

BARNSLEY PARTNERSHIP FOR LEARNING

PENISTONE ADVANCED LEARNING CENTRE:
WIND TURBINE DEVELOPMENT

PLANNING STATEMENT

JUNE 2010

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1. Introduction

- 1.1 This Planning Statement is submitted in support of a Full Planning Application by Barnsley Partnership for learning for wind turbine development at Penistone Advanced Learning Centre (ALC).
- 1.2 This proposal should also be considered within the context of the Outline Planning Permission (reference 2009/0033) and Reserved Matters Approval (reference 2009/0078) currently being implemented on the site for the construction of a new ALC. The proposals that this statement considers are a component part of the wider ALC construction programme. The application should therefore be viewed in that context. This proposal is an alternative to that originally submitted and withdrawn in January 2010 (ref 2009/1590).

The Submission

- 1.3 The application is also supported by the following technical documents:
 - Landscape and Visual Impact Assessment;
 - Design and Access Statement;
 - Noise Impact Assessment.
 - Bat Survey

This Document

- 1.4 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.
- 1.5 The remainder of this document is structured as follows:
 - Chapter 2 sets out the background to the development;
 - Chapter 3 describes the application site and surrounding context;
 - Chapter 4 describes the proposals;
 - Chapter 5 outlines the pre-application discussions that have been held with Barnsley Council;

- Chapter 6 sets out the relevant planning policies as they apply to the site;
- Chapter 7 presents the relevant planning history;
- Chapter 8 sets the context for the material considerations;
- Chapter 9 presents an assessment of the Green Belt;
- Chapter 10 discusses the other material considerations and technical matters; and
- Chapter 11 provides the summary and conclusions.

2. Background to the Development

- 2.1 In response to the continued economic decline of Barnsley Borough since the 1980's, ambitious plans were drawn up for the regeneration of the Borough which is known as Remaking Barnsley. In association with this, there is Education Vision which underpins 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 linkages 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 achieve the educational vision highlighted above, the complete reorganisation of the secondary school stock resulting in the creation of a smaller number of new Advanced Learning Centres (ALCs) is the most appropriate solution and this is to be delivered through the BSF programme. 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.
- 2.4 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.
- 2.5 The wider policy context for these applications sets a requirement for any new development to generate 10% of its energy from on site renewable sources (RSS Policy ENV5, B.3). 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 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 turbines also provides 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 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 1 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 1 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:

School	10% Requirement	Additional Requirement	10%
Darton	To be met by Biomass Heating Plant	Application for 1 x 15kW turbine withdrawn	
Dearne	To be met by Biomass Heating Plant	Permission granted for 2 x 15kW Turbines	
Penistone	To be met by Biomass	Application for 5 x 15kW	

School	10% Requirement	Additional Requirement 10%
	Heating Plant	turbines withdrawn
Carlton	To be met by Biomass Heating Plant	Application for 2 x 15kW turbines withdrawn
Kirk Balk	To be met by Biomass Heating Plant	Permission granted for 1 x 1.5kW building mounted 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 11 wind turbines distributed across all of the Phase 1 schools. At the present time two turbines have been approved at Dearne, and one roof mounted at Kirk Balk has also been approved. Following revisions to the schemes, across all 5 ALC's it is expected that there would be fewer turbines, generating equivalent levels of electricity from renewable sources.

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 turbines are to be located.

2.14 The relative operational efficiency of each site is ranked overleaf:

School	Relative Power Generating Efficiency	Rank
Penistone	100%	1
Darton	64%	2
Dearne	59%	3
Carlton	35%	4
Kirk Balk	-	5

2.15 The distribution strategy, of which this application is a central part, is expected to ensure that the Phase 1 BSF can meet the additional energy generation requirements required by the Council Education Department across the portfolio of sites.

2.16 It also shows that this can be achieved with a lower number of turbines than originally proposed by the original applications on these sites. This has obvious benefits in terms of visual influence and Green Belt openness concerns. However, it does mean that the generating capacity on each of the sites is not equalised across all sites. The reasons for this are considered further below on a site by site basis.

Carlton

2.17 The Carlton site has available open space, but technical work undertaken shows that it has relatively unfavourable wind speeds, with only 35% efficiency predicted. Potential turbines sited in this location would operate at a lower efficiency than the other ALC sites. It is anticipated that attempting to meet the 20% requirement on this site alone would not represent the best use of resources, and could result in under exploitation of available resources elsewhere, through the diversion of investment..

Kirk Balk

- 2.18 The Kirk Balk site has favourable wind potential but the siting of turbines in this location is not possible due to the proximity of sensitive receptors and associated impacts in terms of noise and general amenity. Therefore a smaller roof mounted turbine has been granted planning permission in this location. This is to meet the requirements of the Education Department that each site has at least 1 turbine as a visible presence. Whilst the 20% requirement could be easily met on this site, other planning factors mean that this would not be appropriate.

Dearne

- 2.19 Dearne has reasonably good power generating efficiency, and already benefits from planning permission for two 15m high turbines. It is proposed to keep the generation largely the same, although the wider mix of turbines across the sites, and greater efficiency achievable at Penistone and Darton, means that there is an opportunity to better exploit the available resource by ensuring that energy generation efficiency is maximised within this location.

Penistone

- 2.20 Penistone, by virtue of its location, aspect and wind conditions offers the most efficient source of renewable energy generation by wind. Therefore, to achieve the overall energy generation target, two turbines are proposed and will operate at a significantly higher level of efficiency. This approach offers a reduced overall effect compared to 5 turbines previously applied for. However, known sensitivities and possible prominence of turbines have been recognised and it is considered that this is the most appropriate balance between the number of turbines and efficiency of renewable energy generation.

Darton

- 2.21 Darton offers the second highest level of power generation capability. Whilst the location offers a good level of operational efficiency a single turbine remains proposed as, when compared to Penistone the site is relatively inefficient. Nonetheless to maximise the operational efficiency, whilst minimising the number of turbines proposed a single turbine with a hub height of up to 34 metres is proposed in this location.

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 two turbines proposed in this application form 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 1 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_PEN_AWP_DR_94_BW_LL_15. However it should be noted that this is a component part of a wider site where construction for a new ALC is currently ongoing. The area where construction of the wind turbines is to take place makes up part of the grounds and facilities associated with the ALC. The following planning policy designations apply to the site:

- Green Belt (saved UDP Policy PE5); and
- Existing Community Facility (saved UDP Policy PE20).

Site

3.2 The application site lies wholly within the Green Belt to the north of the main urban area of Penistone and currently comprises Penistone Grammar School and its grounds.

3.3 Following the grant of outline planning permission and reserved matters approval in 2009, construction of Penistone ALC is currently underway on the site.

Wind Turbine Location

3.4 The proposed wind turbines will lie wholly within operational land associated with Penistone ALC.

3.5 The turbines will be located to the south of the existing playing pitches which lie to the west of Huddersfield Road and south of Long Lane. The turbines are to be located on land that current comprises structural landscaping associated with the school¹. The school buildings lie approximately 200 metres to the north east of the proposed turbines.

3.6 The nearest residential properties lie on Huddersfield Road, approximately 175 metres from the proposed wind turbines.

¹ A revised landscaping plan will be submitted to the Council for consideration and approval via the relevant process.

Surroundings

- 3.7 The proposed wind turbines are surrounded by open land to the south, west and east, the school playing fields to the north.

4. The Proposals

- 4.1 The proposal is to construct two wind turbines at a hub height of 25 metres at the locations identified on plan reference BP4L_PEN_AWP_DR_94_BW_LL_15. Associated with this is a GRP structure as an ancillary adjunct to the turbines to accommodate equipment associated with the transmission of the energy generated.
- 4.2 The purpose of the wind turbines is to help secure a source of energy supply to meet a proportion of the energy requirement for the ALC from renewable sources of energy. The proposed turbine model is the Proven 15 with a power output of 15 kW each.
- 4.3 The location of the wind turbine has been determined following consideration of;
- The acoustic impacts on the surrounding residential properties;,
 - Where the wind resource is greatest and most reliable;
 - Topple distances relative to public rights of way; and
 - Ecological issues
- 4.4 Wind turbines are considered to be the most appropriate source of renewable energy as it is the most financially viable source which takes advantage of the local climate and will therefore be the most effective source of renewable energy.
- 4.5 The proposal was the subject of a previous application for five turbines of an identical specification (ref 2009/1590) which was subsequently withdrawn, but was screened on the need for an Environment Impact Assessment (EIA) in line with the requirements of the 1999 Environmental Impact Assessment Regulations and Circular 2/99. It was concluded that EIA was not required. The letter attached at Appendix 1 is confirmation from Barnsley Metropolitan District Council that an EIA was not required for those proposals. The covering letter for this application requests that a further screening opinion be issued and sets out the applicant's view that the proposal is not sensitive enough to require EIA.

Technology Choice

- 4.6 In arriving at the proposals in hand a number of factors have been taken into account when informing the choice of renewable energy technology selected. These are as follows:

- Site circumstances and the availability of a good wind resource, this being the most efficient location of all the phase 1 schools;
 - The requirement of the school to make a visible commitment to renewable energy technologies and to use this as an educational resource; and
 - To take account of comments made in respect of withdrawn planning application 2009/1590 where 5 turbines were proposed;
- 4.7 By way of background, as we state in section 2 of this statement, of the phase 1 schools Penistone, by virtue of its location, elevation, aspect and wind conditions offers the most efficient source of renewable energy generation by wind. Therefore it is logical that wind turbines are the most appropriate choice of technology to use.
- 4.8 When the revised proposals were drawn up, the height of the masts was carefully assessed, with a view to minimising the number of turbines required whilst maximising energy generation potential and efficiency of operation. At a hub height of 25 metres the energy generation potential of the site is increased whilst the number of turbines proposed is minimised. In addition, the presence of two turbines also provides a visible statement of commitment to renewable energy generation for future generations and this brings with it an associated educational resource. A visible presence on site is a specific requirement of the school.
- 4.9 A number of alternatives were considered to the proposals and these included, reducing the hub height to 15 metres and making use of other technologies. We comment on these below.

Reduced Turbine Hub Height

- 4.10 The nature of the site is such that the primary effect of reducing the hub height of the wind turbines to 15 metres will be that they would operate at a lower level of energy generation efficiency. Therefore to secure a similar level of energy generation potential, (as opposed to that produced by 2 turbines with a 25 metre hub height) a greater number of turbines would be required.
- 4.11 This would bring with it implications in respect of:
- Potential impacts upon openness and Green Belt objectives; and
 - A higher level of embedded energy and CO₂ from the turbines relative to the amount of energy produced.

- 4.12 As this is the case the provision of a smaller number of turbines with a higher hub height represents a more efficient use of resources.

Alternative Technologies

- 4.13 In terms of using other technologies to make a contribution to renewable energy generation, the main alternative is photovoltaic (PV) panels. This could be either in its' own right or as part of a mix of technologies (PV/Wind Turbines) to meet the onsite renewable energy generation requirement. For either option the main considerations are as follows.
- 4.14 Firstly the school building has not been designed to take account of this technology. Secondly whilst an engineered solution may be achievable, the potential positioning of PV panels on the roof of the building could potentially run counter to the design ethos of the school. The treatment of the roof was discussed during consideration of the Reserved Matters approval. Presently the roof of the school building is to be painted green so that long distance views of the building will reflect the surrounding field pattern. The installation of black reflective PV panels to the roof is likely to disrupt these long distance views contrary to the approved design approach of the school.
- 4.15 Nonetheless, a primary consideration in terms of technology choice is that of commercial viability. Whilst feed in tariffs in terms of electricity generation increase the attractiveness of installing renewable energy infrastructure, the mature nature of wind turbine technology and its relative cost effectiveness in this case makes the use of wind turbines the only commercially viable approach. We estimate that PV panels have a lifespan of 25-30 years. We estimate that it would take the design life of the panels, or longer, for the installation to pay for itself.
- 4.16 In terms of other technologies we comment as follows:
- Biomass CHP is an immature technology that remains unproven at the present time.
 - Micro hydro electricity generation is not a realistic option given the lack of watercourses under the applicant's control.
 - Ground source/air source heat pumps are not viable, given that the building is under construction and not designed for these technologies. In addition space heating and hot water is to be provided by biomass boilers in any event.

4.17 Taking account of the above therefore the selection of 2 wind turbines at a hub height of 25 metres is considered to be the most appropriate choice in this instance.

5. Pre-application Discussion

- 5.1 In drawing up the proposals under consideration, there has been extensive 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 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. Indicative location plans were submitted as part of a Screening request submitted under the Environmental Impact Assessment (EIA) regulations.
- 5.4 The original proposals were screened on the need for EIA where it was concluded that this was not necessary.
- 5.5 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.
- 5.6 The previous planning application for wind turbines at Penistone ALC (reference 2009/1590) was withdrawn in January 2010 to allow further consideration of the impact of the turbine on bats. In response to this, a bat survey has been undertaken and the proposed wind turbines have been re-sited to ensure minimal impact on these protected species.

Engagement with the school

- 5.7 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 Statutory Consultees

- 5.8 In preparing the proposals, discussions were held with the following statutory consultees:

- Sport England; and
- Natural England

Sport England

- 5.9 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.

Natural England

- 5.10 Officers of Natural England provided comments on the proposed sitings of the turbines. Natural England indicated that, subject to confirmation that the turbines are to be in excess of 50 metres from existing vegetation features, a known issue in respect of risk to bat activity could be overcome.

Other consultees

- 5.11 As part of the wider approach to pre-application engagement, the following consultees were also consulted:
- Civil Aviation Authority
 - Ministry of Defence Estates
 - National Air Traffic Service (NATS)
- 5.12 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 adopted Regional Spatial Strategy (RSS) for Yorkshire and Humber (2008) and the Barnsley Metropolitan Council Unitary Development Plan (UDP) (2000). Recent government statements in respect of the abolition of RSS are material considerations. However the RSS does remain part of the Development plan for the Borough and for the purposes of this planning application should be considered in the context of section 38 (6) of the Planning and Compulsory Purchase Act 2004.
- 6.3 Other documents which should be afforded appropriate material weight in the determination of the planning application include the following:
- Planning Policy Statement 1: Delivering Sustainable Development (2005);
 - Planning and Climate Change: Supplement to Planning Policy Statement 1 (2007);
 - Planning Policy Guidance 2: Green Belts (1995, amended in 2001);
 - Planning Policy Statement 22: Renewable Energy (2004);
 - Barnsley Metropolitan Borough Council Local Development Framework (LDF).

National Planning Policy

PPS1: Delivering Sustainable Development (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 The prudent use of natural resources is a key aim of PPS1 (Paragraph 4) and a key principle of the Statement is the promotion of the development of renewable energy resources (Paragraph 5). 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.
- 6.7 Paragraph 13 promotes the development of renewable energy and paragraph 22 encourages the use of renewable energy schemes in developments.

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

- 6.8 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.
- 6.9 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.
- 6.10 The Supplement requires that opportunities for renewable and low carbon 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.
- 6.11 In particular, paragraph 20 of the Supplement states 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'.

6.12 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)

6.13 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.

6.14 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.

6.15 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.

6.16 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.

- 6.17 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.'

- 6.18 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.

PPS9: Biodiversity and Geological Conservation (2005)

- 6.19 PPS9 sets out planning policies on the protection of biodiversity and geological conservation through the planning system.
- 6.20 Paragraph 1 sets out the key principles to ensure that the potential impacts of planning decisions on biodiversity and geological conservation are fully considered and states that:

'The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm.'

PPS22: Renewable Energy (2004)

- 6.21 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.
- 6.22 The document states that 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.

6.23 Paragraph 8 requires the on-site generation of renewable energy to only be 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.

6.24 Paragraph 13 relates to the development of renewable energy sources in the Green Belt. It is recognised that where renewable energy projects are located in the Green Belt, these constitute inappropriate development, and may impact on the visual amenity and openness of the Green Belt. Careful consideration is therefore required to the visual impact of projects; developers should demonstrate very special circumstances that clearly outweigh any harm, to justify proposals for renewable energy sources.

6.25 Developers will also need to demonstrate very special circumstances for wind turbine development in the Green Belt. PPS22 suggests that:

'such very special circumstances may include the wider environmental benefits associated with the 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 turbine, 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 of renewable energy development on the landscape and visual amenity, and ambient noise levels. 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; and
- Addresses the issues of visual impact, and cumulative visual impact, where appropriate.

6.30 Technical Annex 8 of the Companion Guide provides detailed information relating to development proposals for wind turbine. 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

Regional Spatial Strategy for Yorkshire and the Humber (2008)

6.31 The Regional Spatial Strategy (RSS) for Yorkshire and the Humber was published in May 2008 and sets out the development strategy for the Region. Notwithstanding the proposals of Government to abolish planning at Regional level, the RSS remains, for now form part of the development plan for the area.

6.32 Policy ENV5 specifies that local authorities and developers should seek to increase renewable energy capacity and energy efficiency in prospective and existing developments. In specific reference to new non-residential developments over 1000m², Policy ENV5B states that 10% of energy should be from decentralised and renewable or low carbon sources, unless due to the type or design of the development this is not feasible or viable.

6.33 Policy YH9 states that the Green Belts in North, South and West Yorkshire have a valuable role in supporting urban renaissance, as well as conserving countryside. Policy YH9 requires that the general extent of the Green Belt should not be changed, but recognises that there may be a '*localised need*' to reconsider its extent and use in certain locations.

Barnsley Unitary Development Plan (2000)

6.34 The Barnsley Metropolitan Borough Council Unitary Development Plan (UDP) (2000) and is 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.

- 6.35 The site is allocated under Policy PE5 as Green Belt land and under Policy PE20 as an existing community facility.
- 6.36 Policy PE5 defines the extent of the Green Belt around the settlement of Penistone. 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 the Green Belt.
- 6.37 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.
- 6.38 Policy PE20, states that existing community facilities should be protected against other forms of development.
- 6.39 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.
- 6.40 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.

6.41 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

6.42 In accordance with the requirements of the Planning and Compulsory Purchase Act (2004), the Council is currently preparing its Local Development Framework (LDF).

Core Strategy

6.43 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.

6.44 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.

6.45 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.

6.46 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.

6.47 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.

6.48 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.

6.49 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.

6.50 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 CABI Building or Life Silver Standard.

6.51 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.

- 6.52 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.
- 6.53 Draft Policy CSP37 requires that development retains and enhances the character and distinctiveness of the Landscape Character Area in which it is situated.
- 6.54 Draft Policy CSP43 lends support for the provision of schools and education facilities in the Borough.
- 6.55 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 Development Plan Document (2009)

- 6.56 The Council adopted the Education Sites Development Plan Document (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.
- 6.57 The DPD sets out the Council's intention to create nine advanced learning centres in the borough, to replace the thirteen existing secondary schools.
- 6.58 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. The DPD states that there are '*very special circumstances*' which justify using Green Belt land to provide the education centres (Paragraph 4.10) and to allow the Building Schools for the Future programme to go ahead.

7. Relevant Planning History

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

Application Number	Proposal	Decision	Decision Date
2006/1053	Demolition of existing school and erection of an Advanced Learning Centre and provision of additional sports pitches (Outline)	Approved	31/10/2006
2009/0033	Variation of conditions 4, 8 and 27 relating to trees, access details and community use agreement on previous permission 2006/1053 dated 22 September 2006 for demolition of existing school and erection of an Advanced Learning Centre and provision of additional sports pitches (Outline) at Penistone Grammar School	Approved	11/03/2009
2009/0078	Demolition of existing school and erection of Advanced Learning Centre with associated parking, bus and parent drop off area, hard and soft landscaping, sports pitches and bridge link between the new school and sports pitches (Reserved Matters)	Approved	12/03/2009
2009/1590	Erection of 5 wind turbines at a hub height of 25m.	Withdrawn	

Table 5.1: Planning History

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 Notwithstanding the Government's intention to abolish RSS, it is the stated intention of the coalition government to increase renewable energy targets over and above those set out in RSS. Therefore the abolition of RSS will need to be balanced against these stated policy objectives and government intention.

- 8.3 The key material planning considerations raised by the proposed wind turbines at Penistone 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;
- 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.

- 8.4 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 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. However, 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 turbines at Penistone ALC will meet this overriding objective and consequently this represents the very special circumstances that justifies the proposals within the Green Belt. The development will therefore meet wider planning policy objectives, most notably RSS policy ENV5 and recent Coalition Government statements on renewable energy. It is therefore considered that the need for the development outweighs the harm to the Green Belt and that this constitutes very special circumstances.

Location and Alternative sites

- 9.10 The location of the wind turbine has been selected so as to minimise the impact of the proposed turbines on the surrounding residential properties in terms of noise and visual impact.
- 9.11 During initial discussions with the Council in respect of the now withdrawn application, a request was made to consider alternative siting for the proposals. The site selection process has been thorough, taking account of a number of factors primarily relating to amenity and risk to protected species.
- 9.12 The aim of wind turbine development at the ALC is to provide a sustainable and renewable source of energy for the facility. This will allow the development to

adhere to national, regional and local planning policy objectives whilst also adhering to the Design and Development Brief for the BSF Programme. The turbines are therefore considered to be ancillary to the ALC and therefore need to be located within the school site.

9.13 Notwithstanding this, two alternative sites that warrant comment are attached at Appendix 2:

- One would locate the turbines closer to residential properties which would increase the prospect of the turbines having an adverse impact on residential amenity; and
- The second would locate the turbines further up the hill which would have a greater impact on the landscape and would have implications for the financial viability of the scheme.

9.14 It is also relevant, in this case, to consider this revised proposal in the light of the earlier proposal for 5 turbines on this site, which was a true alternative to the current application. This earlier scheme was withdrawn primarily because it was not possible to resolve ecological issues with Natural England.

9.15 The current proposal will provide 3 fewer turbines. This is because the overall turbine distribution strategy has been revisited, resulting in a requirement for fewer turbines in this location.

9.16 However, the quantum of development now proposed is significantly reduced, by virtue of the reduction in turbine numbers, which has a commensurate benefit in terms of the impact on openness of meeting the phase 1 energy generation requirement.

9.17 This alternative approach has been adopted as it provides the very special circumstances required to justify the turbine on this site, but in a manner which significantly reduces the harm to openness. It is therefore considered to be a more appropriate form of development to meet the energy requirements of the phase 1 sites.

9.18 The current application proposals are therefore a better alternative in terms of harm to the Green Belt, than the earlier application.

Impact upon the Openness of the Green Belt

9.19 It is now necessary to consider whether the proposed development would have an impact upon the openness of the Green Belt (i.e. freedom from development): it's

most important attribute. The impact on openness is 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 scale and mass.

- 9.20 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.
- 9.21 The proposed turbines lie wholly within operational land associated with Penistone 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.
- 9.22 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

- 9.23 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. 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 turbines 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 Penistone 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 Penistone 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.

9.24 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.

9.25 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.

9.26 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;
- RSS Policy ENV5; and
- 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 Policy ENV5 of the RSS requires developers to increase renewable energy capacity and energy efficiency in all developments and states that 10% of energy should be from decentralised and renewable or low carbon sources. It is likely that this will increase with the new Government

10.6 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.

- 10.7 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.
- 10.8 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 development of wind turbines in this location is therefore acceptable.
- 10.9 In summary, the wind turbines are ancillary to the primary use and purpose of Penistone ALC and are 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

- 10.10 In terms of landscape and visual impact, the assessment and photomontages submitted with the application show that in terms of impact, views of the turbines from the north, south and east will be limited, when looked at from the agreed viewpoints. In addition the assessment also concludes that the impact on wider landscape character is also negligible. It is also important to note that the turbines are not sited within a designated landscape.
- 10.11 We note that from the north the view of the turbines is more prominent where a good proportion of the mast and rotor will be visible and this is reflected in the assessment conclusions. However the turbines will be isolated features within the wider landscape and sits well within an area which has other urbanising influences, for example car parking. In addition, with the passing of time any impact that may occur will lessen as vegetation grows and becomes more established.
- 10.12 In terms of other viewpoints (east and south) the photomontages show that it is difficult to discern the turbines within the wider landscape and it is from these locations where the impact on visual receptors is negligible. Overall the nature of any adverse impact arising from the proposals is very limited. When contrasted with the wider benefits the turbines will bring in terms of reducing CO2 emissions, the impact is insufficient to warrant a withholding of planning permission on this basis.

Noise

- 10.13 The detailed noise report has been prepared by SRL and has been submitted as part of this application package. The report considered the potential effect of five turbines in this location. The fact that only 2 turbines of the same type are now proposed only serves to show that the proposals remain acceptable from a noise generation viewpoint.
- 10.14 The assessment concludes that the measured data indicate that relevant criteria for the acceptability of wind turbine noise 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.
- 10.15 The location of the wind turbines within the ALC site has been carefully considered to ensure that the surrounding residential properties experience minimal disturbance.

Impact on Playing Pitch Users

- 10.16 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 proposed 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.
- 10.17 The approved Landscape Masterplan under Reserved Matters Approval 2009/0078 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 playing 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'.

- 10.18 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. 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.

Shadow flicker

10.19 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.”

10.20 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 Proven 15 with a rotor diameter of 9 metres) the potential effect may only be assessed within 90 metres (the equivalent of 10 rotor diameters) of the proposed turbines.

10.21 In terms of assessment it should be noted that when determining the location of the proposed turbines at Penistone that are now being applied for, the turbines are located at least 175 metres from residential properties where shadow flicker might be experienced. With regard to the turbine proposed and associated rotor diameter of 9 metres, this is clearly in excess of 90 metres where the effect of shadow flicker is proven to potentially occur.

10.22 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.

Ecology/Ornithology

10.23 The application site does not contain designated sites of ecological importance nor are they located within 3 kilometres of such a site. However the main issues that has been raised is the potential impact on bat populations that may arise from wind

turbine development. We acknowledge that the wider site contains bat roosts and in this regard, a survey of bat activity is submitted as part of this application.

10.24 In terms of the potential impact upon bats the survey reveals that the wider site is used by relatively small number of pipistrelle and myotis bats for commuting and foraging. Advice from Natural England sets out that to lessen the risk to bat populations, turbines should be sited in excess of 50 metres of existing vegetation or mitigation measures should be employed in circumstances where a 50 metre offset is not possible.

10.25 In response, the turbines have been re-sited, with a view to reducing the risk to bats. In this regard the proposed locations as submitted locate the turbines in excess of 50 metres from existing vegetation features within the site, whilst the woodland belt to the south is approximately 50 metres away. As this is the case through appropriate siting of the turbines, the risk to bats species is minimised.

Surrounding footpaths/highways

10.26 In terms of surrounding public rights of way and highways, the nearest footpath/bridleway is some 150 metres from the closest turbine to the east whilst the nearest highway is some 150 away to the east. Therefore in the event of a catastrophic failure/collapse of the turbine the public is unlikely to be at risk as the nearest public rights of way are well away from the turbines.

Construction effects on highways

10.27 In terms of the effects of construction on surrounding highways, it should be noted that at Penistone ALC, construction is ongoing and there is in place existing infrastructure to enable access to the site.

10.28 This has been agreed by the Council as part of the discharge of conditions attached to planning permission 2009/0033. In this regard, the construction effects report submitted with the application sets out that in terms of additional vehicle movements as a result of proposals these are minimal. Given that 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. A construction impacts assessment for all sites is attached at Appendix 3.

10.29 In terms of maintenance, it is expected that this will be annual and the associated traffic movements will fall within the normal operation of the school.

TV/Telecommunications interference

10.30 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 4. The outcome of this assessment is there is a potential for up to 2913 receptors to be affected where there is no alternative off air service and a further 520 homes where an alternative off-air service may be available.

10.31 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.

10.32 When compared to commercial wind farms, the proposals are 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 construction of the turbines. As this is the case, and accepting the limited potential for an impact, we are prepared to accept a planning condition to a planning permission in this regard.

Air Safety

10.33 As part of pre-application engagement with a number of consultees confirmation has been received from the following bodies that the proposals will not impact upon air safety:

- Civil Aviation Authority
- Defence Estates.

10.34 Responses received at the time of writing are presented at Appendix 5.

11. Summary and Conclusions

- 11.1 This Planning Statement has been prepared to support the Planning Application for two wind turbines at Penistone ALC to provide a proportion of the school's 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 and has been further emphasised by recent statements made by the Coalition Government.
- 11.3 The turbine is located in the Green Belt and constitutes inappropriate development. However there are very special circumstances that override Green Belt considerations in this case. Moreover, it is considered that the development would not harm the functions of the Green Belt in this location.
- 11.4 The proposal will make a positive contribution to national planning objectives of reducing the impact of global climate change and increasing energy generation from renewable sources. There are no known technical constraints on the proposed development in this location. As this is the case we respectfully request that the application be granted planning permission.

Appendix 1 – Screening Opinion Response



BARNSLEY

Metropolitan Borough Council
Planning and Transportation Service

Assistant Director: Stephen Moralee BA (Hons) MBA

Development Control Section

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RECEIVED

12 OCT 2009

My ref – MW/ALC/PEN

Your ref – LAIY2009

Date: 06/10/2009

Enquiries to: Matthew Woodward

Dial Direct 01226 772587

Dear Sir,

I write to provide both a response to a formal screening request (regulation 5 (1)) and guidance on the proposal outlined in your letter dated 16th September 2009.

The proposal involves five wind turbines with a tower (hub) height of up to 25m and a blade diameter of 9m (total height of approximately 29.5m from base to blade tip). The turbines would be located to the south of the proposed Penistone ALC in an area intended as playing fields. Currently the land comprises fields located in the Green Belt.

The proposal falls within Schedule 2 of the Environmental Impact Assessment (EIA) 1999 regulations (as amended) as the applicable thresholds in respect of wind turbine proposals are as follows:

- Development involving the installation of more than 2 turbines;
- The hub height of any turbine or structure exceeds 15 metres.

The proposal exceeds both of these criteria. However, the indicative thresholds and criteria also highlight the following:

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

As the proposal is 5 turbines with an output significantly less than 5MW, the determining factors are primarily those of visual impact and noise. There is a clearly a distinction to be drawn between the turbines hereby proposed and the larger commercial turbines commonly associated with large wind farms. The latter often require an EIA because of the potential visual impact, noise, ecology, TV interference, air safety issues, vehicular movements as well as the impacts of the ancillary infrastructure. I would not anticipate a proposal on this scale to give rise to the same level of environmental effects. Whilst there are potential visual impacts, the turbines are not of the same magnitude as those larger commercial turbines.

FAO Matthew Collins
Turley Associates
33 Park Place
Leeds
LS1 2RY

Please address all correspondence to the Development Control Manager



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With regards to the noise, size and number of the turbines and the proximity of sensitive receptors; these issues would need to be adequately addressed, but the effects are not considered to be significant enough to warrant a formal EIA. Furthermore, the proposal does not fall within an environmentally sensitive area.

There are a number of issues which need addressing in detail as part of a planning application. Firstly, it is considered the proposal amounts to an inappropriate development in the Green Belt. Planning Policy Statement 22 (Renewable Energy) advises as follows:

"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 impact 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 source".

You need to clearly demonstrate that there are very special circumstances which clearly outweigh harm to the Green Belt, and any other harm, in order to satisfy this policy. PPS22 also states:

"The landscape and visual effects of particular renewable energy developments will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development. Some of these effects may be minimised through appropriate siting".

I am aware that Regulatory Services have provided some guidance in relation to noise impacts and the turbines would need to be located sufficient distance away from sensitive receptors. However, in terms of visual impact and associated harm to the Green Belt I have some reservations about the siting of the turbines. The location is a distance (240m) due west of the proposed ALC buildings. It follows that locating turbines closer to the footprint of the ALC would potentially reduce visual harm while promoting a better visual relationship with the ALC, thus negating the concerns I currently have regarding the relatively conspicuous and open nature of the site. I also note that views of the turbines may be obtainable from the centre of Penistone which would likely include the Conservation Area. There is clearly a balance to be struck and therefore careful siting is essential in order to successfully integrate such proposals into the wider landscape. As well as siting, there may also be scope for reducing the height/number of turbines in order to further minimise the visual impact. It is difficult to draw definitive conclusions on the suitability of the site based on the information provided which is why a substantive landscape and visual assessment is required in any submission. However, I would appreciate if you would consider the points outlined in this letter.

Furthermore, you need to comprehensively address the following issues in any subsequent planning application:

- Landscape and Visual Impact (including cumulative effects)
- Noise/Shadow Flicker
- Ecology/Ornithology
- Proximity of highway/footpaths
- Highways Impacts
- Interference to TV/telecommunications
- Impact on air safety



I trust this clarifies the Council's opinion and provides you with the necessary information to be considered in any subsequent planning application. I look forward to hearing from you in due course.

Yours sincerely

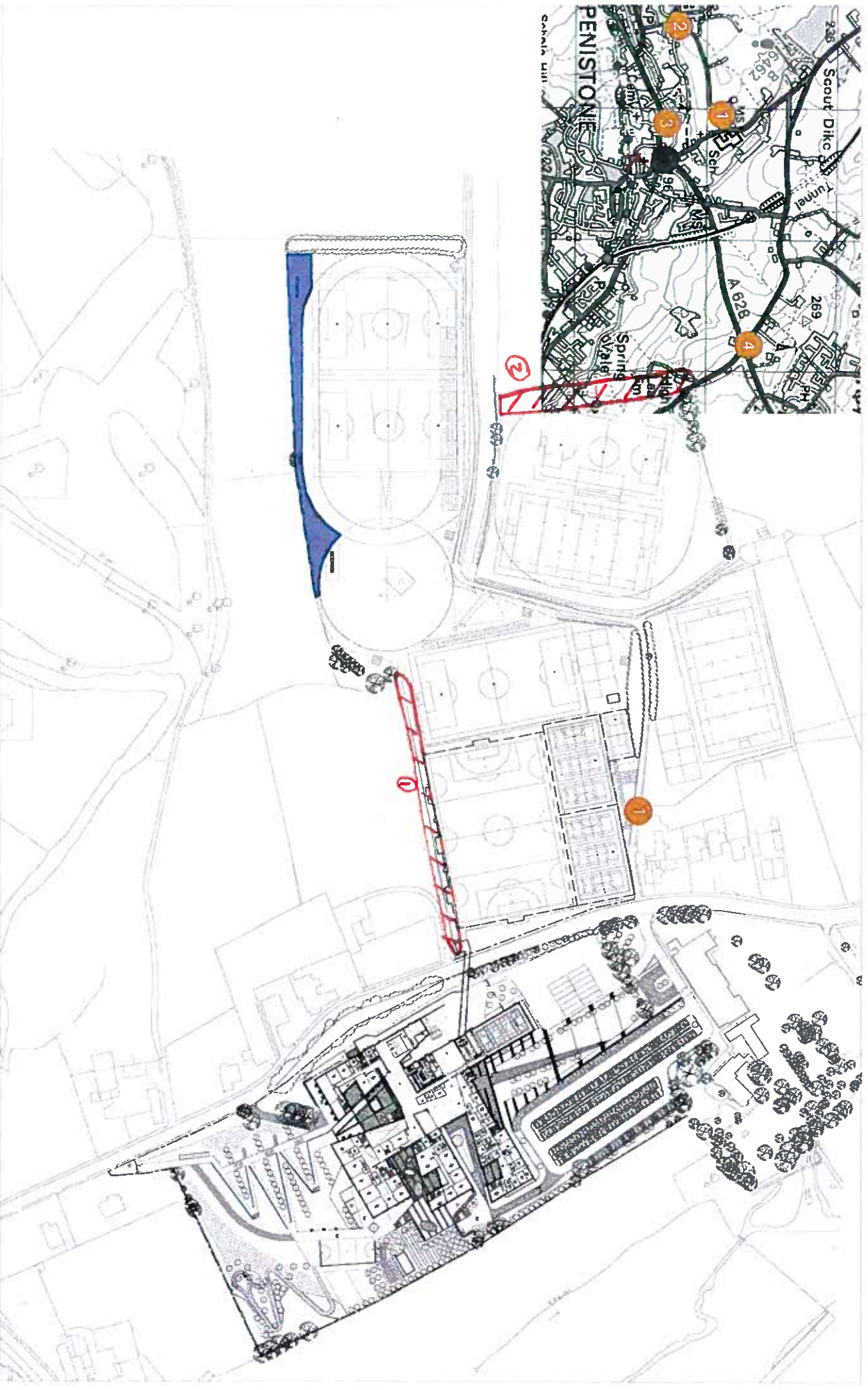


For and on behalf of Martin Winnard,
Development Control Manager



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Appendix 2 – Alternative Sites Considered: Correspondence from BMBC



1. Old Ana Lane/Residential properties
2. Residential properties/PROW to east of Thurstone
3. Leisure Centre and grounds to south of site
4. Roundabout on east of site on A628

Appendix 3 - Construction Impacts Assessment Methodology

Matthew Collins

From: Mills, Peter [pmills@laingorourke.com]
Sent: 02 December 2009 08:50
To: Matthew Collins
Cc: Mills, Peter
Subject: method statement for installation of wind turbines
Follow Up Flag: Follow up
Due By: 03 December 2009 01:00
Flag Status: Red

Scope of works.

To install two wind turbines at each school to achieve 10 % of the schools renewable energy target.

The location of the wind turbines have been determined by acoustic consideration to the surrounding neighbours which generally requires the location to be atleast 175m from residential properties.

Method statement.

Foundations

The bearing pad size for a 15kw Proven wind turbine is 4m x 4m x 2m deep*

Excavate an area on plan of 5m x 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 6 deliveries of concrete to complete the 32m³ pour.

Trowel the concrete surface and allow to set.

Erection of mast and turbine

Locate 20 tonne crane adjacent to the foundation

Manouver the trailer carrying the 25m high mast adjacent to the crane and using a quick release web sling attach the crane to the mast.

Lift and slew the mast into place securing the bolts to the base plate

Release the slings

Lift the turbine section into position, carefully locate the turbine onto the mast fixing bolts. This is done by locating a mobile work platform (Genie 3TS or similar) and manouvering the working platform adjacent to the turbine motor.

Once the turbine is fixed then each of the 3 blades are lifted and securely bolted into place.

Remove the craned and mobile work platform from site.

Vehicle movements

1. delivery of JCB
2. delivery of mobile platform
3. delivery of crane
4. delivery of wind turbine on low loader articulated vehicle.
5. Delivery of 6 concrete wagons

Programme

Forming foundation = 1 week

Installation of wind turbine = 2 days.

* subject to bearing pressure testing of the excavated ground.

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Appendix 4 – TV / Radio Interference Search Results

The BBC Windfarms Tool Your query results.
From: Windfarms [windfarm.Tool@bbc.co.uk]
Sent: 14 June 2010 15:29
To: Matthew Collins
Subject: [The BBC Windfarms Tool] Your query results.

If you were to place turbines in the following locations:

SE238039
SE239039

You would be likely to affect 2913 homes for whom there is no alternative off-air service.

In addition, you may affect up to 520 homes for whom there may be an alternative off-air service.

The transmitters likely to be affected are:

STOCKSBRIDGE
EMLEY MOOR CH5
EMLEY MOOR
MILLHOUSE GRN

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 5 – Responses from Consultees Regarding Air Safety

From: Pope DelphaL [DelphaL.Pope@caa.co.uk]
Sent: 16 November 2009 15:52
To: Matthew Collins
Subject: Penistone WindFarm

Our Ref: DAP/Wind/Penistone\1481
Your Ref: LAIY2009

Dear Mr Collins
Wind Farm Proposal – Penistone

Thank you for notification of the title proposal. In line with the guidance provided within the Department for Trade and Industry document Wind Energy and Aviation interests, which does not differentiate, in consultations terms between very small turbines such as that associated with the application in question, and larger proposed developments. This Directorate has no further observations.

There may however be issues related to en route navigational facilities. Accordingly details of your proposal have been copied to National Air Traffic Services for any comment. If you do not hear from NATS or wish to contact them, they can be contacted at:

National Air Traffic Services Ltd
Navigation Spectrum & Surveillance
Corporate and Technical Centre
4000 Parkway, Whiteley
Fareham
Hampshire
PO15 7FL
Email: nerlsafeguarding@nats.co.uk

For completeness it would also be sensible to establish the related viewpoint of local emergency services air support units. This is because of the unique nature of their operations in respect of operating altitudes and potentially unusual landing sites.

In respect of any aviation need to increase the conspicuity of the turbines, developers should be aware that there may be a need to install aviation obstruction lighting to some or all of the associated wind turbines should this development be progressed. This comment is made specifically if there were concerns expressed by other elements of the aviation industry; ie the operators. For example, if the Ministry of Defence or a local aerodrome had suggested such a need, we the Civil Aviation Authority (sponsor of policy for aviation obstruction lighting) would wish, in generic terms, to support such a claim. We would do so if it could reasonably be argued that the structure(s), by virtue of their location and nature, could be considered a significant navigational hazard. That said, if the claim was clearly outside credible limits (ie the proposed turbine(s) was/were many miles away from an any aerodrome or it/they were of a height that was unlikely to effect even military low flying) the Authority would play an 'honest-broker' role.

All parties should be aware that international aviation regulatory documentation requires that the rotor blades, nacelle and upper 2/3 of the supporting mast of wind turbines that are deemed to be an aviation obstruction should be painted white, unless otherwise indicated by an aeronautical study. It follows that the CAA advice on the colour of wind turbines would align with these international criteria.

The number of pre-planning enquiries associated with windfarm developments has been significant. It is possible that the proliferation of wind turbines in any particular area might potentially result in difficulties for aviation that a single development would not have generated. It is, therefore, not necessarily the case that, because a generic area was not objected to by the aviation industry, future, similarly located potential developments would receive the same positive response.

Developers are advised that there is a civil aviation requirement in the UK for all structures over 300 feet high to be charted on civil aviation maps (I understand that the ministry of defence utilises a lower threshold height). Should this proposed wind turbine development progress and the 300 feet height be breached, to achieve this civil aviation charting requirement, developers will need to provide details of the development to:

Defence Geographic Centre

AIS Information Centre
Jervis Building
Elmwood Avenue
Feltham
Middlesex
TW13 7AH

Telephone: 020 8818 2708 (This number is for Defence Geographic, not the CAA)

An amendable version of the proforma is available electronically at http://www.bwea.com/docs/developers_proforma.doc and can be E-mailed to windfarms@caa.co.uk when submitting preplanning information.

Please be aware that due to the rationalisation of CAA Email addresses the windfarms Email address is now windfarms@caa.co.uk, the previous address windfarms@dap.caa.co.uk will no longer work.

Regards

Delpha

Mrs Delpha L Pope
S&SM Administration Officer
Civil Aviation Authority
Surveillance and Spectrum Management, K6G6, CAA House, 45-59 Kingsway, London, WC2B 6TE
Tel 020 7453 6557 Fax 020 7543 6556 Email DelphaL.Pope@caa.co.uk

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