9. Archaeology and Cultural Heritage

9.1 Introduction

9.1.1 This chapter has been prepared by Simon Atkinson MIFA of Entec UK Ltd and assesses the potential effects on cultural heritage as a result of the construction and operation of the proposed Blackstone Edge wind farm development.

9.1.2 Assessment has been undertaken of any direct effects on features of cultural heritage interest as well as any effects on the setting of off-site features. The assessment has been carried out in accordance with the principles laid down in the Institute of Field Archaeologists (IFA) Standards and Guidance for Archaeological Desk-Based Assessments (IFA, 2001).

9.2 Context

Site context

9.2.1 Cultural heritage is represented by a wide range of features, both visible and buried, that result from past human use of the landscape. These include standing buildings, many still in use, sub-surface archaeological remains and artefact scatters. It also includes earthwork monuments as well as landscape features such as field boundaries and industrial remains.

9.2.2 The site is within the location of a former WWII bombing decoy, and whilst no visible features of this survive, some potential features have been identified on aerial photographs. There are a number of designated features in the wider area, including scheduled monuments and listed buildings. The potential for effects on the setting of these have been considered in this assessment.

Policy context

National

9.2.3 The following national policies include guidance relevant to the treatment of cultural heritage in the development of wind energy schemes:

- Planning Policy Guidance Note (PPG) 15 Planning and the Historic Environment;
- PPG 16 Archaeology and Planning; and
- Planning Policy Statement (PPS) 22: Renewable Energy.

9.2.4 In addition, English Heritage has published guidance entitled Wind Energy and the Historic Environment28.

[28] English Heritage 2006

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Regional

9.2.5 The following policies contained in the Draft Regional Spatial Strategy 12: The Yorkshire and Humber Plan are potentially relevant to this assessment.

Table 9.1 Yorkshire and Humber Plan Policies

Policy	Text
Policy ENV 9 – Cultural Heritage	The Region will safeguard and enhance the historic environment, and ensure that historical context informs future development and regeneration. All development strategies, plans, programmes and decisions in the Region will conserve distinctive elements of the historic environment and enhance local character and distinctiveness in line with the following heritage priority areas of regional, sub regional and local cultural and historical importance: ▪ Prehistoric landscapes, especially the Wolds, the Magnesium Limestone Ridge, Vale of Pickering, and Thornborough Henges Medieval landscapes, especially the Lincolnshire Coversands, the waterlogged landscapes of the Humber and the relict industrial landscapes of the North York Moors. ▪ Industrial landscapes, housing areas and civic buildings, especially in West and South Yorkshire. ▪ Roman military and civil settlements and communications, especially in North Yorkshire) the historic street patterns, sky lines, views and setting of the City of York. ▪ Maritime archaeological assets, seaside resorts, and the purpose built historic ports, docks and infrastructure of the East Coast and the Humber.

Local

9.2.6 The following policies contained in the Barnsley UDP are potentially relevant to this assessment:

Table 9.2 Barnsley UDP Policies

Policy	Text
Listed Buildings Policy BE2	The council will have special regard to the desirability of securing the retention, repair, maintenance and continued use of buildings of special architectural or historic interest. Development which would adversely affect the special architectural or historic interest character of listed buildings will not be permitted. Other buildings considered by the council to be of special architectural or historic interest will be put forward to the department of national heritage for listing.
Archaeological Sites Policy BE3	Where nationally important archaeological remains, whether scheduled or not, and their settings are affected by proposed development there will be a presumption in favour of their physical preservation. Other unscheduled archaeological remains of more local importance may also be worthy of preservation. Where these features are affected by development proposals, their relative importance will be weighed against other factors including the need for the proposed development. On sites of identified or potential archaeological significance, the council may require an archaeological field evaluation to be submitted as part of a planning application.
Policy BE4	Where the authority decides that the physical preservation of archaeological remains in situ is not justified, and that development which would destroy the remains should proceed, the authority will ensure, before granting planning permission, that the developer has made appropriate and satisfactory provision for the excavation and recording of the remains.

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Legislative context

9.2.7 The importance of cultural heritage remains is recognised in legislation as well as national and local policy. Certain features that are deemed to be of particular importance are given legal protection through legislation. The Ancient Monuments and Archaeological Areas Act 1979 provides for a schedule of monuments which are protected.

9.2.8 Similarly, the Planning (Listed Buildings and Conservation Areas) Act 1990 provides for the definition and protection of listed buildings and conservation areas.

9.3 Methodology

9.3.1 Figure 9.1 shows the study area used for the assessment of direct effects, which is based on a 1km buffer around the site centre. This therefore includes areas where there will be no direct effect on cultural heritage as a result of the construction of the wind farm. In order to distinguish this from the wider area assessed for indirect effects, the latter is consistently referred to as the 'extended study area', which is based on a 5km radius from the proposed turbine locations.

9.3.2 Figure 9.2 shows the locations of designated features within the extended study area for which the potential for effects on setting is assessed in section 9.6.

Approach to scoping

9.3.3 The presence of cultural heritage features is a consideration in determining planning applications, and early consultation with the local authority is encouraged in planning guidance (consultations undertaken during this assessment are detailed later in paragraphs 9.3.22 to 9.3.24). In this case there was reason to believe that cultural heritage features may be affected by the development proposal and therefore a desk-based assessment, supplemented by a site visit, has been undertaken. This has involved the collection of existing information that can assist in the assessment of the likely or potential effects of the development. A site walkover has been undertaken in conjunction with the desk-based assessment in order to visit known features of cultural heritage interest, check and update recorded data, and assess general ground conditions.

9.3.4 In completing a desk-based assessment of the effects of any development on cultural heritage it is important to identify the known and potential nature of features that may be involved. This requires consideration of a number of factors:

- Development can affect features of cultural heritage interest not only through direct impacts (e.g. land take) but also indirect impacts, such as the setting of monuments; and
- Desk-based assessment involves a review of current information only and there may be further features within the application area that are not yet known. The potential for this may be assessed from ground conditions, features within the wider area and a history of land use within the area of proposed development. A site walkover can assist in this respect.

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Direct Effects

9.3.5 Information is required on any features that are known to be or could potentially be within areas where ground may be directly disturbed as a result of the proposed development. With a wind turbine development this includes the footprint of the turbines, access tracks and associated infrastructure, for example crane pads and the construction compound.

9.3.6 Legislation and policy set out appropriate responses to potential direct effects on features in accordance with their importance, as set out below.

Sites of National Importance

9.3.7 By legal definition, Scheduled Monuments are considered as being of national importance. As the process of scheduling is ongoing, there are further features which are not scheduled but which may also meet the established criteria29 and may also be of national importance.

9.3.8 All listed buildings are given equal protection by law and are of special architectural or historic interest, although the buildings are graded in importance, with Grades I (most important), II*, and II. Buildings listed at Grade I are described by English Heritage as being 'of paramount importance to the nation' and those listed at II* are of 'outstanding interest' and therefore these are considered as being of potential national importance for the purposes of this assessment.

9.3.9 A non-statutory Register of Historic Parks and Gardens is maintained by English Heritage, and these are graded using the same scale. Therefore, by inference it may be considered that Grade I and II* historic parks are of national importance.

9.3.10 Under the relevant legislation, specific consent is normally required for works which directly affect scheduled monuments or listed buildings. PPG16 paragraph 8 states that there should be a presumption in favour of their physical preservation.

Sites of Regional and Local Importance

9.3.11 Archaeological sites of regional or local importance are those which do not merit scheduling but which are nevertheless of interest.

9.3.12 Conservation areas are normally designated by local planning authorities and maintained on regional and district registers, and are therefore considered to be of local or regional Importance. For the purpose of this assessment, Grade II listed buildings and Grade II registered historic parks are also considered to be of local or regional importance.

9.3.13 PPG16 states that where archaeological features of less than national importance may be affected, planning authorities should weigh importance of the archaeology against the need for the proposed development. There will be times when the physical preservation of a monument will not be justified in the case of a proposed development which would result in the loss of the monument. In such cases it is important that relevant information on the archaeological resource will have been

[29] PPG16 Annex 4

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provided and that appropriate excavation and recording should take place prior to development.

Non-statutory Registers

9.3.14 Features on non-statutory registers of designated sites, namely the Register of Parks and Gardens of Special Historic Interest and the Register of Historic Battlefields (maintained by English Heritage) may be of international, national, regional or local importance. The Register of Parks and Gardens grades sites on the same scale used for listed buildings, of Grades I, II* and II.

Indirect Effects

9.3.15 Indirect effects on features of cultural heritage interest can occur as a result of changes to the setting of a feature, whether permanent or temporary. The setting of a feature can be considered whether or not it is legally protected, although setting is most relevant to designated features, such as Scheduled Monuments (PPG 16), listed buildings (PPG 15, paragraph 3.5; PPG 16) and Conservation Areas (PPG 15). The setting of non-designated features may also be considered, particularly where these are identified as being nationally important, for example through scoping responses and/or designations of particular importance at a local or county level.

Scheduled Monuments

9.3.16 The Ancient Monuments and Archaeological Areas Act 1979 makes no reference to the protection or even existence of a setting, therefore this is a matter which is addressed purely in policy. PPG16 paragraph 8 states that:

Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation.

9.3.17 Paragraph 27 further refers to a presumption against proposals which would have a significant impact on the setting of visible remains, implying the setting which is being protected is essentially a visual concept. This suggests that for the setting of an archaeological site to be a material consideration, it has to include visible surface remains, and the sensitivity of a feature to change will be affected by the degree and ease of its visibility.

Listed Buildings

9.3.18 The Planning (Listed Buildings and Conservation Areas) Act 1990 makes reference to the setting of listed buildings in s.66(1), in that it includes a requirement to have special regard to the desirability of preserving the building or its setting in considering any proposed development which may affect these. There is therefore a legal requirement to consider possible effects on the setting of listed building, though this falls short of a legal presumption that they need always be preserved.

9.3.19 PPG15 (paragraph 3.3) emphasises that there should be a general presumption in favour of the preservation of listed buildings.

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Conservation Areas

9.3.20 Section 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 places a general duty in planning functions to pay attention to the desirability of preserving or enhancing the character or appearance of Conservation Areas.

Historic Parks and Gardens

9.3.21 As a non-statutory register there are no legal controls, but PPG15 paragraph 2.24 states that local authorities should protect registered parks and gardens in determining planning application, and that any effect on their setting is a material consideration.

Scoping and Consultation

9.3.22 English Heritage were consulted at an initial stage in the consideration of the site as a wind farm location. In response, English Heritage noted that there may be potential effects on listed buildings at Upper and Lower Maythorn. Potential effects on the setting of listed buildings at Lower Maythorn have been considered in this assessment, though it is noted that there are no listed buildings at Upper Maythorn.

9.3.23 A Scoping Report was submitted to Barnsley Metropolitan Borough Council on 03 November 2006. This included an understanding of the potential cultural heritage issues associated with the proposed development and set out the scope of the assessment proposed to consider these. The scoping response received from the planning authority did not include any mention of archaeology. However, the South Yorkshire Archaeology Service, who act as advisors to the planning authority on archaeological matters were contacted separately. The South Yorkshire Archaeology Service advised that a cultural heritage desk-based assessment was required, and provided a generic brief for the assessment.

9.3.24 This assessment has been carried out in accordance with this generic brief, and with the Institute of Archaeologist's Standards and Guidance for Desk-Based Assessments (2001).

Effects requiring further consideration

9.3.25 The following effects have been scoped-in.

- *Potential effect on features within the site caused by disturbance during construction of the turbines and associated infrastructure including the grid connection*; and
- *Potential effects on scheduled monuments and listed buildings following construction, caused by changes to their settings.*

Effects not requiring further consideration

9.3.26 There are no potential cultural heritage effects which have been scoped out of the assessment.

Data Gathering

9.3.27 For the purpose of this assessment the following sources were consulted:

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- Nationally- and County- based registers of known archaeological and historical sites;
- Cartographic and historic documents;
- Aerial photographs;
- Place and field name evidence; and
- Published sources.

9.3.28 Published sources were obtained from the following organisations:

- English Heritage -the National Monuments Record;
- South Yorkshire Archaeology Service; and
- Barnsley Archives.

9.3.29 The assistance of these bodies is gratefully acknowledged.

9.3.30 The South Yorkshire Archaeology Service maintains the Sites and Monuments Record (SMR), in addition to providing planning advice to the LPA on archaeological and cultural heritage matters.

Survey Work

9.3.31 A site visit was undertaken on 13 December 2006 by one of Entec's archaeologists. This was aimed at confirming the presence, condition and extent of previously recorded features of cultural heritage interest and identifying any other visible features of cultural heritage interest, in addition to noting the general ground conditions.

9.3.32 Where appropriate, a written description of visible features of cultural heritage interest was made and photographs taken. The location and extent of features were also noted using a hand-held GPS showing an accuracy of ~5m. This is considered an appropriate level of detail for this study.

9.3.33 In addition to the 1km study area, indirect effects on the settings of designated features within the extended study area of 5km radius from turbine locations were also considered as part of this assessment. The assessment of indirect effects has been undertaken in consultation with the Visual and Landscape Assessment (see chapter 7).

9.3.34 The assessment was made, in the first instance, with reference to the calculated Zone of Theoretical Visibility (ZTV) for the wind farm. It is acknowledged that the ZTV provides an unrealistic 'worst case' image as 'bare earth' ZTVs are used in the assessment; no allowance is made for the screening or filtering effect of woodland, afforestation, settlement, large scale development, tree belts, hedgerows and minor variations in topography, which may in fact preclude views of the development. Features outside the ZTV, where no relevant third viewpoint was noted, have been discounted from the assessment. Further to this features have been discounted from assessment according to the following criteria:

- Where there are no visible remains; and

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- Where their setting is sufficiently limited that there is no reasonable expectation of any effect on their setting, such as listed mileposts.

9.3.35 Features have also been grouped for assessment and discussion where a group of features share a common setting and views towards the wind turbines, such as in the following cases:

- Where a principal building and associated buildings are listed separately; and
- Where a group of listed buildings form an historic settlement core.

9.3.36 Following the elimination of features from consideration for the reasons given above, site visits were made to the remaining features (or groups thereof) in order to define the key characteristics of their setting and the potential for effects on this as a result of the proposed development. Wireframes calculated from the locations of those features visited were also used in this assessment. Features were visited where publicly accessible, or from the nearest accessible viewpoint(s). The results of this assessment are presented in section 9.6 and in particular in Table 9.6.

Significance evaluation methodology

9.3.37 The assessment of significance of any effect is largely a product of the importance/sensitivity of a feature, as informed by legislation and policy, and the magnitude of the effect on it, qualified by professional judgement.

9.3.38 Effects on receptors are assigned to one of four classes of magnitude, defined in Table 9.3, below.

Table 9.3 Definition of Magnitude Table

Magnitude	Definition
High	Total or substantial loss of a feature or complete loss of the characteristics of a feature's setting.
Medium	Partial loss or alteration of a feature. Substantial change to the key characteristics of a feature's setting, or a more total loss which is temporary and/or reversible.
Low	Minor loss to or alteration of a feature. Changes to a setting which does not affect the key characteristics, or which is short term and reversible.
Negligible	Minor alteration of a feature. Minor and short term, or very minor and reversible changes to it's setting which do not affect the key characteristics.

9.3.39 As noted above, the assessment of magnitude of an effect essentially relies on professional judgement rather than any scoring of the criteria. With respect to potential effects on the setting of designated features, the magnitude of an effect reflects the extent to which the key characteristics of the setting (the 'immediate setting') will be altered. This is judged on a range of factors including the degree of intervisibility (direct views) between the feature and the development, intervisibility between features where this was intended and the effect on views towards features or groups of features from tertiary locations.

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9.3.40 Effects are considered to be significant or not significant according to the matrix below (Table 9.4). For this assessment, only changes of high magnitude may result in effects of significance, depending on the importance of the feature and the exercise of professional judgement.

Table 9.4 Significance Assessment

Magnitude				
	High	Not significant	Significant	Significant
	Medium	Not significant	Not significant	Not significant
	Low	Not significant	Not significant	Not significant
	Negligible	Not significant	Not significant	Not significant
		Local	**Regional**	**National**
			Policy Importance	

9.4 Description of baseline conditions

9.4.1 Features of cultural heritage interest within the site and 1km study area are listed in Table 9.5 and their locations shown on Figure 9.1. The locations shown in Figure 9.1 rely primarily on grid references provided by the SMR, not all of which have been or can be independently verified in the field. While we believe that this is an accurate depiction of known archaeological features it does not represent a detailed survey and should not therefore be used in isolation for micro-siting purposes at the construction stage.

9.4.2 Designated features identified within 5km of the site boundary are listed in Tables 9.6 and 9.7.

9.4.3 Information given on nationally designated features uses official register numbers.

Existing Situation

Designated Features

9.4.4 There are no scheduled monuments or listed buildings within the site. The nearest designated feature is the Grade II listed building of Lower Maythorn Farm, approximately 616m from the nearest turbine location.

9.4.5 The area has been covered by the ongoing South Yorkshire Historic Landscape Characterisation, and the whole of the site falls within HSY40: Whitley Common Enclosures, Dunford. This comprises enclosed upland common, also containing small sandstone quarries. Typically, fields within this character area are medium sized in the 2-10ha range, with straight regular, well preserved boundaries.

Other Features

9.4.6 There is a single recorded feature within the site boundary, being a bombing decoy and starfish site operated during WWII. The Starfish Decoys operated with the aim of attracting German bombers to open areas and away from their actual targets (in

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this case the Leeds metropolitan area). Pools and low concrete structures were built with open areas to a pattern designed to mimic the industrial areas in their vicinity. A series of fires were then lit in the early stages of a bombing attack, as a simulation of the marker bombs which would be dropped. The intention was to confuse the later waves of bombers and therefore reduce the weight of attacks on the intended targets.

9.4.7 Therefore the structures of the bombing decoy will have been spread over a wider area along Whitley Edge and Ingbirchwoth Moor. There are no visible remains of bomb decoys surviving within the site, though a range of features are visible on aerial photographs of the 1970s and these may record traces of the former bomb decoys. In addition, a brick structure a short distance from the site on the corner of Whitley Road and Brown's Edge Road may be a former control building.

9.4.8 The only records relating to prehistoric activity are of finds of flint from broadly along the southern edge of Whitley Edge.

Table 9.5 Features of Cultural Heritage Interest within the Site and 1km Study Area

SMR No/ref.	Location	Description	Distance from site
SMR 04727	SE 197 052	Ingbirchworth WWII Bombing Decoy and Starfish for Leeds - C16(g) and SF23(m) A bombing decoy (type unknown) and permanent Starfish decoy at Ingbirchworth. The exact location is unknown. It was designed to simulate the lights of Leeds.	Within site
SMR 00567/01	SE 191 049	Miscellaneous nodules and flints of unspecified date found as surface finds.	0.40km
SMR 01042/01	SE 191 050	Surface finds of Mesolithic flints have been made on Upper Whitley Edge by E.E. Rayner and are in his possession. Found by Mr Rayner during the summer of 1962 on moorland at approximately SE 1905 0493 and SE 1868 0492. His flint collection consists of untrimmed flakes, flint fragments and nodules found at varying times and places. He is unable to particularise those from this site.	0.38km
Entec 1	SE 19020556	Single storey brick hut with concrete slab roof. The eastern half is bomb protected, with an earth embankment. Appears to date from WWII and may be a control hut for the bombing decoy or an observation post. Has more recently been used as a pig sty.	0.30km

Information Sources

Aerial Photographs

9.4.9 A search of aerial photographs was undertaken at the NMR. The search resulted in vertical photographic coverage of the site dating from 1954 to 1990, all of which were viewed.

9.4.10 The only features of potential cultural heritage interest noted within the site are the possible remains of the WWII bombing decoy visible on photo MAL/73014 Frame 6 (3 April 1973). The extent of the visible features is shown on Figure 9.1.

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Site Visit

9.4.11 A site visit was undertaken on 13 December 2006 by one of Entec's archaeologists in which the whole of the proposed site was inspected. The visit was made to assess the archaeological potential of the site and note general ground conditions.

9.4.12 The site comprises a series of enclosed fields set in a regular pattern and in use as improved pasture. Fields are enclosed by dry stone walling, some in poor condition, as well as post and wire fencing. Two dry stream channels cross the site and are visible as linear depressions.

9.4.13 Apart from the current site boundaries, there are no visible features of potential cultural heritage interest within the site.

Site History

Prehistoric

9.4.14 The only evidence for occupation within the immediate vicinity of the site comprises finds of Mesolithic flint from along Whitley Edge. These indicate Mesolithic activity within this area, though there is no clear indication for any associated features within the site.

9.4.15 A later Prehistoric settlement site survives some 1.6km to the north of the site and is now designated as a Scheduled Monument (SM 31503). Fieldwalking in the 1970s also recovered an assemblage of Neolithic flints in the vicinity of this settlement.

9.4.16 There is therefore evidence of activity and occupation of the wider area over an extended time within the Prehistoric period. However, there is no available information to suggest an enhanced potential for associated features of archaeological interest within the site boundary.

Roman and Medieval

9.4.17 There is no clear evidence for occupation of the immediate area during the Roman and Medieval periods. Ingbirchworth Moor appears to have comprised open upland moor during the Medieval period.

Post-Medieval

9.4.18 There is no tithe map for Hepworth parish, or enclosure map which covers the site.

9.4.19 The 1st Edition Ordnance Survey map of 1851 shows the site as an open area within Whiteley Common, in a detached portion of Hepworth parish. By then, land north of the site was called The Whams, referring to a small valley or marshy hollow.

9.4.20 A number of small-scale sandstone quarries were in operation at this time, though none are shown directly within the site.

9.4.21 The OS Edition of 1893 shows the site as an enclosed area with the same field boundary pattern as exists now. The enclosure of the site therefore appears to date to the second half of the nineteenth century. No change within the site is notable on the later OS Editions of 1906 and 1931.

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Twentieth Century

9.4.22 During WWII, the site lay on the flight path for Luftwaffe bombers heading for the Leeds area and therefore it was developed as a Starfish bomb decoy site. At Starfish sites fires were lit in the early stages of a bombing raid in order to simulate the fires caused by the initial marker bombs. The intention was to confuse later waves of bombers, and they proved effective in attracting bombers to attack the decoys, thus reducing the weight of attacks on the intended targets. The Ingbirchworth site therefore formed part of the much wider deception plans operated by the UK as parts of its air defences during WWII.

9.4.23 There is no available contemporary record of the layout of the bomb decoy and no visible features survive within the site, though a later aerial photograph appears to show the traces of the ponds and pits in which the fires would have been lit during the operation of the decoy. In addition a single storey brick hut is located to the west of the site, on the corner of Whitley Road and Brown's Edge Road. This is partially bomb-protected and so may have been a control room attached to the bomb decoy or an observation post.

Predicted future baseline

9.4.24 The site comprises improved pasture, and its continued use for this purpose would not be expected to alter the condition of any features within the site.

Information gaps

9.4.25 An attempt has been made to consult all available documentary sources, although it is always possible that some sources will not be identifiable, for example they could be held under obscure references. However, should such sources exist, it is unlikely that they would hold information that would alter the conclusions reached by this assessment.

Sensitive Receptors

Within the Site

9.4.26 The only identified features within the site are the potential buried remains of a WWII bombing decoy. Whilst well-preserved examples of this feature type may be of greater importance, as there are no surviving visible remains of this within the site, it is considered to be of local importance only.

Outside the Site

9.4.27 Scheduled monuments are of national importance. As set out in paragraph 9.3.8, Grade I and II* listed buildings are also considered to be of national importance, whilst Grade II listed buildings may be of regional or local importance.

9.4.28 The non-designated features within the 1km study area, which are identified in Table 9.5, are considered to be of local importance.

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9.5 Mitigation, offsetting and enhancement measures incorporated into the proposed development

9.5.1 Planning guidance (PPG 16) states that there is a presumption in favour of preserving in situ archaeological sites of national importance. The proposals do not pose any threat to any such identified sites.

9.5.2 It is appropriate for significant effects on features of archaeological interest of less than national importance to be mitigated by a programme of archaeological field investigation and preservation by record, if their destruction is unavoidable.

9.5.3 For the purpose of this assessment mitigation is understood to involve the avoidance of effects on features of cultural heritage significance. Compensation measures involve the creation of a record of features whose loss is unavoidable, further details of which are provided below.

Construction

9.5.4 No specific potential has been identified for construction within the site to encounter known archaeological remains, as features identified within the site have been avoided by the site layout.

9.5.5 There is some potential for the presence of sub-surface features of archaeological interest of local interest only. It is therefore proposed that archaeological monitoring of topsoil stripping along the routes of access tracks, crane pads, turbine foundations and the construction compound be undertaken during construction, and provision made for appropriate recording of features identified. This would enable the preservation by record of any remains identified in accordance with PPG 16.

9.5.6 The exact scope of archaeological works, before and during construction, will be agreed with the South Yorkshire Archaeology Service. The archaeological monitoring would be undertaken according to a Written Schemes of Investigation (WSIs) and could be secured by a condition on any planning permission. Soil stripping would be undertaken sufficiently in advance of development to allow appropriate treatment of any remains encountered.

Operation and decommissioning

9.5.7 All scheduled monuments and listed buildings within the extended study area, upon which indirect effects were considered, are listed in Tables 9.6 and 9.7. Indirect effects are considered to be at their greatest during operation, although these could be considered at the culmination of the construction stage. Although no specific mitigation of effects on cultural heritage features is proposed, the overriding mitigating factor of indirect effects on designated features of cultural heritage interest is that the wind farm will remain a reversible development, such that indirect effects are essentially temporary, in the event of the decommissioning of the site.

9.5.8 Operation of the proposed wind farm and its subsequent decommissioning is not anticipated to have any further direct impacts on cultural heritage, as no further land take will occur during these stages.

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9.6 Assessment of potential effects

9.6.1 This section takes into account the mitigation measures described in the previous section and hence effectively forms an assessment of residual impacts and effects once mitigation measures have been taken into consideration.

Construction

9.6.2 The permanent land-take associated with intrusive elements of the proposed development, namely turbine foundations, crane pads, access tracks, and the site construction compound would be expected to remove any currently unrecorded features of cultural heritage interest that may be present in those limited areas that are directly affected. However, no effect on any known cultural heritage features has currently been identified.

9.6.3 The possible remains of a WWII bombing decoy have been identified on aerial photographs, though no features are visible on the site. The identified features have been avoided in the designed scheme layout.

9.6.4 There may be some potential for an effect on hitherto unrecorded remains, although the scope for such an effect is reduced by the relatively small areas of ground disturbance that would be entailed by the proposed development. There is no reason to anticipate the presence of any features of more than local importance and therefore any effect, taking account of the proposed mitigation would not be significant.

9.6.5 Additional indirect effects caused during the construction and decommissioning stages, for example the movement of machinery, will represent a negligible and temporary increase in the level of indirect effects. Indirect effects are therefore considered under the operational stage of the wind farm.

Grid Connection

9.6.6 The underground grid connection route would be predominantly along existing roads and its construction would not be expected to result in any disturbance to archaeological features. This is because any archaeological features are likely to have already been disturbed by construction of the existing roads.

Operation

9.6.7 A list of all scheduled monuments and listed buildings upon which the potential for indirect effects were considered is presented in Tables 9.6 and 9.7, which includes all features within the extended study area (5km from proposed turbine locations). Names and descriptions of designated features in Tables 9.6 and 9.7 use official listing and schedule descriptions. A discussion of the potential effects on each of the features from which turbines will theoretically be visible is included within Table 9.6.

9.6.8 Figure 9.2 shows the locations of designated features (or groups thereof) within 5km of turbines, including those discussed in Table 9.6 overlain on the ZTV (calculated to blade tip). Where groups of features were considered, such as listed buildings within settlements, only one building within the group is labelled to avoid crowding of the figure and allow the labels on the plan to be read.

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9.6.9 In the assessment of indirect effects it is noted that the wind farm will be a temporary development, the indirect effects of which are reversible subject to its decommissioning. It is also notable that the contemporary landscape of many of the monuments considered within the vicinity has altered significantly. This is particularly true of the features which are prehistoric in date, and this may affect an appreciation of their archaeological significance.

9.6.10 It is not considered that the noise generated by turbines will have a significant additional effect on the appreciation of the setting of designated features over the distances involved.

9.6.11 No potential for the movement of the turbines to have a significant additional effect on the setting of receptors has been identified

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Table 9.6 Assessment of indirect effects on designated features within extended (5km) study area

Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
Scheduled Monuments							
23393	Boundary and wayside cross known as Catshaw Cross	-	SE20610349	1.85 km to turbine 3	3 turbines visible	Negligible	The historical association and current physical setting is defined by its roadside location. The cross comprises a small stone set against a dry stone wall along the road. The setting of the cross does not extend beyond this immediate area and will not be affected by the presence of turbines at a distance of over 1.8 km.
31503	Late Prehistoric enclosed settlement on Castle Hill, 550m north of Broadstone Lodge	-	SE20420697	1.60 km to turbine 2	3 turbines visible	Low	The settlement site is located within a level, upland area with no clear topographic features which relate to its location or define its principal setting. Though the area is known as Castle Hill, the monument is not on a hill top location as the land continues to rises up to the north. This area was formerly open upland common, upon which an enclosure period field pattern was imposed, and the monument is now within a pasture field marked by dry stone walling. Broad views are available in all directions, though the falling topography tends to draw the eye to the south as the rising land to the north curtails views in this direction to some extent. To the south east, the Royd Moor windfarm appears as a single line of 13 turbines along a low ridge. The proposed turbines would be visible as three additional turbines along the same ridge as the Royd Moor turbines. They would therefore effectively broaden the view in which turbines would be visible by a small margin, without introducing a new element into views from the monument. As a low earthwork within an enclosed pasture field, the monument is not a prominent feature in any approaches. Therefore other views of the monument are not key to its setting.

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
27213	Wayside Cross south of Hartcliff Road	-	SE23400205	4.72 km to turbine 3	3 turbines visible	Negligible	The historical association is defined by its roadside location, though the cross is now isolated from the road within an enclosed field. This suggests that either the cross or the road has been moved at some time. The cross comprises a small stone set within an enclosed field. The setting of the cross does not extend beyond this immediate area and will not be affected by the presence of turbines at a distance of over 4.7 km.
Listed Buildings							
333781	Barn at Hepshaw Farm, Bedding Edge Road, Hepworth	II	SE1765405070	1.91 km To Turbine 1	3 Turbines Visible	Low	The farm appears to be largely derelict, with the setting of the barn largely confined to the farm, with some wider views. Turbines are likely to be visible to the east, though with views filtered by a line of trees.
333794	Lower Maythorn Farmhouse and barn, Lee Lane, Hepworth	II	SE1870905598	0.84 km To Turbine 2	3 Turbines Visible	Low	Lower Maythorn Farmhouse is located within a cut into the hillside on the south side of Lee Lane. Its entrance is on the western side, away from the proposed wind farm site. The barn has now been converted to residential use, with its principal entrance and windows on the eastern side. Due to the presence of the barn, there are unlikely to be views of the turbines from the farmhouse, though turbines may be visible in the background when approaching the farm along Lee Lane from the east. Turbines may be visible from the converted barn. Where turbines are visible, they would appear within the same field of view as the existing Royd Moor turbines.
333805	Upper Wood Royd Farmhouse, Wood Royd Hill Lane, Hepworth	II	SE1846405696	1.10 km To Turbine 2	3 Turbines Visible	Low	Though the ZTV suggests three turbines will be visible, Wood Royd Hill will blocks views and result in limited visibility of turbines.
340628	Lower Wood Royd Farmhouse, Wood Royd Hill	II	SE1799305684	1.56 km To Turbine 2	3 Turbines Visible	Low	Though the ZTV suggests three turbines will be visible, Wood Royd Hill will blocks views and result in limited visibility of turbines.

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
	Lane, Victoria						
333782	Barn adjoining The Green, Brook Hill Lane, Carlecotes	II	SE1776503337	2.60 km To Turbine 1	3 Turbines Visible	Negligible	Located within the historic core of Carlecotes village, which defines its setting. Views into and out of the village in the direction of the wind farm are greatly restricted by mature woodland to the north and east of the village.
333783	Carlecotes Hall, Brook Hill Lane, Carlecotes	II	SE1784403354	2.54 km To Turbine 1	3 Turbines Visible	Negligible	As above
333784	Church of St Anne, Brook Hill Lane, Carlecotes	II	SE1784503317	2.56 km To Turbine 1	3 Turbines Visible	Negligible	As above
333788	Small Shaw Farmhouse and barns, Hollin Lane off Lee Lane, Hazlehead	II	SE2067004070	1.38 km To Turbine 3	2 Turbine Visible	Low	The farmhouse is situated at the base of the steep SW-facing escarpment which leads to Spicer Hill and Whitley Common, which defines the extent of the farms principal setting. When approaching the farmhouse, there will be intermittent views of the turbines, as there are currently of the Royd Moor wind farm. At the farmhouse, a number of the Royd Moor turbines are visible at the top of the escarpment. Two of the Blackstone Edge turbines would be partly visible at a greater distance. These would be beyond the top of the escarpment and therefore would not intrude in to the principal setting of the farm, and would result in only a low level of additional change to the setting of the farmhouse.
333790	Lower Small Shaw Farmhouse, Hollin Lane Off Lee Lane, Hazlehead	II	SE2068204066	1.39 km To Turbine 3	2 Turbine Visible	Low	As above

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
333791	Hazlehead Hall and cattle shelter, Lee Lane, Hazlehead	II	SE2018403166	2.05 km To Turbine 3	3 Turbines Visible	Negligible	The principal setting of the hall is defined by its farm curtilage. Within this, the hall sits on the southern edge of a group of large modern farm buildings. The turbines would not intrude on the principal setting of the farm, and views from the farmhouse to the wind farm are likely to be restricted by the modern farm buildings. The farmhouse is approached from the north, and the turbines would be to the rear and not visible.
333799	Barn at Softley Farm, Whams Road, Hazlehead	II	SE1864102957	2.44 km To Turbine 1	3 Turbines Visible	Low	The principal setting of the barn is confined to the curtilage of the farm. Wider views are restricted by belts of trees, though views toward the site maintain a more open aspect. Three turbines would be visible, though at a distance of 2.90 km, and would not affect the principal setting of the barn.
333800	Sheep Shelter approximately 200 m west of junction with track to Ranah Stones Farm, Whams Road, Hazlehead	II	SE1930802332	2.90 km To Turbine 1	3 Turbines Visible	Negligible	The sheep shelter is a small agricultural building with a limited setting, confined to its immediate surroundings. This would not be affected by the presence of turbines at a distance of 2.90 km.
333809	Gunthwaite Gate Farmhouse, and barn range, Carr Lane, Gunthwaite	II	SE2311907006	3.72 km To Turbine 3	3 Turbines Visible	Low	The listed buildings at Gunthwaite Hall form a tightly defined group, whose principal setting is confined to the curtilage of the farm. The western side of the farm is heavily wooded, and a wooded railway embankment is located to the immediate west. Views from the farm, and from most of the main approaches, will be prevented by the woodland and the wooded railway embankment. There may be some views of turbines in approaches to the farm along Coach Gate Lane, though at a distance of over 3.7 km, which will result in at most a low magnitude of change.

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
333811	Gunthwaite Hall and summer house, Gunthwaite Lane, Gunthwaite	II	SE2377306488	4.11 km To Turbine 3	3 Turbines Visible	Low	As above
333814	Gunthwaite Hall Barn approximately 50 m north of Gunthwaite Hall, Gunthwaite Lane, Gunthwaite	I	SE2378506567	4.14 km To Turbine 3	3 Turbines Visible	Low	As above
333815	Stable Range approximately 30 m west of Gunthwaite *Hall* Barn, Gunthwaite Lane, Gunthwaite	II*	SE2372806558	4.09 km To Turbine 3	3 Turbines Visible	Low	As above
333816	Farmbuildings adjoining and to south of Gunthwaite Hall Barn, Gunthwaite Lane, Gunthwaite	II	SE2381806554	4.17 km To Turbine 3	3 Turbines Visible	Low	As above
333817	Barn at Ingfield Farm and Ings Cottage, Ingbirchworth	II*	SE2233405641	2.50 km To Turbine 3	3 Turbines Visible	Low	The listed buildings at Ingbirchworth are located within a small village setting, in a group located in lower lying land below the A629 trunk road. The principal setting of the buildings is confined to the settlement. There will be some views of turbines from the western side of the settlement, though at a distance of over 2.50 km. Turbines will not feature in views along any of the main approaches to the settlement.
333819	Green Farmhouse and barn,	II	SE2238905669	2.56 km To Turbine 3	3 Turbines Visible	Low	As above

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
	Ingbirchworth						
333821	Willow Farmhouse and barn, Ingbirchworth	II	SE2192405646	2.10 km To Turbine 3	3 Turbines Visible	Low	As above
333823	Broadfield Farmhouse and barn, Ingbirchworth	II	SE2246405546	2.61 km To Turbine 3	3 Turbines Visible	Low	As above
333825	Grange Farmhouse, Penistone Road, Ingbirchworth	II	SE2239505899	2.62 km To Turbine 3	3 Turbines Visible	Low	As above
333826	Cottage (Now Store) Immediately North East Of Number 24 Penistone Road, Ingbirchworth	II	SE2251105847	2.72 km To Turbine 3	3 Turbines Visible	Low	As above
333827	Annat Royd Farmhouse and barn, Spicer House Lane, Ingbirchworth	II	SE2132304943	1.47 km To Turbine 3	3 Turbines Visible	Low	The farmhouse and barn are located within a farm curtilage, which defines its principal setting. A belt of trees around the farmhouse and garden, together with a group of larger modern farm buildings, greatly restrict views into and out of this curtilage. The farm is approached along a track from Spicer House Lane. The existing tree belt will restrict views between the farm and wind farm. The farm is approached from the west, from where the turbines would be to the rear, and therefore not visible.
333867	Bordhill Lodge, Langsett	II	SE1832101195	4.21 km To Turbine 1	3 Turbines Visible	Negligible	Bordhill Lodge is within a heavily wooded setting, and at a distance of over 4 km to the wind farm no change to its setting is likely to occur.

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
334038	Carr Head Farmhouse, Carr Head Lane	II	SE2388905387	4.02 km To Turbine 3	3 Turbines Visible	Negligible	Carr Head Farmhouse is within a farm setting occupying an open area to the immediate west east of a railway line. It is approached from the west. The farm is within an open area and turbines may be visible, though at a distance of over 4 km this will not notably affect the setting of the farmhouse. The farm is approached from the west, and hence the turbines would be to the rear and not visible.
334039	Cat Hill Farmhouse and barn, Cat Hill Lane	II*	SE2477605226	4.90 km To Turbine 3	3 Turbines Visible	Negligible	Cat Hill Farmhouse and barn occupy a farm setting which is enclosed by a belt of trees. This, together with further intervening tree belts and a distance of almost 5 km would result in there being no notable change to the setting of the farm.
334041	Nether Lea Farmhouse *and* adjoining barn to north, Cat Hill Lane	II	SE2477905261	4.91 km To Turbine 3	3 Turbines Visible	Negligible	Nether Lea Farmhouse and barn occupy a farm setting which is enclosed by a belt of trees. This, together with further intervening tree belts and a distance of almost 5 km would result in there being no notable change to the setting of the farm.
334028	Bank House, Thurlstone	II	SE2266102910	3.60 km To Turbine 3	3 Turbines Visible	Negligible	A number of listed buildings are located within Thurlstone, and their principal settings are confined to the Thurlstone settlement. The ZTV suggests that there will be some limited visibility of turbines from parts of Thurlstone. In particular, views will be restricted by the valley location of Thurlstone, which limits views out to the higher ground in which the turbines would be located. However, any such views, at a distance of over 3.5 km will not affect the settings of listed buildings within Thurlstone.
334051	Hillside, 4 Hillside Lane, Thurlstone	II	SE2265402708	3.73 km To Turbine 3	3 Turbines Visible	Negligible	As above
334052	Cross Royd Head Farmhouse and attached barn, Hornthwaite Hill Road, Thurlstone	II	SE2300102914	3.87 km To Turbine 3	3 Turbines Visible	Negligible	As above

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
334055	9 Ingbirchworth Road, Thurlstone	II	SE2328903745	3.71 km To Turbine 3	2 Turbine Visible	Negligible	As above
334086	4 Rock Side, Thurlstone	II	SE2357103446	4.09 km To Turbine 3	1 Turbine Visible	Negligible	As above
334099	Bank House Farmhouse, Hill Side, Thurlstone	II	SE2264902725	3.72 km To Turbine 3	3 Turbines Visible	Negligible	As above
334104	Redminster House, Towngate, Thurlstone	II	SE2338803549	3.88 km To Turbine 3	1 Turbine Visible	Negligible	As above
334106	15, 17, 19, 26 and 28 Towngate, Thurlstone	II	SE2335403620	3.82 km To Turbine 3	2 Turbine Visible	Negligible	As above
334030	Nether Mill House and barn, Barnsley Road	II	SE2455203892	4.86 km To Turbine 3	2 Turbine Visible	Negligible	A number of listed buildings are located within Penistone and their principal settings are confined to the Penistone settlement. The ZTV suggests that there will be some limited visibility of turbines from parts of Penistone, although its valley location limits views out to the higher ground in which the turbines would be located. However, any such views, at a distance of over 4.8 km, will not affect the settings of listed buildings within Thurlstone.
334032	Nether Mill Cottage, Barnsley Road	II	SE2470703974	4.99 km To Turbine 3	3 Turbines Visible	Negligible	As above
334034	Water Hall, 1 and 2 Barnsley Road	II	SE2444703800	4.78 km To Turbine 3	2 Turbine Visible	Negligible	As above
334103	8 and 10 Thurlstone Road	II	SE2432203652	4.71 km To Turbine 3	3 Turbines Visible	Negligible	As above

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
334094	Coal Drops immediately west of bridge under Penistone Woodhead Railway, St Mary's Street	II	SE2444303399	4.91 km To Turbine 3	3 Turbines Visible	Negligible	As above
334065	1 and 2 Bullhouse, summer house and former stable, Manchester Road, Millhouse	II	SE2123102138	3.34 km To Turbine 3	3 Turbines Visible	Negligible	Bullhouse comprises a small settlement including a group of listed buildings near to an existing non-operational turbine. The group of buildings is heavily enclosed by woodland and this tightly defines the principal setting, as well as restricting views into and out of it. Bullhouse can be approached from the north or south along narrow wooded roads. The restricted views into and out of Bullhouse and along its approaches would result in there being only minimal change to the setting of the buildings.
334069	Bullhouse Lodge, Manchester Road, Millhouse	II	SE2118902783	2.75 km To Turbine 3	3 Turbines Visible	Negligible	*As above*
334088	Royd Farmhouse and barn, Royd Lane	II	SE2173303743	2.36 km To Turbine 3	2 Turbine Visible	Low	The farm is located at the base of an escarpment which leads to the higher ground occupied by the Royd Moor turbines. This topography would result in only limited and intermittent views of the proposed turbines from the farm and from approaches to it.
334100	Shore Hall Farmhouse and barn, Shore Hall Lane, Millhouse	II	SE2228302788	3.41 km To Turbine 3	3 Turbines Visible	Negligible	The principal setting of the farmhouse and barn is defined by the farm curtilage. Limited visibility as a result of trees surrounding the farm, together with intervening built development and trees, is such that at a distance of over 3.4 km only minimal change to the setting of the farm would result.

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
334109	Far Westhorpe Farmhouse and barn, Well House Lane	II	SE2438804856	4.53 km To Turbine 3	3 Turbines Visible	Negligible	The farm setting to these buildings retains a relatively open aspect to the wind farm site, but at a distance of 4.5 km there would be only a limited magnitude of change.
340303	Hade Edge Methodist Chapel and Sunday school, Dunford Road, Hade Edge	II	SE1458505388	4.97 km To Turbine 2	3 Turbines Visible	Negligible	The chapel retains open views to the wind farm site to the east, but at a distance of approximately 5 km any change to its setting would be minimal.
340411	Wickleden, Little Cake, Scholes	II	SE1546606352	4.16 km To Turbine 2	3 Turbines Visible	Negligible	Views to the wind farm would be restricted by a belt of trees, and at a distance of over 4 km any change to its setting would be negligible.
340431	2 and 3 Marsh Road, Scholes	II	SE1577007285	4.16 km To Turbine 2	1 Turbine Visible	Negligible	There are a number of listed buildings within Scholes, but due to topography most are outside of the ZTV. There may be limited visibility from other and in their approaches. However, the limited visibility and distance of over 4 km would result in only a negligible magnitude of change.
340500	The Olde House, Ryecroft Lane, Scholes	II	SE1525007400	4.69 km To Turbine 2	3 Turbines Visible	Negligible	As above
340507	Sandygate Farm, Sandy Gate, Scholes	II	SE1548207477	4.51 km To Turbine 2	1 Turbine Visible	Negligible	As above
340597	House to north of group east side of track, Upper House Lane, Scholes	II	SE1535506080	4.23 km To Turbine 2	3 Turbines Visible	Negligible	As above

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
341269	Manor Farm, Bank Lane, Upper Denby	II	SE2268007341	3.53 km To Turbine 3	3 Turbines Visible	Negligible	There are a number of listed buildings within Upper Denby, and their principal setting is confined to the village itself. The open aspect of land to the south-west may result in some views to the wind farm from the western periphery of the village, but at a distance of over 3.5 km this will not result in any notable change to the settings of the listed buildings.
341270	Rock House, Bank Lane, , Upper Denby	II	SE2268907456	3.61 km To Turbine 3	3 Turbines Visible	Negligible	As above
341292	4-10 Coalpit Lane, Upper Denby	II	SE2287407410	3.73 km To Turbine 3	3 Turbines Visible	Negligible	As above
341268	2 Balk Lane, Upper Cumberworth	II	SE2112408859	3.67 km To Turbine 2	3 Turbines Visible	Negligible	There are a number of listed buildings within Upper Cumberworth, and their principal setting is confined to the village itself. The open aspect of land to the south-west may result in some views to the wind farm from the western periphery of the village, but at a distance of over 3.5 km this will not result in any notable change to the settings of the *listed* buildings.
341282	31 Carr Hill Road, Upper Cumberworth	II	SE2064808718	3.36 km To Turbine 2	3 Turbines *Visible*	Negligible	As above
341284	31 Cumberworth Lane, Upper Cumberworth	II	SE2110208858	3.66 km To Turbine 2	3 Turbines Visible	Negligible	As above
341285	Church Of St Nicholas and school, Cumberworth Lane, Upper Cumberworth	II	SE2111808823	3.63 km To Turbine 2	3 Turbines Visible	Negligible	As above

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
341298	Lane Side house to east of group, Cumberworth Lane, Upper Cumberworth	II	SE2146809082	4.02 km To Turbine 2	3 Turbines Visible	Negligible	As above
341310	Lane Hackings Farmhouse, Lane Hackings Green, Lower Cumberworth	II	SE2260609497	4.99 km To Turbine 2	2 Turbine Visible	Negligible	The principal settings of listed buildings within Lower Cumberworth are confined to the settlement itself. Views to the wind farm site from Lower Cumberworth, and at a distance of approximately 5 km there will be no appreciable effect on setting.
341296	Denby Dale Wesleyan Methodist Church, Cumberworth Lane, Denby Dale	II	SE2278908622	4.46 km To Turbine 2	1 Turbine Visible	Negligible	The principal settings of listed buildings within Denby Dale are confined to the settlement itself. Views to the wind farm site from Denby Dale, over a distance of approximately 4.5 km, will not result in an appreciable effect on setting.
341299	Church of St John, Denby Lane, Denby Dale	II	SE2263107160	3.38 km To Turbine 3	3 Turbines Visible	Negligible	As above.
341300	Former Farmhouse and barn to Tenter House Farm immediately west of the New Farmhouse, Dry Hill Lane, Denby Dale	II	SE2382708040	4.87 km To Turbine 3	3 Turbines Visible	Negligible	As above.
341313	18 20 and 22 Lower Denby Lane, Lower Denby	II	SE2369807768	4.61 km To Turbine 3	3 Turbines Visible	Negligible	The principal views from these houses are to Lower Denby Lane, away from the wind farm. There may be some visibility of turbines from the rear of the properties, though at a distance of over 4.5 km the magnitude of any change will be negligible.

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Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility	Magnitude	Comments
341316	The Crown and adjoining house, Park Head Lane, Birds Edge	II	SE1999508153	2.65 km To Turbine 2	3 Turbines Visible	Negligible	The Crown is situated within the centre of the settlement at Park Head, which defines its principal setting. There are only limited views to the wind farm site from The Crown or in approaches to it, and any change to the building's setting would be negligible.
341319	Broomhill, Penistone Road, High *Flatts*	II	SE2115107509	2.53 km To Turbine 2	3 Turbines Visible	Low	The setting of the house is primarily defined by its location alongside Penistone road, to the east. Due to the open aspect of land to the south, there may be some views of turbines to the rear of the building at a distance of over 2.5 km.
341322	Low House and farmhouse, Penistone Road, High Flatts	II	SE2118607396	2.47 km To Turbine 2	2 Turbine Visible	Negligible	The *setting of* Low House Farmhouse is defined by its farm curtilage, with surrounding trees *resulting in* limited view into and out of the farm. There will be very limited views of turbines from the farm and approaches to it.

Where separately listed buildings have been grouped together for the purpose of the assessment, the reference number for the principal building only is provided.

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9.6.12 There will be no direct views of turbines from listed buildings listed in Table 9.7, which are within the extended (5km) study area. Following review, it is considered that there are no third viewpoints or approaches to any of the buildings which could result in potentially significant effects on the setting of any of these buildings.

Table 9.7 Assessment of Indirect effects on designated features within 1 km Study Area

Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility
333785	Dick Royd Farmhouse and attached barn, Brook Hill Lane	II	SE1735402993	3.14 km To Turbine 1	No Turbines Visible
333786	Barn to Upper Town Head Farm, Brook Hill Lane, Dunford	II	SE1646202791	3.94 km To Turbine 1	No Turbines Visible
333852	Lower Belle Clive Farmhouse and outbuilding, Hartcliff Road, Langsett	II	SE2193001488	4.24 km To Turbine 3	No Turbines Visible
333855	Barn, adjoining and to south of Alderman's Head Cote Farmhouse, Manchester Road, Langsett	II	SE2232800854	4.99 km To Turbine 3	No Turbines Visible
333859	Wagon and Horses Public House, Manchester Road, Langsett	II	SE2125600456	4.94 km To Turbine 3	No Turbines Visible
333860	Barn approximately 5 m north of The Lodge (Y.W.A.), Manchester Road, Langsett	II	SE2119900424	4.95 km To Turbine 3	No Turbines Visible
333861	Langsett House, barn and house, Manchester Road, Langsett	II	SE2113000421	4.93 km To Turbine 3	No Turbines Visible
334071	Church Of St Saviour and vicarage, Manchester Road, , Thurlstone	II	SE2240003322	3.15 km To Turbine 3	No Turbines Visible
334073	44, 46 and 48 Manchester Road, Thurlstone	II	SE2331403452	3.86 km To Turbine 3	No Turbines Visible
334087	Weaver's House at Leapings, Rock Side, Thurlstone	II	SE2282203183	3.57 km To Turbine 3	No Turbines Visible
334090	Carr House, Royd Lane	II	SE2131503986	1.88 km To Turbine 3	No Turbines Visible
334091	Royd Moor Farmhouse and barns, Royd Moor Road	II	SE2218304234	2.50 km To Turbine 3	No Turbines Visible
334105	Barn at Redminster Cottage, Towngate, Thurlstone	II	SE2337503523	3.88 km To Turbine 3	No Turbines Visible
334102	1 - 9 Tenter Hill, Thurlstone	II	SE2348503535	3.98 km To Turbine 3	No Turbines Visible
340231	5, 6, 7, 8 and 9 Barnside and barn, Hepworth	II	SE1714605990	2.45 km To Turbine 2	No Turbines Visible
340235	Former dwellings and barn adjoining to right of No 42, Barracks Fold, Hepworth	II	SE1632406690	3.43 km To Turbine 2	No Turbines Visible

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Table 9.7 (continued) Assessment of Indirect effects on designated features within 1 km Study Area

Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility
340244	Church Of The Holy Trinity, Butt Lane, Hepworth	II	SE1628406950	3.56 km To Turbine 2	No Turbines Visible
340245	21, 23, 25, 31, 39, 41 and 43 Butterly, New Mill	II	SE1660808141	3.93 km To Turbine 2	No Turbines Visible
340283	Daisy Lee, Daisy Lee Lane (Off Penistone Road), Hade Edge	II	SE1497304407	4.66 km To Turbine 1	No Turbines Visible
340312	5, 6 and 9 East Street	II	SE1649107416	3.59 km To Turbine 2	No Turbines Visible
340363	1,2, 3,4,5,6 and 7 Hill Street, Jackson Bridge	II	SE1635707423	3.71 km To Turbine 2	No Turbines Visible
340406	Hollingreave, Huddersfield Road, New Mill	II	SE1636708914	4.64 km To Turbine 2	No Turbines Visible
340432	Scholes Methodist Chapel, Marsh Road, Scholes	II	SE1578807314	4.16 km To Turbine 2	No Turbines Visible
340475	43,45, 52,54, 56,58, 60, 72,74, Ivy Cottage, Town Head Farmhouse and barn, White House Paris Road, Scholes	II	SE1573807506	4.29 km To Turbine 2	No Turbines Visible
340490	2, 50, Horn Cote, Penistone Road, New Mill	II	SE1668608636	4.22 km To Turbine 2	No Turbines Visible
340502	27 St Georges Road, Scholes	II	SE1590307740	4.26 km To Turbine 2	No Turbines Visible
340503	Croft House Farm Barn, St Georges Road, Scholes	II	SE1587107740	4.29 km To Turbine 2	No Turbines Visible
340508	9,10,11, 12,15 Scholes Road, Jackson Bridge	II	SE1637607426	3.69 km To Turbine 2	No Turbines Visible
340519	1,3,5, 8,10,12,14 Sike Lane, Totties	II	SE1570908129	4.63 km To Turbine 2	No Turbines Visible
340521	Brianfield Farmhouse and barn, Snowgate Head, New Mill	II	SE1777408656	3.59 km To Turbine 2	No Turbines Visible
340529	Stalley Royd Farmhouse, Stalley Royd Lane, Jackson Bridge	II	SE1664907523	3.51 km To Turbine 2	No Turbines Visible
340534	26,28 Sude Hill, New Mill	II	SE1650508766	4.44 km To Turbine 2	No Turbines Visible
340535	Christ Church, New Mill	II	SE1660608708	4.32 km To Turbine 2	No Turbines Visible
340554	31, 33,35,37,39, 54,56, 59-67, 69, 71-81 Totties Lane, Totties	II	SE1570708230	4.69 km To Turbine 2	No Turbines Visible
340565	34, 36, 56, 58, 59, 64,65,66, 78,79,80,81, Barn Opposite No 58, former Co op building opposite No 59a and Butchers Arms, Town Gate,	II	SE1629306836	3.51 km To Turbine 2	No Turbines Visible

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Table 9.7 (continued) Assessment of Indirect effects on designated features within 1 km Study Area

Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility
	Hepworth				
340590	Nos 13/14 and 15 (South East Part) and adjoining barns, Upper Gate, Hepworth	II	SE1620806804	3.57 km To Turbine 2	No Turbines Visible
340591	Cruck Building to north part of Carr Farm, Upper Gate, Hepworth	II	SE1626506771	3.51 km To Turbine 2	No Turbines Visible
340592	Barn, south part of Carr Farm, Upper Gate, Hepworth	II	SE1626606756	3.50 km To Turbine 2	No Turbines Visible
340593	28 and 29 Upper Gate, Hepworth	II	SE1626306792	3.52 km To Turbine 2	No Turbines Visible
340613	Moor View Farmhouse, Upper House Lane, Fulstone	II	SE1752409406	4.36 km To Turbine 2	No Turbines Visible
340614	Barn to northwest of Moor View Farmhouse, White Ley Bank, Fulstone	II	SE1752509422	4.38 km To Turbine 2	No Turbines Visible
340615	12 White Ley Bank, Fulstone	II	SE1745809354	4.35 km To Turbine 2	No Turbines Visible
340616	West Royd Farmhouse, White Ley Bank, Fulstone	II	SE1745809380	4.37 km To Turbine 2	No Turbines Visible
340617	Denhirst, White Ley Bank, Scholes	II	SE1576707460	4.24 km To Turbine 2	No Turbines Visible
341134	Church Of St Paul, Church Lane, Shepley	II	SE1916509718	4.19 km To Turbine 2	No Turbines Visible
341135	37 Cliffe Road, Shepley	II	SE1908809585	4.07 km To Turbine 2	No Turbines Visible
341136	10 and 11 Cliffe Side, Shepley	II	SE1927709666	4.13 km To Turbine 2	No Turbines Visible
341137	Copley House and former weaving establishment, Copley Lane, Shepley	II	SE2075809816	4.44 km To Turbine 2	No Turbines Visible
341149	Shepley First School, Firth Street, Shepley	II	SE1942609650	4.11 km To Turbine 2	No Turbines Visible
341170	Lane Head House, Lane Head Road, Shepley	II	SE1940809015	3.48 km To Turbine 2	No Turbines Visible
341215	Croft Head Farm, Station Road, Shepley	II	SE1935809853	4.31 km To Turbine 2	No Turbines Visible
341216	The Granary, Station Road, Shepley	II	SE1932709834	4.30 km To Turbine 2	No Turbines Visible
341217	20, 22, 30 and 32 Station Road, Shepley	II	SE1935509876	4.34 km To Turbine 2	No Turbines Visible
341264	Cliffe House, Lane Head Road	II	SE1921709452	3.92 km To Turbine 2	No Turbines Visible

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Table 9.7 (continued) Assessment of Indirect effects on designated features within 1 km Study Area

Ref.	Name	Grade	NGR	Distance to nearest turbine	Visibility
341272	Denby Dale Railway Viaduct, Barnsley Road, Denby Dale	II	SE2245308395	4.06 km To Turbine 2	No Turbines Visible
341311	Withywood Hall, Low Fold, Lower Cumberworth	II	SE2237409394	4.77 km To Turbine 2	No Turbines Visible
341312	4 and 6 Low Fold, Lower Cumberworth	II	SE2231909359	4.71 km To Turbine 2	No Turbines Visible
341317	Birds Edge Mill, Penistone Road, Birds Edge	II	SE2019607944	2.48 km To Turbine 2	No Turbines Visible
341320	Friends Meeting House, Penistone Road, High Flatts	II	SE2123207461	2.55 km To Turbine 2	No Turbines Visible
341321	Green Hollows, Penistone Road, High Flatts	II	SE2121907454	2.53 km To Turbine 2	No Turbines Visible
341323	Low House Farmhouse, High Flatts	II	SE2125607461	2.56 km To Turbine 2	No Turbines Visible
341328	Braggs Farmhouse, Top Road, Lower Cumberworth	II	SE2222309364	4.66 km To Turbine 2	No Turbines Visible
341331	3 Storey Mill Building at Hartcliffe Mills immediately east reservoir, Wakefield Road, Denby Dale	II	SE2230308336	3.92 km To Turbine 2	No Turbines Visible

9.7 Summary of significance evaluation

9.7.1 A summary of the significance evaluation (as described in section 9.6) for the cultural heritage assessment is provided in Table 9.8.

Table 9.8 Summary of significance of effects

Receptor and summary of predicted effects	Type of effect[1]	Significance[2]
Potential disturbance to features associated with the WWII Bombing decoy	N	Not Significant
Potential disturbance to features not previously identified	-ve	Not Significant
Potential effects on the setting of scheduled monuments	-ve	Not Significant
Potential effects on the setting of listed buildings	-ve	Not Significant

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Table 9.8 (continued) Summary of significance of effects

Receptor and summary of predicted effects	Type of effect[1]	Significance[2]

Key/footnotes:

1.Type of effect	-ve = negative	2.	S	Significant
	+ ve = positive		or	
	N = Neutral		NS	Not-significant
	? = unknown			

9.8 References

Written Sources

DOE (1990) Planning Policy Guidance (PPG Note 16): Archaeology and Planning

DOE (1994) Planning Policy Guidance (PPG Note 15): Planning and the Historic Environment

DOE (1997) The Hedgerow Regulations

English Heritage (2006) Wind Energy and the Historic Environment

Field J (1989) English Field Names

IFA (2001) Standard and Guidance for Archaeological Desk Based Assessments

Mills A D (1998) Oxford Dictionary of English Placenames

Palmer R and Cox C (1993) Uses of Aerial Photography in Archaeological Evaluation, IFA Technical Paper 12

Scottish Natural Heritage (2001) Guidelines on the Environmental Impacts of Wind Farms and Small Scale Hydroelectric Schemes

Cartographic Sources

Ordnance Survey 25" to 1 mile Yorkshire Sheet 273(a)

1st Edition 1851

2nd Edition 1893

1906

1931

Aerial Photographs

RAF/82/1015 Frames 276-278, 7 September 1954

RAF/540/1424 Frames 77-78, 29 September 1954

RAF/543/9 Frames 182-183, 19 June 1957

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RAF/543/1677 Frames 260-261, 3 March 1962

RAF/58/4977 Frame 41, 7 March 1962

RAF/58/4983 Frame 390-392, 13 March 1962

MAL/68025 Frame 2 25 April 19686

MAL/73014 Frames 6-7 3 April 1973

MAL/79043 Frames 42-32 13 November 1979

MAL/75031 Frame 146 7 May 1975

OS/90229 Frames 4-5 1 August 1990

Internet and other sources

www.magic.gov.uk

www.english-heritage.org.uk

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