SECTION D DEVELOPMENT TO BE CARRIED OUT BY THE COUNTY COUNCIL

<u>Background Documents:</u> the deposited documents; views and representations received as referred to in the reports and included in the development proposals dossier for each case; and other documents as might be additionally indicated.

Installation of a wind turbine, Aldington Primary School, Roman Road, Aldington – AS/10/1211

A report by Head of Planning Applications Group to Planning Applications Committee on 2 November 2010

Application by Aldington Primary School for the installation of a Proven 15kw wind turbine on a 15m mast in the playing field at Aldington Primary School, Roman Road, Aldington, Ashford, TN25 7EE – AS/10/1211

Recommendation: Subject to the views of Jacobs noise - permission be granted subject to conditions

Local Member(s): Mr A.Wickham

Classification: Unrestricted

Item D1

Site

- Aldington Primary School is located on the south eastern edge of the village of Aldington, along Roman Road. The school was built in 1842 and is of traditional Victorian brick construction, similar to other village schools of this age around the county. In 2004, the facilities were updated with the construction of new modern classrooms and a hall. There is also a temporary modular classroom building which is used as a pre-school and for after-school clubs.
- 2. The school site is 'wedge' shaped, with the buildings occupying the narrower end closest to the built development of Aldington village. The grounds open up to the south east into a playground area, and a grass sports pitch with agricultural fields beyond. The grounds are bordered by Roman Road along the northern edge, agricultural fields to the east, and a steep scarp slope to south which drops down to more fields. The school therefore has an elevated position, at the top of the slope, with views down towards the Romney Marsh. The main school buildings are set back and screened by established trees, so are not visible when looking towards the scarp slope.
- 3. The wind turbine is proposed to be located on the edge of the school playing field, overlooking the slope to the south. The location is approximately 90m from a mobile classroom, 100m from the main school buildings, and 140m from the residential properties on the opposite side of Roman Road, known as Goldwell Houses. The closest residential property across open ground is Cobb's Hall, 180m east of the proposed turbine. The Saxon Shore Way follows a line across the valley below the site, 250m south of the proposed development, and there are a number of other public rights of way in the area.





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4. Recent planning history includes an application submitted earlier this year for the installation of solar voltaic panels and a wind turbine. This application was amended to remove the wind turbine element in order for the applicant to conduct ecological and noise surveys. The current application is the resubmission of the wind turbine with the additional information. In 2003 the School was granted permission for an extensive modernisation program with a large new classroom block and hall. In 2005 a mobile building was granted temporary permission to be used as a pre-school and after school club.

Proposal and Background

- 5. This application is for the installation of a 15kw wind turbine installed on a 15m mast in the playing field of Aldington Primary School. The turbine blades are proposed to be 9.8m in diameter, installed onto a hub fixed at a height of 15m on the proposed mast. This gives the wind turbine a total maximum visible height of 19.9m.
- 6. The mast is proposed to be fixed to the ground on a supporting two-tier foundation: the lower tier measures 4.8m x 4.8m and would be submerged below the topsoil, leaving only the upper tier (1.5m x 1.5m) visible. This area would then be enclosed by a 1.2m open slat fence, with a gate to allow maintenance access.
- 7. The application states that the mast would be finished in grey zinc coated finish, and that the turbine hub and blades can either be finished in black or white.
- 8. Aldington Primary have stated that they are applying for the wind turbine as they are a designated 'Green Flag Eco School' and won a Big Lottery Sustainable Energy Programme Grant in order to assess the site's suitability for accommodating renewable energy technologies. Subsequently the School secured funding and grants to install solar PV panels and a small wind turbine. The solar PV panels have been granted planning approval under a previous application (AS/10/553) and now the School is seeking consent for a wind turbine. The wind turbine was originally included within the application AS/10/553, however this element was withdrawn from the proposal in order for the applicants to produce biodiversity and noise data. In order to avoid duplication and wasting resources, technical consultation responses to the previous application were used in the consideration of the current proposal.
- 9. The applicant has stated the proposed turbine would be used to generate electricity to supply the school, with any excess being sold to the grid. The application states that the potential generation could be 28,000kwh. Further to this, they intend to use the turbine as an educational tool and as a method to demonstrate the Eco Schools Green Flag Status. The School has also stated that the wider aims of the turbine would be to reduce the carbon footprint of the school and contribute to wider renewable energy targets and help to reduce greenhouse gases and mitigate the impacts of climate change.

Planning Policy

- 10. The Development Plan Policies summarised below are relevant to consideration of the application:
- (i) National Planning Policy Statement 1: Sustainable Development

It is the overarching requirement of the planning system to deliver sustainable development; to address the impacts of climate change and ensure a reduction in emissions; to encourage the mitigation of climate change through the use of renewable energy.

(ii) National Planning Policy Statement 7: Sustainable Development in Rural Areas The Planning system should seek the conservation of the natural beauty of the landscape and countryside, and provide for the sensitive exploitation of renewable energy sources in accordance with the policies set out in PPS22

(iii) National Planning Policy Statement 22: Renewable Energy Small scale renewable energy developments can provide a limited but valuable contribution to overall outputs of renewable energy and that Planning Authorities should not refuse applications because a proposal only provides a small output.

(iv) The adopted Ashford Borough Local Plan 2000 Saved Policies

- **Policy EN9** Development proposals which would damage significantly buildings, landscape features, or important views, which contribute to the settings and entrances of towns and villages will not be permitted.
- **Policy EN27** Long term protection will be given to Special Landscape Areas and other important landscape features. Priority will be given over other planning considerations to the conservation or enhancement of natural beauty, including landscape, wildlife and geological features. Due regard will be had to the economic and social well-being of the area.
- **Policy CF8** Proposals to harness renewable energy sources will be permitted where: a) there would be no significant adverse impact on the landscape or features of natural, historical, cultural or archaeological interest; and, b) there would be no significant adverse impact on existing uses, for example, through visual impact, noise or traffic generation.

Consultations

- **11. Ashford Borough Council –** raises no objection to the proposed development subject to the following conditions
 - The turbines hereby permitted shall be finished in a colour, details of which shall be submitted to and approved by the Local Planning Authority in writing before any works are commenced. The approved colour scheme shall be fully implemented before the development is brought into used and thereafter maintained.
 - A suitably worded condition requiring maximum day and night noise levels to be agreed and for the operator to employ a consultant at the request of the Local Planning Authority (following receipt of a noise complaint) to assess noise levels from the complainant's property relating to the turbine - the monitoring protocol to be previously approved by the Local Planning Authority. Reason: To provide a

mechanism for investigating a complaint and verification that the sound output from the wind turbine is in accordance with the noise report statement.

Aldington Parish Council – Supports the application.

KCC Biodiversity Projects Team – Recommends that the precautionary measures detailed in appendix 2 of the Ecological Report are carried out. If dead bats are identified around the turbine after construction an ecologist must be contacted for advice.

NATS - NERL Safeguarding Office – No safeguarding objection to the proposal.

Jacobs Noise – Final views awaited.

Local Member

12. The local County Member for Ashford Rural East Mr A.Wickham was notified of the application on 24 August

Publicity

- 13. The application was advertised by the posting of a site notice and the notification of 31 neighbours. One letter of representation has been received objecting to the scheme. The main points for the objection are summarised as follows:
 - Sympathise with the principles of renewable energy and sustainability, however this must be set against potential human harm and damage to the environment.
 - The limited gain from the turbine should be set against the 'down-sides' of the application.
 - The turbine would be 19m high, and on an exposed ridge where it is taller than everything around it. It would be clearly visible from many directions and for a considerable distance, and would stand out on the skyline from views from the south and west.
 - It would be in a field abutting the main street running through the village and would affect the visibility of many houses. It would also affect those working, visiting and travelling through Aldington. The amenity of residents should be protected.
 - In the rural environment, the visibility of the proposed turbine would be overbearing and unreasonable.
 - The turbine would create regular and rhythmic noise with a 'whooshing sound', which would be intrusive not akin to natural countryside noise.
 - The school functions during normal daytime hours, whereas the potential disturbance in the locality would be all day and night.
 - The noise would be disruptive to the general peace and character of the community as a whole, and a potential violation of the right to peaceful enjoyment of possessions guaranteed by the Human Rights Act.
 - Aldington is an ancient village and developments have respected this being lowrise or sited out of the centre of the village, using sensitive materials. The turbine would be significantly detrimental to the character of the environment.
 - The turbine would detract from the area's natural beauty and would be visible from the Saxon Shore Way and other footpaths.
 - Without retracting from the reasons for objecting, a turbine of half the size would easily fulfil any perceived need of the school.

Discussion

- 14. In considering this proposal regard must be had to Development Plan Policies outlined in paragraph (4) above. Section 38(6) of the Planning and Compulsory Purchase Act (2004) states that applications must be determined in accordance with the Development Plan unless material considerations indicate otherwise. Therefore, this proposal needs to be considered in the context of Development Plan Policies, Government Guidance and other material planning considerations arising from consultation and publicity.
- 15. This application has been brought for determination by the Planning Applications Committee following the material planning objections of a near neighbour to the proposal site on a number of points listed above. The main points to consider in determining the application are:
 - whether the proposal accords with national and local policy and guidance relating to renewable energy developments
 - the visual impact of the proposed turbine on nearby residents and the locality including the potential for shadow flicker
 - the noise impact of the turbine
 - the visual impact of the turbine on the wider countryside

The application should be determined on a balance of the perceived benefits and policy guidance, against the potential detrimental noise and visual impacts.

Design

16. The design of the proposed wind turbine is standard in comparison to other turbines of a similar size. The turbine would be attached to a black hub which is fixed to the top of a 15m steel galvanised column. The unit would consist of three blades with a diameter of 9m painted in black. The applicant has indicated that the blades and hub can be finished in white. I would recommend, after visiting and researching similar wind turbines, that black would be the most suitable finish for a turbine of this size and this location. The black colour would the turbine blend with nearby trees and would be less prominent and noticeable than if it was finished in white. Recent research also indicates that the use of light colours can attract insects, which in turn can attract bats to the site.

National Planning Guidance

17. National planning policy is very clear on the approach that should be taken to renewable energy. Planning policy is governed by the overarching principles of sustainable development as highlighted in Planning Policy Statement 1; which also encourages the mitigation of climate change through the use of renewable energy technologies. The main guidance relating to this application is Planning Policy Statement 22, which relates to renewable energy. This publication is very clear in stating that proposals for renewable energy should not be refused on the grounds that the amount of energy generated by the proposal is small. Therefore, the fact that the turbine would only produce a small amount of energy is not a material consideration for

this application. Planning Policy Statement 7 seeks to conserve the natural beauty of the countryside, but also encourages the 'sensitive exploitation' of renewable energy and is therefore relevant to this application.

18. The principle of the wind turbine is well supported by national planning guidance, and therefore the key determining factors to be considered relate to the impacts of the development, weighed against the benefits and national guidance.

Visual Impact on the Locality

- 19. The proposed turbine would be located towards the back of the school playing fields, away from the main road and the residential properties. The school field is bordered by mature and well-established hedgerows and trees along Roman Road which, when in leaf, would screen most views of the turbine from the road. When not in leaf, there may be the potential to see the turbine through the hedgerow, however this would be intermittent and would not be dominant.
- 20. The residential properties known as 'Goldwell Houses', are situated on the northern side of Roman Road and overlook the main school buildings. There were no letters of representation from these residential properties, however, it is prudent to assess the potential visual impact. It may be possible to view part of the turbine element of development from the upstairs windows of several of the houses; however there are no uninterrupted views towards the proposed development as the school buildings and hedgerow screen the proposal site. In my opinion the visual impact of the turbine is minimal, and does not constitute "significant adverse impact" on these residential properties.
- 21. To the east of the proposed development there is a residential property and the occupants of this house have objected to this application on visual impact grounds. This property is oriented from north to south, so there are no direct views towards the turbine from within the residence and there is well established border planting along the dividing boundary, as well as a number of external buildings. Therefore in my opinion the turbine would not be readily visible from this property; although it may still be possible to view the turbine from other points within the residential curtilage. The turbine would be 180m away from the property, therefore in my opinion, it would not have a "significant adverse impact" of the degree required to warrant refusal on policy grounds.
- 22. Turbines by their nature are prominent features. In my opinion the proposed turbine would be sited in a location that is not easily viewable from the village, or from the road when approaching the village. The most obvious features for those driving in or out of the village are the large pylons, and the impact of the turbine would be insignificant in scale and design in comparison. If someone wished to view the turbine from Roman Road or the nearby houses, then it would be possible, however not obvious or overly dominant. Therefore in my opinion the benefits of the turbine outweigh the visual impacts on the locality, which in any case do not constitute a "significant adverse impact".

Shadow Flicker

23. Shadow flicker is caused when the sun passes behind the blades of the turbine, and the shadow is cast over properties. The movement of the blades causes the shadow to flicker and can cause significant disturbance and intrusion to those effected. Due to the

low height of the proposed turbine, the distance between it and the nearest houses and the orientation of the turbine in relation to the sun's path and the houses it is considered that shadow flicker is not an issue for this application.

Wider Visual Impact

- 24. The proposed turbine would be located at the top of a scarp slop which drops sharply towards the lowlands of the Romney Marsh. The turbine would therefore be in a prominent position in the landscape, and could be easily visible on the skyline from a number of vantage points from further down the valley, including along a 200m stretch of the Saxon Shore Way footpath. The proposed location puts it at the end of a line of trees, which are of comparable height, and it should be noted that in the wider landscape there are a number of very large electricity pylons.
- 25. Wind turbines, by their nature, can be prominent features in the landscape as they require an open wind flow in order to operate, so need to be sited in exposed locations. Therefore, it would not be prudent in this application to demand that alternative sites are explored, or landscape screening is proposed in order to reduce the visual impact, as I am satisfied with the applicant's assertions that the proposed location is the most suitable for a wind turbine on the school site.
- 26. The proposed turbine is of a small-scale, and although visible from a number of view points, in my opinion it would not be incongruous on the surrounding landscape. It would be located on the end of a line of trees of a similar height to the turbine, and although a man-made structure, individually it would not introduce a pattern of uniformity alien to the natural landscape if more turbines were proposed, then the uniformity would perhaps introduce a dominant pattern to the skyline. The fact that the turbine would be visible does not make it unacceptable and in my opinion, although visible, it would not create a dominant feature on the skyline. Therefore, the proposal would accord with PPS7 and Policy CF8 of the Ashford Borough Local Plan 2008 which indicates that proposals to harness renewable energy sources will be permitted where there is no "significant adverse impact" on the landscape.

Noise

- 27. Planning for Renewable Energy the Companion Guide to PPS22, 2004 describes in detail the possible noise implications of wind turbines. They generate two sources of noise: the mechanical noise produced by the gear box, generator and other parts of the drive train; and the aerodynamic noise produced by the passage of the blades through the air. The Guide goes on to state that technological developments since the 1990's have significantly reduced the mechanical noise generated by wind turbines and it is now usually less than, or of a similar level to, the aerodynamic noise. Aerodynamic noise from wind turbines is generally unobtrusive; it is broadband in nature and similar in this respect to the noise of wind in the trees.
- 28. The objector to this application has raised concerns relating to the noise impacts of this proposal; specifically the potential 'whooshing' sound that the movement of the turbine blades would create. The applicant had submitted a noise report within the original application which attempted to predict the potential noise levels at key receptors in accordance with 'The assessment and rating of noise from wind farms': ETSU-R-97 Standards (by the Working Group on Noise from Wind Turbines) as specified within PPS22. However, this report was deemed insufficient by our noise specialist consultee

and subsequently the applicant has recently produced a new noise report which attempts to meet the deficiencies raised.

- 29. If the noise created by the turbine is significantly above the background noise levels, it has the potential to cause a high level of disturbance to those in the locality. The literature relating to noise from turbines has stated that in the worst case scenarios the noise can disrupt sleep patterns and affect the well being of the receptors although it must be stressed that these instances are associated with much larger turbine developments. The potential noise impacts are nevertheless an important material consideration for this application.
- 30. The noise report submitted with the application submits data that indicates that the noise produced from the turbine, at varying wind speeds, should not be significantly above the existing background noise levels. However, within the previous application the noise consultant and our technical consultee disagreed on various technical points. For this reason, the current noise report has been sent to Jacobs Noise for analysis. At the time of writing, the response has not been received, although is expected before the Committee meeting.
- 31. Ashford Borough Council has recommended that should permission be granted, a condition should be imposed requiring that agreed maximum day and night time noise levels are not exceeded. The thresholds imposed are to be based upon the awaited advice from Jacobs Noise. Should there be any complaints relating to noise, the School would be required to employ a noise consultant to assess the noise levels at the complainant's property. If the noise levels are found to exceed the permitted limits the School would then be required to take steps to avoid this recurring that could require the turbine to be serviced, or being switched off at certain times or wind speeds.
- 32. Jacobs Noise have been asked whether they agree with Ashford Borough Council in that a condition should be applied limiting the maximum noise levels, and requiring surveys to be taken if any noise complaints are received. They have also been asked if they agree with the conclusion that the noise impacts of the turbine on nearby properties are acceptable. The response of the noise consultant on these issues is crucial. If Jacobs consider that the impact is unacceptable and a condition cannot be applied then I would recommend refusal of the application. However, if the effects are within acceptable limits, then I would recommend that the development is permitted and controlled by an appropriate condition.
- 33. The objector to the application has noted that the turbine would be associated with a school that is only occupied during the day-time, whereas the impact of the development on the locality would be 24 hours a day. I would recommend that the use of the turbine is attributed to the existence of the school and its energy requirements, not to the hours of day that there is activity on site. PPS1 and PPS22 seek to mitigate the effects of climate change by promoting renewable energy; in my opinion it would be an unreasonable and prohibitive restriction on renewable energy creation to limit the use of the turbine to a particular time of day, and this would be counter to the duty of the planning function imposed by PPS1 and PPS22. However, the turbine could still be subject to the noise restrictions imposed by condition as discussed above.

Conclusion

34. Subject to no contrary views from Jacobs Noise, in my opinion the development accords with national and local planning policy on renewable energy developments and

this on balance outweighs the potential visual harm and the potential noise impact of the wind turbine on the locality. The wind turbine is of small scale and therefore would not cause a "significant adverse impact" to the surrounding area so accords with policies EN9, EN27 and CF8 of the Ashford Borough Local Plan 2000. Therefore, subject to the views of Jacobs Noise relating to any potential nuisance caused to neighbours by noise emanating from the turbine, and imposition of appropriate conditions placing limits on noise levels and requiring surveys to be undertaken in the event of a complaint, I wouldn't raise a planning objection and recommend accordingly.

Recommendation

- 35. Subject to the views of Jacobs Noise I RECOMMEND that PERMISSION BE GRANTED subject to conditions:
 - The standard time condition for implementation;
 - The development to be completed in accordance with the approved plans;
 - That ecology advice is sought in the event of dead bats being found around the turbine;
 - Maximum night and day noise limits; and
 - That in the event of complaints relating to noise then a consultant be employed to measure the impacts;

Case officer – Jeff Dummett

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Background documents - See section heading