. Where visible, the proposed development will add moving features into rural views.

According to NRW's Garn Fach Felling Plan the coup that partially screens views north towards T1 to T9 will be felled in 2032-2036. If the forest were to be felled, the hubs of an additional six turbines and the blades of two turbines could be visible in views to the north-north-east from the north-western area of the house, although it is likely that garden and forest edge vegetation would continue to provide a screen/ good filter. The magnitude of change would remain **Medium**.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a moderate magnitude of change, the **Project would not** breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-52a and 6-52b

Property 2: Fwnog

Since the repowered Llandinam turbines will be screened by Garn Fach Plantation there will be no change to views from this property in the cumulative situation.

If the forestry were felled (this coup is due to be felled between 2032 – 2036 (according to NRW's Garn Fach Felling Plan), the larger repowered Llandinam turbines may just become visible behind and to the north of the Garn Fach turbines assuming no screening in this direction (which is unlikely). The presence of the Llandinam repowered turbines is unlikely to change the magnitude of change to the visual amenity experienced from this property resulting from the presence of Garn Fach which would remain **Medium**.

Property 3: Ddulley Bank



View of the north-facing gable-end of the building, and dormer windows on the western 'rear' facade.



View of the east-facing front façade of the property showing windows on both storevs.

Table 6-6.5: Ddulley Bank

Property 3: Ddulley Bank					
Direction to Site	West	Number of turbine hubs theoretically visible	17		
Distance to nearest turbine	843m	Number of turbine tips theoretically visible	17		
Nearest turbine	T11	Primary view direction	East		
Description of property, location and existing context:					

Property 3: Ddulley Bank

A detached 2 storey farmhouse (landowner property) and outbuildings accessed via a minor road to the east. The curtilage of the property includes a garden which surrounds the property to the north, south and east. The curtilage of the property is enclosed by a dense coniferous shelterbelt to the west and hedgerows with some mature deciduous trees to the north and east. Directly south of the property are a series of agricultural outbuildings that are slightly lower than the farmhouse.

The property lies at an elevation of around 340m AOD on gently sloping topography, rising westwards towards the Site. Land use surrounding the property consists of pastoral fields comprising a regular field pattern. Fields directly to the southwest are defined by dense mature tree hedgerows or woodland shelterbelts whilst those to the north are slightly more open, bound by hedgerows and some fences.



Aerial view of the property

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.

Description of existing views and visual amenity:

Windows are present on both storeys of the east-facing front façade of the property with views into the garden and some filtered rural views (between mature trees) to pasture fields to the east (these views are also affected by farm buildings and machinery). There are also windows on both storeys of the west-facing façade of the property (towards the Site), including dormer windows. Although views west (towards the Site) from the property are screened by the dense line of conifer trees enclosing it. There are a small number of windows on the ground floor of the north-facing gable end of the property, from which views will be partially screened by the adjacent farm building. The south-facing aspect of the property could not be viewed on Site (due to access limitations) although agricultural buildings to the south of the property prevent any long reaching views in this direction.

The curtilage of the property including the garden and agricultural yard is visually enclosed by surrounding agricultural buildings to the south and north, a dense conifer hedgerow to the west and hedgerows containing mature trees to the east.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-53a and 6-53b

The wireline, based on a bare ground model, indicates that the hubs and blades of all 17 turbines are theoretically visible from the property. However, in reality, views to turbines T12 to T17 are likely to be screened by adjacent agricultural buildings to the south of the property. Turbines T9 to T12 (all less than 1.2km from the property) may be partially visible on the skyline above the coniferous hedgerow, (as the Site lies at a higher elevation than the property), particularly from the dormer windows on the western façade of the property. Turbines to the north-west (T1 to T9) are at a greater distance from the property, with the lower portion of the turbines screened by the intervening landform. It is likely that the Garn Fach plantation would further screen views to these turbines so that only the blades are visible over the treeline. Rural views to the east from the property will remain unchanged.

The magnitude of change to the visual amenity experienced from this property in the round is judged to be **Medium** due to the presence of screening features in and around the property.

According to NRW's Garn Fach Felling Plan the area of forest that screens the lower parts of turbines T1-T8 to the north-west will be felled in 2032-2036, revealing the upper portion of these turbines. This would slightly increase the magnitude of change in views to the north-west from the property with a larger extent of these turbines visible. Due to the distance of these turbines from the property and the fact they are likely to be partially visible over Garn Fach plantation the magnitude of change would remain **medium** if this part of the Garn Fach plantation was felled.

It is acknowledged that other plantations and shelterbelts such as those to the west (screening views to the Site) can be felled, and therefore the level of screening provided by them is not necessarily permanent. Should the shelterbelt boundary to the west of the property be felled the magnitude of change in views may increase.

Conclusion with respect to the potential effects on Living Conditions:

Property 3: Ddulley Bank

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a moderate magnitude of change, the **Project would not** breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-53a and 6-53b

If the repowered Llandinam turbines were in place, those to the west would be completely screened by the conifer shelterbelt whilst those to the north-west would be at least partially screened by the Garn Fach Plantation so there will be little to no change to views from this property in the cumulative situation. None of the Llandinam repowering turbines will be situated closer to the property than the Garn Fach turbines and therefore the magnitude of change relating to the presence of Garn Fach will remain as reported above.

If the forestry were felled (this coup is due to be felled between 2032 – 2036 (according to NRW's Garn Fach Felling Plan), slightly more of the repowered Llandinam turbines may become visible behind the Garn Fach turbines, but this would not change magnitude of change resulting from the presence of Garn Fach, which would remain **Medium**.

Property 4: Fford Las







View showing the southern gable end of Ffordd Las.

Table 6-6.6: Ffordd Las

Property 4: Ffordd Las					
Direction to Site	North-west	Number of turbine hubs theoretically visible	17		
Distance to nearest turbine (m)	944m	Number of turbine tips theoretically visible	17		
Nearest turbine	T17	Primary view direction	East		
Description of property, location and existing context:					

Property 4: Ffordd Las

Fford Las is a detached 2-storey property in the hamlet of David's Well. The building is derelict but appears to be undergoing some kind of restoration. The property fronts directly onto the minor road which runs through David's Well. The Llaithddy Brook runs in a minor stream valley to the east of the Site. Elevation at the property is roughly 420m AOD. The curtilage of the property appears to extend to the south-eastern side of the road, including some (also derelict) outbuildings.

Several large trees surround the property, most of which are deciduous, with some coniferous trees to the south. Fields surrounding the property are small scale sheep pasture, with most boundaries marked by mature hedgerows containing mature hedgerow trees although some post and wire fences are also present.

The landscape character to the west, beyond the adjacent small-scale fields is one of large scale open rough pasture, containing some angular blocks and strips of plantation woodland. A large area of plantation woodland lies to the south on Red Lion Hill.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Description of existing views and visual amenity:

The 'front' of the property is orientated east towards the road and away from the Site. This façade has at least four windows including two dormer windows from which there are rural views to the outbuildings opposite, mature trees and a backdrop of Redlion Hill with its plantation. The rear (north-west) of the property faces towards the Site and there appears to be windows on this façade, including dormers, but mature deciduous trees within the garden of the property screen (in summer) and filter (in winter) views in the direction of the Site so that views are relatively short and rural in character. There are no obvious windows on the south-west facing gable end of the property, whilst four windows are located on the north-east facing gable end with scenic views across the agricultural landscape.

From the property there are some distant views to the existing Llandinam turbines, which peak over the skyline to the northwest and north-north-west.

There is not an obvious 'primary outlook' for this property although there are rural views from the rear of the property and garden across the surrounding pasture fields to Brondre-fawr Hill to the west, and (within the Site), views from the north-eastern gable end down the valley to the north-east towards David's well.

It should be noted that the property is still under renovation and once complete may include additional windows or the removal of surrounding trees and outbuildings, in which case there may be more views available.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-54

The wireline, based on a bare ground model, shows that all 17 turbines could theoretically be visible from this property, occupying approximately 47degree field of view from the west-north-west to the north-north-west. The closest turbine, T17 would be situated just under 1km from the property (944m).

In reality, fewer than 17 turbines are likely to be visible from this property as mature vegetation within the garden and in field boundaries to the north and north-west will have a screening effect on views. Some filtered views to the nearest turbines are still likely to be partially visible between the garden vegetation and nearby hedgerow boundaries, introducing moving elements into a rural view. Turbines further afield are likely to be completely screened.

It is possible there may be some glimpsed views to sections of access tracks between turbines T8 to T11 on south-east facing sloping land however, due to the distance these are unlikely to be very noticeable (if visible at all).

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be <u>High</u> due to the proposed development being relatively close but filtered.

Conclusion with respect to the potential effects on Living Conditions:

Despite the nearest turbine (T17) being situated 944m away, this distance combined with the filtered nature of views will ensure that the turbines will not feel unpleasantly encroaching or inescapably dominant from the property and the rural views from the other three aspects of the property will remain unchanged.

Property 4: Ffordd Las

It is considered that the Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-54

If the repowered Llandinam turbines were in place, at least an additional 34 turbine hubs may be visible on distant skylines to the north-west and north-north-west extending the field of view in which turbines will be visible across to a 56-degree field of view. The Garn Fach turbines would have a greater influence on the view and the magnitude of change resulting from adding Garn Fach to a baseline containing the repowered turbines, therefore the magnitude of change will remain the same as a baseline containing the existing Llandinam turbines, as they are situated closer to the property than the Llandinam turbines (4km away). The magnitude of change will remain the same i.e. **High**.

Property 5: Maens Cottage



View to the south-east facing front façade of the property, showing windows on both storeys.



View to the south-west facing gable-end of the property, showing the outbuilding screening views.

Table 6-6.7: Maens Cottage

Property 5: Maens Cottage						
Direction to Site	South-south-west to north- north -west	Number of turbine hubs theoretically visible	11			
Distance to nearest turbine	960m	Number of turbine tips theoretically visible	14			
Nearest turbine	T11	Primary view direction	South-east			
Description of property, location	Description of property, location and existing context:					

Property 5: Maens Cottage

The property is a detached, two-storey cottage (landowner property) with a single-storey outbuilding (to the south-west of the property). Landform slopes gently down to the south to meet the Custogion Brook, with the property lying at an elevation of around 400m AOD.

The cottage lies in a garden, set back from the minor lane directly to the south. The curtilage of the property includes a garden surrounding the property and enclosed by a post and wire fence. Lines of mature deciduous trees surround the property to the south as well as enclosing the property and a small pasture field to the north-east and north. There are also some mature trees in the garden to the west of the property.

Fields surrounding the property are generally semi-improved sheep pasture, enclosed by some post and wire fencing and some tall deciduous shelterbelts. Source: Esn, Maker, Goodye, Earthster Geographics, CRES/Airbus DS, USDA, USGS, AerockiD, IGN, and the GIS User Community

Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.

Description of existing views and visual amenity:

The front of the property faces south-east, with large windows on both storeys taking advantage of views across the garden and between mature trees to the scenic Custogion Brook. There are no windows on the south-western gable end of the property (angled towards the Garn Fach Site), although there is at least one small window on the outbuilding immediately to the south-west. There are no windows on the north-eastern gable end of the property. Due to a lack of access, the number of windows on the north-western façade of the property were not assessed. However, the sloping landform and a mature tree hedgerow enclosing the pasture field to the north prevents long-distance views in this direction and this side of the property is not directed towards the wind farm.

Views from the curtilage of the property are often enclosed by mature trees and vegetation in the garden as well as mature trees lining the lane to the south. The outbuilding screens views to the south-west from most of the curtilage of the property, although from southwestern parts of the garden there may be some more extensive views.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-55a and 6-55b

The wireline, based on a bare ground model, shows that 11 turbines (T7 toT17) could potentially be visible from this property as well as the very tip of the blades of T3 to T6, occupying a 119-degree field of view from the south-south-west to north-west. The nearest turbine, T11 lies just under 1km (960m) to the west-south-west of the property.

In reality views to turbines T3 toT10 to the west-north-west are likely to be at least partially screened by intervening hedgerow vegetation and shelterbelts, although the blades of closer turbines are still likely to be visible over the skyline. The Garn Fach plantation is likely to further screen views to turbines T3 to T8 (already screened considerably by the landform), so only the uppermost part of the turbine blades may be visible. There are no windows on the south-western aspect of the property so there will be no views towards the scheme from the property itself. There will however be relatively open views from the garden (to the south-west of the outbuilding) towards turbines T10 toT17 adding built features on the skyline over the plantation and pasture fields

It is also likely that access tracks on the open sloping land between turbines T7 and T17 will be visible from the south-west of the garden as well as views to the borrow pit situated on sloping ground 1.1 km to the south-west, particularly during the construction phase, although this is likely to be at least partially screened by the shelterbelt of conifer trees surrounding it.

Views to the south-east from the front façade of the property will remain unchanged with scenic views extending over the lower-lying landform of the Custogion Brook.

The magnitude of change to views in the round from the property is assessed to be **Medium** due to the oblique nature of views and presence of screening features.

Conclusion with respect to the potential effects on Living Conditions:

Property 5: Maens Cottage

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a moderate magnitude of change, the Project will not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-55a and 6-55b

If the repowered Llandinam turbines are built, they would be seen in views behind the Garn Fach turbines, increasing the number of turbines visible, to an additional six turbine hubs and nine hubs and blades. However, the Garn Fach turbines are nearer and have a greater influence on views. The additional Llandinam repowering turbines would not increase the field of view in which turbines are visible and the magnitude of change to views from this property resulting from adding Garn Fach to a baseline containing the repowered Llandinam turbines will remain **Medium**.

Property 6: Pabyllwyd Ganol



View of the front, south-south-east facing aspect of the property from the access track.



View to the rear, north-north-west facing aspect of the property, showing limited windows but a large patio door.

Table 6-6.8: Pabyllwyd Ganol

Property 6: Pabyllwyd Ganol			
Direction to Site	South-south-west to north-west	Number of turbine hubs theoretically visible	9
Distance to nearest turbine	995m	Number of turbine tips theoretically visible	10
Nearest turbine	T4	Primary view direction	Front faces south-east (although rear patio faces north-north-west).
Description of property, location	on and existing context:		•

Property 6: Pabyllwyd Ganol

A detached two-storey cottage, which currently appears to be derelict. The property lies at an elevation of around 410m AOD, directly south of the Blue Lins Brook within its minor stream valley. The landform rises to the north-west and south-east.

The curtilage of the property includes an overgrown garden and patio at the 'rear'. Access is provided by a forestry track (shared with Fwnog, The Barns and Pabyllwyd), but the driveway to this property is located to the south — approximately 80m length and winding through plantation forestry.

The Garn Fach plantation lies directly to the south/ south-east of the property, whilst to the north is an area of sloping, rough, sheep pasture.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Description of existing views and visual amenity:

The property has several windows on both storeys of the south-south-east facing front façade, with views to the access track and the Garn Fach plantation. On the rear (north-west) facing façade of the property (towards the Site) there is a patio door and windows on both floors as well as velux windows in the roof. Views to the north-west are not far reaching, especially not at ground level, due to the rising landform and surrounding mature trees, however they include views of pastoral fields, with planation conifers along the skyline. There are no windows on the south-western gable end of the property. It is unclear how many windows are situated on the north-north-eastern gable end of the property, although this facade faces away from the Site in any case.

Views from the curtilage of the property are largely enclosed by the landform rising up to the north-west, and plantation forest/ and mature garden trees located to the north-east, south-east and south-west.

The driveway to the property runs through the Garn Fach Plantation and therefore is visually enclosed to the north-east and southwest, although there are rural views to the rising ground behind the cottage on approaching the property.

The existing Llandinam turbines are theoretically visible on the skyline in views from the property covering a 50 degree field of view form the west-south-west to the west.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-56a and 6-56b

The wireline, based on a bare ground model, indicates that the hubs of 9 turbines and the blades of 10 turbines will theoretically be visible from the Site, spanning a 100 degree field of view from the south-west to the north-west.

In reality, it is likely that there are views towards the scheme from windows on the north-western façade of the property, adding moving features to rural views. However, these will most likely only include the northernmost turbines, with possibly some oblique views to turbines T7 to T10 (which are already partially screened by the landform). Intervening vegetation, including mature deciduous trees is likely to at least filter views towards the turbines from both the north-western windows and the curtilage of the property. There are no windows on the south-western gable end of the property, and therefore there will be no views to the scheme. Views from the remaining aspects of the property (to the north-east and south-east (the 'front' façade) will remain unchanged. There may be some distant glimpsed views to the access tracks between turbines T5 and T6 from the north-west facing façade of the property or the property's access track. There may also be oblique views to turbines on the skyline to the west of the property when approaching the property along its private driveway, which will add to the presence of built features in the view.

Overall, the magnitude of change from the property and its curtilage is assessed to be Medium.

Due to the rising landform to the south screening views to the southern turbines, the presence of Garn Fach plantation does not influence the visibility of the scheme and therefore the magnitude of change in views from the property would remain the same if parts of the plantation were felled i.e. **Medium.**

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a moderate magnitude of change, the Project would not breach the residential visual amenity threshold.

Property 6: Pabyllwyd Ganol

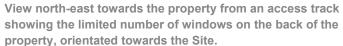
Consideration of cumulative effects: See Figure 6-56a and 6-56b

If the repowered Llandinam turbines are built, around 12 of these turbines (or parts of these turbines) would be theoretically visible from the 'rear' north-western aspect of the property and curtilage, replacing the existing small turbines. The nearest visible repowered Llandinam turbine would lie 899m to the north-west of the property.

In this context, the Garn Fach turbines will appear to form an extension of Llandinam repowering, albeit slightly closer and more prominent in views from the property. The magnitude of change resulting from adding Garn Fach to the baseline containing the repowered turbines will remain **Medium**.

Property 7: The Barns







View towards the south-east facing front of the property.

Table 6-6.9: The Barns

Property 7: The Barns					
Direction to Site	North-west, west, south-west south	Number of turbine hubs theoretically visible	17		
Distance to nearest turbine	1,065m	Number of turbine tips theoretically visible	17		
Nearest turbine	T4	Primary view direction	Front faces south-east; rear faces north-west		
Description of property, locatio	n and existing context:				

Property 7: The Barns

The Barns is a detached two storey cottage and outbuilding on the edge of Garn Fach Forest. The curtilage of the property includes a large garden area, containing some mature trees and a large single-story outbuilding to the north-north-west of the property. The property is accessed via a 65m private track running to the south-east of the property through plantation forest

The property is situated at an elevation of 450m AOD, on a gentle slope which rises up to the south-west. It is situated to the north-west of Garn Fach, an area of mixed broadleaved and coniferous woodland (plantation).

The landscape character to the north-west of the Site is one of large-scale open sheep grazed fields.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Description of existing views and visual amenity:

The front of the cottage (which includes windows at ground and first floor level and a conservatory) faces south-east towards Garn Fach Forest (with a private driveway approaching the front from the forest track). Its rear (which includes some smaller windows and a rear garden with outbuildings/ sheds) faces across pastural fields towards the elevated land on which the northern part of the Site is located. There is not an obvious 'primary outlook' for this property although the main (and larger) windows are at the front. The ground rises quite rapidly behind the property.

There are views of the existing Llandinam turbines with at least 30 turbines theoretically visible from the property from the northwest to north-north-west, although due to the distance of these turbines from the property (the nearest situated around 2km to the west-north-west) and the smaller scale of these turbines (31m hub height), they may not be visible in poor visibility.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-57a and 6-57b

The wireline, based on a bare ground model, indicates that the hubs and blades of 17 turbines are theoretically visible from the rear of the property and garden across a 142 degree field of view. In reality, it is likely the hubs of only 6 turbines (T1 to T6) will be seen from the west-north-west to the north-north-west covering a 64 degree field of view due to screening from the Garn Fach Plantation. The presence of Garn Fach plantation would completely screen views to turbines T8, T10 to T17 from the south-south-west to the west, and screen all but the top of the blades of turbines T7 and T9. The nearest turbine is T5 which is located 1.1 km away from the property to the north-west – this turbine, and turbines T1 to T8 (the lower parts of some which will be screened by the near hill), will be prominent features in views from the rear windows of the property and from the rear garden area, creating additional built features in the view. Access tracks between turbines T1 to T4 will be partially visible where landform allows, and potentially also the upper parts of the substation and energy storage facility will be visible. There will be no views of the turbines from the front or side façades of the property.

The magnitude of change to the visual amenity experienced from this property in the round is judged to be **High** due to the wind farm turbines being prominent in rural views from the rear of the property and garden (as well parts of the associated tracks and parts of the substation/ storage facility), and on approaching the property along the driveway.

According to NRW's Garn Fach Felling Plan the coups that screen the views south-west/south towards T8-T17 will be felled between 2032 and 2047. If the forest were to be felled, there would be views to the hubs of all 17 turbines across a wider, 142-degree field of view but none would be any closer than the turbines that are already visible, and the magnitude of change will remain **High**.

The magnitude of change to views and visual amenity is therefore assessed to be <u>High</u> (and this would remain unchanged if Garn Fach forest coups were felled).

Conclusion with respect to the potential effects on Living Conditions:

The development would be seen in rural views from the rear of the property where at least two windows face north-west towards the Site, and would become a prominent feature in views from the rear of the property and garden. However, as the nearest turbine will be over 1km away the wind farm will not be unpleasantly encroaching or inescapably dominant from the property. There will be no views of the turbines from the front or side façades of the property. For these reasons it is considered that the

Property 7: The Barns

Project would not breach the residential visual amenity threshold either with Garn Fach forestry plantation in place, or with part felled coups.

Consideration of cumulative effects: See Figure 6-57a and 6-57b

If the repowered Llandinam turbines are built, around 26 of these turbines (or parts of these turbines) would be theoretically visible from the rear of the property to the west-north-west to the north-north-west, replacing the existing small turbines. The nearest visible repowered Llandinam turbine would lie 1.2km to the north-north-west of the property.

In this context, the Garn Fach turbines will appear to form an extension of Llandinam repowering, albeit slightly closer and more prominent in views from the property. The magnitude of change resulting from adding Garn Fach to the baseline containing the repowered turbines will remain **High**.

Property 8: Lower Nanthir







View of the north-western façade of the property.

Table 6-6.10: Lower Nanthir

Property 8: Lower Nanthir			
Direction to Site	West	Number of turbine hubs theoretically visible	14
Distance to nearest turbine	1,081m	Number of turbine tips theoretically visible	17
Nearest turbine	T17	Primary view direction	South-east
Description of property, location and existing context:			

Property 8: Lower Nanthir

The property consists of two detached buildings situated within the dispersed hamlet of David's Well. The first building (to the east) is a two-storey large L-shaped building, the central part of which contains an octagonal tower. The second large, detached building (to the north-west) appears to be converted outbuildings, with one part being two-story in height and the other being single storey. The properties are accessed via a track from the minor lane that runs through David's Well.

The property lies at an elevation of around 410m AOD within the minor stream valley of the Llaithddy Brook.

Within the curtilage of the buildings is a courtyard/ garden area with several large, mostly deciduous trees, particularly to the south-east where they follow the course of the Llaithddy Brook, and north-west along the property boundary.

The buildings are set within an area of pasture fields bound by hedgerows and punctuated by small copses of trees.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

The eastern of the two properties has several south-west facing windows towards the Site (including windows in the octagonal 'tower'), although the 'primary' view appears to be in the other direction over the attractive Llaithddy Brook Valley. The western of the two properties appears to face south-east into the courtyard (rising landform and vegetation screen views to the rear, albeit there are velux windows in the roof). There are several large mature trees surrounding the properties, particularly to the south-east and north-west, which provide some visual enclosure screening views in summer and filtering views in winter. However, the properties are not completely enclosed and there are some open views from the buildings and their curtilage to the surrounding rural landscape including the elevated moorland hills.

The existing Llandinam turbines are partially visible on distant skylines to the north-west in clear conditions.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-58

The wireline, based on a bare ground model, shows that all 17 turbines could potentially be visible from this location, occupying a 50-degree field of view from the west-north-west to north. The nearest turbine, T17 lies just over 1km to the west-north-west of the property.

Mature trees within the curtilage and along the boundary of the property will provide some screening of views to the Site in summer and filtering of views in winter. The presence of the western property will also prevent some views towards the Site from the eastern property and courtyard at ground level. There will however be some views of the turbines in currently rural views, particularly from windows which point in the direction of the Site (e.g. from the octagonal tower). It is possible there may be some glimpsed views of sections of the access track between turbines on south-east facing sloping land however, due to the distance these are unlikely to be very noticeable (if visible at all).

Un-altered and scenic views will still be available to the north-east, east and south-east.

The magnitude of change in views and visual amenity from the property in the round is assessed to be <u>High</u> because turbines are likely to become a feature of views to the north-west from this property.

Conclusion with respect to the potential effects on Living Conditions:

Although turbines are likely to become a feature of views to the north-west from this property, at this distance (nearest turbine over 1km away) the turbines will not feel unpleasantly encroaching, overwhelming or inescapably dominant from the property. There will still be undisturbed views along the Llaithddy Brook Valley and eastwards, and these appear to be the primary direction of views from the property.

For these reasons it is considered that the Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See **Figure 6-58**

Property 8: Lower Nanthir

If the repowered Llandinam turbines are to be built, they would be seen behind and to the right (north-north-west) of the Garn Fach turbines, increasing the number of turbines visible (an additional 14 turbine hubs), and extending the angle of view occupied by turbines to a 60-degree field of view. However, the Garn Fach turbines are nearer and have a greater influence on views. In this context the magnitude of change to views from this property resulting from adding Garn Fach to a baseline containing the repowered Llandinam turbines will remain **High**.

Property 9: Rock House



View to the north-western and south-western façades of the property, showing the Property in its wider context.



View to the north-western and south-western façades of the property, showing the conifer woodland to the north-west.

Table 6-6.11: Rock House

Property 9: Rock House			
Direction to Site	West	Number of turbine hubs theoretically visible	17
Distance to nearest turbine (m)	1,168m	Number of turbine tips theoretically visible	17
Nearest turbine	T16	Primary view direction	Not clear
Description of property, location and existing context:			

Property 9: Rock House

The property is a two-storey detached cottage set back from the road, enclosed by an area of mostly coniferous woodland to the north, north-west and north-east. The property forms part of the dispersed the hamlet of David's Well.

It lies at an elevation of around 380m AOD, close to the Llaithddy Brook in a small valley. Landform slopes up from the west of the property towards the Brondre-Fawr Ridge.

The curtilage of the property includes an enclosed garden around the house and a short access track/driveway which meets the lane through David's Well to the north-west. The surrounding land use is primarily sheep pasture.



Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.

Description of existing views and visual amenity:

It is difficult to tell which is the 'front' and 'back' of this property, but the façade orientated to the north-west has rural views towards the undeveloped Brondre-Fawr Ridge. This façade has windows on only the ground floor and the woodland screens views to the north-west and north so that views from the north-western façade of the house and garden on this side of the property are oblique and in a westerly direction. There is one small window on the second storey of the south-west facing gable end of the property facing along the pastoral valley. The south-east facing façade of the property appears to look over the Llaithddy Brook and away from the Site while the north-east facing gable end also faces away from the Site (lack of access means the number of windows on these aspects of the property are unknown). It is likely there may be some scenic views across the Llaithddy Brook although these may be partially filtered by mature trees surrounding the property and watercourse. From the access drive there are clear views towards the Brondre-Fawr Ridge.

A small number of the existing Llandinam turbines are visible in views from the access track to the north-west, these may not be visible in poor visibility.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-59

From the house itself the coniferous woodland is likely to screen views of turbines T1-T15. From the north-west facing façade of the property there may be some oblique views turbines T16-T17 from ground level windows. There will be clear views of turbines T1-T17 from the access drive on departing the property with the closest turbine (T17) just over 1km (1,168m) away, introducing moving elements to a rural view. It is possible there may be some glimpses of sections of the access tracks between some of the turbines, but these are unlikely to be very noticeable if visible at all.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be **Medium** due to the presence of screening and oblique nature of views.

It is acknowledged that woodland such as the conifers to the north of the property (screening views to the Site) could be felled, and therefore the level of screening provided by them is not necessarily permanent. If the woodland to the north of the property were felled the magnitude of change in views may increase to **high**.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a moderate magnitude of change, the **Project would not breach the residential visual amenity threshold**.

Even if the woodland to the north of the property were felled and the magnitude of change to views from the property were to increase to high, the distance to the turbines means that the **Project would not** breach the residential visual amenity threshold.

Property 9: Rock House

Consideration of cumulative effects: See Figure 6-59

If the repowered Llandinam turbines were in place these would replace the existing smaller turbines on the skyline where they would be visible from the end of the access drive, replacing the existing smaller turbines. However, the Garn Fach turbines will be closer to the property and will have a greater influence on the view than the Llandinam repowered turbines, so the magnitude of impact on views from this property would remain the same as above i.e. **Medium** (or **High** with woodland to the north of the property felled).

Property 10 Upper Maens Cottage



View north east along minor lane showing the southwestern gable-end of Upper Maens Cottage.



The front (south-eastern façade) of Upper Maens Cottage viewed from the minor lane to the south.

Table 6-6.12: Upper Maens Cottage

Property 10: Upper Maens Cottage			
Direction to Site	West	Number of turbine hubs theoretically visible	13
Distance to nearest turbine	1,1232m	Number of turbine tips theoretically visible	17
Nearest turbine	T11	Primary view direction	South-east
Description of property, location and existing context:			

Property 10: Upper Maens Cottage

The property is a two-storey property with a small single-storey outbuilding. The property lies at an elevation of around 410m AOD, with the front of the building orientated towards the southeast. Landform here is gently sloping, rising up from the course of a small tributary of the Custogion Brook to the south.

Fields surrounding the property are sheep pasture. The curtilage of the property includes a drive and garden as well as some agricultural outbuildings to the south. There are some mature deciduous trees to the north-west and south-east, within the curtilage of the property, with the boundaries of the property defined by a low-cut hedge. Access is provided by the minor lane directly to the south of the property.



Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User

Aerial view of the property

Description of existing views and visual amenity:

The 'primary' views from this property appear to be south-east down the pastoral Custogion Valley and to the undeveloped hills to the south. This façade has windows on both storeys (including dormer windows). There are also windows on both storeys of the south-western gable end that look up the Custogion Valley towards Hirddywel. There are views up-slope to the rear (north-west façade) of the property over pasture fields although built features including a poultry farm and Ddulley Bank Farm as well as conifer shelterbelts are present in views. One small window at ground level on the north-east gable end looks north-east up the lane. The property sits in a relatively open setting which enables some far-reaching and scenic across the surrounding pastoral landscape. Some filtering of views is provided by the mature trees to the north and south.

In views to the west-north-west some turbines of the Llandinam wind farm are just visible on the skyline in clear conditions. The nearest turbine of this wind farm is situated 3km to the west-north-west.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-60a and 6-60b

The wireline, based on a bare ground model, indicates that all 17 of the turbines would theoretically be visible from this location (only the blades of turbines T1 and T2 would be visible). The turbines would in total cover a 71-degree field of view ranging from T17 to the south-west to turbine T1 to the north-west.

There will be views from windows on the south-western gable end of the property directly towards the wind farm with the nearest turbine (T11) located just over 1km (1,168m) from the property, and oblique views from the south-eastern 'front' of the property, as well as from the open space/ garden around property. There will be views to a borrow pit situated 1.4 km to the west-south-west, particularly during the construction phase as well as some views of access tracks to the south-west between turbines T7 and T16 where they pass along the north-facing slopes. The wind farm will become a prominent feature in views from the property and its curtilage, adding built features into the rural view. The 'primary' views which face south-east and extend down the Custogion Valley will remain unchanged.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be <u>High</u> due to the proposed wind farm being a key/defining element in views to the west from the property and its curtilage and the open setting of the property.

Conclusion with respect to the potential effects on Living Conditions:

Although the development will be prominent in views to the south-west and west of the property the distance between the property and turbines (the nearest turbine being just over 1.2km away) means the development will not be overwhelming, unpleasantly encroaching or inescapably dominant. The scenic long-reaching views south-east down the Custogian Valley will remain unchanged

The Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-60a and 6-60b

Property 10: Upper Maens Cottage

If the repowered Llandinam turbines were in place, 12 turbine hubs would be visible over the skyline in views in addition to the Garn Fach wind farm from the west to the north-north-west, replacing the existing smaller Llandinam turbines. The nearest Llandinam Repowering turbine would be situated around 2.9km to the west-north-west. Although Llandinam repower and Garn Fach turbines differ in scale the perspective means that they will appear as one larger wind farm. The Garn Fach turbines are closer and would have a greater influence on the view from this property than the Llandinam repowered turbines, so the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **High**.

Property 11: Great Meadows



View of the 'front' north-north-west façade of Great Meadows from the minor lane through David's Well.



The front, north-north-west facing aspect of the property, with ground floor and dormer windows.

Table 6-6.13: Great Meadows

Property 11: Great Meadows			
Direction to Site	West to north-west	Number of turbine hubs theoretically visible	14
Distance to nearest turbine	1,248m	Number of turbine tips theoretically visible	17
Nearest turbine	T16	Primary view direction	North-north-west
Description of property, location and existing context:			

Property 11: Great Meadows

A two-storey cottage, with a single-storey extension on the rear, situated within the dispersed the hamlet of David's Well. The property lies in the minor stream valley of the Llaithddy Brook at an elevation 360m AOD, which runs directly to the south-east of the property. The curtilage includes a short access drive to the north-west as well as out buildings and stables to the north and west and a pony paddock to the west. the property is enclosed by a mixture of fencing and a low hedge along the road.

Land use surrounding the property includes sheep pasture fields with some hay fields to the south. The landform slopes up Red Lion Hill to the south and Brondre-fawr Hill to the west creating a backdrop to views.



Appendix 6: Landscape and Visual Assessment

Aerial view of the property

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.

Description of existing views and visual amenity:

The primary outlook of this property appears to be to the north-north-west, into the courtyard and across the road towards the undeveloped hills of the Garn Fach Site. This north-north-west facing façade has windows on both storeys. There are no windows on the south-west gable end of the property. There are windows on both storeys of the rear (south-south-east) of the property with views likely to extend over the Llaithddy Brook and pasture fields to the south and south-east. The north-east gable end is not visible but faces away from the Site, in any case and coniferous trees and outbuildings prevent views from this aspect of the building.

The curtilage of the property is enclosed by a low-cut hedge and fencing on all sides except for the north-east, allowing rural views to the surrounding fields from the property and its curtilage. There are some open views from the property, driveway and paddock area directed to the north-west (towards the Site).

In distant views to the north-west some existing turbines of the Llandinam wind farm are just visible on the skyline in clear conditions (the nearest turbine of this wind farm is situated 4.2 km to the north-west)

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-61

The wireline, based on a bare ground model, indicates that all, or parts of all 17 of the Garn Fach turbines would be theoretically visible from this property to the west/ north-west occupying a 70-degree field of view. The nearest turbine (T16) will be situated 1,248m to the west-north-west of the property.

As there is relatively little screening, the development will be visible to the west and north-west from the front façade of the property, the driveway and outdoor space including paddock area. It is also possible that there may be views to parts of access tracks between some of the turbines, although these are not likely to be prominent. Turbines will introduce moving built features to rural views.

Views from the south-east facing 'rear' of the property across the Llaithddy Brook would however remain unchanged.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be <u>High</u> due to the proposed wind farm being a key/defining element in views to the north-west from the front of the property and its outdoor space and driveway.

Conclusion with respect to the potential effects on Living Conditions:

Although the development will be prominent in views to the north-west of the property the distance between the property and turbines (the nearest turbine being over 1km away) means the development will not be overwhelming, unpleasantly encroaching or inescapably dominant. Although turbines would introduce moving built elements to a rural view, the development would not block the only available views, with the scenic views across the brook from the 'rear' of the property remaining unchanged.

The Project <u>would not</u> breach the residential visual amenity threshold.

Property 11: Great Meadows

Consideration of cumulative effects: See Figure 6-61

If the repowered Llandinam turbines were in place, they would be visible on the skyline to the north-west behind Garn Fach (the nearest repowered turbine would be 4km from the property). The Garn Fach turbines are closer and would have a greater influence on the view from this property than the Llandinam repowered turbines, so the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **High.**

Property 12: Pabyllwyd



The north-eastern façade of the property seen set within woodland.



View to the property from the east across the recently felled area of the Garn Fach Plantation (existing Llandinam wind farm behind)

Table 6-6.14: Pabyllwyd

Property 12: Pabyllwyd			
Direction to Site	West/ south-west	Number of turbine hubs theoretically visible	10
Distance to nearest turbine	1,293m	Number of turbine tips theoretically visible	12
Nearest turbine	T4	Primary direction of view	North-east
Description of property, location and existing context:			

Property 12: Pabyllwyd

Pabyllwyd is a large, detached, single-story building. The curtilage of the property includes a driveway area and a garden to the west, set within the Garn Fach Forest. The property is accessed via a track which runs east-west through woodland, joining a private forestry track to the west.

The property lies at an elevation of around 400m AOD, nestled into a valley of the Blue Lins Brook.

The property is situated within the Garn Fach plantation, however the coup surrounding and to the east of the property has recently been felled. Some mature deciduous trees reman surrounding the property but most land is occupied by scrub and young plantation conifers.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

There are large windows on the north-east facing façade of the property, which appears to be the primary outlook, with rural and scenic views extending across the recently felled plantation along the course of the brook. There are also likely to be windows on the south-eastern, south-western-western, and north-western façades of property. Views to both the north and south from the property itself and its curtilage are likely to be limited by the extent of the Garn Fach plantation as well as the being enclosed by the rising valley landform. Views to the south-west along the course of the brook, and towards the Garn Fach scheme, are filtered by deciduous woodland lining the access track.

In distant views to the north-west the hubs of at least 18 turbines within the existing Llandinam wind farm are theoretically visible from the property. However, these views are likely to be screened by deciduous trees following the brook and access track. The nearest existing Llandinam turbine is situated 1.8km to the north-west.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-62

The wireline, based on a bare ground model, shows that the hubs of a total of 10 turbines (T1-T10) would theoretically be seen from the property as well as a small part of the blades of turbine T11, occupying a 91-degree field of view from the south-west to the north west. However, in reality it is likely that these views will be screened in summer and filtered in winter by mature vegetation within the curtilage of the property, trees following the course of the Blue Lins Brook, mature trees lining the access track, and maturing trees in Garn Fach Forest to the south-west. Views to wind energy development may be visible from windows on the north-west and south west facing aspects of the property, as well as its curtilage and access track, although these views are likely to be heavily filtered if not screened by woodland. The principal view from the property (which appears to be to the north-east) will remain unchanged.

The magnitude of change to views and visual amenity from the property is assessed to be <u>Low</u> due to the well screened nature of <u>views</u>

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a low magnitude of change, **the Project would not breach the residential visual amenity threshold.**

Consideration of cumulative effects: See Figure 6-62

If the Llandinam repowering wind farm is developed larger turbines will replace the currently small Llandinam turbines. However, views in this direction are heavily filtered if not screened by deciduous woodland and the magnitude of change in views from the properties as a result of adding Garn Fach to a baseline containing the repowered Llandinam turbines will also be **Low**.

Property 13: Upper Nanthir



The north-north-east facing façade of the property with windows on both storeys.



The north-north-east facing façade of the property in its wider setting.

Table 6-6.15: Upper Nanthir

Property 13: Upper Nanthir			
Direction to Site	North-west	Number of turbine hubs theoretically visible	17
Distance to nearest turbine	1,303m	Number of turbine tips theoretically visible	17
Nearest turbine	T17	Primary direction of view	North-north-east

Description of property, location and existing context:

A detached two-storey cottage in the small hamlet of David's Well, with a single-story extension on the western gable end of the building. The property lies on the south-eastern, gently sloping valley side of the Llaithddy Brook, at an elevation of 420m AOD.

The curtilage of the property includes a garden enclosed by a small area of conifer woodland to the east and mature deciduous trees to the west, whilst post and wire fencing mark the remaining boundaries. A private access track runs northwest from the property to join the minor lane passing through David's Well.

The surrounding land use is a mixture of small rough pasture fields associated with the brook to the north-east and some larger grassland fields to the south-east, whilst the Red Lion Plantation lies to the south.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

It appears that the primary outlook of this property is from the north-north-east facing front of the property, with windows on both storeys, including windows on the single-story extension. A gap in trees to the north-east of the property means it is likely there are long-reaching rural views in this direction across the surrounding pastoral fields and the Llaithddy Brook. Due to a lack of

Property 13: Upper Nanthir

public access, it is unclear if there are any windows on the single-storey west-north-west-facing gable end of the property (towards the Garn Fach Site) or the east-south-east facing gable end. However, mature deciduous trees enclosing the property to the west and conifers to the east are likely to at least heavily filter, if not screen, views from the property in these directions. It is likely there are windows on both storeys of the south-south-west facing 'rear' of the property (away from the Site) across fields towards the Red Lion Plantation including some recently felled areas.

Appendix 6: Landscape and Visual Assessment

Views from the curtilage of the property are likely to be visually enclosed particularly by mature trees to the east and west, although there are likely to be some rural and scenic views extending across fields to the north and south. There are likely to be views to the surrounding pastoral land from the relatively open access track, although these are more limited where the landform dips to cross the Llaithddy Brook.

The existing Llandinam turbines are likely to be visible from parts of the access track in clear conditions, situated 4.5km to the north-west

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-63

The wireline, based on a bare ground model, shows that the hubs of all 17 turbines could theoretically be visible in views west-north-west to north-north-west, covering a 46-degree field of view, in front of, and to the left of, the existing Llandinam wind farm.

Due to the orientation of the front of the property (to the north-north-east) views from this façade to the turbines will be oblique and will only encapsulate the northernmost turbines of the scheme, which are the more distant turbines. Scenic views to the north-east along the Llaithddy Brook valley will remain otherwise unchanged. It is unclear if there are any windows on the west-north-west facing gable end of the property facing towards the scheme, however if there are any views they will be heavily filtered by surrounding mature trees. Views from the remaining two aspects of the property will remain unchanged. It is likely there will be some unfiltered views towards the scheme from the garden to the north of the property as well as parts of the access track. It is possible there may be some glimpse views to sections of the access tracks between some of the turbines, but these are unlikely to be very noticeable if visible at all.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be **Medium** due to the oblique nature of views and distance to the visible turbines.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a low magnitude of change, the Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-63

If the Llandinam repowering turbines were built the turbines would be visible to the right and behind the Garn Fach wind farm. The nearest repowered turbine would be 6.9km from the property. The Garn Fach turbines are closer, but the repowered Llandinam turbines would be visible at a less oblique angle than Garn Fach. Nevertheless, the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **Medium.**

Property 14: Green Meadow



View to the south-east aspect on the property showing windows on both storeys.



View to the south-west facing rear of the property showing dense vegetation to the north-west.

Table 6-6.16: Green Meadow

Property 14: Green Meadow			
Direction to Site	North-west	Number of turbine hubs theoretically visible	13
Distance to nearest turbine	1,392m	Number of turbine tips theoretically visible	17
Nearest turbine	T16	Primary direction of view	North-east

Description of property, location and existing context:

A detached two-storey cottage, with a roof that continues down below the main eaves height to the rear. The cottage lies within the small hamlet of David's Well, situated on the south-eastern, gently sloping banks of the Llaithddy Brook, at an elevation of 375m AOD.

The cottage is set back from the lane to the north-east and has its own private access track. The curtilage of the property includes a garden to the north-west and a single storey outbuilding/ static caravan and sheds/greenhouses to the north-east of the property. The garden is enclosed by a post and wire fence to the south-east and a dense hedgerow to the south-west and north-west containing several mature trees (both conifer and deciduous).

The surrounding land use is predominantly rough and semiimproved sheep pasture associated with the brook with some hay fields to the south. Field boundaries are often marked with post and wire fencing and in places re-enforced with hedgerow boundaries, with trees being more common in fields to the north associated with the brook.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

There are windows on both storeys to the front (north-east facing) façade of the property facing towards the lane and across the garden. However, views in this direction are likely to be limited by the mature vegetation following the access track and the outbuildings within the curtilage. There are ground floor windows on the 'rear' (south-west facing) façade, with rural views across

Property 14: Green Meadow

the course of the brook and surrounding pasture fields, although these look to be filtered by garden vegetation. There is one ground floor window on the south-eastern façade of the building, allowing rural views across open pasture fields. There are windows on both storeys of the north-west facing façade of the property with views over the garden. Trees within the curtilage of the property and associated with the Llaithddy Brook to the north-west are likely to heavily filter views in this direction in winter and screen views in summer from both the property and its curtilage.

Appendix 6: Landscape and Visual Assessment

The access track is enclosed by a trimmed hedge to the north-west and post and wire fence to the south-east so there are views over the hedgerow to the existing Llandinam turbines to the north-west.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-64

The wireline, based on a bare ground model, shows that the hubs of 13 turbines and the blades of all 17 turbines would be visible from the property (based on a bare earth model), covering a 66-degree field of view from the west to north-north-west. However, in reality the mature trees to the north-west of the property will heavily filter views towards turbines T1-T14 from the north-west of the garden and north-western aspect of the property. There may however be some views west to the nearer turbines T15-T17 in the westernmost extent of views from the south-west facing aspect of the property, or from windows on the north-western aspect of the property as well as the west of the garden. Rural views to the north-east and south-east will remain unchanged.

There will be clear views (over the hedgerow) towards the scheme from the majority of the private access track, with all 17 turbines visible over a 66-degree field of view.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be **Medium** due to the primary angle of view of the house and the presence of screening (acknowledging that turbines will be seen obliquely from the house and clearly from the access track).

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a moderate magnitude of change, the **Project would not breach the residential visual amenity threshold.**

Consideration of cumulative effects: See Figure 6-64

If the Llandinam repowering turbines were built, theoretically (based on a bare earth model) the hubs of at least 12 turbines would be visible to the north-west behind the Garn Fach turbines. In reality, views to these turbines will be screened from the property and its curtilage by mature vegetation. There may however be views to the re-powering scheme from the access track (over the hedgerow). The Garn Fach turbines are closer and would have a greater influence on the view from this property than the Llandinam repowered turbines, so the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **Medium**.

Property 15: Brondre Fawr



The north facing gable end of the property showing windows on both storeys.



View to the east facing façade showing one window on the second storey between agricultural buildings and mature trees.

Table 6-6.17: Brondre Fawr

Property 15: Brondre Fawr			
Direction to Site	North-east	Number of turbine hubs theoretically visible	8
Distance to nearest turbine	1,496m	Number of turbine tips theoretically visible	12
Nearest turbine	T15	Primary view direction	Not clear – possibly east

Description of property, location and existing context:

A detached two-storey farmhouse with a roof that partially continues down below the main eaves height on the western façade. The property is situated at the foot of the Brondre Fawr Hill on land that slopes down to the west towards Afon Marteg. The property lies at an elevation of 360m AOD.

The curtilage of the Farmhouse includes a large farmyard with associated farm buildings to the north-west and south-west of the property. The property is accessed by a long private road (shared by Brondre Fawr Bungalow) to the south-west bordered by a post and wire fence.

The property lies in an area of predominantly moderate scale agricultural fields with a recently felled forest coup to the east of the property, whilst another large conifer plantation lies around 750m to the west.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User



Aerial view of the property

Description of existing views and visual amenity:

Community.

There are windows on both storeys of the north facing gable end of the property from which views are likely to be partially screened by agricultural outbuildings at ground level while from second storey windows views extend along the pastoral valley to

Property 15: Brondre Fawr

the north. Windows are also present on both storeys of the east facing façade of the property, from which there are views towards the steep slopes of the Brondre Fawr Hill with recently felled plantation. There is at least one window on the second storey of the west facing façade of the property, from which there may be some filtered views between surrounding agricultural buildings and mature trees – but this faces away from the Site. It is unclear if there are windows on the south-facing aspect of the property, but conifer trees and agricultural out-buildings to the south of the property are likely to screen views in this direction and this façade faces away from the Site.

Appendix 6: Landscape and Visual Assessment

The majority of the curtilage of the property is visually enclosed by agricultural outbuildings (to the north-west and south-west) and mature trees (to the south) although some rural views extend up the steep slopes of the Brondre Fawr Hill.

The private access drive (shared with Brondre Fawr Bungalow) is bordered by a post and wire fence and it is likely from here there are extensive views up the broad valley to the north and down the valley to the south.

There are no views to the existing Llandinam turbines from the property.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-65

The wireline, based on a bare ground model, shows that the hubs of 8 turbines and the blades of 12 turbines are theoretically visible from the property (based on a bare earth model) covering a 30-degree field of view from the north to the north-north-east. In reality, these views will be at least partially filtered by intervening mature trees to the north of the property. However, there will be views to the scheme from second storey windows of the north facing façade, and possibly from northern parts of the curtilage of the property. The proposal will introduce moving elements to the skyline. The nearest theoretically visible turbine (T15) will be situated just under 1.5km to the north-east. Views from windows on the other aspects of the property will remain unchanged.

The private access track is notably open, and from parts of the track it is possible that a greater number of turbines within the Garn Fach scheme (up to 14 turbines) may be visible.

The magnitude of change to views from the property (and its access track) in the round is judged to be **Medium** because the proposed development will be clearly discernible from the upper windows of one aspect of the house and from the access track, but it will not be the key defining feature of views experienced from the property in general due to the general direction of windows/ presence of screening features.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a medium magnitude of change, the Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-65

If the Llandinam Repowering turbines were in place the blades of at least 9 additional turbines and the hub of one turbine would theoretically be visible above the skyline behind and to the left of the Garn Fach turbines (based on a bare earth model). The Garn Fach turbines are closer and would have a greater influence on the view from this property than the Llandinam repowered turbines, so the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **Medium**.

Property 16: Brondre Fawr Bungalow



The west-south-west facing façade from the access track with the course of the Afon Marteg in front and Brondre Fawr Hill behind



View from the north-east showing the roof of Brondre Fawr Bungalow behind mature trees (with Brondre Fawr in the foreground).

Table 6-6.18: Brondre Fawr Bungalow

Property 16: Brondre Fawr Bungalow			
Direction to Site	North-east	Number of turbine hubs theoretically visible	11
Distance to nearest turbine	1,559m	Number of turbine tips theoretically visible	12
Nearest turbine	T15	Primary view direction	West

Description of property, location and existing context:

A detached L-shaped bungalow situated the foot of the Brondre Fawr Hill at an elevation of 360m AOD on land sloping west towards Afon Marteg.

The curtilage of the property includes a small garden to the south and west of the property, enclosed by a low hedgerow. The property is accessed by a long private access track (shared by Brondre Fawr) to the south-west bordered by a post and wire fence.

Farm buildings and the Brondre Fawr farmhouse (property 15) lie to the north-east of the proprerty whilst additional large farm buildings are situated to the south-east. The property lies in an area of predominantly moderate scale agricultural fields with a recently felled coup to the east of the property and another large conifer plantation 750m to the west.



Aerial view of the property

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Description of existing views and visual amenity:

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User

There are windows on the south-south-eastern gable end of the property and are likely to the windows and east-north-eastern façades of the property. Views from these windows and the properties' garden extend over surrounding pasture to the south, to

Property 16: Brondre Fawr Bungalow

the neighbouring agricultural buildings to the south-east and up the steep slopes of Brondre Fawr Hill with its recently felled plantation to the east. There are windows on the west-south-western façade of the property with open scenic pastoral views towards the Afon Marteg – this appears to be the primary direction of view. It cannot be confirmed if windows exist on the north-north-west-facing gable end but if there are views in this direction they will be screened by conifer trees and a small area of scrubby deciduous woodland to the north of the property as well as the Brondre Fawr property (15) and its associated agricultural buildings to the north-east. The private access drive (shared with Brondre Fawr) is bordered by a post and wire fence and from here there are extensive rural views up the broad valley to the north and down the valley to the south.

Appendix 6: Landscape and Visual Assessment

There are no views to the existing Llandinam turbines from the property.

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-66

The wireline, based on a bare ground model, shows that the hubs of 11 turbines and the blades of 12 turbines are theoretically visible from the property covering a 39-degree field of view from the north to the north-north-east. The nearest theoretically visible turbine (T15) situated just over 1.5km to the north-east. In reality it is likely that the majority of these views will be filtered or screened by coniferous vegetation, the Brondre Fawr property and associated agricultural buildings to the north-east. Views from all other aspects of the property would remain unchanged including the primary scenic views to the west. The private access track is notably open, and from parts of the track it is possible that a greater number of turbines within the Garn Fach scheme (up to 14 turbines) may be visible.

The magnitude of change to views from the property (and its access track) in the round is judged to be **Low** because the proposed development in unlikely to be visible from the property but will be visible from the access track.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a low magnitude of change, the Project would not breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-66

If the Llandinam Repowering turbines were in place the blades of at least 11 turbines and the hub of one turbine would theoretically be visible behind and to the left of the Garn Fach turbines (based on a bare earth model). As the Garn Fach turbines would be closer and would have a greater influence on the view from this property than the Llandinam repowered turbines, the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **Low**.

Community.

Property 17: Waen Llydan



The north-east facing gable end of the property, visually enclosed by dese hedgerow boundaries of mature conifer trees.



The south-east facing front façade of the property with windows on both storeys

Table 6-6.19: Waen Llydan

Property 17: Waen Llydan			
Direction to Site	North-west	Number of turbine hubs theoretically visible	17
Distance to nearest turbine	1,870m	Number of turbine tips theoretically visible	17
Nearest turbine	T16	Primary direction of view	South-east

Description of property, location and existing context:

A detached and relatively isolated L-shaped two-storey cottage, associated with the small hamlet of David's Well. The property lies at an elevation of around 410m AOD, situated on a gentle slope which slopes downward to the north-east towards a tributary of the Llaithddy Brook.

The curtilage includes a small garden surrounding the property enclosed by dense hedgerow boundaries including mature deciduous and evergreen trees to the north-west, north-east and south-east, whilst a post and wire fence marks the south-western boundary. Access is provided by a private drive, also enclosed by a tall hedgerow to the north-west and a post and wire fence to the south-east, which joins the minor lane to the north-east.

Land use surrounding the property consists predominantly pasture fields bound by post and wire fencing and some hedgerow boundaries. The Red Lion Plantation lies to the south of the property, the nearest coup of which has recently been felled.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

The front façade of the property appears to face to the south-east with windows on both storeys (dormer windows on the second floor). Surrounding mature vegetation significantly encloses the property, although views from these windows are likely to extend over the pasture fields and recently felled section of the Red Lion Plantation to the south-east, framed by the dense garden

Property 17: Waen Llydan

vegetation. It is likely there are windows on the north-east facing gable end of the property, although due to the dense conifer hedgerow enclosing this side of the property views in this direction are likely to be heavily filtered. Due to a lack of public access it is unclear if windows exist on the rear, north-western façade (towards the Site) or south-western gable end of the property, however views in this direction are likely to be heavily filtered or screened by surrounding hedgerow boundaries whilst the rising landform is likely to limit views in these directions. It is unlikely there are any views to the existing Llandinam turbines as surrounding boundary vegetation visually encloses the property, although they are visible from the open access track.

Appendix 6: Landscape and Visual Assessment

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-67

The wireline, based on a bare ground model, shows that the hubs of all 17 turbines are theoretically visible from the property, covering a 50-degree field of view from west-north-west to north-north-west. In reality, views from the north-western façade (towards the scheme) are heavily filtered or screened by the mature vegetation surrounding the property. There will however be clear views of the turbines (and possibly some of the tracks between turbines) from the access drive introducing moving elements to a rural view. Views from the remaining façades of the property including the 'front' south-east facing façade and principal view will remain unchanged.

The magnitude of change to views from the property (and its access track) in the round is judged to be **Low** because the proposed development in unlikely to be visible from the property, but will be visible from the access track.

It is acknowledged that mature boundary vegetation including that screening views to the Site can be felled or trimmed, and therefore the level of screening provided by them is not necessarily permanent. Should the mature trees enclosing the property be felled or trimmed the magnitude of change in views may increase.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a low magnitude of change, the Project would not breach the residential visual amenity threshold.

Even if the mature vegetation were to be trimmed and the magnitude of change to views from the property increase, the distance from the turbines means the residential visual amenity would not be breached.

Consideration of cumulative effects: See Figure 6-67

If the Llandinam turbines were re-powered they would appear behind and to the right of the Garn Fach turbines Since the Garn Fach turbines are closer they would have a greater influence on the view from this property than the Llandinam repowered turbines, so the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as reported above i.e. **Low.**

Property 18: Waun Cottage



View to the south-east facing façade of the property, showing the Llandinam turbines on the skyline behind (to the north-west)



View of the north-west facing façade of the property (towards the Site) with windows on both storeys.

Table 6-6.20: Waun Cottage

Property 18: Waun Cottage			
Direction to Site	West	Number of turbine hubs theoretically visible	17
Distance to nearest turbine	1,904m	Number of turbine tips theoretically visible	17
Nearest turbine	T16	Primary direction of view	North-east

Description of property, location and existing context:

Waun Cottage is a detached, L-shaped, two-storey cottage in the valley of a small tributary of the Llaithddy Brook. Landform slopes up to the north-east and south-west. The property is situated at an elevation of around 400m AOD.

The curtilage of the property comprises a hardstanding/ driveway area at the front/ south-east side of the property and garden to the north. The property is accessed directly from a minor lane. A low trimmed hedgerow marks the north-western boundary with the remaining boundaries enclosed by a post and wire fence. Land use surrounding the property consists predominantly pasture fields bound by post and wire fencing and some hedgerow boundaries.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

The 'front' of this property, and focus of views, appears to be to the north-east, with open and scenic views across the brook to the opposite grazed hill slope. The façade has windows on both storeys (including dormer windows). The south-western façade of the property has a number of windows both on the first and second floor but views from this side of the house of the wider landscape

Property 18: Waun Cottage

are screened (in summer) and filtered (in winter) by the tall conifer hedgerows and hedgerow trees on the opposite side of the lane that runs past the property. South-east-facing windows (on both storeys) have open and scenic views across the surrounding pasture fields associated with the brook. Windows are present on both storeys of the north-west facing façade which face towards the site. From these windows there are views of the existing Llandinam turbines in clear conditions, with the nearest turbine being situated 4.9km to the north-west.

Appendix 6: Landscape and Visual Assessment

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-68

The wireline, based on a bare ground model, shows that all 17 of the Garn Fach turbines would be theoretically visible from this location, occupying a 54-degree field of view from the west-north-west to the north-north-west. The nearest Garn Fach turbine (T16) will be situated just under 2km (1,904m) to the north-west although this will be screened. There will be slightly oblique views to turbines T1-T15 from windows on the north-western façade of the property (turbines T16 and T17 will be screened by vegetation bordering the opposite side of the lane), introducing additional built and moving features to the rural view from this facade. There may also be some views of the turbines from north-west parts of the garden. Views from the remaining aspects of the property including the scenic principal aspect (to the north-east) will however remain unchanged.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be **Medium** due to the proposed wind farm being clearly discernible in views to the north-west from property, but not from other façades (including the primary view across the brook).

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a medium magnitude of change, **the Project would not breach the residential visual amenity threshold.**

Consideration of cumulative effects: See Figure 6-68

If the repowered Llandinam turbines were in place, these would replace the smaller existing turbines in views from the north-west gable end of this property. The re-powered turbines would not increase the extent of the field of view in which turbines are present, beyond that that of the existing Llandinam turbines. However, the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain as assessed above i.e. **Medium**.

Property 19: Upper Llaithddu



Outbuildings to the north-west of the property viewed from the footpath the to the west.



South-eastern 'front' façade and south-western gable end of Upper Llaithddu viewed from the lane directly to the south-east.

Table 6-6.21: Upper Llaithddu

Property 19: Upper Llaithddu			
Direction to Site	West-south-west to north- north-west	Number of turbine hubs theoretically visible	11
Distance to nearest turbine	1,916m	Number of turbine tips theoretically visible	13
Nearest turbine	T16	Primary direction of view	South-east

Description of property, location and existing context:

The property at Upper Llaithddu is a two-storey detached farmhouse, currently uninhabited but in the process of being sold. The property is situated within the valley of the Llaithddu Brook at an elevation of around 370m AOD. The landform slopes upward to the west towards the Site.

The curtilage of the property includes several agricultural outbuildings in poor repair to the north, north-west and south-west, as well as a number of mature deciduous trees in its north-eastern corner. The curtilage of the property is currently unenclosed. The property is situated on the minor road that continues through the hamlet of David's Well further south-west.

Surrounding the property are fields of pasture with regular fields to the west and more open rough grazing following the course of the brook to the east. Field boundaries are marked by a mixture of hedgerows, fences and walls with some mature trees along boundaries.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

The property is orientated so that the 'front' façade faces south-east towards the road and beyond across the scenic Llaithddu valley, and the 'rear' façade faces north-west towards the rear yard and outbuildings with rising hills behind. Several windows exist

Property 19: Upper Llaithddu

on both storeys of the south-east facing 'front' aspect of the property, although garden vegetation screens views from ground level. There are no windows on the rear, north-west facing aspect of the property, or the north-eastern or south-western gable ends. All windows of the property were boarded up at the time of Site visit. According to the wirelines, there are theoretically some distant views to the existing Llandinam turbines to the north-north-west over a 5-degree field of view.

Appendix 6: Landscape and Visual Assessment

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-69

The wirelines (based on a bare earth model) indicate that the hubs of 11 turbines (T1-T11) as well as the blades of T12 and T13 of the proposed development would theoretically be visible from this location, covering a 53-degree field of view from the west-north-west to the north-north-west. The landform changes considerably over short distances in this area so views, and extent of turbines visible, will vary across the curtilage of the property. As there are no windows on the north-western façade of the property and views from much of the north-west of the curtilage are screened by surrounding out buildings, views to the development are likely to be limited. However, there are likely to be some views to the turbines from the curtilage of the property, between outbuildings. The primary views across the stream valley will remain unchanged.

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be **Medium** due to the proposed wind farm being clearly discernible in views from parts of the curtilage, but not in the primary views south-east across the valley.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a medium magnitude of change, **the Project would not breach the residential visual amenity threshold.**

Consideration of cumulative effects: See Figure 6-69

If Llandinam is repowered as proposed, 15 repowered (and larger) turbines would replace the existing small Llandinam turbines. The Garn Fach turbines will be closer and would have a greater influence on the view from this property than the Llandinam repowered turbines, so the magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **Medium.**

Property 20: Fferm Ganol



View from the south-east, showing the stable outbuilding situated on more elevated ground to the west of the property.



View from the south-east, showing the property in its wider setting.

Table 6-6.22: Fferm Ganol

Property 20: Fferm Ganol					
Direction to Site	South-south-west to north- north west	Number of turbine hubs theoretically visible	15		
Distance to nearest turbine	1,937m	Number of turbine tips theoretically visible	17		
Nearest turbine	T1	Primary direction of view	Appears to be north-east		

Description of property, location and existing context:

A detached and isolated two-storey property nestled into an area of gently sloping land (downwards to the north-east) at an elevation of around 400m AOD.

The curtilage also contains a stable block building and garage to the west of the property situated on a localised mound at a higher elevation than the property.

The property is accessed by a long and winding private access track to the south-east, bordered by post and wire fencing, which meets a minor lane near Blue Lins Farm.

The property lies to the east of the Garn Fach Plantation, in an area of relatively open pasture fields divided by post and wire fencing with some partial hedgerows with trees.

Aerial image source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGrid, IGN, and the GIS User Community.



Aerial view of the property

Description of existing views and visual amenity:

Property 20: Fferm Ganol

It is likely views extend from windows on the north-eastern façade of the property across a garden area with filtered rural views down the valley of the Camnant brook. Mature broadleaf and evergreen trees screen views to the north and north-west of the property. It appears the 'front' of the property is orientated towards the north-west. A lack of public access to the west of the property means it is unclear how many windows are on the north-western, north-eastern or south-western façade (facing towards the Site) - however there are likely to be some windows facing south-west with the elevated stable block and vegetation (including the Garn Fach Plantation) limiting views westwards in the direction of the existing Llandinam turbines. An external seating area under a lean-to on the south-east façade of the property allows some far-reaching views across a landscape of pasture fields to the south with some in field trees. There is also a velux window in the roof on this façade. There are clear views south-east from the stables, and rural views in all directions from the long and open access track

Appendix 6: Landscape and Visual Assessment

Description of likely change in views and visual amenity as a result of the Project: See Figure 6-70a and 6-70b

The wireline, based on a bare ground model, shows that the hubs of 15 turbines and the blades of the remaining two turbines would theoretically be visible from this location across a 73-degree field of view. However, the wirelines are based on a bare-earth model and in reality the elevated stable block, vegetation around the property, and Garn Fach plantation situated directly to the west will screen views to the proposed development, although there may be some glimpses of the more distant southerly turbines from upper storey windows on the 'rear' of the property and oblique views from the outdoor lean-to. From the access track there are likely to be open views of more turbines, although partially screened by the Garn Fach plantation

The magnitude of change in views and visual amenity experienced from this property in the round is judged to be to be **Low** due to the proposed wind farm being mostly screened by a combination of landform, buildings and vegetation.

According to NRW's Garn Fach Felling Plan the coups that screen the views to the west will be felled between 2032-2036. If the forest were to be felled, there would be views to potentially a greater number of turbines from the access track, stable block and possibly some upper storey rear windows with the nearest turbine (T1) at a distance of just under 2km (1,937m) away. The magnitude of change in views and visual amenity experienced from this property in the round if the Garn Fach planting is felled would be increased to **Medium**.

Conclusion with respect to the potential effects on Living Conditions:

The residential visual amenity threshold is only concerned with properties in which there is a High or Very High magnitude of change. As the property is assessed as having a low (with Garn Fach forest) or medium (Garn Fach felled) magnitude of change, the Project <u>would not</u> breach the residential visual amenity threshold.

Consideration of cumulative effects: See Figure 6-01a and 6-70b

If the repowered Llandinam turbines were in place, they would be largely screened by the Garn Fach plantation and so the change resulting from adding Garn Fach Wind Farm to a baseline containing the repowered Llandinam turbines would be the same as adding Garn Fach to a baseline containing the existing Llandinam turbines.

If the Garn Fach plantation was felled (coups that screen the views turbines will be felled between 2032-2036) there would be views to the repowered Llandinam turbines over a 100-degree field of view from the stable block and access drive (and possibly also upper rear storey windows. The Llandinam repowering turbines would be a little closer to the property (the nearest situated at 1.8km to the north-west) than the Garn Fach turbines and therefore would have a greater influence on views from these areas. The magnitude of impact on views from this property resulting from the addition of Garn Fach to a baseline containing the repowered Llandinam turbines would remain the same as above i.e. **Medium.**

1.4 Conclusions

- **1.4.1** This Residential Visual Amenity Assessment (RVAA) describes the change in view likely to be experienced by residents at the closest properties to the proposed Garn Fach Wind Farm (within 2km of a turbine). A total of 20 properties have been identified as lying within 2km of the proposed turbines and having a potential view of the turbines.
- **1.4.2** None of the 20 properties assessed are judged likely to experience a 'very high' magnitude of change to views. Six of the 20 properties are judged to experience a 'high' magnitude of change;11 are judged to experience a 'medium' magnitude of change and three are judged to experience a 'low' magnitude of change. The six properties assessed as likely to experience a 'high' magnitude of change are:
- **Custogion** due to the Project becoming a prominent feature in views from two aspects of the property (although these do not appear to be 'primary' viewing directions) as well as being visible from much of the access track and curtilage of the property;
- Ffordd Las due to the proposed turbines being relatively close although filtered by garden vegetation;
- **The Barns** due to the wind farm turbines and parts of the associated tracks being prominent in views from the rear of the property and garden, and on approaching the property along the driveway;
- Lower Nanthir due to turbines becoming a feature of views to the north-west from this property;
- **Upper Maens Cottage** due to the proposed wind farm being a key/defining element in views to the west from the property and its curtilage and the open setting of the property;
- **Great Meadows** due to the proposed wind farm being a key/defining element in views to the north-west from the front of the property and its outdoor space and driveway.
- **1.4.3** All properties with a high magnitude of change were assessed in terms of potential effect on 'living conditions' by judging whether the Project will breach the Residential Visual Amenity Threshold, in accordance with the Landscape Institute's Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (LI TGN 2/19). In this case the threshold will not be breached at any of these properties i.e. the turbines will not be so overwhelming, unpleasantly encroaching or inescapably dominant from the property so as to render the property an unpleasant place to live.

Assessment of effects on residential visual amenity

1.4.4 This section sets out the results of the magnitude of change to views from each individual property.

Table 6-6.23: Summary of results

Ref	Name	Magnitude of Change	Cumulative Magnitude of Change
1	Custogion	High	High
2	Fwnog	Medium	Medium
3	Ddulley Bank	Medium	Medium
4	Ffordd Las	High	High
5	Maens Cottage	Medium	Medium
6	Pabyllwyd Ganol	Medium	Medium
7	The Barns	High	High
8	Lower Nanthir	High	High
9	Rock House	Medium	Medium
10	Upper Maens Cottage	High	High
11	Great Meadows	High	High
12	Pabyllwyd	Low	Low
13	Upper Nanthir	Medium	Medium

Ref	Name	Magnitude of Change	Cumulative Magnitude of Change
14	Green Meadow	Medium	Medium
15	Brondre Fawr	Medium	Medium
16	Brondre Fawr Bungalow	Low	Low
17	Waen Llydan	Low	Low
18	Waun Cottage	Medium	Medium
19	Upper Llaithddu	Medium	Medium
20	Fferm Ganol	Medium	Medium

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