

**THE HIGHLAND COUNCIL**

**CAITHNESS, SUTHERLAND & EASTER ROSS PLANNING  
APPLICATIONS COMMITTEE - 9 March 2010**

Agenda Item	
Report No	

**09/00403/FULCA : The Highland Council  
Wick High School, West Banks Avenue, Wick**

**Report by Area Planning and Building Standards Manager**

**SUMMARY**

**Description :** Installation of 5kw wind turbine at Wick High School, Wick.

**Recommendation - GRANT**

**Ward :** Ward 3 – Wick

**Development category :** Local development

**Pre-determination hearing :** Not required

**Reason referred to Committee :** Application submitted by the Council

**1. PROPOSED DEVELOPMENT**

- 1.1 The application seeks consent to erect a 5kw wind turbine, measuring 15.4 metres to the centre point of the hub. The turbine has a rotor diameter of 5.5 metres and consists of a dark grey turbine head with matching dark grey composite blades supported on a galvanised steel tower.
- 1.2 A supporting document was submitted with the application which includes detail on the equipment specification, estimated energy capture, noise, shadow flicker and ornithological issues.

**2. SITE DESCRIPTION**

- 2.1 Wick High School playing fields are located on the south western outskirts of Wick to the south of the High School. The playing fields are bounded by Pulteneytown Academy School grounds to the east with land currently used for agriculture to the south east adjacent to Newton Road. The turbine is located in the east corner of the site atop a low grassed embankment. Trees have been planted on the reverse face of the embankment towards the south.

#### 4. PUBLIC PARTICIPATION

4.1 Advertised : Neighbour Notification & Council Development (expired 04.12.09)

Representation deadline : 04.12.09

Timeous representations : none

Late representations : none

#### 5. CONSULTATIONS

5.1 **Environmental Health:** No objections. Recommend that the wind turbine meets the following requirements

- Noise arising from the wind turbine shall not exceed an  $L_{A90,10min}$  of 35 dB at the nearest neighbouring noise sensitive property. This shall apply at wind speeds not exceeding 10m/s, as measured at a height of 10m above ground level at the wind turbine. In the event of audible tones being generated by the wind turbine a 5dB(A) penalty for tonal noise shall be added to the measured noise level. Any measurement and assessment of noise from the wind turbine shall be carried out in accordance with The Assessment and Rating of Noise from Wind Farms (ETSU-R-97). (Available from ETSU, Hartwell, Oxfordshire, OX11 0RA)
- To prevent problems with shadow flicker, separation between wind turbines and nearby dwellings should generally be 10 times the rotor diameter. Where shadow flicker could be a problem developers should provide calculations to quantify the effect.

The Environmental Health Officer was supplied with noise data. The Environmental Health Officer is satisfied that the nearest house is far enough away not to be adversely affected by noise or shadow flicker.

5.2 **SNH:** No objections. Environmental Impact Assessment (EIA) not required. Note concerns that a significant increase in the number of such proposals may result in cumulative impacts on the natural heritage interests of the area. Construction operations if undertaken in the main bird breeding season (April-July inclusive) should ensure that there is no disturbance to nesting birds. There is evidence of European Protected Species (EPS) – bats, *Pipistrellus sp.* – within the local area. If bat mortality is detected once turbines are operational, the turbine should be removed / relocated. In such cases bat fatalities should be reported to SNH.

5.3 **Ministry of Defence:** No objections. The principal safeguarding concern of the MOD with respect to the development of wind turbines relates to their potential to create a physical obstruction to air traffic movements and cause interference to Air Traffic Control and Air Defence radar installations. If planning permission is granted, information regarding the date construction starts and ends, the maximum height of construction equipment and the latitude and longitude of the turbine, is requested.

5.4 **Highlands and Islands Airports:** No objections. The development does not infringe the safeguarding surfaces for Wick Airport.

## **6. DEVELOPMENT PLAN POLICY**

The following policies are relevant to the assessment of the application

### **6.1 Highland Structure Plan 2001**

E2 Wind energy developments

### **6.2 Caithness Local Plan**

Para 1.34; Primary Policy 4 (PP4)

## **7. OTHER MATERIAL CONSIDERATIONS**

### **7.1 Draft Development Plan**

Not applicable.

### **7.2 Highland Council Supplementary Planning Policy Guidance**

Highland Renewable Energy Strategy and Planning Guidelines

### **7.3 Scottish Government Planning Policy and Guidance**

Scottish Planning Policy

PAN 45 Annex 1 – Planning for Micro Renewables: Annex to Renewable Energy Technologies

## **8. PLANNING APPRAISAL**

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

### **8.3 Development Plan Policy Assessment**

Structure Plan policy E2 (Wind energy developments) states that “wind energy proposals will be supported provided that impacts are not shown to be significantly detrimental”. For the reasons discussed below, the proposal is not considered to present any significant impacts in terms of visual impact or impact upon residential amenity. Therefore, the proposal is considered to comply with Structure Plan policy E2.

Caithness Local Plan para 1.34 states: “Smaller scale ‘stand-alone’ schemes can help meet local needs. Potential sites for wind energy need in Caithness need to be assessed in relation to the criteria outlined in the Approved Structure Plan”.

Caithness Local Plan Primary Policy 4 (PP4) states: “The Council will not approve development unless there is an over-riding social, public health or safety reason, or for the benefits of primary importance to the environment”. Furthermore the site is identified in Wick Settlement Policy as an Amenity Area in which “The Council will safeguard these areas from development not associated with their purpose or function”. However, for the reasons discussed below, the proposal is not considered to present any significant impacts. Therefore, the proposal is considered to comply with Local Plan policy PP4.

## 8.4 Material Considerations

### Visual impact

The turbine is located in the south west corner of the site adjacent to the playing fields boundary. The site is slightly elevated being positioned atop the embankment along the south west edge of the all-weather pitch. The immediate area is relatively flat, with a break in the slope beyond the playing fields rising towards Pulteneytown Academy and Newtonhill to the south. The skyline in the location of the turbine is characterised by tall linear forms in the shape of the floodlighting for the all-weather pitch and rugby goalposts. From Newton Road the turbine will be in a slightly elevated position in comparison with the adjacent floodlights for the all-weather pitch. The floodlights are of a comparable height to the wind turbine tower. The form of the turbine is not dissimilar to these tall linear structures. The visual impact is considered to be limited to the area immediately surrounding the turbine, with no significant impact upon the wider landscape.

### Impact upon residential amenity

**Noise impact** – Noise is most associated with large scale wind turbines and most of which emanates from the gearbox. Noise from smaller turbines is generally minimal. The 5kw turbine is constructed without a gear box, therefore the possibility of noise is greatly reduced. At certain wind speeds (4 to 8 m/s) the turbine will contribute minimally (maximum 5dB) to an increase in current background noise for neighbouring properties, which in this instance are 120 metres away. At this distance, the contribution to background noise is not expected to be noticeable.

A condition can be attached to the planning permission which sets a maximum noise output and allows for the turbine to be shut down and not operated again until mitigation measures to reduce noise levels have been agreed and implemented.

**Shadow flicker** – Under certain combinations of geographical position, time of day and time of year, the sun may pass behind the rotor and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off and the effect is known as "shadow flicker". It occurs only within buildings where the flicker appears through a narrow window opening. The seasonal duration of this effect can be calculated from the geometry of the machine and the latitude of the potential site. This is an issue most often associated with large scale turbine applications. To prevent shadow flicker, as a general rule, separation between the turbine and the nearest residential property should be ten times the rotor diameter.

There are no properties within the distance specified, therefore shadow flicker is not considered as an issue.

## 9. CONCLUSION

- 9.1 The proposal complies with Structure Plan policy E2, which states that wind energy developments should be supported provided that impacts are shown not to be significantly detrimental. The proposal also complies with national policy and guidance, which seeks Planning Authorities to support the development of a diverse range of renewable energy technologies, including small scale projects. There is not considered to be any significant impact on the visual qualities of the area or the amenity of the residential area. Therefore, the recommendation is to grant permission subject to the conditions below.

## 10. RECOMMENDATION

**Action required before decision issued** N

Notification to Scottish Ministers N

Notification to Historic Scotland N

Conclusion of Section 75 Agreement N

Revocation of previous permission N

**Subject to the above**, it is recommended the application be **Granted** subject to the following conditions.

1. The development to which this planning permission relates must commence within THREE YEARS of the date of this decision notice.

**Reason:** In order to accord with the statutory requirements of the Town and Country Planning (Scotland) Acts.

2. No development shall start on site until the completed Notice of Initiation of Development (NID) form attached to this planning permission/approval of matters has been submitted to and acknowledged by the Planning Authority.

**Reason:** In order to accord with the statutory requirements of the Town and Country Planning (Scotland) Acts.

3. Upon completion of the development the completed Notice of Completion form attached to this decision notice shall be submitted to the Planning Authority.

**Reason:** In order to accord with the statutory requirements of the Town and Country Planning (Scotland) Acts.

4. Noise arising from the wind turbine shall not exceed an LA90,10min of 35 dB at the nearest neighbouring noise sensitive property. This shall apply at wind speeds not exceeding 10m/s, as measured at a height of 10m above ground level at the wind turbine. In the event of audible tones being generated by the wind turbine a 5dB(A) penalty for tonal noise shall be added to the measured noise level. Any measurement and assessment of noise from the wind turbine shall be carried out in accordance with The Assessment and Rating of Noise from Wind Farms (ETSU-R-97). (Available from ETSU, Hartwell, Oxfordshire, OX11 OR.) In the event of noise levels exceeding the permitted level the turbine shall be shut down and not operated again until mitigation measures to reduce the noise levels to below the permitted level have been submitted by the developer, agreed in writing by the Planning Authority and thereafter implemented by the developer.

**Reason:** In the interests of amenity.

#### **FOOTNOTE TO APPLICANT RELATIVE TO APPLICATION 09/00402/FULCA**

Breeding Birds: Any construction works carried out between the period April-July inclusive should ensure there is no disturbance to nesting birds.

European Protected Species – Bats: SNH advise that there are records of pipistrelle bat near Wick. SNH recommends that careful consideration is given to the turbine location with reference to the legislation on European Protected Species. Further information and advice regarding bats and micro-renewables can be found in the following guidance on SNH's website <http://www.snh.org.uk/strategy/renewables/sr-mr01.asp>

If bat mortality is detected once the turbine is operational, the turbine should be removed/relocated as soon as practical. Any bat fatalities associated with micro wind turbines should be reported to SNH.

Ministry of Defence: Prior to the commencement of development, confirmation must be given to Defence Estates Safeguarding at Defence Estates, Safeguarding - Wind Energy, Defence Estates, Kingston Road, Sutton Coldfield, West Midlands, B75 7RL of

- the date construction starts and ends
- the maximum height of construction equipment
- the latitude and longitude of the wind turbine

Signature: Allan J Todd

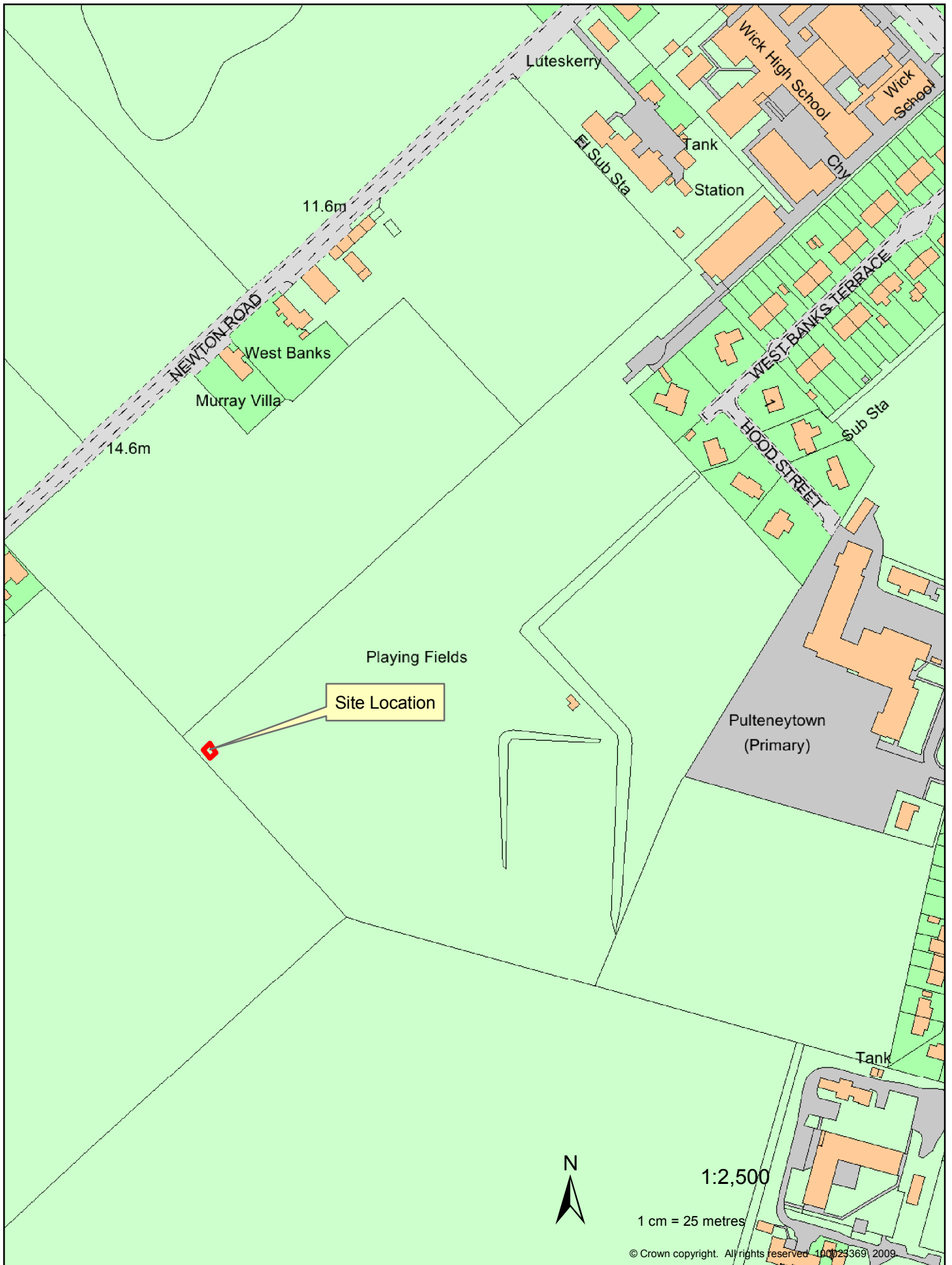
Designation: Area Planning & Building Standards Manager Caithness, Sutherland and Easter Ross

Author: David Barclay

Background Papers: Documents referred to in report and in case file.

Relevant Plans: Plan 1 – Location plan

Plan 2 – Site plan and elevations



09/00403/FULCA  
 Installation of a 5Kw wind turbine with a hub height of 15.4m  
 at Wick High School, West Banks Avenue, Wick.

The Highland Council  
 per Cdmm (UK) Ltd  
 36 Longman Drive  
 Inverness  
 IV1 1SU

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