



Matthew Woodward
Development Control
Barnsley Metropolitan Borough Council
1 Gateway Plaza
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Barnsley
South Yorkshire
S70 2DR

27 July 2012

Dear Matthew

Screening for a Proposed Single Wind Turbine Development at Spring Brook near Underbank Reservoir

I am writing in connection with a proposal to develop two wind turbines at "Spring Brook" on Sheepphouse Farm, Cubley, Penistone. The proposal is located on land immediately to the north of Underbank Reservoir. **Figures 1 and 2** show the site location and an indicative layout, respectively.

The Energy Workshop (TEW) wishes to undertake a formal screening exercise under the Environmental Impact Assessment Regulations in relation to the project on behalf of the landowners, John Darwin and family, as a prelude to the submission of a formal planning application later this year.

The proposal in its finalised form would consist of two wind turbines with an anticipated total installed capacity of up to 4 megawatts (i.e. the development will be less than 5MW). It is anticipated that the will have a maximum tip height of 101m. The final choice of turbine will be informed by the results of a wind resource modelling exercise and other assessments.

Scope of the letter

The purpose of this letter is to request a formal 'Screening Opinion' from Barnsley Metropolitan Borough Council (BMBC) as the determining authority for this scheme, in accordance with Section 5 of the EIA Regulations, as to whether the proposed wind turbine would represent 'EIA development'. A further aim of this exercise is to set out and agree the scope and content of the Environmental Report, which would accompany the planning application for the project.

Requirement for Environmental Assessment

The assessment as to whether the scheme represents EIA development or not should be informed by Schedule 2 of the Town and Country Planning

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(Environmental Impact Assessment) Regulations 2011, paragraph 3(i) - *Installations for the harnessing of wind power for energy production (wind farms)*; and the still relevant DETR Circular 2/99 (Environmental Impact Assessment) (including Amended Circular 02/99-consultation paper June 2006).

Schedule 2 of the EIA Regulations state that any wind farm application involving the installation of more than two turbines, or where the hub height of any turbine, or any other structure, is in excess of 15m, should be considered as 'Schedule 2 Development', in which case the potential need for EIA should be assessed, in this case, by the Local Planning Authority.

Annex A of Circular 02/99, however, gives further detailed guidance on indicative thresholds for identifying when such 'Schedule 2' developments do require EIA. With respect to wind farms, paragraph A15 in Annex A of the Circular states that:

"the likelihood of significant effects will generally depend upon the scale of the development and the visual impact, as well as potential noise impacts. EIA is more likely to be required for commercial developments of five or more turbines, or more than 5MW of new generating capacity".

This proposal falls below these thresholds.

In determining whether EIA is necessary, the selection criteria outlined in Schedule 3 of the 2011 EIA Regulations should also be taken into account. The Regulations state that any proposed Wind Turbine Development would, therefore, only need to be the subject of an EIA if it was deemed to have any 'significant' effects on the environment, by virtue of factors such as its size, nature or location. As stated, however, the project lies below the indicative EIA threshold set out in the accompanying Circular 02/99, which states that EIA is more likely for schemes over 5MW in capacity, and five turbines in number.

The potential effects of the proposal are likely to include the project's visibility from the surrounding area, as well as potential effects on local residential receptors. TEW considers, however, that the scale, location and design of the scheme would result in any such 'effects' not being significant in relation to the selection criteria in Schedule 3, and that the proposal would, therefore not require EIA.

Scope of Environmental Report

Within Annex A of this letter, we have aimed to set out the nature of any potential effects, seeking to provide more details and the rationale behind our conclusion that none of the environmental effects would be significant. We have also aimed to provide sufficient detail of the proposed scheme to assist in identifying the scope of work required to support any environmental appraisal report.

Regardless of the conclusions of your formal screening opinion, we would like to

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emphasise that the proposed Environmental Report will seek to identify, describe and assess all potential environmental impacts which are considered relevant, as set out in Annex A.

We would welcome feedback from BMBC on the applicability of the proposed areas of study presented in Annex A, i.e. the requisite level of detail to assist in the planning determination process and whether additional studies may be required.

We are particularly keen to agree to the locations of some representative viewpoints (VPs) for the visual assessment to ensure that any locations that the Council considers important are included in the assessment. The proposed VPs (which are a sub-set of those used to assess the previous wind farm proposal at this location) are shown in **Figure 3**.

Timescales

This letter effectively forms the basis of a formal request for a screening opinion under paragraph 5 of the EIA Regulations. TEW will manage the submission of the planning application and accompanying Environmental Report, and the company's experience and capabilities in this area are extensive.

We would be grateful if you could consider the above information and the associated information appended to this letter, and provide me with the Council's formal 'Screening Opinion', as stated under Paragraph 5 of the EIA Regulations. You will note in Part 2 of the Regulations, such opinions should be issued within 3 weeks, beginning with the date of the receipt of a 'Request for a Screening Opinion'. We would therefore be grateful if you could provide us with an indication of your anticipated timescale for issuing your formal 'Screening Opinion' so that we can progress the project accordingly.

Should you feel that the proposed development would create 'significant effects' and thus requires an Environmental Statement, I would be grateful if you could provide your Council's formal Scoping Opinion within the required 5 weeks.

We look forward to hearing from you in due course and should you have any queries please do not hesitate to contact me at the telephone number or email below.

Yours sincerely,

Thomas Chappell

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Annex A: Proposed Scope of the Environmental Report for the proposed Spring Brook Wind Turbine Development

As stated in the supporting letter, TEW considers that the proposed development of two wind turbines at Spring Brook represents 'Schedule 2' development under The Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Any potential effects of the construction, operation and decommissioning of the project, deemed to have a potentially significant environmental impact would, therefore, need to be the subject of an Environmental Impact Assessment (EIA). As discussed in the covering letter, TEW is, however, of the opinion that there will be no 'significant' impacts, as defined in the Regulations, and the proposal would therefore not require an Environmental Statement.

It is, however, recognised that any planning application for the project will need to be accompanied by supplementary information in the form of an Environmental Report detailing the non-significant effects of the proposal in order to provide sufficient information to allow the thorough consideration of the proposal by the Local Planning Authority.

This Annex describes the proposed scope of the Environmental Report (ER), which will accompany the application for planning permission. This will undertake a thorough assessment of all likely effects, which are not deemed to be significant, and will also include other information relevant to the determination of the proposal, such as an assessment of relevant planning policies material to the proposal.

Structure of the Environmental Report

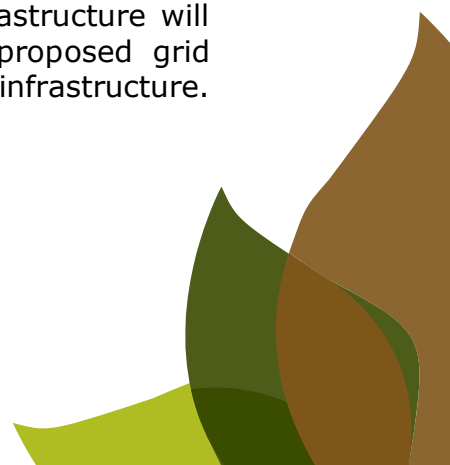
The Environmental Report (ER) will consist of two documents, a written report and an accompanying volume of figures. The ER would describe the proposal, the relevant planning policy framework and the wider background to the proposal. It will then set out sufficiently detailed assessments of non-significant environmental effects (as identified below), accompanied by a brief background to the screening of the project.

The ER will include a full description of the proposal including a detailed layout plan at a scale of at least 1:10,000, and site location plan at a scale 1:25000. Full descriptions of potential turbines, generic foundation designs, access roads, any necessary connection buildings and substations, and any other infrastructure will also be provided. Details of the underground cabling and the proposed grid connection will also be included, along with details of the associated infrastructure.

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Figures 1 and 2 illustrate the site of the proposed wind turbines.

The Proposed Turbines

The proposed project would consist two wind turbines, with an anticipated total site generating capacity of around 4MW (depending on the final choice of turbine).

The turbines would be of the horizontal axis type with a rotor consisting of three blades each anticipated to be up to 40m in length, allowing for manufacturer variation. The height to the wind turbine hub would be in the order of 60m, which would give a maximum height to vertical blade tip of approximately 101m. The exact turbine type has not yet been chosen with the final choice dependent on the results of wind monitoring. In order to allow a degree of flexibility between turbine manufacturers it may be necessary to install a turbine with a different hub height or blade length, although it is not envisaged that the maximum height to tip of 101m would be exceeded.

Figure 2 illustrates the indicative position of the turbines, which have been sited so as to ensure:

- a minimum stand-off of 40m ("oversail distance") from footpaths;
- a minimum stand-off of 150m (1.5 x "toppling distance") from the electricity transmission lines across the site; and
- a minimum of 450m from uninvolved properties.

The exact grid reference may be subject to change as a result of any issues raised in relation to any studies that are undertaken during the site assessment process.

The site is currently open arable land consisting of large open fields enclosed by drystone walls. Dwellings in proximity to the proposed scheme include a number of farms and small groups of other properties. The nearest non-involved residence is approximately 450m away to the north of the proposed turbines.

It is proposed that access to the site would be taken directly from the adjoining minor road. It is anticipated that the wind turbine would be connect into the local electricity distribution network in the vicinity of the site. The feasibility of using electricity from the turbines to supply a planned milking parlour on the farm are also being investigated.

Construction Methods and Programme

The broad construction methods and anticipated time-scales for the construction of the access tracks, turbine foundation and any necessary connection building will be



described including diagrams where appropriate. It is anticipated that approximately 1km of new access track will be required to enable the turbines to be installed.

The Design Process

The ER will describe the rationale behind both the selection of the site, and the proposed turbine locations and configuration, including an assessment of the known constraints. Reference will be made to the adopted Development Plan.

Planning Policy Framework

The ER will include a full assessment of national and local planning policy relevant to the determination of the proposal. In particular how the proposal relates to the adopted Development Plan, the emerging Local Development Framework and the National Planning Policy Framework (NPPF). Other material conditions that the applicant considers relevant to the determination of the proposal will also be identified in the ER.

In addition, the ER will also contain information on the Sustainable Context of the development including an assessment of current renewable energy performance throughout the District. How the project contributes to wider renewable targets will also be discussed.

Benefits of the Proposal

The ER will summarise the benefits of the proposal in terms of the local and global environmental benefits of generating renewable electricity as well as the social and economic benefits associated with green energy.

As a summary, two 2MW wind turbines would produce around 10,720 megawatt hours (MWh) of electricity per annum (this is 10.7 million kilowatt hours), based on measured offsite wind data. The average UK household uses 4,700 kilowatt hours of electricity per annum. Therefore, a 4MW development would generate electricity equivalent to the yearly demands of around 2,280 homes.

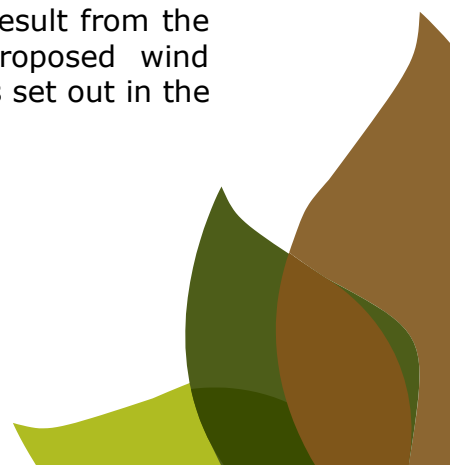
Potential Environmental Effects

There are a number of potential environmental effects which could result from the construction, operation and eventual decommissioning of the proposed wind turbine. TEW believes that these will all be non-significant effects, as set out in the

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EIA Regulations, and therefore the proposal does not require an EIA. If any issues are deemed to be of particular concern e.g. landscape and visual effects, it is proposed that these potential effects would be the subject of detailed and more rigorous environmental assessments. This will then aid a thorough assessment of the proposal.

It is proposed that the following issues would be addressed within the ER, providing additional information to the planning application.

Visual Effects

A visual assessment of the project will be undertaken. It is proposed that the visual assessment would encompass the area within a 10km radius of the proposed wind turbine. The assessment of any additional schemes will only be considered if specifically requested by the LPA or other statutory consultees.

Photomontages from significant viewpoints (VPs) will be supplied. The proposed VP locations are shown in **Figure 3** and are listed in the table below. The VP locations are a sub-set of the VP locations used in the assessment of the previous, larger wind farm proposal at this location.

VP	Easting	Northing	Distance to Spring Brook	Direction (degrees)	Sheephouse VP
1	423524	399546	1.4	68	1
2	425238	398941	1.2	350	2
3	421072	400724	3.8	98	4
4	416144	400331	8.7	91	7
5	427199	396891	3.8	326	9
6	428410	399468	3.3	282	11
7	421536	404308	5.2	140	12
8	425911	404191	4.1	192	14
9	423389	394878	5.5	17	15
10	419291	398670	6.0	75	17

Figure 3 figure shows the Zone of Theoretical Visibility for the proposed turbines. This indicates theoretically visibility of blade tips, taking landform but not trees or buildings into account. It therefore represents a “worst case”.

The visualisations will be accompanied by supporting text, describing details of the





methodology used to produce the photomontages and ZTV, and appropriate ways of using these tools to assess the proposal (e.g. appropriate viewing distance) and assessing visual impact from the specified viewpoints.

The impact of the proposal upon any non-statutory designations will be taken into account in the Environmental Report. In addition all Scheduled Ancient Monuments (SAMs) within a 5km radius from the site will be identified, and the potential visual impact of the proposal on the setting of any significant designations will be described and assessed.

In summary, TEW believes that the proposal will result in non-significant landscape and visual effects. A visual assessment will, however, be undertaken for the site, taking into account the requirements of the LPA. This will ensure that an appropriate level of assessment is undertaken within the ER.

Ecological Effects

The site is not within or adjacent to any statutory ecological sites. The closest such designation is the Dark Peaks Special Protected Area (SPA) / Special Conservation Area (SAC) / Site of Special Scientific Interest (SSSI) which is located some 2.5km to the southwest. The land surrounding the proposed turbine is predominantly used for arable farming. The turbine footprint will be within areas that are currently arable. Given this and the findings of ecological surveys from the previous wind farm proposal at the site, TEW believes the present proposal is unlikely to have a significant effect on the ecology of the site or surrounding area.

The county ecologist and, if necessary, Natural England and RSPB will be consulted. If they identify that protected species are likely to be present on the site, then appropriate surveys will be undertaken to assess their presence and current distribution.

In the unlikely event that the turbine location is in conflict with a protected species, the layout would be modified in order to comply with requirements. TEW considers that should any protected species be found, amendments to the site layout and the preparation of a mitigation strategy, both subject to requirement, would remove all significant ecological impacts. Any mitigation strategy, would be agreed with the county ecologist and/or NE and RSPB, as appropriate.

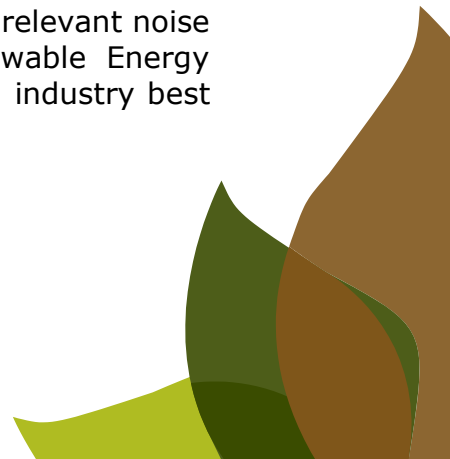
Noise Effects

The proposed turbine layout will be designed to fully comply with the relevant noise guidelines. In accordance with the requirements of PPS22: Renewable Energy (ODPM, 2004), all wind farm proposals should follow the established industry best

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practice guidelines supplied in the ETSU (1997) report 'The Assessment of Rating of Noise from Windfarms'.

The noise assessment included in the report will include a noise contour plan, illustrating worst-case scenarios in relation to the potential audibility of the wind turbines at proximate residential properties and will be accompanied by a full description of the methodology used. A table illustrating predicted noise levels at proximate dwellings would also be included.

No background noise assessments will be undertaken unless the noise contour plan predicts that the noise from the turbines will exceed the ETSU guidance levels at nearby residences i.e. daytime levels of 35 d(B)A and night-time levels of 43d(B)A.

In addition to the information stated above, the Environmental Report will contain a list of suggested planning conditions that could be imposed to ensure compliance with noise guidance levels at all times.

Hydrology

There are a number of surface watercourses within the site and Underbank Reservoir is located some 800m to the south. An assessment of potential hydrological impacts will be undertaken following a desk based study, walkover survey and consultations with a range of organisations including BMBC and the Environment Agency.

The footprint of the proposal is small and it is envisaged that potential impacts on hydrology could be mitigated through "embedded" measures such as the incorporation of Sustainable Drainage principals into the design of the projects etc. All construction designs and methods would be in accordance with EA Guidelines and Pollution Prevention Guidelines. Therefore no significant hydrological impacts are anticipated.

Archaeology

As stated in Schedule 3 Part 2(c) (viii) of the EIA Regulations, landscapes of historical, cultural or archaeological significance need to be considered with regard to possible impacts from the proposed development. There are no protected or listed structures on or within the proposed wind farm site, or within a 500m radius. TEW does not consider the proposal would have any direct and adverse archaeological or cultural effects. However, English Heritage will be consulted as well as the Conservation Team within the BMBC.

The ER will include a brief desk-based archaeological assessment (including

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reference to the Sites and Monuments Record (SMR) and Ordnance Survey First Edition 6" map).

In addition to direct impacts on the cultural heritage, new developments can have an effect on the 'visual setting' of an ancient site or monuments and should be considered during any landscape and visual assessment. Nine scheduled monuments have been identified approximately within 5km of the site location, as follows:

- Glass Furnace, Bolsterstone
- Wayside Cross south of Hartcliff Road
- Wortley Top Forge
- Two Romano-British settlements at Finkle St
- Water powered bloomer, iron forge and rolling mill at Low Forge
- Ewden Beck round barrow cemetery and cross dyke
- Iron age and Roman quern workings at Wharncliffe Rocks
- Ewden Beck ring cairn

These will be addressed in consultation with EH, however, TEW consider that the effect of the proposal on the setting of scheduled ancient monuments will not be significant.

Transport and Infrastructure

Access to the site is likely to be obtained directly from the adjoining minor road. Under Schedule 4 of the EIA Regulations Part 1 (1 a, b, c), a description of the development is required including the physical characteristics of the proposed development and land-use requirements during the construction and operational phases. In addition estimates of expected residues and emissions together with a description of the main characteristics of the production processes are required for the proposed development. Although not considered to be EIA development, the ER will include the required information stated above including the anticipated vehicle movements onto the site during the construction, operation and eventual decommissioning of the wind turbines. This will include details of vehicles, abnormal loads, routing and measures to minimise highway impacts such as phasing, wheel washing and local safety measures. The impact of such vehicle movements is considered to be not significant.

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Aeronautical Issues

The ER will include a description of military and civilian aeronautical issues, relating to the proposal, and a summary of how the applicant has addressed them. The Ministry of Defence (MOD) and Civil Aviation Authority (CAA) will be contacted in relation to the proposal and all relevant correspondence will be included within the ER. A basic aviation assessment has already been undertaken in relation to the likely effect of the proposal on safeguarding and traffic services at potentially affected aerodromes. Detailed discussions with aviation stakeholders will commence in the coming months. The siting and small scale of what is a single turbine scheme is, however, anticipated to mitigate against many potential aeronautical concerns.

Radio-communications and TV interference

The ER will include a description of any potential impact the proposal could have on radio-communications links including interference with television reception (AM and digital) to properties in the area. Ofcom and the BBC will be consulted during the project development and a radio-communications assessment will be undertaken if necessary.

Details of any necessary mitigation to address television reception issues will be provided in accordance with industry best practice. Typically such mitigation is delivered via an appropriate planning condition, if the proposal were to be approved.

Shadow Flicker

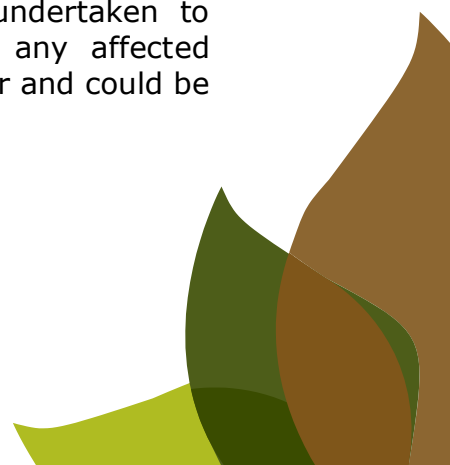
Shadow flicker occurs when a turbine is positioned between the sun and a potential receptor such as a dwelling, in a location where the rotating blades effectively block the view of the sun, casting a flickering shadow. Such effects are strongest at sunrise and sunset and could be annoying especially if viewed through a window.

It is generally accepted that where a separation distance for wind turbines from habitations exceeds ten times the rotor diameter of a turbine blade (PAN 45 and A.D. Clarke), the shadow flicker cannot occur. In the case of the proposed turbine, which will have a maximum blade diameter of 82m, shadow flicker would not be an issue at distances greater than 820m. There are a small number of non-involved residential properties that lie within 820m of the currently proposed turbine locations. An assessment of the shadow flicker effects will be undertaken to establish the potential number of hours of shadow flicker that any affected properties would be subject to. Any such effects are likely to be minor and could be

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mitigated to prevent occurrence in practice such that these impacts are not predicted to be significant.

Conclusions

Each section of the ER will conclude with a summary of key issues and conclusions, and the document, as a whole will incorporate a general summary (including mitigation measures). Relevant references, a glossary of terms and abbreviations used will also be included, along with any necessary Appendices.

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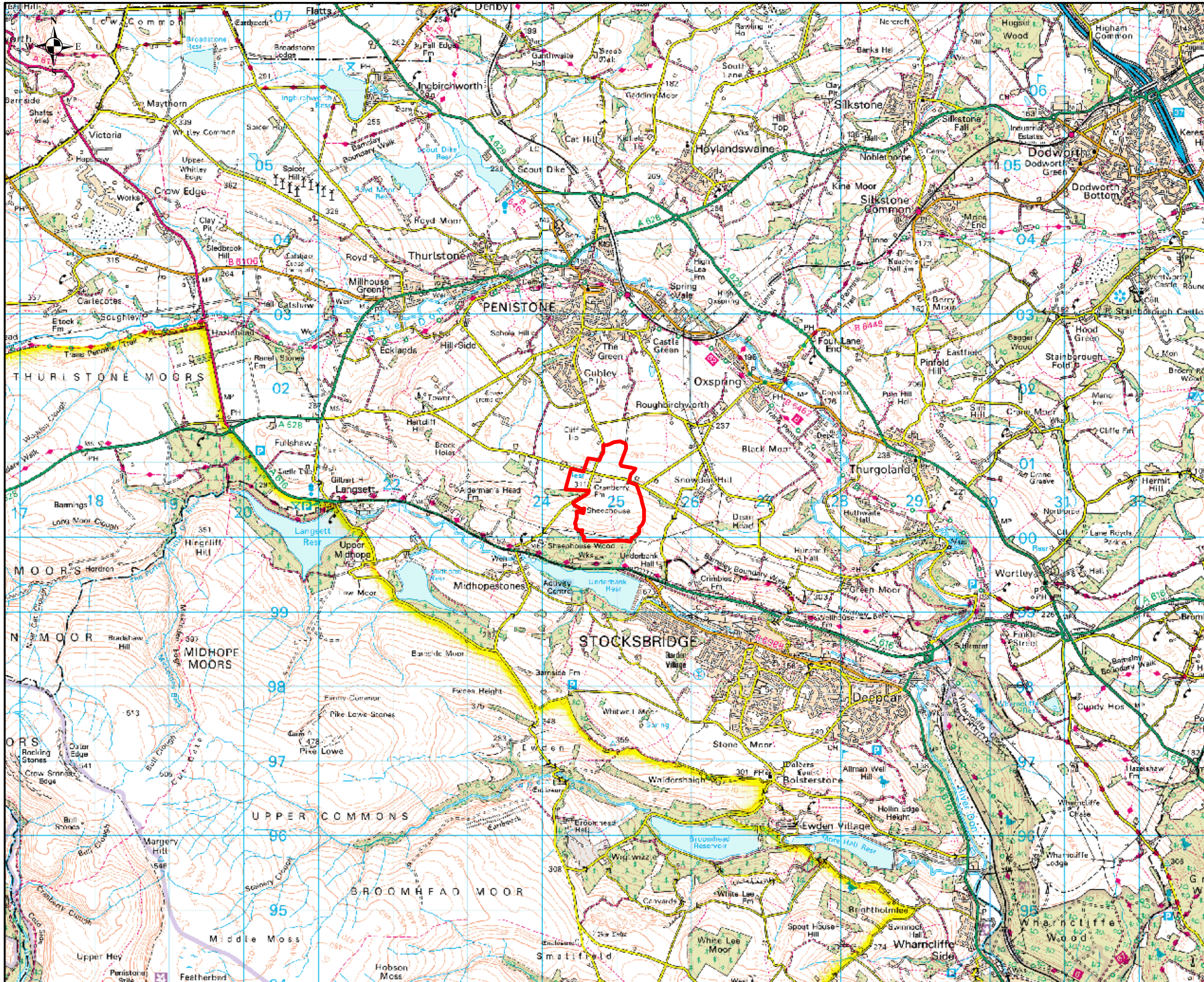


Figure 1
Site Location

— Site Location

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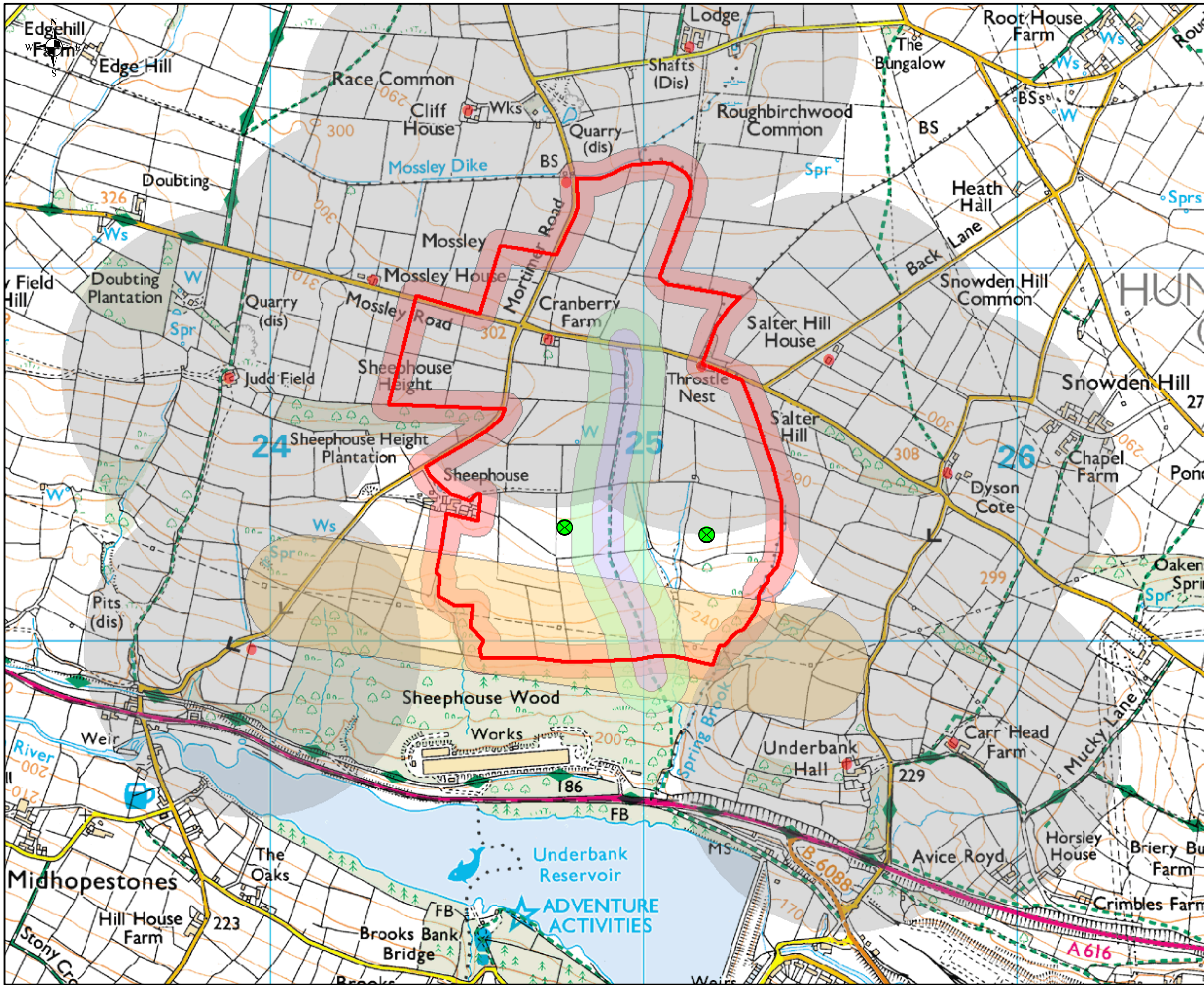


Figure 2
Indicative Layout
(Turbines Only)

- Site Location
- Dwelling 450m Buffer
- Boundary 45m Buffer
- PowerLine_150m_Buffer
- 42
- 101

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