

Small Scale 20kW Wind Turbine

Laneside Farm
Pendleton
Lancashire
BB7 1PU

Landscape and Visual Impact Assessment



Windle
Beech
Winthrop
CHARTERED SURVEYORS

Windle Beech Winthrop Limited
Chartered Surveyors
Skipton Auction Mart
Gargrave Road
Skipton BD23 1UD
+44 01756 692 900
www.wbwsurveyors.co.uk

Contents

1	Introduction	3
2	Site Location.....	4
3	Landscape and Visual Impact Assessment Methodology..	4
4	Visual Impact Assessment.....	7
5	Landscape Impact Assessment.....	14
6	Cumulative Assessment of Consented Wind Turbine Developments	20
7	Heritage Asset Assessment.....	21
8	Summary	25
	Appendix A – ZTV Plans	26
	Appendix B – Viewpoint Photo Montages.....	31
	Appendix C – Landscape Character Area Plans	39

1 Introduction

This report provides a visual assessment of the landscape surrounding the proposed installation of a wind turbine at Laneside Farm, Pendleton. It is written to provide supplementary information to the planning application, design and access statement and detailed drawings.

The following sections describe the site and surrounding landscape in order to provide as much information as possible as to the visual impact of a wind turbine on the surrounding landscape. It is not a definitive document and should be read in conjunction with all the additional information supplied with the planning application. In order to achieve the aim of the report it is divided into the following sections:

Site Location

Contains information pertaining to the proposed site in terms of the location, height and the visibility from the surrounding area. Location information is provided from Landmark Information Group Ltd.

Landscape and Visual Impact Assessment

An assessment of the visual and landscape impact that the proposed turbine is likely to have. This has been carried by Mr R.Preston MRTPI of WBW Ltd in accordance with following recommended guidance.

- *Landscape Character Assessment Guidance for England and Scotland (2002), Countryside Agency and Scottish Natural Heritage.*
- *Lancashire Landscape Character Assessment.*
- *Guidelines for Landscape and Visual Impact Assessment (2002), Landscape Institute and Institute of Environmental Management and Assessment.*

Cumulative Assessment of Consented Wind Turbine Developments

An assessment of the cumulative effect of consented Wind Turbines within the 10km study area in relation to the proposed development.

Heritage Asset Assessment

An assessment of the proposed development upon nearby heritage assets of which the turbine may impact the aspect of.

2 Site Location

The site location is on agricultural land 2.3km from the Lancashire village of Pendleton and 2.3km from the town of Clitheroe, to the East of Laneside Farm. The site of the turbine is at location reference SD7741 2806, 192m above mean sea level¹. Access to the site is from Pendleton Lane opposite Laneside Farm.

3 Landscape and Visual Impact Assessment Methodology

The following sections describe the analysis tools used in order to assess the landscape and visual impact of the proposed turbine. Although inextricably linked the landscape and visual impacts are, for the purposes of this report, considered separately in accordance with the following good practice and guidance documents:

- *Landscape Character Assessment Guidance for England and Scotland (2002), Countryside Agency and Scottish Natural Heritage.*
- *Lancashire Landscape Character Assessment.*
- *Guidelines for Landscape and Visual Impact Assessment (2002), Landscape Institute and Institute of Environmental Management and Assessment.*

Zone of Theoretical Visibility

The Zone of Theoretical Visibility Map (ZTV) in Plan 1, Appendix A, has been produced to show the theoretical visibility of the proposed wind turbine based on the tip height of the structure. The ZTV is a bare land analysis of the study area (10km radius) and does not take into account any obstructions such as vegetation (forest/woodland, hedges, individual trees etc) or built developments such as buildings, walls and other man made structures. These obstructions can greatly reduce the extent of the turbine visibility. Therefore the ZTV produced as part of this analysis is based upon a worst case scenario as the proposed turbine structure may not be visible from all the areas indicated on the ZTV map. Similarly as it is produced based upon the tip height of the proposed turbine, the full extent of the turbine may also not be visible from all the areas on indicated on the ZTV map. The methodology for production of the ZTV is also included in appendix C of this document.

Visual Representation

Through consultation with the Ribble Valley planning Authority and the Forest of Bowland AONB officer a selection of viewpoints has been selected that will represent a variety of receptors from a range of viewpoints surrounding the proposed turbine site. These viewpoints have been indicated on Plan 2 in Appendix A. Where a selected viewpoint was not within the ZTV or where other obstructions prevented visibility of any part of the turbine a nearby location was chosen as an alternative to indicate the scale of the turbine. From these

¹ Landmark Information Group Ltd, OS Explorer Ref OL21

locations a series of photomontages have been produced that assist with determining the impact of the proposed turbine at each of the selected viewpoints.

Sensitivity of Visual Receptors

The visual receptors are those people to whom the proposed wind turbine would be visible and the change in outlook would have some level of impact. The sensitivity of the receptors is dependant on the following:

- Location and context of the viewpoint
- The expectations and occupancy or activity of the receptor
- The importance of the view (popularity/appearance in guidebooks etc)

The sensitivity of receptors for the purposes of this assessment is set out in Table 1 below:

Visual Sensitivity	Receptors
High	• Occupiers of residential properties with views affected by the development. • Users of outdoor recreational facilities including public rights of way whose attention or interest may be focused on the landscape.
Medium	• Occupiers of residential properties where views towards the development are restricted. • People travelling through the area in cars, trains or other transport routes
Low	• People engaged in outdoor recreation/sport where an appreciation/awareness of the landscape is less important to the activity. • People at their place of work
<i>Table 1 – Sensitivity of Visual Receptors²</i>	

² *Guidelines for Landscape & Visual Impact Assessment 2nd Edition, 2006*

Assessment of the Perceived Magnitude of Change a Development may have on Visual Receptors

This classification system is used as a basis to ascertain the level or magnitude of change the visual receptors were likely to experience and may be modified by other factors such as distance, obliqueness, elevation, size, context, weather. The classification for the visual magnitude of change is set out in Table 2 below.

Visual Magnitude of Adverse Change	Definition
High	The proposed turbine would cause permanent, long term fundamental alteration of the view.
Medium	Partial loss or alteration of the view or a one or more key characteristics of the view.
Low	Minor loss or alteration of the view or one or more key characteristics of the view.
No Change	No perceived change to the view or its key characteristics.

Table 2 – Visual Magnitude of Change³

Significance of Visual Impact

The potential significance of the visual impact of the turbine is a correlation between the sensitivity of the receptor (Table 1) and the magnitude of visual change (Table 2) and is set out in Table 3 below. The categorisation of the significance is drawn from Guidelines for Landscape & Visual Impact Assessment 2nd Edition, 2006 and Volume 11 of Highways Agency Design Manual For Roads And Bridges as referred to in the aforementioned text. For the purposes of this analysis the categories shown in Table 3 are defined as follows:

Substantial: Major changes to the view for which a key consideration must be made due to the sensitivity of the receptors.

Moderate: The effects may be an important consideration, but more likely when considered as part of a cumulative effect with other developments within the viewpoint.

Slight: The effects are unlikely to be critical.

Negligible: No effects or those that are beneath levels of perception

		Significance of Impact		
		Magnitude of Change		
Visual Receptor Sensitivity		High	Medium	Low
	High	Substantial	Moderate	Slight
	Medium	Moderate	Moderate	Slight
	Low	Slight	Slight	Negligible

Table 3 – Significance of Visual Impact

³ Guidelines for Landscape & Visual Impact Assessment 2nd Edition, 2006

4 Visual Impact Assessment

The following visual impact assessment has been carried out in accordance with the methodology set out in Section 3 of this document.

Viewpoint 1

Location of Viewpoint 1 is on the lane side at the head of Footpath 6 (**LCC Ref: FP6**) and intersection with Bridleway 1 (**LCC Ref: BW1**) next to Laneside Farm. The viewpoint position is at E:377047, N:441212 at a position below the proposed site of 159 metres above Mean Sea Level. The viewpoint is 252 metres from the proposed site in an East South-Easterly direction. The viewpoint is taken from the edge of the Forest of Bowland AONB the boundary of which follows Pendleton Lane.

From the current view towards the proposed site the immediate foreground is of sloping pasture land; the mid-ground is of the proposed site set against moorland fringe and the backdrop of Pendle Hill. This mid-ground has scattered trees and fence line boundaries. The background is of the westerly slopes of Pendle Hill. The character of this viewpoint is sloping agricultural land with views up towards Pendle Hill.

The predicted view is illustrated by the photomontage visualisation in Appendix B (MG-VPA Viewpoint 1). The proposed turbine at 27 metres tall projects against the backdrop of Pendle Hill and partially against the skyline above Pendle Hill. The main receptors from this viewpoint would be users of the local footpaths and bridleways and residents of Laneside Farm (the Applicant). These receptors would be classed as having a high visual sensitivity to this turbine. The magnitude of change from this viewpoint would be medium as the structure is slender and does not dominate large sections of this view. The view from the bridleway is intermittent due to the screening of trees and hedges lining Pendleton Lane. The significance of visual impact is therefore determined as moderate from the viewpoint.

Mitigation of the impact from this viewpoint would involve planting of a length of hedges and trees along the side of the land from which this viewpoint is taken. Sections of this lane already have vegetation which limits the views towards the proposed site and therefore this would not be out of keeping with the setting. However to do this would also remove the potential to enjoy the views of Pendle Hill from this section of the lane and as the visual impact is not severe it would seem that such mitigation measures would be more counter productive.

Viewpoint 2

The location of Viewpoint 2 is on the western edge of Pendle Hill in open access land. The viewpoint position is that of E:378744, N:441310 at a position above the proposed site of 455 meters above Mean Sea Level. The viewpoint is 1,425 metres from the proposed site viewed in a west south-westerly direction. The viewpoint is taken from within the Forest of Bowland AONB close to a nearby cairn detailed on the OS Landranger map as “pile of stones”. The viewpoint selected by the LPA was at the pile of stones, however this would have resulted in the proposed turbine not being visible from this viewpoint. As the pile of stones (cairn) is a feature associated with footpath navigation, a location in line with the proposed turbine site and the cairn was selected that is also located on an official open access pathway close to the selected viewpoint. This allows a view of the proposed turbine to be shown on the photomontage.

The immediate foreground is of the stony moorland of Pendle Hill. The mid-ground is of the proposed site sat amongst agricultural land and against a tree line. The background is of the Ribble Valley containing the developed and industrial setting of Clitheroe with panoramic views beyond this to Longridge Fell.

The predicted view is illustrated by photomontage visualisation in Appendix B (MG-VPA Viewpoint 2). The proposed turbine at 27 metres tall projects against the mid-ground which is tree lined agricultural land. Only the upper half of the proposed turbine is visible from this viewpoint due to the topography of the surrounding land. The main receptors from this viewpoint would be recreational users of the open access land on Pendle Hill which would be deemed to have a high visual sensitivity due to the panoramic nature of this viewpoint.

The visual magnitude of change from this viewpoint given the partially obscured view of the turbine, the scale of the turbine and the distance from the viewpoint and that the turbine does not project against the panoramic backdrop would lead to a low magnitude of change, therefore the significance of visual impact from this viewpoint would be slight and could easily be classed as negligible due to the scale of the turbine and it's obscured nature from this viewpoint location.

Viewpoint 3

Viewpoint 3 is located on the southern edge of Worsaw Hill as viewed in a south-south-westerly direction. The viewpoint position is that of E:377884, N:443242 at a position just above the proposed site of 212 metres above Mean Sea Level. The viewpoint is 2,366 metres from the proposed site and is taken from agricultural land of which is not designated as either open access or crossed by designated footpaths or bridleways.

The immediate foreground is of the edge of Worsaw Hill. The mid-ground is of tree lined agricultural land. The background is of the proposed site projecting partially against tree lined agricultural land and partially against the foothills of Pendleton Moor. The predicted view is illustrated by the photomontage visualisation in Appendix B (MG-VPA Viewpoint 3).

The proposed turbine at 27 metres tall projects against the tree lined agricultural land surrounding the site with the blades partially projecting against the backdrop of Pendleton Moor. The main receptors from this viewpoint would be those responsible for farming the agricultural land on Worsaw Hill and therefore their sensitivity to this impact is classed as low. The magnitude of change could also be classed as low/no change given the scale of the turbine and distance from this viewpoint. Therefore the significance of visual impact from Viewpoint 3 should be considered to be negligible and this could be mitigated further if a dark colour was selected for the turbine tower and blades.

Viewpoint 4

The location of Viewpoint 4 is on a public right of way footpath (LCC Ref: FP2). The viewpoint position is at E:377093, N:440407 at a height above the proposed site of 220 metres above Mean Sea Level. The viewpoint is 690 metres from the proposed site and lies 300 metres within the AONB boundary. Therefore it represents a typical view from the edge of the AONB at this range as experienced by footpath users walking in a north westerly direction along this footpath.

The current view towards the proposed site is in a north-north-easterly direction. The immediate foreground is of agricultural land and well maintained dry stone walls. The mid-ground is of the proposed site partially obscured by trees and containing the residence of Knowl Top. The background is of a panoramic view across to Worsaw Hill and beyond.

The predicted view is illustrated by photomontage visualisation in Appendix B (MG-VPA, Viewpoint 4). The proposed turbine at 27 metres tall projects against the backdrop of Worsaw Hill with the upper blades projecting against a skyline backdrop. The visual impact represents views of footpath users of the footpath (LCC Ref: FP2) walking in a north westerly direction along this footpath and the sensitivity of these receptors is generally classed as high.

The visual magnitude of change could be classed as medium as the scale of the turbine does not completely dominate the panoramic views from this viewpoint. This magnitude could even be considered as low if consideration of the fact that the view would be intermittent due to the presence of a tree line between the footpath and views from this viewpoint. Therefore the significance of this impact is classed as moderate/slight depending on which magnitude of change is considered most appropriate. This impact could be mitigated further if a dark colour was selected for the turbine tower and blades which would help reduce the impact.

Viewpoint 5

The location of Viewpoint 5 is on the roadside of the A59. The viewpoint position is at E:376000, N:441490 at a height below the proposed site of 180 metres above Mean Sea Level. The viewpoint is 1,350 metres from the proposed site. The current view towards the proposed site is in an east-south-easterly direction. The immediate foreground is of open agricultural land with sporadic tree lines of various growth quality. The mid-ground is of the proposed site sat above Laneside Farm, again within agricultural land lined with sporadic hedge and tree line boundaries. The background is dominated by the westerly slopes of Pendle Hill which slope steeply up above the proposed site.

The predicted viewpoint is illustrated by photomontage visualisation in Appendix B (MG-VPA Viewpoint 5). The proposed turbine at 27 metres high projects against the agricultural land associated with the farm which differs drastically in quality from the moorland of Pendle Hill. The main receptors from this viewpoint will be road users of the A59 and due to the topography and nature of the road verges along this stretch of road will mainly be visible to those travelling in a north easterly direction along the A59 towards Skipton, North Yorkshire.

The visual sensitivity of road users is classed as medium and the visual magnitude of change from this viewpoint should be classed as low due to perceived proximity of the turbine to the farm buildings and the turbine projected against the steep sloping backdrop. Therefore the significance of the visual impact from this viewpoint should be classed a slight. This could be further mitigated if a dark colour was chosen for the turbine head and blades which would therefore allow the turbine to be less visible when projected against the backdrop of agricultural land.

Viewpoint 6

The location of Viewpoint 6 is on the edge of Pendleton village. The viewpoint position is at E:375490, N:439675 at a position below the proposed site of 119 metres above Mean Sea Level. The viewpoint is 2,282 metres from the proposed site. The current view towards the proposed site is in a north easterly direction. The immediate foreground is of fence lined agricultural land, the mid-ground is dominated by various wooded areas which largely obscure the proposed site and most of the land around it. The background is a skyline backdrop and to the right of which lies the rising summit of Pendle Hill.

The predicted view is illustrated by photomontage visualisation in Appendix B (MG-VPA Viewpoint 6). The proposed turbine at 27 metres high is largely obscured by the trees in the mid-ground of this viewpoint, however the turbine head projects against a backdrop of agricultural land close to the proposed site. The main receptors to this viewpoint would be recreational users of footpath (LCC Ref: FP15) and would also be typical by occupying properties on the northern edge of Pendleton village. Therefore the visual sensitivity of receptors from this viewpoint should be classed as high. The visual magnitude of change from this viewpoint is significantly reduced due to the scale of the turbine, distance from the viewpoint and the fact that the turbine site and turbine is largely obscured by trees. Therefore the visual magnitude of change could be classed as low/no change.

Given the above, the significance of the visual impact from viewpoint 6 is classed as slight/negligible.

Again this could be mitigated further if a dark colour was selected for the turbine tower head and blades.

Viewpoint 7

The location of Viewpoint 7 is taken from Clitheroe Castle which sits in the centre of the Lancashire town of Clitheroe. The viewpoint position is at E:374264, N:441679 at a height below the proposed site of 93 metres above Mean Sea Level. The viewpoint is 3,120 metres from the proposed site. The current view towards the proposed site is in an easterly direction. The immediate foreground is of the developed centre of Clitheroe town containing a mixture of historic, industrial terraced residences and modern industrial buildings. The mid-ground is of rolling agricultural land heavily interspersed by trees, the background is of the proposed site sat amongst sporadic tree lined agricultural land at the foot of Pendle Hill.

The predicted view is illustrated by photomontage visualisation in Appendix A (MG-VPA Viewpoint 7). The proposed turbine at 26.5 metres tall projects against the agricultural land surrounding the proposed site. The main receptors to this viewpoint will be visitors of Clitheroe Castle and these could be classed as people engaged in outdoor recreation where appreciation/awareness of the landscape is less important to the activity. Therefore the visual sensitivity of receptors from this viewpoint is classed as low.

The visual magnitude of change from this viewpoint is classed as medium/low largely due to the scale of the turbine and distance from this viewpoint. Therefore the significance of visual impact from this viewpoint is slight/negligible. This again could be mitigated further if a dark colour was selected for the turbine which would help assist it to blend in with the surroundings.

Summary of Viewpoint Analysis

Table 4 below is a summary of the previous viewpoint analysis and shows the significance of the visual impact of the proposed turbine upon each viewpoint.

<i>Viewpoint</i>	<i>Receptor Sensitivity</i>	<i>Visual Magnitude of Change</i>	<i>Significance of Visual Impact</i>
<i>1</i>	High	Medium	Moderate
<i>2</i>	High	Low	Slight
<i>3</i>	Low	Low	Negligible
<i>4</i>	High	Medium/Low	Moderate/Slight
<i>5</i>	Medium	Low	Slight
<i>6</i>	High	Low/No Change	Slight/Negligible
<i>7</i>	Low	Medium/Low	Slight/Negligible
<i>Table 4 - Summary of Significance of the Landscape Impact</i>			

The summary of the results shown in Table 4 above demonstrate that the significance of visual impact would be no worse than moderate. The primary mitigation measure would be to select a colour for the turbine which is dark and would reduce its impact against the viewpoint various backgrounds.

5 Landscape Impact Assessment

The methodology used to assess the significance of impact on the landscape character is very similar to that of the Visual Impact Assessment in Section 4 of this document.

An assessment has been made in order to determine the impact of a turbine, not just in its immediate landscape but also on the neighbouring character areas deemed to be impacted.

The sensitivity of the landscape is combined with a written subjective judgement of the magnitude of impact to provide an assessment of the potential significance of any impact the turbine will have on the local landscape character. Consideration of the landscape character has been taken from the following assessments:

- **National Character Assessment**
- **A Landscape Strategy for Lancashire - Landscape Character Assessment**
- **The Forest of Bowland AONB Landscape Character Assessment**

The landscape sensitivity and capacity to wind energy development has been determined by the **LCC Study Landscape Sensitivity to Wind Energy Development in Lancashire (2005)**. Although this study was aimed at larger scale turbines the methodology behind the analysis is the same. An allowance for the smaller scale of this application has been made in the subsequent section of this assessment. The sensitivity of the landscape and the magnitude of landscape impact for the purposes of this assessment is set out in the subsequent Tables 5 & 6 below:

Level of Sensitivity	
High	Characteristics of Landscape Character Area indicate that wind energy development will not generally be appropriate. 
Moderate - High	
Moderate	
Moderate - Low	
Low	
	Characteristics of Landscape Character Area indicate potential for wind energy development at an appropriate scale.

Table 5: Level of Sensitivity to Wind Energy Development⁴

⁴ Landscape Sensitivity to Wind Energy Development in Lancashire (2005)

Visual Magnitude of Adverse Change	Definition
High	The proposed turbine would cause permanent, long term fundamental alteration of the Landscape.
Medium	Partial loss or alteration of the landscape or a one or more key characteristics of the Landscape.
Low	Minor loss or alteration of the view or one or more key characteristics of the Landscape.
No Change	No perceived change to the Landscape or its key characteristics.

Table 6 – Landscape Magnitude of Change⁵

Significance of Landscape Impact

The potential significance of the landscape impact of the turbine is a correlation between the sensitivity of the landscape (Table 5) and the magnitude of landscape change (Table 6) and is set out in Table 7 below. The categorisation of the significance is drawn from Guidelines for Landscape & Visual Impact Assessment 2nd Edition, 2006 and Volume 11 of Highways Agency Design Manual For Roads And Bridges as referred to in the aforementioned text and the definitions closely relate to those in the Visual Impact Assessment as set out in Section 4 of this report.

		Significance of Impact		
		Magnitude of Change		
Landscape Sensitivity		High	Medium	Low
	High	Substantial	Moderate	Slight
	Moderate	Moderate	Moderate	Slight
	Low	Slight	Slight	Negligible

Table 7 – Significance of Landscape Impact

⁵ Guidelines for Landscape & Visual Impact Assessment 2nd Edition, 2006

Assessment of the Landscape Character

The turbine lies within the National Character Area 33 - ***Bowland Fringe and Pendle Hill***: as described by Natural England in the Character Map of England. The key characteristics of this National Character Area are described as:

- Undulating rolling landscape with local variation created by both the numerous river valleys and outlying upland features of Beacon Fell, Longridge Fell and Pendle Hill.
- Strong outcrops of 'reef knolls' and limestone form distinct landscape features to the Ribble and Hodder Valleys.
- Meandering, commonly tree-fringed rivers with oxbow lakes form prominent features within the predominantly pastoral landscape.
- Predominantly Grade 3 agricultural land supporting permanent pasture, mostly improved, for dairy and livestock farming.
- Intensively managed landscape, with lush hay meadows in small- to medium-scale fields defined by well maintained hedgerows with mature hedgerow trees. Some rough grazing at higher elevations.
- Extensive semi-natural woodland, much of which is ancient, on both main valley bottoms, side valleys and ridges.
- Dense north - south communication corridor, comprising the M6, the railway line and the Lancaster Canal, defining the western boundary and providing a physical and psychological barrier.
- Numerous water courses and bodies including the rivers Ribble, Hodder, Calder, Wyre, a number of reservoirs, and field ponds north of Preston.
- Small villages, hamlets and scattered farmsteads mostly in local stone are well integrated into the landscape and connected by a network of winding hedge-lined country lanes.
- Bowland Fells provide a dramatic backdrop to the east and north with extensive views possible from high ground across the Lancashire and Amounderness Plain and across open valley bottoms.

Regional Character.

At regional level the various landscape character types are identified by the Lancashire County Council and ***The Forest of Bowland AONB Landscape Character Assessments***. Landscape Character Areas and the given alpha-numeric codes in order to categorise them. The landscape areas that fall within the study area are shown on Plan 1 in Appendix C, along with the relevant Sensitivity to Wind Energy Development assessments⁶. Only those which fall within a 3km radius of the site are included as the effects of a turbine of the scale proposed outside this radius are considered to be negligible. Areas to the South West of the site are not included as they are shielded by Pendle Hill. The site sits within the Moorland Fringe landscape character type and is bordered by the Moorland Hills landscape character type (to the East) and Undulating Lowland Farmland landscape character type (To the West). The fringes of moorland areas are transitional enclosed landscapes between the

⁶ Landscape Sensitivity to Wind Energy Development in Lancashire (2005)

inhospitable moorland fells and the more intensively farmed land of the lowlands. They occur, generally above the 200m contour, throughout the study area and are characterised by a rolling landscape of marginal pastures divided by stone walls which reflect the underlying geology. Sheep grazing forms the predominant land use of these fringe areas which have often been improved either from semi-natural acidic, neutral or wet grassland. There is a great diversity of landform, colour and texture. Tree cover is sparse in these landscapes although trees are usually associated with farmsteads and gorse is common along the roadsides. Isolated stone farmsteads are often prominent on the steep slopes and are reached by dead-end lanes. There are also terraces of weavers and other workers cottages and sparse linear settlements, particularly along the winding roads towards the foot of the slopes. There is good preservation of archaeological sites in these marginal locations as a result of the non intensive agricultural practices adopted.

LCA 4i, North Pendle Fringe (Proposed Site)

The proposed turbine would be located within landscape character area 4i – North Pendle Fringe, an area of moderate to high sensitivity to Wind Energy Development. In general this landscape forms the transition between the more settled valleys and the other landscapes and the high moorland and the edge landscape to the distinctive outlier to Pendle Hill. As such it shows a transition of characteristics. The relatively large scale and exposed character of this landscape suggests a modest sensitivity to wind energy development. The area forms the lower part of the visual backdrop for the adjacent areas and this elevates its sensitivity. In most cases however this Moorland fringe landscape does not form the skyline and therefore there may be opportunities for development in these areas.

Such developments would be backclothed by the higher parts of this character area and the Moorland Plateaux and Hills above reducing its sensitivity.

The sensitivity to wind energy development is classed as moderate-high by the assessment in the Landscape Sensitivity to Wind Energy Development in Lancashire (2005). As this study was aimed at turbines of a larger scale than the one proposed in this application it would be logical to reduce this sensitivity to moderate or even moderate-low.

Viewpoint 5 of the viewpoint analysis can be used to demonstrate a view 1358m from the site for the proposed turbine. The landscape in this particular area is punctuated with trees and some farm buildings and not bare in character. The effectiveness of the landscape as a backdrop to the proposed turbine is clearly evident and if finished externally in an appropriate colour, the turbine would be visually well absorbed without harm to landscape character. Therefore magnitude of change of the proposed development would be medium/low. The topography of the land and numerous tree lines result in a reduced magnitude of change as the landscape is only significantly impacted when viewed from locations close to the proposed site.

The significance of impact of the proposed turbine on this landscape character area (4i) is therefore deemed as moderate/slight.

LCA 5e, Lower Ribblesdale (Clitheroe to Gisburn)

The proposed turbine would also be located adjacent to landscape character area 5e which is Lower Ribblesdale (Clitheroe to Gisburn). This is an area classed as one of Moderate-High sensitivity to Wind Energy Development. This is a small scale area forming the broad valley of the Ribble penetrating the high ground level of the Forest of Bowland and its outlier. There is a mature and established character to the landscape comprising stands of mature deciduous woodland, picturesque built developments and other attributes which elevates its sensitivity. There is however more contemporary development and proximity to urban areas which reduces the sensitivity of the area.

Although the proposed turbine would be located within area 4i, that area is quite small and it is considered appropriate to consider the effect of the proposal on the character of that area of adjacent landscape classified as 5e. Landscape area 5e is assessed on the map (fig 3) of Landscape Strategy For Lancashire – Landscape Character Assessment as being appropriate for small scale wind turbine developments. The area is described as having stands of mature woodland and picturesque built development.

The sensitivity to wind energy development is classed as moderate-high by the assessment in the Landscape Sensitivity to Wind Energy Development in Lancashire (2005). As this study was aimed at turbines of a larger scale than the one proposed in this application it would be logical to reduce this sensitivity to moderate/low.

The proposed turbine would be small scale proposal and as such it would be considered appropriate development for area 5e (subject to its precise location being acceptable). This area of landscape would form a fore-ground setting leading almost to the site for the proposed development. The character of this area with its mature wooded areas and landscape features would, because of these features, help to absorb the proposed development without harm to the landscape itself. The proximity of the site and scale of the proposed turbine result in magnitude of change to the landscape by the proposed development being low.

The significance of impact of the proposed turbine on this landscape character area (4i) is therefore deemed as slight-negligible.

LCA 2e, Pendle Hill

Finally, Consideration should be given to the effect of the proposal on the adjoining land classified as 2e – Pendle Hill. This area is classified as one of high sensitivity to Wind Energy Development. The distinctive landmark outlier form, standing above the adjacent landscape, indicates high sensitivity. It provides a distinctive and recognisable backdrop for adjacent areas. Any significant intrusion into the exposed and bare landform of Pendle Hill would be likely to harm its character and appearance.

The sensitivity to wind energy development is classed as high by the assessment in the Landscape Sensitivity to Wind Energy Development in Lancashire (2005). As this study was aimed at turbines of a larger scale than the one proposed in this application it would be logical to reduce this sensitivity to moderate.

The topography of the land and the scale of the proposed development would result in the turbine not seen against the backdrop of Pendle Hill from the majority of viewpoints, thus preserving its character and appearance. Viewpoints 3,5 & 7 of the viewpoint analysis demonstrate this.

Therefore given the proximity of the site and scale of the proposed turbine it would result in a medium magnitude of change to the landscape.

The significance of impact of the proposed turbine on this landscape character area (2e) is therefore deemed as moderate.

Summary of Landscape Impact Assessment

Table 8 below is a summary of the previous Landscape Impact Assessment and shows the significance of the landscape impact of the proposed turbine upon each Landscape Character Area.

<i>Regional Landscape Character</i>	<i>Landscape Sensitivity</i>	<i>Magnitude of Change of Landscape</i>	<i>Significance of Impact</i>
<i>LCA 4i, North Fringe (Proposed Site)</i>	Moderate/Low	Medium/Low	Moderate-Slight
<i>LCA 5e, Lower Ribblesdale (Clitheroe to Gisburn)</i>	Moderate/Low	Low	Slight-Negligible
<i>LCA 2e, Pendle Hill</i>	Moderate	Medium	Moderate

Table 8 – Summary of Significance of the Landscape Impact

The summary of the results shown in Table 8 above demonstrate that the significance of impact would be no worse than moderate. The landscape character area in which the proposed turbine is sited would be only moderately-slightly impacted by the proposal.

6 Cumulative Assessment of Consented Wind Turbine Developments

The screening opinion 3/2012/0777P has requested that a cumulative assessment is carried out in order to determine whether the number of wind energy developments in the area is creating an adverse impact.

Lancashire County Council resource for Operational Wind Developments

The assessment was therefore carried out through a search of the approved wind energy developments from LPA databases and these are then plotted on the ZTV map produced. The only LPA that falls within the ZTV is Ribble Valley Borough Council and therefore the a search of RVBC database was the source for this analysis.

A search was carried out on approved wind energy developments and 4 results were found within the study area (10km radius). These have been plotted on Plan 3 on the ZTV map included in Appendix A. Two of the four within a 10km radius do not fall within the ZTV as they are on the opposite (Eastern) side of Pendle Hill and are completely obscured from the proposed site.

Table 9 below details the four approved turbines within the 10km study area.

Map Ref	Turbine Location	Size of Turbine (Tip Height m)	Within ZTV	Range from Proposed Site (km)
A	Mason House Farm, Bashall Eves	23	Yes	8.9km
B	Smalleys Farm, Billington	11.8	Yes	8.2km
C	Whitakers Farm, Read	24.8	No	5km
D	Hob Wood House, Sabden	12 (hub height)	No	3.2km
Table 9 - Summary of Approved Wind Developments within the Study Area				

Of the remaining two, one is at a range of 9km and is on an 18m mast and the other is at a range of both 8.5km and is on a 9m mast. Both locations are screened by trees and therefore although these fall within the ZTV area they are in reality unlikely to be visible at all. Therefore they are highly unlikely to cause a cumulative visual impact with the proposed site given the size of the structures and the distance from the proposed site.

7 Heritage Asset Assessment

The site is located close to several local heritage assets and as such it is considered necessary to assess the impact of the proposed wind turbine upon these.

Local History

The proposed development site is approximately 1.2km east of Clitheroe which is a small rural settlement and approx 1000m west of Pendle Hill.

Pendle Hill is classed as Open Moorland and the area in which the turbine would be located is classed as Lowland Grass and Mossland/ scrub.

Given the scale of the proposed turbine, the tree lined nature of the landscape and topography of the land the following heritage assets are (designated or undesignated) have been deemed to be potentially impacted by the proposed turbine.

The Heritage Sites in the area are principally:

- Little Mearley Hall
- Mearley Hall
- Lane Side

The following descriptions highlight the significance of the assets and settings in the area of the proposals. The grade of the listings of the building suggests how important it is to the area. Grade 1 listed means that it is a building of exceptional interest and is sometimes considered to be internationally important. Grade 2, or Grade 2* listed means that it is a building that is nationally important and of special interest. The significance of all of the assets and settings will remain the same as no physical works are to be carried out to the listed structures or sites.

Little Mearley Hall.

Grade 2* first listed in December 1952. The official description is as follows: House, late C16th with early C19th alterations and re-used early C16th window. Rubble, mostly pebbledashed with roof of slate and stone slate. 2 storeys with attic. The north-west front has a cross-wing at its right-hand side having a window with plain stone surround on the ground floor. On the 1st floor is a window with 2 mullions remaining, with an inner hollow chamfer and an outer hollow chamfer with angle bead. The attic has a stepped 3-light mullioned window with double chamfer and hood. The main range has a 2-bay facade of squared sandstone, having paired sashed windows with glazing bars in plain stone surrounds, separated by square mullions. To the left is a door with plain stone surround. At the far left is a 2-storey semi-octagonal bay window of sandstone ashlar, from Sawley Abbey (VCH). 3 sides now have sashed windows with glazing bars. The sides are separated by buttresses with decorated offsets, capped by crocketed gablets at 1st floor level and with attached octagonal shafts above with tracery decoration. Level with the 1st floor is a band

of blank arcading with ogees and cinquefoils. At the rear the cross-wing has double-chamfered mullioned windows, as does the ground floor of the main range. On the 1st floor is a 4-light mullioned window with outer casement moulding with angle bead, and inner hollow chamfer. The lights have segmental heads. At the far right is a similar surround, now reconstructed. The door, at the left of the main range, has a moulded surround with Tudor-arched head. Above is a stone plaque inscribed '1590' with the arms of Nowell quartering Walmesley and the initials of Christopher Nowell and Elizabeth (Walmesley) his wife (VCH). Inside, the front room of the cross-wing has a wide fireplace with chamfered segmental arch. The room in the main range lit by the bay window has 2 built-in cupboards of C18th type, with raised panels, and semi-circular heads. Each is flanked by fluted pilasters. The central room also has a built-in cupboard with raised panels. An early C19th engraving shows the bay window before sashes were inserted.

Lane Side.

First Listed Feb 1967.

Grade 2. House, late C18th. Sandstone rubble with slate roof. Double-pile plan. 2 storeys, 2 bays. Windows have plain stone surrounds and square mullions, of 3 lights except for the left-hand ground-floor one which is of 4 lights. Chimneys on left hand gable and between bays. No door in main(south) façade. Entrance at rear through single-storey porch.

Mearley Hall (Site of).

Mearley Hall stands on the lower slope of Pendle Hill, about the middle of the township, but is a modern farm-house of no interest. The old hall was pulled down about 1886, and only the tall gate piers with ball ornaments and the high fence wall now remain. An account of the building as it then stood, written in 1883, describes the ground plan as nearly complete 'with central portions and two projecting wings.' Part of the house had been restored and over the door was a stone with the arms of Radcliffe of Todmorden. The eastern wing, described as the most interesting part of the house, was then partly roofless and in ruins. A winding staircase which led from the large south-east room on the ground floor had been completely wrecked, and the oak panels of the wainscot lay broken among the debris. The masonry, however, was still compact and firm. The chief architectural features of the house, which seems to have belonged to the 16th century and faced north, were its gables, chimneys, and long projecting stone gargoyles.

Impact of the proposal on the significance of the heritage assets

There will be no physical impact on the significance of the heritage assets due to the separation distance between them and the proposed turbine. From an amenity perspective, to view the proposed turbine from ground level means a person would be required to align themselves a viewpoint whereby the turbine would be seen to conflict visually with the assets.

The assets are located within a local area characterised by trees, hedges, walls and fences and the opportunity for visual conflict is very limited.

From Pendle Hill it is not possible to view the turbine and the assets in direct visual conflict with one another, because of the differences in the height of the landscape areas.

Figure 1 below shows the location of the public rights of way in the vicinity of the site for the proposed turbine.

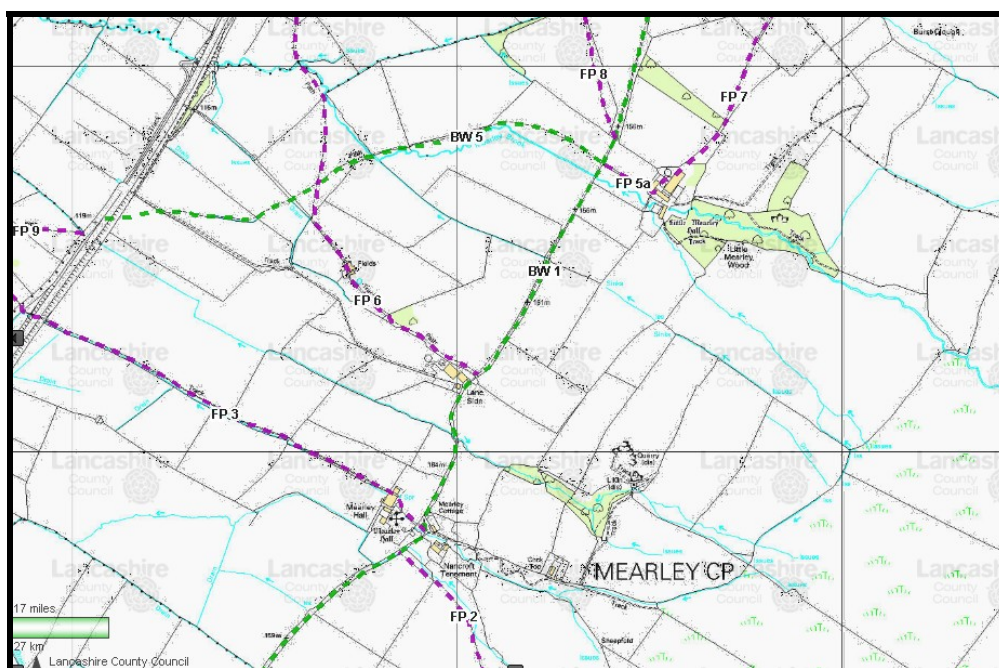


Figure 1 – PROW Proximity to Heritage Assets

The main public viewpoints of the turbine would be from the public rights of way shown on the above map extract.

Footpath FP2 is approx 600m from the site for the turbine. From this distance the turbine would not be seen to adversely affect the setting of Lane Side (Grade 2 Listed) especially with the mitigation effect of the trees and hedges between the viewpoint and the turbine and Lane Side. Little Mearley, further to the north, is so distant and the scale of the turbine so modest that the setting of Little Mearley would be preserved.

Bridleway BW1 passes north to south and immediately past Lane Side. As Lane Side is approached from either direction along this Bridleway, it will be

possible to view the turbine and Lane Side, but the separation distance of some 400m is such that the setting of Lane Side could not be said to be adversely affected.

Footpath FP5a is located approx 700m to the north of the site for the turbine. Again, the separation distance between Lane Side and the turbine and the mitigation of the trees and hedges in the landscape is such that the setting of Lane Side would be preserved when viewed from this footpath. Mearley, further to the south is a replacement building for the original and is not itself listed.

Taking the above into account it is considered that the proposed turbine could be constructed without harm to the local Heritage Assets.

8 SUMMARY

The proposed site lends itself readily to the use of renewable wind energy. As is the nature of small scale wind developments the sites are required to be elevated. Thus the proposed turbine projects against the skyline and is visible from a number of surrounding viewpoints.

Other long distance views have been provided from the surrounding hills and the impact of the turbine demonstrated from these viewpoints.

Given the sloping nature of the surrounding countryside, the turbine has the most significant impact on the landscape and visual amenity at close range. Mid-Long range views set the turbine against surrounding agricultural land backdrop. At these long distances the impact is significantly reduced due to the size of the turbine.

It is suggested that the optimum colour to mitigate any visual effects would be a galvanised tower with matt grey hub, tail and fins for the remainder of the turbine. This would reduce the impact against on the agricultural backdrops and also when the turbine projects against surrounding hillsides.

The cumulative impact with other consented wind developments within the 10km radius study area has been demonstrated to be negligible due to the small number and distance from the proposed site.

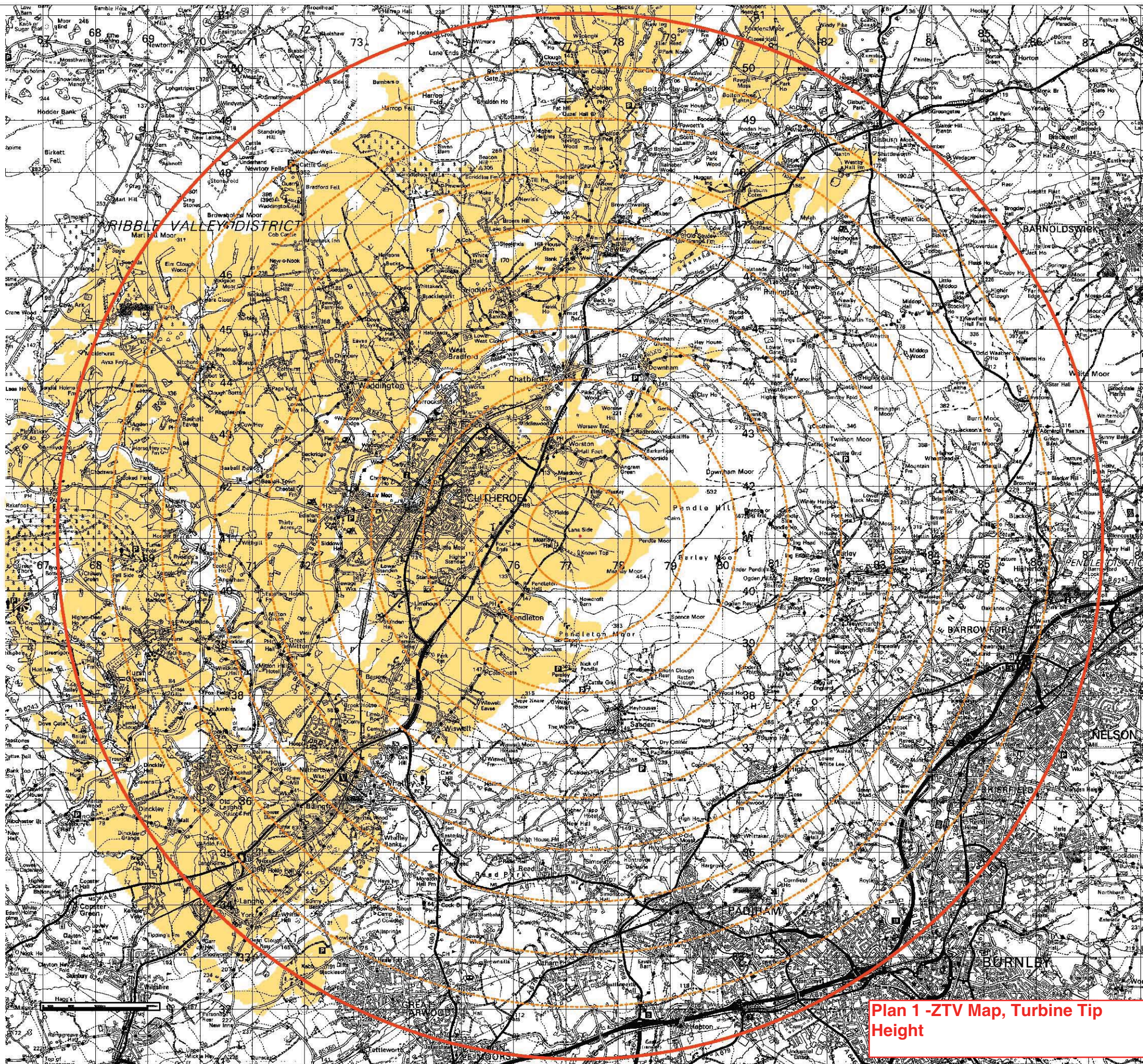
Appendix A – ZTV Plans

Plan 1–Turbine Tip Height (10km Radius)

Plan 2 –Viewpoint Locations

Plan 3 – Consented Wind Developments

Plan 4 - Heritage Assets



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No. 0100031673



Revisions

Ref	Details of Revision	Date	By
-	xxx	xxx	xx

Legend

- Proposed Turbine Location
- 10km Radius Study Area Extents
- 1km Radius Interim Distances
- Theoretical visibility of proposed turbine location at 27.1m above ground

Notes

Turbine location - easting 377272, northing 441048.
ZTV modelled using target point set at turbine location to 27.1m height above ground representing theoretical visibility of site at blade tip height. ZTV extents set to 11km to ensure inclusion of all points within 10km study area.
Visual barriers such as woodlands and settlements not included, model represents worse case scenario.

Status / Purpose of Issue **Final**

Project Name
WBW - Lane Side Farm Single Turbine
Non Interpretative ZTVs

Figure
ZTV - Blade Tip

Figure No
CEC1947-1-03 -

Rev
-

Scale
NTS @ A3
See scalebar

Date
20.03.2012

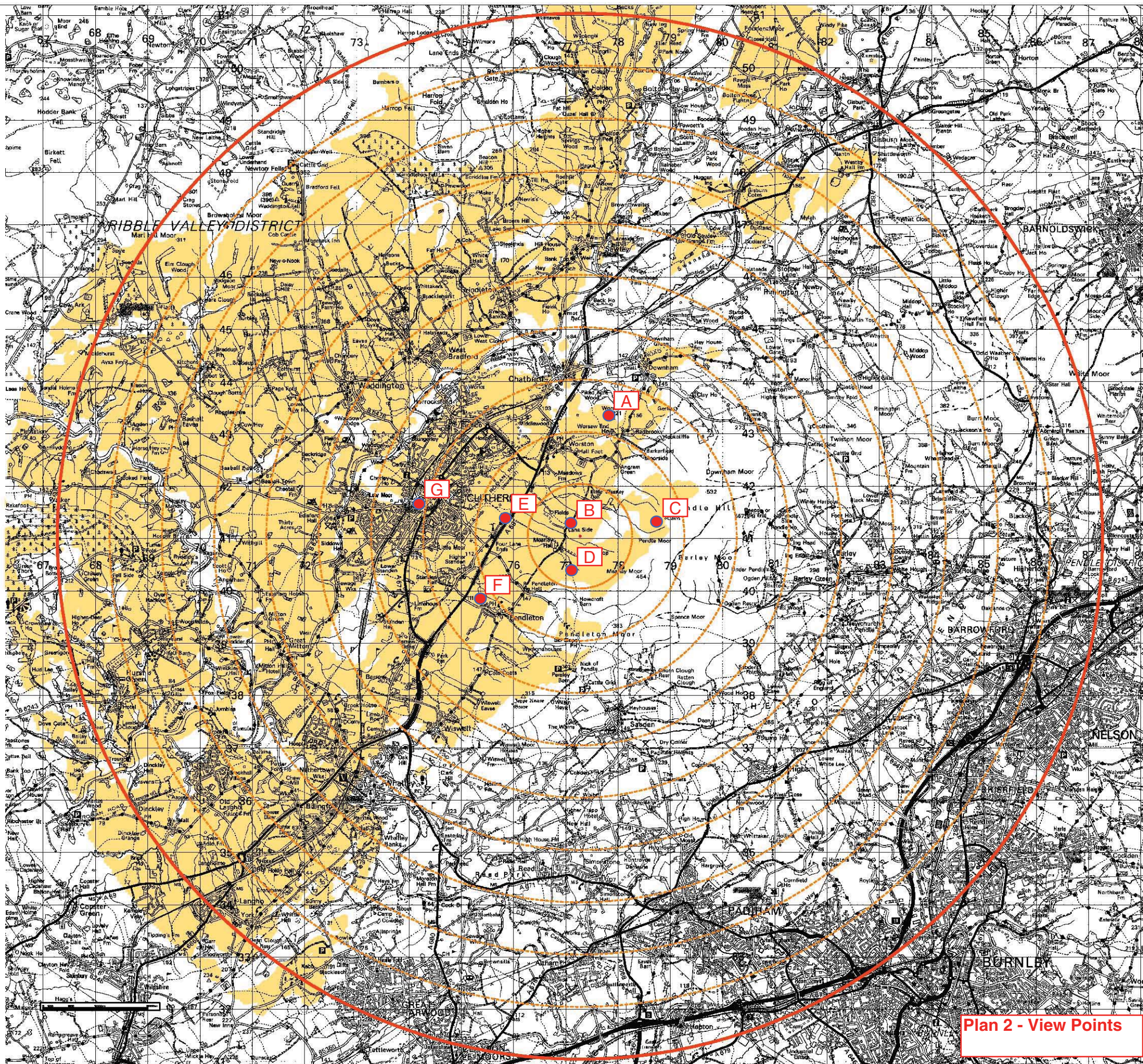
By
LWR

Client
Mark Gornall
c/o Windle Beech Wintthrop
Skipton Auction Mart
Gangrave Road
Skipton
North Yorkshire
BD23 1UD

Prepared by:
CEC Ltd
Five Acres
Alet
Truro / Cornwall
TR4 9DU
Phone 01872 245510
Fax 01872 262071



Plan 1 -ZTV Map, Turbine Tip Height



Plan 2 - View Points

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No. 0100031673

4
NORTH

Revisions

Ref	Details of Revision	Date	By
-	xxx	xxx	xx

Legend

- Proposed Turbine Location
- 10km Radius Study Area Extents
- 1km Radius Interim Distances
- Theoretical visibility of proposed turbine location at 27.1m above ground
- View Points

Notes

Turbine location - easting 377272, northing 441048.
ZTV modelled using target point set at turbine location to 27.1m height above ground representing theoretical visibility of site at blade tip height. ZTV extents set to 11km to ensure inclusion of all points within 10km study area.
Visual barriers such as woodlands and settlements not included, model represents worse case scenario.

Status / Purpose of Issue **Final**

Project Name
WBW - Lane Side Farm Single Turbine
Non Interpretative ZTVs

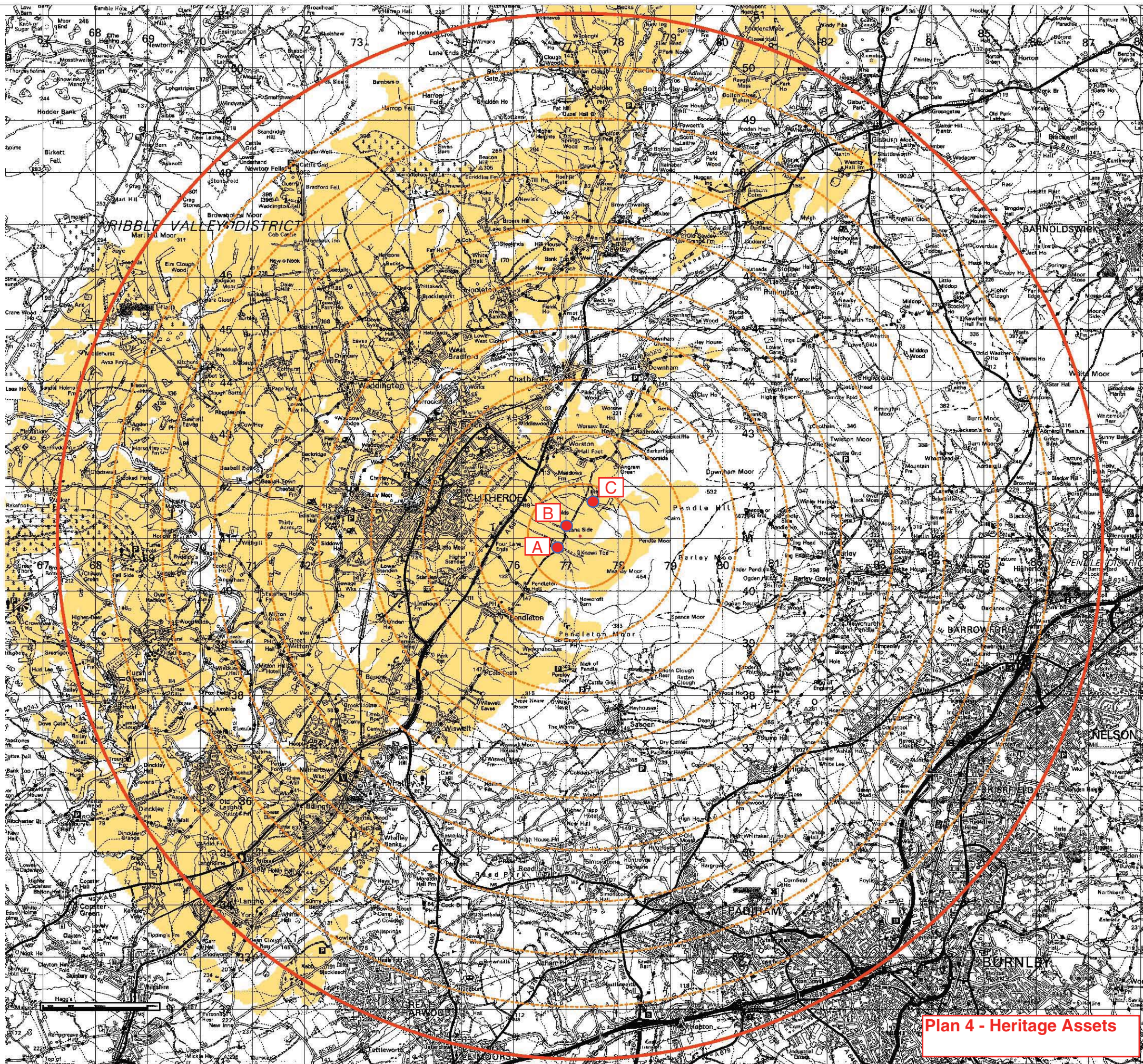
Figure
ZTV - Blade Tip

Figure No	Rev	Scale	Date	By
CEC1947-1-03 -		NTS @ A3 See scalebar	20.03.2012	LWR

Client
Mark Gornall
c/o Windle Beech Wintthrop
Skipton Auction Mart
Gangrove Road
Skipton
North Yorkshire
BD23 1UD

Prepared by:
CEC Ltd
Five Acres
Alet
Truro / Cornwall
TR4 9DU
Phone 01872 245510
Fax 01872 262071

cec
Cornwall Environmental
Consultants Ltd



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No. 0100031673

4
NORTH

Revisions

Ref	Details of Revision	Date	By
-	xxx	xxx	xx

Legend

- Proposed Turbine Location
- 10km Radius Study Area Extents
- 1km Radius Interim Distances
- Theoretical visibility of proposed turbine location at 27.1m above ground
- Heritage Asset

Notes

Turbine location - easting 377272, northing 441048.
ZTV modelled using target point set at turbine location to 27.1m height above ground representing theoretical visibility of site at blade tip height. ZTV extents set to 11km to ensure inclusion of all points within 10km study area.
Visual barriers such as woodlands and settlements not included, model represents worse case scenario.

Status / Purpose of Issue **Final**

Project Name
WBW - Lane Side Farm Single Turbine
Non Interpretative ZTVs

Figure
ZTV - Blade Tip

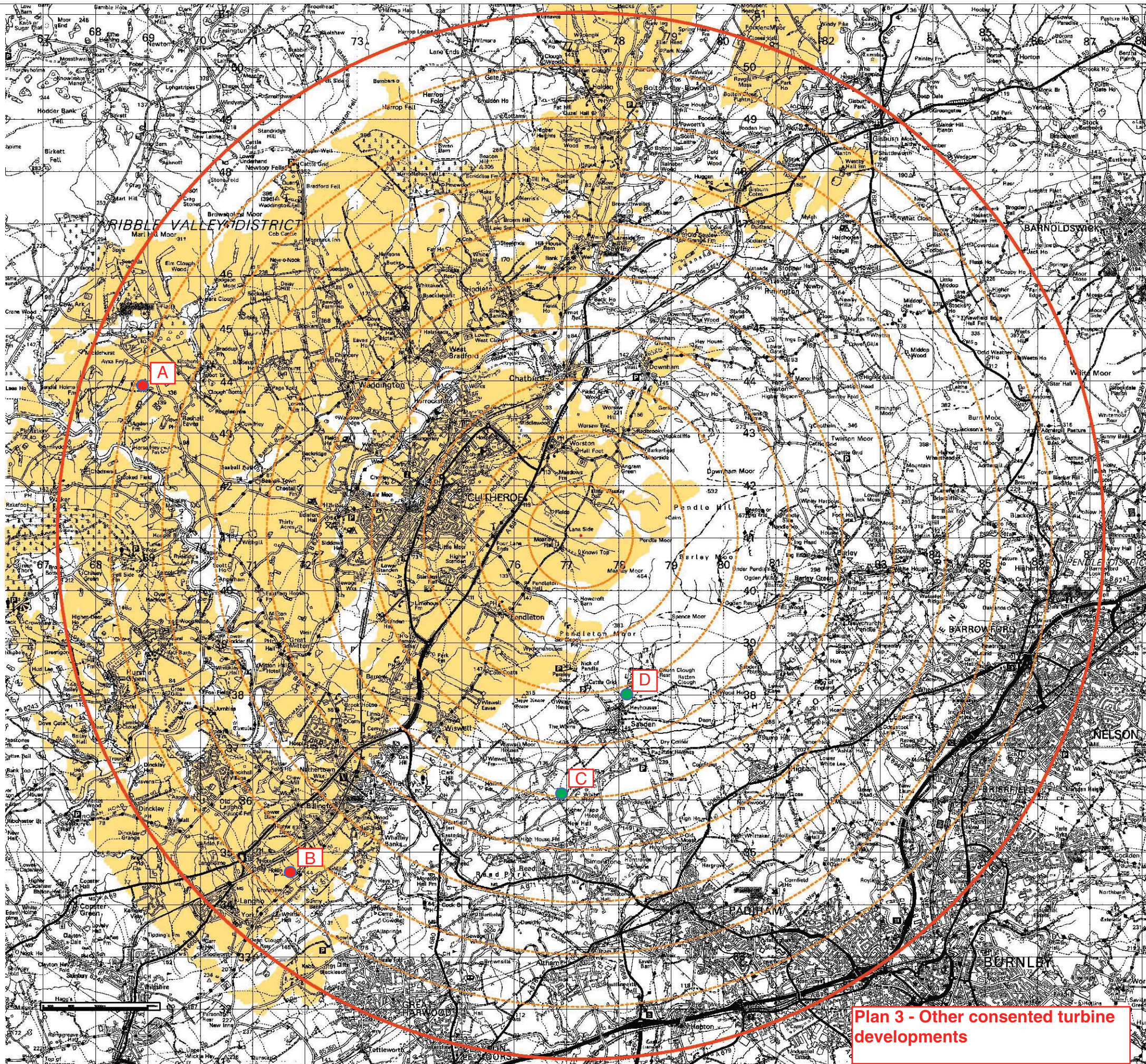
Figure No	Rev	Scale	Date	By
CEC1947-1-03 -		NTS @ A3 See scalebar	20.03.2012	LWR

Client
Mark Gornall
c/o Windle Beech Wintthrop
Skipton Auction Mart
Gangrave Road
Skipton
North Yorkshire
BD23 1UD

Prepared by:
CEC Ltd
Five Acres
Alet
Truro / Cornwall
TR4 9DU
Phone 01872 245510
Fax 01872 262071



Plan 4 - Heritage Assets



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. License No. 0100031673



Revisions			Date	By
Ref	Details of Revision		xxx	xx
-	xxx			

- Legend**
- Proposed Turbine Location
 - 10km Radius Study Area Extents
 - 1km Radius Interim Distances
 - Theoretical visibility of proposed turbine location at 27.1m above ground
 - Consented wind turbines developments within sight of proposed site
 - Consented wind turbines developments out of sight of proposed site

Notes
Turbine location - easting 377272, northing 441048.
ZTV modelled using target point set at turbine location to 27.1m height above ground representing theoretical visibility of site at blade tip height. ZTV extents set to 11km to ensure inclusion of all points within 10km study area.
Visual barriers such as woodlands and settlements not included, model represents worse case scenario.

Status / Purpose of Issue **Final**

Project Name
WBW - Lane Side Farm Single Turbine
Non Interpretative ZTVs

Figure
ZTV - Blade Tip

Figure No	Rev	Scale	Date	By
CEC1947-1-03 -		NTS @ A3 See scalebar	20.03.2012	LWR

Client Mark Gornall c/o Windle Beech Wintthrop Skipton Auction Mart Gangrave Road Skipton North Yorkshire BD23 1UD	Prepared by: CEC Ltd Five Acres Alet Truro / Cornwall TR4 9DU Phone 01872 245510 Fax 01872 252071	
---	--	--

Appendix B – Viewpoint Photo Montages



PHOTO MONTAGE SPECIFICATION	
Focal Length: 42mm	
Range: 252m	Direction: ESE
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m-Zuiko Digital 14-42mm	
Viewing Distance on A3: 400mm	

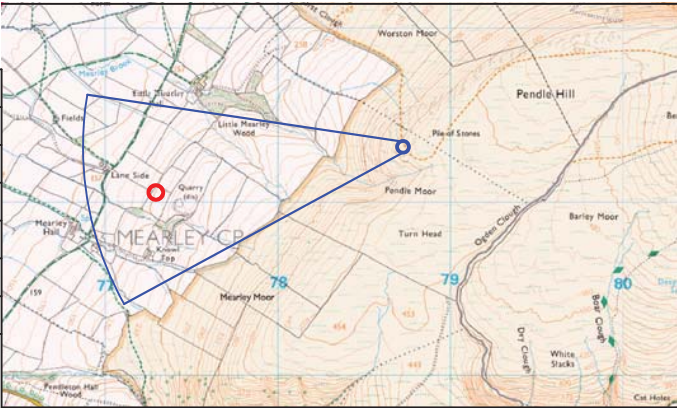


wbw Windle Beech Winthrop	
Dwg No.: MG – VPA	
Title: Viewpoint Analysis Viewpoint 1	
Range: 252m	Direction: ESE
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	



PHOTO MONTAGE SPECIFICATION

Focal Length: 42mm	
Range: 1425m	Direction: WSW
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m–Zuiko Digital 14–42mm	
Viewing Distance on A3: 400mm	





Windle
Beech
Winthrop

Dwg No.: MG – VPA	
Title: Viewpoint Analysis Viewpoint 2	
Range: 1425m	Direction: WSW
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	

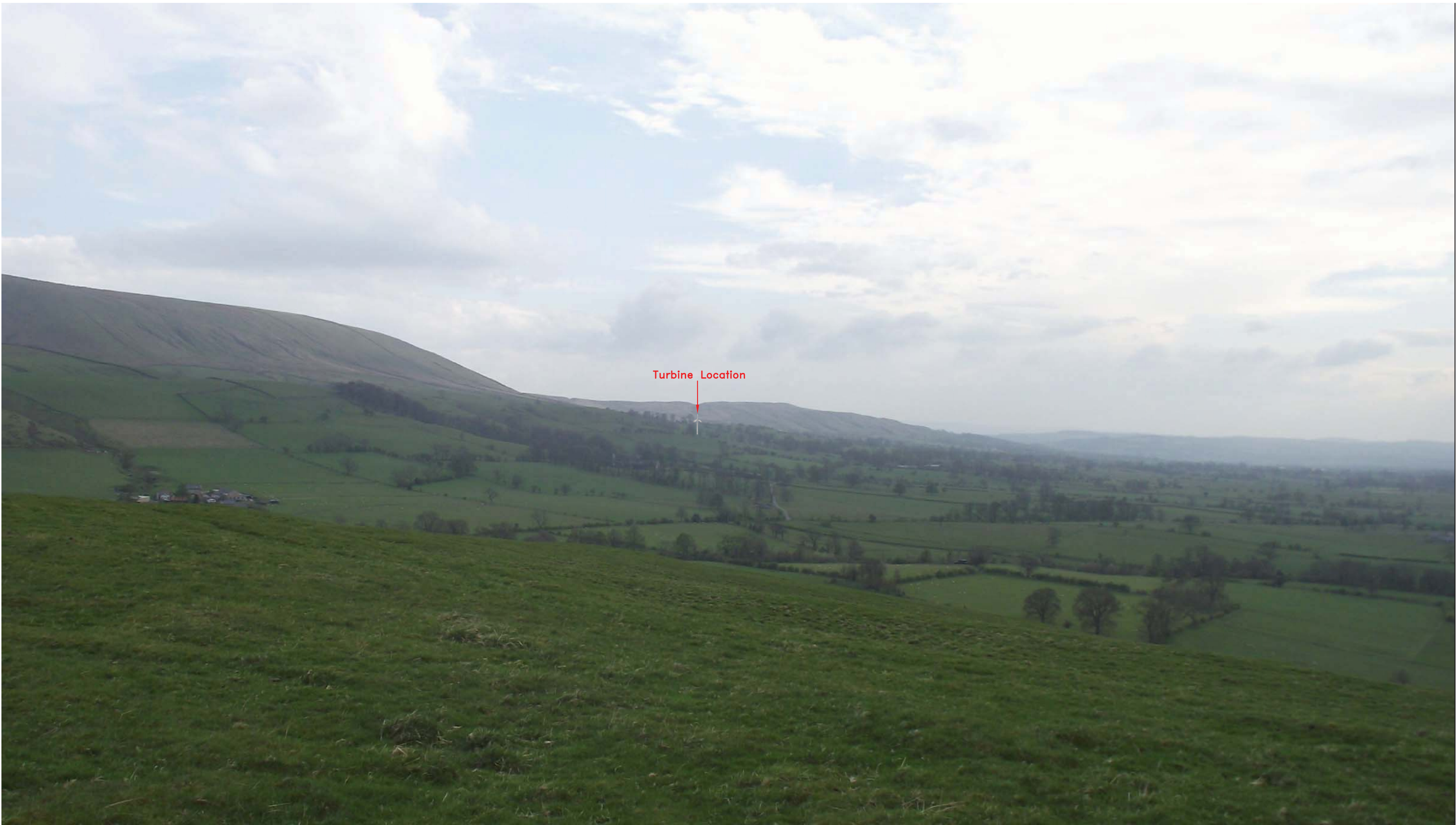
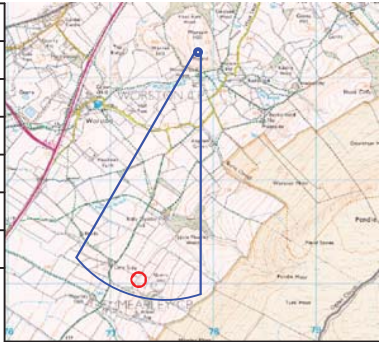


PHOTO MONTAGE SPECIFICATION	
Focal Length: 42mm	
Range: 2366m	Direction: SSW
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m-Zuiko Digital 14-42mm	
Viewing Distance on A3: 400mm	



wbw Windle Beech Winthrop	
Dwg No.: MG – VPA	
Title: Viewpoint Analysis Viewpoint 3	
Range: 2366m	Direction: SSW
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	



PHOTO MONTAGE SPECIFICATION	
Focal Length: 42mm	
Range: 690m	Direction: NNE
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m-Zuiko Digital 14-42mm	
Viewing Distance on A3: 400mm	



wbw Windle Beech Winthrop	
Dwg No.: MG - VPA	
Title: Viewpoint Analysis Viewpoint 4	
Range: 690m	Direction: NNE
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	



PHOTO MONTAGE SPECIFICATION	
Focal Length: 42mm	
Range: 1358m	Direction: ESE
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m-Zuiko Digital 14-42mm	
Viewing Distance on A3: 400mm	



wbw Windle Beech Winthrop	
Dwg No.: MG - VPA	
Title: Viewpoint Analysis Viewpoint 5	
Range: 1358m	Direction: ESE
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	



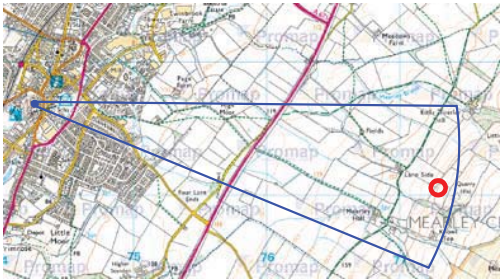
PHOTO MONTAGE SPECIFICATION	
Focal Length: 42mm	
Range: 2282m	Direction: NE
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m-Zuiko Digital 14-42mm	
Viewing Distance on A3: 400mm	



wbw Windle Beech Winthrop	
Dwg No.: MG - VPA	
Title: Viewpoint Analysis Viewpoint 6	
Range: 2282m	Direction: NE
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	



PHOTO MONTAGE SPECIFICATION	
Focal Length: 42mm	
Range: 3120m	Direction: E
Height Above Ground: 1.6m	
Date Taken: 29 Apr 2012	
Camera: Olympus EPL112.3mp	
Lens: m-Zuiko Digital 14-42mm	
Viewing Distance on A3: 400mm	



wbw Windle Beech Winthrop	
Dwg No.: MG - VPA	
Title: Viewpoint Analysis Viewpoint 7	
Range: 3120m	Direction: E
Date: 17th May 2012	
Produced by: P.Mason	
Issue Number: 1	

Appendix C – Landscape Character Area Plans

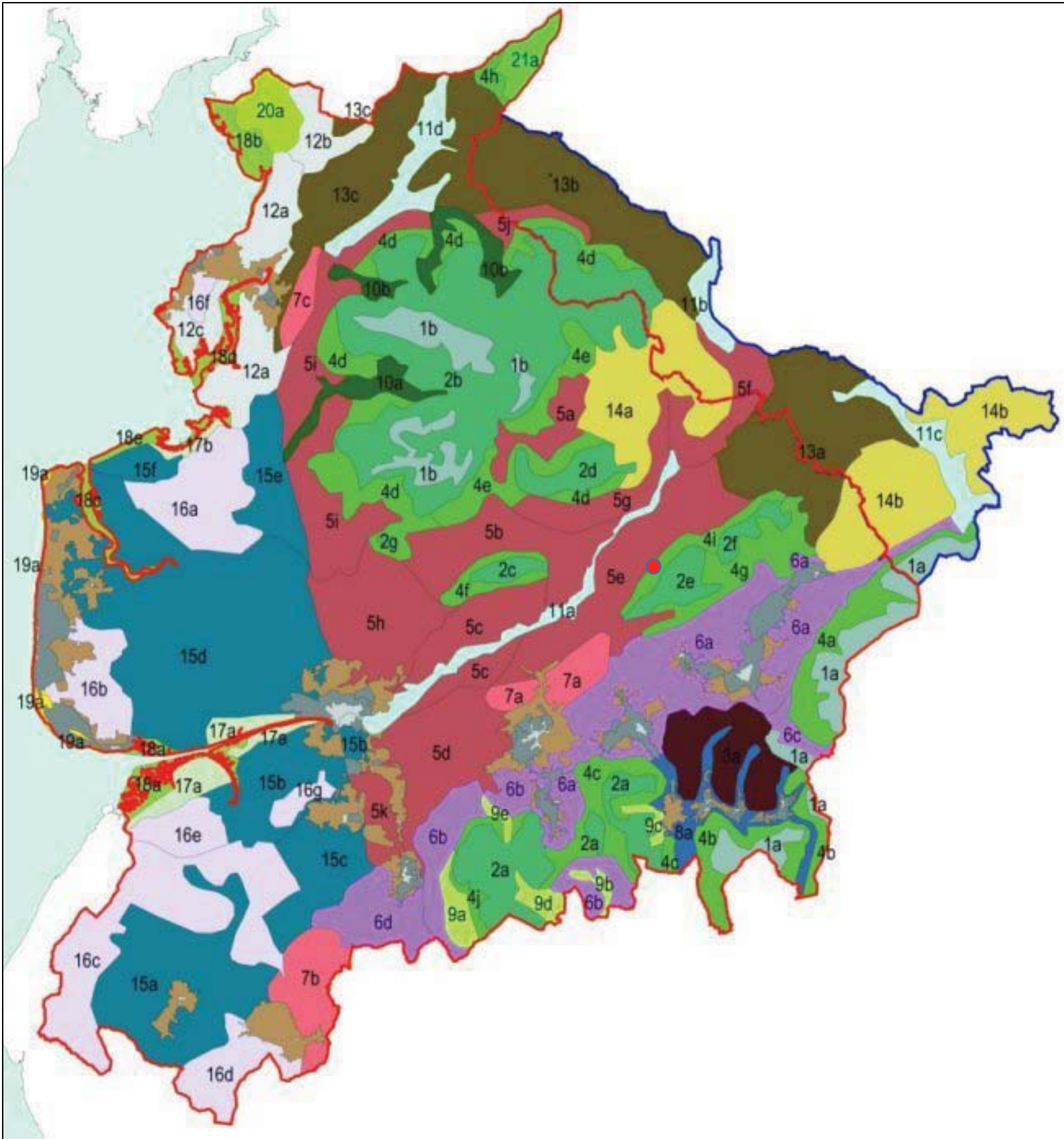


Figure 8: Landscape Character Types & Landscape Character Areas

- Lancashire County, Blackpool and Blackburn with Darwen Boundary

Craven Study Area
- Landscape Character Types & Areas

1

Moorland Plateaux

1a. South Pennine Moors

1b. High Bowland Plateaux

2

Moorland Hills

2a. West Pennine Moors

2b. Central Bowland Fells

2c. Longridge Fell

2d. Waddington Fell

2e. Pendle Hill

2f. White Moor/Burn Moor

2g. Beacon Fell

3

Enclosed Uplands

3a. Rossendale Hills

4

Moorland Fringe

4a. Trawden Fringe

4b. Rossendale Moorland Fringe

4c. Moorland Fringe

4d. Brithstone Fringes

4e. Limestone Fringes

4f. Fell Fringes

4g. Fells Fringe

4h. Fells Fringe

4i. Fells Fringe

4j. Fells Fringe

4k. Fells Fringe

4l. Fells Fringe

4m. Fells Fringe

4n. Fells Fringe

4o. Fells Fringe

4p. Fells Fringe

4q. Fells Fringe

4r. Fells Fringe

4s. Fells Fringe

4t. Fells Fringe

4u. Fells Fringe

4v. Fells Fringe

4w. Fells Fringe

4x. Fells Fringe

4y. Fells Fringe

4z. Fells Fringe
- 5

Lowland Farmland

5a. Ribblesdale and Loud Valley

5b. Ribblesdale and Loud Valley

5c. Ribblesdale and Loud Valley

5d. Ribblesdale and Loud Valley

5e. Ribblesdale and Loud Valley

5f. Ribblesdale and Loud Valley

5g. Ribblesdale and Loud Valley

5h. Ribblesdale and Loud Valley

5i. Ribblesdale and Loud Valley

5j. Ribblesdale and Loud Valley

5k. Ribblesdale and Loud Valley

5l. Ribblesdale and Loud Valley

5m. Ribblesdale and Loud Valley

5n. Ribblesdale and Loud Valley

5o. Ribblesdale and Loud Valley

5p. Ribblesdale and Loud Valley

5q. Ribblesdale and Loud Valley

5r. Ribblesdale and Loud Valley

5s. Ribblesdale and Loud Valley

5t. Ribblesdale and Loud Valley

5u. Ribblesdale and Loud Valley

5v. Ribblesdale and Loud Valley

5w. Ribblesdale and Loud Valley

5x. Ribblesdale and Loud Valley

5y. Ribblesdale and Loud Valley

5z. Ribblesdale and Loud Valley

6

Industrial Foothills and Valleys

6a. Calder Valley

6b. West Pennine Foothills

6c. Cliviger Gorge

6d. Adlington-Coppull

7

Farmed Ridges

7a. Mellor Ridge

7b. Upholland Ridge

7c. Langthwaite Ridge

8

Settled Valleys

8a. Irwell

9

Reservoir Valleys

9a. Rivington

9b. Turton-Jumbles

9c. Haslingden Grange

9d. Belmont

9e. Raddlesworth

10

Wooded Rural Valleys

10a. Wyre Valley

10b. North Bowland Valleys

11

Valley Floodplains

11a. Lower Ribble Valley

11b. Long Preston Reaches

11c. Aire Valley

11d. Lune Valley

12

Low Coastal Drumlins

12a. Camforth-Galgate-Cockerham

12b. Warton-Borwick

12c. Heysham-Overton

13

Drumlin Field

13a. Gargrave Drumlin Field

13b. Bentham-Clapham

13c. Docker-Kellet-Lancaster

14

Rolling Upland Farmland

14a. Slaidburn-Giggleswick

14b. Lathersdale and Cringles

15

Coastal Plain

15a. Ormskirk-Lathom-Rufford

15b. Longton-Bretherton

15c. Croston-Mawdesley

15d. The Fylde

15e. Forton-Garstang-Catterall

15f. Knott End-Pilling

16

Mosslands

16a. North Fylde Mosses

16b. South Fylde Mosses

16c. Martin Mere and South West Mosses

16d. Skelmersdale Mosses

16e. Tarleton Mosses

16f. Heysham Moss

16g. Hoole and Farington Mosses

17

Enclosed Coastal Marsh

17a. Clifton and Hutton Marsh

17b. Cockerham Coast

18

Open Coastal Marsh

18a. Ribble Marshes

18b. Hest Bank-Silverdale Marshes

18c. Wyre Marshes

18d. Lune Marshes

18e. Pilling and Cockerham Marshes

19

Coastal Dunes

19a. Fylde Coast Dunes

20

Wooded Limestone Hills and Pavements

20a. Arncliffe and Silverdale

21

Limestone Fells

21a. Leck Fell

Urban Landscape Types

Historic Core

Industrial Age

Suburban

Coastline

Scale approx 1:325,000 at A3 page size

Landscape Character Type: Moorland Hills
Landscape Character Area: 2e Pendle Hill

Refer to Appendix 2: Key for source of information in left hand column

Key Characteristics	Sensitivity to Wind Energy Development
PHYSICAL	High The large scale and exposed character of this landscape suggests a low sensitivity to wind energy development. The distinctive landmark outlier landform, standing above the adjacent landscape, indicates a high sensitivity. It provides a distinctive and recognisable backdrop for adjacent areas. This landscape forms part of the AONB.
Scale: Large scale	
Openness: Open. Exposed	
Landform: Millstone grit outcrop with particularly distinct landform – steep scarp to north and flat plateau top. <u>Upland rolling landform.</u>	
Landcover: Smooth, undulating surface of blanket bog. No conifer plantations.	
Complexity/ Pattern: <u>Simple</u>	
Built Environment: No quarries or communication masts. <u>Sparse settlement pattern.</u>	
PERCEPTUAL	
Sense of remoteness:	
Perception of change: Limited to recreation pressures.	
VISUAL	
Settings: Distinctive landmark for many miles around.	
Views: Stunning views from the top.	
VALUE	
Rarity. <u>Unique profile</u>	
Designated scenic quality: AONB	
Cultural associations: Beacon site in 16thC. Famous landmark. <i>Considerable evidence of settlement and land use since prehistoric times.</i> <u>Pendle Witches.</u>	
Amenity and recreation: Popular footpaths to the top.	

Scale: Where site specific sensitivities do not preclude development, scale will be determined by the extent of the appropriate location and the scale of the landscape.

Landscape Character Type: Moorland Fringe
Landscape Character Area: 4i North Pendle Fringe

Refer to Appendix 2: Key for source of information in left hand column

Key Characteristics	Sensitivity to Wind Energy Development
PHYSICAL	Moderate-High In general this landscape forms the transition between the more settled valleys and other landscapes and the high moorland and the edge landscape to the distinctive outlier of Pendle Hill. As such it shows a transition of characteristics. The relatively large scale and exposed character of this landscape suggests a modest sensitivity to wind energy development. The area forms the lower part of the visual backdrop for the adjacent areas and this elevates its sensitivity. In most cases however this Moorland Fringe landscape does not form the skyline and therefore there may be opportunities for development within these areas. Such development would be backclothed by the higher parts of this character area and the Moorland Plateaux and Hills above, reducing its sensitivity. This area is within the AONB and this reflects the visual quality of the landscape and its elevated sensitivity.
Scale:	
Openness: <i>Enclosed – transitional between moorland and lowland farmed landscapes</i>	
Landform: Smooth landform.	
Landcover: <i>Unimproved agricultural grassland. Tree cover sparse</i>	
Complexity/ Pattern: <i>Dry stone walls - Characteristic diverse pattern.</i>	
Built Environment: Rural character – sheltered from urban influence by Pendle Hill. <i>Distinctive vernacular architecture.</i> More rural character than South Pendle Fringe.	
PERCEPTUAL	
Sense of remoteness: <i>Remote character</i>	
Perception of change: <i>Marginal farms have been abandoned.</i>	
VISUAL	
Settings: <i>Vertical components in the landscape could be silhouetted against the moorland skyline beyond.</i>	
Views: <i>Elevated and often long distance views from lay-bys and viewpoints.</i>	
VALUE	
Rarity:	
Designated scenic quality: Most in AONB	
Cultural associations: <i>Archaeological interest well preserved. Historic boundary walls.</i>	
Amenity and recreation: <i>Trackways and Packhorse Ways provide for informal recreation.</i>	

Scale: Small and possibly medium scale.

Landscape Character Type: Moorland Hills
Landscape Character Area: 2e Pendle Hill

Refer to Appendix 2: Key for source of information in left hand column

Key Characteristics	Sensitivity to Wind Energy Development
PHYSICAL	High The large scale and exposed character of this landscape suggests a low sensitivity to wind energy development. The distinctive landmark outlier landform, standing above the adjacent landscape, indicates a high sensitivity. It provides a distinctive and recognisable backdrop for adjacent areas. This landscape forms part of the AONB.
Scale: Large scale	
Openness: Open. Exposed	
Landform: Millstone grit outcrop with particularly distinct landform – steep scarp to north and flat plateau top. <u>Upland rolling landform.</u>	
Landcover: Smooth, undulating surface of blanket bog. No conifer plantations.	
Complexity/ Pattern: <u>Simple</u>	
Built Environment: No quarries or communication masts. <u>Sparse settlement pattern.</u>	
PERCEPTUAL	
Sense of remoteness:	
Perception of change: Limited to recreation pressures.	
VISUAL	
Settings: Distinctive landmark for many miles around.	
Views: Stunning views from the top.	
VALUE	
Rarity. <u>Unique profile</u>	
Designated scenic quality: AONB	
Cultural associations: Beacon site in 16thC. Famous landmark. <i>Considerable evidence of settlement and land use since prehistoric times.</i> <u>Pendle Witches.</u>	
Amenity and recreation: Popular footpaths to the top.	

Scale: Where site specific sensitivities do not preclude development, scale will be determined by the extent of the appropriate location and the scale of the landscape.