BARNSLEY PARTNERSHIP FOR LEARNING

WIND TURBINE DEVELOPMENT AT SHAFTON ADVANCED LEARNING CENTRE

PLANNING STATEMENT

SEPTEMBER 2010

TURLEY ASSOCIATES

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1. Introduction and Background

1.1 This Planning Statement is submitted in support of a Full Planning Application by Barnsley Partnership for learning for a wind turbine at Shafton Advanced Learning Centre (ALC).

1.2 The proposals that this statement considers are a component part of the wider ALC construction programme. The applications should therefore be viewed in the context of the Outline Planning Permission (reference 2009/1260) and Reserved Matters Approval (reference 2009/1361). This application is a resubmission, following the withdrawal of planning application 2010/0065 for 3 No. 15kW wind turbines in February 2010.

1.3 This Planning Statement sets out the relevant planning policy and material considerations associated with the type of development proposed. The statement then continues to set out why the proposals are acceptable and planning permission should be granted.

The Submission

1.4 This application is also supported by the following technical documents:

- Landscape and Visual Impact Assessment prepared by Anthony Walker and Partners Landscape Architects;
- Design and Access Statement prepared by Turley Associates; and
- Noise Assessment prepared by SRL.
- A BREAMM assessment which relates to Ecological issues prepared by E3 Ecology.

1.5 In addition, this statement also includes the following:

- An assessment on the potential for interference to TV and radio reception;
- Construction impacts on the surrounding highways network.

This Document

1.6 In terms of the structure of this document,:

- Section 2 sets the context for the proposals;

- Section 3 describes the application site and surrounding context;
- Section 4 describes the proposals;
- Section 5 sets out the relevant planning policy;
- Section 6 sets out the relevant planning history;
- Section 7 introduces the material considerations;
- Section 8 assesses the proposals against the purposes of the Green Belt;
- Section 9 analyses the other material considerations and technical matters; and
- Section 10 provides a summary and conclusions.

2. Background to the Development

2.1 In response to the continued economic decline of Barnsley Borough since the 1980's, an ambitious plan was drawn up for the regeneration of the Borough which is known as Remaking Barnsley. In association with this, there is an Education Vision which acts to underpin the regeneration of the Borough. This has become known as Remaking Learning. Remaking Learning is a radical programme of transformation that will provide the highest quality learning opportunities for every child, young person and adult. A key tool in the delivery of this agenda is the Building Schools for the Future (BSF) programme, within which Barnsley is a "wave 3" Authority.

2.2 The Council's broad remit for delivering the BSF programme rests on improving the quality of teaching, support to teaching and the experience the school can offer. The design, environment, equipment and servicing of school buildings are central to these strategies and this has clear links with providing appropriate facilities that are fit for purpose. The current building stock has suffered through lack of investment and this has had a detrimental effect on attainment levels in Barnsley. There are serious suitability, condition and sufficiency issues to be addressed.

2.3 To address these issues and to help to achieve the educational vision highlighted above, the complete reorganisation of the secondary school stock is being pursued. This has resulted in the creation of a smaller number of new Advanced Learning Centres (ALCs) as the most appropriate solution. This is being delivered through the BSF programme. Upon completion, the BSF programme will deliver state of the art facilities providing access to high quality learning environments for all learners aged 11+ fit for the 21st Century

2.4 . A part of the new development programme is the delivery of cutting edge sustainability features and this includes the generation of a proportion of the energy consumed from renewable sources on site.

2.5 The wider policy context is as follows. The emerging Barnsley Core Strategy also sets a requirement for decentralised, renewable or low carbon energy sources to be installed at new major development sites, to reduce carbon dioxide emissions by at least 15% (draft policy CSP5). There is therefore a clear emerging policy steer to provide renewable energy generation on site. On behalf of the Council, as a leading public sector body, the BSF team have adopted this requirement on each of the ALC sites.

2.6 This helps to lead the way in terms of policy compliance for other major developments in the Borough, and also provides a strong fit with the environmental

objectives of the Council. The turbine will also provide a new educational opportunity for children using the ALC, with the energy generation agenda presenting a number of opportunities for learning, which would otherwise not be present, including potential subject matter relevant to geography, physics, environmental and other technology considerations.

2.7 10% of the energy requirement at the ALC is already met through the provision of biomass heating / hot water as an integral part of the approved development. The Council, through the brief and specification prepared by the Education Department, requires a further 10% on site generation to be provided. This requires the presence of at least 1 turbine at each site, but allows the additional 10% to be provided across the phase 2 sites as a whole. This allows for individual site circumstances to be taken into account.

Overall Approach to Delivery

2.8 The on site renewable energy generation targets effectively amounts to 20% of that required across the Phase 2 BSF portfolio. A strategic decision has been made to focus on biomass heating systems and wind power generation, as these technologies are the most proven and cost effective means of meeting the requirement.

2.9 Other technologies are either not feasible, not cost effective or a combination of both of these factors. Technologies such as micro-hydro and photovoltaics have been discounted on this basis, as they do not represent best value for public expenditure.

2.10 At the time of applying, the following baseline position applies for the Phase 2 schemes:

School	**10% Requirement**	**Additional 10% Requirement**
Shafton	To be met by Biomass Heating Plant	Application for 3 x 15kW turbines withdrawn
Greenacre	To be met by Biomass Heating Plant	Permission granted for 1 x 1.5kW Turbine

School	10% Requirement	Additional 10% Requirement
Springwell	To be met by Biomass Heating Plant	Permission granted for 1 x 1.5kW Turbine

2.11 The actual position therefore shows that 10% on site generation requirements for the majority of the ALC sites will be met by biomass heating plant. However the additional contribution, over and above the contribution made by biomass has not been met. Therefore to meet the requirement specified by the Council, further sources of renewable energy are required.

2.12 Overall the previous applications included a total of 5 wind turbines distributed across all of the Phase 2 schools. At the present time two turbines have been approved, one each at Greenacre and Springwell. Following a review of the overall approach to delivery for the phase 2 sites a lower number of turbines are now proposed generating equivalent levels of electricity from renewable sources and to offset the shortfall of delivering lower output turbines at Greenacre and Springwell.

2.13 In this context, the overall approach to turbine distribution will be based upon selective use of more efficient turbines in the areas of greater operational efficiency. The objective is to meet the overall generation requirements set by both policy and the Education Departments Development Brief (amounting to 20% on site generation overall), but to achieve this in a more efficient manner. A result of this approach will be fewer effects on the openness of the Green Belt, within which the turbine is to be located.

2.14 The relative operational efficiency of each site is discussed below.

Shafton

2.15 Of all of the phase 2 sites, Shafton has the best wind profile of the three sites and therefore is the most operationally efficient. This makes it therefore the most logical location for a wind turbine of higher power generating capacity.

Springwell and Greenacre

2.16 Both Springwell and Greenacre are constrained from accommodating a larger scale wind turbine by a combination of factors. These include:

- Site size;
- The proximity of residential receptors;
- Site topography; and
- A less efficient wind profile resulting in a lower operational efficiency.

2.17 As this is the case, neither the Springwell site nor the Greenacre site were considered suitable or appropriate to accommodate a larger scale wind turbine operation. As this is the case, planning permission has been secured for small scale wind turbine development in these locations, leaving an interim deficit to be made up at Shafton.

2.18 The assessment undertaken therefore shows that the Shafton site, by virtue of its exposure to wind resource offers the greatest potential for renewable electricity generation from wind of all of the phase 2 sites. It is therefore the most logical and appropriate location for a larger scale installation (when compared to those turbines alredy approved at Springwell and Greenacre), to make best use of the available wind resource to achieve a proportion of energy generation from on site renewable sources. No other phase 2 site offers the same combination of good wind resource and relative remoteness from sensitive receptors.

Expected energy generation and CO2 savings as a result of development at Shafton

2.19 With regard to the proposed development at Shafton, the expected levels of electricity generation and CO2 savings is shown in the table below:

Time period	**Expected electricity generation from 1 WES 18 80kW wind turbine at 34 metres to the hub (kWh)**	**Commensurate CO2 savings**
1 year	84,700	44 tonnes
10 years	847,000	440 tonnes
20 years (estimated design life of the	1,694,000	880 tonnes

turbine)		

2.20 Therefore over the anticipated design life of the turbines, in excess of 880 tonnes of CO2 is expected to be saved. For the Greenacre and Springwell sites the expected level of electricity generation is 1,350 Kwh per site per annum, totalling 2,700 Kwh for both sites per annum. These contributions are very low by comparison and will not achieve the same level of CO2 saving, but savings will be achieved nonetheless.

2.21 In terms of the expected energy output from all phase 2 sites, the proposed turbine at Shafton will make up circa 97% of the total renewable energy generation capacity for that phase of the BSF programme. It is clear that without the turbine the expected CO2 savings will not be achieved, nor will the target of meeting 10% of the energy consumption from the new elements of the Schools over and above that provided by the biomass heating (as per the design brief) be met.

Summary

2.22 The revised strategy offers a more efficient means of meeting the same energy generation requirement, both in terms of cost effectiveness and the extent of development proposed. In this context the turbine proposed in this application forms a central component of the wider strategy. The wider strategy is based upon a thorough analysis of the energy generation potential from wind across the phase 2 portfolio.

2.23 Overall, this strategy will continue to deliver wider environmental benefits through renewable energy generation in the most efficient locations and in a form which, we consider, reduces landscape, visual and Green Belt concerns.

3. Site Description and Context

3.1 The application site boundary for the proposals is shown outlined in red on plan reference BP4L_SHA_AWP_DR_94_BW_LL_14 P03. It should be noted that this is a component part of a wider site where construction for a new ALC has been approved. The area where construction of the wind turbine is to take place is on marginal land associated with the approved playing field provision related to the ALC.

Shafton ALC Site

3.2 The Education Sites DPD identifies new sites for schools, including the site at Shafton. In accordance with the Outline and Reserved Matters Approval, the school buildings should be located towards the north of the site with playing fields and open space being situated in the southern portion of the site. The proposed wind turbine will sit at the southern end of the site, within the area identified for playing fields and open space but the site comprisng marginal land incapable of forming a playing pitch or playing field.

3.3 The site lies to the south of the main urban area of Shafton and is wholly within the Green Belt, as defined by saved UDP Policy NE7.

3.4 The site has Outline Planning Permission (reference 2009/1260) and Reserved Matters Approval (reference 2009/1361) for a new Advanced Learning Centre where works on construction have started.

3.5 The school site extends to 11.17 hectares, 2.5 hectares of which is for the buildings and access, and the remaining 8.67 is for playing fields and open space.

Surroundings

3.6 The wider site is bound by Engine Lane and Hazeldene Farm to the east, Collier Road to the north and further green fields to the south and west.

3.7 Collier Road, which lies to the north of the site, is the main A628 which links the site with the urban areas of Shafton to the north and Cudworth to the west, whilst Engine Lane links the site to Grimethorpe which lies to the south east.

3.8 The eastern boundary of the wider site wraps around Hazeldene Farm which comprises a farmhouse and some outbuildings.

4. The Proposals

4.1 The proposal is to construct 1 wind turbine at a hub height of 34 metres within the location identified in red on plan reference BP4L_SHA_AWP_DR_94_BW_LL_14 P03. Associated with this is a GRP structure as an ancillary adjunct to the turbines.

4.2 The purpose of the wind turbine is to help secure a source of energy supply to meet a proportion of the energy usage for the ALC from renewable sources of energy. The proposed turbine model is the WES 18 with a power output of 80kW.

4.3 The background and rationale to the proposal is set out in section 2 of this statement. The location of the wind turbine has been determined following consideration of a number of factors (but not exclusively) as follows:

- Potential noise effects on the surrounding residential properties;
- Consideration of the requirements of statutory consultees in particular Sport England and Natural England;

4.4 In line with the requirements of the 1999 EIA regulations, a screening letter on the need for an Environmental Impact Assessment (EIA) of the proposals, is included as part of this planning application package. We consider that whilst the proposal is Schedule 2 development, it is not EIA development. The site itself is not sensitive as defined by the regulations.

5. Pre-application Discussion

5.1 In drawing up the proposals under consideration, there has been dialogue and discussion with the Council, the school and other consultees. This is outlined below.

Barnsley Metropolitan Borough Council (BMBC)

5.2 Pre application discussions have been held with officers at BMBC regarding the proposed development. Initial discussions were held in February 2009 where the key issues were identified in respect of the phase 1 schools. In this respect the Council requested that due consideration be given to noise, landscape and visual impact and other matters such as shadow flicker and highways impact.

5.3 Further dialogue was held with the Council where proposed locations of the turbine were considered.

5.4 Prior to the resubmission of proposals, further discussions were held with Officers of the Council in February 2010. During the meeting further discussion was held in respect of turbine siting and overall approach to delivering 10% on site renewable energy generation over and above that provided via the biomass heating.

5.5 The previous planning application for wind turbines at Shofton ALC (reference 2010/0065) was withdrawn in February 2010 to allow further consideration of the impact of the turbine on Green Belt considerations and the rationale behind the approach taken.

Engagement with the school

5.6 As part of the ongoing BSF programme, extensive engagement was held with the school during the design process where the location of the proposed turbines was discussed and agreed. This engagement is ongoing.

Engagement with Sport England

5.7 Pre-application discussions were held with officers of Sport England where the siting of the turbines was discussed. As a result of the discussions, the siting of turbines was considered and in principle agreement was reached, subject to the application of conditions to a planning permission.

5.8 At the time of writing no adverse comment has been received from any of the above consultees.

6. Relevant Planning Policy

Statutory Context

6.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that planning applications must be determined in accordance with the statutory development plan, unless material considerations indicate otherwise.

6.2 The Development Plan of consideration for the application proposal comprises the saved Barnsley Metropolitan Council Unitary Development Plan (UDP) (2000).

6.3 Other documents which should be afforded appropriate material weight in the determination of the planning application include:

- Planning Policy Statement 1: Delivering Sustainable Development (2005);
- Supplement to Planning Policy Statement 1: Planning and Climate Change (2007);
- Planning Policy Guidance 2: Green Belts (1995/2001);
- Planning Policy Statement 22: Renewable Energy (PPS22);
- Barnsley Metropolitan Borough Council Local Development Framework (LDF).

National Planning Policy

PPS1: Creating Sustainable Communities (2005)

6.4 PPS1 outlines the Government's vision for the planning system and the key policy principles which should underpin it. Principles include taking a spatial planning approach, promoting good design and actively seeking to support sustainable development through the development plan system.

6.5 A key principle of PPS1 is the requirement for development plans and decisions to contribute towards global sustainability by addressing the causes and potential impacts of climate change. This should be secured through policies which reduce energy use, reduce emissions, promote the development of renewable energy resources and take climate change impacts into account in the location and design of new development.

6.6 A second key feature of PPS1 is the promotion of good design in new development. It affirms that good design ensures attractive, usable, durable and adaptable places and is a key element in achieving sustainable development.

6.7 Key policies contained in the Guidance include support for sustainable economic growth, creating linkages between places, greater accessibility to local facilities and services and the re-use of previously developed land.

6.8 The prudent use of resources is another key principle of PPS1. This requires using resources efficiently, in a form that respects the needs of future generations. Development plan policies and decisions should seek to minimise the need to consume new resources over the lifetime of the development by seeking to promote the use of renewable resources to encourage energy efficient developments.

Supplement to Planning Policy Statement 1 Planning and Climate Change (2007)

6.9 The Supplement to PPS1 sets out how planning should contribute towards reducing emissions, stabilising climate change and securing the highest viable resource and energy efficiency by securing sustainable patterns of development.

6.10 The PPS1 Climate Change Supplement comments, at Paragraph 3 that:

> *"Climate change is the greatest long term challenge facing the world today"*

6.11 It also comments at Paragraphs 5 and 6 that:

> *"Changes in climate are likely to have far-reaching, and potentially adverse, effects on our environment, economy and society for which we need to prepare and adjust.*
>
> *There is therefore an urgent need for action on climate change."*

6.12 Consideration of the environmental performance of a proposed development, particularly the climate that the development is expected to experience of its projected lifetime, is encouraged as a key part of the planning process.

6.13 The Supplement requires that opportunities for renewable and low-carbons sources of energy supply and supporting infrastructure are maximised through regional and local plans. Regional targets for renewable energy generation should be set in line with PPS22 and should require that a proportion of the energy supply

of new development is secured from decentralised and renewable or low-carbon energy sources.

6.14 The Climate Change Supplement also notes, at paragraph 20, that planning authorities should:

> *- not require applicants for energy development to demonstrate either the overall need for renewable energy and its distribution, nor question the energy justification for why a proposal for such development must be sited in a particular location;*

and

> *- ensure any local approach to protecting landscape and townscape is consistent with PPS22 and does not preclude the supply of any type of renewable energy other than in the most exceptional circumstances;*

6.15 The effects of the proposal on existing and proposed development in close proximity should also be taken into consideration.

PPG2: Green Belts (1995; Amended 2001)

6.16 PPG2 outlines the fundamental aims of the Government's Green Belt policy as the prevention of urban sprawl and safeguarding greenfield land. Green Belts shape the pattern of urban growth, ensuring that development occurs in locations allocated in development plans.

6.17 The five purposes of including land within Green Belts are:

- To check the unrestricted sprawl of large built-up areas;
- To prevent neighbouring towns from merging into one another;
- To assist in safeguarding the countryside from encroachment;
- To preserve setting and special character of historic towns;
- To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

6.18 The positive role of Green Belts is outlined in terms of fulfilling objectives which provide opportunities for access to the open countryside and outdoor sport and recreation, retain and enhance attractive landscapes, improve damaged and

derelict land, secure nature conservation and retain land in agricultural, forestry and related uses.

6.19 PPG2 sets guidelines and provides advice on the types of development which are appropriate within Green Belts. These are as follows:

- Agriculture and forestry;
- Essential facilities for outdoor sport and outdoor recreation, for cemeteries and other uses of land which preserve the openness of the Green Belt;
- Limited extension, alteration or replacement of existing dwellings;
- Limited infilling in existing villages and limited affordable housing for community needs under development plan policies according to PPG3; and
- Limited infilling or redevelopment of major existing developed sites.

6.20 There is a general policy presumption against inappropriate development unless very special circumstances can be demonstrated. The key guidance statement at Paragraph 3.2 states:

> *'Inappropriate development is by definition harmful to the Green Belt. It is for the applicant to show why permission should be granted. Very special circumstances to justify inappropriate development will not exist unless the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations*.'

6.21 The visual amenity of the Green Belt is identified at Paragraph 3.15 of PPG2 as a specific consideration. Proposals for development should not harm the visual amenity of the Green Belt by reason of their siting, materials or design.

PPS22: Renewable Energy (2004)

6.22 PPS22 sets out the Government's planning policy on renewable energy. The key objectives are the promotion and development of renewable energy and improvements to energy efficiency in order to mitigate climate change.

6.23 The guidance states that regional and local planning bodies should contain policies designed to promote and encourage the development of renewable energy sources. The wider environmental and economic benefits of all proposals for renewable energy projects, irrespective of scale, should be treated as a material

consideration that will be given significant weight in determining whether proposals should be granted planning permission.

6.24 Paragraph 8 allows local planning authorities to include policies in their plans which require a percentage of the energy to be used in new residential, commercial or industrial developments to be derived from on-site renewable energy sources. To ensure viability, such policies should ensure that the requirement to generate on-site renewable energy is only applied to developments where the installation of renewable energy generation equipment is feasible given the type of development proposed, its location, and design and the policy should not be framed in such a way as to place an undue burden on developers, such as specifying that all energy to be used in a development should come from on site renewable generation.

6.25 Of clear significance to the proposal is paragraph 13. the paragraph states:

> *"When located in the green belt, elements of many renewable energy projects will comprise inappropriate development, which may impact on the openness of the green belt. Careful consideration will therefore need to be given to the visual impacts of projects, and developers will need to demonstrate very special circumstances that clearly outweigh any harm by reason of inappropriateness and any other harm if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources."*

6.26 Paragraph 18 requires that local planning authorities and developers consider the opportunity for incorporating renewable energy projects in all new developments. Small scale renewable energy schemes, such as wind turbines, can be incorporated into new developments and some existing buildings. PPS22 requires that local planning authorities should encourage such schemes through positively expressed policies in local development documents.

6.27 Paragraphs 19 and 20 relate to the impacts upon landscape and visual amenity and ambient noise levels derived from renewable energy developments. Appropriate siting, design and landscaping schemes are emphasised as a means of minimising the impacts of the proposed renewable energy development.

Companion Guide to PPS22 (2004)

6.28 The Companion Guide to PPS22 sets out practical advice as to how the renewable energy policies set out in PPS22 can be implemented in practise.

6.29 The Companion Guide requires that where a renewable energy proposal is promoted, it should be demonstrated that the project:

- Meets the requirements of applicable development plan policies;
- Does not compromise the reasons behind any relevant area designation, or if it does, the proposal provides sufficient justification of the environmental, economic and social benefits which outweigh any harm;
- Addresses the issue of visual impact, and cumulative visual impact, where appropriate.

6.30 Technical Annex 8 of the Companion Guide provides specific information relating to development proposals for wind turbines. Key issues associated with such development may include impacts upon ambient noise levels, landscape and visual amenity, listed buildings and conservation areas and ecology.

The Development Plan

Barnsley UDP

6.31 The Barnsley Metropolitan Borough Council Unitary Development Plan (UDP) (2000) constitutes the Council's statutory development plan whilst the Local Development Framework (LDF) is under preparation. Only the Local Plan policies which were 'saved' by the Secretary of State in September 2007 have been considered as part of this appraisal.

6.32 The site is identified under Policy NE7 as being within the Green Belt.

6.33 Policy NE7 defines the extent of the Green Belt around the settlement of Cudworth. Policy GS7 seeks to safeguard against inappropriate development in this locality and specifies that development will not be permitted within the Green Belt unless it maintains openness and does not conflict with the purposes of including land within it.

6.34 Policy GS9 requires that development within the Green Belt should not by reason of its siting, materials or design result in significant harm to the visual amenity of the Green Belt.

6.35 Policy ES12 sets out the Council's requirements for proposals that seek to develop wind energy generation. Such proposals will be assessed with regard to the following factors:

- Effect both individually and cumulatively upon landscape and the visual amenity of the area;
- The impact on residential amenity with reference to noise, visual outlook, shadow flicker and flashing from the turbine blades;
- Provision of satisfactory access to the highway network having regard to visual amenity, highway capacity and safety;
- Effect on wildlife, ecology and archaeology;
- Effect on agricultural land uses;
- Electro-magnetic effects;
- The provision for connection to the electricity transmission and supply system;
- The effect of shadow flicker or flashing from turbine blades.

6.36 Policy ES12A outlines the importance of using appropriate technology and design for all wind generator proposals. Policy ES1C states that the Council will control development in the vicinity of existing wind generation installations so as to safeguard these from a reduction in local wind speeds.

6.37 Policy BE6 sets out design standards for all development. Proposals will be assessed in terms of:

- The quality of layout and the suitability of the scale of the development;
- The use, quality, design and landscape treatment of open land within the site and the area around buildings;
- The standard of detailed design and facing materials of proposed buildings;
- The suitability of the whole development for its proposed context and its relationship with adjoining land uses.

Barnsley Local Development Framework

6.38 The Core Strategy remains in draft but will constitute part of the Development Plan upon its expected adoption in February 2011. The Core Strategy will set out the proposed policies, spatial options and strategic objectives for the future development of the Barnsley Borough to 2026.

6.39 The Core Strategy Revised Preferred Options was published in June 2009. This was updated by the Core Strategy "Publication Version", which went out to consultation in March and April 2010.

6.40 The Publication Version sets out strategic policies; site specific allocations will be issued following the publication of the Core Strategy. Strategic Objective 6 requires that all new development is suitably designed and built to the highest standards, by embracing the principles of sustainable design, whilst Strategic Objective 8 seeks to minimise energy consumption and to support renewable energy facilities in the Borough.

6.41 Draft Policy CSP1 supports Strategic Objectives 6 and 8 by requiring that development reduces and mitigates the impact of growth on the environment and ensures that existing and new communities are resilient to climate change, through the efficient use of resources and renewable energy.

6.42 Draft Policy CSP5 outlines the Council's requirements for incorporating renewable energy in developments; all new development exceeding 1,000sq m of non-residential floorspace will be expected to incorporate decentralised, renewable or low carbon energy sources, in order to reduce the carbon emissions associated with the development. This should be by at least 15% for applications submitted to 2015 and 20% for applications submitted thereafter.

6.43 Draft Policy CSP6 outlines the Council's support for development that produces renewable energy, as long as there is no significantly harmful effect upon:

- The character of the landscape and appearance of the area;
- Living conditions;
- Biodiversity, geodiversity and water quality;
- Historical and cultural features and areas;
- Highway safety; and
- Infrastructure including radar.

6.44 Draft Policy CSP6 requires that all proposals are accompanied by information that shows how the local environment will be protected and that the site will be restored when production ends.

6.45 Draft Policy CSP29 seeks to secure high quality design in all new developments. The policy requires that all development must adhere to design principles which include:

- Contribution to place making and high quality design;
- Regeneration;
- Improved access and safety for all;
- Meet the CABE Building or Life Silver Standard.

6.46 In terms of Green Belt policy, Draft Policy CSP34 requires that the extent of the Green Belt is retained and safeguarded, in order to protect the countryside and open land around built up areas. Development in the Green Belt must meet the requirements of PPG2.

6.47 Draft Policy CSP36 requires that new development conserves and enhances biodiversity and geodiversity in the Borough. This should include protecting and improving habitats, species, sites of ecological value and sites of geological value and maximising biodiversity and geodiversity opportunities in and around new developments. Development which may harm a biodiversity or geological feature will not be permitted unless effective mitigation and/or compensatory measures can be ensured.

6.48 Draft Policy CSP37 requires that development retains and enhances the character and distinctiveness of the Landscape Character Area in which it is situated.

6.49 Draft Policy CSP43 lends support for the provision of schools and education facilities in the Borough.

6.50 Draft Policy CSP48 requires all development of more than 1,000sq m of non-residential floorspace to provide a minimum of 10% of predicted energy needs from decentralised, renewable or low carbon energy sources.

Barnsley Education Sites DPD

6.51 The Council adopted the Education Sites DPD in January 2009. The DPD sets out the planned sites for secondary schools across the borough in accordance with the Government's Building Schools for the Future development programme.

6.52 The DPD sets out the Council's intention to create nine advanced learning centres in the borough, to replace the thirteen existing secondary schools.

6.53 The DPD outlines that for each advanced-learning centre which requires a new site a number of options for new sites were identified and consulted upon throughout the Barnsley Education Sites Issues and Options document. The sites were then selected following the preferred options consultation.

6.54 Policy EDS1 relates to the Council's intention to build three of the replacement schools on new sites. This includes reference to *'11.17 hectares of land west of Engine Lane in Shafton'.*

6.55 Key issues associated with the development of the Shaftom education site as identified by the Education Sites DPD, include reducing the effect of development upon the Green Belt and residential amenity.

6.56 The DPD refers to the development of new education centres in the green belt. The Council has partly reviewed the boundary of the green belt in preparing the local development framework. Paragraph 4.10 states that there are *'very special circumstances'* which justify using green belt land to provide the education centres and to allow the Building Schools for the Future programme to go ahead.

6.57 The DPD identifies new sites for schools, including the site at Shafton. In accordance with the Outline and Reserved Matters Approval, the school buildings should be located towards the north of the site with playing fields and open space being situated in the southern portion of the site. The proposed wind turbines will sit at the southern end of the site, within the area identified for playing fields and open space.

7. Relevant Planning History

7.1 Table 5.1 outlines the planning history of relevance to the site and the application proposal.

Application Number	Proposal	Decision	Decision Date
2009/1260	Variation of condition 12 of previously approved planning application 2007/0822	Approved	16/12/2009
2009/1361	Erection of an advanced learning centre, car parking, new access, formation of sports pitches and other ancillary facilities (Reserved Matters)	Approved	12/01/2010
2007/0822	Development of Advanced Learning Centre (Outline).	Approved	28/08/2007
2010/0065	Erection of 3 wind turbines at a hub height of 25 metres with associated control building	Withdrawn 24 February 2010	

Table 5.1: Planning History

7.2 Correspondence with Barnsley Council planning officer Matthew Woodward in December 2009, confirmed that no applications for wind turbines have historically been submitted on the site.

8. Material Considerations

8.1 Section 38(6) of the Planning and Compulsory Purchase Act (2004) refers to the Development Plan as a whole and states that:

> *'if regard is to be had to the Development Plan for the purposes of any determination to be made under the Planning Acts, the determination must be made in accordance with the Plan unless material considerations indicate otherwise'*

8.2 The key material planning considerations raised by the proposed wind turbine at Shafton ALC to be taken into account in the decision making process are therefore:

- Impact on the Green Belt;
- Impact on the landscape and visual amenity of the area;
- Impact on noise levels;
- The impact of shadow flicker;
- Potential effects on playing pitch users
- Impact on ecology / ornithology;
- Impact of the wind turbines surrounding footpaths / highways;
- Impact of construction on the highway;
- Television / telecommunications interference; and
- Impact on Air Safety.

8.3 These are discussed in more detail in the following two sections.

9. Green Belt Assessment

9.1 It is accepted that wind turbine development constitutes inappropriate development in the Green Belt. Paragraph 3.1 of PPG2 makes it clear that there is a general presumption against inappropriate development in the Green Belt and that such development should not be approved except in very special circumstances. Paragraph 3.2 also makes clear that inappropriate development is, by definition, harmful to the Green Belt. The presumption against development in the Green Belt is also reflected in the saved policies of the Barnsley UDP (2006).

9.2 Within the context of what is stated at paragraph 13 of PPS22, the central issue, therefore, is whether very special circumstances exist which outweigh the harm to the Green Belt resulting from the inappropriateness of the proposed development. In considering the issue, it is necessary to assess:

- The impact on the openness of the Green Belt;
- The impact on the visual amenities of the Green Belt;
- The impact on the purposes of including land within the Green Belt; and
- The impact on the use of land within the Green Belt.

Very Special Circumstances

9.3 Paragraph 13 of PPS22 states that the development of renewable energy is inappropriate development in the Green Belt in the context of PPG2, therefore very special circumstances will need to be demonstrated.

9.4 PPS22 also suggests that:

> *'Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.'*

9.5 It is therefore considered that the very special circumstances in this case are the wider environmental benefits of the proposals. It is also worth noting that the Education Sites DPD noted that there are very special circumstances for allowing the ALC's themselves to be developed within the Green Belt. Whilst this DPD has not removed the ALC sites from the Green Belt, the currently proposed turbine, is part and parcel of delivering that development and securing its wider environmental obligations. This suggests some level of wider development plan support and

differentiates this turbine from an equivalent turbine in the open Green Belt, where the context lacks any urbanisation.

9.6 National policy and the statutory development plan seek to reduce climate change and increase the use of renewable sources of energy. This is a position that is reiterated and reinforced by the Coalition Government. The proposals will secure a renewable source of energy generation in line with the overriding national and regional planning policy objectives. It is considered that this constitutes very special circumstances for this development in the Green Belt.

9.7 The development of a wind turbine within the grounds of the new school is a key component to the wider school redevelopment proposals, as this will secure a proportion of energy is derived from on site renewable sources in accordance with the national planning policy objectives, the statutory development plan and the Design and Development Brief for the BSF Programme.

9.8 The erection of the turbines will secure a source of renewable energy generation that will play its part in the wider objective of reducing greenhouse gas emissions, a principal cause of global climate change. The need to secure and deliver sources of renewable energy generation in order to reduce CO2 emissions is a key national planning policy objective.

9.9 The provision of a turbine at Shafton ALC will meet this overriding objective and consequently this represents the very special circumstances that justifies the proposals within the Green Belt. It is therefore considered that the need for the development outweighs the harm to the Green Belt and that this constitutes very special circumstances.

Impact upon the Openness of the Green Belt

9.10 It is also helpful to consider the extent of the impact on openness that the proposed development would have upon the Green Belt (i.e. freedom from development): it's most important attribute. Impacts on openness are assessed on the basis of the presence and extent of buildings and other urbanising features, with proposed development being compared with existing as a means of demonstrating the balance of change. Impact can be assessed in terms of change in developed footprint and site coverage, and in terms of changes in building volume, scale and mass.

9.11 Whilst it is acknowledged that the proposed wind turbine will constitute an increase in 'built form' in the Green Belt, this is limited by the small footprint and tower like form of the development. Whilst there will clearly be an impact on openness, as a

form of development, turbines lack major volume and mass and must therefore have a commensurately low impact on openness.

9.12 The proposed turbines lie wholly within operational land associated with Shafton ALC, which is itself an urbanised area of the Green Belt. The presence of buildings, hardstanding and indeed maintained playing fields and associated infrastructure, all have an urbanising effect on this area of the Green Belt, which reduces the concern of this proportionally small addition of development.

9.13 Whilst the turbines do have an effect on openness, we consider that this is limited and is outweighed by the contribution the turbine can make to reducing carbon emissions and delivering on renewable energy generation targets.

Impact on the Purposes of Including Land within the Green Belt

9.14 The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. It establishes five purposes of including land within the Green Belt which is useful to consider in order to establish the extent of harm arising. Considering the effect of the proposed wind turbine upon each of the five purposes, it is concluded that:

i) To check the unrestricted sprawl of large built up areas

The Green Belt in this location will continue to fulfil this function. It is not considered that the proposed wind turbine will prevent the fulfilment of this function as the proposed development lies wholly within the curtilage of Penistone ALC, has a small footprint and will not result in pressure to physically develop other areas of land either within or around the site.

ii) To prevent neighbouring towns from merging into one another

The Green Belt in this location will continue to perform this function as it will not materially reduce separation distances between Cudworth and surrounding urban areas.

iii) To assist in safeguarding the countryside from encroachment

The Green Belt will continue to fulfil this function in this location and will not be adversely affected by the proposals as the proposed wind turbines lie wholly within grounds associated with Shafton ALC.

iv) To preserve the setting and special character of historic towns

The Green Belt in this location does not undertake this function and does not need to be considered in this instance.

v) To assist in urban regeneration, by encouraging the recycling of derelict and other urban land

The re-use or recycling of urban land would not be prevented by this development proposal. The use of this site as an ALC has been suggested in the Education Sites DPD and this decision has been made in the light of other brownfield alternatives. The turbine is one element of delivering a sustainable educational development.

9.15 Paragraph 1.6 of PPG2 advises that once Green Belts have been defined, the use of land has a positive role to play in fulfilling five purposes as set out in this statement and above. The proposed development would not undermine any of those purposes. It can therefore be concluded that the proposed wind turbine will not undermine the functioning of the Green Belt in this location.

9.16 Finally, it has been demonstrated that the need for the development constitutes very special circumstances, which far outweighs the very limited impact on the openness of the Green Belt and modest impact on the visual amenities and character of the Green Belt.

9.17 In light of the foregoing, it is considered that the proposed development is acceptable and is not in conflict with the provisions of PPG2 or saved UDP policies in respect of the Green Belt.

10. Other Material Considerations and Technical Matters

10.1 This application is supported by a number of accompanying reports which set out specific details relating to landscape and visual impact and noise. The impact of the proposed wind turbines on TV / telecommunications will also be considered in this chapter. All of these matters should be considered as material to the determination of the application.

Principle of Development

10.2 National, regional and local planning policy supports the development of renewable sources of energy to support sustainable development objectives as recently reiterated by the new Government.

10.3 The proposals are for the generation of energy from renewable sources of energy. This is supported by adopted and emerging national, regional and local planning policy, namely:

- PPS1 and its supplement;
- PPS22 and the Companion Guide to PPS22;
- Draft Core Strategy Policy CSP48.

10.4 The objective of PPS1 is the promotion of sustainable development and identifies the prudent use of natural resources as one of the key principles. Similarly, the key objective of PPS22 is the promotion and development of renewable energy in order to mitigate against climate change.

10.5 This is also reflected in emerging policy. Strategic Objective 8 of the Core Strategy Preferred Options seeks to minimise energy consumption and supports the development of renewable energy sources. Draft Core Strategy Policy CSP48 seeks the provision of a minimum of 10% of the energy requirements of all new developments to be provided from decentralised, renewable or low carbon sources.

10.6 Wind turbines are considered to be the most appropriate source of renewable energy in this location as they will take advantage of the local climatic conditions and will be the most financially viable source.

10.7 The previous section of this statement demonstrates the lack of harm to Green Belt purposes and objectives and that the wider benefits of the development clearly

outweigh the limited harm to the Green Belt. Therefore the construction of a wind turbine in this location is therefore acceptable.

10.8 In summary, the wind turbine is ancillary to the primary use and purpose of Shafton ALC and is the most appropriate source of renewable energy in this location. The development will ensure the ALC will adhere to the requirements of the statutory development plan and national planning policy. The principle of the development of wind turbines in this location is therefore acceptable.

Landscape and Visual Impact

10.9 In terms of landscape and visual impact, the assessment submitted with the application shows that the turbine will be visible to a number of receptors in the locality, when looked at from the agreed viewpoints (please refer to accompanying photomontages) and the impact will be, at worst, moderate adverse during construction and minor/moderate adverse after 15 years..

10.10 However it is important to note that the turbine will invariably be viewed in the context of the wider ALC development, associated works and the existing electricity pylon in the vicinity of the site. Therefore any potential visual impact should be viewed within this urbanising context.

10.11 Nonetheless the location of the wind turbine has been carefully considered so as to provide sufficient offset from residential properties whilst maintaining operational efficiencies and meeting the objectives of statutory consultees. Given that the potential impact upon visual amenity is limited, it is therefore considered acceptable.

Noise

10.12 The detailed noise report has been prepared by SRL and has been submitted as part of this application package.

10.13 The assessment concludes that the measured data indicate that the criteria for the acceptability of wind turbine noise (as set out by ETSU) are likely to be met at all wind speeds during both the daytime and the night time. In terms of noise impact, the proposed wind turbines are therefore considered to be acceptable.

10.14 The location of the wind turbines within the ALC site has been carefully considered to ensure that the surrounding residential properties experience minimal disturbance.

Shadow flicker

10.15 The Companion Guide to PPS 22 Planning for Renewable Energy, Technical Annex: Wind states:

> *"Under certain combinations of geographical position and time of day, the sun may pass behind the rotor of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off; the effect is known as 'shadow flicker'. It only occurs inside buildings where the flicker appears through a narrow window opening."*

10.16 Shadow flicker is not a common occurrence and has been proven to occur only within ten rotor diameters of properties within 130 degrees either side of north. In terms of assessing the potential effect of Shadow Flicker the first assessment that should be made is the proximity of sensitive receptors that lie within 10 rotor blade diameters of the proposed turbine. In this case given the type of turbine proposed (a WES 18 with a rotor diameter of 18 metres) the potential effect may only be assessed within 180 metres (the equivalent of 10 rotor diameters) of the proposed turbines.

10.17 In terms of assessment it should be noted that when determining the location of the proposed turbines at Shafton that are now being applied for, the turbines are located at least 200 metres from residential properties where shadow flicker might be experienced. With regard to the turbine proposed and associated rotor diameter of 18 metres, this is clearly in excess of 180 metres where the effect of shadow flicker is proven to potentially occur.

10.18 As this is the case, shadow flicker in residential properties is not an issue that is likely to be experienced as a result of the development.

Impact on Playing Pitch Users

10.19 Pre-application discussions with Sport England have confirmed that the proposed siting of the turbine is acceptable in principle. This is by virtue of the fact that the turbine is located on land previously approved as new landscaping and not on existing playing or land capable of being used as a playing field.

10.20 The approved Landscape Masterplan under Reserved Matters Approval 2009/1361 clearly shows the application site as comprising new structural landscaping that never formed part of the approved playing field provision. As this is the case ,we consider that the proposal complies with Exception Criteria E3 of Sport England's

Playing Fields Planning Policy Statement, which specifies that planning permission for development which may affect the use of a planning field is acceptable where:

> *'The proposed development affects only land incapable of forming, or forming part of, a playing pitch, and does not result in the loss or inability to make use of any playing pitch (including the maintenance of adequate safety margins), a reduction in the size of the playing areas of any playing pitch or the loss of any other sporting/ancillary facilities on the site'.*

10.21 In terms of other potential effects on pitch users, we note that Sport England may take the view that there may be some potential for distraction to users by virtue of the location of pitches relative to the location of the turbines. This is with regard to the potential for the occurrence of shadow flicker. It should be noted that in this circumstance the actual occurrence for shadow flicker is rare. Therefore we consider that this potential issue, however infrequent the actual occurrence, can be adequately addressed via a management plan that could be sought via the attachment of an appropriate condition to a planning permission.

Ecology/Ornithology

10.22 The application site does not contain designated sites of ecological importance nor are they located within 3 kilometres of such a site[1]. There is, therefore, no impact on issues of acknowledged ecological importance.

10.23 In term of the potential impact upon protected species, the BREAMM assessment submitted with this application (which relates to the wider school development) considers this issue. Whilst it is acknowledged that some bat activity was recorded on the site, it is not of significant intrinsic value in its own right. In addition the report also concludes that the vegetation present on site are at a low risk of being capable of supporting bats.

10.24 Whilst the risk to protected species is low, a worst case scenario of the relationship of the turbine to existing vegetation has been undertaken. This is to take account of the thrust of the interim guidance note on this issue from Natural England which seeks a minimum offset of 50 metres from existing vegetation. In this regard it should be noted that the nearest existing vegetation feature to the turbine is some

[1] We acknowledge the existence of a SSSI approximately 2.5 kilometres from the site but it should be noted that the special interest relates to geology and not ecology.

140 metres from the turbine, which is clearly in excess of the minimum sought by Natural England. Therefore the proposal is acceptable and the risk to protected species has been minimised.

Ice Throw

10.25 The potential for ice throw from the turbine has been assessed but is not considered to be a significant issue for the determination of the application. As outlined by the PPS22 Companion Guide, the weather conditions required for the build-up of ice are unlikely to occur more than once a year in England.

10.26 Therefore this is not likely to be a frequent occurrence.

Surrounding footpaths/highways

10.27 In terms of surrounding public rights of way and highways, the nearest footpath/bridleway is some 130 metres from the turbine to the west whilst the nearest highway is some 150 metres to the east. In terms of potential effects on safety for users of the surrounding footpaths/highways the distance of the turbine from these exceeds the fall over distance of the turbine. Therefore in the event of a catastrophic failure/collapse of the turbine there is no effect upon wider public safety in terms of highways and footpath users.

Construction effects on highways

10.28 In terms of the effects of construction on surrounding highways, it should be noted that at Shafton ALC, construction of the ALC and wind turbines will be undertaken in the same build cycle. As this is the case, there will be in place infrastructure to enable access to the site as part of the wider construction programme.

10.29 In terms of additional vehicle movements as a result of the proposals these are minimal. In addition, oversized vehicles are not expected to be used as part of the construction process, particularly as it is understood that the turbine tower comes in sections that should fit onto standard vehicles. There is already a construction access on site, along with associated traffic generation and management measures, the impact of the additional vehicle movements is considered minimal. As this is the case the construction effects on highways are minimal.

10.30 Nonetheless details of the expected vehicle movements arising from construction of the turbine is attached at Appendix 2 of this statement.

TV/Telecommunications interference

10.31 As part of preparing the proposals an assessment of the potential for interference to television and radio signals was undertaken using a web based tool provided by the BBC. A copy of the response is attached at Appendix 1. The outcome of this assessment is there is potential for up to 652 receptors to be affected where there is no alternative off air service and a further 10846 homes where an alternative off-air service may be available.

10.32 The web based tool does not consider the precise location, number or height of proposed turbines. Therefore as part of the assessment as the extent of impact (if any) will only be known once the turbines are constructed and operational.

10.33 When compared to commercial wind farms, the proposal is very modest in scale and operation and the issue in hand clearly relates to establishing mechanisms for mitigating impact should it be proven to occur as a result of the construction of the turbine. As this is the case, and accepting the potential for an impact, we are prepared to accept a planning condition to a planning permission in this regard.

Air Safety

10.34 These proposals are for a small scale wind farm which does not lie in close proximity to any airfield. It is therefore considered that the proposals are unlikely to interfere with aviation radar.

11. Conclusions

11.1 This Planning Statement has been prepared to support the Planning Application for 1 wind turbine at Shafton ALC to provide a proportion of the schools energy requirements.

11.2 There is an overriding need to provide additional facilities for the generation of renewable energy sources and this is supported by national, regional and local planning policy. Therefore, the proposed wind turbines will satisfy some of this need.

11.3 Therefore, although constituting inappropriate development in Green Belt policy terms, the proposals are justified and acceptable having regard to the very special circumstances which exist in this case. Moreover, it is considered that the development would not harm the functions of the Green Belt in this location and that effects on openness are very limited.

11.4 Also, there are no technical constraints on the proposed development in this location.

11.5 It is therefore considered that the proposal is fully compliant with national guidance and all of the relevant planning policy objectives of the development plan and local guidance, and that planning consent should be granted for this important and extremely beneficial development. Therefore, we respectfully request that the application be permitted.

Appendix 1 – TV / Radio Interference Search

TURLEY ASSOCIATES

The BBC Windfarms Tool Your query results.
From: Windfarms [Windfarm.Tool@bbc.co.uk]
Sent: 20 January 2010 17:47
To: Matthew Collins
Subject: [The BBC Windfarms Tool] Your query results.

If you were to place turbines in the following locations:

SE397098

You would be likely to affect 652 homes for whom there is no alternative off-air service.

In addition, you may affect up to 10846 homes for whom there may be an alternative off-air service.

The transmitters likely to be affected are:

EMLEY MOOR CH5
SHEFFIELD CH5
BELMONT
BILSDALE
EMLEY MOOR

This information is provided for the guidance of Wind Farm developers.
The results of this query are a rough estimate of populations that may suffer interference from wind farms built at the locations specified.
The information is not intended to be a substitute for an on-site survey where the potential for disruption to television services may more accurately be assessed.

The BBC does not accept liability for the consequence of any use of the information provided by this web site. All television reception difficulties caused by the erection of wind turbines are the responsibility of the wind farm developer.

This email was automatically generated in response to a query at the BBC Windfarms Tool website. Please do not reply to this address.

If you wish to contact the BBC, please visit:
http://www.bbc.co.uk/feedback/

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The BBC accepts no responsibility for this email. This email is generated by a request on the BBC webserver. If you were not expecting this email, please contact webweaver@bbc.co.uk including all headers from the email.

Appendix 2 – Turbine Construction Methodology.

TURLEY ASSOCIATES

Scope of works.

To install one WES18 wind turbine at Shafton School.

Method statement.

Foundations

The bearing pad size for a WES 18 wind turbine is 6m x 6m x 2m deep*

Excavate an area on plan of 6.5m x 6.5m with battered sides at 45 degree slopes. Use JCB 3B Backacter excavator to excavate.

Soil removed from the excavation to be redistributed on site via a small dump truck.

Blind the formation with 50mm 15N/mm2 concrete

Install timber formwork to form the sides of the bearing pad

Install reinforcement bars

Set free issue holding down bolts in the centre of the form work

Place 35 N/mm2 concrete into form work by pouring directly from the back of the concrete wagon into form work.

There will be 12 deliveries of concrete to complete the 72m3 pour.

Trowel the concrete surface and allow to set.

Erection of mast and turbine

Locate 60 tonne crane adjacent to the foundation

Unload the 3 mast sections and bolt together on the ground

Erect the bolted mast via crane and bolt down to the base

Bolt the 2 turbine blades to the rotor at ground level

BELFAST	028 9089 7400
BIRMINGHAM	0121 233 0902
BRISTOL	0117 989 7000
EDINBURGH	0131 557 1099
GLASGOW	0141 248 9233
LEEDS	0113 386 3800
LONDON	020 7851 4010
MANCHESTER	0161 831 1300
SOUTHAMPTON	023 8072 4888

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