Application for Determination

Parish Hickling

Reference BA/2011/0360/FUL Target date 6 January 2012

Location Norfolk Wildlife Trust, Hickling National Nature Reserve, Stubb

Road, Hickling

Proposal Phased erection of a 7.5m tower wind-powered water pump

Applicant Mr Kevin Hart (Norfolk Wildlife Trust)

Recommendation Approve subject to conditions

Reason for referral to Committee

Broads Authority involved in project partnership and

recommendation is a departure from the Development Plan

1 Description of Site and Proposals

- 1.1 The application site is within the National Nature Reserve at Hickling. The Hickling Broads and Marshes reserve covers over 150 hectares and the application concerns the area to the east of Hickling Broad which is comprised of reedbeds and marshes. The site is covered by Site of Special Scientific Interest, Special Protection Area, Special Area of Conservation and Ramsar designations.
- 1.2 Beyond the car park and visitor centre which are accessed from Stubb Road, bird hides, one holiday dwelling and Stubb Mill are the only built features in this otherwise natural/semi-natural environment. There are few trees or tall vegetation, resulting in long views across and beyond the reserve.
- 1.3 Permissive paths provide pedestrian access within the reserve area around the application site, including Whiteslea Lodge Track which follows an approximately north-south route from the visitor centre to the isolated holiday dwelling at Whiteslea Lodge.
- 1.4 The application proposes the phased erection of a 7.4 metre high tower windpowered water pump (the tower height has been rounded up to 7.5 metres in the description of the application).
- 1.5 The wind pump is proposed to be erected approximately 37 metres to the east of Whiteslea Lodge track in a position approximately 450 metres to the southeast of the visitor centre and 500 metres from Hickling Broad. BESL

have recently undertaken flood alleviation works in this area and a new flood bank and soke dyke occupy the space between the track and proposed site of the wind pump.

- 1.6 The proposal is to erect a 4.3 metre tower for the first five years. This would sit on a concrete base housing the pump chamber that would measure 1.4 metres wide, 2.4 metres long and 2 metres deep. The 4.3 metre tower would be of a lattice construction in galvanised steel. The pump would have four aluminium blades with a diameter of 3.6 metres and a tail unit extending 2.9 metres horizontally from the rear of the top of the tower. Timber post and rail fencing is proposed around the pump to create a safety enclosure.
- 1.7 The pump is proposed to circulate and manage water around the drainage network to improve water quality as part of the Upper Thurne Water Level Management Plan which seeks to restore and maintain the international designated features of the site.
- 1.8 Within the reserve the existing grazing marshes are planned to be developed into reedbeds. It is predicted that as the reed establishes it will grow to a height that will impede the airflow to the pump and reduce its efficiency. It is therefore proposed to increase the height of the tower from the initial 4.3 metres to 7.4 metres after approximately five years. The phased approach is also proposed to mitigate the visual impact of the tower by assimilating it more gradually into the landscape.

2 Site History

BA/1997/2108/HISTAP Reprofiling of dykes, installation of bunds and water control structures associated with the rehabilitation of reedbeds – Approved subject to conditions.

BA/2011/0020/FUL Flood defence improvements consisting of 1.1km of floodbank strengthening and 1.9km of new setback floodbank, internal bunds and other works to facilitate its management as a wetland nature reserve – Approved subject to conditions.

3 Consultation

Broads Society - No objections.

Parish Council – The councillors did not have any objections in principle, but felt that the BA wildlife officer's reservations about one of the proposed sitings should be supported.

District Member – No response.

Natural England – Natural England would like to endorse this application, which addresses water level management issues arising from the wider Hickling wetland creation project which we fully support. As the works are being undertaken under the aegis of the Norfolk Wildlife Trust, we would

expect best practice to be followed during the construction phase in relation to any protected species within the application area, notably otters, water voles, reptiles and bats. We do not consider that a tower of this type in this location poses a significant threat to bird populations, or would have an unacceptably adverse impact on landscape.

Environment Agency – To be reported orally.

Norfolk County Council Historic Environment Services – No response.

Representations

None received.

4 Policies

4.1 Development Management Policies DPD adopted November 2011

DP1 – Natural Environment All development should:

- (a) protect biodiversity value and minimise the fragmentation of habitats;
- (b) maximise opportunities for restoration and enhancement of natural habitats;
- (c) incorporate beneficial biodiversity and geological conservation features where appropriate; and
- (d) include green infrastructure where appropriate.

Development proposals where the principal objective is to restore or create new habitat, particularly where these contribute to the Broads Biodiversity Action Plan or enhance geodiversity, will be supported.

Where it is anticipated that a development could affect the integrity of a Special Protection Area (SPA), Special Area of Conservation (SAC) or Ramsar Site, either individually or cumulatively with other development, an Appropriate Assessment under the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations), specific to the development, will be undertaken. If adverse impacts on the integrity of the site and its qualifying features are predicted, measures to mitigate for these effects will be implemented. If it is not possible to mitigate for adverse effects, the development will not be permitted.

Development that may affect the special interest of a Site of Special Scientific Interest (SSSI) which is not also subject to an international designation, or a National Nature Reserve, will only be permitted in exceptional circumstances where:

(e) the benefits of the development clearly outweigh the impact of the development on the features of the site and the contribution that it

- makes to the network of habitats and/or geological features in England; and
- (f) the detrimental impact of the proposal on biodiversity interest and/or geodiversity has been minimised through the use of all practicable prevention, mitigation and compensation measures.

Development that would have an adverse impact on a Local Nature Reserve, County Wildlife Site, a habitat identified in the UK or Broads Biodiversity Action Plan (BAP), or a local site of geodiversity, including peat soils, will only be permitted in exceptional circumstances, having regard to:

- (g) the international, national, regional and local importance of the site in terms of its contribution to biodiversity, scientific and educational interest, geodiversity, visual amenity and recreational value; and
- (h) the benefit of the proposed development in relation to the overriding public interest.

Development that would be likely to have an adverse impact on a legally protected species will only be permitted where mitigation measures are implemented to maintain the population level of the species at a favourable conservation status within its natural range. Habitat and species enhancement will be sought, provided they will accord with the importance of the Broads protected area. Where the proposed development would impact upon European protected species or habitats it must also be demonstrated that:

- (i) the development is necessary for reasons of overriding public interest; and
- (j) there are no satisfactory alternatives, in terms of the form of, or location for, the development, that would have a lesser impact on the species or habitats.

DP2 – Landscape and Trees

Development will be permitted where it would not have a detrimental effect on, or result in the loss of, significant landscape heritage or a feature of landscape or ecological importance, including trees, woodlands or hedgerows.

The landscaping of new development should:

- (a) reflect the local landscape character, having regard to the findings of the Authority's Landscape Character Assessment;
- ensure that biodiversity is taken into account in the planning stage to create an environment of high amenity and nature conservation value and contribute to the Broads Biodiversity Action Plan;
- (c) where appropriate, maintain, and enhance, restore or add to geodiversity;
- (d) wherever possible, support adaptation to climate change, for instance by incorporating Sustainable Drainage Systems (SUDs) and providing shade and shelter;
- (e) have regard to its impact on navigation.

Development proposals should normally be accompanied by:

- (f) an ecological survey as required by the nature and scale of the proposal;
- (g) a landscaping scheme that details new planting and including, when appropriate, replacement trees of a value commensurate or greater to that which is lost, boundary treatments and proposals for ecological enhancement;
- (h) an arboricultural assessment detailing the measures to be put in place to protect trees and hedgerows during construction works and providing justification for the removal of any trees or hedgerow;
- (i) details of landscaping maintenance arrangements; and
- (j) a method statement for any land raising and/or dispersal of excavated or dredged materials.

In exceptional circumstances, where the landscape, biodiversity, navigation, social or economic benefits of a proposal are considered to outweigh the loss of a feature, impact on landscape character, or existing habitat, development may be permitted subject to adequate compensatory measures being implemented. However, wherever possible the design and layout of the development should be configured to make provision for the retention, enhancement or restoration of these features.

DP4 - Design

All development will be expected to be of a high design quality. Development should integrate effectively with its surroundings, reinforce local distinctiveness and landscape character and preserve or enhance cultural heritage. Innovative designs will be encouraged where appropriate.

Proposals will be assessed to ensure they effectively address the following matters:

- (a) **Siting and layout:** The siting and layout of a development must reflect the characteristics of the site in terms of its appearance and function.
- (b) Relationship to surroundings and to other development:

 Development proposals must complement the character of the local area and reinforce the distinctiveness of the wider Broads setting. In particular, development should respond to surrounding buildings and the distinctive features or qualities that contribute to the landscape, streetscape and waterscape quality of the local area. Design should also promote permeability and accessibility by making places connect with each other and ensure ease of movement between homes, jobs and services.
- (c) **Mix of uses:** To create vitality and interest, proposals should incorporate a mix of uses where possible and appropriate.
- (d) Density, scale, form and massing: The density, scale, form, massing and height of a development must be appropriate to the local context of the site and to the surrounding landscape/streetscape/waterscape character.

- (e) Appropriate facilities: Development should incorporate appropriate waste management and storage facilities, provision for the storage of bicycles, connection to virtual communication networks and, if feasible, off-site provision for a bus shelter and/or a bus service serving the development.
- (f) **Detailed design and materials:** The detailing and materials of a building must be of high quality and appropriate to its context. New development should employ sustainable materials, building techniques and technology where appropriate.
- (g) **Crime prevention:** The design and layout of development should be safe and secure, with natural surveillance. Measures to reduce the risk of crime and anti-social behaviour must however not be at the expense of overall design quality.
- (h) Adaptability: Developments should be capable of adapting to changing circumstances, in terms of occupiers, use and climate change (including change in water level). In particular, dwelling houses should be able to adapt to changing family circumstances or ageing of the occupier and commercial premises should be able to respond to changes in industry or the economic base.
- (i) Flood Risk and Resilience: Development should be designed to reduce flood risk but still be of a scale and design appropriate to its Broads setting. Traditional or innovative approaches may be employed to reduce the risks and effects of flooding.
- (j) **Biodiversity:** The design and layout of development should aim to maintain, and enhance, restore or add to biodiversity.

DP5 – Historic Environment

New development will be expected to protect, preserve or enhance the fabric and setting of historic, cultural and architectural assets that give the Broads its distinctive character.

Development that would affect a Heritage Asset, including a Listed Building, Conservation Area, Registered Park and Garden, Scheduled Monument or its setting, or a locally listed asset, will be considered in the context of national policy (currently PPS5), having regard to the significance of the asset. Harm to or loss of significance to a Designated Heritage Asset will only be permitted in exceptional circumstances.

Proposals for development on sites that are of known or suspected archaeological interest must be accompanied by an archaeological field evaluation that determines the significance of the archaeological remains and assesses the implications of the development on these remains. Development that would adversely affect important archaeological remains will only be permitted where:

- (a) The benefits of the development outweigh the harm to the remains and the value of retaining the remains in situ;
- (b) The degree of disturbance has been minimised; and

(c) Satisfactory provision is made for the evaluation, excavation, recording and interpretation of the remains before the commencement of development.

Where development can take place and still preserve important features in situ, planning conditions will be sought to secure the implementation of effective management plans that ensure the continued protection of those features.

DP8 – Renewable Energy

Renewable energy proposals should be of a scale and design appropriate to the locality and should not, either individually or cumulatively, have an unacceptable impact on the distinctive landscape, cultural heritage, biodiversity or recreational experience of the Broads. The impact of ancillary infrastructure, including power lines, sub-stations, storage buildings, wharves and access roads, will form part of the evaluation.

Wherever possible, renewable energy proposals should utilise previously developed sites and result in environmental improvements over the current condition of the site.

DP28 – Amenity

All new development, including alterations and extensions to existing buildings, will be expected to provide the occupiers/users with a satisfactory level of amenity. Development will not be permitted if it would have an unacceptable impact on the amenity of existing or potential neighbouring properties or uses. When considering the impact of a development on amenity, consideration will be given to:

- (a) overlooking;
- (b) overshadowing:
- (c) visual amenity;
- (d) light pollution:
- (e) airborne pollutants;
- (f) odours;
- (g) noise pollution and disturbance; and
- (h) provision of a satisfactory external amenity space to residential properties.

Where existing amenity is poor, improvements will be sought in connection with any development.

DP29 – Development on sites with a High Probability of Flooding Development will only be permitted in Environment Agency Flood Zones 2 and 3 and those areas deemed to be at risk of flooding in the Authority's Strategic Flood Risk Assessment, where appropriate and when the Sequential Test and Exception Test (parts (a), (b) and (c)) where applicable, as set out in PPS25, have been satisfied. Development proposals should be supported by a Site Specific Flood Risk Assessment.

The Flood Risk Assessment will need to meet the requirements of PPS25 and give consideration to the following:

- (a) whether the proposed development will make a significant contribution to achieving the objectives of the Core Strategy and other policies of the Development Plan;
- (b) whether the development involves the redevelopment of previously developed land or buildings and would result in environmental improvements over the current condition of the site;
- (c) whether appropriate measures to ensure resilience to potential flooding have been incorporated into the development;
- (d) whether appropriate measures to reduce the risk of flooding (on and offsite), including sustainable drainage systems with effective attenuation of flows to adjoining land or waterways, have been incorporated;
- the impact of the proposal on flood risk elsewhere and on the effectiveness of flood alleviation or flood defence schemes; and
- (f) where the proposal involves the replacement of an existing building, whether the replacement building is located and/or designed without increasing flood risk and, where possible, to reduce the risks and effects of flooding.

The relocation of existing development to an undeveloped site with a lower probability of flooding will be permitted where:

- (g) the vacated site would be reinstated as naturally functioning flood plain;
- (h) the benefits of flood risk reduction outweigh the benefits of leaving the new site undeveloped; and
- (i) the development of the new site is appropriate when considered against the other policies of the Development Plan.

Surface water run-off proposals should address the requirements of the Flood and Water Management Act 2010.

4.2 Broads Core Strategy adopted September 2007

CS1 – Landscape

Development and changes in land use / management must ensure that all aspects of the environmental and cultural assets of the Broads distinctive landscape are protected, enhanced and restored.

Proposals should ensure opportunities for positive impacts on the following core assets have been addressed and adverse impacts avoided:

- (i) the defining and distinctive qualities of the varied landscape character areas formed by the built and natural environment;
- (ii) tranquillity and wildness as part of the Broads experience;
- (iii) the value and integrity of nature conservation interest; and
- (iv) the character, appearance and integrity of the historic and cultural environment.

Opportunities to mitigate the visual impact of currently intrusive features should be sought.

CS6 – Historic and Cultural Environments

The archaeology of the Broads will be better understood, protected and enhanced by:

- (i) protecting existing archaeology from inappropriate development or change;
- (ii) raising awareness of potential archaeology through the identification of likely sites/finds;
- (iii) the adoption of methodology and procedures for the notification, recording and interpretation of unanticipated finds; and
- (iv) encouraging the interpretation of archaeology.

CS20 – Rural Sustainability

Development within the Environment Agency's flood risk zones will only be acceptable when it:

- (i) Is compatible with national policy and when the sequential test and the exception test, where applicable, as set out in PPS25, have been satisfied:
- (ii) Is demonstrated that it is necessary to support the social and economic needs of the local community:
- (iii) Would not increase flood risk elsewhere; and
- (iv) Would not affect the ability for future flood alleviation projects to be undertaken.

5 Assessment

- 5.1 In designing this proposal, consideration was given to a number of forms of provision and it has been concluded that on the basis of efficiency, cost, sustainability, climate change adaptation, noise, visual impact and health and safety, a wind pump would be preferable to other electrical or renewably powered options. In principle, the use of a renewable energy source is welcomed and it is appreciated that a wind pump has been assessed to be the most appropriate and practical option for the applicants. In assessing this proposal it is necessary to consider the biodiversity, landscape, amenity, flood risk and archaeological impacts.
- 5.2 The objective of the proposal is to improve water quality for the benefit of the designated features of the site. It is considered that the construction work could potentially impact on water voles, fish and reptiles and that the operation of the pump could affect bats and birds. Mitigation measures have been proposed in respect of the construction period, which include timing the work outside the bird breeding season, cutting back vegetation and following Natural England protocols. The proposed location of the pump is an area away from any linear landscape features which would be used by bats and therefore the risk of bat strike is considered to be low, however monitoring of the pump once in operation is proposed and

considered necessary. The Parish Council's concerns about impact on wildlife relate to an alternative site that has been discounted. Natural England have endorsed the application and it is not considered that the biodiversity value or designated features of the site would be significantly adversely affected, subject to conditions in respect of appropriate mitigation measures and monitoring.

- 5.3 Whiteslea Lodge is the only property within sight of the proposed pump and it is not considered that its installation would adversely affect the occupants. The Reserve is, however, a popular destination with bird watchers and walkers and the naturalness, wildness and tranquillity are significant attractions for such visitors. The pump would be adjacent to the track which, whilst not a public right of way, is one of the principal routes through the Reserve. Although the pump is not considered to adversely affect wildlife, it is considered that its presence may diminish the enjoyment of visitors to the Reserve. It is noted that the application makes reference to possible use of the pump as an educational tool and practical application of sustainable engineering to protect the environment and these positive impacts to visitors are also noted. It is considered that the visual impact of the pump would be wider than the impact of any noise or other disruption to the guiet enjoyment of the Reserve, and the impact of the proposal on the amenity of the Reserve's users is not considered to be unacceptable.
- 5.4 The pump is proposed to manage water levels within the drains, maintaining levels in the winter and reserving sufficient water in the system for summer use. Water levels within the Reserve are managed by the IDB pump at Stubb Mill and any excess water can be pumped away. The installation of the pump chamber would require the excavation of a relatively small amount of material which is proposed to be spread on the adjacent land. This is acceptable.
- 5.5 At the pre-application stage it was highlighted that there is potential for previously unidentified archaeological assets to be present in this area. In response, it is proposed to employ an archaeologist with an appropriate watching brief and this is considered necessary to condition this should permission be granted.
- The above notwithstanding, the key issue in the consideration of the application is impact on landscape. In this regard, Policy DP8 of the Development Management Policies DPD requires renewable energy proposals to be appropriate in scale and design to the locality and not to have an unacceptable landscape impact. In addition, Policy DP2 only allows development where it would not have a detrimental effect on, or result in the loss of significant landscape heritage or a feature of landscape importance. This policy does also recognise that there may be exceptional circumstances where the benefits of a proposal outweigh the landscape impact or loss of a landscape feature and allows that development may be permitted where adequate compensatory measures can be implemented.
- 5.7 The Authority's Landscape Character Assessment notes the enduring wilderness, openness and naturalness of the landscape in this area (Upper

Thurne, Marsh, Broads and Fens) and the absence of any significant built development. Quietness and tranquillity characterise the Reserve and in landscape terms it is a greatly valued area. Tall, vertical features are not common in this landscape, with the exception of Stubb Mill. It is noted that the large scale wind turbines at Somerton are also visible on the horizon from the site but these are not considered to have any significant effect on the valued characteristics of the Reserve. It is recognised that small-scale wind pumps similar to that proposed here have been installed at other locations within the Broads for similar purposes. However, the landscape in this particular locality is considered to be one of few remaining "pristine" landscapes in the Broads and is therefore more vulnerable to the introduction of such structures.

- 5.8 The openness and undeveloped nature of the marshes means that the introduction of any new structure will have a visual impact on the area and potentially disturb the sense of tranquillity and wilderness. The potential impact of the introduction of a single, tall structure has been recognised in the proposal with the phasing of the increase in height.
- 5.9 The proposal, as submitted, is considered to result in adverse impacts on the local landscape character and visual amenity. Although these impacts are considered to be localised and largely contained within the Reserve, the impact on the valued landscape characteristics is considered to be significant. It is recognised that the wind pump, although proposed on a permanent basis, would effectively be a temporary structure that could be removed in future and the landscape restored to its current condition.
- 5.10 Policy DP2 states that development should not be permitted where it would have a detrimental landscape impact. It does, however, recognise that there may be exceptional circumstances where the benefits of a proposal would outweigh the impact on landscape character and states that development may be permitted in such circumstances if adequate compensatory measures can be implemented. Effectively, this is a two-stage assessment, firstly the overriding benefits and secondly the compensatory measures. In this case it is considered that the proposal would offer overall benefits in terms of improving water quality, facilitating management of water levels and maintaining the designated features of the site. It is also noted that the option of a wind powered pump also provides sustainability benefits over alternative options (e.g. an electric or diesel powered pump). If these benefits are considered to outweigh the landscape impact, then adequate compensatory measures would also be required if the proposal is to be considered in accordance with Policy DP2.
- 5.11 Compensatory measures have not been proposed in the application. The phased erection of the full height tower has been proposed to mitigate the impact of the installation, but this would not compensate for the adverse landscape impact and it is not considered that there are measures available that would provide adequate compensation. The proposal can therefore not be considered to be in accordance with Policy DP2. On this basis, the impact on the landscape is such that the application should be refused.

5.12 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications should be determined in accordance with the Development Plan unless there are other material considerations which indicate otherwise. In this case, whilst the policy position is clear, there are other material considerations which must be given appropriate weight. These include the overall purpose of the development, which is to improve management of an area of international importance for its conservation value. the sustainability rating of the proposed solution and the lack of alternative options on this isolated site. It is also noted that an alternative location for the wind powered water pump was considered at a pre-application stage, but discounted. The impacts here were more unacceptable than the proposed site. The support of Natural England for the proposal is also noted. Taking the above into account, it is considered that there are strong material considerations to weigh against the provisions of the Development Plan and whilst the assessment is finely balanced, it is concluded on balance that these would allow the granting of planning permission as a departure from the Development Plan policy.

6 Conclusion

- 6.1 The proposal to erect a wind powered water pump on a phased basis over 5 or more years is considered to be acceptable in terms of the impacts on wildlife, amenities and flood risk and the design and materials are considered to be appropriate. The proposed site is considered to be a valuable Broads landscape characterised by the absence of built development, openness, naturalness and tranquillity. It is therefore considered that the introduction of any new structure would adversely affect these qualities and that the proposed wind pump would compromise local landscape character and the visual amenity of the area.
- 6.2 The pump is proposed as part of the long-term management plan for this internationally recognised habitat and alternative options to achieve this have been discounted by the applicants. Policy DP2 of the Development Management Policies DPD recognises that there may be circumstances where an adverse landscape impact can be accepted if the other benefits are considered to outweigh it and the impact can be compensated. The proposed phased increase in the height of the pump is welcomed in recognition of the adverse landscape impact, but is not considered satisfactory mitigation and there are not considered to be adequate compensatory measures available in this instance.
- On balance, however, given the absence of appropriate alternatives and the objectives of the proposal to restore and improve the designated features of the site, it is considered that there are considerable benefits in favour of the proposal. The judgement as to whether these benefits outweigh the adverse landscape impact is a finely balanced one, however it is noted that the pump is proposed as part of the long-term management of the site and that the landscape impact would not necessarily be permanent and would not be irreversible. On balance, it is therefore considered that the proposal can be recommended for approval as a departure from policy.

6.4 If the Local Planning Authority were minded to grant planning permission it will be necessary to re-advertise the application as a 'departure'

7 Recommendation

Approve subject to conditions:

- (i) Standard time limit.
- (ii) In accordance with submitted plans.
- (iii) In accordance with proposed ecological mitigation measures.
- (iv) Archaeological watching brief to be submitted.
- (v) Bat and bird strike monitoring scheme to be submitted.

8 Reason for Recommendation

Although the proposal cannot be considered to be in accordance with Policy DP2 of the adopted Development Management Policies DPD (2011), it is considered to be in accordance with Policies DP1, DP4, DP5, DP8, DP28 and DP29 and Policies CS1, CS6 and CS20 of the adopted Core Strategy (2007).

List of Appendices: Location Plan

Background papers: Application File BA/2011/0360/FUL

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Date of Report: 15 December 2011

