

Landscape Comments

1) Methodology

Landscape, Visual and Cumulative effects methods of assessment is based on Guidelines for Landscape and Visual Assessment Second Edition (Landscape Institute and Institute of Environmental Management and Assessment 2002) and Landscape Character Assessment for England and Scotland (Countryside Agency and Scottish National Heritage 2002)

Future assessment will include guidance from the recently published Landscape and Visual Assessment third edition.

Landscape and Visual effects result when development alters the existing landscape character, landscape patterns and scale, or sense of place (Landscape Effects) or affects receptors – people within the landscape - and their experience and view of the landscape (visual Effects).

Landscape and Visual effects can be assessed as Positive, Adverse or Neutral – the Nature of the effect.

Landscape effects are graded as High – Medium or Low levels of landscape sensitivity combined with Substantial- Moderate or Slight changes in landscape character combining to give Very Substantial, Substantial, Moderate or Minor landscape effects.

Visual effects consider the sensitivity of the receptor – High, Medium or Low combined with the magnitude of the change of view graded – Substantial, Moderate or Slight to give a level of Significance Very Substantial, Substantial, Moderate or Minor visual effects.

The Landscape

The proposed development lies in the refer to Chalkland Landscape area, as defined by the Cambridgeshire landscape guidelines, and in the 'East Anglian Chalk' landscape character area, as defined by Natural England's national character areas.

This is a large scale landscape with an ordered pattern of large or very large fields, fields and woodland separated by low mechanically trimmed hedges or open ditches and featuring relatively few hedgerow trees. The landscape pattern becomes more detailed at the edge of settlements and in the stream valleys.

The area is generally sparsely settled, with settlements small and relatively compact. Long views are possible from chalk ridges to the north and south of the development site.

Some infrastructure is present close to the development site, notably the A 505, the main railway line and industrial development at the edge of Royston. Much of the area remains tranquil however, with opportunities to get away from transport corridors and built up areas on the numerous lanes and public rights of way.

Landscape effects

The Landscape effects will generally lessen with distance from the development site. Landscape effects will be most keenly felt close to the proposed development or where the development will affect the landscape scale patterns and character, and the setting of villages, features or historic and landscapes.

Viewpoints have been submitted which demonstrate the probable Landscape effects of the development close to Littlington.

Viewpoints 1 and 3 and extra information viewpoint 5 show the turbines as dominating the approach to the village, the village centre itself (here far more of the turbines would be visible than suggested in viewpoint 3) and the tranquil landscape west of the village. The turbines would be set between 600m and 1500m from these viewpoints.

Here the Landscape has a medium level of sensitivity to change, - a tranquil rolling landscape with a small scale and detailed landscape pattern around the village itself - and the magnitude of the effects of the development would be major — The scale and movement of the turbines, would completely dominate and alter the present local landscape character.

This would result in a Very Substantial or Substantial level of harm to Littlington and its surrounding landscape, with little or no opportunity for mitigation of the effects.

Further from the village the landscape effects will also be very substantial or substantial. Viewpoints 4 and extra information viewpoint B Show the possible landscape effects of the turbines from elevated positions on Therfield Heath.

Here the wide and open landscape is relatively free of infrastructure and clutter, and what there is (the railway and the A505) take the form of low, horizontal forms in the landscape mid-ground. Again the landscape is sensitive to change, and almost entirely rural in character, from the heath dropping away in the foreground to the open patchwork of agricultural land, small woodlands and shelter belts to the more distant chalk ridge between Haslingfield and Croydon.

The turbines would be set in a larger landscape, but due to their scale and movement and industrial nature, would form a substantial and dominant landscape feature. Again there would be no mitigation measures possible to reduce the landscape effects.

3) Visual effects

The level of sensitivity to receptors of visual effects are graded high medium and low. Receptors of high sensitivity include people using the public right of way network, local

residents with clear or close views of the development, and people involved in outdoor recreation.

Views from the centre, and south and west edges of the village will vary in their magnitude, but some will cause very substantial or substantial harm to views.

From the elevated viewpoints on Therfield Heath, and from viewpoints on the Hamcarlow Way South of Littleington, the proposed turbines will dominate the view. They will cause particular harm at these points as the heath and the surrounding footpaths and bridleways are a popular recreation area, which people visit, at least in part, for the specific views available from the heath and local rights of way.

The proposed development would alter the views over a wide area, which visitors would experience over extended periods of time – with the development being either constantly in view, or experienced as a series of viewpoints. Visual effects would be very substantial or substantial, with little scope to reduce the harm by mitigation.

Cumulative effects

The visual and landscape effects of a wind farm development can combine with existing and proposed wind farm developments to produce a cumulative effect.

Cumulative impacts can be defined as the additional changes caused by the proposed development in conjunction with other similar developments, or as the combined effect of a number of developments. Assessment of Cumulative effects should take account of existing wind farms, and those which are consented or at application stage.

Cumulative effects will include both Landscape and Visual effects, and can be experienced in several ways – As effects on the physical landscape fabric, or as effects on the landscape character - either as combined visibility where two or more developments exist in the same view, or where the developments are experienced as a as a sequence of landscape and visual effects.

At The proposed Highfield development both combined and sequential effects can be seen.

At Therfield Heath the existing wind farm at Langford, east of Biggleswade can be seen clearly on the horizon. These turbines would appear as a backdrop to the proposed development, marking space and foreshortening the views between the two, with the Highfield development dominating.

The Wadlow wind farm development is also visible from Therfield Heath. The view from the public car park, for example, would encompass the Wadlow development (distant) Highfield (close) and Langford (Middle distance). The entire horizon would be affected to a greater or lesser extent by wind farm development.

These developments would also be experience sequentially. For example on a journey from east to west along the A505 there would be varying degrees of Landscape and Visual effects, from Very Substantial to minor, associated with wind farm developments for much of the journey.

Significant Cumulative Landscape and Visual effects will also be evident west of Highfield. In the Guilden Morden area, to the north and south of the village, both the Langford and Highfield developments will both be clearly visible from many viewpoints, with one or the other effecting the landscape and viewpoints to varying degrees producing effects from Very Substantial to Minor as the traveller moves between the two developments.

Conclusion

The proposed Highfield wind farm development will have significant negative Landscape and Visual effects over a wide area of South Cambridgeshire and neighbouring districts.

In the villages close to the site and their immediate surroundings, the development will dominate and alter the landscape character and the views experienced by people living in and travelling through the area. Harm to the existing landscape character and views will affect both the villages themselves, and their setting in the wider landscape.

The development will significantly reduce the present landscape character, views and amenity value of a valued and popular recreation area, and many associated public rights of way.

The development will also form a visual bridging point between the existing Wadlow and Langford developments. Effects will be particularly evident between Langford and the proposed Highfield development.

In my opinion the proposed development will cause unacceptable levels of harm to the local landscape character, to the villages, their setting, and the wider landscape, and to the amenity of local people and visitors. There will be few opportunities for mitigation to reduce the Landscape and Visual effects of the development.

S/0439/12/FL

Land at Highfield Farm, west of Royston Road, Littlington

Installation of; five wind turbines of maximum height to tip of 100m; a single 60m lattice tower meteorological mast; on-site substation; access tracks; hard standing areas; external transformers; temporary construction compound; and associated infrastructure.

Engina Documents

Design and Access Statement

Written Statement Chapter 9 Landscape and Visual impact Assessment

Appendix 9 Methods of Landscape and Visual assessment

LANDSCAPE COMMENTS

Landscape Character

- 1) The Cambridge shire landscape guidelines refer to the area as the Chalklands Landscape area - This is a large scale landscape with an ordered pattern of large or very large fields, fields and woodland separated by low mechanically trimmed hedges or open ditches and featuring relatively few hedgerow trees.
- 2) The geometrical field pattern results from downland enclosure, and although some enclosure hedging has been lost in recent times, the open rolling landscape and field patterns have largely remained constant.
- 3) The eastern part of this area has a number of woodlands and shelter belts which help to break up the long distant views and give some form and character. The simple, open landscape, affords long distance, panoramic views in many areas
- 4) It is a fairly sparsely settled landscape, particularly to the south and east, with villages centred either on the river valleys or as strings of settlement on the spring line of the chalk slopes. Villages tend to be linear in form particularly on the higher ground. This is a rural and tranquil landscape which can feel empty and unpopulated in places.
- 5) The landscape and field pattern tends to be more detailed around the edge of villages, with thicker hedgerows, more mature trees and areas of woodland, and paddocks and small meadows forming the setting to the village. However the topography and the open nature of the surrounding landscape mean that long views are often possible from the village to the surrounding countryside.
- 6) The river and stream valleys are well wooded and are prominent features in the landscape. They generally have an enclosed, small scale and detailed character, although again long views are available out of the valleys to the wider landscape beyond.
- 7) The complex history of settlement and the impact of people on the landscape over

the centuries is particularly apparent in this part of the County. Roman roads, Anglo-Saxon earthworks, large fields, modern roads and developments are all interlinked. (e.g. Hamcarlow way, Roman Road, Fleam dyke)

The Wider Area

- 1) The site is set at the edge of a noticeable escarpment, running north-east to south-west, affording long views to north-west to The Gog Magog Hills, Cambridge, and the wide Cam Valley and the Fens beyond, and to the high land east and west at the Great Chisel and Balsham areas.
- 2) Given the elevated position and open nature of the Landscape, long views are also possible back into the site from a wide area, whether from the valley bottoms to the north and west or from the surrounding hills to the south west and east.

The Local Landscape

- 1) The proposed site lies in the central portion of the East Anglian Chalk landscape character area. The surrounding landscape is generally wide, open and rolling, with long views dominating, particularly to the north and south. Prominent chalk hills form distinct edges to the north and south of Littlington and these are cut by dry valleys to create a rounded rolling landform.
- 2) The site lies between these two ridges of hills which run from south-west to north-east. The northern ridge reaches approximately 80m AOD, while the southern area is considerably higher reaching about 120m AOD. Long views are available to the site from numerous locations on these areas of high ground.
- 3) Both ranges of hills are cut by the valley of the River Cam and its major tributaries, flowing north towards Cambridge. The Cam valley is a busier landscape and contains transport connections (M11, A1301 and the Railway) and some more developed villages such as Sawston and Great Shelford. Another major road, the A505 runs parallel and between the north and south ridges. This is joined north of Royston by the A1198 heading north towards Huntingdon. Away from the M11 corridor and these major roads the landscape is quiet and rural.

The Site

- 1) The site lies at approximately 50m AOD. 1200m south of the village of Littlington and immediately to the west of Royston Road, running north south between Littlington and the A505. The site is generally flat land rises gently to the north and west and there are long views of the north and south chalk ridges from the site.
- 2) Belts of native trees and hedge plants approximately 5-15m tall run to the north and south of the site connected by a band of low trees which will split the proposed five turbines three to the east and two to the west.
- 3) A group of small buildings – Highfield Cottages are present on the site itself at the eastern end of the southern tree belt

- 4) Limlow –a bungalow with associated outbuildings is situated on the opposite side of Royston Road approximately 400m to the north east of the site and Morden Grange Farm and its associated cottages approximately 600m to the west are the closest buildings to the site

The Turbines in the Landscape

Landscape Effects

Landscape effects refer to how the proposed development will alter or change the character of the landscape, and to what extent. Landscape effects can be positive (beneficial) neutral or negative (detrimental)

- 1) This area bridging South Cambridgeshire and North Hertfordshire has a marked rural Character, and away from the main roads it is tranquil and quiet – sometimes deeply rural and ‘unspoilt’.
- 2) The turbines will be viewed in a rural landscape the in which the majority of visible development is largely defined by small scale settlements - villages and farms. There are views which contain more extensive settlements and infrastructure – for example distant views over Cambridge, pylons or industrial development at the edge of Royston, but the proposed turbines will often appear dominant to the existing development, which largely remains below the skyline or in distant views. From many positions from which they will be viewed the turbines, due to their scale, will appear above the skyline, and will often be the dominant landscape feature.
- 3) The long views possible between the chalk ridges and their villages, with the turbines sited between, will result in the turbines being visible from a high number of locations, and to remain visible over wide areas.
- 4) The proposed turbines will be visible in the landscape in conjunction with the existing turbines at Wallow, and the approved turbines at Langford. The three developments will not always be visible together, but in several locations along the north and south ridges a pair of the developments, or even all three will combine to produce a cumulative effect in the landscape in the landscape between Guilden Morden in the west and Balsham in the east.
- 5) When determining the impact of the proposed turbines, useful reference points are the Wadlow wind farm mentioned above, both in the wider and local landscape and the three communication pylons on the high ridge between Reed and Barkway. Although these pylons are fairly small in scale (about 20 m tall?) they do serve as useful positional markers across a wide area and give some indication of the likely visibility of the much larger turbines present in the same views.
- 6) The new turbine erected at Wadlow are also useful in terms of gauging likely visual and landscape effects, particularly in relation to landscape, buildings etc which are closer to the turbines - for example settlements along the road between Balsham and Weston Colville approximately 2-4km distant, and roads dropping towards the A11 – for example Six Mile Bottom Road between Green End Farm and Wadlow

Farm, approximately 1-2km distant.

- 7) The existing wind farm at Wadlow can also give an indication of how the development will appear in the wider landscape. When viewed to the east from Chapel Hill Barrington, The Wadlow wind farm is clearly visible and a notable feature in the landscape. The proposed site at Littlington is also visible from Chapel Hill, and will be approximately 5km closer than the Wadlow site, breaking the skyline and having a significant effect on views at over 12km distance.

Visual Effects

Visual effects refer to the impact on views from footpaths, roads, dwellings, public spaces etc. The effect on a view of the proposed development can range from very large to negligible, and again can be positive (beneficial) neutral or negative (detrimental)

Rights of Way

- 1) Several Rights of way pass through or close to the site notably the long distance paths the Hamcarlow Way, which runs SW-NE approximately 600m north of the site and the Chain Walk around Therfield 3.5 km to the south linked by the Morden Grange Farm footpath which runs north-south 500m to the west. Further footpaths run north –south to the east of the site around Limlow Hill. Networks of footpaths connect the villages of the north ridge between Guilden Morden and Bassingbourn to the north, and Therfield to Great Chishill in the south.
- 2) As mentioned above, the long views possible between the chalk ridges and their villages, with the turbines sited between, will result in the turbines being visible from a high number of locations, and to remain visible in the landscape to outdoor travellers – walkers, horse riders - for long periods.
- 3) The area is popular with walkers and In some cases the rights of way the paths pass very close to the proposed turbines, and on the ground, the impact of development is likely to be even greater than that shown in the viewpoints. In this respect the visual effects of the completed turbines at Wadlow can be compared with those shown in the submitted viewpoints – for example comparing viewpoint 1 at 0.7 km distant from the development with views from Six Mile Bottom Road where the existing development is between 1 and 2 km distant.
- 4) Examples of local rights of way with views of the turbines are:
 - a) From Bassingbourn Chalk Pit Local Nature Reserve and paths – various views including views of turbines at full height above the Horizon from the path south of Bassingbourn
 - b) Wide views from Hamcarlow Way to Therfield Heath and chalk hills, again with the full views of turbines above the skyline.
 - c) From Littlington recreation centre – turbines visible over the rooftops from the Conservation area.

- d) South of Steeple Morden – a deeply rural area, quiet and tranquil with wide views to Royston and the ridge beyond – again a full view of the turbines which break the skyline.
- e) East of Steeple Morden long views to both north and south chalk ridges

Roads

- 1) Most roads in the study area particularly to the east and west of the main river valleys, run on a loose grid orientated either along the slope of the ridges, generally SW to NE, or up and down the slopes SE-NW.
- 2) The open nature of the landscape long views and the low speed of travel on narrow country roads will mean that the proposed turbines will be visible for long periods to the driver or cyclist travelling between villages, - either along the high contours of the ridge, or heading towards or parallel to the development up or down the slope.
- 3) Along the slope, Littlington Road between Steeple Morden and Littlington, Bassingbourn Road between Littlington and Bassingbourne, and The Joint West of Barkway are examples. Up and down the slope North Brook End north of Steeple Morden, Croydon Hill south of Croydon and New Road north of Great Chishill are examples. There are several others.
- 4) Travel along main roads will be faster, but there are still many open stretches where the turbines will be highly visible to the driver for long periods. Extensive stretches of the A505 south of the site (SW-NE) and the A1198 (SE-NW) are examples.
- 5) Travelling through the areas at speed will also bring cumulative views of the consented Langford, Littlington and Wadlow wind farms, or enable them to be viewed in fairly rapid succession on a journey.

Villages and Buildings

- 1) Many villages and individual farms and buildings will have views to the turbines. Virtually all villages on the northern slopes, from The Mordens to Croydon Hatley, Barrington, Bassingbourne and Littlington itself will have numbers of properties facing the Turbines on their southern sides.
- 2) There will also be some views to the turbines from villages on the south slopes on their northern sides. Barley and Great Chishill are examples.
- 3) Most of the local villages are fairly small with little large scale modern development. In most cases the majority of the built area is covered by a conservation area containing large numbers of listed buildings.
- 4) As mentioned above there will be clear views to the turbines from the village edges. There will also be views from within the villages and conservation areas, either through gaps in the built area or views of the turbines in conjunction with of village

buildings. Church Street Littlington, High Street Croydon and East Hatley, Hatley are examples.

The Submission

- 1) The development will impose substantial effects on the landscape both locally and over a wider area. This is due both to the close proximity of numerous settlements, historical features, local quiet and rural landscapes, public rights of way, and also to the site's position in the wider, open landscape, its relationship to the setting of Cambridge, the Cam Valley and its tributaries, and relationships to the existing wind farm development at Wadlow and the consented development at Langford.
- 2) I feel that the submission under –estimates the Landscape and Visual effects of the proposals.
- 3) The Development is site is very close to several small, rural villages – Littlington conservation area is less than 1000m from the site. Five other village conservation areas are within 5Km of the site, and many more will have clear views to the site.
- 4) The turbines are by far the largest landscape features and will completely dominate the local landscape. As mentioned above the existing turbines at Wadlow show the magnitude of near distance landscape and visual effects of turbines on local landscape and buildings. Littlington is closer to the proposed turbines than the examples at wadlow.
- 5) The landscape of the study area is often surprisingly quiet, tranquil and rural, with few (or no) views to infrastructure such as pylons industrial buildings, major roads etc. The proposals will introduce extremely large, moving features into this landscape, completely changing its character.
- 6) In the wider landscape two other wind farm developments will be seen together, or in sequence with the Littlington site. The three developments will be seen as a row – Langford 12 km to the west, Wadlow 25 km to the east. Again the existence of Wadlow demonstrates the clarity of views, and the likely impacts when viewed from points such as Barrington hill and Barkway.
- 7) I would recommend refusal of the scheme due to unacceptable landscape and visual impacts, and the very significant cumulative impacts when combined with existing and consented developments.