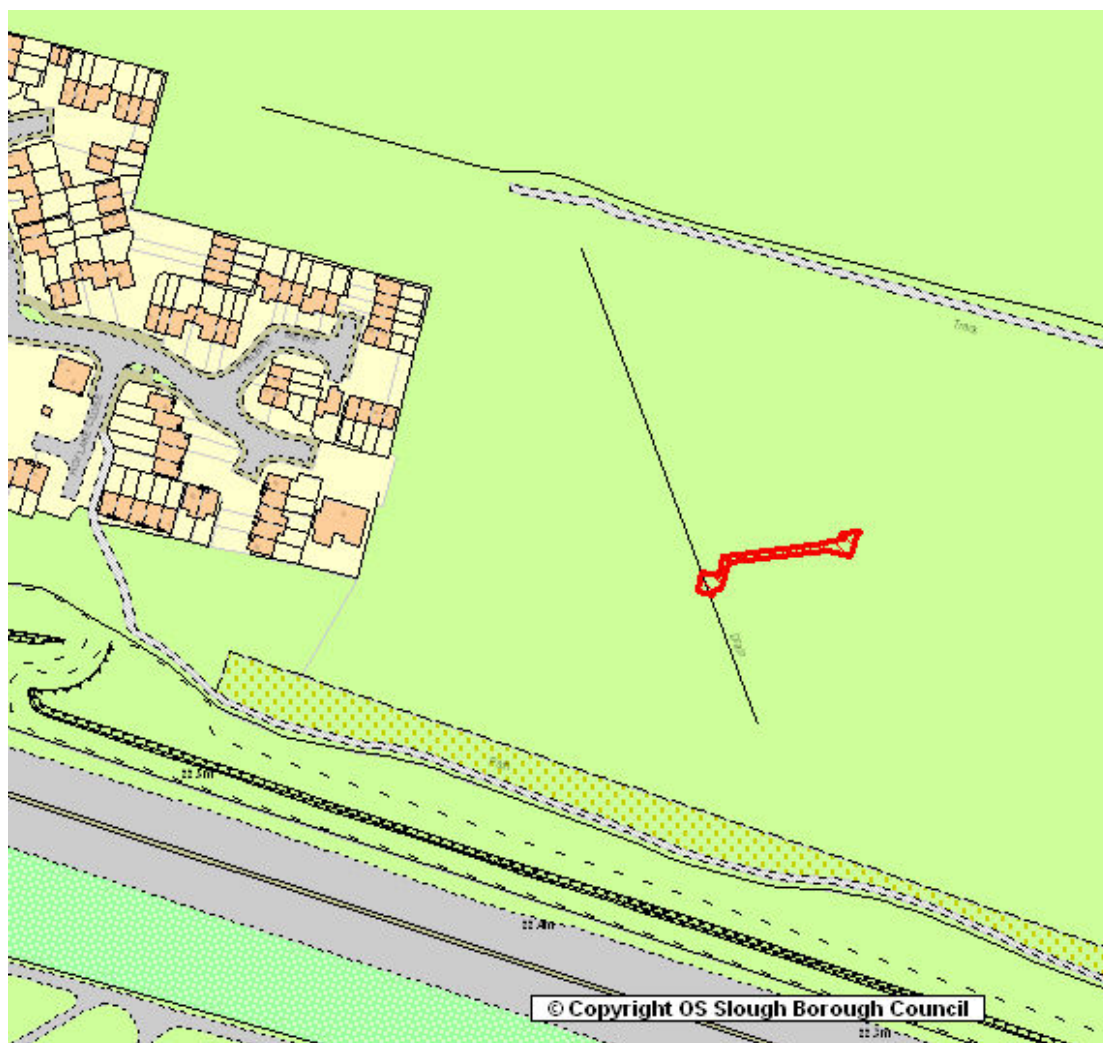


		Applic. No	P/08770/066
Registration Date	07-Jul-2008	Ward	Cippenham Meadows
Officer	Mr. Albertini		
Applicant	Barratt Homes Ltd		
Agent	Roger Rippon, Rippon Development Services 19, Christchurch Gardens, Reading, RG2 7AH		
Location	Land adj to extension of, Eltham Avenue, Cippenham, Slough, Berks		
Proposal	WIND TURBINE (95 METRE HIGH TOWER; 140 METRES TO BLADE TIP) AND SUB STATION (OUTLINE)		

**Recommendation:** Refuse



**1.0 SUMMARY OF RECOMMENDATION**

1.1 Refuse

1.2 'Having considered the relevant Policies below, the development is considered to have an adverse affect on sustainability and the environment for the reasons set out'.

**PART A: BACKGROUND**

**2.0 Proposal**

2.1 The turbine consists of a 95 metre high tower with 4.5 metre diameter base and a three blade rotor on top. The swept diameter of the blades is 90 metres and the maximum height to blade tip is 140 metres. The rotor and blades can rotate horizontally on the tower within a 90 metre diameter oversail of the around the tower. Clearance under the blades is 50 metres above ground level

2.2 The application is outline such that the precise appearance of the equipment and the turbine type is not part of the application but the maximum power is expected to be 3 MW. Electricity from the turbine is expected to supply the national grid. The applicants indicate it could potentially provide a local supply to, for example, street lights on the new estate.

2.3 The application includes a 2.4 metre high and 5 metre long sub station next to the recently completed extension of Eltham Avenue.

2.4 Supporting information includes a planning statement, some technical consultee responses, analysis of noise, shadow flicker, TV reception and landscape/visual impact. The later includes photomontages of nearby, local and distant views e.g. Windsor Castle; river Thames.

2.5 For comparison purposes the 95 metre tower is about 10 metres higher than the one next to the M4 at Green Park Reading.

**3.0 Application Site**

3.1 The site is in the middle of playing fields currently being laid out and on the edge of the associated car park. It is also next to a new road linking the new 300 home development to Eltham Avenue.

3.2 The turbine tower is 115 metres from the nearest home in Eltham Avenue and 120 metres from the motorway. It is 60 metres from the proposed changing room building and 135 metres from the edge of Western House School grounds. Part of the football pitches, car

park and Eltham Avenue extension will be overhauled by the rotating blades.

4.0 **Site History**

- 4.1 Green Wedge playing field and planting approved (P/8770/48). 300 homes and playing fields approved in outline 2006 and master plan approved 2007. Changing room and car park approved 2008.

5.0 **Neighbour Notification**

- 5.1 All homes within about 400 metres of the site (This includes all homes south/east of the stream/great hedge) plus others nearby or likely to get a very clear view of the turbine if it were built e.g. Gladstone Way.

- 5.2 74 letters of objection with standard or similar content raising the following:

Direct Noise – of rotation/mechanical noise

Wind Thump – noise as blade passes tower can be heard a mile away

Indirect noise – low frequency noise transmitted through the ground can be felt in homes up to 1.5 miles away.

All the above can be intrusive and disturbing to residents.

Shadow flicker. Blinds reduce enjoyment of view from window.

Separation distance - Examples given of separation distances of other turbines from homes e.g. 800m 850 m 1,000 feet. Nearby buildings and terrain affect wind speed.

Safety – example of debris thrown 500m away

Green Credentials – turbines do not replace conventional power stations as variable nature of wind needs to be allowed for re capacity; more time and energy spent on electricity grid for variable output of wind power, carbon footprint payback period variable depending upon what is taken into account; turbines cant work in high winds.

Effect on house prices

Commercial interests – Barratt have vested interest; they are supplying the land. Power will not necessarily go to Slough. Carbon off-set rather than investing in energy efficient homes.

Revenue generation; Barratt have said installation is multi million pounds. Barratt benefit from revenue rather than tackling energy efficiency.

- 5.3 52 other letters raising similar issues to above (and some with standard comments) plus other issues: affect on wildlife/bats, unsightly, overshadow home, not safe where children playing, residential area unsuitable, too near school, affect on TV reception, doubtful efficiency of wind power, noise calculation errors, affect on radar/air traffic, health risk of electromagnetic field, ruin view from windows, intimidation of overbearing structure near residents, no consultation with wildlife bodies, question lack of an Environmental Impact Assessment, photomontages not verified, no site selection process, question lack of technical data, r  
Height described incorrectly (should be 140 metres)

Western House School Governors object – unsightly; too high, noise, flicker affect pupils.

One letter of support but with some concerns.

- 5.4 The applicant undertook consultation with residents in Cippenham prior to submitting the application. The applicants have sent resident comments to the Council.

- 5.5 Petition  
One petition received with over 1,000 signatures objecting to the proposal and listing the following concerns :

Safety – too close to residential and school  
Community Impact – Noise, Vibration, Flicker  
Property Blight  
TV/Radio reception interference.  
Business located in residential area with no benefit to the community.

## 6.0 **Consultation**

- 6.1 **Highways/Traffic** : no objection

- 6.2 **Neighbourhood Enforcement (Noise)**  
Do not think noise assessment carried out properly. Suggest various conditions if the scheme is approved. It is unclear how some conditions could be complied with such that further information is likely to be needed if the application is to be approved.

- 6.3 **Parks Section** (re future responsibility for recreation land).  
No specific concerns about affect on playing football near turbine although advice should be sought from appropriate organisations

e.g. Sport England. They do have concerns about affect on users of the public space next to the site.

- 6.4 **BAA (on behalf of Civil Aviation Authority)**  
Response expected prior to meeting; holding response is 'object'.
- 6.5 **NATS (National Air Traffic Control)**  
No objection
- 6.6 **Dept. of Cultural Media and Heritage (Re affect on Windsor Castle)**  
No comments received.
- 6.7 **South Bucks District Council:** No objection
- 6.8 **Royal Borough of Windsor and Maidenhead**  
Concerned about noise affecting residents; ask for those to be consulted; ask for impact on residents in Borough to be considered. Ask for affect on setting of Windsor Castle and historic park to be considered.
- 6.9 **Consultations undertaken by applicant**  
(Government policy requests the applicant undertake consultation with communications and infrastructure organisations and include responses as part of the application).
- Defence Estates,  
Highways Agency  
Orange  
Southern Electric  
Pipex Communications  
T Mobile  
BT Wholesale  
Cable and Wireless  
MLL Telecom  
Vodafone  
Hutchinson 3G UK  
National Grid Wireless  
Arqiva  
The Joint Radio Company

The responses from the above, copied by the applicant, state either that there is no objection or that the proposal is unlikely to affect operations.

## **PART B: PLANNING APPRAISAL**

- 7.0 **Policy Background**
- 7.1 Government Planning Policy Statement 22 (Renewable Energy) generally encourages renewable energy developments. It states

that wider environmental and economic benefits, whatever their scale, are material considerations and should be given significant weight. It also states Council's should not make assumptions about the technical and commercial feasibility of renewable energy projects. Supporting companion guidance outlines various issues that Council's must address. These are addressed below and include relevant Core Strategy and Local Plan policies.

- 7.2 The South East Plan (including proposed changes) has a policy direction Council's to encourage renewable energy to help meet regional targets. It also refers to the need to consider impacts on landscape and amenity and affects on designated areas (such as green belt).
- 7.3 The Local Plan policy OSC 7 (Cippenham Green Wedge) seeks to keep the area as open space and open land allowing only buildings ancillary to open space and not allowing uses that do not retain the open landscape character. This proposal would not comply fully with this policy.
- 7.3 Some of the appraisal below is based upon information supplied by the Council's consultant Atkins.

## 8.0 **Landscape and Visual Impact**

- 8.1 As the turbine is very close to residential property it will be a very dominant feature when looking out of windows or from gardens. The turbine will be overbearing and will adversely affect residential amenity to such a degree that the benefit of having a renewable energy source is out weighed by the dis benefits to local residents and the visual amenity of the nearby residential area.
- 8.2 Homes to the west of the site (Eltham Ave. and Philbye Mews) would be affected most; the distance from the tower will be less than the total height of the turbine in many cases. Other homes nearby would also be adversely affected, to a lesser degree, such as Marcia Court 235 m metres away and recently permitted homes 160 metres away.
- 8.3 Tree planting will not be able to significantly screen the turbine. Furthermore there is very limited space to plant trees because of the football pitches. A structure of this type and size is not appropriate in a residential suburban area. The applicants visual analysis states that the significance of the visual impact will be substantial in some cases.
- 8.4 The turbine would also be a very obvious feature on the skyline for many other parts of Cippenham and beyond where views are not blocked by immediately adjacent buildings or trees. The applicants describe the significance of the visual impact as 'moderate'.

Cippenham does not have many tall structures for a new structure to be considered typical of the landscape. It should be noted that some electricity pylons used to exist nearby until a few years ago.

- 8.5 Regarding more distant viewpoints the turbine will have some impact but, in general, even if significant any adverse affects could be out weighed by the benefits of having a renewable energy source. However the Council's consultant questions the completeness and interpretation of some of the applicants analysis of impacts in particular the impact on the view from Windsor Castle and the setting of the Castle and other heritage sites. A different analysis may result in a different conclusion.
- 8.6 The turbine is not far from the green belt south of the motorway and the setting of the green belt needs to be considered. The turbine will be very obvious when viewed from the green belt but because of the background urban landscape and adjacent sewage works any adverse affects are limited.

9.0 **Noise**

- 9.1 There are a number of queries regarding the applicants noise assessment such that there is insufficient information to fully assess the proposal. One query relates to the selected noise monitoring points. These should be the nearest homes but the only information supplied relates to homes further away.

As the turbine is close to residential property accurate noise information is needed to make decision. Levels may well be high enough to warrant refusal of the application. There are two types of noise source relevant; mechanical noise from within the hub of the turbine and aerodynamic noise from the blades going through the air. Noise levels are judged against increases above existing background levels. It should be noted that mechanical noise of modern turbine designs is less than in the past.

10.0 **Shadow Flicker**

- 10.1 This is the effect of the turning blades in front of a low sun on people in homes nearby (existing or permitted). The applicants assessment shows that flicker for some homes will be below the accepted threshold. They propose mitigation measures for the worst affected homes such as tree planting, installation of window coverings and careful treatment of rotor blade surfaces. For other homes they conclude disturbance will not be material. They also state the rotation speed will not be great enough to adversely affect epileptics.
- 10.2 The Council's consultant considers the assessment to have underestimated the effects. However based on the applicants information

the proposal is considered unacceptable. There are no details of mitigation works to prove the problem can be overcome. There is very limited scope for effective tree planting because of the playing fields between turbine and many homes affected. Furthermore offering window coverings to occupiers is not an acceptable mitigation measure.

11.0      **TV Reception**

11.1      The applicants assessment concludes that some homes west of the turbine are likely to be affected significantly but remedial action can be taken. This is accepted as reasonable provided the remedial action can be secured in a Section 106 obligation. That obligation ought to cover action for any other homes affected beyond those identified by the applicant if the application were to be approved.

12.0      **Health and Safety**

12.1      The chance of the tower toppling or parts falling or ice being shed is very low. However this scheme is unusual in that it oversails an area that will be well used compared to most if not all other large turbines. Below will be a public building, public recreation space and a highway linking residential areas. Consequently safety is a relevant consideration including perceived safety threats in that some people may be put off using the public space or road and paths below which are key amenities and infrastructure necessary for a residential area. The Council's consultant considers safety and level of risk should have been assessed by the applicant.

12.2      Government guidance indicates that noise and visual impacts will normally result in separation distances greater than that wanted for safety reasons. But as there are outstanding concerns about these impacts and associated distances safety is still a relevant issue. Furthermore guidance suggests it is normal to have a separation distance of the total height plus 10%. This zone would overlap the motorway, several homes as well as the features mentioned above. Highway safety linked distraction by drivers is not considered an issue.

12.3      Based upon the information available the proposal is considered unacceptable.

12.4      A point to note but not directly linked to planning considerations is the land around the turbine will become the Council's responsibility in the future under the terms of an existing Section 106 agreement. Construction of a turbine would temporarily limit use of part of football pitches.



13.0 **Other Matters**

- 13.1 Depending upon comments from BAA re Heathrow Airport a further reason for refusal may be necessary. If the application were to be approved the Council would first need to satisfy itself that the Ministry of Defence and Highways Agency responses provided by the applicant are still current and that White Waltham aerodrome are content.
- 13.2 Regarding ecology the Council's consultant advises that an assessment of potential affects primarily on birds and bats would be needed if the application were to be approved. However, based on Government guidance and the habitats nearby it is most unlikely that any impact would prevent a single turbine going ahead.
- 13.3 The presence of a turbine next to the motorway could be seen as a land mark and contribute positively to the image of Slough. This needs to be balanced with the negative aspects for those living nearby.
- 13.4 For comparison purposes the turbine at Reading is not near a residential area. The area below it is accessible to the public, including a tennis court but its purpose and level of use is very different to that proposed at Slough. There are no comparable turbines located next to residential areas.

14.0 **Summary**

- 14.1 Encouraging renewable energy is clearly a Government priority and is supported by the Council's Core Strategy. Furthermore Government guidance indicates the benefits of even small scale schemes should be a material consideration. However this still needs to be balanced with local planning policy. Turbines are not normally in residential areas and this scheme is so close to homes that the negative effects for residents are too great to outweigh the wider energy benefits. There is no evidence that mitigation measures could successfully overcome the problems. The turbine did not feature in the master plan for the wider area that has already been approved. There is no rationale as to why this site should feature a turbine compared to other sites in the wider area. Furthermore some information is missing for the scheme to be accepted.

**PART C: RECOMMENDATION**

15.0 **Recommendation**

- 15.1 Refuse

**PART D: LIST OF REFUSAL REASON(S)****Reason(s)**

## 1. Visual Amenity

The residential amenity of nearby existing homes will be adversely affected by the size of the turbine and its proximity to those homes in terms of visual amenity and sense of it being overbearing.

Consequently the proposal is not in accordance with The Adopted Local Plan for Slough 2004 Policy EN1 (Design) and Policy 9 (Built Environment) of the Local Development Framework Core Strategy (Submission) November 2007 (confirmed sound August 2008).

## 2. Noise

The noise assessment is inadequate to judge the impact of noise on residential property. Consequently it is unclear if Planning Policy Guidance 24 (Noise) and policy 8 (Sustainability and the Environment) of the Local Development Framework Core Strategy (Submission) November 2007 (confirmed sound August 2008) can be complied with.

## 3. Shadow Flicker

The assessed shadow flicker will have an adverse affect on residential amenity such that the proposal does not comply with policy 8 (Sustainability and the Environment) of the Local Development Framework Core Strategy (Submission) November 2007 (confirmed sound August 2008) in terms of quality of design.

## 4. Safety

The rotor blades oversailing of a public highway, proposed public building/car park and public recreation area is considered to be a potential safety hazard or perceived hazard which is poor design and will hinder use of these public recreation and transport facilities. Consequently the proposal does not comply with The Adopted Local Plan for Slough 2004 Policy EN 1 (Design) nor Policy 8 (Sustainability and the Environment) of the Local Development Framework Core Strategy (Submission) November 2007 (confirmed sound August 2008) in terms of quality of design.

## 5. TV reception

The need for mitigation measures to ensure television reception for homes west of the site is not affected has not been fully agreed nor secured such that the proposal is unacceptable. Consequently the proposal does not comply with Planning Policy Statement 22 Renewable Energy companion guide.