



RIBBLE VALLEY BOROUGH COUNCIL

AMENDED PLANS RECEIVED

19/9/12

For office use only

Application No. 320120863 P

Date received

Fee paid £

Receipt No:

Council Offices, Church Walk, Clitheroe, Lancashire, BB7 2RA Tel: 01200 425111 www.ribblevalley.gov.uk

Application for Planning Permission. Town and Country Planning Act 1990

Publication of applications on planning authority websites.

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

1. Applicant Name, Address and Contact Details

Form 1: Applicant Name, Address and Contact Details. Fields include Title (Mr), First name (AT), Surname (Rogerson), Company name, Street address (Handlesteads, Collins Hill Lane), Town/City (Chipping, Preston), County, Country, Postcode (PR3 2WQ), Telephone number, Mobile number, Fax number, Email address, and a question: 'Are you an agent acting on behalf of the applicant?' with Yes/No radio buttons.

2. Agent Name, Address and Contact Details

Form 2: Agent Name, Address and Contact Details. Fields include Title (Mrs), First Name (Julia), Surname (Pye), Company name (J Pye Planning), Street address (Hill Crest Farm, Startifants Lane, Chipping), Town/City (Preston), County, Country (United Kingdom), Postcode (PR3 2NP), Telephone number (07803557019), Mobile number, Fax number, Email address (jpyeplanning@gmail.com), and a question: 'Has the building, work or change of use already started?' with Yes/No radio buttons.

3. Description of the Proposal

Please describe the proposed development including any change of use:

Erection of a CF 50KW Wind Turbine 39.65 Meters high from blade to tip

Has the building, work or change of use already started? Yes No

#### 4. Site Address Details

Full postal address of the site (including full postcode where available)

Description:

House:  Suffix:

House name:

Street address:

Town/City:

County:

Postcode:

Description of location or a grid reference  
(must be completed if postcode is not known):

Easting:

Northing:

#### 5. Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application?  Yes  No

#### 6. Pedestrian and Vehicle Access, Roads and Rights of Way

- Is a new or altered vehicle access proposed to or from the public highway?  Yes  No
- Is a new or altered pedestrian access proposed to or from the public highway?  Yes  No
- Are there any new public roads to be provided within the site?  Yes  No
- Are there any new public rights of way to be provided within or adjacent to the site?  Yes  No
- Do the proposals require any diversions/extinguishments and/or creation of rights of way?  Yes  No

#### 7. Waste Storage and Collection

- Do the plans incorporate areas to store and aid the collection of waste?  Yes  No
- Have arrangements been made for the separate storage and collection of recyclable waste?  Yes  No

#### 8. Authority Employee/Member - see attached e-mail

With respect to the Authority, I am:

- (a) a member of staff
- (b) an elected member
- (c) related to a member of staff
- (d) related to an elected member

Do any of these statements apply to you?  Yes  No

#### 9. Materials

Please state what materials (including type, colour and name) are to be used externally (if applicable):

##### Walls - description:

Description of existing materials and finishes:

n/a

Description of proposed materials and finishes:

n/a

##### Others - description:

Type of other material:

Turbine

Description of existing materials and finishes:

Description of proposed materials and finishes:

Steel painted grey

Are you supplying additional information on submitted plan(s)/drawing(s)/design and access statement?  Yes  No

If Yes, please state references for the plan(s)/drawing(s)/design and access statement:

Drawings, design and access statement, location map, ground plans and elevations, acoustics survey, planning statement, ZTV mapping, turbine brochure

### 10. Vehicle Parking

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Please provide information on the existing and proposed number of on-site parking spaces:

Type of vehicle	Existing number of spaces	Total proposed (including spaces retained)	Difference in spaces
Cars	0	0	0
Light goods vehicles/public carrier vehicles	0	0	0
Motorcycles	0	0	0
Disability spaces	0	0	0
Cycle spaces	0	0	0
Other (e.g. Bus)	0	0	0
Short description of Other			

### 11. Foul Sewage

Please state how foul sewage is to be disposed of:

Mains sewer  Package treatment plant  Unknown   
 Septic tank  Cess pit

Other

n/a

Are you proposing to connect to the existing drainage system?  Yes  No  Unknown

### 12. Assessment of Flood Risk

Is the site within an area at risk of flooding? (Refer to the Environment Agency's Flood Map showing flood zones 2 and 3 and consult Environment Agency standing advice and your local planning authority requirements for information as necessary.)

Yes  No

If Yes, you will need to submit an appropriate flood risk assessment to consider the risk to the proposed site.

Is your proposal within 20 metres of a watercourse (e.g. river, stream or beck)?

Yes  No

Will the proposal increase the flood risk elsewhere?  Yes  No

How will surface water be disposed of?

Sustainable drainage system  Main sewer  Pond/lake  
 Soakaway  Existing watercourse

### 13. Biodiversity and Geological Conservation

To assist in answering the following questions refer to the guidance notes for further information on when there is a reasonable likelihood that any important biodiversity or geological conservation features may be present or nearby and whether they are likely to be affected by your proposals.

Having referred to the guidance notes, is there a reasonable likelihood of the following being affected adversely or conserved and enhanced within the application site, OR on land adjacent to or near the application site:

a) Protected and priority species

Yes, on the development site  Yes, on land adjacent to or near the proposed development  No

b) Designated sites important habitats or other biodiversity features

Yes, on the development site  Yes, on land adjacent to or near the proposed development  No

c) Features of geological conservation importance

Yes, on the development site  Yes, on land adjacent to or near the proposed development  No

### 14. Existing Use

Please describe the current use of the site:

Agricultural

Is the site currently vacant?  Yes  No

Does the proposal involve any of the following?

If yes, you will need to submit an appropriate contamination assessment with your application

Land which is known to be contaminated?  Yes  No

Land where contamination is suspected for all or part of the site?  Yes  No

A proposed use that would be particularly vulnerable to the presence of contamination?  Yes  No

### 15. Trees and Hedges

Are there trees or hedges on the proposed development site?  Yes  No

And/or: Are there trees or hedges on land adjacent to the proposed development site that could influence the development or might be important as part of the local landscape character?  Yes  No

If Yes to either or both of the above you may need to provide a full Tree Survey, at the discretion of your local planning authority. If a Tree Survey is required, this and the accompanying plan should be submitted alongside your application. Your local planning authority should make clear on its website what the survey should contain, in accordance with the current 'BS5837: Trees in relation to construction - Recommendations'

### 16. Trade Effluent

Does the proposal involve the need to dispose of trade effluents or waste?  Yes  No

### 17. Residential Units

Does your proposal include the gain or loss of residential units?  Yes  No

### 18. All Types of Development: Non-residential Floorspace

Does your proposal involve the loss, gain or change of use of non-residential floorspace?  Yes  No

### 19. Employment

If known, please complete the following information regarding employees:

	Full-time	Part-time	Equivalent number of full-time
Existing employees	0	0	0
Proposed employees	0	0	0

### 20. Hours of Opening

If known, please state the hours of opening for each non-residential use proposed:

Use	Monday to Friday		Saturday		Sunday and Bank Holidays		Not Known
	Start Time	End Time	Start Time	End Time	Start Time	End Time	

### 21. Site Area

What is the site area?  hectares

### 22. Industrial or Commercial Processes and Machinery

Please describe the activities and processes which would be carried out on the site and the end products including plant ventilation or air conditioning. Please include the type of machinery which may be installed on site:

n/a

Is the proposal for a waste management development?  Yes  No

### 23. Hazardous Substances

Is any hazardous waste involved in the proposal?  Yes  No

### 24. Site Visit

Can the site be seen from a public road, public footpath, bridleway or other public land?  Yes  No

If the planning authority needs to make an appointment to carry out a site visit whom should they contact? (Please select only one)

The agent  The applicant  Other person

### 25. Certificates (Certificate A)

#### Certificate of Ownership - Certificate A

#### Town and Country Planning (Development Management Procedure) (England) Order 2010 Certificate under Article 12

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/ the applicant was the owner (owner is a person with a freehold interest or leasehold interest with at least 7 years left to run) of any part of the land or building to which the application relates

Title:  First name:  Surname:   
Person role:  Declaration date:   Declaration made

25. Certificates (Agricultural Land Declaration)

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Agricultural Land Declaration

Town and Country Planning (Development Management Procedure) (England) Order 2010 Certificate under Article 12

Agricultural Land Declaration - You Must Complete Either A or B

(A) None of the land to which the application relates is, or is part of an agricultural holding



(B) I have/The applicant has given the requisite notice to every person other than myself/the applicant who, on the day 21 days before the date of this application, was a tenant of an agricultural holding on all or part of the land to which this application relates, as listed below:



If any part of the land is an agricultural holding, of which the applicant is the sole tenant, the applicant should complete part (B) of the form by writing 'sole tenant - not applicable' in the first column of the table below

Notice recipient		Date notice served
Name:	n/a sole tenant	<input style="width: 100px; height: 30px;" type="text"/>
Number:	<input style="width: 100px;" type="text"/> Suffix: <input style="width: 100px;" type="text"/>	
Street:	<input style="width: 100%; height: 20px;" type="text"/>	
Locality:	<input style="width: 100%; height: 20px;" type="text"/>	
Town:	<input style="width: 100%; height: 20px;" type="text"/>	
Postcode:	<input style="width: 100%; height: 20px;" type="text"/>	

Title: Mrs First Name: Julia Surname: Pye

Person role: Agent Declaration date: 22/08/2012  Declaration Made

26. Declaration

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information. I/we confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine opinions of the person(s) giving them.

Date 22/08/2012

**Louise Blatchford**

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**From:** Julia Pye Planning [jpyeplanning@gmail.com]  
**Sent:** 09 October 2012 16:37  
**To:** Louise Blatchford  
**Subject:** Re: Planning application 3/2012/0863 - Handlesteads, Collins Hill Lane, Chipping  
yes he is

**From:** Louise Blatchford  
**Sent:** Tuesday, October 09, 2012 4:33 PM  
**To:** Julia Pye Planning  
**Subject:** Planning application 3/2012/0863 - Handlesteads, Collins Hill Lane, Chipping

Hi Julia

We just wanted to check - is the applicant the brother of Councillor Jim Rogerson?

Kind regards  
Louise

Louise Blatchford  
Technical Admin Assistant  
Planning Department  
Ribble Valley Borough Council

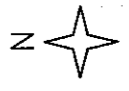
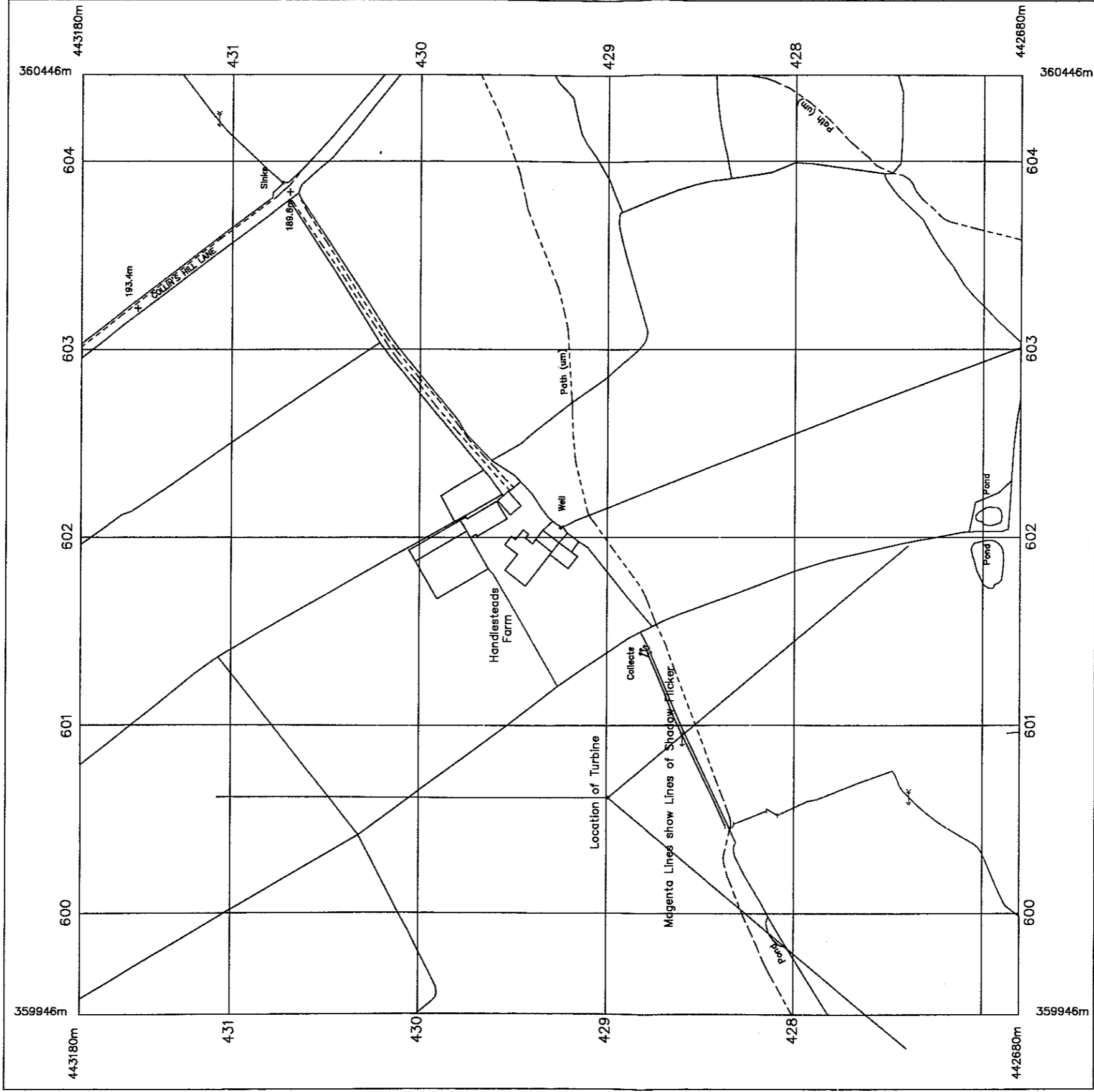
**Best in the country for customer satisfaction – 94 per cent of Ribble Valley residents are satisfied with life in the borough (Place Survey 2009)**

<!--[if !supportEmptyParas]--> <!--[endif]-->

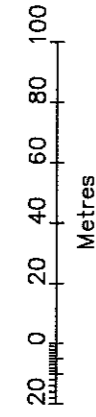
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Stanfords VectorMap



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Proposed Wind Turbine  
 Handiesteads Farm  
 Collins Hill Lane  
 Chipping  
 PR3 2WQ



# C&F Green Energy

320120863P

## **Summary of Acoustic Measurements**

**CF50-30m mast**

**Tarrae, Co. Galway**

**7<sup>th</sup> Sept 2011**

**Report Version 1.0**

Prepared for:  
C&F Green Energy

**Introduction**

The following report is based upon measurements taken by C&F Green Energy. The measurements have been assessed and comply with the requirements of BS EN 61400 - 11: 2003.

**Test Details**

Wind Turbine Model: CF50  
Max Output: 50KW  
Rotor Diameter: 20m  
Mast Height: 30m  
Location: Tarrae, Co. Galway  
Date of tests: 1<sup>st</sup> Sept - 6<sup>th</sup> Sept  
SLM: Larson Davis 824 with narrow band module

**Test Setup**

All acoustic measurements were conducted in accordance with IEC 61400-11:2002. The BWEA have also published a standard that addresses wind turbine noise assessment and the acoustic measurement technique is largely based on the IEC standard. The output data are presented in the format requested by the BWEA standard since this is typically most appropriate for planning purposes in the UK.

The microphone is located downwind at ground level facing the turbine at a distance of 40m which is the mast height plus the rotor radius. The microphone is placed on a piece of plywood and covered with a hemispherical wind shield. Acoustic and wind data are recorded while the wind turbine is active and also when shut down so that background noise can be assessed.

Acoustic measurements were taken as 1 minute Leq A-weighted readings. All measurements were recorded with 1/3 octave definition.

Wind velocity was measured using an anemometer on a 15m pole. Presented data are scaled to the height of the rotor axis.

**Results**

As specified in the BWEA standard, the 1/3 octave acoustic levels for all measurements were analysed to identify any tonal contribution. In this respect, no tonal content was present.

Several key metrics are required by the BWEA standard.

These are:

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<b>Key BWEA Metrics</b>	
Sound Power at 8m/s	88.2 dBA
Sound Power vs Velocity slope	2.7 dBA / (m/s)
Sound Pressure at 8m/s	
Distance 25m	52.2 dBA
Distance 60m	44.7 dBA

In Figure 1, the acoustic data is presented as a function of nacelle height wind speed. Data are presented for both the background noise and the combined turbine & background noise cases. A linear regression is performed on both sets of data.

In Figure 2, the A-weighted sound pressure level of the wind turbine is adjusted to account for background noise and presented as a function of velocity.

In Figure 3, the A-weighted sound power level is presented as a function of wind speed.

In Figure 4, a contour plot shows the relationship of sound pressure to wind speed and distance. The distance here is measured from the centre of the mast. The data for this plot is derived from an interpolation where spherical propagation is assumed.

Finally, on the last page of the report, the above data are presented in the recommended BWEA format. The stated power level and field plot have been adjusted to account for an uncertainty penalty of 1.5dBA.

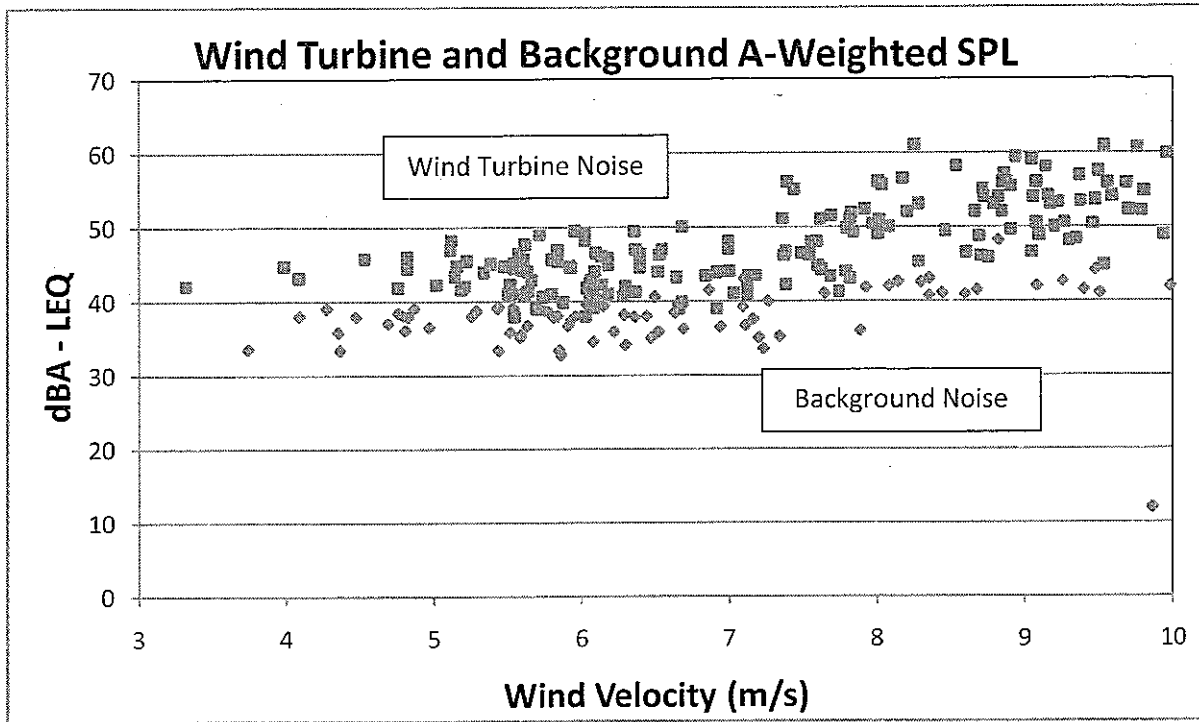


Figure 1: Wind turbine and background noise data as a function of nacelle height wind velocity.

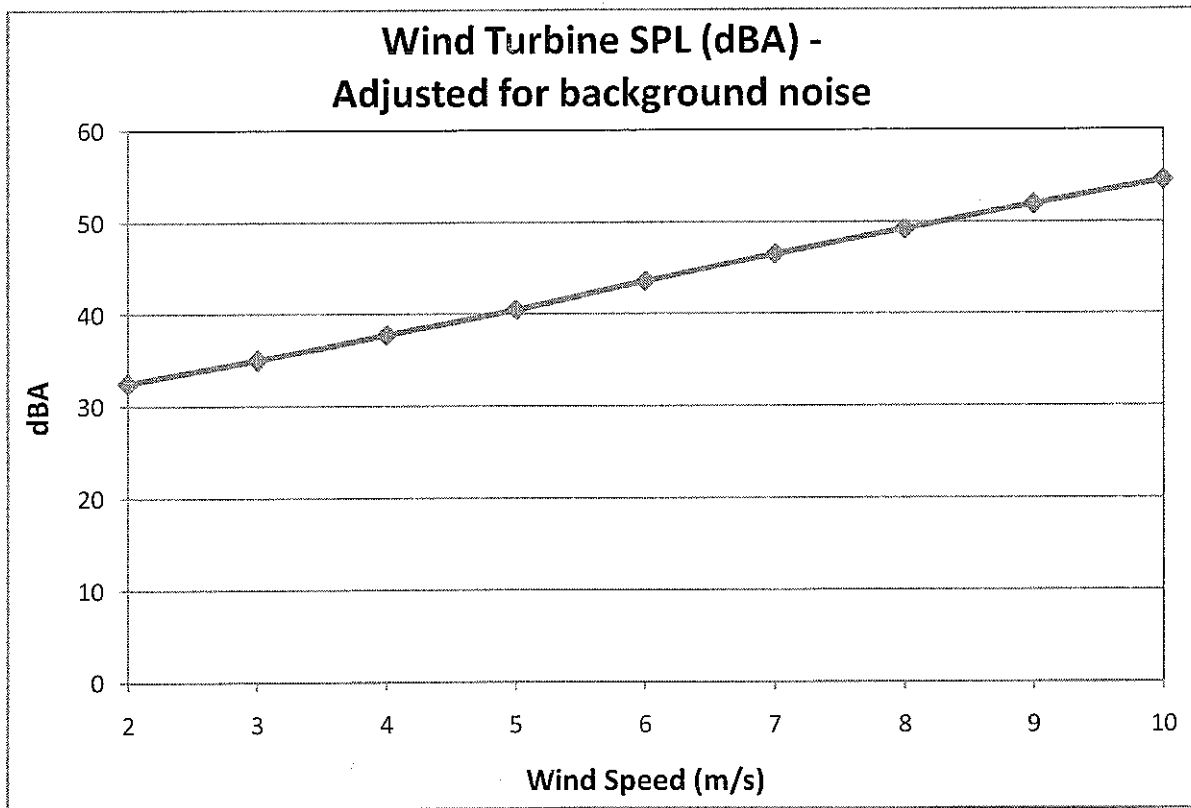


Figure 2: A-Weighted Sound Pressure Level as a function of nacelle height wind velocity.

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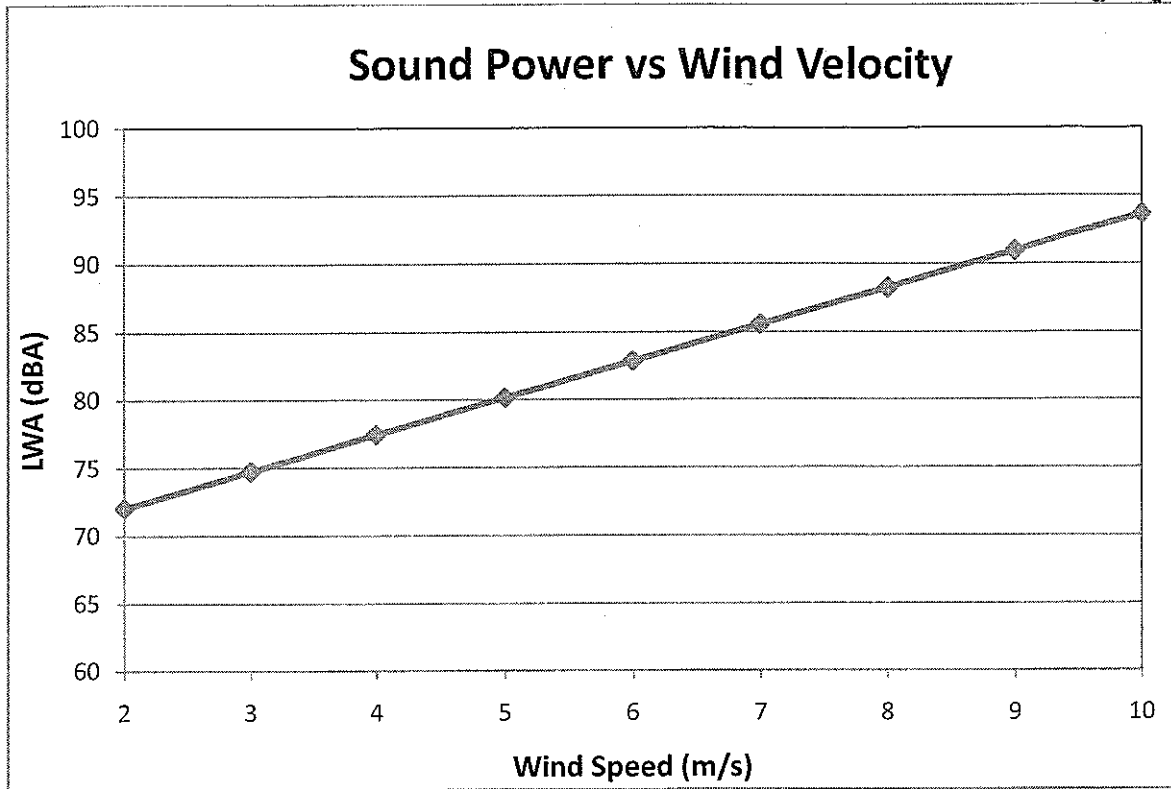


Figure 3: A-Weighted Sound Power Level as a function of nacelle height wind velocity.

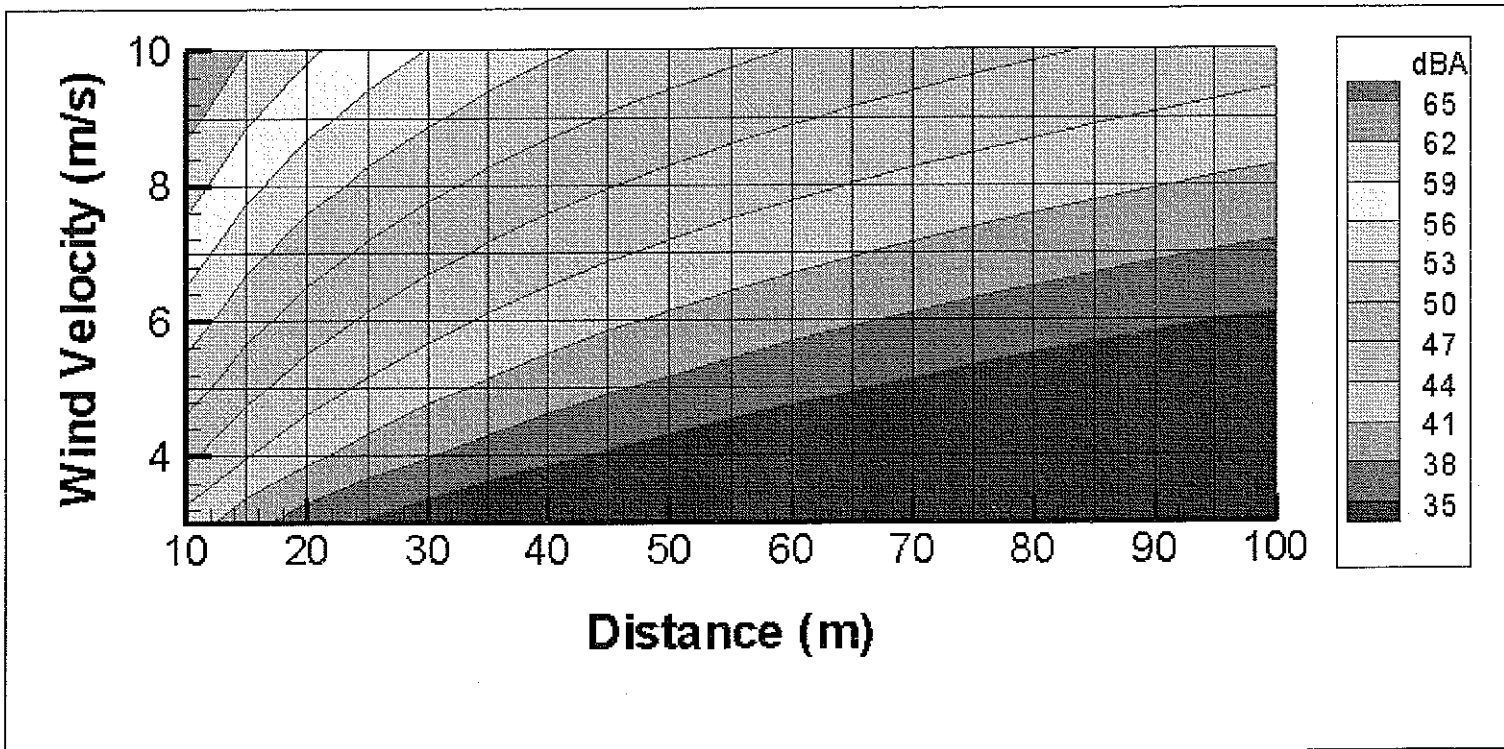
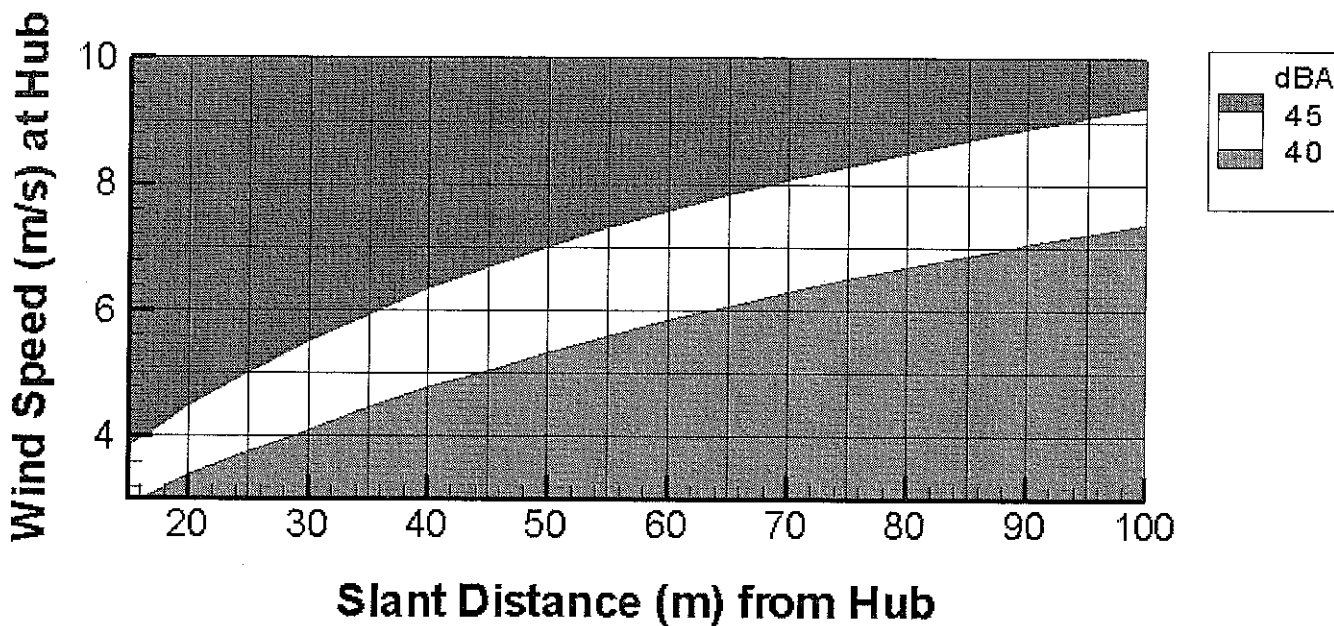


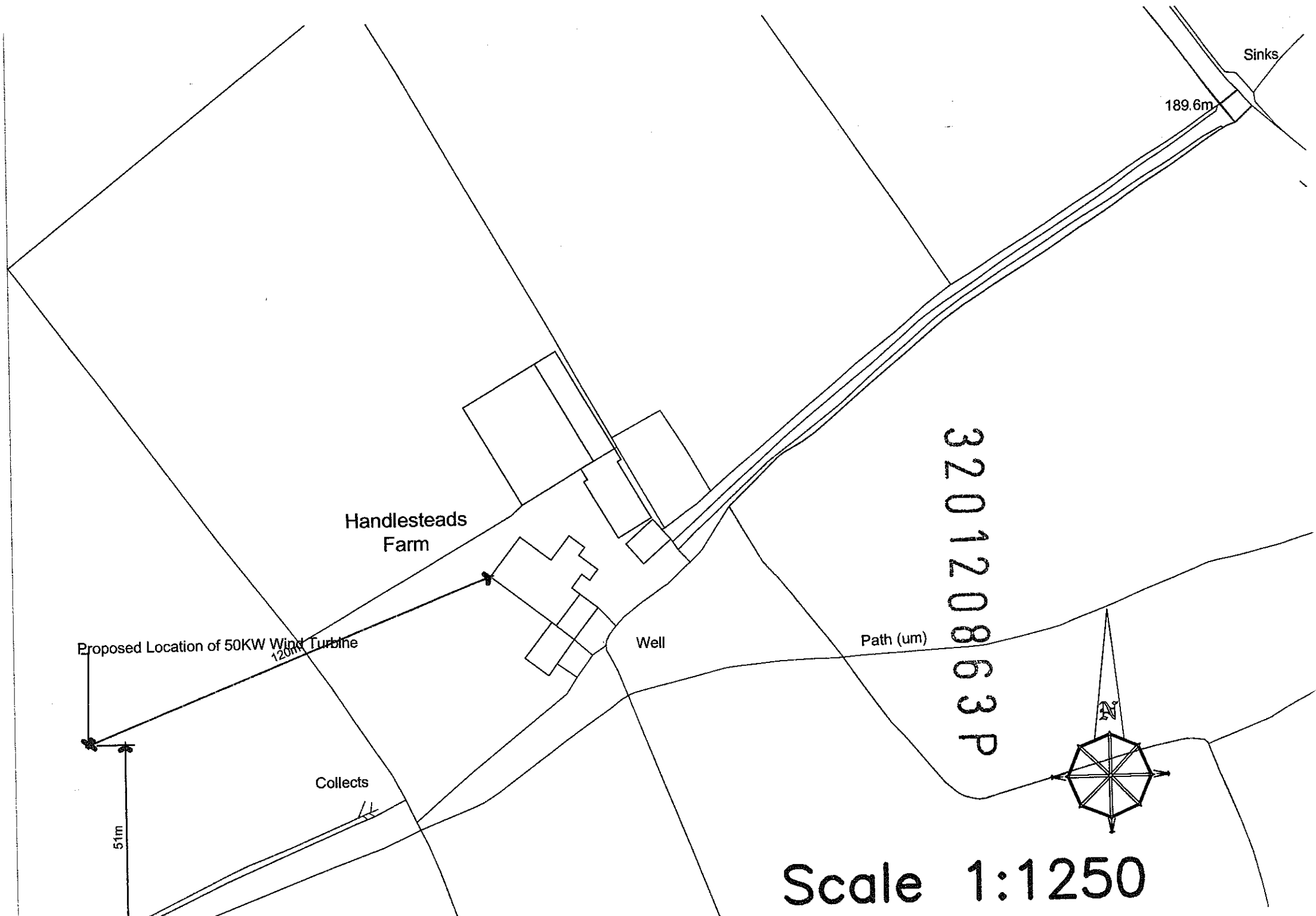
Figure 4: A-Weighted Sound Pressure Level as a function of wind velocity and distance from turbine.

## Acoustic Noise Levels

<b>Turbine Make:</b>	C&F Green Energy	<b>Model</b>	CF50
<b>NOISE EMISSION LEVEL</b>			<b>NOISE PENALTY</b>
Sound Power $L_{Wd,8m/s}$	<b>89.7 dB(A)</b>	Noise Slope (dB/m/s)	<b>2.7</b>
			<b>NO</b>



<b>C&amp;F Green Energy</b>	Tarrae Test Site, Galway	Issued by C&F Green Energy September 2011
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Sinks

189.6m

Handlesteads Farm

320120863P

Proposed Location of 50KW Wind Turbine

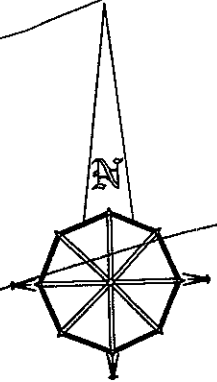
120m

Well

Path (um)

Collects

51m



Scale 1:1250

Handlesteads  
Farm

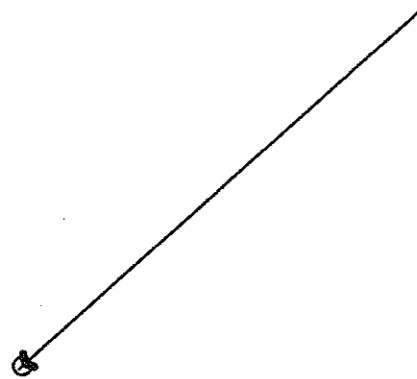
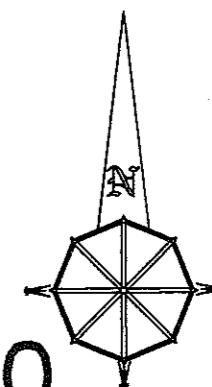
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Proposed Location of 50KW Wind Turbine

Well

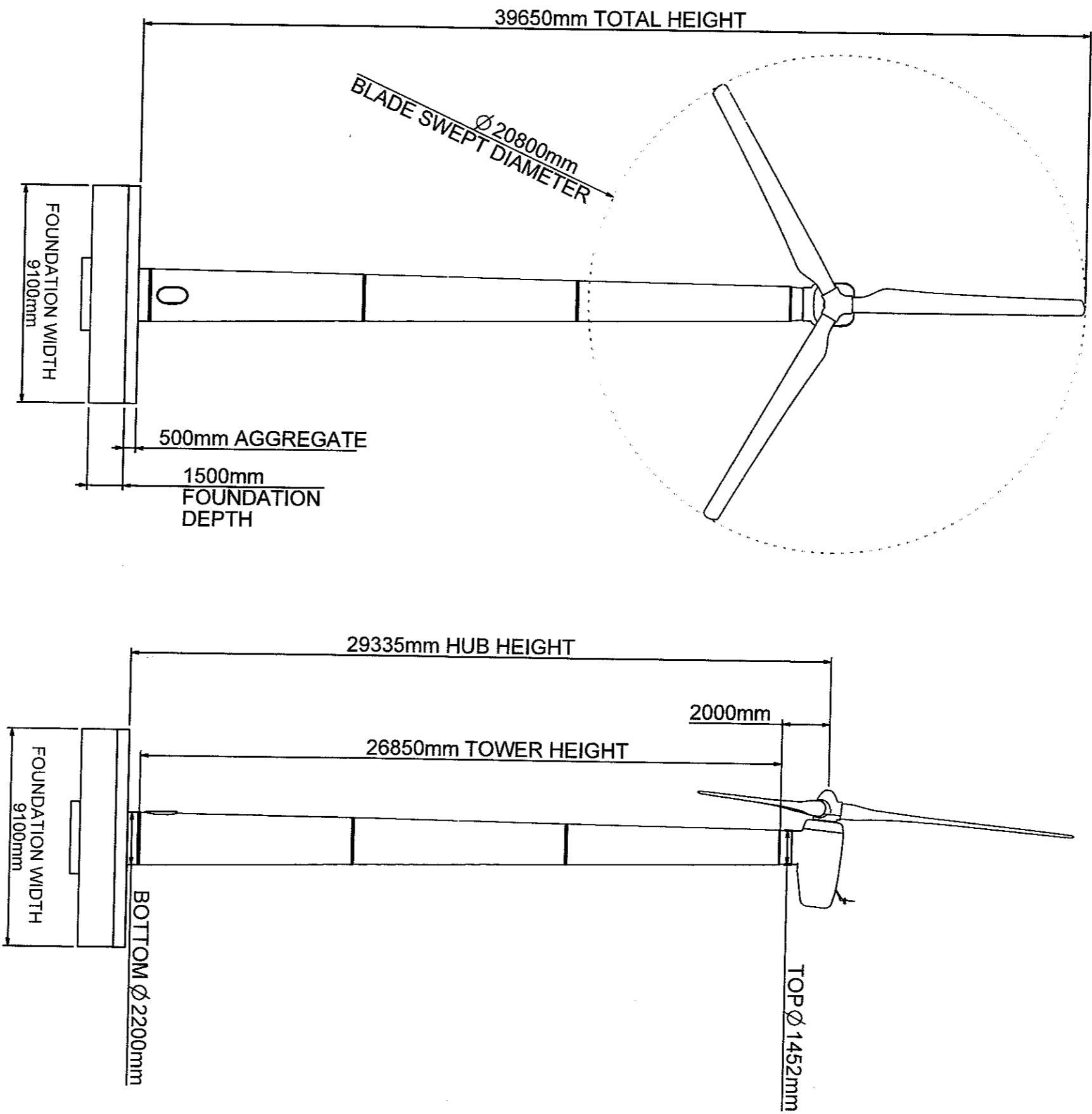
Collects

Scale 1:500

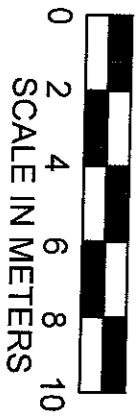




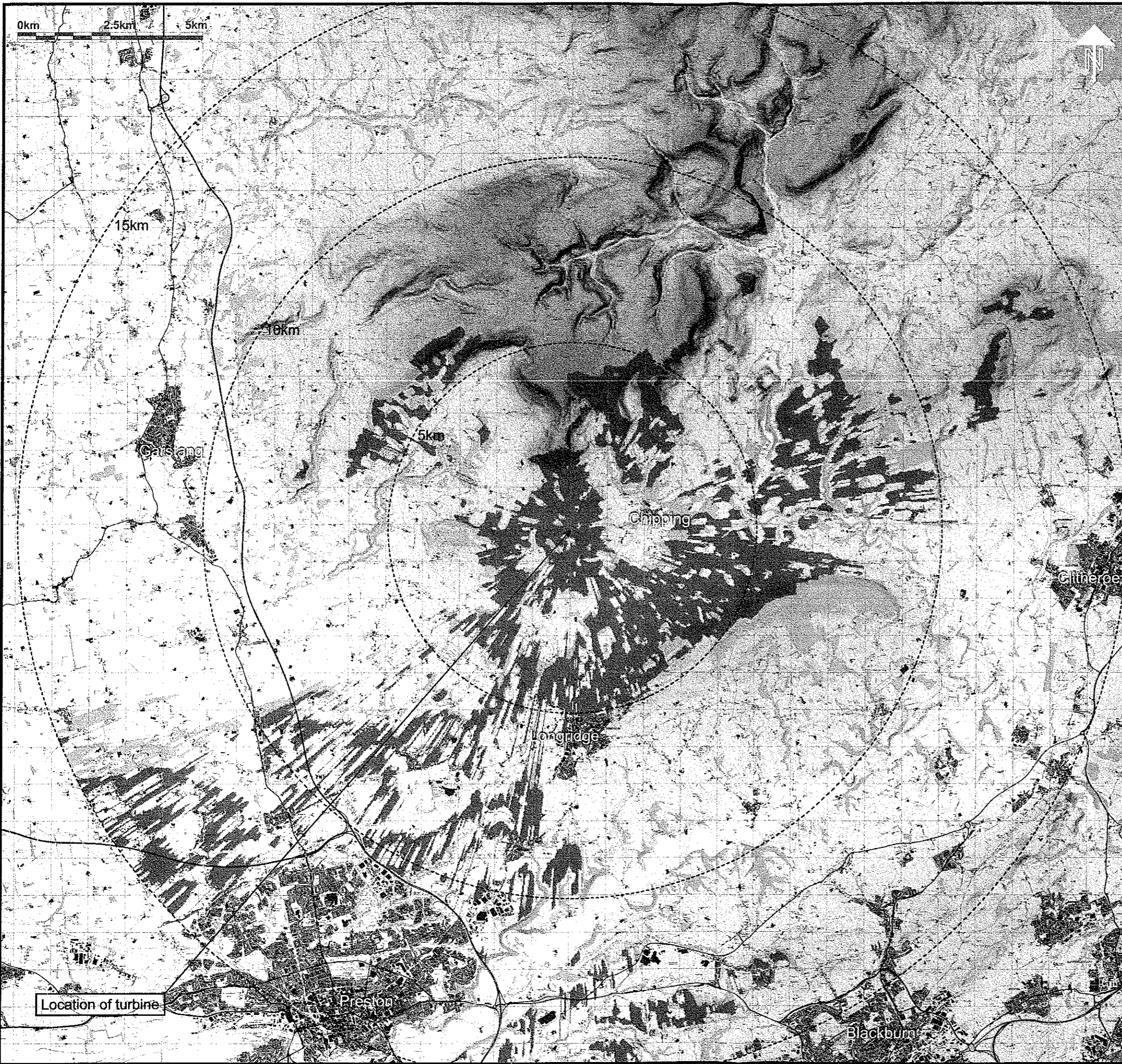
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OVERALL DIMENSIONS FOR CF50 TURBINE:  
50kW GENERATOR / 26.8m MONOPOLE / 9.7m BLADES



<b>CAF GreenEnergy</b>		<b>50kW</b>	
DESCRIPTION: OVERALLS / PLANNING		All Dimensions in mm	
MATERIAL:	Monopole: 15mm / 12mm S355	QTY PER UNIT:	-
DRAWN:	C O'Neill	SCALE:	1:200
CHECKED:	-	DWG SIZE:	A3
DATE:	02-Nov-11	FINISH:	-
		SHEET:	1 OF 1



**Key:**

- Proposed turbine location (E 360060 N 442896)
- ZTV for hub and tip
- ZTV for tip only
- Woodland areas
- Range rings at 5km intervals

**Notes:**

ZTVs generated from hub height of 29.335m, tip height of 39.65m. Receptor eye height 1.8m.

The ZTV 'with obstructions' is calculated with addition of obstructions in the form of woodlands (OS data, assigned 12m height) and buildings (OS data, assigned 8m height). This presents a more realistic impression of the actual visibility, although it does not demonstrate additional screening effects of localised banks, hedgerows, individual trees and any taller buildings and tree groups.

See Fig 01 for ZTV without obstructions.

320120863 P

Revision: -

Scale: 1:100,000, see also barscale and grid

Sheet Size: A3

Date: Aug 2012

Filename: 2012-210-HandlesteadsFarmZTV-02.pdf

**Project:**  
 Proposed 50KW Wind Turbine at Handlesteads Farm, Chipping

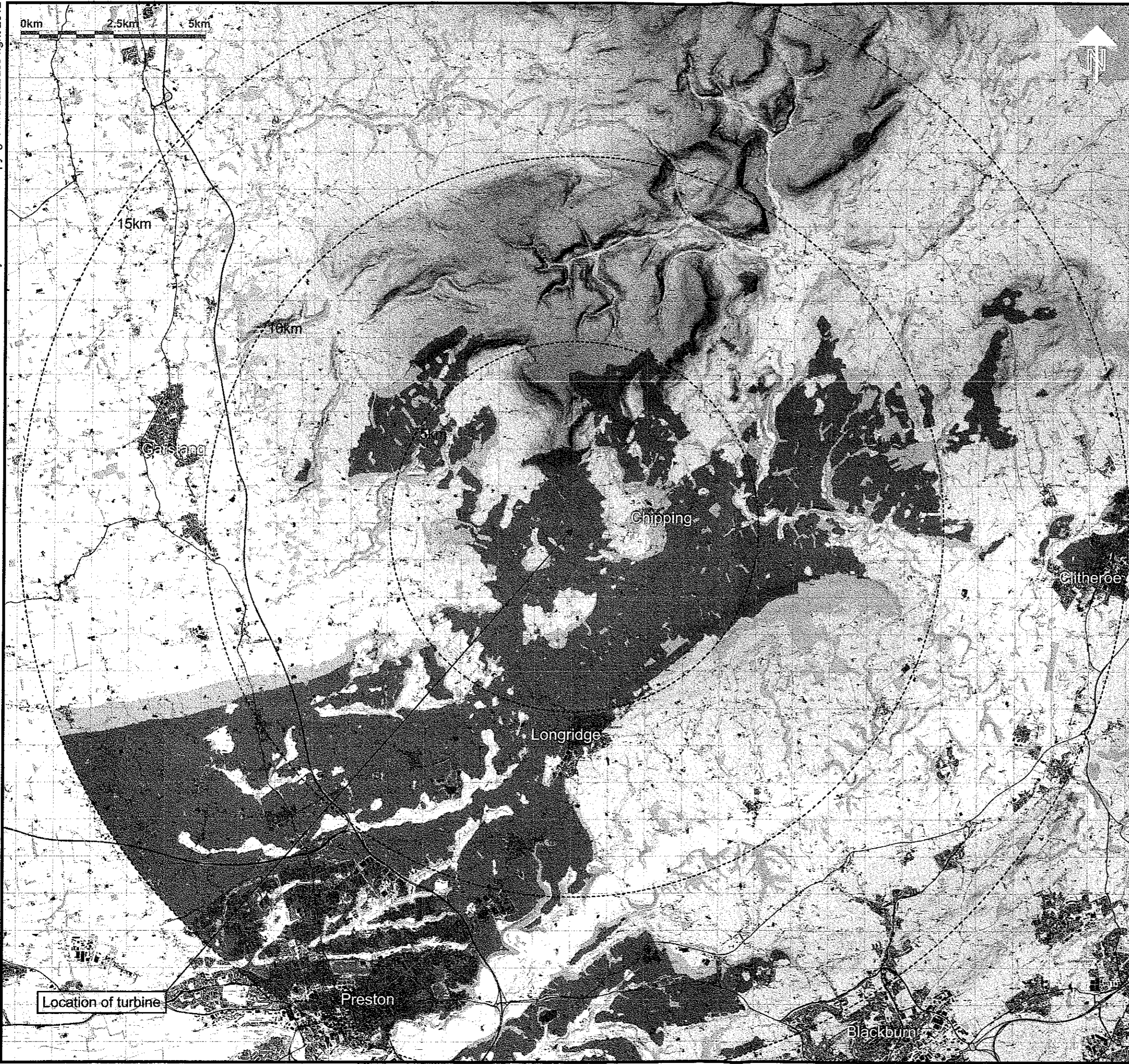
**Client:**  
 Mr AT Rogerson

**Drawing title:**  
 Zones of Theoretical Visibility: Turbine hub and tip 'with obstructions'

**Figure:**  
 02

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2012-210-HandlesteadsFarmZTV.cdr © 2B Landscape Consultancy Ltd



- Key:**
- Proposed turbine location (E 360060 N 442896)
  - ZTV for hub and tip
  - ZTV for tip only
  - Woodland areas
  - Range rings at 5km intervals

**Notes:**

ZTVs generated from hub height of 29.335m, tip height of 39.65m. Receptor eye height 1.8m.

The Bare Earth ZTV is calculated against a 'bare-earth' terrain model (OS landform panorama) with no obstructions and therefore shows theoretical visibility of a situation without trees or buildings.

See Fig 02 for ZTV with obstructions, which is a more accurate estimation of visibility.

320120863P

Revision: -

Scale: 1:100,000, see also barscale and grid

Sheet Size: A3

Date: Aug 2012

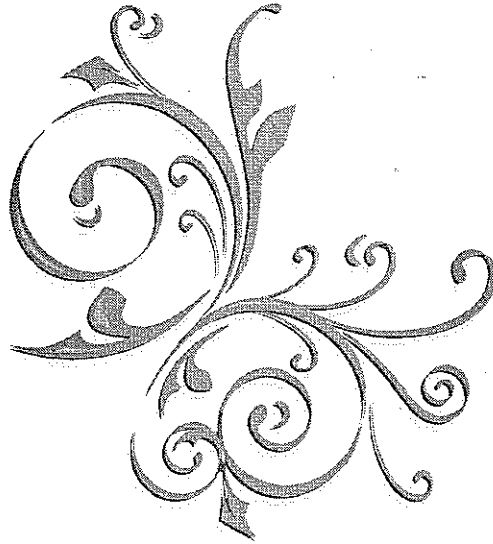
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Project: Proposed 50KW Wind Turbine at Handlesteads Farm, Chipping

Client: Mr AT Rogerson

Drawing title: Zones of Theoretical Visibility: Turbine hub and tip 'bare earth'

Figure: 01



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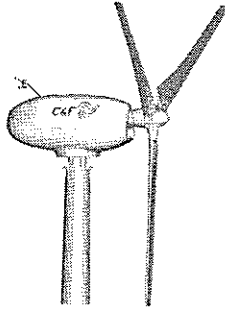
**Planning Statement**  
**In support of a Planning Application for**  
**A 50KW Wind Turbine**

**At**

**Handlesteads Farm**  
**Collins Hill**  
**Chipping**  
**Preston**  
**PR3 2WQ**

**On Behalf of Mr A T Rogerson**

**Agent**  
**Mrs Julia Pye**  
**Hill Crest Farm**  
**Startifants Lane**



## Contents

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## 1. Introduction

The Applicant seeks planning consent for a CF50 Wind Turbine to provide electricity to his property, Handlesteads Farm, as well as the adjacent farm buildings. This is to ensure that the existing working farm can be as sustainable as possible.

The turbine will be sited to the West of the dwelling and livestock buildings against the back drop of a well established tree boarder the location of the turbine has been chosen to ensure that its impact is reduced and that the turbine can gain maximum efficiency from the prevailing wind.

Handlesteads Farm has been run by Mr Anthony Rogerson solely since 1999 when his father died, prior to this he worked on the farm with his Mother, Father and Brothers. The holding comprises of 180 acres of which 67 are owned. The applicant has 450 breeding ewes which he lambs from March onwards his lambs are sold as a mixture of stores and fat from September onwards. In addition to the sheep the applicant has a total headage of 120 cattle, 36 of these are suckler cows with calves at foot, these animals calve all year round with approximately 8 heifer calves being kept each year for breeding / replacement purposes. The applicant owns 4 pedigree stock bulls which he uses for breeding with his own cattle and also hires out on an infrequent basis. His suckler herd is a multi suckler herd therefore additional calves are sourced locally for rearing. These calves along with the own bred cattle are sold from 10 – 20 months old at the local auction mart as store cattle

In addition to the farm the applicant has a fencing contracting business which employs two local men full time and one part time, the applicant is not actively fencing and spends approximately 10% of his time on the fencing part of his business and 90% of his time on the farm working approximately 120 hours per week, he has no help on the farm apart from casual labour as and when required.

The proposed turbine not only will go a long way of reducing the applicants carbon footprint, but will supply all electricity to the farm and dwelling, the surplus will then be transferred into the grid to provide the applicant additional income, therefore is partially a diversification project

The EU has given the UK a target for 10% of electricity to come from renewable sources by 2010, and 15% by 2015. In addition to these targets the UK has agreed to a binding target that 20% of all energy will come from renewable sources by 2020, the bulk of these targets are expected to be delivered locally through the planning system.

On shore wind turbines are vital in terms of delivering these targets although the clarity for domestic turbines is not as specific as those for 'wind farms'.

The benefits of wind energy are:-

Reduction of carbon footprint

Lower energy bills

Wind is in a plentiful supply in the UK

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## 2. Local Plan Designation

Handlesteads Farm is situated within an Area of Outstanding Beauty on the fringes of Chipping Village and Bleasdale. Therefore it is subject to Policies G1 and ENV1 along with specific policies for renewable energy ENV24, ENV25 and ENV26.

### Policy G1

All development proposals will be expected to provide a high standard to building design and landscape quality. Development which does so will be permitted, unless it adversely affects the amenities of the surrounding area.

In determining planning applications the following criteria will be applied:

- a) Development should be sympathetic to existing and proposed land uses in terms of its size, intensity and nature
- b) The likely scale and type of traffic generation will be assessed in relationship to the highway infrastructure and the proposed and existing public transport network. This will include safety, operational efficiency, amenity and environmental considerations.
- c) Developments should make adequate arrangements for car parking
- d) A safe access should be provided which is suitable to accommodate the scale and type of traffic likely to be generated.
- e) The density, layout and relationship between buildings are of major importance. Particular emphasis will be placed on visual appearance and the relationship to surroundings as well as the effects of development on existing amenities.
- f) Development should provide adequate arrangement or servicing and public utilities
- g) Developments should provide adequate day lighting and privacy
- h) Materials used should be sympathetic to the character of the area
- i) Developments should not result in the loss of important open space including public and private playing fields
- j) Developments should not damage SSI's, County Heritage Sites, Local Nature Reserves or other sites of nature conservation importance.
- k) Development should not require culverting, artificial channelling or destruction of watercourse. Wherever possible water courses should be maintained within a reasonable corridor of native vegetation.
- l) Developments should be economic in the use of land, water and aggregates and should not prejudice future development which would provide significant environmental and amenity improvements
- m) Where it is the intention to rely upon a private water supply, developments should provide an adequate means of water supply, which will not derogate existing users.

The proposed wind turbine is sited immediately west of the existing farm buildings. Looking across the valley the turbine will be line with these building and therefore its impact is reduced by the built

environment of the farm. The mast of the turbine is narrow in diameter with the blades turning at 50rpm and grey in colour therefore it will blend into the landscape by virtue of its design and location sensitively. No traffic will be generated nor provision for access roads and parking due to the small scale nature of the proposal. No services or public utilities will be provided and as demonstrated with the shadow flicker map no neighbouring properties or large amount of the countryside will be affected by loss of light or amenity issues. It is hoped that the grey colour of the turbine will be more sympathetic on the landscape than a bright white turbine. The site is within agricultural land and will not have result in any loss of important open space including public and private playing fields. Nor it it within an SSI, Country Heritage site, local nature reserve. No culverting, channelling or destruction of water courses will occur due to the small nature of the development. As the land is agricultural grade 3 land it is felt that the siting of this turbine at the proposed location is a good economic use of the land as it is not classified as prime grade 1 or 2 agricultural land. No water supply is also proposed.

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### Policy ENV1

The landscape and character of the Forest of Bowland Area of Outstanding Natural Beauty will be protected, conserved and enhanced. In addition development will also need to contribute to the conservation of the natural beauty of the area. The environmental effects of proposals will be a major consideration and the design, materials, scale, massing and landscaping of development will be important factors in deciding planning applications (see Policy G1). The protection, conservation and enhancement of the natural environment will be the most important considerations in the assessment of any development proposal. Regard will also be had to the economic and social well-being of the area.

The Forest of Bowland Area of Outstanding Natural Beauty is of recognised national landscape value. The principal duties of the local planning authorities that administer this area are the conservation and enhancement of its natural beauty. This does not mean that no development will be allowed in the area. Where possible new development will be accommodated through the re-use of existing buildings, which in most cases is more appropriate than new build. Indeed other policies in this plan accept that there is a need for development to allow for appropriate employment generating facilities, countryside recreation opportunities and housing for those in need. However this should not be at the expense of those qualities which make the area special. This policy will be used to ensure that development which does take place is both appropriate and actually enriches the landscape character of the area. In support of this a landscape assessment had been undertaken which is included in Appendix 2.

The Borough Council will work with the Forest of Bowland AONB Countryside Management Service and government bodies to protect, conserve and enhance key landscape areas/features throughout the AONB. The Council will protect threatened landscapes/landscape features through representation at the Technical Officer Group and through the joint advisory committee of the Forest of Bowland AONB. It will ensure that specific landscape schemes identified in the Forest of Bowland AONB Management Plan are implemented in accordance with the aims and objectives of that management plan. The Council will support better practice in the conservation and traditional management of:

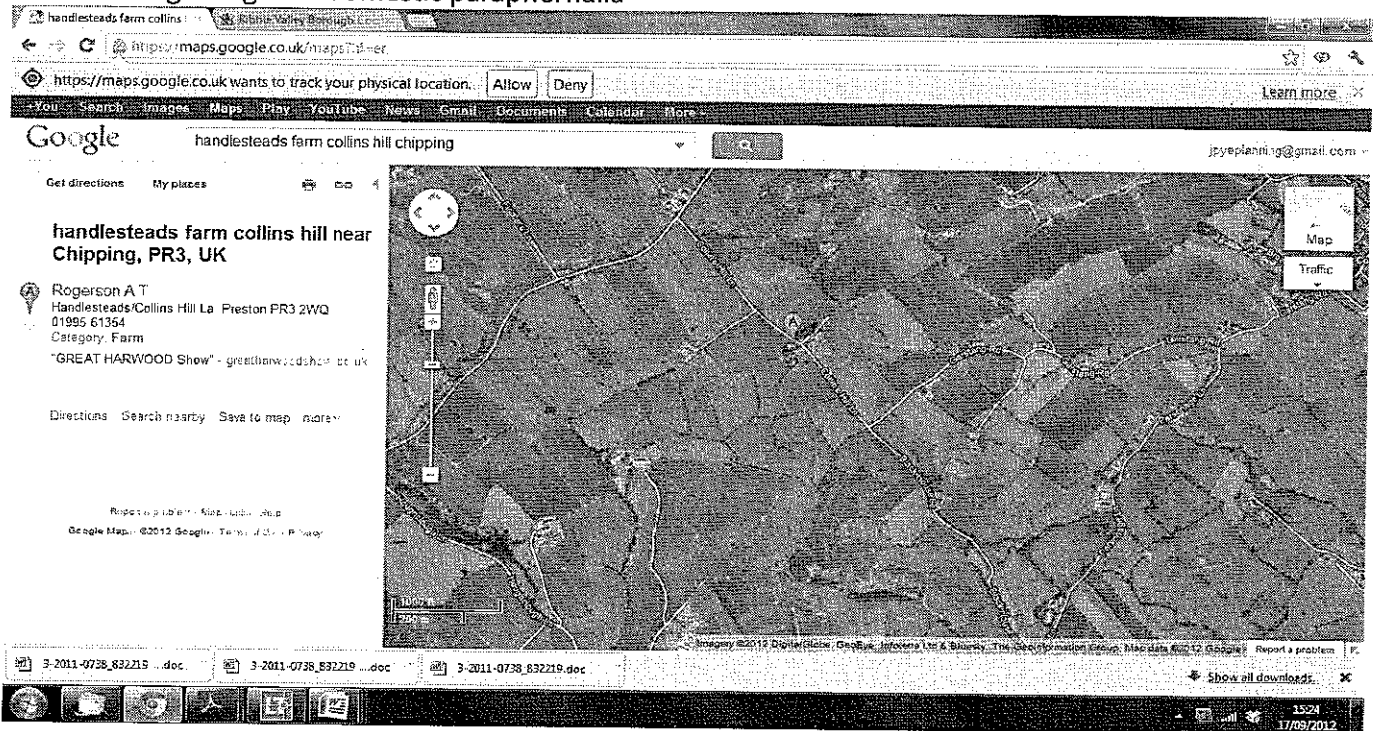
- Moorland/upland areas

- Woodlands
- Hedgerows/hedgerow trees
- Dry Stone Walls

In terms of nature conservation, the Council will also protect and conserve rare species/habitats and enhance the native biological diversity of the AONB.

This policy will be implemented by the use of development control powers.

The application site is within and Area of Outstanding Natural Beauty (ANOB) the site is surrounded by farms and isolated dwellings in an area on the outskirts of chipping which has always been a predominantly farming area. Most farms within close proximity to the application site are still working farms and all have a magnitude of farm buildings and ancillary items surrounding them. Which include electricity masts and cables and telephone cabling along with domestic paraphernalia



### Application Site

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The image above shows the application site in relation to the surrounding area and shows properties within close proximity to the proposed turbine.

The impact of the turbine upon the surrounding area is minimal by virtue of the amount of telegraph and electricity poles which have more of an impact on the ANOB due to their massing rather than a single structure. However these poles have been accepted as appropriate in the countryside and over time have blended into their surroundings, it is envisaged that this turbine will have the same effect. It should be noted that to the south of the proposed turbine at the top of Jeffery Hill permission was granted for a radio mast by BT Tetra application number 3/1999/0878 on the horizon which is clearly visible on the landscape over a wide area and is in a much elevated position within the ANOB than the proposed turbine.

Farms are one of the largest contributors to green house emissions due to both machinery and livestock with a large carbon footprint. The aim of this application is to significantly off set the amount of carbon produced on site against the proposed turbine. The applicant will then be going a long way to being self sufficient with all the electricity used on site being generated by the turbine and a modest income received from the excess electricity generated. This should be looked upon as a farm diversification project. The farming community are being targeted by DEFRA and Natural England to be as sustainable as possible to meet increasing targets Europe wide the installation of this turbine will help the applicant achieve this

#### **POLICY ENV24 Renewable Energy**

In view of the general environmental benefits associated with harnessing renewable energy sources, the Borough Council will support the development of renewable energy schemes provided it can be shown that such developments would not cause unacceptable harm to interests of acknowledged importance in the local environment.

This general policy is to stimulate the development of new and renewable energy sources in conjunction with other planning policies

#### **Policy ENV25**

In assessing proposals for renewable energy schemes, the Borough Council will have particular regard to the following issues:

- I. The immediate and wider impact of the proposed development on the landscape; and AONB in particular the need to protect features and areas of natural, cultural, historic and archaeological interest;
- II. The measures that would be taken, during and after construction, to minimise the impact of the development on local land use and residential amenity;
- III. The local and wider benefits the proposal may bring; and
- IV. The fact that certain renewable energy resources can only be harnessed where the resource occurs.

The application site is within the ANOB therefore we have commissioned a Zone of Theoretical Visibility mapping to show the impact on the ANOB and surrounding areas, two maps have been completed and are subject to a separate report to accompany this planning application. The first map takes into account the impact of the turbine if the land was flat and the second looks at the contours of the surrounding area which gives a true illustration of the impact of the turbine. This should be read in conjunction in assessing this application against the above policy.

The construction of the turbine will be by crane due to the height once up the turbine will need minimal maintenance therefore no service roads or fencing is proposed as part of this application. This also ensures that at the end of the life of the turbine it can be taken down very easily and the landscape can go back to how it is now, with minimal works.

The benefits of the turbine such as the reduction of carbon on the existing working farm, the free electricity and the modest income the applicant will receive should be seen as a positive step for a traditional farm, especially during a climate of change for the farming industry. Ownness is being put of the farming community to be as sustainable as possible, with schemes for recycling plastic and the generation of electricity for buildings and milking parlours being of high importance to the likes of DEFRA and Natural England especially when looking at farm assurance schemes

As detailed above the farming community is one of the biggest contributors to green house gas emissions therefore the construction of this turbine will go a long way to offsetting the carbon produced on this farm.

The harnessing of wind power can only occur within certain locations in the borough due to the topography of the area and natural features such as trees and buildings etc. For a turbine to be efficient it has to be sited at least 50m away from obstructions. The wind speed at the application site has been measured at 6m/s. Therefore it will be able to generate the target amount of electricity per annum.

The application site has been carefully chosen taking into account the built environment of the farmstead and the natural features on site, whilst also taking into account the wind speed and where it will be best sited.

I have also spoken to the Gliding Club who are within 400m of the site our meeting was positive but I have not had a written response to our meeting.

It should be noted that I do not feel that the turbine will affect the gliding club, after carefully studying the landing and takeoff patterns of the gliders they will not be directly affected by the proposed turbine and it is hoped that they will be in support of this application. However it should be noted for information purposes 2 15kw wind turbines have been approved and constructed on the air field at Cockerham Gliding Club.

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#### Policy ENV26

The Borough Council will approve proposals for wind turbine generators providing:

#### About the proposal

- I. The visual impact of the proposal on the wider landscape is justifiable;
- II. The proposal does not harm any wildlife habitat or area of historical or architectural importance;
- III. The degree of nuisance caused by noise and shadow flicker to nearby residential amenities, agricultural operations, recreational areas or the function of the countryside is minimal;
- IV. The proposal does not interfere with electromagnetic signals;
- V. The design, colour layout and scale of turbines and ancillary structures including access roads must be appropriate to the character of the area;
- VI. Connections to electrical grids and sub stations etc Must be acceptable in the landscape setting;
- VII. Adequate restoration and after provision must be made;
- VIII. Suitable parking facilities should be provided where appropriate.

#### Location

Development proposals within or close to the Area of Outstanding Natural Beauty, sites of special scientific interest, local nature reserves, or scheduled ancient monuments will not be allowed unless;

- I. The proposal cannot be better located outside such statutory designated areas
- II. The proposal is acceptable in environmental and landscape terms; and
- III. Any adverse environmental impacts as far as practicable have been mitigated:

The location of the turbine is not one of dominance within the landscape the site is surrounded by hills and trees which obscure the turbine and reduce its impact on the ANOB. Shadow flicker calculations have been done and have been submitted in addition to this

application for the council to consider the impact of the turbine on neighbour amenity. Please not that this impact in minimal.

The turbine is grey in colour which will help it blend into the landscape and as it is sited west of the large agricultural buildings on site its impact will be minimal no other ancillary buildings are proposed as part of this application nor are service roads or parking, as the site can be accessed from the existing farm yard and track into the applicants fields.

The applicant does not own any land outside the ANOB therefore he cannot site it anywhere else. Due to the upland nature of the farm it is in an area most suitable for harnessing the wind due to the high average wind speeds. The turbine will not be situated on a ridge top or summit location to ensure it is not a prominent feature.

In assessing the wider impact and cumulative impact from turbines, it should be noted that the wind turbine approved at Dewlay on the A6 near Garstang which is 125m high can be seen from some of the surrounding areas such as Beacon Fell. However due to the topography of the surrounding areas, especially the height of Beacon fell it has been demonstrated that like the Dewlay turbine this one will only provide fleeting glances in specific areas (see ZTV Map and supporting statement). This proposed turbine is no way as large as that at Dewlay with a total height of 38.6m, to that end will not cause as much as an impact as that at Dewlay.

### 3. Planning History

3/1995/013A	Open Fronted Machinery / Storage shed	Permitted Development
3/2003/0726	Erection of Timber Framed proprietary sheep Building to accommodate a commercial lambing Flock	Approved
3/2005/0291	Stage 2. An extension to a timber framed sheep Building to one side and rear elevation 408m <sup>2</sup> site Area	Approved
3/2007/0265	Erection of timber framed, concrete walled Agricultural building for the use as a covered Midden store	Approved
3/2008/0399	The removal of 3 no stone/brick/timber buildings In poor repair and the erection of propriety design Steel agricultural portal frame building for the storage Of hay / straw	Approved

#### 4 Planning Policy

##### National Policy

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##### National Planning Policy Framework

Paragraph 153 of the National Planning Policy Framework (NPPF), a material consideration, notes that *'When determining planning applications, local planning authorities should apply the presumption in favour of sustainable development and:*

- *not require applicants for energy development to demonstrate the overall need for renewable or low-carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and*
- *Approve the application if its impacts are (or can be made) acceptable. Once opportunity areas for renewable and low-carbon energy have been mapped in plans, local planning authorities should also expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying opportunity areas.*

It is clear from this statement that the impacts on the surrounding area and site can be made acceptable, without causing an undue detrimental visual impact on the surrounding landscape.

Due to the location proposed, the method of the erection of the mast indicated and the, this proposal will have a minimal impact upon the adjacent site or the Area of Outstanding Natural Beauty. On this basis, given the proposed development will have little if no impact on the adjacent Heritage Asset by virtue of its construction, and the obvious benefits the harnessing of the renewable energy resource will have on reducing the carbon footprint of the working farm, the scheme is considered to be wholly in accordance with the guidance provided in this draft national document.

##### Planning Policy Statement 1 – Delivering Sustainable Development

One of the key principles of PPS1 (ii) notes that *'Regional planning bodies and local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change'*. In respect of the protection and enhancement of the environment, the statement also makes clear in paragraph 17 that, *'The Government is committed to protecting and enhancing the quality of the natural and historic environment, in both rural and urban areas. Planning policy should seek to protect and enhance the quality, character and amenity value of the countryside and urban areas as whole.'*

Ministerial advice on development in the countryside is contained within PPS7, which states as one of its key principles, *'(iv) all development in rural areas should be well designed and inclusive, in keeping and scale with its location, and sensitive to the character of the countryside and local distinctiveness.'*



Given the scale, type and design of the proposed turbine and mast, the development is considered to be entirely sensitive to the character of the site, and will be an acceptable scale in relation to the Applicant's farm buildings.

### **Planning Policy Statement 22 - Renewable Energy**

*PPS22 states that 'In sites with nationally recognised designations (Sites of Special Scientific Interest, National Nature Reserves, National Parks, Areas of Outstanding Natural Beauty, Heritage Coasts, Scheduled Monuments, Conservation Areas, Listed Buildings, Registered Historic Battlefields and Registered Parks and Gardens) planning permission for renewable energy projects should only be granted where it can be demonstrated that the objectives of designation of the area will not be compromised by the development, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits.'*

In this case, the objectives of the designation of the area will not be compromised due to the method of construction, and given the clear benefits the proposal will have on the sustainability and long term future of Ingrave Farm.

PPS22 outlines national policy objectives in relation to renewable energy and considerations relevant to the determination of planning applications of this sort. This policy states '*Small – scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally, Planning Authorities should not therefore reject planning applications simply because the level of output is small*', it also goes to say, '*of all renewable technologies wind turbines are likely to have the greatest visual and landscape effects. However, in assessing planning applications, local authorities should recognise that the impact of turbines on the landscape will vary according to the size and number of turbines and the type of landscape involved, and that these impacts may be temporary if conditions are attached to planning permissions which require the future decommissioning of turbines*'.

The applicant is only applying for a single wind turbine which will be located within close proximity to the built development of the farm, within a back drop of trees and hedgerows.

### **Supplementary Planning Document – Sustainable Resources**

This policy has a specific section when looking at Wind Energy. Section 3.14 states that wind power are a technically proven energy technology for which there is great potential in the UK, yet it currently only accounts for 0.5% of the electricity generated in this country.

This supplementary document also asks for specific requirements to be met when determining wind power applications these include, Landscape and Visual Impacts,

Ecological Impacts, Noise, Shadow Flicker, Wind Speed, Site Access, Electromagnetic Interference, Cultural Heritage and Cumulative Impacts these requirements are met in this report.

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## 5. Context

The application site lies within Chipping. Chipping is a village and civil parish of the borough of the Ribble Valley, within the Forest of Bowland, area of outstanding Natural Beauty and the land in question lies in a predominantly rural area surrounded by agricultural land and buildings. The siting of the turbine has been chosen based on data collected regarding wind speeds and also within an area on the farm where the maximum possible wind speed can be achieved. In addition to this the location has also been chosen to reduce any visual impact, impact caused by shadow flicker to any neighbouring property and that it will be sited to the west of the dwelling and livestock buildings against the back drop of a well established tree boarder.



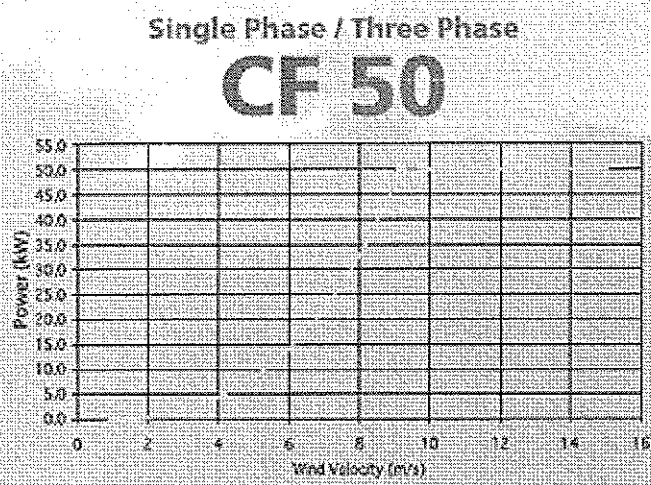
Image taken from Google earth, showing features on site such as established trees and farm yard including the track into the field, along with fence lines and hedges.

## 6. Amount / Specification

One turbine is being applied for domestic purposes only. Not only will it provide all power for the domestic dwelling on site it will also generate power in the nearby agricultural buildings.

The applicants are proposing to install an CF 50KW single phase wind turbine with the following specification which will be supplied from C & F Green Energy a well established company:-

SPECIFICATION SHEET	
Rotor Diameter	20 m
Tower/Mast	29 m
Max. Power	50 kW
An. Yield @ 5 m/s	117,250 kWh
Rated Wind Speed	9.0 m/s
Min active wind speed	2.2 m/s
Cut out wind speed	NONE
Annual Carbon Saving	70 - 80 Tonnes
Noise @ 5 m/s at 60m	TBA
Max RPM	50 rpm
Method of Installation	Crane
<b>GSM Controlled as Standard</b>	



#### BLADE PITCH CONTROL

The blades are automatically controlled to optimise aerodynamic performance. C & F have developed mega turbine pitch control technology giving them perfect control of each turbine. This guarantees power production at the **lowest** wind speeds, as well as high wind speeds and as the table above shows the turbine will produce energy at a wind speed of 2.2 m/s this ensures the turbine runs efficiently.

#### YAW ACTUATOR, WIND VANE CUP ANEMOMETER

A wind direction vane and cup anemometer is monitored by the turbine microprocessor which activates the Yaw Motor to align the turbine into the wind. This feature improved performance and energy yield.

#### MECHANICAL BRAKE

All C & F Turbines use a hydraulic rotor brake system. This system is designed to gently bring the turbine to a halt to reduce the chance of causing a break down if the turbine suddenly stopped.

#### BLADES

The structural design of the blades has been optimised for performance, strength and durability. All blades are constructed from infused glass / carbon fibre reinforced and tested to class 1 hurricane wind speeds

#### MAST

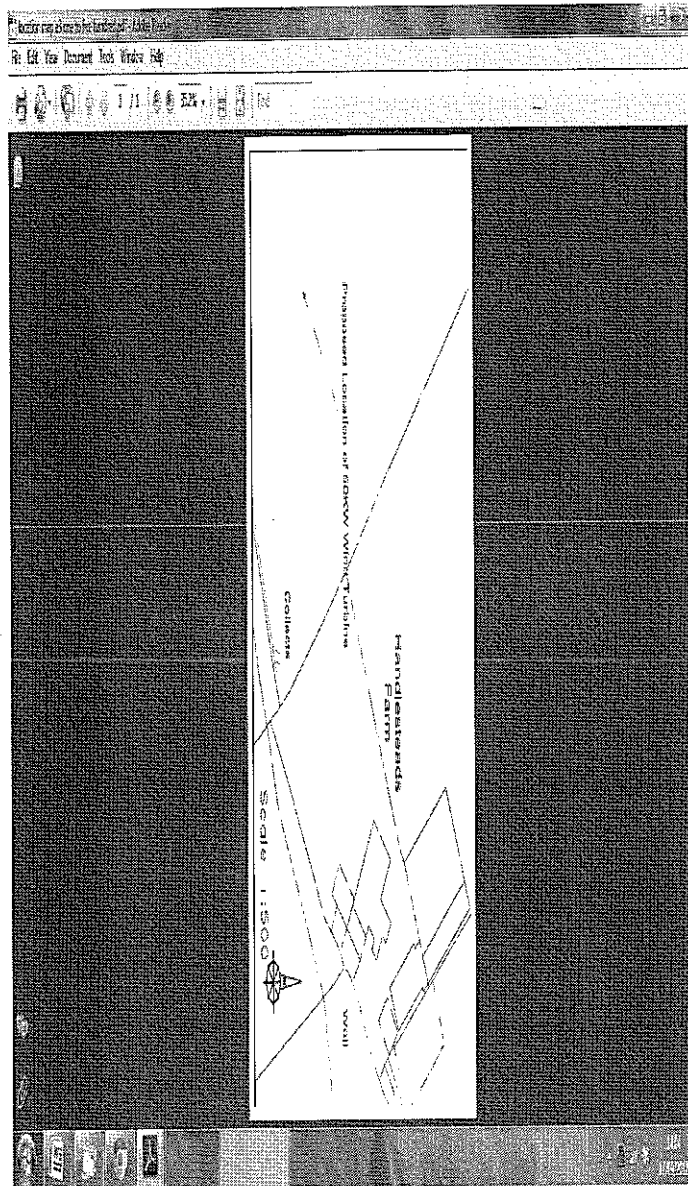
A monopole mast which can withstand hurricane force winds. This houses a hydraulic ram used for erecting and lowering the mast.

### 7. Layout

As detailed above, the location of the turbine has been carefully chosen to ensure it has minimal impact but also can achieve the predicted power generation.

The layout of the site and the location of the turbine can be seen below.

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This map is not to scale but it clearly shows the proximity of the turbine to the farm stead and the surrounding buildings.

## 8. Landscape and Visual Impacts

The turbine is to be situated within an agricultural field which is part of the applicants' ownership.

A ZTV Map and accompanying statement is to be provided as part of this application which goes into more detail with regards to the Landscape and Visual Impacts.

## 9 Ecological Impacts

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Energy from wind sources has the potential to have a beneficial impact on reducing the impacts on both climate change and pollution, by reducing dependency on traditional dirty fuels. Major causes of habitat loss are caused by the destruction and fragmentation of the natural environment by development, agricultural intensification, including woodland management water abstraction and costal squeeze. It is relatively simple to install small scale wind systems to avoid habitat loss, there is potential of sensitive use of the ground below the wind turbine to provide additional areas for foraging or interconnection of colonies.

There is no evidence on site of ground dwelling mammals such as badgers, foxes or other creatures. Nor are there any nesting birds or bats within close proximity to the turbine. However if a mammal was to come into contact with the turbine they use a method call Echo location which uses sound instead of sight to locate objects. An example of this a bat could catch insects in flight in a dense wood with high wind speeds without colliding with moving branches or other obstacles so it is almost certain that they could clearly see the wind turbine when moving or stationery.

Minimal numbers of large migratory birds such as swans and geese are not known within the area, therefore the turbine will not have any detrimental impact on protected birds. After speaking to the RSPB I was informed that local birds such as swallows, magpies, blackbirds, swifts etc are small enough to manover around the turbine therefore it does not cause them any undue problems.

The RSPB are firm supporters of wind energy and have even installed turbines on their sites throughout the country. As they firmly believe the impact of climate change will eventually devastate bird populations globally and measures must be taken to avoid this scenario.

## 10 Noise

Accompanying the application is an acoustic survey prepared by C & F Green Energy and undertaken by Martyn Bailey MSc MIOA, which gives a detailed report on the noise produced by the turbine.

## 11 Wind Speed

Also accompanying this application are figures taken from the Wind Speed Data base for the application site. These figures clearly show that the wind speed in the area is ideal for the harvesting of wind energy, with no average being below the minimal wind speed of 1.2 m/s for operation.

To calculate the wind speed of a site, to determine whether or not the site would be suitable for a wind turbine, the following information is usually considered.

Before installing a small wind system it is essential to have a good knowledge of wind speed at the site. The Department of Trade and Industry wind speed database contains estimates of the annual mean wind speed throughout the UK. This may give an indication of average wind speed in different parts of the country. However it is very unlikely to give an accurate idea of wind speed at a proposed site for a small wind system, particularly in urban or built up areas -if wind speed at the site is not in the range at which the small wind system capacity is rated, then the system may deliver less electricity than expected.

The data is the result of an air flow model that estimates the effect of topography on wind speed. There is no allowance for the effect of local thermally driven winds such as sea breezes or mountain/valley breezes. The model was applied with 1km square resolution and takes no account of topography on a small scale or local surface roughness (such as tall crops, stone walls, or trees), both of which may have a considerable effect on the wind speed. The data can only be used as a guide and should be followed by on-site measurements for a proper assessment.

Each value stored in the database is the estimated average for a 1km square at 10m, 25m or 45m above ground level (agl). The database uses the Ordnance Survey grid system for Great Britain and the Northern Irish Ordnance Survey grid system for Northern Ireland.

A good alternative to the UK Wind Speed Database is onsite wind measurement. Installers and manufacturers may be able to give advice on how to get an approximate idea of wind speed at a proposed site, which depends on a variety of factors such as local topography and the built environment.

Wind speed taken from the BWEA website for your postal code PR3 2WQ:

### Wind speed Database Query Results For the 1km grid square 360 442 (SD6042)

Wind speed at 45m agl (in m/s)

7.6	7	6.1
7	6.7	6

6.9	6.4	5.8
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Wind speed at 25m agl (in m/s)

7.2	6.5	5.5
6.3	6.2	5.4
6.4	5.7	5.1

Wind speed at 10m agl (in m/s)

6.5	5.9	4.7
5.6	5.5	4.6
5.7	4.9	4.3

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## **12 Site Access**

The location site is easily accessible from the existing track and farm yard. When the turbine is delivered to site, it is not envisaged that there will be any problems as no gateways will need to be altered and there is no need to form further areas of hardstanding.

## **13 Electromagnetic Interference**

C & F Green energy have been in contact with the National Grid who state as long as the turbine is sited 33 m away from the overhead cables it will not create any electromagnetic interference.

## **14 Cumulative Impacts**

The application seeks permission for one turbine on this site. There are no other turbines within visual distance of this site; therefore there is no cumulative impact from this development. The Ribble Valley Borough Council Sustainable Resources Supplementary Planning Document also states that the potential for additional wind turbines cannot be taken into consideration when determining a planning application.

## **15 Shadow Flicker**

Shadow flicker has been proven to occur only within ten rotor diameters of turbine position. The CF 50 Turbine has a rotor diameter of 20.8m so the impact of shadow flicker would only occur within a 208m distance of the turbine. The only property falling within this distance is the applicants own property. In addition to the distance shadow flicker only affects properties within 130 degrees either side of north of the turbine.

Based on the information above the map below demonstrates that no property will be affected by shadow flicker nor will any outbuilding or livestock building. The shadow flicker will occur on the applicants own land over a small area therefore the impact on the countryside is negligible.

## 16 Conclusion

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The EU has given the UK a target for 10% of electricity to come from renewable sources by 2010, and 15% by 2015. In addition to these targets the UK has agreed to a binding target that 20% of all energy will come from renewable sources by 2020, the bulk of these targets are expected to be delivered locally through the planning system.

The proposed turbine will ensure that the dwelling and buildings on site go some way to providing sustainable development; their carbon foot print will be reduced by 14 – 19 Tonnes per year which can be offset against the carbon produced on the farm to help the applicants become greener. This reduction and saving of carbon can go towards both national and local targets for renewable energy, and also help provide the applicant with additional income to help support the existing farm.

The construction of the turbine will be done in a sustainable way with no excessive works needing to be carried out to get the turbine to site or to erect it, and therefore in light of all the above information, this application should be looked upon in a favourable manner as it is considered to be wholly in accordance with the relevant National and Local Plan Policies.

Due to the low key construction and the reduction on the effects of climate change reducing pollution and potentially providing additional small areas of refuge foraging space and interconnection of colonies the transition to a lower carbon economy with an increased use of renewable is likely to increase biodiversity rather than damage it.

The construction of a wind turbine at Handlesteads Farm is ideal due to its positioning, and siting within the borough to harness an average wind speed of 6.2m/s which is well above the minim requirement of 2.2m/s for the turbine to run. This will mean that the turbine will be producing an enough electricity to make Handlesteads farm sustainable as well as exporting power back to the grid, which will benefit the long term natural resources.

Although the turbine is to be sited within the AONB it is felt that the sensitivity of the landscape has somewhat changed due to the erection of a 125m Turbine at the Dewlay Cheese Factory on the A6 in Garstang. This turbine has changed the balance of the areas within the AONB with lines of sight to the turbines which are far and wide including many vantage points as well as rural areas. This turbine has become a feature of Industrialisation within the rural landscape. However it should be noted that in this instance due to the scale of the proposed turbine and its location it will not create a great cumulative impact on the surrounding area, due to the land levels surrounding the application site, the Dewlay turbine can be seen fragmentally in the surrounding area, and the proposed turbine due to its size and scale will not have any way near the same impact at that at Dewlay.

The impact on the ANOB can clearly be seen on the attached ZTV Mapping and due to the topography of the land within a 25km radius of the turbine it is clear that the impact from the turbine is very minimal, this impact should be outweighed by the positive long term effect the proposed wind turbine will have on the environment

We are slowly running out of natural resources for the production of energy and any step to becoming sustainable should be seen as a positive contribution to this depletion however small.