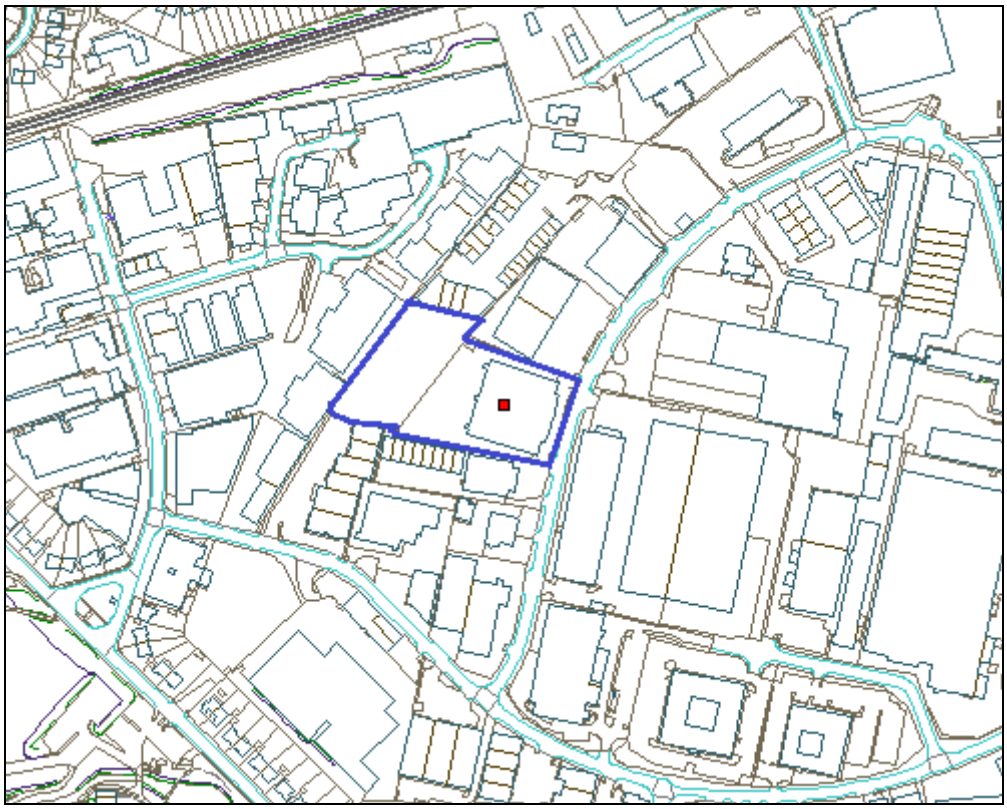
Application Number: AWDM/0852/13 **Recommendation – Approve**

Site: **Unit 1-2 37 Chartwell Road Lancing Business Park Lancing**

Proposal: **Installation of 6 kw wind turbine, 18.25 ms tall (including rotor blades) in forecourt of premises**

Applicant: Mr Danny Trussler Ward: Churchill
Case Officer: Peter Devonport



Not to Scale

Reproduced from OS Mapping with the permission of HMSO © Crown Copyright Licence number LA100024321

Site and surrounds

The site is occupied by The Rabbit Group's Waste Management plant and located in the central part of the Lancing Business Park.

The existing use comprises a Waste Transfer station, sited at the front (with offices to the forefront) where waste is separated and sorted. Directly recyclable materials such as soil, hard core, metals and plastics are removed for further recycling. The remaining waste is transferred to the Energy from Waste Plant at the rear of the site.

The Business Park is a large industrial estate bounded by residential on its western, northern and southern frontages. The railway lies on its northern margins, beyond which lies a large residential area, centred around Cokeham Lane/Hurstfield, Tower Road and Sompting Road.

The site is accessed off Chartwell Road, the principal distributor road for the estate.

The coast lies some 500 ms to the south and the South Downs National Park on higher ground some 1.7 kms to the north and 2.8 kms from Shoreham Airport to the east.

The site sits on slightly lower ground than Chartwell Road on the west side and comprises a two and a half storey large building at the front and still larger industrial building to the rear (13.5 ms tall).

The relatively shallow forecourt provides parking and vehicular access is at both ends.

The industrial estate contains a wide range of industrial buildings of varying sizes but typically one to three storeys tall.

Opposite the site to the north east is an existing three rotor blade, 10KW wind turbine on a metal framed mast some 30 ms tall, approved under ADC/0004/10 at the front of the Graham Wood Structural Ltd site.

The site is not in any flood zone 2 or 3 but is in a buffer zone, close to potentially contaminated land.

Proposal

The proposal itself occupiers a site of some 9 sq ms but sits in and serves a site area of 1.01 hectares and comprises:-

a) Galvanised green finished Steel mast 15.5 ms tall and three mounted rotor blades of 5.5 ms, giving a total height of 18.25 ms. The hub and blades would be black.
b) The turbine would be mounted on a 3 x 3 1.2 ms concrete cube set within the existing concrete foundation in the forecourt of the site in the North East corner.

The site is adjacent to a front boundary wall currently concreted for car parking.

The proposal is supported by a Planning Statement and Noise emissions study.

Consultations

The Environmental Health Officer comments:

Having viewed the acousticians report under typical weather conditions I do not anticipate any noise problems. The acoustician has looked at wind speed up to 20m/s and has concluded that noise would not be a problem.

My only concern was what effect wind gusts that may exceed 20m/s that we get periodically during Gale conditions. Would the rotor cause a thud at high speeds similar to that of a helicopter rotor. However, the applicant advises that the speed of the rotor is regulated during strong winds. "You will see from the Technical Specification Sheet (Appendix 3) and the Technical Specification Sheet to the back of the Noise Emission Report (Appendix 6), that there is a rotor speed control which is self-regulating on the turbine and in winds of above 12 metres/second or 25mph the turbine blades twist to limit power in response to high rpm".

Obviously such wind conditions will impact on background noise levels, and at such wind speed, noise measurement outside would not be possible because of wind shear across the microphone. Therefore I do not believe a noise condition would be appropriate or enforceable.

In the unlikely event that noise from the development does give rise to justified complaint during strong wind, as assessed by an Environmental Health Officer, then it would be reasonable to ask the applicant to disengage the turbine at this time. The turbine has a brake. The Council does have an obligation under the Environmental Protection Act 1990 to deal with such matters under Statutory Nuisance.

The scope for land contamination is limited and this may be addressed by suitable avoidance and mitigation measures.

The Head of Building Control *advises that he does not have a great deal of experience of these but recalls that one of the huge installations had a fallen turbine during the recent storm. However he does not consider this will suffer the same fate. He notes the proposal is for a 3x3x1.2m pad of concrete integrated into the concrete forecourt. Even allowing for the fact that over time the issue is not just the overturning forces created by the action of the wind on the structure but also vibration caused by wear in the rotor bearings etc. he is of the opinion that this will be sufficiently stable.*

Shoreham Airport

No objection to the project.

Ministry of Defence: No objection but wish to be fully advised on details and construction if planning permission is granted.

Royal Society for the Protection of Birds comments that:

Our view is that a turbine of the type proposed in this location is not likely to have a significant effect on birds. The only potential risk is that gulls would collide with the turbine. However, I do not believe this is a significant risk because the photographs show that the nearby buildings have curved roofs, so it is unlikely that there will be gulls nesting on roofs nearby. Furthermore, the turbine blades are quite short, so the small rotor swept area means that risk of collision for birds is lower.

In terms of EIA screening, an EIA is more likely for Schedule 2 developments that are likely to have significant environmental impacts. I cannot comment on other environmental impacts, but my view is that there are unlikely to be significant effects on birds, and the turbine is not in a 'sensitive area' as defined in Regulation 2 (1).

Lancing Parish Council

No objections providing that the turbines did not create any noise pollution as had been experienced on similar turbines where the blades had caused 'whistling' noises.

Representations
Three objections have been received:

12 Cedra Close, Lancing:
Strenuously object to another wind turbine so close to housing. Site is visible from house. Despite so called proof on noise nuisances, plagued by noise every time slightest bit of wind. Objections were ignored last time and now have to endure these awful objects. The Council should not be fooled and make the same mistake again. Visit Elm Grove to experience for yourself rather than trust lab report.

15 West Way Lancing:
Second wind turbine application they have objected to mainly on grounds that it is installing wind turbines by stealth. Once one is agreed, it opens the floodgates to every business with resulting mass installations which are unsightly and spoil what little is left of views of the Downs. Regeneration in Lancing will be compromised as made more unattractive by unsightly installations. We pay rates too and expect The Council to take notice of what residents say but will not be surprised if this goes ahead and objections ignored. However perhaps small voices will be heard by someone with a bit of care and sense and stop this getting passed.

Parker & Highland Joinery Ltd:
No objection to visual appearance but concerned over potential noise levels, based upon the experience of the existing noisy turbine nearby. However, if a noise assessment has been carried out for the turbine and it is deemed that the noise levels are within acceptable limits, then no objections.

Planning Assessment

The main issues raised by this proposal are:-

a) The principle of wind turbines on an industrial estate and contribution to decarbonising energy generation.
b) Impact on amenity of neighbours.
c) Quality of the design and impact on local character, views and townscape, including national park.
d) Safety impacts.

e) Wildlife and other environmental impacts.

The Committee should consider the planning application in accordance with:

Section 70 of the Town and Country Planning Act 1990 (as amended) that provides the application may be granted either unconditionally or subject to relevant conditions, or refused. Regard shall be given to relevant development plan policies, any relevant local finance considerations, and other material considerations; and

Section 38(6) Planning and Compulsory Purchase Act 2004 that requires the decision to be made in accordance with the development plan unless material considerations indicate otherwise.

The Adur Local Plan saved policies comprise the Development Plan here but the Government has accorded the National Planning Policy Framework considerable status as a material consideration which can outweigh the Development Plan's provisions where such plan policies are out of date; or silent on the relevant matter or at variance with the National Planning Policy Framework. Whilst the Saved Policies from the 1995 Local Plan are now nearly twenty years old, the Council's own Conformity Assessment of the saved policies currently indicates broad compliance with the National Planning Policy Framework, where relevant policies exist. The weight accorded to the emerging Adur Local Plan as a material consideration is limited due to its nascent status.

As such the proposal should be principally assessed against saved Adur Local Plan Policies and the National Planning Policy Framework and Government and relevant agency/trade standards set out in The Government's Planning practice guidance for renewable and low carbon energy, Planning Guidance: Small wind; a good practice guide - Renewable UK; Planning Noise advice document – ADC as well as the statutory objectives of the National Park under the 1949 Act.

Environmental Impact Assessment

A formal screening decision is required under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as to the need for a full Environmental Impact Assessment, principally because of the height of the structure exceeds 15ms.

Officers have concluded that no such formal assessment is necessary, having regard to an objective assessment of the potential impacts of the proposal and issued a decision accordingly under delegated powers in line with the requisite timetable.

The application, nonetheless, remains supported by a noise study and all other necessary information required to assess the acceptability of the proposal.

The principle of wind turbines on an industrial estate and contribution to decarbonising energy generation

Wind turbines provide renewable energy and reduce the reliance on fossil fuels to meet the nation's energy needs, and, correspondingly, help moderate greenhouse (carbon) emissions and militate against climate change.

The Government's National Planning Policy Framework assigns *Planning a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure.* It strongly *support(s) the transition to a low carbon future in a changing climate, and encourage(s) the use of renewable resources (for example, by the development of renewable energy).* To this end it advises that: *When determining planning applications, local planning authorities should not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions and approve the application if its impacts are (or can be made) acceptable.*

The Local Plan is generally supportive of the principle of renewable energy schemes to help manage climate change, subject to acceptable impacts under policy AP6.

The draft Local Plan also takes a very positive stance on the provision of such decentralised stand-alone renewable energy facilities.

The energy produced is modest but welcome and as stated above, Government policy cautions against questioning the need met by any such renewable energy facility.

The suitability of industrial land on a designated business park for accommodating such renewable energy facilities is not directly addressed by any of the above, but in terms of the character and function of the estate, such infrastructure is highly compatible with an industrial landscape. In this case, it is located on brownfield land and follows the precedent of the wind turbine opposite. It also reinforces the sustainability credentials of the applicant's business which recycles waste material and generates energy from residual waste and boosts the estate's image as modern and sustainable location for business.

The structure barely entails the loss of one parking space.

As such the proposal may be supported in principle.

Impact on amenity of neighbours

Wind turbines have the potential to cause noise nuisance to sensitive neighbouring properties from the movement of the rotor blades. Certainly, the

existing wind turbine is audible on a windy day, close to the site and complaints have been received over a thudding noise from a longer distance on very windy days.

However, the proposed new site, like its neighbouring predecessor, is in the heart of an industrial estate, characterised by industrial processes and activities and allied traffic movements. These give rise to a certain level of background noise which is tolerated as an inevitable function of the estate.

As for impacts on the adjacent residential areas, the nearest residential properties are remote – nearly 280 ms to the north across a railway line; just under 300 ms to the west and south and around 330 ms to the east. Crucially, the submitted Noise Assessments concludes that the proposal is unlikely to cause any annoyance to any residents, given the background levels in the area (at 34 dB at its lowest and thereby higher by 19dB(A) than the 15dB(A) predicted for the turbine) and the technical specifications of the turbine. The Environmental Health Officer concurs with this analysis.

Further reassurance over potential thudding noises at high wind velocities has been provided by the applicant who advises *that there is a rotor speed control which is self-regulating on the turbine and in winds of above 12 metres/second or 25mph the turbine blades twist to limit power in response to high rpm".* Again, the Environmental Health Officer is satisfied that this self-regulatory device will avoid repetition of the reported thudding noise problems and may be secured by condition. In any event, the Environmental Health Officer advises that remedial action may be undertaken under the Environmental Protection Act 1990.

Shadow flicker and reflected light particularly for residential properties to the north, is not expected to be an issue in this case given the distances involved; the limited number of turbines; modest size of the structure and absence of any complaints over the existing turbine. Use of a matt finish to minimise flash may be secured by condition.

Quality of the design and impact on local character, views and townscape, including national park

The new wind turbine would be located close to the existing wind turbine. The neighbouring wind turbine is appreciably taller and is the only other freestanding wind turbine in the immediate area of any significant size. There are a few other tall structures in the wider area, principally the electricity pylons running across the open land far to the north west of the site and chimneys proposed and existing on the East Worthing Industrial estate to the west and Southern Water sewage works, as well as Milford Court 10 storey tower block to the south. However, the accumulation of such tall structures is not significant as they are still relatively modest and they are widely dispersed. Certainly, they are dwarfed by tall structures such as Shoreham power station chimney which stands at 106 metres tall.

Taller, industrial type structures such as wind turbines are not out of character with the industrial landscape of the trading estate in any event and the structure is only marginally less tall than the industrial building to the rear of the site. Importantly, it is only half (18 ms) the height of the existing turbine (34 ms), opposite, which is, itself, a less than imposing and relatively unobtrusive structure.

Apart from the backs of the houses and their rear gardens directly bounding the industrial estate and from the railway bridge, views of the wind turbine would be very limited from the adjacent residential areas due to the pattern and height of buildings; presence of trees and flat topography.

Those homes closest, (e.g. Hurstfield) would have a view of the structure but the impact would not be unacceptable given the industrial estate backcloth and size and design of the wind turbine.

The setting of the National Park would not be materially harmed either because of the distance and slimness of the structure, and no objections are raised by The South Downs National Park Authority.

The design of the structure itself is utilitarian but acceptable and its lattice mast structure lends it a light and open appearance. A finish in a light colour to help it blend still further into the background may be secured by condition.
The siting in the forecourt of the site is slightly awkward but the applicants advise this is the optimal location, taking into account operational requirements and building heights and the impact on the character of what is an industrial estate is not damaged. Indeed, its prominence on the site itself, adds character and interest to the estate.

Safety impacts

The applicant has committed to use of a secure structure and fastening to avoid the risks of fall-over and attendant harm to persons and property. The Head of Building Control is satisfied that the provision made is satisfactory.

The risks from low flying aircraft has been assessed and the application is supported by an email from Shoreham Airport and the MOD.

Wildlife and other environmental impacts

The RSPB do not consider there to be any significant risk to birds from the rotor blades.

The site is close to a buffer zone between potentially contaminated and non-contaminated land. The Environmental Health Officer advises that the scope for land contamination is limited and this may be addressed by suitable avoidance and mitigation measures, secured by condition.

Conclusions

The proposal would make a modest contribution decarbonising energy generation and reducing greenhouse gases. The industrial estate is a suitable location for such a facility and the impact on neighbouring residential properties would be very limited. No harm to the setting of the South Downs National Park or wildlife would result. As such, and subject to the recommended conditions, the proposal is acceptable.

Recommendation

Grant planning permission subject to the following conditions:

1. Implement within 3 years
2. Build according to approved drawings
3. Use specified equipment and maintain
4. Agree finishes and colour
5. Contaminated land

Background Papers

Representations by members of the Public
Consultation responses by stakeholders

6th January 2014