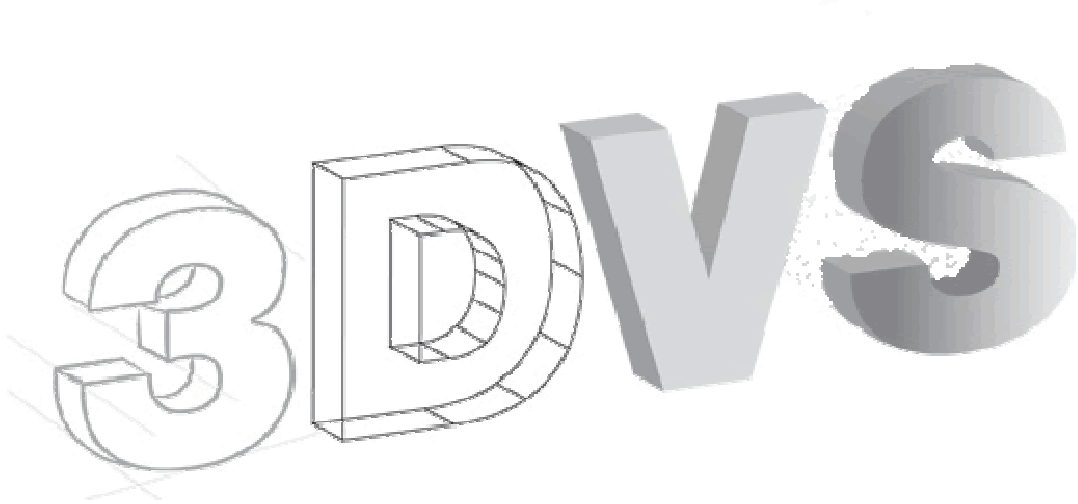

Landscape and Visual Impact Assessment of a single Endurance E3120 Wind Turbine 24.6m to hub on land at Westfield Farm, Royd Moor Lane, Penistone, South Yorkshire.

August 2015

This report is prepared in accordance with the guidelines in 'Guidelines for landscape and Visual Impact Assessment. Published by The Landscape Institute & The Institute of Environmental Management & Assessment ' 3rd Edition & 'Visual Representation of Windfarms: Good Practice Guide'. Published by Scottish Natural Heritage and other guidance

Contents

Supplementary Documentation

1. Introduction

It is accepted that the consequence of locating a wind energy development is that it will have impact and resultant degrees of effect on landscape, the landscape & visual amenity, neighbouring landscape character areas and the receptors therein.

The aim of the Landscape and Visual Impact Assessment is to identify, analyse and report all predicted effects caused by the proposed wind energy development upon a baseline area. Potential effects resulting from the construction and operation of a wind energy development are dependent on the scale of development, site specifics and the characteristics/sensitivity of area receptors. The study and assessment of all potential effects is to enable identification and rating of predicted effects:

Assessment of landscape effects considers:

- Elements: Individual landscape components (e.g. hills, trees, buildings) which are quantifiable and easily described
- Characteristics: Combination of elements that contribute to the character and area;
- Character; The distinct and recognisable pattern of landscape elements that occur consistently in a particular type of landscape and how this is perceived by people. It reflects the particular combination of geology, landform, vegetation, land use and settlement pattern. Each character area has a particular distinctiveness and 'sense of place' and can be appraised at a range of scales (national, regional, district and local).

Visual Impact is very much a subjective issue. What some people may class as an intrusive and significant visual impact, others may see the opposite. Methods, techniques, assessment and presentation are constantly evolving. Each LVIA should be assessed on its own merits and it should be proportionate to the size and scale of the project.

3DVS have undertaken this LVIA study which is intended to form part of an application for the determination of the erection of one Endurance E3120 wind turbine 24.6m hub on land at Westfield Farm, Thurlstone. The report identifies the impact of this turbine on the receiving landscape through photography and other methods.

Turbine Grouping is classified as the following:

Single	1 Turbine
Small Group	Up to 3 Turbines
Small Wind Farm	Up to 5 Turbines
Medium Wind Farm	6 to 10 Turbines
Large Wind Farm	11 to 20 Turbines
Very Large Wind Farm	21 to >30 Turbines

Continued on Page 4

Turbine Size is classified as the following:

Very Small	25m or less to Blade Tip (approx power = 12Kw)
Small	25 to 50m to Blade Tip (approx power = 0.50KW)
Medium	50 to 90m to Blade Tip (approx power = 1MW)
Large	90 to >130m to Blade Tip (approx power = 2.5MW >)

This Landscape and Visual Impact Appraisal (LVIA) are intended to support the planning application for a single wind turbine on land at grid reference: 422650, 403885.

The aim of this report is to assess the significance of effect of the proposed development upon landscape character and visual amenity. This assessment has been made via a process of systematic classification based on a series of criteria which are detailed within Section 3 of this document and with regard to extant good practice guidance on the preparation of landscape and visual impact assessments, landscape character assessments and the visual representation of wind energy developments.

In summary this report will:

Identify and describe the character and sensitivity of the receiving landscape

- Identify and describe a series of visual amenity receptors within the landscape
- Describe the magnitude of impact and significance of effect on landscape character and the selected visual amenity receptors.
- Provide conclusions on the overall landscape and visual effects of the proposed development.

The existing condition of landscape character and of the visual amenity receptors assessed has been established through a process of desk top and site surveys. Reference has been made to a range of material including:

- Ordnance Survey map data
- Natural England. National Character Area Profile 37: Yorkshire Southern Pennine Fringe
- Barnsley Borough Landscape Character Assessment (2002)

2. Proposed Development

The proposed development would consist of a single 3 bladed wind turbine; 24.6m to hub height. This type of turbine is considered by wind industry experts and landscape planning professionals to be small in scale.

The wind turbines would be light grey in colour. The coatings of the turbine blades, hub, nacelle and tower have been carried out to industry standards in order to minimise reflected light. A small cabinet would be installed at the base of the turbine tower to house the turbine control system.

Continued on Page 5

All cables linking the proposed turbine to the National Grid would be buried. Temporary tracks would be created to support traffic access over the brief construction phase. These would then be removed with no resultant loss of land or land use. The proposal would have a lifespan of 25 years after which the turbine could be removed, the foundations grubbed up and the land returned to its former use.

The precise siting of the proposed turbine has been carefully selected, balancing considerations such visual impact, optimum exploitation of the wind resource, ease of grid connection and ease of access.

As a useful comparison, the table below shows the heights of other commonly found infrastructures.

Landscape Element	Typical Height (m)
Single Storey House	5
Two Storey House	8.5 - 10
Farmyard Grain Silo	10
Telegraph Pole	10.5
Mature Tree	15
Pylon	35 - 50

3. Landscape & Visual Impact Assessment

3.1 Landscape Character and Sensitivity Assessment

3.1.1 Methodology

This section of the report sets out the predicted significance of effect of the proposal on landscape character.

Landscape character is an amalgamation of natural, aesthetic, perceptual and cultural factors all of which combine to create a common 'sense of place' which can be used to categorise the landscape into definable units at the local, regional and national level.
Due to the small scale of the proposed turbines, the scope of the landscape character and sensitivity assessment will be limited to this LCT.

Landscape Resources are defined as:

Landscape Fabric	Physical landscape elements present within the landscape such as landform, land cover, boundary features, trees and woodland, that make up the landscape we see, and that may be affected during the construction and operation of the proposed development
Landscape Character	The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas of the landscape
Landscape Quality (or condition)	A term based on judgements about the physical state of the landscape, and about its intactness, from visual, functional and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place.

Table Continued on Page 6

Landscape Value	The intrinsic value that is attached to a landscape, often (but not always) reflected in designation or recognition. It expresses national or local consensus as to the (degree of) importance of a landscape, for reasons including landscape quality, scenic (or visual) quality, wildness and tranquillity, natural and cultural heritage interests, cultural associations and recreational opportunities.
Amenity	The benefits afforded to people by a particular area in terms of what is seen and experienced. Amenity includes not just visual amenity and views but also the experience of landscape in its widest sense. Different groups of people such as walkers, residents and motorists may have different amenity expectations.

For the purpose of this proposal an assessment of landscape quality has been carried using the following criteria:

- Derelict means land so damaged by industrial or other development that it is incapable of beneficial use without treatment.

The landscape is classed as: Good Landscape.

Note: The criteria used in the analysis of landscape quality are related to landscapes in the local context. Areas of landscape quality do not necessarily correlate directly with landscape character areas or statutory designated sites as defined by the statutory agencies or local planning authorities.

The sensitivity of a landscape varies according to its key characteristics and the values placed on these. Table A sets out the proposed approach to determining sensitivity within the landscape unit identified. The assessment of each characteristic may produce conflicting results therefore a degree of professional judgement has been used to determine the overall sensitivity of landscape character as being Very High, High, Medium or Low.

Study Area

The extent of the study area for this landscape assessment has been set at a 5km radius from the turbine blade tip; this reflects the limit of potential visual significance for this specific single turbine proposal. Visual impacts beyond 5km are not considered to be significant given the small scale of the proposed turbine and the constraints of landform and vegetation cover.

A ZTV drawing has been prepared for the 5km study area and this is presented in supplementary documentation. The 5km study area is divided into three zones of visibility marked by concentric circles:

- ZONE 1: Visibility within 1000m radius of the proposed turbine (Near Distance Views)
- ZONE 2: Visibility between 1000m and 2500m of the proposed turbine (Middle Distance Views)
- ZONE 3: Visibility between 2500->5000m of the proposed turbine (Far Distance Views)

This theoretical zone of visibility takes the screening effect of topography into account but not that provided by structures or land cover; it therefore offers a worst case scenario assessment.

Continued on Page 7

Key Characteristic	Attributes likely to indicate higher sensitivity to wind energy development		Attributes likely to indicate lower sensitivity to wind energy development
Landform and Scale	Complex, dramatic or rugged landform. Small-scale landform/ landcover/built development		Simple, smooth and convex or flat and uniform landform. Large-scale landform/land cover/built development
Landcover	Complex or irregular land cover patterns/smaller field sizes		Simple, regular patterns with sweeping lines and extensive areas of consistent ground cover
Skylines	Prominent, undeveloped or distinctive skylines with important landmark features.		Landscape with no prominent or low skylines with no distinctive backdrop or context
Human Influence	Perceived 'wild' landscapes absence of man-made elements, buildings or structures, traditional or historic settlements		Frequency of man-made elements (e.g. utility infrastructure or industrial elements), brownfield or industrial landscapes, landscapes already affected by built and contemporary structures (e.g. pylons, masts, cranes, silos) provided there are no visual conflicts where the structures are seen in close proximity to one another
Perceptual Qualities (Remoteness/Tranquillity)	Physically or perceptually remote, peaceful or tranquil, little or no evident movement		Close to visible audible signs of human activity, prominent movement
Visibility and views	Extensive close and mid-range views from scenic routes, well-known tourist viewpoints.		Landscapes visually contained by topography, buildings, trees or woodlands with limited inward and outward views
Scenic Quality	Landscapes of distinctive character valued for their high scenic quality. Nationally designated landscape.		Landscape of low-medium scenic quality unlikely to have a scenic quality designation

Table A: Criteria for Assessing Landscape Sensitivity to Wind Energy Development

Continued on Page 8

The magnitude of predicted landscape change within the landscape unit identified is based on the criteria set out in Table B.

Magnitude	Description
Very Large	The development would form a dominant landscape element or would result in a total loss or major change to key landscape characteristics.
Large	The development would form a prominent landscape element, or would result in a substantial alteration to key landscape characteristics.
Medium	The development would form a conspicuous landscape element or would result in a partial loss of or alteration to key landscape characteristics.
Small	The development would form an apparent, small landscape element or would result in a minor alteration to key landscape characteristics.
Very Small	The development would form an inconspicuous minor landscape element, or would result in a very minor alteration to key landscape characteristics.
Negligible	The development would be a barely perceptible landscape element, or would not change the key landscape characteristics.

Table B: Definition of Magnitude of Change (Landscape)

The significance of landscape effect has been determined by assessing landscape sensitivity against magnitude of change (as set out in Tables A and B above). The outcomes of this assessment are set out in Table C. Table C is given as a guide only and the final assessment of significance of landscape effect may take into account any modifying factors based on professional judgement.

Magnitude of Change	Sensitivity			
	Very High	High	Medium	Low
Very Large	Major	Major	Major	Major/Moderate
Large	Major	Major	Major/Moderate	Moderate
Medium	Major	Major/Moderate	Moderate	Moderate/Minor
Small	Major/Moderate	Moderate	Moderate/Minor	Minor
Very Small	Moderate	Minor	Minor/Negligible	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Table C: Significance of Landscape and Visual Effects

Continued on Page 9

High	Total loss of or major alteration to key elements/features/characteristics of the baseline i.e. pre-development landscape or view and-or introduction of elements that may not be uncharacteristic when set within the attributes of the receiving landscape
Medium	Partial loss of or alteration to one or more key elements/features/characteristics of the baseline i.e. pre-development landscape or view and-or introduction of elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape.
Low	Minor loss or alteration to one or more key elements/features/characteristics of the baseline i.e. pre-development landscape that may not be uncharacteristic when set within the attributes of the receiving landscape
Negligible	Very minor loss or alteration to one or more key elements/features/characteristics of the baseline is. pre-development landscape or view and-or introduction of elements that are not uncharacteristic with the surrounding landscape e.g. a 'no change' position

Table D: Determination of magnitude of impact on landscape

The proposal is located in National Character Area: 37 Yorkshire Southern Pennine Fringe

The key characteristics for NCA 37 are:

A transitional landscape dissected by steep-sided valleys, dropping from the high gritstone hills in the west to lower land in the east, and thus creating an important backdrop to the many industrial towns and villages within and beyond the NCA.
Sandstones and gritstone beds of Millstone Grit (Namurian) age underlying smooth hills and plateaux in the west. These are overlain in the east by beds of sandstone, siltstone and mudstone of Coal Measures age.
Rivers creating a deeply dissected landscape, with high plateaux cut by steep-sided valleys, and fanning out in ‘fingers’ across valleys of the NCA.
Treeless hill tops with tracts of rough grazing and extensive areas of enclosed pasture to the west, but with broadleaved woodland on steeper valley sides, giving the impression of a well-wooded landscape, especially to the north and west of Sheffield.
Predominantly pastoral farming, especially in western areas, with a shift to more arable land in the drier eastern areas.
Boundary features that change from distinctive patterns of drystone walls on the upland hills, to hedgerows becoming the predominant field boundary in the east.
Close conjunction between rural landscapes and the rich industrial heritage of the urban areas, including settlements associated with the textile industry, with large mills and tall chimneys, and large factories and forges associated with the iron, steel and manufacturing industries.
Urban development constrained within valley floors and up side slopes, with location and layout strongly influenced by the landform.
Industrial wealth revealed in magnificent civil architecture in town centres, notably Bradford, Halifax, Huddersfield and Sheffield, and several stately homes with designed parklands.
Evidence of bronze-age and Roman habitation still present on uplands, and old pack-horse routes that once joined settlements across the Pennines still in place, or now forming modern major road routes.

Table Continued on Page 10

Extensive and dramatic views from higher land out over lower-lying land to the east, even from within urban areas.
Several reservoirs contained within narrow valleys contributing a distinct character as well as providing popular places to visit.
Small patches of fragmented priority habitats providing important refuges locally for wildlife. Grassland mosaics are particularly important in supporting waders and the twite that breeds on adjacent moorland areas; lowland woodland is also an important feature.
In places a dense network of roads and urban development, with many road, rail and canal routes crossing the NCA, and a high density of footpaths throughout.

The document Barnsley Landscape Character further defines the area as F2: Penistone Upland Farmland and the key characteristics are:

Stepped landform rising to 364m at Hartcliffe Hill
Fields of pasture comprising small to medium geometric field units strongly defined by distinctive stone walls.
Linear or circular beech plantations stand out on the skyline, sometimes enclosed by stone walls
Unimproved pasture with scrub on steeper slopes
Scattered farmsteads of local light coloured stone.
Penistone is the largest settlement in the area, lying on the edge of the Don Valley. Isolated trees form silhouettes against the skyline.
Pylons and power lines are visually prominent on the skyline.
Single lane rural roads criss-cross the open countryside, bounded by stone walls
Disused industrial quarries, shafts and mines indicate the historical importance of the area for the extraction of coal and stone
Panoramic views over adjacent river valleys and towards the open moorland of the Peak.
The western boundary of the area is defined by the open Moorland of character area *Thurlstone and Langsett Unenclosed Moorland.*
The underlying solid geology of this area is formed by complex beds of the Lower Carboniferous, comprising bedded sandstones, shale's and mudstones with intermittent coal seams. The area has an upland character which is enhanced by its proximity to and views across unenclosed Moorland.

3.2 Landscape Impact Assessment

Baseline Description

3.2.1 Immediate Site

The site of the proposed development is situated to the west/northwest of Westfield Farm. The proposal stands at 422650, 403885 at an AOD of approximately 252m on land which slopes to the northeast. The topography of the proposed site area is one of irregular shaped fields bounded by natural drystone walls.

The geology of the immediate area is: Bedrock; Pennine Lower Coal Measures, Mudstone, Siltstone, Sandstone, Coal, Ironstone and Ferricrete. Superficial Deposits: Alluvium, Silt and Sand.

Continued on Page 11

3.2.2 Wider Area

The application is near to the settlements of Thurlstone – 735m to the southeast and Millhouse Green 836m to the southwest, an area known as Top o'th' Town is 574m to the east. The wider landscape and views are dominated by three commercial wind farms; Spicer Hill, Roydhouse Moor and Broadstone Edge. The landscape to the south is pre-dominantly pastoral with little built form the exception being Royd Moor Farm & Royd Moor House.

3.2.3 Major Roads and Public Rights of Way

Nearby public highways are the A628 which is 930m to the south. The B6462 is 1.45km to the northeast. The A629 1.44km to the northeast.

There are PRoW's which pass through the site. There is a footpath leading off Westfield Ave, 241m to the southeast. With other footpaths to the east from Royd Moor Rd into a residential area known as Top 'o the town. The Trans Pennine Trail is 794m to the southeast. The Penistone Boundary Walk to the north is 748m at its nearest point.

3.2.4 Cultural Heritage

Examination of the OS1:25k local map indicates no archaeological surface or sub-surface assets nearby. Examination of English Heritages Web Site shows no assets nearby. Although there are listings for properties along Towngate in Thurlstone.

3.2.5 National/International quality effects

The Baseline assessment using MagicMap reveals that the site is ~3.7km north east of the Peak Park, but not near any other statutorily protected areas, planning zones or other features of National or International significance and therefore at this level the proposal will not cause any likely adverse or beneficial effects at this level. Due to elevation differences the turbine is not seen from the Peak Park. Impact at this level though is considered to be Negligible.

3.2.6 Regional quality effects.

The site is not near any Local Nature Reserves, or any other local landscape designations. There is no impact.

3.2.7 Local & Site Level effects

3.2.7.1 Landform

The site is situated on a sloping north-northeast facing hillside, field pattern is generally regular. There are a number of large windfarms to the northwest. The introduction of this application will not severely effect the landform. The landscape can accommodate this proposal, without detrimental effect.

3.2.7.2 Land Use

The small footprint of the proposed turbine base and other associated infrastructure will allow the continuous, almost uninterrupted use of the surrounding land. Land use impact is negligible

3.2.7.3 Land Cover

The small footprint of the turbine platforms and infrastructure will not have a significant impact on the Land Cover it is therefore considered to be negligible

3.2.7.4 Landscape Features

Grassland/Pasture	Negligible. The small footprint of the turbine base would have a minimal reduction in farm resource
Woodland	No Impact. The siting of the turbine and other infrastructure - permanent & temporary will avoid any impact on existing trees or woodland
Hedgerows	Negligible. The siting of the proposal and other associated infrastructure will avoid impact on existing hedgerows as the field boundaries are natural stone walls. There may be some removal of these boundary walls to create access roads. Impact will be moderate as these alterations are reversible.
Wetland/Marsh/ Watercourses	Not applicable. There are no streams or wetland areas within the site boundary. The nearest is water bodies Royd Moor Reservoir to the northwest and Scout Dike Reservoir to the northeast.

3.3 Landscape Character

Wind turbines are by scale and nature discordant features to place in any landscape, however the accepted need for renewable energy from wind power is making their presence in rural and other landscape more visually acceptable. There are a number of other wind turbines of comparable scale to the north and northwest, including the three large commercial wind farms at Spicer Hill, Royd House Moor & Blackstone Edge. In this context the overall effect of introducing this small scale turbine into a generally agricultural landscape would be low to moderate

3.3.1 Landscape Quality (Short Term)

The proposal and its infrastructure will not result in any loss or alteration to any of the key elements, features, characteristics of the baseline existing landscape and view. A newly built turbine would be relatively prominent, but not a unique element in this landscape or in the wider region.

3.3.2 Landscape Quality (Long Term)

In the long term, the implications of the proposal, which will present few opportunities to mitigate against indicates that the longer term effect would continue to be Medium although their may be an increase in the number of similar structures over a wider area of the landscape. The structures would become more accepted visually into the landscape e.g. as in the case of the many pylons and associated linear features that criss cross the area and would become a mature feature eventually being removed after a period of approximately 25 - 30 years.

3.3.3 Summary

In summary it is felt that given the Medium value and Moderate sensitivity of the receiving landscape with very few significant natural or built features which would be affected and the extremely compact footprints of the turbine developments and infrastructure would, overall, have no more than a Medium impact on the landscape and quality.

3.4 Visual Impact Assessment

This is an LVIA Report for one small wind turbine. It is not a utility scale turbine and should not be considered as such, it is not the subject of a full EIA.

3.4.1 Methodology

This section of the report considers the sensitivity of change of selected viewpoints in the landscape surrounding the proposal. Due to the small scale of the proposed wind turbine, a study area extending to a 5km radius has been adopted for the visual impact assessment.

Because of the siting of the turbine in the landscape and major differences in topography and access, viewpoints to the site are limited. These viewpoints were chosen to provide illustrative near (within 1000m), Middle (1000m-2500m) and Far (2500-5000m) distance views of the proposal.
By examining the ZTV 7 viewpoints were identified that would represent the site in its environment, additionally a further 4 images were taken to comply with a request by the LPA in regards to views from nearby properties, these images are also supported by aerial views from Google Earth.

See supplementary documents.

For each viewpoint a wire frame drawing and corresponding photomontage visualisation has been prepared. This has been done using Resoft Ltd's WindFarm software. This software uses a 3D DTM model of the existing landscape derived from OS Landform Panorama data based on a 50m grid and 10m contour intervals. The software is used to create a 3D model of the proposed wind turbine using turbine grid coordinates and specified turbine geometry. Specified viewpoint coordinates direction of view and horizontal field of view data were used to generate wireframe views of the proposed turbine within the existing landform.

To create the photomontage visualisations single images on a flat plane projection are imported into the software and aligned to the corresponding wire frame drawing. To aid alignment, geographic features in the image are matched with the corresponding coordinates of those features on the base map.

Viewpoint photographs were taken in February 2015 using a Digital SLR Camera fitted with a 50mm equivalent lens & the viewpoint location data logged with a Garmin Montana 650t GPS. Conditions on the day were excellent.

For all photomontages there is an element of judgement, the finished image is only intended as a representation of the likely appearance of the proposed development.

The assessment of the sensitivity, magnitude of change and significance of effect for the selected viewpoints has been conducted using the criteria set out in Tables D, E and F. Table F is given as a guide only and the final assessment of significance of visual effect may take into account any modifying factors based on professional judgement. The conclusions of the visual assessment are set out in section 3.4.2 below.

[1] Multiple images stitched together to create a panoramic view have not been used.

Continued on Page 14

Typical Visual Receptors	Sensitivity
Locations defined by special interest in the available view: Promoted viewpoints. Special tourist or visitor locations. Recreational hilltops and peaks.	Very High
Visual receptors with a particular interest in their surroundings or prolonged viewing opportunities. Residential locations within 1km of the proposal. Special visitor or recreational sites. Nationally or locally recognised footpaths and cycleways. Recognised scenic drives or promoted tourist routes.	High
Visual receptors with a general interest in their surroundings or with transient viewing opportunities. General footpaths. Residential locations over 1km from the proposal. Residential and local roads. Public spaces.	Medium
Visual receptors with limited or passing interest in their surroundings. Views from places of work. Indoor facilities. Users of A-roads and trains.	Low

Table D: Visual Receptor Sensitivity Criteria

Magnitude	Description
Very Large	The development would form a dominant element of the view dramatically altering its overall quality and character. Dominating and controlling the view.
Large	The development would form a prominent element within the view resulting in a prominent change to its overall quality and character. Standing out, striking.
Medium	The development would form a conspicuous element within the view resulting in conspicuous change. Distinct, noticeable.
Small	The development would form an apparent small element within the view without affecting the overall quality or character of the view. Evident.
Very Small	The development would form an inconspicuous minor element within the view, without affecting the overall quality or character of the view. Not obvious, lacking definition.
Negligible	The development would result in a barely perceptible change in the view, or would cause a 'no change' situation to the existing view. Weak, not legible.

Table E: Definition of Magnitude of Change (Visual)

Magnitude of Change	Sensitivity			
	Very High	High	Medium	Low
Very Large	Major	Major	Major	Major/Moderate
Large	Major	Major	Major/Moderate	Moderate
Medium	Major	Major/Moderate	Moderate	Moderate/Minor
Small	Major/Moderate	Moderate	Moderate/Minor	Minor
Very Small	Moderate	Minor	Minor/Negligible	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Table F: Significance of Visual Effects

3.4.2 Viewpoint Assessment

The following conclusions should be read in conjunction with the photomontage and wire frame visualisations presented in supplementary documents.

Viewpoint 1:
Royd Moor Rd. E/N: 422973 403916. Distance: 332m Direction: 259 deg. Elevation: 238m
Existing View
Looking out over a gently rising landscape containing a few isolated trees. Field enclosures are natural stone walls with some evidence of pole & wire fencing. The ridgeline shows a series of HV structures and associated linear features.
Predicted View with Operational Wind Turbine
The proposal will be seen as a new vertical structure in the landscape from the roadside. The upper parts of the turbines geometry will pierce the skyline.
Type and Sensitivity of Visual Receptor
Receptors: Vehicles on Royd Moor Rd, views to vehicles will be in the main 'oblique' or angled to the line of travel. There may be views to some properties along Windsor Ave. See separate discussion and images. Sensitivity: Medium>High. Visual receptors with a general interest in their surroundings or with transient viewing opportunities. General footpaths. Residential locations over 1km from the proposal. Residential and local roads. Public spaces.
Magnitude of Change to Baseline View
Large: The development would form a prominent element within the view resulting in a prominent change to its overall quality and character. Standing out, striking. There few other vertical structures seen from this view direction.
Assessed Significance of Visual impact
High.

Viewpoint 2:
Royd Moor Rd & PRoW. E/N: 422415 404147. Distance 361m. Direction: 142 deg. Elevation 262m
Existing View
Looking southeast from an area around Royd Moor House and Royd Moor Farm. The landscape slopes down dip from right to left. Westfield Farm is clearly seen. Whilst field boundaries are of natural stone their size and shape are weakly defined. The background landscape in the middle distance gradually rises, showing areas of woodland on its lower slopes with urbanisation on the middle ridgeline. The far distant ridgeline is occupied by HV pylon systems which can be seen clearly piercing the skyline.
Predicted View with Operational Wind Turbine
The proposed turbine will be seen predominantly against the background landscape. The lower parts being masked by walls, with only the upper half of the blade rotation being seen against the skyline.
Type and Sensitivity of Visual Receptor
Receptors: Vehicles and users of the Prow – an offshoot of the Penistone Boundary Walk. Sensitivity: High to the users of the footpath due to the length of view.
Magnitude of Change to Baseline View
Medium; The development would form a conspicuous element within the view resulting in conspicuous change. Distinct, noticeable.
Assessed Significance of Visual impact
High

Viewpoint 3:
Spicer House Lane. E/N: 421603, 404227. Distance: 1109m. Direction: 109 deg. Elevation: 252m
Existing View
A long distance panoramic view showing the full extent of the landscape character of the area. The urban settlement of Penistone and its viaduct are clearly seen. Field systems are of varying sizes, enclosed by natural stone walls, common in this area. Isolated pockets of woodland are seen at varying distances. HV infrastructure can be seen on the hillside above Penistone.
Predicted View with Operational Wind Turbine
The predicted view and landscape character will remain the same as the existing view. Only the very upper portions of the proposal may be visible, due to elevation differences and masking offered by local dry stone walls.
Type and Sensitivity of Visual Receptor
Receptors: Road Users, walkers in the area. Sensitivity: Low; Visual receptors with limited or passing interest in their surroundings. Views from places of work. Indoor facilities. Users of A-roads and trains.
Magnitude of Change to Baseline View
Negligible. The development would result in a barely perceptible change in the view, or would cause a 'no change' situation to the existing view. Weak, not legible.
Assessed Significance of Visual impact
Zero

Viewpoint 4:
Scout Dike Reservoir, recreational area. E/N: 423548, 404860. Distance: 1346m. Direction: 221 deg. Elevation: 223m
Existing View
Looking out over Scout Dike Reservoir. The view is pastoral, fields are predominantly rectilinear in shape, enclosed by natural stone walls. The greater part of the ridgeline has no vertical structures. Small areas of woodland are seen. Isolated trees are seen on the edges of the fields. There is no built from to be seen. The far horizon is the Peak Park.
Predicted View with Operational Wind Turbine
The existing view will not alter to any great extent. Only the upper parts are predicted to be seen and maybe partially screened by vegetation seen on the ridge line.
Type and Sensitivity of Visual Receptor
Receptors: Those using the reservoir for fishing. Users of the footpath around the reservoir. On the opposite bank of the reservoir is the Penistone Boundary Walk. It is unlikely that the proposal will be seen due to the rising terrain to the southwest. Sensitivity: High, defined as; Visual receptors with a particular interest in their surroundings or prolonged viewing opportunities. Residential locations within 1km of the proposal. *Special visitor or recreational sites.* Nationally or locally recognised footpaths and cycle ways. Recognised scenic drives or promoted tourist routes.
Magnitude of Change to Baseline View
Small: The development would form an apparent small element within the view without affecting the overall quality or character of the view. Evident.
Assessed Significance of Visual impact
Slight.

Viewpoint 5:
A629. E/N: 425703, 404347. Distance: 3094m. View direction: 271 deg. Elevation: 259m
Existing View
A long distance, panoramic view showing the full landscape character of the area. We see a mixture of agricultural land transitioning into the urban landscape around Penistone. The landscape & view is dominated by the commercial windfarms at Spicer Hill, Royd Moor & Broadstone Edge. In the far distance an area of the Peak Park can be seen.
Predicted View with Operational Wind Turbine
The baseline view and landscape will remain as is. The proposal will be seen as a small feature to the left of the image. It is against the backcloth of the rising landscape and does not pierce the skyline.
Type and Sensitivity of Visual Receptor
Receptors: Road users along the A629. Views will be perpendicular to the line of travel. Sensitivity: Low; Visual receptors with limited or passing interest in their surroundings. Views from places of work. Indoor facilities. Users of A-roads and trains.
Magnitude of Change to Baseline View
Small: The development would form an apparent small element within the view without affecting the overall quality or character of the view. Evident.
Assessed Significance of Visual impact
Slight.

Viewpoint 6:
Mortimer Rd. The viewpoint is from within the Peak Park. Distance to site = 2993m, bearing 45 deg north-east. 305m AOD.
Existing View
This is a far distance view. It was taken from within the Peak Park. We see a rising landscape with large areas of woodland on its slopes. Field systems are regular in shape. The skyline is dominated by a number of pylons. An existing turbine can be seen with its base slightly below the ridge line.
Predicted View with Operational Wind Turbine
The proposal will be seen in combination with the existing wind turbine of similar manufacture. The upper arts of the proposal will be seen on the skyline with its lower portions placed against the backcloth of woodland. However the more dominant features on the skyline are the pylons.
Type and Sensitivity of Visual Receptor
Medium; Visual receptors with a general interest in their surroundings or with transient viewing opportunities. General footpaths. Residential locations over 1km from the proposal. Residential and local roads. Public spaces.
Magnitude of Change to Baseline View
Medium; The development would form a conspicuous element within the view resulting in conspicuous change. Distinct, noticeable
Assessed Significance of Visual impact
Moderate

Viewpoint 7:
PRoW; E/N: 422550, 403574. Distance:302m Direction 30 deg. Elevation: 271m
Existing View
This final viewpoint is from the footpath which passes between Westfield Drive, The farm and Thurlstone. The photo is taken from an elevated position in the landscape above the farm. We see an agricultural setting with residential properties in the area known as 'Top 'o the Town visible in the middle are of the view. Dry stone walls in a poor state of repair bound the path. The view in the near distance is dominated by a small group of trees.
Predicted View with Operational Wind Turbine
The baseline view will not be significantly altered. The proposal is seen to the left hand side of the image partially screened by trees. It should be noted that this screening/masking will vary depending on season. It is predicted that during the summer months the proposal will have less of an impact to the amenity of the footpath than in say the winter.
Type and Sensitivity of Visual Receptor
Receptors: Users of the footpath. Sensitivity: High.
Magnitude of Change to Baseline View
Medium; The turbine is partially screened from this static position. The proposal will be lost to view as users move southeast towards High Bank Lane, views from the area around High Bank Lane are dependent on the screening offered by the dry stone walls and the old quarry.
Assessed Significance of Visual impact
High

Concerns were raised by the Case officer for the LA with regards to views from some residential properties. A series of photographs were taken and these are discussed below – see supplementary documents.

1. View from the area of Westfield Ave.

Westfield Ave consists of two types of property:

1. Bungalows
2. Standard two storeys, semi-detached properties.

The proposed site is 248m to the northwest of the photo location as shown on the supplied additional Google Earth image.
Views from the position of the photomontage as looking towards the site are masked by Farm Buildings to such an extent where only the upper part of the turbine will be seen.

This view will alter depending on the viewer's local position due to elevation changes, in particular when moving down Westfield Lane to its junction with Royd Moor Rd.

Views from the two storey semi-detached properties are limited to the rear upper floor areas and are at an angle to the site.

Only two blocks of bungalows will have views to the site; again these views are highly restricted due to viewing angle and masking.

Continued on Page 19

Visual impact will be slight to moderate due to this masking.

Further representations were received from:

14 Roydmoor Court
17 Windsor Ave
Folly Barn

A site visit took place on Tuesday 12th March 2013 to examine the objections in the 'field'.

A number of photographs were taken during the site visit as well as a desktop examination and assessment of the site objections using Google Earth and Google Street View.

The following observations were made:

14 Roydmoor Court.

Distance to site = 348m.
Direct or Primary View line of sight bearing = 263 deg
Line of sight bearing to turbine site = 280 deg

Site description:

Views to the site from 14 Roydmoor Court are not direct and are masked by the numerous mature trees and hedge lines on the property. Views to the site are also further reduced by the buildings and silo on the farm. It should also be noted that the house sits slightly lower than the surrounding terrain, further reducing any views by increasing the subtended angle of elevation to the site.

3DVS took two photographs.

Photograph 1 is looking toward 14 Roydmoor Court. The position of the property is marked and is quite clearly seen at a lower level than adjacent properties. The hedge line can be clearly seen as can the large mature trees. The amount of masking will increase on a seasonal basis. Views to the site are not direct. The site will not be seen from either the ground floor living areas or upper floor secondary areas.

Photograph 2 is taken from the end of Roydmoor Court adjacent to the property. 3DVS is not legally allowed to access the private land of others; therefore a more conclusive photograph could not be taken. A number of masking features should be noted e.g. bushes etc., again these mask direct views to the site. The turbine applicant has had planning permission to build a large shed on land in front of the house which will further reduce any views to the site.

Conclusions

Attention is drawn to the Google Earth image which clearly shows that views to the site are blocked by large mature trees on the property. Hedges etc. block any further views from lower level room's views to the site. The property does not have a direct line of sight to the turbine. The primary line of site is to the properties on the other side of the road.

The proposed turbine will NOT be seen in its entirety, if at all from this property. Visual impact is zero possibly extremely slight.

Continued on Page 20

17 Windsor Ave.
Additional photograph 3
Distance to site = 333m
Primary line of sight = 65 deg east/northeast looking away from the site. This is the front of the property.
Secondary line of sight = 241 deg southwest from the rear of the property.
Bearing of turbine from the rear of the property = 260 deg.

Site Description

17 Windsor Ave is in an elevated position to the east of the site. The primary view is to the front of the house looking away from the site. There will be no views to living areas at the front of the house.

The view is to the rear of the house. Examination of the Google Earth image shows that there is a large bungalow which blocks or 'clips' the line of sight from the rear of 17 Windsor Ave. It should be noted that the property is set back, and this will further reduce any views to the site. Field observations noted that the bungalow in front of the property has a very high roof, thus blocking any direct views to the site from upper floor windows

Additional photograph 3 clearly backs up the point made by 3DVS, it should be noted that there is what appears to be a garage or extension to the rear of the property which again will further block or reduce the view and potential line if sight to the turbine from the rear lower floors.

Conclusion

There is no direct view to the site from the front of the property. To the rear, where there are potential views, these views are severely restricted by the bungalow slightly in front of the house. Any view is restricted to a small area from the right hand upper floor window, which is a secondary view. Again it should be noted that 3DVS does not have access to private land. Visual impact, if any, is extremely tenuous.

Folly Barn

Distance to site = 309m
Primary line of sight (front of property) 160 deg southeast
Bearing to Turbine site = 230 deg

As in the previous observations; Attention is drawn to the supplied Google Earth image. The primary line of site from the downstairs main living area is perpendicular to the proposed site; no views will be had.

Additional photograph 4 shows that there will be views from 2 windows and a door; it should be noted that the view from one window (on the left of the image) is blocked by a tree. 3DVS is not aware of what this 'living area' is; it appears to be a bedroom, as curtains were drawn. This is a secondary view, with no significant visual impact to the main living areas.

Conclusion.

There will be secondary views to the site from one window. There are no views to the main living area as the views are perpendicular to the site. Visual impact will be negligible as the view is from the rear of the property.

4. Conclusion

The proposal would result in the introduction of a single vertical structure of a small scale to the baseline landscape. The small footprint of the proposal and the permanent access roads will result in only a minor and reversible loss of land. Views to the site are predominantly from the local area and from the higher elevation levels in the far distance to the northeast. The proposal is generally seen against the backcloth of the rising landscape of Royd Moor. There are no direct views to the site from the narrow streets of Thurlstone, any views from Penistone will be extremely slight in impact and glimpsed. There are no views to the proposal from Millhouse Green or from the Peak Park. A number of nearby properties were further assessed for any visual impact – see separate notes & images – and it was shown that the views were not primary line and in some case the view to the site was well screened by other built form and vegetation.

The proposal is not in any National Statutory areas, such as AONB or National Park. The site does not contain any SSSI or other designation. The land is Greenbelt but classed as disadvantaged.

The area has a large number of other vertical structures which dominate the skyline and other views into the site; these being the three large windfarms at Spicer Hill, Broadstone Edge and Roydhouse Moor which are of a far greater size and scale than the proposal.

Views to main roads are rapid, broken and transient, particularly along the A628. Views from the A629 are similar in type.

On balance the visual impact of this proposal on the area will be moderate.