



Justification of wind turbine
at Upper Langridge Farm



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Wind turbine installation at Upper Langridge Farm

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Upper Langridge Farm, Bath, BA1 9BW

Upper Langridge Farm, Bath, BA1 9BW

preamble

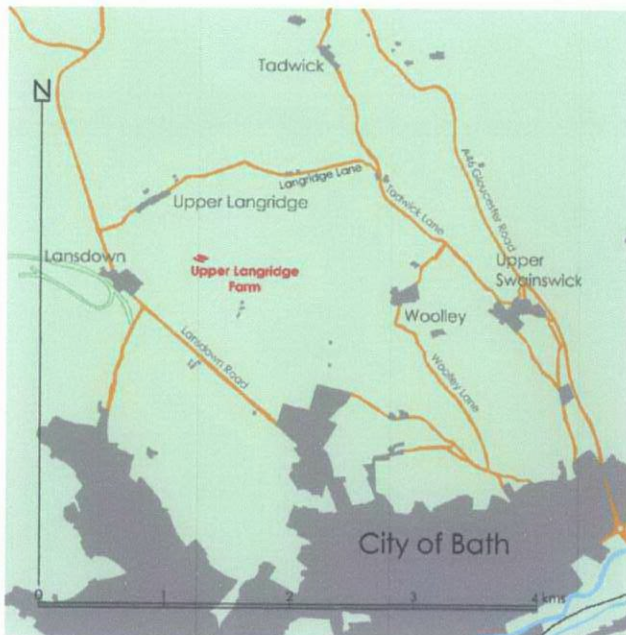
Introduction

- 01 This report describes proposals to introduce a wind turbine close to and south of Upper Langridge Farm, Lansdown.
- 02 The site is not near a Listed Building and not in a Conservation Area. It is in the Bath and Bristol Green Belt and the Cotswold Area of Outstanding Natural Beauty.
- 03 The report demonstrates the application proposals meet the policies of the Development Plan. There are material considerations that are relevant and these are discussed in this report.
- 04 The selection of the appropriate wind turbine has been taken with care and an analysis of alternatives is set out in Appendix A.

Planning Context

- 05 The Development Plan for Bath and North East Somerset includes the Joint Replacement Structure Plan of 2002 and the Bath and North East Somerset Local Plan which was adopted in October 2007. Relevant policies of the plan are addressed below and set out in Appendix B.
- 06 Material considerations include the Draft Regional Spatial Strategy for the South West 2006 – 2026,¹ the Rural Landscape Character Assessment 2003 and Government guidance. The Council has prepared Supplementary Guidance addressing work on existing dwellings in the Green Belt. Relevant material considerations are discussed below and are set out in Appendices C and D.
- 07 The Rural Landscape Character Assessment was prepared after the Joint Structure Plan was adopted and after many policies in the Local Plan had been drafted. Nevertheless, some of the policies of the local plan were amended following the local public inquiry and report of the Inspector.

¹ The Regional Spatial Strategy may be adopted. At the time of the preparation of this statement only the draft is available and progress on the RSS does not appear to be progressing.



Location plan:-Upper Langridge Farm

- 08 Following the adoption of the Joint Structure Plan in 2002, Government advice has been issued which in some respects overtakes the policies of the Structure Plan. In particular, Government advice responding to the issues of climate change has been brought forward. This is set out in revised standards in Building Regulations as well as a suite of objectives in a supplement to the Planning Policy Statement PPS1 which was published in December 2007. Appendix C
- 09 Current government advice presents a challenge for decision makers when determining proposals for which address climate change issues. In particular, there will be challenges for decision makers when reconciling innovative equipment with policies seeking to secure local distinctiveness based on repeating traditional forms of construction.
- 10 On October the 19th the Council published a 'Core Strategy' for consultation. This may be held to be material but little weight can be put on this at the early stage of the consultation process. Much of the Core Strategy addresses spatial development which is not relevant to this application.
- 11 However the strategy seeks to bring forward options on addressing climate change. It poses questions as part of the consultation exercise. The application proposals seek to secure a very low or zero carbon building and this can be considered to be consistent with the broad intentions set out with this part of the Core Strategy consultation document.

other considerations

- 12 Policies in the Development Plan address countryside designations. These policies have been rolled forward from earlier texts but have been overtaken now by recent government initiatives addressing climate change. Original objectives of countryside designations have not been reconciled with the implications of meeting climate change. The AsONB have been designated to protect natural beauty and Green Belts are centred on long standing objectives to prevent the spread of urban development.
- 13 Government advice in the PPS 22 'Renewable Energy' recognises that decisions on proposals for renewable energy projects must reconcile the objectives of the countryside designations such as AsONB and Green Belts with the benefits that renewable energy will bring.
- 14 The Supplement to PPS 1 and other Government policies addressing climate change are material considerations. The contribution the proposed wind turbine makes to achieving targets to reduce greenhouse emission and its other benefits may be held to be a material consideration.
- 15 The essential challenge to address climate change introduces ethical dimensions when dealing with proposals for sources of renewable energy. There is a compelling case that any ethical dimensions associated with addressing climate change and departing from other policies are material considerations.

Upper Langridge Farm



Location of upper Langridge Farm

Upper Langridge Farm

- 16 Upper Langridge Farm lies some four kilometres north of the City of Bath close to the hamlet of Lansdown. The farm ensemble lies on the scarp of the linear Lansdown plateau with steep slopes falling away from the farm to the East and to the Lam Valley.
- 17 The farm consists of a cluster of stone buildings extending west from the original farmhouse. The buildings are likely to have been built in nineteenth century and are used now as a home. The surrounding land is let to a tenant farmer.

The wind turbine

- 18 The development at Upper Langridge Farm is being undertaken with the aim of minimising carbon emissions in occupation. The building is being constructed with passive energy conservation features, such as high levels of insulation and solar water heating, with the main heat source being a woodchip boiler. It is expected that, with these technologies, 80% or more of the annual heating requirement for Upper Langridge Farm should be free of carbon emissions.

- 19 However in order to offset the carbon emissions associated with electrical consumption it is essential to provide some form of on-site, renewable electrical generation. Given the size of the dwelling the only economically viable technology is wind power. Because the farm is near the top of the Lansdown ridge, it is ideally located for wind power.
- 20 The wind turbine will be introduced to a field some 150 metres to the south of the house and an existing wood and 400 metres north of Lansdown Road and some 500 metres from the nearest houses.
- 21 The turbine will be 15 metres high with 4.5m blades. The equipment will generate 15kw of energy. Surplus electricity will be sold back to the National Grid. ² The proposal is for a single mast and does not qualify the proposal to be screened for Environmental Impact Assessment. ³
- 22 The decision on the siting of the turbine has followed trials on the efficaciousness and speed of prevailing winds and the effect of the existing trees. These do not affect the turbine.

² This single turbine is defined as micro-generation equipment in the Energy Act 2004. [Energy Act 2004, s.82, ss.6 and 8]

³ Companion to the Planning Policy Statement 22, 'Renewable Energy', p180, s.88.



selection of the turbine

23 The Proven 15kW turbine has been selected for this installation as it provides the best performance for the installation cost and physical size. See Appendix A

24 At a total height of 19.5m it is 4-5m smaller than either of the machines with equivalent annual output. A physically smaller turbine, the Proven 6 is available, but neither this nor the Westwind 10 is capable of meeting any significant proportion of the annual demand. To produce the same annual generation with smaller turbines would require 3No Proven 6 or 2No Westwind 10 at



The Proven 15kw turbine