



Haldenby Grange Barn,
Luddington

Ecological Appraisal Report

April 18, 2018

ECOLOGICAL APPRAISAL REPORT

DOCUMENT CONTROL



Project:	Haldenby Grange Barn	
Client:	Mr and Mrs Cleaver	
Project Number:	2018/011	
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Date of Issue:	18 April 2018	
Version:	V1	
Report Reference Number:	2018/011/01	

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Executive Summary

An initial ecological desk study, Extended Phase 1 Habitat Survey and an initial bat and barn owl survey were undertaken as part of an ecological appraisal for a small area of land at Haldenby Grange, Mill Road, Luddington, Scunthorpe. The survey was in connection with the proposed conversion of a Grade II listed barn into a residential dwelling.

The site consists of a Grade II listed barn, an area of species-poor semi-improved grassland and gardens, a small area of woodland and a number of scattered trees. Adjacent to the site, to the north, is a farmyard with three large agricultural buildings, bare ground and small areas of species-poor semi-improved grassland. To the south, is Haldenby Grange farmhouse and associated gardens, and to the east and west are arable fields.

The majority of the habitats on site are of negligible or low ecological value. The scattered trees and woodland could support populations of invertebrate species and may be used by nesting birds. The barn, and particularly the dense ivy, may be used by roosting bats.

An initial bat and barn owl potential assessment the Grade II listed barn was undertaken, all the trees within the site boundary were also assessed for bat their potential. All of the trees within the site boundary had negligible potential for roosting bats. The barn appeared to have some access under the roof tiles for crevice dwelling bat species such as pipistrelle. The western wall of the barn has a dense ivy covering much of the wall which could also support roosting bats. The barn had no potential to support roosting barn owl.

The proposed development will have negligible impact on the ecological value of the area but may have impacts on protected species if bats are roosting in the building. It is recommended further dusk/dawn emergence/re-entry surveys are undertaken to ascertain if bats are roosting in the ivy, or in the building. To avoid impacts on nesting birds, vegetation clearance should be undertaken outside the bird nesting season (i.e. Avoid March to August).

1. INTRODUCTION

AB Ecology were commissioned to undertake an ecological appraisal in connection with the proposed conversion of a Grade II listed barn into a residential dwelling at Haldenby Grange, Mill Road, Luddington, DN17 4QS, hereafter referred to as the 'site'. The site is located at Ordnance Survey National Grid Reference SE 826 179.

1.1 SCOPE OF THE STUDY

The site is approximately 0.14 ha and consists of a single building (a barn) with associated gardens and access track/parking area. A small area of species-poor semi-improved grassland with scattered trees and a small woodland area are also present within the site boundary. Adjacent to the site, to the north, is a farmyard containing three large agricultural buildings, access tracks and small patches of species-poor semi-improved grassland. Arable fields bound the site to the east and west. To the south of the site is the farmhouse and garden.

This report considers the existing baseline ecological features of the area within the site boundary (See Drawing 1) and provides an ecological appraisal of the site in relation to the proposed development.

A summary of the legislation in respect of any potential protected/notable species that could be present within the local area, can be found in Appendix A.

1.2 OBJECTIVE

The objectives of the assessment were as follows:

- To undertake an initial ecological desk study to obtain existing information on designated sites within 2 km of the site and protected and notable species within 1 km of the site;
- To undertake an Extended Phase 1 Habitat Survey to map key habitats and highlight the potential for protected species within the site;
- To undertake an initial bat and barn owl *Tyto alba* survey to determine the likelihood of bats or barn owl roosting on site;
- To produce a report which details the findings of the aforementioned surveys and highlights any key ecological issues of the proposed development; and
- To advise on any further ecological surveys that may be required and any mitigation measures required, if necessary.

1.3 STUDY LIMITATIONS

Species lists included in the Extended Phase 1 Habitat Survey Target Notes (Appendix B) are not necessarily an exhaustive inventory of all species occurring at the site. They are intended to illustrate the general species richness of a particular area and draw attention to any species that may be considered uncommon or unusual. Species may have been missed on the basis of seasonal flowering periods.

2. METHODOLOGY

2.1 INITIAL DESK STUDY

An initial, ecological desk study, was carried out in April 2018 to identify existing records of sites of nature conservation interest within 2 km and of protected or notable species within 1 km of the centre of the site (National Grid Reference SE 826 179).

To ensure that the information reported in this desk study is current, only data from surveys conducted within the last fifteen years were considered. It should be noted that desk studies do not provide an exhaustive list of all ecological information for any area, and so cannot be relied on as the only source of information for any study area in question. An absence of records does not necessarily mean a species is not present in an area. Desk studies are, however, very useful in combination with field based surveys to identify features of nature conservation interest that might be associated with a site. The following organisations/web resources were consulted during the desk study:

- Multi-Agency Geographic Information Centre (MAGIC) [online];
- National Biodiversity Network (NBN) Atlas [online]; and
- Lincolnshire Biodiversity Action Plan (Lincolnshire Biodiversity Partnership, 2011).

2.2 EXTENDED PHASE 1 HABITAT SURVEY

An Extended Phase 1 Habitat Survey was undertaken by two suitably qualified ecologists¹ on 09 April 2018 to record the habitats and vegetation on site. The land within the site boundary, and the immediate surrounds, was surveyed and mapped (refer to Drawing 1).

This followed the standard methodology set out by the Joint Nature Conservation Committee (JNCC, 2010). Key features identified during the Extended Phase 1 Habitat Survey are summarised in the form of Target Notes (refer to Appendix B). Nomenclature for plant species names is taken from Stace (2010).

2.3 INITIAL BAT AND BARN OWL SURVEY

Bats

All buildings and trees within the survey area were assessed by a suitably experienced ecologist² to determine their potential for roosting bats. The survey was commensurate with good practice, following the guidance set out in the *Bat Workers Manual* (Mitchell-Jones & McLeish, 2004) and in *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016). This initial assessment was conducted on 09 April 2018, during daylight hours. A note was made of any features (such as cracks, holes, crevices or ivy *Hedera helix*) that may provide roosting opportunities for bats. Each structure was assessed according to the criteria in Table 1. Each structure was graded high, moderate, low or negligible for its suitability for roosting bats.

¹ Adele Antcliff MSc., BSc. (Hons), MCIEEM and Rachel Blackham MSc., BSc. (Hons), MCIEEM.

² Adele Antcliff MSc., BSc. (Hons), MCIEEM Class 2 Bat Licence Number 2015-13206-CLS-CLS

Table 1: Criteria for Bat Roost Potential Assessment

Bat Roost Potential	Description
Negligible	The structure (building or tree) has no importance to roosting bats and no features have been identified which roosting bats could utilise. The surveyor would be surprised to find any bats roosting here.
Low	Superficially the structure may have some interest to roosting bats, but it is considered sub-optimal to the extent that the surveyor would not anticipate bats to favour it. The structure appears unsuitable for maternity colonies and would only support low numbers of bats if any at all.
Moderate	A structure that has some potential for roosting bats, but is less than ideal in some way. The surveyor would neither expect, nor be surprised to find a bat in a structure categorised as having moderate bat potential.
High	A structure with 'ideal' features which, in the experience of the surveyor, is wholly appropriate for use by roosting bats. For example, it has no obstructions below cavity entrances, the cavity is upward leading, the structure has a high degree of connectivity with likely navigation routes, and surrounding habitat offers good foraging potential. The structure might be particularly prominent and likely to be noticed by navigating bats.
Confirmed	Positive signs of bats are found, i.e. individual bats, bat droppings or existing records of a bat roost are directly associated with this structure.

Barn Owl

During the initial bat survey the barn was also assessed for its potential to support roosting or breeding barn owl. An external and internal assessment were carried out to determine if the barn was suitable for this species (access points, nesting features) and to determine if there was any evidence of this species using the barn such as feathers, pellets or dead birds.

3. RESULTS

3.1 DESK STUDY

3.1.1 Designated Sites

The desk study revealed that no statutory designated sites lie within 2 km of the site. A non-statutory designated Community Forest (HEYwoods) lies approximately 1.2 km north west of the site. The HEYwoods initiative aims to increase woodland cover and to improve the management of existing trees, woods and associated habitats in Kingston upon Hull and the East Riding of Yorkshire (Heywoods, 2013).

3.1.2 Species

The NBN Atlas provided freely available records of species of nature conservation interest, located within 1 km of the site. The publically available, project applicable records, are summarised below³.

No records of mammals, amphibians or reptiles were recorded within close proximity of the site. A number of bird species were recorded, two of which are included on the red list of birds of conservation concern (Eaton *et al.* 2015). Red list species included house sparrow *Passer domesticus* and starling *Sturnus vulgaris*.

3.2 EXTENDED PHASE 1 HABITAT SURVEY

The results of the Extended Phase 1 Habitat Survey are shown on Drawing 1 and are supplemented by the Target Notes in Appendix B. The habitats are described below. The site comprised the following broad habitat types:

- Buildings;
- Bare ground;
- Semi-natural Broad-leaved Woodland;
- Species-poor Semi-improved Grassland;
- Allotment/gardens; and
- Scattered trees.

Additionally, just outside the site boundary was a ditch and a small section of species-rich hedgerow.

Buildings

A single building exists within the site boundary; a Grade II listed barn (Target Note 1). This is a large brick built barn with a pitched, tiled roof. On the southern aspect is a small extension area of similar construction to the main building but with open walls, currently used for storage. Dense ivy is growing on the western aspect of the building.

A number of other buildings are present just outside the site boundary (see Drawing 1).

To the north, is a farmyard with typical agricultural buildings comprised of metal beams, corrugated metal sheeting and pitched roofs with asbestos sheeting. They are of negligible ecological value.

To the south of the site is a residential property; the farmhouse. This is of similar construction to the barn, it is brick built with a pitched, tiled roof which appears in good condition.

A small green house is located to the south east of the barn and a small wooden chicken coop is present to the south west of the site. These also are of negligible ecological value.

Bare Ground

³ The data provider, original recorder [where identified], and the NBN Trust bear no responsibility for any further analysis or interpretation of this data.

The access tracks and parking area for the farmhouse and barn is made up of hard packed bare ground of negligible ecological value. A patch of bare ground is also present within the area of species-poor semi-improved grassland to the west of the site (Target Note 2).

Semi-natural Broad-leaved Woodland

A small area (0.03 ha) of semi-natural broad-leaved woodland is present along the western boundary of the site (Target Note 3). Trees present included alder *Alnus glutinosa*, silver birch *Betula pendula*, holly *Ilex aquifolium*, elder *Sambucus nigra* and a willow *Salix* sp. The ground flora is patchy, and made up of tall ruderal species including common nettle *Urtica dioica*, cleavers *Galium aparine*, broad-leaved dock *Rumex obtusifolius*, common hogweed *Heracleum sphondylium*, foxglove *Digitalis purpurea*, lesser celandine *Ranunculus ficaria* and spear thistle *Cirsium vulgare*.

Species-poor Semi-improved Grassland

Around the barn is an area of garden made up mainly of species-poor semi-improved grassland (Target Note 4). It is dominated by common and widespread grassland species such as Yorkshire-fog *Holcus lanatus*, and red fescue *Festuca rubra* with creeping buttercup *Ranunculus repens*, spear thistle, cow parsley *Anthriscus sylvestris* and dandelion *Taraxacum officinale* agg also present.

Allotments/Gardens

On the eastern edge of the site is a small garden/allotment area with a green house and various planting beds and pathways. There is no evidence of recent management and the area is overgrown with tall grassland/ruderal species.

Scattered Trees

Within the site are a large number of scattered trees (Target Note 5). Mainly broad-leaved species such as silver birch, alder, apple *Malus* sp. and willow but occasional coniferous Leyland cypress trees *X Cuprocyparis leylandii* are also present. Most of the trees are mature however some self-seeded saplings are also present.

Numerous common bird species were recorded in the trees during the survey including robin *Erithacus rubecula*, wren *Troglodytes troglodytes*, blackbird *Turdus merula*, blue tit *Cyanistes caeruleus*, chaffinch *Fringilla coelebs* and woodpigeon *Columba palumbus*. Yellowhammer *Emberiza citrinella* a red-listed bird species was also recorded singing whilst on site.

Ditch

A drainage ditch is present off site on the south western boundary (Target Note 6). The ditch is partially dry with only pockets of shallow (less than 10 cm) water. The water is covered in algae. The banks are steep (over 45°) and earth so would be suitable for burrowing mammals such as water vole *Arvicola amphibius*. One bank is dominated by grassland species whilst the other is woodland. No aquatic or emergent vegetation was recorded growing in the ditch and it is likely that the ditch is dry much of the year..

Species-rich Hedgerow

A short section of species rich hedgerow is present outside the site boundary, along the garden area between the barn and the farmhouse (Target Note 7). Species included beech *Fagus sylvatica*, elder, hawthorn *Crataegus monogyna*, holly and a cotoneaster *Cotoneaster* sp. The

hedge is small 8 m long, approximately 1 m high and less than 0.5 m wide. It appears to have been recently cut.

Five species of cotoneaster are listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended (HMSO, 1981). Making it an offence to grow or cause them to spread into the wild (See Section 4.3.6 for further detail). Cotoneaster species are difficult to identify and it was not possible to confirm if the species present is one of those listed on Schedule 9.

INITIAL BAT AND BARN OWL SURVEY

Bats

A single building: the Grade II listed barn; is present within the site boundary. The pitched, tiled roof has a felt under layer. There are some small gaps in the roof and felt giving access to the inside of the building. The majority of the roof appears well sealed, with only a few missing/broken tiles. There are a number of gaps in the walls but nearly all of these have been sealed on the inside so access is not possible.

Where gaps exist pipistrelle *Pipistrellus* sp. bats may have access to roost between the roof tiles and the roofing felt. Brown long-eared *Plecotus auritus* bats which are often associated with roosting in barns on wooden joists require flight access (they are not crevice dwelling) and therefore are unlikely to be using this structure. On the western aspect of the building is a large, dense area of ivy. The ivy creates numerous cracks and crevices which could be favoured by roosting bats particularly pipistrelle. The building has moderate potential to support roosting bats.

None of the trees within the site boundary had any potential to support roosting bats and need not be considered further.

Barn Owl

The barn owl assessment concluded that there was no suitable access points for barn owl in the barn and no evidence of this species was recorded during the survey.

4. EVALUATION AND RECOMMENDATIONS

4.1 DESIGNATED SITES

One non-statutory designated site, HEYwood, a community woodland, was recorded within the 2 km desk study area. HEYwood is located over 1.2 km from the site with no interconnecting woodland habitat. Development of the site will have no impact upon this site and therefore need not be considered further.

4.2 HABITATS

Habitats within the site boundary include buildings, bare ground, species-poor semi-improved grassland, semi-natural broad-leaved woodland, gardens/allotments and scattered trees. The majority of the habitats are of negligible to low ecological value and their removal will not have a significant adverse effect on the biodiversity of the area. The broad-leaved woodland and the scattered trees will support various invertebrate species and the trees are likely to support nesting birds. However due to the small extent and the isolated nature of this woodland (surrounded mainly by arable fields) it is only of low ecological value.

The building also has some potential to support roosting bats.

None of the habitats within the site boundary qualify as UK Priority habitats as listed under the NERC Act 2006 however gardens and allotments are a local Biodiversity Action Plan Habitat (Lincolnshire Biodiversity Partnership, 2011). As only a small proportion of the garden of the existing property is proposed for development and due to the small scale of the site it is not deemed that the removal of a small area of species-poor semi-improved grassland and scattered trees will have a significant impact on the Habitat Action Plan habitat, or the biodiversity value of the area.

Outside the site boundary a small section of ditch and a species-rich hedgerow were present. The ditch is likely to be dry for much of the year and was of low ecological value. Due to the short length (under 20 m) of the hedgerow and the fact it borders a domestic garden it would not be considered an 'important hedgerow' under the hedgerow regulations (HMSO, 1997). Although it may provide habitat for various invertebrates and foraging and nesting birds the hedge is of low ecological value.

4.3 SPECIES

4.3.1 Amphibians (including Great Crested Newt) and reptiles

No records of amphibian or reptile species were returned from the desk study. There are no waterbodies within the site that would support amphibians or reptiles and no ponds suitable for, great crested newts *Triturus cristatus* within 250 m of the development. All habitats within the site are either unsuitable or sub-optimal for amphibians and reptiles and the site is isolated from more favourable habitats by large expanses of arable farmland, it is therefore unlikely these species would be present on site. Amphibians and reptiles need not be considered further.

4.3.2 Badger

There are no records of badger *Meles meles* within 1 km of the site. There were no signs of badger during the site visit and therefore this species need not be considered further.

4.3.3 Bats

Although no records of bats were identified during the desk study, this is likely to be due to lack of records than an absence of the species. Bats are listed as a Priority Species on the Local Biodiversity Action Plan (Lincolnshire Biodiversity Partnership, 2011). An initial bat roost assessment of the buildings and trees within the site boundary was undertaken. The building was assessed as having moderate potential to support roosting bats due to gaps between the tiles and the felt and the large expanse of dense ivy on the western aspect. Bats and their roosts are protected under the Wildlife and Countryside Act (1981) as amended (see Appendix A). It is therefore recommended that further emergence/re-entry surveys are undertaken on the building to ascertain if roosting bats are present.

4.3.4 Barn Owl

The barn is unsuitable for barn owl and this species need not be considered further.

4.3.5 Birds

Farmland birds are listed on the local Biodiversity Action Plan (Lincolnshire Biodiversity Partnership, 2011). This includes starling (found during the desk study) and yellowhammer (heard singing on site). A number of other common and widespread bird species were recorded during the survey. It is likely that birds will be using the vegetation at the site for nesting, including the

scattered trees and woodland. Any vegetation clearance should be undertaken outside the bird nesting season (i.e. avoid March-August inclusive). If this is not possible, then the vegetation should be checked immediately prior to removal to ensure nesting birds are not disturbed. If nesting birds are present, the nest must be left intact until the young have fledged the nest.

Any proposed tree, hedge and shrub planting should contain a proportion of species that will benefit native fauna, particularly those that attract invertebrates which provide food for birds, and also potentially bats, foraging in the area. Primarily native species should be planted and only non-natives that are known to be beneficial for invertebrates such as bees (Royal Horticultural Society, undated) should be used. This could include tree species such as silver birch, wych elm *Ulmus glabra* and pedunculate oak *Quercus robur*. Shrub species such as common dogwood *Cornus sanguinea* lavender *Lavandula* sp., honeysuckle *Lonicera periclymenum* or evening primrose *Oenothera biennis*.

4.3.6 Invasive Species

A cotoneaster species was present on the site boundary within the short hedgerow. Five species Hollyberry *Cotoneaster bullatus*, wall cotoneaster *C.horizontalis*, small-leaved cotoneaster *C.microphyllus* agg., Himalayan cotoneaster *C.simonsii* and entire-leaved cotoneaster *C.integrifolius*. of cotoneaster are listed on Schedule 9 of the Wildlife and Countryside Act (1981) (HMSO, 1981) making it an offence to plant or cause these species to grow in the wild. Due to the difficulties in distinguishing the different species of cotoneaster a precautionary approach is recommended. The plant is located outside the site boundary, however it is very close to the area of potential construction. It is recommended that the species is either left in-situ, or that the entire plant is removed including the root mass. The material can be chipped or burnt on site or removed to a licensed landfill as controlled waste.

4.3.7 Water Vole

No records of water vole were found during the desk study. No habitats within the site boundary are suitable for this species and the ditch just outside the boundary is sub-optimal habitat due to lack of vegetation and cover. No evidence of water vole, including burrows and latrines was found during the site visit and it is unlikely this species is present.

5. SUMMARY

Table 2 summarises the results and recommendations for the site.

Table 2: Summary Table

Habitat/Species	Result	Recommendations/Enhancement
Habitats	All the habitats at the site are of low ecological value. The scattered trees and broad-leaved woodland has some value to nesting birds but due to the small size and low quality of the habitat, the loss is unlikely to be significant.	Any planting should seek to incorporate native species and those valuable for nature conservation where possible. See recommendations for birds.
Bats	The Grade II listed barn has moderate potential to support roosting bats, particularly the dense ivy on the western aspect of the building.	Further bat emergence/re-entry surveys will be required.

	None of the trees within the site boundary had any potential to support roosting bats.	
Birds	<p>The building was not suitable for use by roosting barn owl.</p> <p>Habitats on the site could be used by other nesting and foraging birds, especially the woodland and scattered trees. Common and widespread species were recorded during the survey and one red list bird of conservation concern.</p>	<p>Vegetation clearance should be undertaken outside the bird nesting season (i.e. avoid March to August). Alternatively, the vegetation should be checked for nesting birds immediately prior to removal.</p> <p>Planting of native tree/shrub species or those known to attract native wildlife.</p>
Invasive Species	A single cotoneaster plant was recorded growing in the hedgerow outside the site boundary.	The plant should either be left completely untouched or should be removed and either chipped or burnt on site. It must not be allowed to grow offsite or spread to the wild. If it is to be removed from the site it needs to be classed as controlled waste.

6. REFERENCES

- Collins, J (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 3rd Edition, Bat Conservation Trust.
- Eaton, M., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D. and Gregory, R. (2015) Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds*, 108, pp, 708-746
- Heywoods (2013) *Heywoods* [online] Available at: <http://heywoods.org.uk/> [accessed April 2018]
- HMSO (1981) *Wildlife and Countryside Act 1981* [online]. Available at: <http://www.legislation.gov.uk/ukpga/1981/69> [accessed April 2018].
- HMSO (1997) *The Hedgerow Regulations 1997* [online]. Available at: <http://www.legislation.gov.uk/uksi/1997/1160/contents/made> [accessed April 2018].
- HMSO (2000) *Countryside and Rights of Way Act 2000* [online]. Available at: <http://www.legislation.gov.uk/ukpga/2000/37/contents> [accessed April 2018].
- HMSO (2006) *Natural Environment and Rural Communities Act 2006* [online]. Available at: <http://www.legislation.gov.uk/ukpga/2006/16/contents> [accessed April 2018].
- HMSO (2010) *Conservation of Habitats and Species Regulations 2010* [online]. Available at: <http://www.legislation.gov.uk/uksi/2010/490/contents/made> [accessed April 2018].
- Joint Nature Conservation Committee (2010) *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit*. Revised reprint 2010. Peterborough: JNCC.

Lincolnshire Biodiversity Partnership (2011) *Lincolnshire Biodiversity Action Plan 2011-2020 3rd Edition*. Lincolnshire

Mitchell-Jones, A.J. and McLeish, A.P. (2004) *The Bat Worker's Manual*. 3rd Edition. Peterborough: JNCC.

Multi-Agency Geographic Information for the Countryside (MAGIC) [online]. Available at: <http://www.magic.gov.uk/> [accessed April 2018].

National Biodiversity Network Atlas [online]. Available at: <https://nbn.org.uk/news/online-atlas/> [accessed April 2018].

Royal Horticultural Society (undated) *RHS recommended plants for attracting bees into the garden* [online]. Available at: <https://www.rhs.org.uk/advice/pdfs/plants-for-bees> [Accessed April 2018].













Stace, C.A. (2010) *New Flora of the British Isles*. 3rd Edition. Cambridge: Cambridge University Press, JNCC

Drawings


Drawing 1: Extended Phase 1 Habitat Survey



Legend

-  Site Boundary
-  Wider site ownership
- Habitats
-  Bare Ground
-  Semi-natural Broad-leaved Woodland
-  Building
-  Garden/Allotment
-  Poor Semi-improved Grassland
- Scattered Trees
-  Broad-leaved Tree
-  Coniferous Tree
-  Ditch
-  Species-rich Hedgerow
-  Target Notes

Scale @ A3 1:500

Client		Mr and Mrs Cleavers	
Project		Haldenby Grange Barn	
Title		Extended Phase 1 Habitat Survey Results	
Project Number	Date	2018/011	18/04/2018
		Drawing Number	1

Appendix A

Legislation

WILDLIFE LEGISLATION

Species Protection

A level of statutory protection is afforded to specific species, largely as a consequence of dramatic declines in populations caused by habitat loss and/or degradation (both direct and indirect impacts) and persecution. In England the various statutes which provide this protection include the following:

- The Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000);
- The Conservation of Habitats and Species Regulations 2010 (as amended);
- Natural Environment and Rural Communities Act (NERC) 2006;
- The Protection of Badgers Act 1992; and
- Wild Mammals (Protection) Act 1996.

These are further described for specific protected species surveyed for or expected at the site below.

National Planning Policy Framework (NPPF)

The NPPF sets out, amongst other points, how at an overview level the 'planning system should contribute to and enhance the national and local environment by:

-recognising the wider benefits of ecosystem services;
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Governments' commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.....

The NPPF states that this should be achieved through local planning development frameworks and gives recommendations for criteria based policies which recognise the hierarchy of designates sites which range from internationally important habitat, to sites of importance at a local level and ensure that protection is 'commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks',

A list of principles which local planning authorities should follow when determining planning applications is included in the NPPF which includes the following;

- If significant harm resulting from a development cannot be avoided.....adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
-opportunities to incorporate biodiversity in and around developments should be encouraged;
- Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland, unless then need for, and benefits of, the development in that location clearly outweighs the loss.....

Species of Principle Importance in England

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK Biodiversity Action Plan (UK BAP) and which continue to be regarded as conservation priorities under its successor, the UK Post-2010 Biodiversity Framework.

Bats

All species of bat and their roost are protected under UK and European legislation. Bats are included in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way Act 2000 and Regulation 40 and Schedule 2 of The Conservation of Habitats and Species Regulations 2010. It is an offence to:

- Deliberately capture, injure or kill a bat;
- Damage or destroy a breeding site or resting place of a bat; and
- Disturb a bat, including disturbance of a bat in such a way as to be likely to affect:
 - i) the ability of bats to survive, reproduce or breed, or to rear or nurture their young;
 - ii) their ability to hibernate or migrate; and
 - iii) to significantly affect the local distribution or abundance of bats.

Provisions are made within the UK legislation to allow for disturbance of bats or their roosts to take place under licence where works affect any bat species. The licence is issued by the appropriate statutory authority, which in England is Natural England (NE). Licences can only be granted if there is no satisfactory alternative or if the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range. Licences can be issued for scientific, research purposes (including survey work), and for the disturbance of bats in relation to a development.

Birds

All birds are protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence, with certain exceptions (e.g. game birds), to intentionally:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built; and
- Take or destroy the egg of any wild bird.

Schedule 1 of the Act contains a list of birds which are conferred extra protection and for which all offences carry harsher penalties. Under the legislation it is illegal to: intentionally or recklessly disturb a Schedule 1 bird while it is building a nest or is in or near a nest containing

eggs or young; and intentionally or recklessly disturb dependent young of such a bird. Examples of species covered under Schedule 1 include: barn owl *Tyto alba*, kingfisher *Alcedo atthis* and little-ringed plover *Charadrius dubius*.

Invasive Species

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence "*to plant or otherwise cause to grow in the wild any plant listed in Schedule 9, Part II*". This could include cutting the plant or roots and disturbing surrounding soil if not correctly managed. This includes species such as Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum*, Himalayan balsam *Impatiens glandulifera* and rhododendron *Rhododendron ponticum*. It also includes five species of cotoneaster.

Further legislation affecting these species is administered via the Environmental Protection Act (1990), whereby Environment Agency guidelines state that "*any polluted soil or plant material that you discard, intend to discard or are required to discard is classed as 'controlled waste'*." Further, under Section 33 of the Environmental Protection Act 1990, it is an offence to deposit, treat, keep or dispose of controlled waste without a licence. Section 34 places duties on any person who imports, produces, carries, keeps, treats or disposes of controlled waste. Accordingly, handling of controlled waste should be undertaken by an authorised person, who is either a registered carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991. This must be accompanied by appropriate Waste Transfer documentation. The provisions concerning waste transfer notes are set out in the Environmental Protection (Duty of Care) Regulations 1991 (as amended). Failure to comply with these provisions is an offence.

Appendix B

Target Notes

Target Note 1

Description: Grade II listed barn. Brick building with pitched tiled roof. With an extension of similar construction but with open walls and currently used for storage. Wooden joists and roofing membrane are present. There is a large patch of dense ivy *Hedera helix* on the western aspect. The roof is generally in good condition although there are some small gaps in the eastern half of the main building. From the exterior there appears to be numerous holes in the walls but they have been filled or covered with chicken wire from the inside so there is no access for bats or birds. No evidence internally of usage by bats or barn owl *Tyto alba*. Evidence of rats *Rattus norvegicus* including droppings, a nest and feeding remains.

Photograph 1: South (front) aspect of barn



Photograph 2: North (back) aspect of barn



Photograph 3: Extension with open walls



Photograph 4: Gaps in walls plugged on inside



Target Note 1

Photograph 5: Gaps in roof (inside barn)



Photograph 6: Rat droppings/bedding



Target Note 2

Description: A small patch of bare ground is present within the grassland area to the west of the barn. Some ephemeral vegetation is starting to grow but much of the area is devoid of vegetation.

Photograph 7: Section of bare ground in grassland area.



Target Note 3

Description: A small area of semi-natural broad-leaved woodland is present along the western boundary of the site. This may have, at one time, been planted as a hedgerow and scattered trees, and has been left unmanaged and now a woodland ground flora has started to develop. The ground flora is patchy, but comprises common and widespread shade tolerant species such as common nettle *Urtica dioica* and cleavers *Galium aparine*.

Photograph 8: Woodland area



Common name	Scientific name	DAFOR ¹
Canopy		
alder	<i>Alnus glutinosa</i>	A
silver birch	<i>Betula pendula</i>	A
elder	<i>Sambucus nigra</i>	O
willow	<i>Salix</i> sp.	O
holly	<i>Ilex aquifolium</i>	O
hawthorn	<i>Crataegus monogyna</i>	O
Ground Flora		
common nettle	<i>Urtica dioica</i>	LD
broad-leaved dock	<i>Rumex obtusifolius</i>	F
cleavers	<i>Galium aparine</i>	F
Yorkshire fog	<i>Holcus lanatus</i>	A
foxglove	<i>Digitalis purpurea</i>	O
spear thistle	<i>Cirsium vulgare</i>	O
creeping buttercup	<i>Ranunculus repens</i>	O

¹ DAFOR scale where D-dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare

Target Note 3

lesser celandine	<i>Ranunculus ficaria</i>	O
dandelion	<i>Taraxacum officinale</i> agg.	R
common hogweed	<i>Heracleum sphondylium</i>	R

Target Note 4

Description: Much of the site is dominated by species-poor semi-improved grassland. The grassland appears to be used as a garden but is not highly managed as is typical of garden lawns. The grassland is dominated by grassland species, with occasional herbs.

Photograph 9: Species-poor SI grassland

Photograph 10: Grassland between barn and farm house



Common name	Scientific name	DAFOR ²
red fescue	<i>Festuca rubra</i>	A
Yorkshire fog	<i>Holcus lanatus</i>	A
white clover	<i>Trifolium repens</i>	F
creeping buttercup	<i>Ranunculus repens</i>	F
cow parsley	<i>Anthriscus sylvestris</i>	F
dandelion	<i>Taraxacum officinale</i> agg.	F
common nettle	<i>Urtica dioica</i>	O
spear thistle	<i>Cirsium vulgare</i>	O
cleavers	<i>Galium aparine</i>	O
common chickweed	<i>Stellaria media</i>	O
daffodil	<i>Narcissus pseudonarcissus</i>	R
a forget-me-not	<i>Myosotis</i> sp.	R

² DAFOR scale where D-dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare

Target Note 5

Description: A number of scattered trees are present within the grassland areas. These are mainly broad-leaved species dominated by silver birch *Betula pendula* with alder *Alnus glutinosa*, apple *Malus* sp. and willow *Salix* sp, however two coniferous Leyland cypress *X Cuprocyparis leylandii* trees were also present. Many of the trees are mature or semi-mature but some self-seeded saplings were also evident.

Photograph 11: Scattered trees including two large cypress trees.



Target Note 6

Description: A small drainage ditch is present just off site, on the south western boundary of the site. The ditch is dry in places and only holds small pockets of shallow water despite recent heavy rainfall. The lack of emergent/aquatic vegetation also indicates it is likely that the ditch is dry for much of the year. The earth banks are steep (over 45°); one bank is dominated by grassland vegetation whilst woodland/scrub is present on the other bank.

Photograph 12: Ditch holding small amounts of water



Target Note 7

Description: A small species rich hedgerow present along edge of grassland between barn and farmhouse. The hedge contains beech *Fagus sylvatica*, elder *Sambucus nigra*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium* and a cotoneaster *Cotoneaster* sp. The hedgerow is no more than 1 m high, less than 0.5 m wide and is approximately 8 m long.

