Kirklees COUNCIL
Planning

PLAN NO.		
DATE LODGED		
RECEIPT NO.		FEE RECEIVED
CASH	CHEQUE	OTHER

KIRKLEES COUNCIL - RESPONDING TO THE RECESSION
VALIDATION CHECKLIST: SUPPLY 1 COPY (PLUS THE ORIGINAL)

PO Box B93, Civic Centre 3, Huddersfield, HD1 2JR Tel: 01484 414746 Email: planning.contactcentre@kirklees.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

Title: Mr | First name: PETER | Surname: MITCHEL

Company name:

Street address: UPPER WOOD ROYD BARN
HOG CLOSE LANE

Town/City: HOLMFIRTH
County: WEST YORKSHIRE
Country: ENGLAND
Postcode: HD97TE

	Country Code	National Number	Extension Number
Telephone number:			
Mobile number:			
Fax number:			

Email address:

Are you an agent acting on behalf of the applicant? (•) Yes ( ) No

2. Agent Name, Address and Contact Details

Title: Mr | First Name: Ross | Surname: Weaver

Company name: Investment Renewables LTD

Street address: Bank Street

Town/City: Wakefield
County: West Yorkshire
Country: United Kingdom
Postcode: wf14 9qf

	Country Code	National Number	Extension Number
Telephone number:	07788	436893	
Mobile number:			
Fax number:			

Email address: ross@investmentrenewables.co.uk

3. Description of the Proposal

Please describe the proposed development including any change of use:
INSTALLATION OF ONE 15M 10KW EVOCO WIND TURBINE

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

Longley Springs Sheffield Rd Hoylend

4. Site Address Details

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

Description:

House: | Suffix:

House name: UPPER WOODROYD BARN

Street address: HOG CLOSE LANE

Town/City: HOLMFIRTH

County:

Postcode: HD9 7TE

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

Easting: 418066

Northing: 405770

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

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):

Others - description:

Type of other material: Wind turbine components

Description of *existing* materials and finishes:

N/A

Description of *proposed* materials and finishes:

NACELLE BODY AND BLADES - WHITE COMPOSITE
TOWER - FULLY GALVANISED STEEL COLUMN

9. (Materials continued)

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:

HD97TE-SITE PL
HD97TE-SITE LO TION
HD97TE-DESIGN AND ACCESS STATEMENT
HD97TE-SUPPORTING STATEMENT
HD97TE-SUPPORTING MAPS AND PHOTOGRAPHS
HD97TE-GREEN BELT IMPACT ASSESSMENT
HD97TE-NOISE IMPACT ASSESSMENT
HD97TE-EVOCO 10KW DESIGN DETAILS 15M
HD97TE-FOUNDATION PLAN
HD97TE-HEIGHT COMPARISONS

10. Vehicle Parking

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 [X] 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:

FALLOW

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

21. Site Area

What is the site area? 48,564 sq.metres

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:

WIND TURBINE FOR GENERATING CLEAN ELECTRICITY FO USE BY CUSTOMER AND TO BE SOLD TO THE GRID AS CLEAN ENERGY.

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 (General Development Procedure) Order 1995 Certificate under Article 7

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: Mr First name: ROSS Surname: WEAVER

Person role: Agent Declaration date: 17/07/2010 ☒ Declaration made

25. Certificates (Agricultural Land Declaration)

Agricultural Land Declaration

Town and Country Planning (General Development Procedure) Order 1995 Certificate under Article 7

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

Title: Mr First Name: ROSS Surname: WEAVER

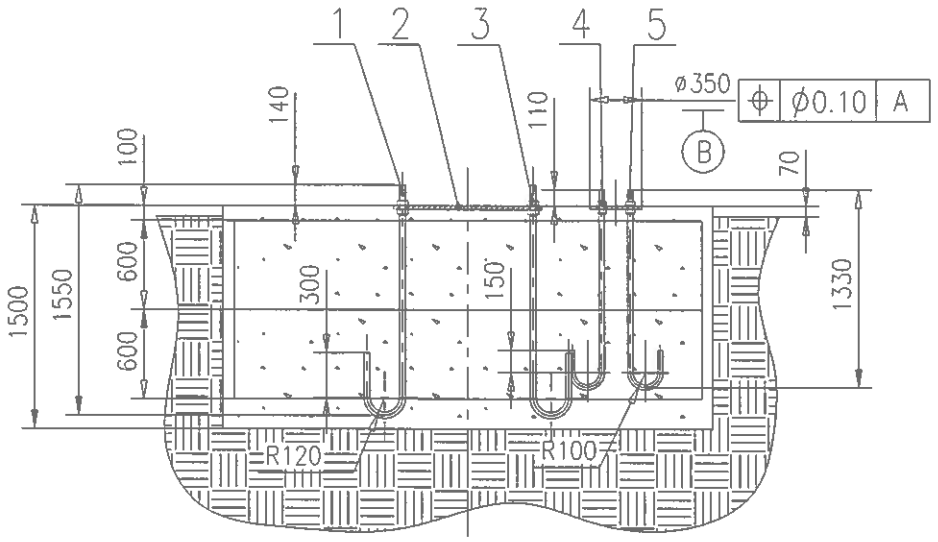
Person role: Agent Declaration date: 17/07/2010 ☒ Declaration Made

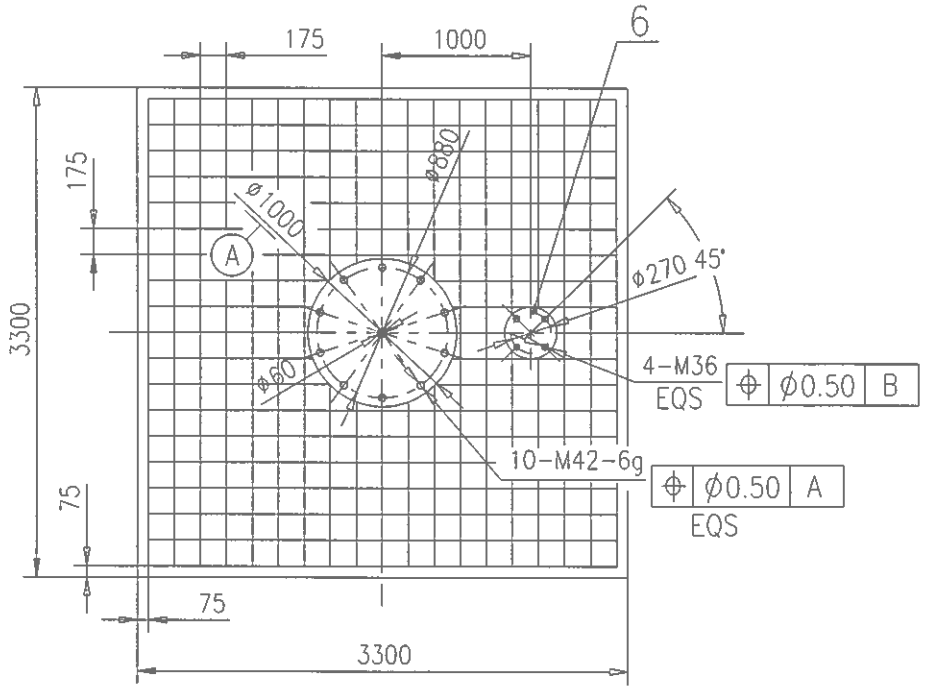
26. Declaration

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information. ☒

Date 17/07/2010

Evo-10K-4300-15m





Technical requirements

1.Cast concrete directly into excavated hole. Do not shutter and backfill.
2.If the site soil conditions are chemically aggressive, very wet or the site is subject to extremes of temperature, Evoco Energy should be consulted about the choice of concrete grade. Otherwise, a 35 Newton or better concrete (C35) will be adequate for most conditions. If mixing the concrete yourself, you should use the following proportions by volume 1:2:4 cement:sand:gravel
3.Steel reinforcing mesh to be grade BS 4483, A393.
4.Anchor bolts to be grade 10.9 grade high tensile steel.
5.Exposed threads to be covered with protective caps.
6.Care should be taken whilst excavating to prevent subsidence or collapse.

No.	Drawing No.	Description	Qty.
1	Evo-10K-4310-15m	Anchor bolts M42-Tower	10
2	Evo-10K-4320-15m	No.1 foundation plate Tower	1
3	GB/T 6170-2000	Bolt M42	20
4	GB/T 6170-2000	Bolt M36	8
5	Evo-10K-4330-12m	Anchor bolts M36 Hydr Ram	4
6	Evo-10K-4330-15m	No.2 foundation plate Hydr Ram	1

DESIGNER		STANDAR	
DRAFTER			
CHECKER			
		ORDER	

Evoco Energy Ltd.
St Pegs Mill,Thornhill Beck Lane,
Brighouse.HD64AH United Kingdom.
Tel:+44(0)1484 475 800
info@evocoenergy.com

evoco wind energy

Tower Foundation

scale 1:50

Evo-10K-4300-15m

Investment Renewables Ltd

DESIGN AND ACESS STATEMENT

Proposed Installation for TWO Evoco 10kw Wind Turbine with a 15m mast at:

UPPER WOOD ROYD BARN
HOG CLOSE LANE
HOLMFIRTH
HD97TE

17/07/10

CARRIED OUT BY:

INVESTMENT RENEWABLES LTD
30 BANK STREET
MIRFIELD
WEST YORKSHIRE
WF149QF

Introduction

This statement is submitted in support of a full planning application for the installation of ONE small scale 15m 10kw wind turbine on land at:

UPPER WOOD ROYD BARN, HOG CLOSE LANE, HOLMFIRTH, HD97TE

This statement explains the background to the proposed development, describes the scheme and, in the context of relevant planning policy, sets out the case for the proposal.

Background

The applicant uses around 10,000 kWh of electricity a year, which is considerably higher than the UK average of 4,500 a year.

The applicant is located in an area of significantly high wind allowing for an exceptionally high average wind speed. This would allow the customer to generate a high yield of electricity that can be used on site as well as being sold back to the grid to be resold as clean electricity to those without the means to generate their own renewable electricity.

This coupled with current increases in energy prices at a steady 11% per annum and their desire to promote themselves as green and energy efficient really demonstrates an excellent reason to install this renewable technology.

After assessing various options the decision has been made to install ONE small scale wind turbine as this is deemed necessary to offset the properties current usage. The primary reasons for this over other renewable technologies are the abundant, good quality wind resource in and around the Holmfirth area and the more than sufficient spare land. The site in question has uninterrupted open land in the West and South West. This is the Prevailing wind direction, where approx 80% of the UK's wind comes from, which is ideal for maximising energy generation.

Site and Surroundings

Upper Wood Royd Barn is located East of Hepworth and South of Shepley. The site enjoys an exceptionally exposed position making it very suitable for a wind turbine installation. It demonstrates good distances between neighbouring properties over 200m, which is deemed acceptable with regards to noise impact.

The turbine to the North East is clearly in a very exposed location, with far higher visual impact on the surrounding landscape. Due to the proposed turbines lower position and exceptional average wind speed it is believed that this location demonstrates good justification for the proposed installation.

2 Conclusion

It is believed that the merits of this proposal far outweigh the implications of siting the turbine on Green Belt. The above paragraphs demonstrate good reasoning and provide support for the installation to be approved.

The proposed development is associated with an existing dwelling with land allowing it to be considered as other development. The turbine can fall within, 'Engineering and Operations' as it is believed that there is no conflict with the purpose of the land.

The lowered siting allows the turbine to blend in with the hillsides and its visual impact is no more detrimental than the larger turbines found in close vicinity to the property. The turbine is located lower in the valley with the hills acting as a backdrop.

The high annual electricity usage coupled with the good wind resource found at Upper Wood Royd Barn warrants this proposal, as the turbine would increase efficiency on site by around 50%. This would significantly help towards Kirklees' Environmental Policies.

3 Ready To Help

Investment Renewables hopes that the following document provides Kirklees Council with all the information required to make an informed decision. If for any reason Kirklees Council feels there is more information that is required, please do not hesitate to call and we will be more than happy to help.

Contact Via:

Investment Renewables Ltd

30 Bank Street

Mirfield

West Yorkshire

WF149QF

Please make contact using the following number: 07788 436893

Email: info@investmentrenewables.co.uk

Investment Renewables Ltd

SUPPORTINGT MAPS AND PHOTOGRAPHS

Proposed Installation for one Evoco 10kw Wind Turbine with a 15m mast at:

UPPER WOOD ROYD BARN
HOG CLOSE LANE
HOLMFIRTH
HUDDERSFIELD
HD97TE

17/07/10

Carried out by:

INVESTMENT RENEWABLES LTD
30 BANK STREET
MIRFIELD
WEST YORKSHIRE
WF149QF

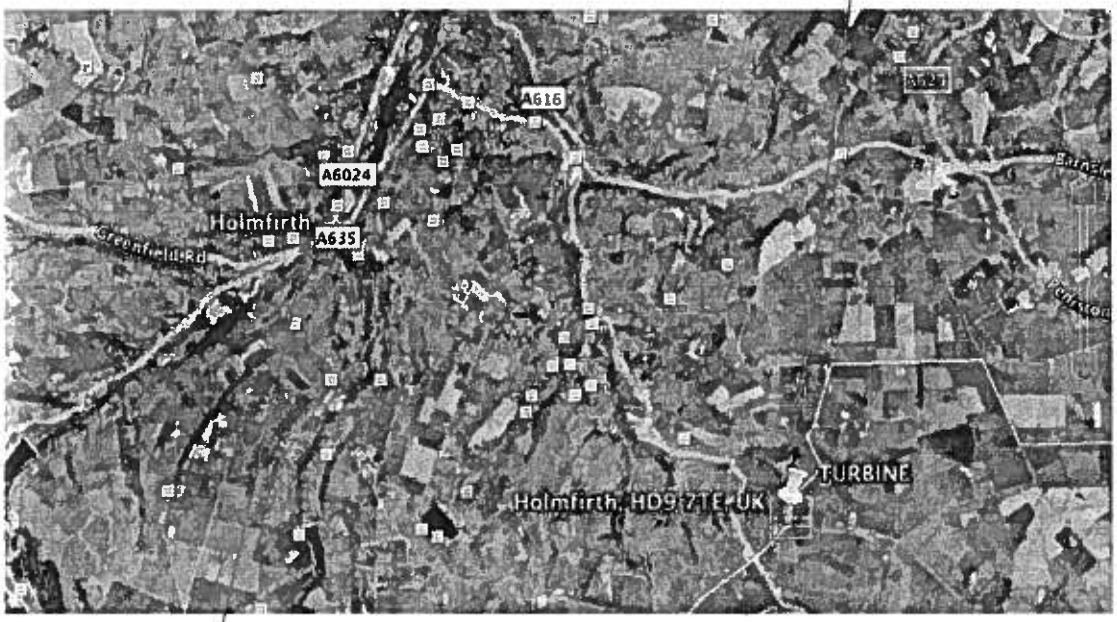
Introduction

The following information, maps and photographs are intended to give a better understanding of the selected location and the surrounding environment around the proposed site.

Surrounding Area Map

The property is approximately 4.5 km from the centre of HOLMFIRTH.

UPPER WOOD ROYD BARN, HD97TE



HOLMFIRTH

Arial Site Photograph

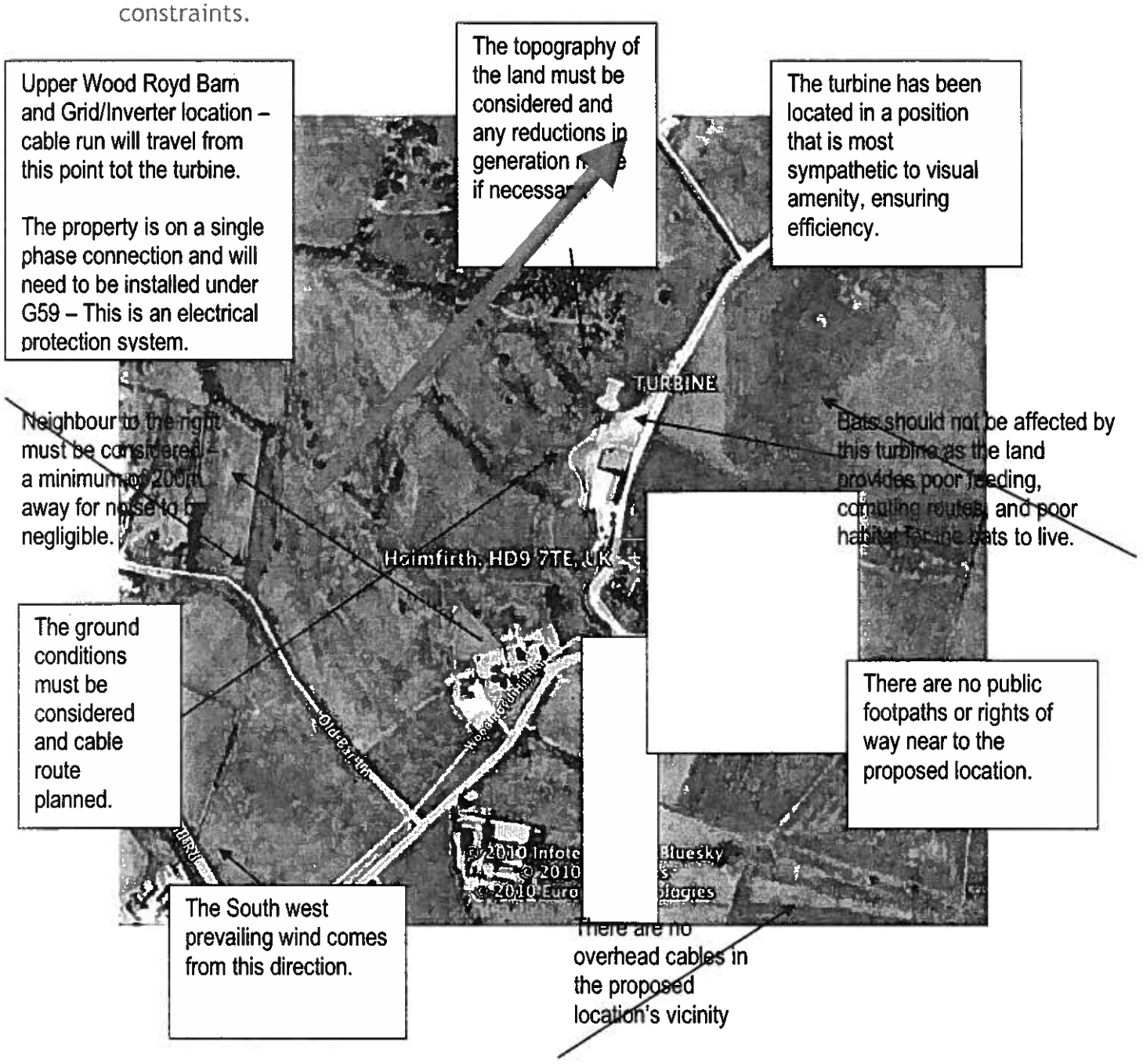
The YELLOW pin indicates the approximate proposed turbine location. Please see site plan for exact details.

Proposed turbine location

Upper Wood Royd Barn

Site location factors

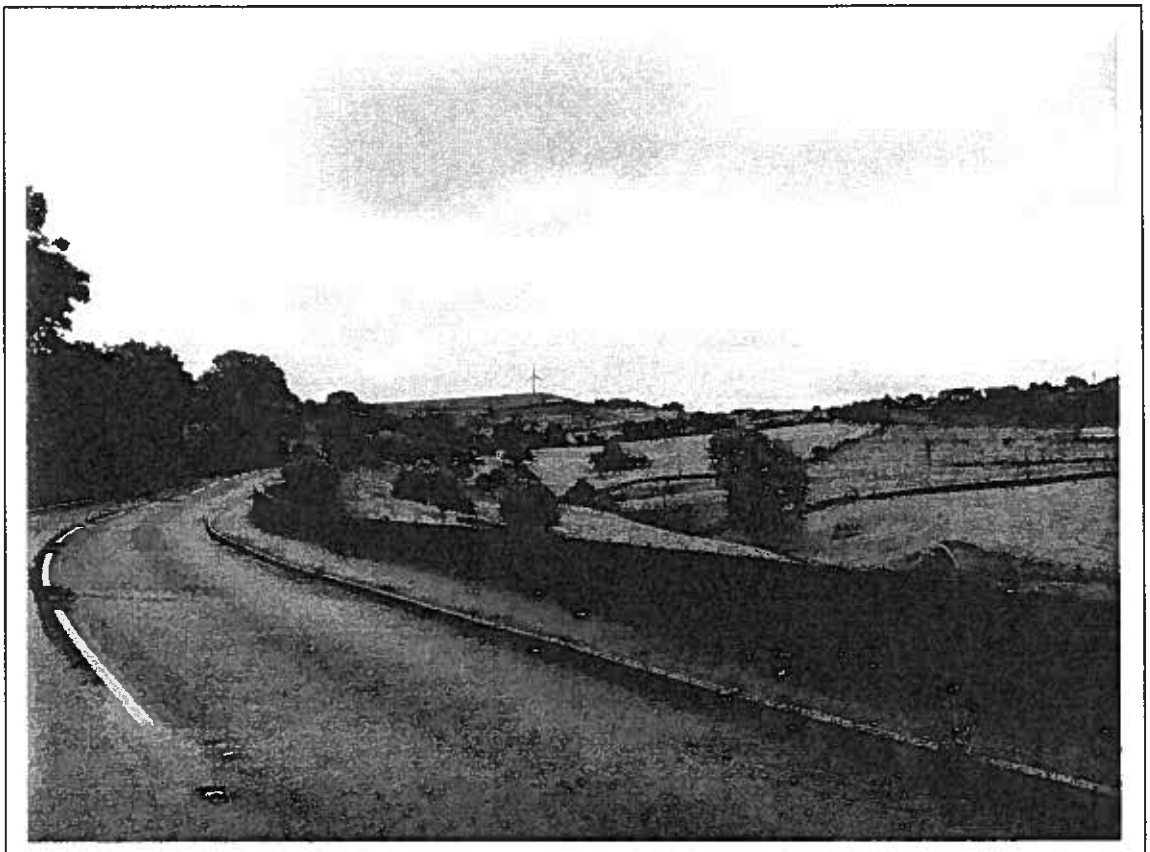
Whilst siting a small wind turbine there are plenty of factors that need to be considered. The map and annotations below give some indication to siting constraints.



Photographs of site and surrounding area

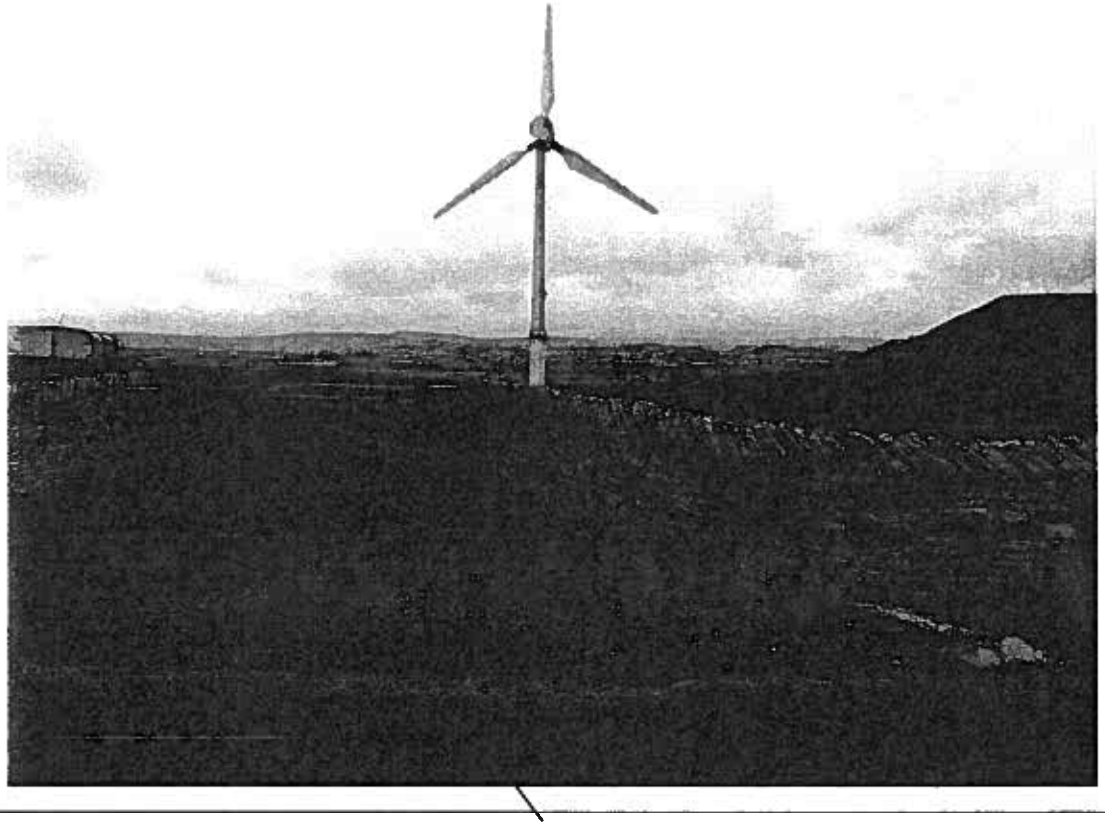
Imposed Images

THIS SHOWS THE IMPOSED TURBINE LOOKING ACROSS TO THE SOUTH. THE PROVEN TURBINE IS QUITE CLEARLY MORE PROMINENT WITH ITS BLACK BLADES/NACELLE. THE EVOCO BLENDS IN WELL.



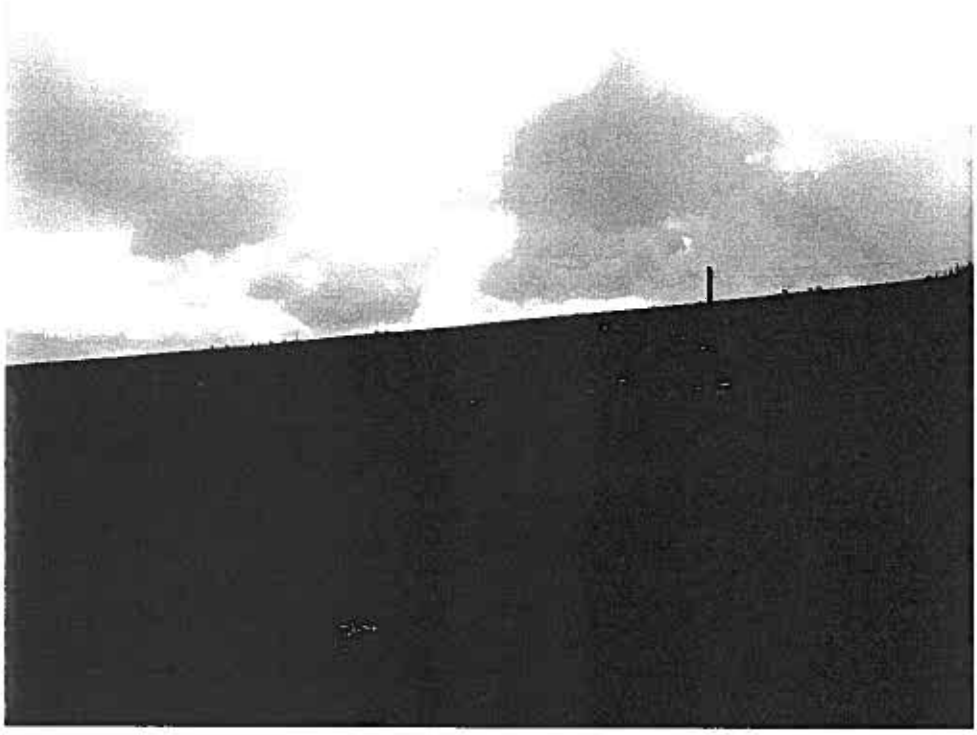
THIS SHOWS THE IMPOSED TURBINE LOOKING ACROSS TOWARDS THE EAST. THE ONLY SIGNIFICANT DWELLING IN THIS DIRECTION IS THE NEIGHBOUR AT 203M AWAY. THIS VIEW DEMONSTRATES HOW WELL THE TURBINE BLENDS IN!

THIS SHOWS THE TURBINE LOOKING TOWARDS THE NORTH. ALTHOUGH IT CAN BE SEEN IT IS RELATIVELY SMALL AND THE COLOURS HELP IT BLEND WELL INTO ITS SURROUNDINGS. THERE ARE NO DWELLINGS NEAR BY THAT THE TURBINE WILL HAVE ANY GREAT IMPACT ON.

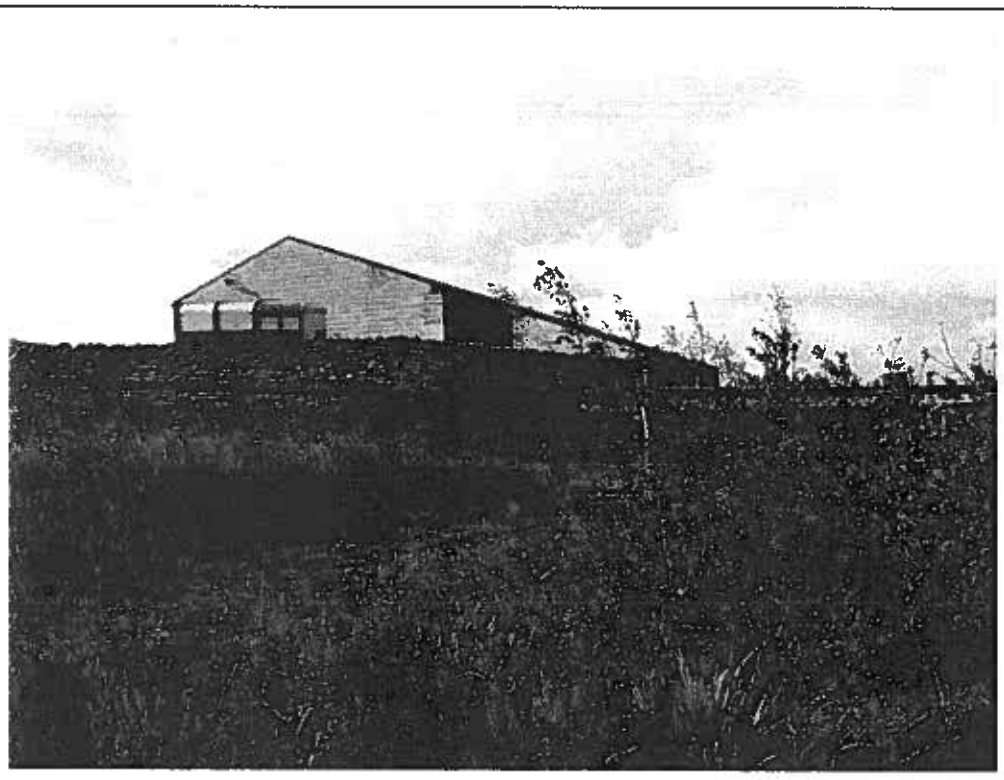


THIS SHOWS THE TURBINE LOOKING ACROSS THE PROPERTY IN A WESTERLY DIRECTION. THIS IS THE MOST IMPOSING VIEW BUT DUE TO THE HIGH STONE WALL DRIVER BY WILL ONLY SEE THE TURBINE FOR A FEW SECONDS. THE LARGE SCALE TURBINE CAN BE MADE OUT IN THE BACKGROUND.

360 Views

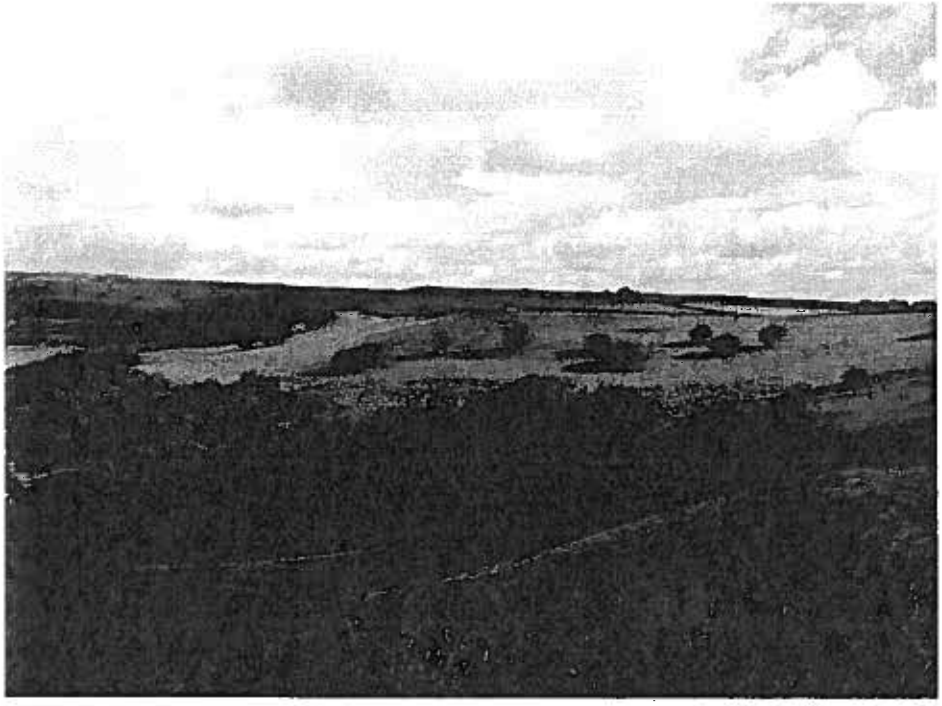


THIS SHOWS THE VIEW LOOKING TOWARDS THE NORTH EAST.



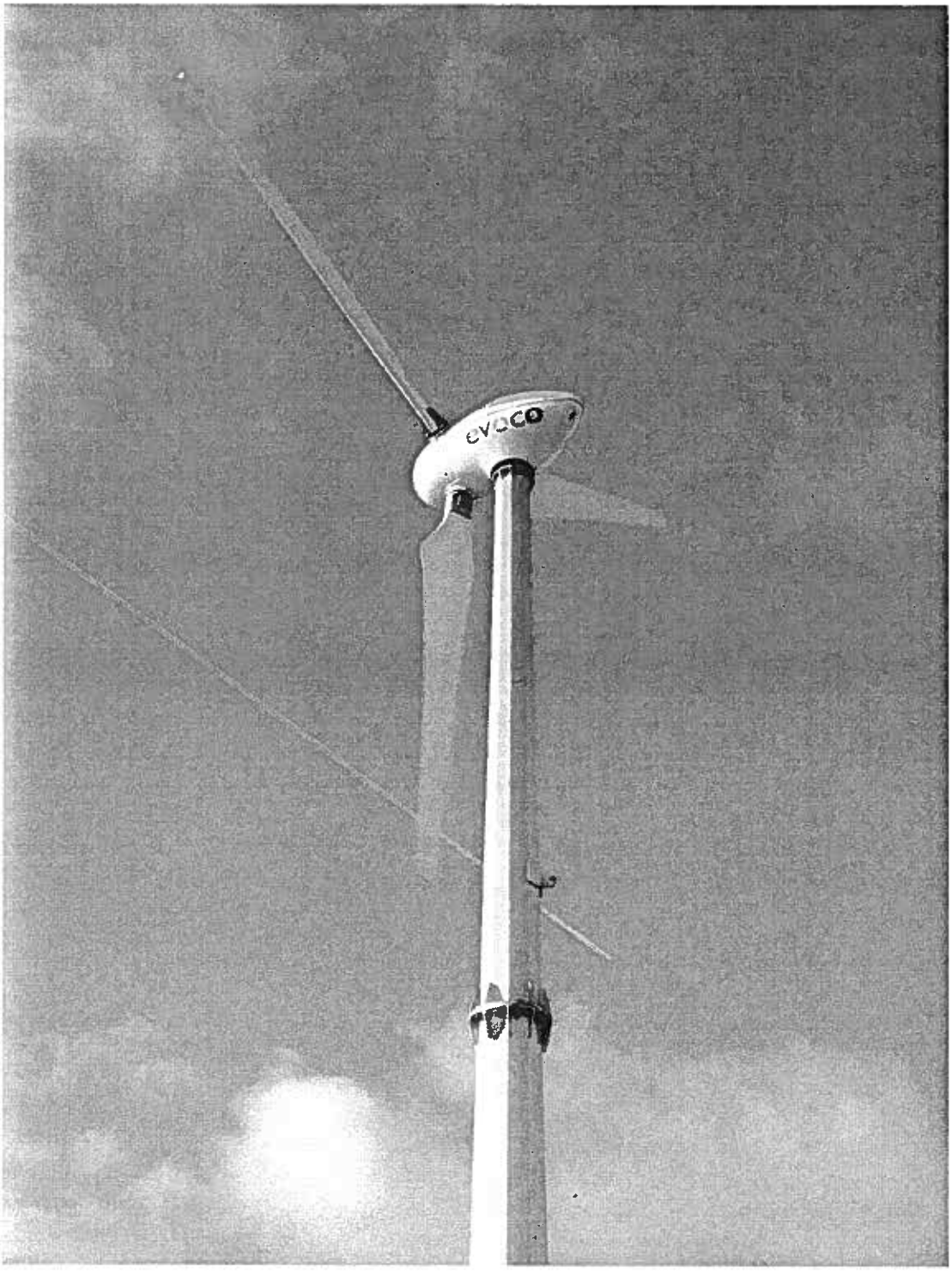
THIS SHOWS THE VIEW LOOKING TOWARDS THE SOUTH EAST.

THIS SHOWS THE VIEW LOOKING TOWARDS THE SOUTH WEST.

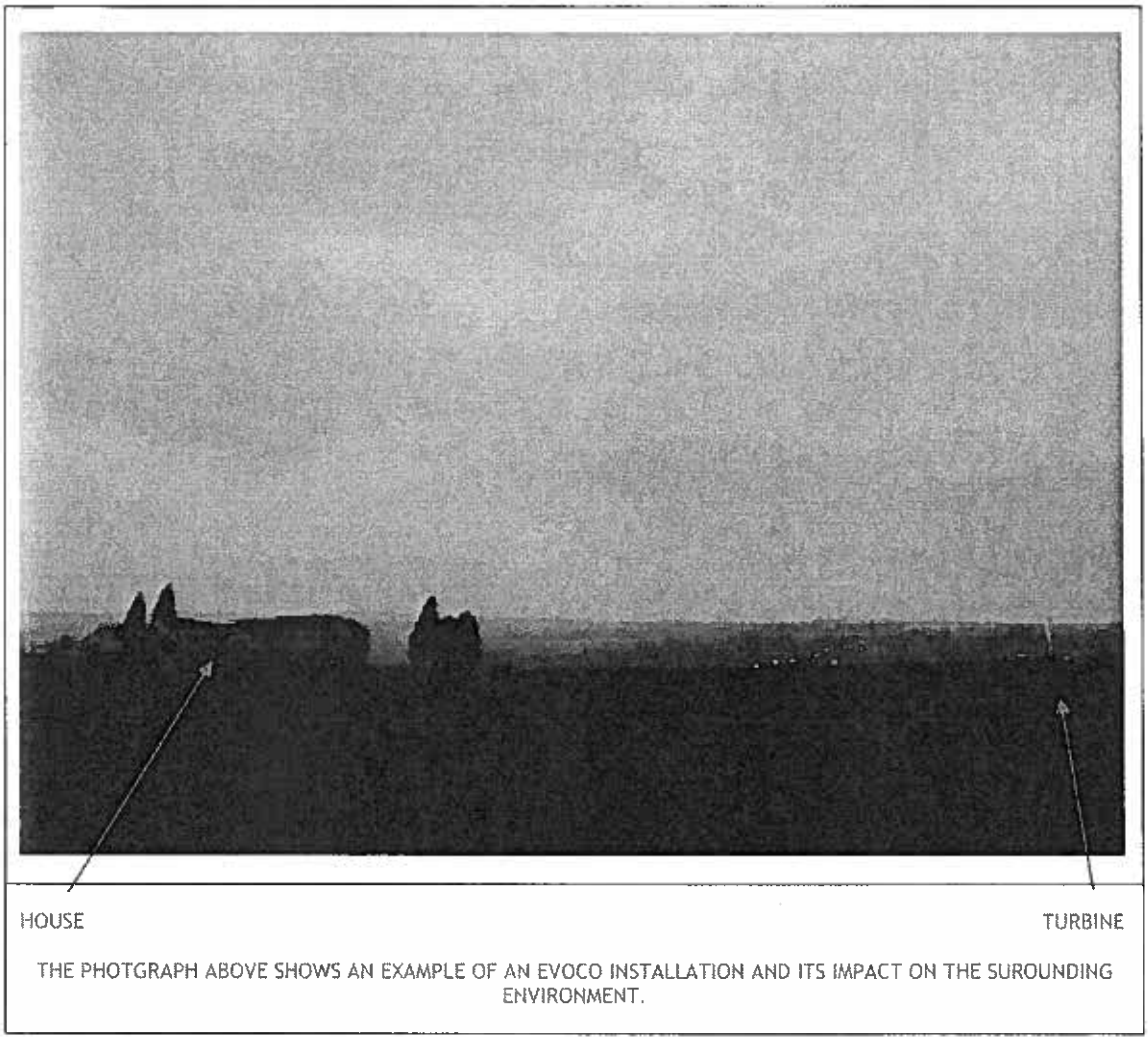


THIS SHOWS THE VIEW LOOKING TOWARDS THE NORTH WEST.

Current Evoco Installation



THIS IMAGE SHOWS THE CLEAN DESIGN OF THE EVOCO 10 AND WITH THE WHITE COMPOSITE BLADES, WHITE NACELLE BODY AND GALVANISED STEEL TOWER.



THE PHOTGRAPH ABOVE SHOWS AN EXAMPLE OF AN EVOCO INSTALLATION AND ITS IMPACT ON THE SUROUNDING ENVIRONMENT.

Contact Via:

Investment Renewables Ltd

30 Bank Street

Mirfield

West Yorkshire

WF149QF

Please make contact using the following number: 07788 436893

Email: info@investmentrenewables.co.uk

Investment Renewables Ltd

SUPPORTING STATEMENT

Proposed Installation for one Evoco 10kw Wind Turbine with a 15m mast at:

UPPER WOOD ROYD BARN
HOG CLOSE LANE
HOLMFIRTH
HD97TE

17/07/10

CARRIED OUT BY:

INVESTMENT RENEWABLES LTD
30 BANK STREET
MIRFIELD
WEST YORKSHIRE
WF149QF

Summary

It is proposed to install 1 x small scale wind turbine on land adjacent to;

UPPER WOOD ROYD BARN, HOG CLOSE LANE, HOLMFIRTH, HD97TE

The small scale 10kw wind turbine is designed for grid-connected electricity generation and will be mounted on a 15m mast, comparable in height to the numerous turbines in the area and under half the size of the existing turbines on the wind farm to the North East. The turbine has a maximum rotor radius of 4.75 metres and a rated output of 10kw. The turbine is to be connected to the national grid to enable any surplus energy generated to be fed onto the grid.

The Evoco 10kw turbine is expected to generate in excess of 38,000 kWh of electricity each year at an average wind speed of 7.1 m/s at hub height, equivalent to a saving of approximately 326 tonnes of CO_2 over the 20 year life expectancy period. With the properties relatively high usage the installed capacity will help greatly towards the regional and national targets for renewable energy generation for 2020 cutting emissions by 50%. The turbine has been specifically designed for low noise operation and minimal visual impact, and has exceptional performance within its class. The turbine has a survival wind speed of 50m/s. The turbine is constructed of high tech composite materials. The tower is finished fully in galvanised steel.

The proposed location of the wind turbine is shown in 'SUPPORTING MAPS AND PHOTOGRAPHS' & 'SITE PLAN'.

The proposed location of the turbine is approximately 203m from the nearest property not owned by the applicant.

Wind Resource

The proposed site has been evaluated thoroughly in line with the national wind speed database for the UK (NOABL) and gives an annual mean minimum wind speed of approximately *6.7 m/s 10m agl* for Grid Ref centre of 418097, 405770 / SE180057 recalculated to the turbines' installed elevation. This average wind reading for the proposed site is above average and is comfortably within recommended guidelines for wind turbine siting.

Environmental Impact Assessment

Background and Policy Context

Wind energy is an abundant natural resource. It is non-polluting, clean and sustainable. The UK has one of Europe's windiest climates and therefore

wind energy is expected to be an important element in achieving the UK government's commitment to reduce CO_2 emissions to 12.5% below 1990 levels by 2010. More specifically it is Government policy to achieve 10% of the nation's electrical requirements from renewable sources by 2010.

Planning Policy Statement 22, published in 2004 replaces PPG22 - Renewable Energy, the statement and supporting notes cover all aspects of renewable energy including considerations for the siting of wind turbines and encourages favourable views towards small scale renewable power sources.

Significantly Paragraph 18:

Small scale renewable energy development

" Local planning authorities and developers should consider the opportunity for incorporating renewable energy projects in all new developments. Small-scale renewable energy schemes utilising technologies such as solar panels, biomass heating, small-scale wind turbines, photovoltaic cells, combined heat and power schemes can be incorporated both into new developments and some existing buildings. Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents."

Paragraph 20 states:

" 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."

Environmental Impact

PPS22 Renewable Energy (August 2004) and/or PPG22 (Feb 1993) - Annex on Wind Energy, recommend the consideration of the following factors in the assessment of the planning implications of proposals for wind turbine developments:

Sitting and the Landscape

PPS22 and PPG22. It has been normal practice to site utility scale wind turbines on elevated and exposed ground in order to achieve the highest possible energy capture and optimise the economics of the project. This has led to considerable opposition to wind power projects wherever they have been proposed.

It is important to appreciate that the Evoco turbine is of a completely different scale to the now familiar utility scale turbines, which may have tower heights of 100m and rotor diameters of 80m or more.

By comparison the Evoco turbine, with a tower height of 15m (max) and rotor radius of just 4.75m (max), is nearer in scale to a typical telegraph pole or power transmission pole, a familiar aspect of our rural landscape.

However it is accepted that the main difference between such installations and the Evoco turbine is that the turbine involves moving parts. The Evoco turbine has been specifically designed to have low visual impact, with slender blades and minimal visual bulk at tower height. Care has been taken to select appropriate materials that are sympathetic to as many situations as possible.

The turbine is to be situated at the highest point on the customers land; this is to capture the highest yield of wind energy and to ensure the turbine is as far from neighbours as possible. The visual impact can be seen in "SUPPORTING MAPS AND PHOTOGRAPHS".

Standard and Certification

There is currently no compulsory standard for wind turbine design, however the Evoco 10 has been designed in line with and complies with the IEC 61400 -2 standard for small wind turbine design. The turbine has CE certification.

The turbine is designed to survive wind speeds of 50 m/s, which is considerably in excess of those experienced in West Yorkshire. Indeed, if such winds were to be experienced inland in the UK there would be very widespread damage to buildings and power lines with considerable destruction. The maximum recorded wind speed during the notorious 1987 gales was 47.8 metres per second.

The turbine is currently being assessed under the rigorous MCS 006 Microgeneration Certification Scheme product accreditation scheme under which Evoco have already been approved as certified grant installers. The product is set to realise MCS accreditation around September 2010.

Safeguarding

PPG22, not applicable in this case as, due to its small scale, it is not felt appropriate that the installation should be safeguarded by the planning authorities against potentially conflicting future developments.

Precedent

PPG22 states that since the merits of particular cases vary widely, fears that granting of planning permission may be seen as setting a precedent is not sufficient reason for refusal. Each application must be dealt with in it's own right as the variables and impacts of each potential site can vary

dramatically.

Safety

PPG22 identifies little or no risk arising to the public and states that properly designed and maintained turbines are a safe technology.

Icing

PPG22. Icing up of the GRP composite blades is not seen as a risk in the proposed location.

Proximity to Power Lines

There are no large overhead power cables in the vicinity of the proposed site but care has been taken to ensure the turbines are suitably sited, clear from phone lines with at least falling distances allowed for. Whilst the turbine is considerably lower than the overhead lines; following YEDL's guidelines we have avoided the lines by a minimum of 9m.

Proximity to Airports

PPS22 and PPG22. The nearest airport is Leeds Bradford airport 35 km away. This scale of turbine will not have any impact on air traffic, as it is lower than surrounding buildings. The topography of the land demonstrates higher points in between the airport and the proposed location therefore will not affect the airport traffic.

There are numerous installations of a similar size in close proximity to this proposal and it is deemed that there will be no adverse affects on air traffic signalling or compromise on safety.

Proximity to Railways

The nearest railway line will be in Denby Dale 35.1 km from the property. PPG22 says it may be advisable for a turbine to be set back from roads and railways by a distance equal to at least the height of the turbine. Clearly in this case the turbine is at a far greater distance than this from the railway track and is set with ample falling distance from the road.

Shadow Flicker

PPG22. Shadow flicker is a rare event which sometimes can occur when the shadow of the turbine blades play on nearby buildings at certain times of day and days of the year. It most commonly would affect nearby buildings to the East or West of the turbine at dusk and dawn. The distance from the turbine to neighbouring properties mean this would not be an issue as a distance of 10x rotor diameter away is seen as sufficient to eradicate any chance of this.

PPG22. This is a phenomenon that very occasionally may affect large turbines. It is not considered to be relevant to a turbine as small as the Evoco turbine.

Specialist Consultation

PPG22. This is not believed to be appropriate for a small turbine such as the Evoco in the proposed location.

Noise Levels

It is generally accepted that if the wind turbine noise is less than 10dB(A) below background noise levels, this will not cause a nuisance to neighbours. On a typical site in the countryside, it is expected that this condition can be met at distances greater than about 100m from the wind turbine base. Therefore as a general rule where possible, the nearest residents to the wind turbine should be 100m or more away.

The noises from the wind turbine are however gentle and it would be quite reasonable to locate the wind turbines less than 100m from your home.

The Evoco 10 is anticipated to produce less than 45db under normal operation at 100m. The turbine uses a permanent magnet generator, specifically designed for low noise unlike large scale turbines that use gearboxes, usually the source of noise.

The table below gives a guide to average noise levels as a comparison:

Examples of typical noise levels

Source/Activity Indicative noise level	[dB(A)]
Threshold of hearing	0
Rural night-time background	20-40
Quiet bedroom	35
Busy road at 5km	35-45
Car at 65km/h at 100m	55
Conversation	60
City Traffic at 5m	75-85
Pneumatic drill at 7m	95
Jet aircraft at 250m	105

Source of data -
http://www.sleafordrep.co.uk/info/ESVol2/APPENDIX%2010.1.pdf

There is much opposition to large wind turbines and often this focuses on noise issues, not all of which is entirely justified and most of which does not apply to small wind turbines. One specific issue that is often raised is that of

so called 'low frequency noise'.

This is a factsheet from the BWEA on this issue:

http://www.bwea.com/pdf/briefs/lfn summary.pdf

Please see the accompanying noise report, which details the noise levels emitted by the turbines.

In summary, the noise levels generated by small wind turbines is normally masked by background noise when located at least 100m from other permanently occupied dwellings.

I. This is an issue, which only affected some early large wind turbines in the USA back in to early 80's.

2. No small wind turbine would ever produce a low frequency noise due to their small size.

Ecology

It is not believed that the proposed site is in any way a protected habitat or area of outstanding natural beauty.

PPG 22 suggests that the risk of collision between birds and the moving blades is minimal.

The RSPB state *"...the RSPB favours a broad mix of renewables, including solar, wind, and marine power, wherever they are used in ways that minimi se unnecessary damage to wildlife and the natural environment. We particu larly support solutions that enable individuals and communities to generate their own power close to their homes and businesses."*

The Natural England Technical Information Note TIN051 Bats and Onshore Wind Turbines states *"The Eurobats guidance proposes that the buffer surrounding woodland areas should be 200 m, while this document suggests a buffer zone of 40 m."*

In our experience a buffer of 40m is more than acceptable as advised by numerous planners and various ecological colleagues and associates. This distance of 40m has been adhered to at Upper Wood Royd Farm to ensure any Bats that may use the site would not be at harm.

PPG 22 suggests that the risk of collision between birds and the moving blades is minimal. Investment Renewables has no knowledge that bats are present on or around the farm land. In any case, the turbine has been situated suitably so that bats are not affected.

The poor habitation around Upper Wood Royd Barn suggests bat inhabitation would be low and any bats found here would use the hedge/tree lines as

commuting routes and for feeding.

Listed buildings and conservation areas

There are not believed to be any known archaeological remains at the proposed location. In any case, the foundations required for each Evoco turbine involve minimal disturbance of the ground beneath the tower and each anchoring point and are removable in the event of future decommissioning of the turbines. The proposed location is not in the vicinity of any known listed buildings. There are not believed to be any Conservation areas around the proposed turbine location.

Construction Disturbance

The amount of additional traffic and need for construction machinery to erect the Evoco turbine is negligible. No road closures are required and hindrance to the public footpath will not occur.

Conditions

Due to the minimal foundations required for the Evoco turbine, restoration of the site following possible de-commissioning is particularly simple. There are no outbuildings; all electric equipment is located in the applicants building.

If planning officers would like to visit an installed turbine locally to take readings on sound levels or to gain a good firsthand appreciation of the scale of the turbine, Investment Renewables would be happy to arrange this.

Conclusion

There will be minimum impact on the environment in terms of noise and wildlife, and minimum visual impact from most public
roads. The turbine will reduce the properties carbon emissions by approxima tely 50%.

Installation of small windturbines facilitates the Government's commitment to the reduction of carbon emissions and fossil fuels by sourcing 15% of electricity from renewable energy by 2015.

Contact Via:

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30 Bank Street

Mirfield

West Yorkshire

WF149QF

Please make contact using the following number: 07788 436893

Email: info@investmentrenewables.co.uk

KIRKLEES COUNCIL

SCREENING OPINION

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT (ENGLAND AND WALES) REGULATIONS 1999

Application No. 2010/92169

Applicant: P Mitchel

Description of Development: Erection of 1 evoco 10kw wind turbine on a 15 metre high mast

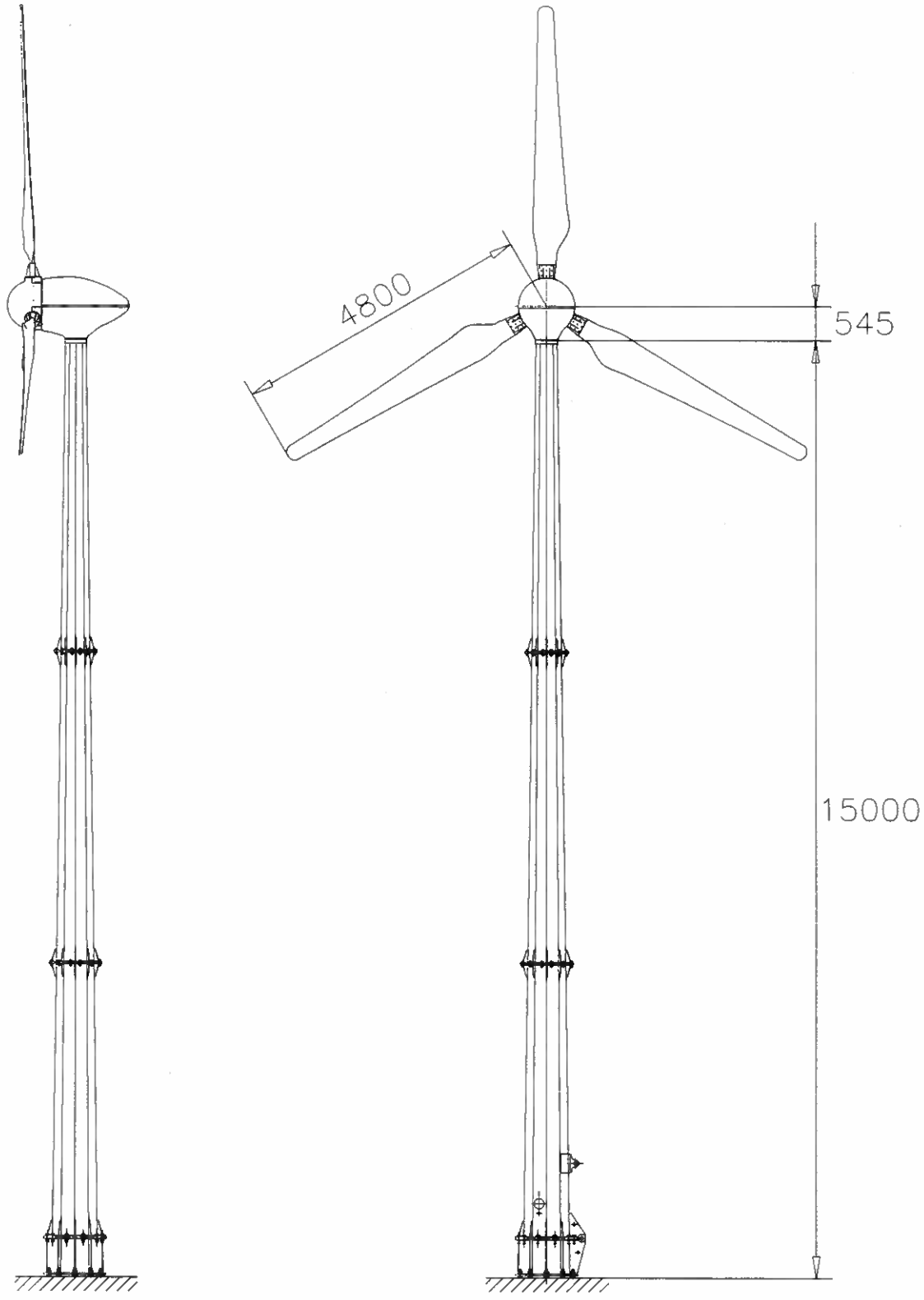
Address of Development: Upper Woodroyd Barn, Hog Close Lane, Holmfirth. HD9 7TE

Proposal type	Screening Opinion	EIA Required	Environmental Statement Submitted
Schedule 1 *Development* *1*	NO	If YES EIA Mandatory If NO determine whether the development is Schedule 2 Development	
Schedule 2 Development *2*	YES (3 (i))	If YES determine whether the development is EIA Development If NO the development is outside the scope of the Regulations	
EIA Development *3*	NO	If YES provide detailed reasons and place on Part 1 of the Register	

		If NO place Screening Opinion on Part 1 of the Register	
Screening Direction	**NO**		
Pre-application Screening Opinion	**NO**		

REASONS FOR REQUIRING AN ENVIRONMENTAL STATEMENT *4.*

COPY OF SCREENING OPINION ON PART 1 REGISTER *5.*	**Date 29.7.10**
SCREENING OPINION TO APPLICANT/AGENT *5.*	**Date**
COPY OF REQUEST FOR ENVIRONMENTAL STATEMENT ON PART 1 REGISTER	**Date N/A**
COPY TO SECRETARY OF STATE (FOR MONITORING)	**Date N/A**
Officer dealing with application **Screening Opinion Completed in Conjunction with Guidance Notes**	**Name: William Simcock** **YES**



evoco wind energy

	NAME	DATE
DRAWN	BH	
CHECKED	SW	
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE: EVOCO 10kW WIND TURBINE 15m TOWER

Evoco Energy Ltd.
St Pegs Mill, Thornhill Beck Lane,
Brighouse. HD6 4AH. United Kingdom.
Tel: +44 (0) 1484 475 800 info@evocoenergy.com

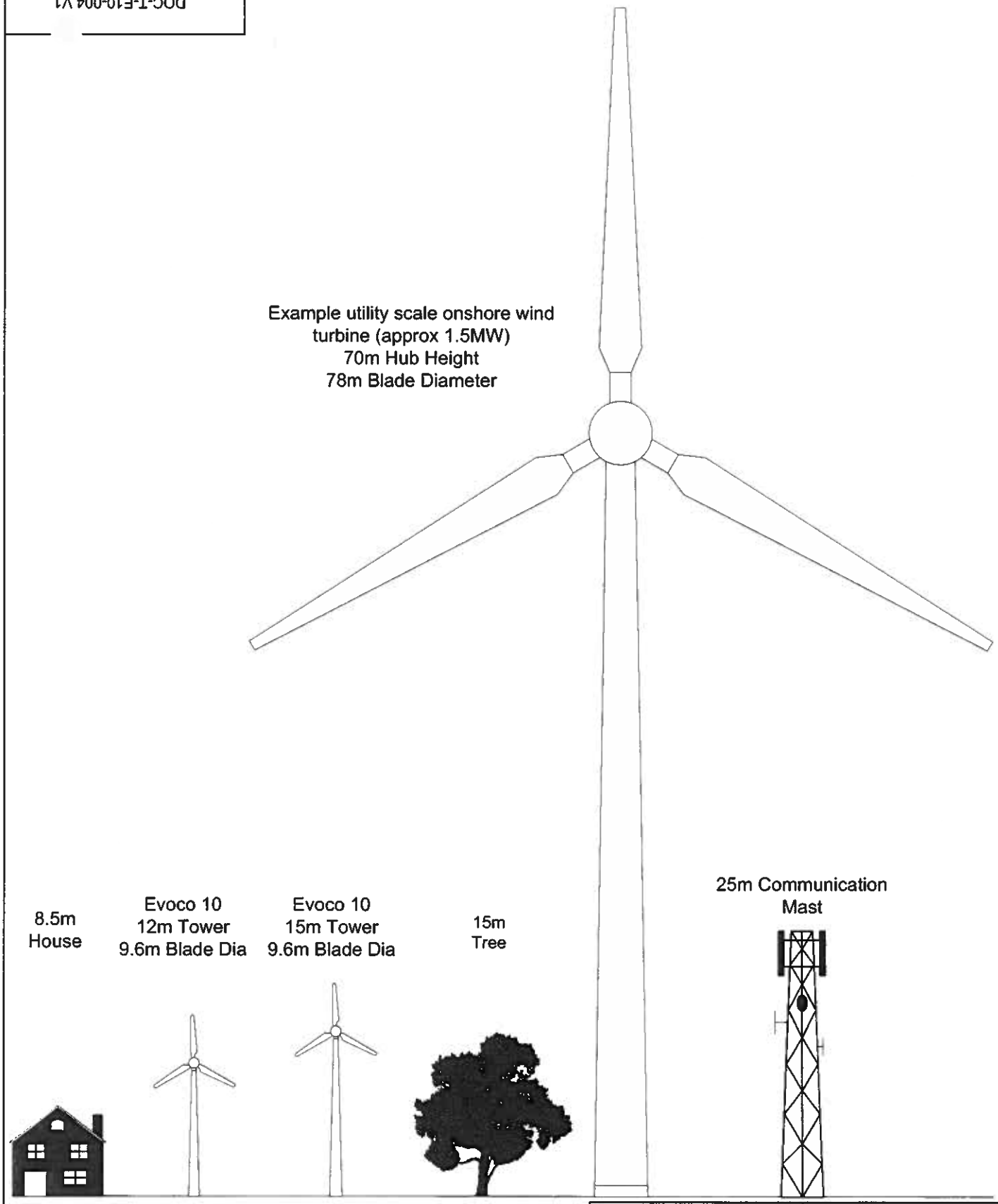
DIM	DWG. NO.	REV
mm	PL EVO10-15M	2.2

SCALE: 1:100	DATE: 27/05/2009	SHEET 1 OF 1

DOC-T-E10-004 V1

Issue	Details	Date

Example utility scale onshore wind turbine (approx 1.5MW)
70m Hub Height
78m Blade Diameter



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evoco energy

Scale:	1:500
Drawn:	BH
Checked:	SW
Date:	21.02.10

Drawing Name:
Turbine size comparison

Drawing No:
DOC-T-E10-004 V1

Impact on the local ecology especially bats is deemed to be fairly low due to the poor potential for Feeding, Roosting or Commuting. The turbine is sited approx 40m from the new build barn a recent addition to the property and well over 50m from the older part of the house.

Visual amenity has also been considered and the turbine has been positioned as far from all roads and neighbours as possible. At the same time we have tried to ensure that the turbines efficiency is not compromised.

The Evoco turbine is designed with visual amenity in mind. It has a thin tower with streamline nacelle and blades with as little bulk in the head as possible. The nacelle and blades are white to enable them to blend in with the sky to the best ability, similar to the large utility turbines found on the wind farm to the North east of the property. As you can see from the photomontage the turbine is relatively small, blending well with the background.

Photograph showing the proposed location of the turbines facing North.

Justification for the development

The United Kingdom has a target to reduce its greenhouse gas emissions by 12.5% below base year levels by 2008-12 and a further domestic goal to reduce carbon dioxide emissions by 20% below 1990 levels by 2020.

The Renewables Obligation came into force in April 2002, requiring all electricity suppliers to source 10% of their supply from renewable technologies by 2010.

The current Feed-in tariff effective this April 2010 is a government initiative similar to those found in Europe designed to encourage the installation of microgeneration technologies by the domestic and SME sectors.

Upper Wood Royd Barn benefits from an excellent wind resource. In the 6.7 m/s 10m agl wind regime on site, the Evoco 10kw turbine is expected to generate in excess of 38,000 kWh of electricity each year. This is equivalent to a saving of approximately 16.3 tonnes of carbon dioxide/Annum & 326 tonnes over 20 years.

The property currently uses in excess of 10,000 kWh per annum, which is high and damaging to our environment; the turbine is expected to contribute 50% of this requirement, reducing the reliance on energy drawn from the grid dramatically, a substantial proportion of which is generated from fossil fuels.

All surplus energy will then be sold back to the grid and used in properties without renewable technology thus providing further benefits to many Uk residents.

Policy background

Wind energy is a non-polluting, clean and sustainable abundant natural resource. The United Kingdom has one of Europe's windiest climates, sometimes described as the Saudi Arabia of clean energy, therefore wind energy is expected to be an important and significant element in achieving the government's commitment to reduce CO^2 emissions to 12.5% below 1990 levels by 2010.

Government policy on renewable energy is contained within the Energy White Paper 'Our energy future - creating a low carbon economy' (2003).

The Regional Spatial Strategy for Yorkshire and the Humber to 2016 (2004) sets out the regional targets for renewable energy, acknowledging that polices and proposals should be included within development plans to help achieve the regional targets. Policy R 12 of the spatial strategy sets out the renewable energy targets for Yorkshire and Humberside.

Planning Policy Statement 22 (PPS22)

PPS22 'Renewable Energy (2004) provides the national planning framework

for promoting renewable energy uses.

It states 'local planning authorities and developers should consider the opportunity for incorporating renewable energy projects in all new developments. Small scale renewable energy schemes utilising technologies such as solar panels, biomass heating, small scale wind turbines, photovoltaic cells, combined heat and power schemes can be incorporated both into new developments and some existing buildings. Local Planning Authorities should specifically encourage such schemes through positively expressed policies in local development documents'.

Para 20 states '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 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.'

Design Principles

The proposal is to install ONE 10kw wind turbine on 15m masts at:

UPPER WOOD ROYD BARN, HOG CLOSE LANE, HOLMFIRTH, HD97TE

The wind turbine proposes the generation of electricity for use within the applicants property and for the proposed addition of outdoor lighting.

The 2025 Kirklees Environment Vision states that the council will, *"Reduce carbon dioxide (CO_2) by greater than 30% by 2020 from 2005 baseline"*

The property demonstrates a good example of a location and need for such renewable technology as it has such an exceptionally high average wind speed, one that should be taken full advantage of.

This proposed location is well over the required distance away from neighbouring properties with regards to noise levels and is in no way imposing on any structures in the surrounding area. There are numerous turbines in the Holmfirth area in much more exposed areas. The proposed location at Upper Wood Royd Barn offers a good backdrop of hills to the North and East acting as camouflage.

The A616/Shefield Road can see the turbine but again the views are limited due to the large hills. The proven turbine located across the road can be seen from this direction, already cutting the sky line. There is also a large turbine in the South west which isn't overly impacting giving a good idea of the little impact the Evoco will have.

The property demonstrates a good example of a location and need for such renewable technology and would support the proposals of Kirklees Council and its aims for reduction of the carbon emissions that it is responsible for.

Siting

The turbines are to be sited to the North of the property with approximately 100m from the main buildings. The location was chosen to take best advantage of the topography of the site and to best utilise the prevailing winds typically from the South West, at the same time minimising noise impact on surrounding neighbours and keeping visual impact to a minimum.

It was decided to install ONE small scale wind turbine, as this has been deemed sufficient for the applicants present needs. The turbine will be significantly lower than the larger utility turbines found locally to the South West and to the North East, which are closer in height to 80m. The proposed turbines are more similar in size to a telegraph pole or small mobile phone masts.

Design

The Evoco 10kw turbine has a rotor radius of 4.75 metres (max) and is mounted on a freestanding 15 metres (max) tower, comparable to some of the trees to the West. The turbine nacelle and blades are manufactured from high tech white materials, coated and painted white with the tower being fully galvanised steel.

The colours were chosen, as they are believed to blend well with the skyline offering as little visual impact as possible.

Amenity

Noise

The turbine is designed for low noise operation and minimal visual impact. The nearest property not owned by the applicant is approximately 204m from the proposed location. Due to the separation distance and low noise generation the turbine will not be heard by surrounding residents.

Access

There is no public access required to the turbine at Upper Wood Royd Barn.

Access for maintenance is annual and can be gained along existing tracks and vehicles can be parked inside the field gate away from the road. There will be no disruption to the pedestrian access or vehicular access to the site during installation and maintenance.

Conclusion

This statement has been produced to support the planning application for the installation of ONE Evoco wind turbine on 15m masts:

UPPER WOOD ROYD BARN, HOG CLOSE LANE, HOLMFIRTH, HD97TE

The turbine propose the generation of electricity for use within the property selling surplus electricity to the grid for resale as clean energy.

The 2025 Kirklees Environment Vision states that the council will, *"Reduce carbon dioxide (CO_2) by greater than 30% by 2020 from 2005 baseline"*

This clearly states that Kirklees Council should be fully supportive of renewable technologies that greatly aid in the battle against climate change.

The impact of the proposed turbine will be relatively minimal to visual amenity and noise generation and has been as sympathetic as possible in it's siting. All neighbours have been considered carefully and the turbine has been sited as far from the roadside and neighbours as possible.

With very few neighbours in close proximity to the turbine Investment Renewables deems this location to be ideal for such technology and would encourage Kirklees to fully support the proposal.

The proposed development is in line with central and regional government guidance and adheres to the policies of Kirklees Council.

Ready To Help

Investment Renewables hopes that the following document provides Kirklees Council with all the information required to make an informed decision. If for any reason Kikrlees Council feels there is more information that is required, please do not hesitate to call and we will be more than happy to help.

Contact Via:

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Please make contact using the following number: 07788 436893

Email: info@investmentrenewables.co.uk

S. & D. Garritt Ltd.

Noise & Vibration
Design & Consultancy

Vicarage Cottage, High Street, Wadworth, Doncaster DN11 9BG. Telephone & Fax: 01302 854303

REPORT

of

SOUND MEASUREMENTS ON EVOCO 10 WIND TURBINE

for

EVOCO ENERGY LTD.,
ST. PEG'S MILL,
THORNHILLS BECK LANE,
BRIGHOUSE,
WEST YORKSHIRE
HD6 4AH.

Date of measurements: 16th October 2009

Date of report: 19th October 2009

1.0 Introduction

Evoco Energy Ltd. commissioned this measurement of sound levels to be taken during normal operation of an Evoco 10 turbine installed at Evoco Energy's Test Site 2. The method of test was essentially informal and was intended to provide preliminary information on sound levels under operating conditions specified by the client rather than conforming to any prescribed test method.

2.0 Sound Measurements

Sound levels were measured outdoors at the Evoco 10 installation at Evoco Energy's Test Site 2 during the morning of 16th October 2009. Measurement positions were used at 1.2m height above ground level at 3m, 25m, 60m and 100m from the base of the turbine tower in the downwind direction. The wind speed was monitored at a position directly upwind a distance between 2 and 4 times the rotor diameter from the base of the turbine tower.

All measurements were taken using Bruel & Kjaer 'Investigator' precision sound analyser type 2260 serial no. 2409281 for which current calibration certificates are held. A full set of sound descriptors and sound frequency spectra were taken for every measurement and are stored on disk for later recall if required. Results are shown below of the time-averaged (L_{eq}) values since these are likely to be the most useful for comparison with other test data. Downloads from the sound level meter are given on the attached sheets showing the one-third octave sound frequency spectra of L_{eq} values in graphical form.

Distance from Turbine Base	**Sound Pressure Level Site Results dB LA_{eq}**
3m	64.9 dBA
25m	58.7 dBA
60m	53.9 dBA
100m	48.4 dBA
Ambient / background with turbine stationary	45.2 dBA

The average wind speed for the duration of the tests was measured at 5.0 m/s with a maximum of 8.1 m/s.

3.0 Summary of Results

After subtracting the LA_{eq} sound levels caused by sources other than the turbine, which were mainly from distant road traffic noise, the overall sound levels to the nearest decibel from the turbine alone were:

Distance from Turbine Base	Sound Pressure Level Turbine Alone dB LA_{eq}
3m	65 dBA
25m	59 dBA
60m	53 dBA
100m	46 dBA

The sound emitted by the turbine audibly consisted of contributions from the resonance of the tower at a low-mid frequency and from the blades at high frequencies. Comparison of the results on the attached frequency spectra against the background sound levels quantifies these as being:

Tower resonance

Occurred at 125 & 160 Hz:

160 Hz was 24 dB above background at 3m
125 Hz was 14 dB above background at 25m
160 Hz was 11 dB above background at 60m
125 Hz was 9 dB above background at 100m

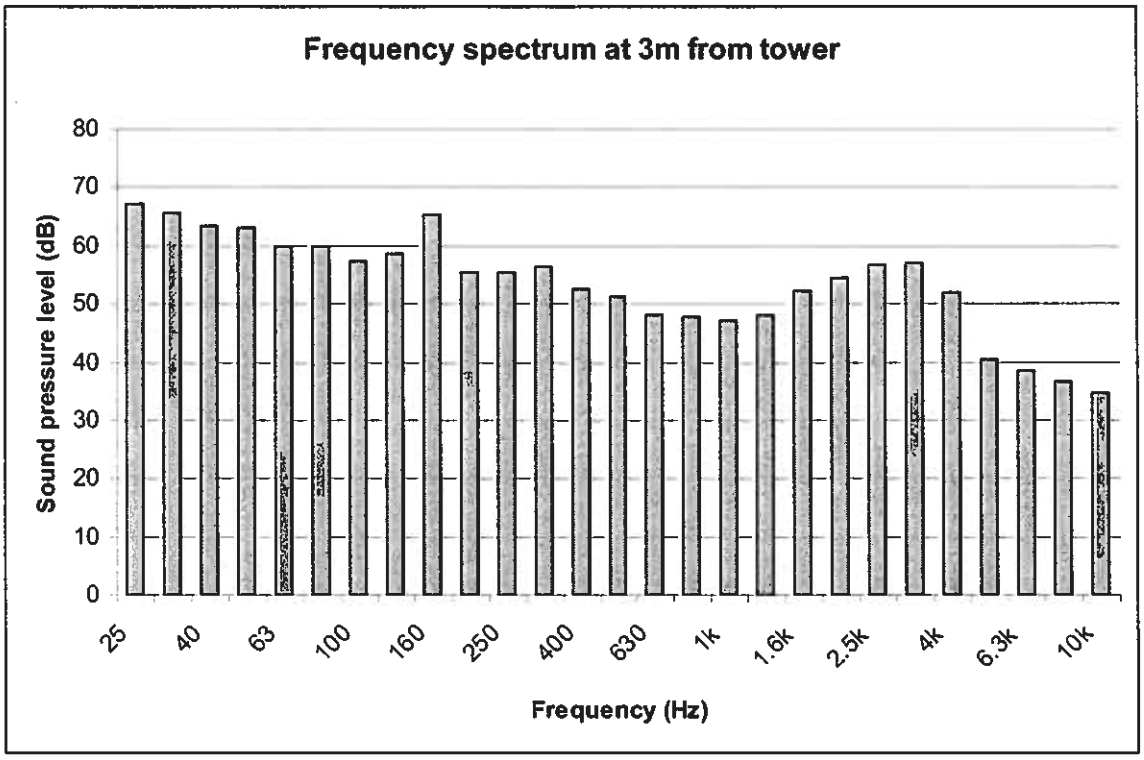
Sound frequency of tower noise appeared to vary with rotor speed.

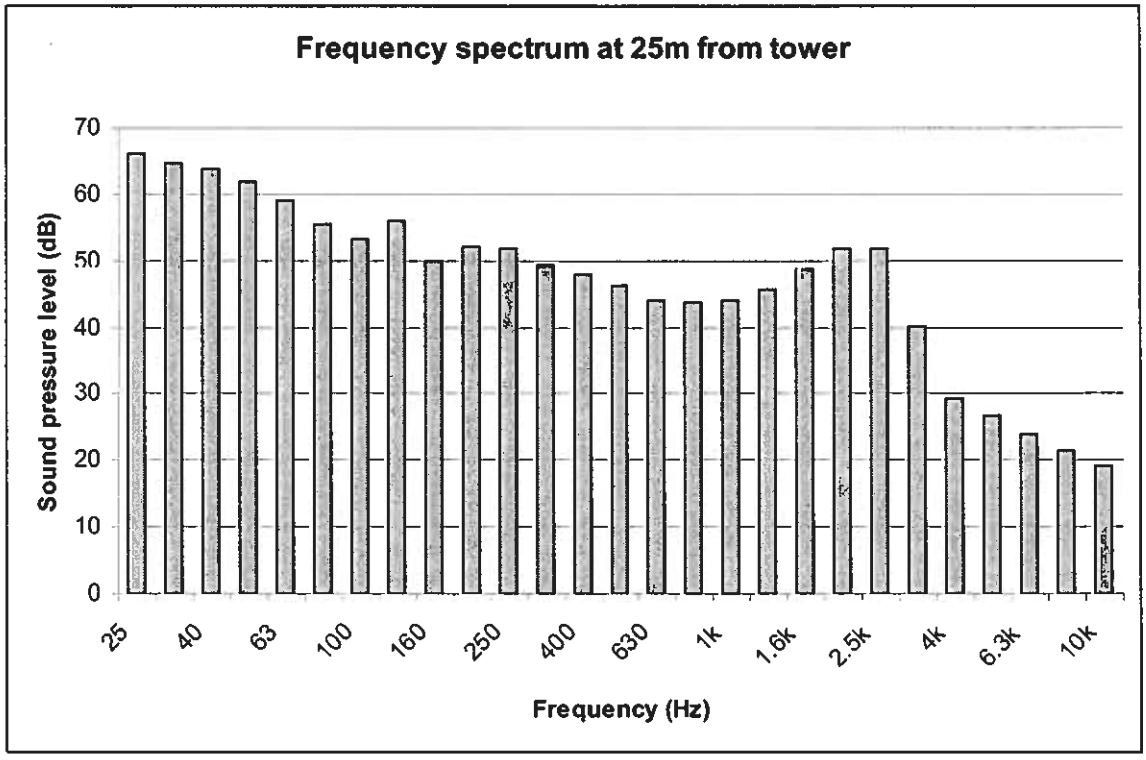
Blade Noise

Occurred at 1.6 to 4 kHz. At these frequencies blade noise was:

up to 32 dB above background at 3m
up to 25 dB above background at 25m
up to 19 dB above background at 60m
up to 14 dB above background at 100m

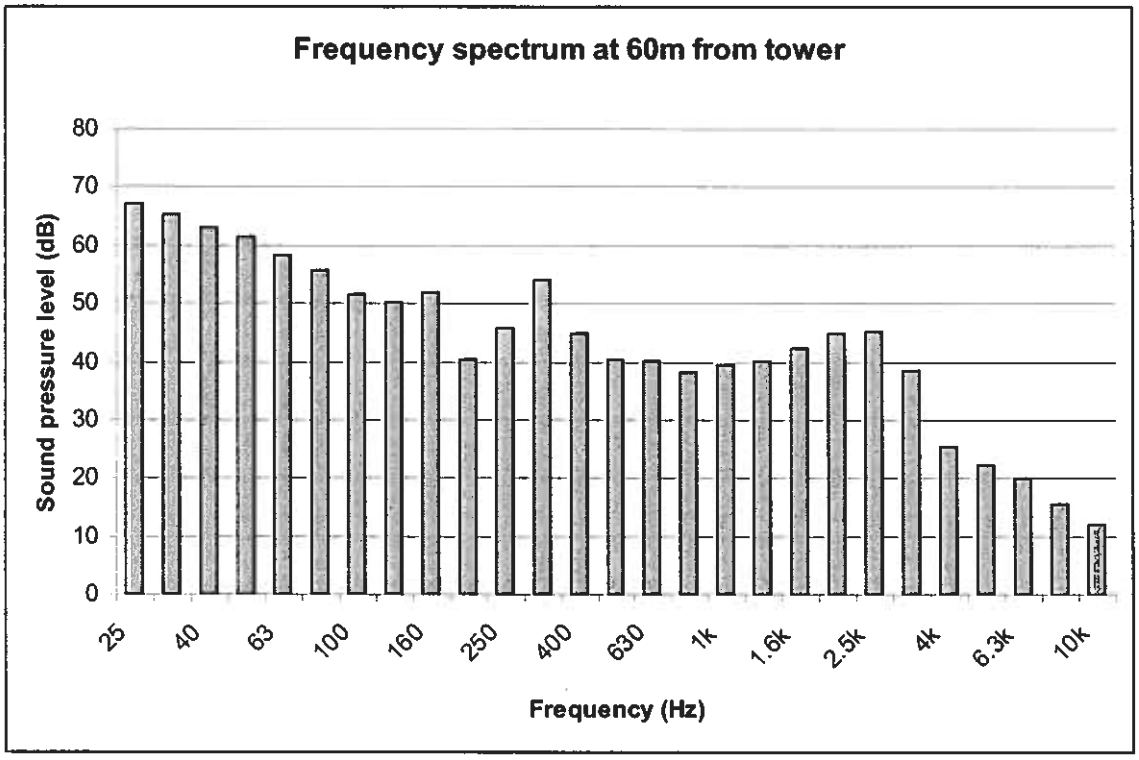
Evoco 10 Turbine

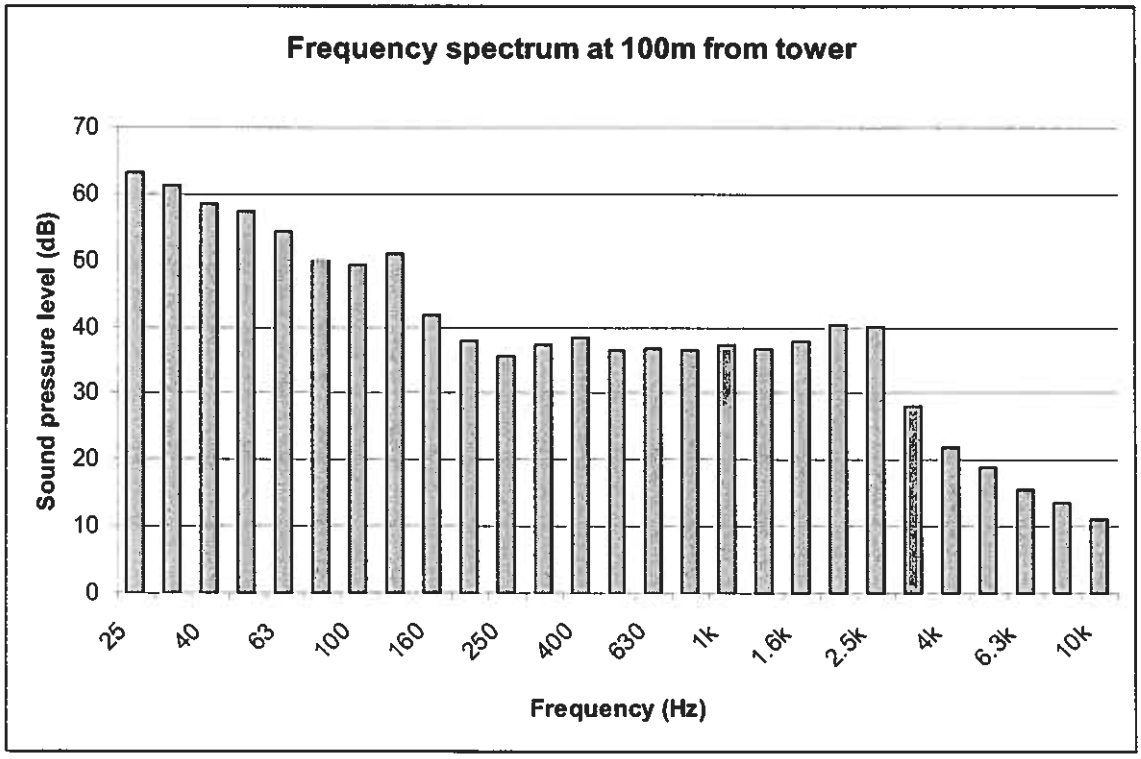




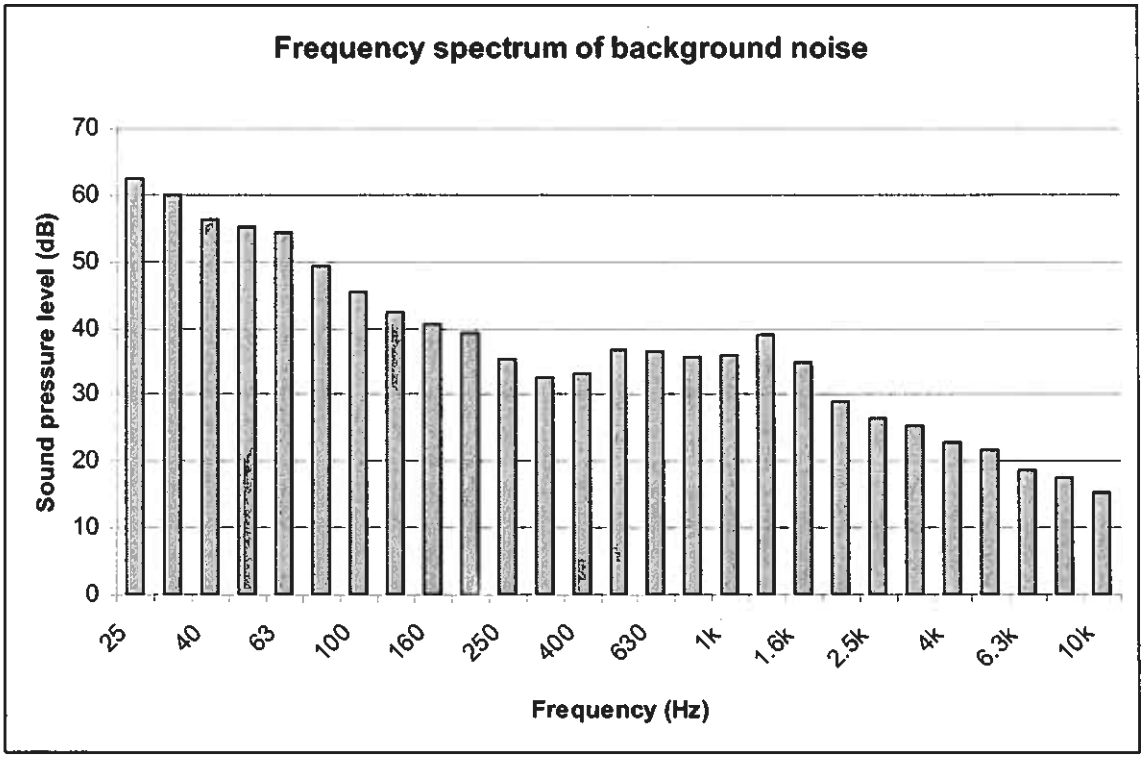
All values dB linear, LL_{eq}. Average wind speed 5.0m/s.

Evoco 10 Turbine





All values dB linear, LL_{eq}. Average wind speed 5.0 m/s.



All values dB linear, LL_{eq}

GREENBELT IMPACT ASSESSMENT

AT:

UPPER WOOD ROYD BARN
HOG CLOSE LANE
HOLMFIRTH
HD97TE

CARRIED OUT BY:

INVESTMENT RENEWABLES LTD
30 BANK STREET
MIRFIELD
WEST YORKSHIRE
WF149QF

1.0 Planning Policy Considerations

1.1 The site is located outside any settlement and within the greenbelt. National planning policies relevant to the proposal are contained within Planning Policy guidance note 2 *Green Belts*, Planning Policy Statement 22 *Renewable Energy*. We assess the proposal in terms of these policies below.

1.2A PPG2 sets out that development which is considered to be appropriate in Green Belt locations. Whilst wind turbines are not listed in paragraph 3.4 in the types of Development considered to be appropriate we are of the view that nevertheless there should not be an automatic policy presumption against such developments.

1.3 As the development is associated with an existing dwelling with land, the wind turbine can be considered appropriate under paragraph 3.12, which covers other development. The turbine can fall within the "engineering and other operations" mentioned and is not therefore inappropriate development provided the openness of the Green Belt is maintained and there is no conflict with the purposes of land in the green Belt.

1.4 Taken from PPS22 Green Belt, paragraph 13 it states, *'such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources'*. Upper Wood Royd Barn uses a high amount of electricity with a gross usage of approximately 10,000 kWh/Annum, which is greatly damaging to our environment. The local area also receives a good wind resource making good sense to use this abundant element harnessing it for the production of clean, Green energy.

The potential for the generation of electricity is excellent on site with a optimum wind speed of 6.7m/s 10m agl and would reduce carbon emissions by a minimum of 16.3 tonnes/annum, 326 tonnes in 20 years helping to drive Kirklees towards their goals of their UDP and Kirklees Environmental Policies.

Around 50% of the electricity generated by the turbine would be used on site lowering the properties carbon footprint considerably. With the surplus being sold as additional green electricity used by many local homes and properties across the country.

1.5 After evaluation of the proposed project in conjunction with the various outlined policies we are satisfied that wind turbines can be appropriate development in the Green Belt. This is confirmed by the presence of small scale turbines at over five properties in the vicinity with one being just 60m away to the North East.