

Barn adjacent to Hill Place

Ewyas Harold Common, Hereford HR2 0JG

Ecological Assessment Report





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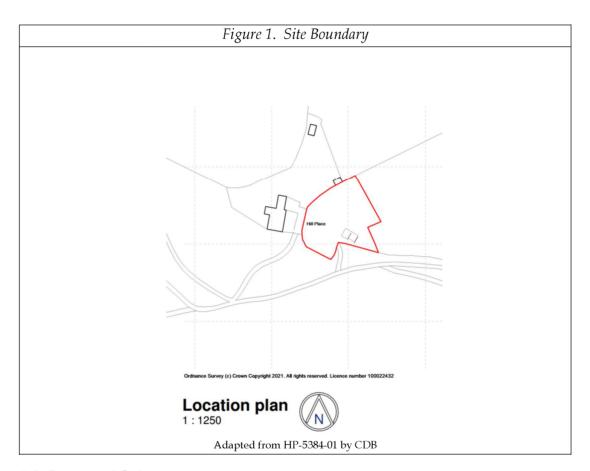
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1 Introduction

1.1 Site Description

The subject of this report (the 'Site') is a dutch barn and the land immediately surrounding it, as shown on **Figure 1** below. It is located at Ordnance Survey Grid Reference SO SO3839830015, c. 1.2km north of Ewyas Harold. It is situated in a field to the immediate east of Hill Place, from where it can be accessed via a dirt track.



1.2 Proposed Scheme

The Proposed Scheme is to replace the barn with a single-storey dwelling as shown in *CDB Drawing 5384.02*, a copy of which can be found in **Appendix 1**.

1.3 Scope of the Study

This report provides an ecological impact assessment of the development proposals at the Site. Details are given of the survey methodologies used to gather baseline information and the relevant legislation and policies that have guided the assessment.

The objectives of the study are to:

- Provide an appropriate ecological baseline to evaluate the nature conservation interest of the Site and identify features of ecological importance.
- Assess the impacts of development against the ecological baseline and any
 effects on important ecological features (including habitats, species and
 ecosystem functions and processes).
- Incorporate mitigation and compensation measures within the scheme to avoid, reduce, and counter negative ecological impacts and their effects on wildlife, and ecological enhancement to deliver biodiversity gain through the planning system.

2 Methodology

2.1 Desk Study

Data was obtained from Herefordshire Biological Records Centre (HBRC) in July 2023 with a request for records of protected species and information on non-statutory sites within a 2km radius of the Site.

The Multi-Agency Geographic Information for the Countryside (MAGiC) (www.magic.gov.uk) was also used to obtain information regarding national statutory designated sites (Sites of Special Scientific Interest (SSSI)) within 2km, and international statutory designated sites (Special Areas of Conservation (SAC)) within 5km.

Online mapping and aerial photograph resources such as GoogleEarth and Bing Maps (www.bingmaps.com) were also consulted for contextual information.

2.2 Field Survey

2.2.1 Phase 1 Habitat Survey

A Phase 1 habitat survey of the Site was undertaken on the 19th July 2023. The survey followed standard methodology (JNCC 2010), which involved a walkover of the Site to record the habitats present using standard habitat classification. The Phase 1 habitat survey was extended to include an examination of the Site for evidence of, and potential for protected and otherwise notable species. A Phase 1 habitat plan was produced, which can be found in **Appendix 2**.

2.2.2 Hedgerow Assessment

During the Phase 1 habitat survey, the hedgerows on the Site were assessed to determine whether any of them meet the ecological criteria for 'Important Hedgerows' according to the Hedgerow Regulations 1997. A 30m length of each hedgerow was paced out and the following information was gathered:

- A list of woody species in the shrub layer in the 30m-sample section.
- A list of additional woody species found in the total length of hedge.
- Mature/ standard hedgerow trees.
- Record of the ground flora present.
- Details of associated features such as ditches, fences or banks.

Further details of the Hedgerow Regulations can be found in **Appendix 3**.

2.2.3 Bat Building Inspection

Of particular consideration for the ecological assessment was the potential use of the barn by roosting bats. A daytime inspection of the building was undertaken on 19th July 2023 to look for evidence of bats and to assess the potential of the building to provide shelter for bats. The inspection for bats included a search for field signs such as droppings, animal carcasses or skeletal remains that could indicate previous use of the buildings by bats. The survey was carried out in accordance with good practice guidelines published by the Bat Conservation Trust (Collins, 2016 and 2023).

A powerful Clulite torch with a 500m spot beam, an endoscope, and binoculars were used to examine the building exteriors and interiors.

The suitability of the building to support roosting bats was assessed according to the following categories:

- 1. **Negligible potential/not a roost**: no suitable features.
- 2. **Low potential:** one or more suitable features that could be used by single, or very low numbers of bats opportunistically.
- 3. **Moderate potential:** one or more suitable features that could be regularly used by bats, but sub-optimal conditions may limit the potential for breeding or hibernating bats.
- 4. **High potential:** one or more roost features that are suitable for use by a colony of bats on a regular basis and may support a maternity or hibernation site.
- 5. **Confirmed roost:** evidence of current/recent bat occupation.

2.2.4 Reptile Survey

The Site lies adjacent to Ewyas Harold Common, which is known to support good populations of reptiles. In accordance with standing advice published by Natural England for local planning authorities who need to assess the impacts of development on reptiles, a survey to confirm whether reptile species are present within the Site was undertaken in September 2023.

The reptile survey follows standard guidance (Froglife, 1999) that requires daytime searches for basking animals with the use of purposely placed roofing felt artificial refuges, as well as a search of existing debris and places of shelter for reptiles. Thirty-four artificial refugia (0.25m2 squares of roofing felt, also known as 'reptile sheets') were set out on the Site on 25th August 2023 to bed in for ten days before surveying commenced on the 4th September. Reptile sheets were positioned in places where reptiles might be expected to shelter and bask, such as edge habitats and unshaded

vegetation. The Site was visited on seven occasions throughout September in suitable weather conditions (dry and sunny days when temperature is between 10°C and 17°C). During each visit the Site is slowly walked, whilst the surveyor searches for reptiles and carefully looks under the artificial refugia.

The details of the survey visits are given in **Table 1**.

Table 1. Survey Times and Weather Conditions

Date	Time (hrs)	Weather			
2023		Temp	Wind*	Cloud	Ground conditions
4 th Sep	09:45-10:15	18°C	1	<5%	Clear skies, dewy ground
7th Sep	08:15-08:45	19°C	2	60%	Light rain within 1 hour prior to survey
13th Sep	10:00-10:30	14°C	1	10%	Clear skies and sunny
15th Sep	09:00-09:30	15°C	1	40%	Some cloud but strong sun
18th Sep	16:30-17:00	17°C	1	30%	Sunny with some cloud
22 nd Sep	09:15-09:45	12°C	1	30%	Sunny with sparse cloud
26th Sep	16:30- 17:00	17°C	2	20%	Sunny with sparse cloud

^{*}Beaufort Scale: 0-Calm; 1-Light Air; 2-Light Breeze, 3-Gentle Breeze.

2.3 Personnel

The Phase 1 habitat assessment was carried out by Anton Kattan MCIEEM (24 years' experience and Dominic Hill Grad CIEEM (six years' experience). The reptile surveys were carried out by Dominic Hill and Andy Freeman-Hall (seven year's experience).

2.4 Ecological Appraisal

2.4.1 Appraisal process

The ecological appraisal of the proposed development is undertaken in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, which are in full accordance with the mandatory requirements of the UK EIA Regulations. The ecological assessment will seek to obtain the best possible biodiversity outcomes by integrating the following key principles:

- Avoidance: seek options that avoid harm to ecological features (for example, by locating on an alternative site).
- Mitigation: Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed (for example, through a condition or planning obligation).
- Compensation: Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.
- Enhancements: Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2.4.2 Defining important ecological receptors and value

The CIEEM EcIA guidelines state that one of the key challenges in EcIA is to decide which ecological features (habitats, species, ecosystems and their functions/processes) are important and should be subject to detailed assessment. Such ecological features will be those that are considered to be important and potentially affected by the project. It is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable.

However, effort should be made to safeguard biodiversity in its entirety, as emphasised by the Convention on Biological Diversity and developed in the EU Biodiversity Strategy 2020. The EU Strategy and national policy documents emphasise the need to achieve no net loss of biodiversity and enhancement of biodiversity.

The importance of an ecological feature will be considered within a defined geographical context. The following frame of reference will be used:

- International and European
- National
- Regional
- Metropolitan, County, vice-county or other local authority-wide area
- River Basin / District
- Local

Various approaches can be adopted for defining <u>local</u> importance, including assessment within a district, borough or parish context or within another locally defined area.

2.4.3 Characterising ecological effects

When describing ecological impacts and effects, reference should be made to the following characteristics as required:

- Positive or negative
- Extent
- Magnitude
- Duration
- Frequency and timing
- Reversibility

The assessment only needs to describe those characteristics relevant to understanding the ecological effect of the impacts and determining its significance.

2.4.4 Defining significance of ecological effects

The CIEEM guidelines define an 'ecologically significant effect' as an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Significant effects should be qualified with reference to an appropriate geographic scale. However, the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important.

Significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution). A significant effect is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project.

3 Planning Context

3.1 National

The National Planning Policy Framework (NPPF), December 2023, requires that the planning system should conserve and enhance the natural environment (Section 15) by, inter alia, 'protecting and enhancing sites of biodiversity value' and 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures' (para 180).

To protect and enhance biodiversity, plans should 'safeguard components of local wildliferich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them', 'promote the conservation, restoration and enhancement of priority habitats, ecological networks and the restoration and recovery of priority species' and 'identify and pursue opportunities for securing measurable net gains for biodiversity' (para 185).

Local planning authorities should apply the following principles (para 186):

- a) If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.
- b) Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any border impacts on the national network of Sites of Special Scientific Interest.
- c) Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site (para 188).

3.2 Herefordshire Local Plan

The Herefordshire Local Plan Core Strategy 2011 - 2031 (Adopted 16 October 2015) sets out the relevant policies relevant to biodiversity, as follows:

Policy LD2 - Biodiversity and geodiversity

Development proposals should conserve, restore and enhance the biodiversity and geodiversity assets of Herefordshire, through the:

- 1. retention and protection of nature conservation sites and habitats, and important species in accordance with their status as follows:
 - a) Development that is likely to harm sites and species of European Importance will not be permitted.
 - b) Development that would be liable to harm Sites of Special Scientific Interest or nationally protected species will only be permitted if the conservation status of their habitat or important physical features can be protected by conditions or other material considerations are sufficient to outweigh nature conservation considerations.
 - c) Development that would be liable to harm the nature conservation value of a site or species of local nature conservation interest will only be permitted if the importance of the development outweighs the local value of the site, habitat or physical feature that supports important species.
 - d) Development that will potentially reduce the coherence and effectiveness of the ecological network of sites will only be permitted where adequate compensatory measures are brought forward.
- 2. restoration and enhancement of existing biodiversity and geodiversity features on site and connectivity to wider ecological networks; and
- 3. creation of new biodiversity features and wildlife habitats.

Where appropriate the council will work with developers to agree a management strategy to ensure the protection of, and prevention of adverse impacts on, biodiversity and geodiversity features.

Policy LD3 - Green infrastructure

Development proposals should protect, manage and plan for the preservation of existing and delivery of new green infrastructure, and should achieve the following objectives:

- 1. identification and retention of existing green infrastructure corridors and linkages; including the protection of valued landscapes, trees, hedgerows, woodlands, water courses and adjoining flood plain;
- 2. provision of on-site green infrastructure; in particular proposals will be supported where this enhances the network; and
- 3. integration with, and connection to, the surrounding green infrastructure network.

4 Results

4.1 Designated Sites

4.1.1 Statutory Designated Sites

There are no internationally designated sites for nature conservation within 5km of Hill Place, or nationally designated Sites of Special Scientific Interest (SSSI) within 2km.

4.1.2 Non-statutory Designated Sites

Table 2 lists the non-statutory locally designated Sites, known as Special Wildlife Sites (SWS) in Herefordshire, that are within 2km of Hill Place The SWS are shown on the HBRC map in **Appendix 4**.

Table 2. Locally Designated Sites within 2km of Hill Place

SWS Name	Site	Habitat	Distance
	Code		
Ewyas Harold Common	SO32/14	Acid grassland	20mS
Dore Abbey	SO33/29	Bat roost	0.5km
			NE
River Dore	SO33/23	Riparian habitats and	0.7km
		species	NE
Disused railway line. Pontrilas to	SO32/16	Botanical	0.7km E
Ewyas Harold			
Dulas Brook	SO33/18	Riparian habitats and	0.8km
		species	SW
Gilberts Hill Wood and Garrabach	SO33/30	Ancient woodland	1km E
Coppice			
Dulas Churchyard	SO32/11	Hay meadow with rich	1.3kmSW
		flora	
Woodland near Abbey Dore	SO33.26	Alder woodland	1.7N
The Poplars Meadow	SO32/15	Unimproved hay	1.7km S
		meadow	
Cwm Wood	SO32/12	Mixed woodland with	1.8km
		large wild service trees	SW
Pikes Wood and adjoining woods	SO32/13	Ancient woodland	1.8km S
Russells Coppice	SO33/21	Coppice and grassland	1.9nw
Callow Hill Wood	SO32/17	Ancient woodland	2km S

4.2 Habitats

The following description of habitats should be read with reference to the Phase 1 Habitat Plan in **Appendix 2**. Hedgerows (**H**) and trees (**T**) are referenced on the plan. Illustrative photographs accompany the text.

The Site consists of a species-poor agriculturally semi-improved field bounded by hedgerows. A barn and associated yard, is located at the south-east side of the field (**Photo 1**).

4.2.1 Semi-improved Grassland

The grassland was recently mown at the time of the survey (**Photo 1**), and when revisited for reptile survey, was grazed by sheep. The ground is disturbed in places, and there are areas of bare and gravel-covered ground and small rubble piles around the barn (**Photo 2**). The grassland is dominated by grasses including Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris*, and cock's foot *Dactylis glomerata*, with occasional stands of hard rush *Juncus inflexus*. Broad-leaved species include creeping buttercup *Ranunculus repens*, meadow buttercup *Ranunculus acris*, broad-leaved dock *Rumex obtusifolius*, dandelion *Taraxacum officinalis*, white clover *Trifolium repens*, and common sorrel *Rumex acetosa*.

Photo 1. Grassland with barn in background

Photo 2. South aspect of barn with rubble and bare ground

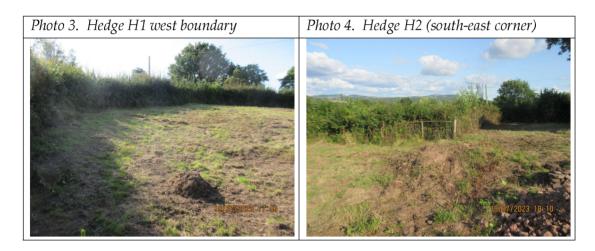
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4.2.2 Hedgerows

The Site is bounded by two hedgerows:

• **H1 (Photo 3)** is c. 3m tall x 2m wide. It is species-rich, with five woody species counted within a sample 30m section. The species present include dog rose Rosa canina, field maple *Acer campestre*, blackthorn *Prunus* spinosa, elder *Sambucus nigra*, hawthorn *Crataegus monogyna* and ash *Fraxinus excelsior*.

- Whilst the composition is species-rich, H1 does not quite reach the ecological criteria for an 'Important Hedgerow' under the Hedgerow Regulations.
- **H2 (Photo 4)** is c. 2m tall x.1.5 wide. It is species-rich with six species counted in a sample 30m length. Species present include hawthorn, blackthorn, field maple, elder, ash, hazel *Corylus avellana*, dog rose and willow *Salix* sp. Nonnative snowberry *Symphoricarpos albus* is also present. The southern end of **H2** is sparce and gappy.
 - Whilst the composition is species-rich, H2 does not quite reach the ecological criteria for an 'Important Hedgerow' under the Hedgerow Regulations.



4.2.3 Trees

There are four trees either on Site or close to the boundaries of the Site,

- **T1** is just south of the existing barn and is a mature pollarded willow (**Photo 5**) with a hollow in its trunk.
- **T2** is a mature ash with a dense cover of ivy on its trunk (**Photo 6**).
- T3 & T4 are both young ash trees (Photo 7)



4.3 Bats

4.3.1 Evidence of Bats

There was no evidence of roosting bats in the barn, and the building is assessed as **Category 1: having <u>negligible</u>** potential to support bats. Further details are provided in **Section 4.3.3** below.

4.3.2 Desk Study

HBRC provided 232 bat records from approximately 12 different locations within 2km of the Site, recorded during the past 25 years. The bat species present within the search area were:

- Brown long-eared bat *Plecotus auritus*
- Common pipistrelle bat Pipistrellus pipistrellus
- Soprano pipistrelle bat *P. pygmeus*
- Daubenton's bat Myotis daubentoniid
- Whiskered bat M. mystacinus
- Natterer's bat *M. nattereri*
- Lesser horseshoe bat *Rhinolophus hipposideros*
- Noctule bat Nyctalus noctule
- Leisler's bat N. leisleri
- Barbastelle bat Barbastella barbastellus

The most relevant findings of the desk study were.

- There are no previous records of bats from the Site itself.
- The closest and most significant roost records are from Dore Abbey, c. 480m north-east of the Site. There is a dataset of 40 records dating between 1999 and 2000. A colony of at least 54 lesser horseshoe bats is recorded, as well as a roost of 31 Natterer's bats and small numbers (2+) of common pipistrelle.
- One hundred and two of the records relate to roosts at Dulas Church, located c. 1.3km south-west of the Site. The records date from 2016 and are of small roosts of common pipistrelle (up to 8 animals), soprano pipistrelle (up to 4 animals), brown long-eared (up to 6 animals) and whiskered (up to 4 animals) bats.
- At c. 630m south-west are 12 records dating from 2020 of small roosts of lesser horseshoe (2 animals), common pipistrelle (5 animals) and soprano pipistrelle (2 animals).
- At 1.8km is a record dating from 2008 of a lesser horseshoe roost of 30 + bats.
- At 1.9km west are 30 records dating from 2008 and 2009 of small roosts of lesser horseshoe (2 bats), common pipistrelle (2 bats) and soprano pipistrelle (1 bat).

All other data held by HBRC are of small roosts or activity records.

4.3.3 Building Inspection

The barn is described below.

The building is a dutch barn with a steel girder frame and wooden supports. It has a curved roof of corrugated asbestos and corrugated metal walls. The northeast elevation is open. There is a leanto on the north-west elevation with a timber frame, and corrugated metal walls and roof.



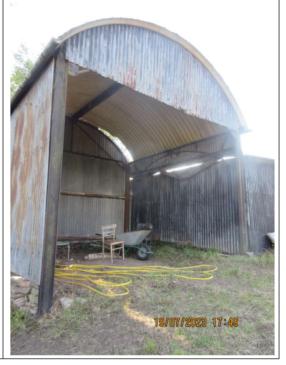
There are no features on the walls or roof of barn or lean-to that are suitable for roosting bats, the single skin corrugated panels do not offer crevices or other suitable roosting places for bats, and there are no crevices where panels join. .

The barn is open, light and drafty and does not offer any sheltered roosting opportunities for bats within.

Photo 8 Interior of lean-to



Photo 9. Interior of barn



The lean-to has a door and unglazed window on the north-west aspect. The interior is flooded with daylight There are no internal voids or crevices in which bats could be concealed.

Photo 10. Door and window of lean-to



4.3.4 Tree and Habitat Assessment

Tree **T1** (which lies just outside the Site boundary), has potential to support roosting bats within its hollow trunk, and the hedgerows that encircle the Site provide foraging habitat and navigational feature for bats.

4.4 Reptiles

HBRC hold 47 records of reptiles recorded between 2002 and 2010. All of apart from one record originate from Ewyas Harold Common. All four of the commoner species of reptiles are represented: adder *Vipera beris*, common lizard *Zootoca vivipara*, slow worm *Anguis fragilis* and grass snake *Natrix helvetica*. The closest records to the Site are located c. 240m west of the Site. These are 13 records including adder, grass snake and slowworm located on the north-west edge of the common.

No reptiles were found on the Site during any of the seven reptile survey visits carried out in 2023. The survey was carried out because of the proximity of the Site to Ewyas Harold Common, and the good populations of reptiles that were known to be present on the Site. However, the Site itself has suboptimal habitat for reptiles, being regularly grazed short by sheep and lacking the complex structure and opportunities for concealment that would provide good habitat for these species. The null results provide confirmation of absence of reptiles on the Site.

4.5 Breeding Birds

No birds' nests were noted within the barn, but the hedgerows and trees at the Site boundary are likely to support nesting birds.

4.6 Other Protected Species

- There are no ponds on the Site or within 250m, so it can be concluded with reasonable certainty that great crested newts *Triturus cristatus* are absent.
- Hedgehogs Erinaceous europaeus could potentially be present on the adjacent Ewyas Harold common, and travel along the boundary hedgerows of the Site.

5 Assessment

5.1 Restrictions Constraints and Deviations

There were no significant constraints to the study. The ecological information gathered through desk study and survey provides adequate baseline to assess impacts on protected species and notable habitats and prepare a mitigation strategy for the planning application.

5.2 Legislation

Appendix 3 summarises the legislation relevant to this study. The protection afforded to key habitats and species by the legislation identified above has informed the scope of the ecological studies undertaken to determine baseline conditions and guided measures that will protect and benefit valued ecological resources associated with the Site.

5.2.1 Legal Protection and Licensing for Bats

The key pieces of legislation protecting bats are the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and The Conservation of Habitats and Species Regulations 2017.

Bats are legally protected from harm and it is an offence to deliberately or intentionally kill or injure a bat. It is also prohibited to incidentally or deliberately capture, kill, disturb or take bats, or damage or destroy a breeding site or resting place - irrespective of whether it (the roost) is occupied.

Taken together, the Act and Regulations make it illegal to:

- a) Deliberately capture or intentionally take a bat;
- b) Deliberately or intentionally kill or injure a bat;
- c) To be in possession or control of any live or dead bat or any part of, or anything derived from a bat;
- d) Damage or destroy a breeding site or resting place of a bat;
- e) Intentionally or recklessly obstruct access to any place that a bat uses for shelter or protection;
- f) Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection;
- g) Deliberately disturb bats, in particular any disturbance which is likely to (i) impair their ability to survive, breed, reproduce or to rear or nurture their young; or in the case of hibernating or migratory species, to hibernate or migrate; or (ii) to affect significantly the local distribution or abundance of the species to which they belong.

A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.

Although the law provides strict protection to bats, it also allows this protection to be set aside (derogated) under Regulation 53 of the Conservation of Habitats and Species Regulations 2017 through the issuing of licences for the purpose of preserving public health, or public safety, or other imperative reasons of overriding public interest (IROPI) including those of a social or economic nature and beneficial consequences of primary importance for the environment. This is often referred to as a "Bat Mitigation Licence". Schemes with planning permission usually fulfil the requirements of IROPI. Natural England currently determine these licences in England and an application to Natural England can be made once the necessary planning and building consents have been obtained.

As discussed, where a lawful operation is required to be carried out, but which is likely to result in one of the above offences, a licence may be obtained from Natural England to allow the operation to proceed. However, in accordance with the requirements of the Conservation of Habitats and Species Regulations 2017 a licence can only be issued where the following requirements are satisfied:

- a) that there is no satisfactory alternative; and
- b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favorable conservation status in their natural range.

5.3 Non-statutory Designated Sites

Ewyas Harold Common SWS is located c. 20m from the Site boundary. The common is designated for its acid grassland habitat, but also supports all four of the commoner species of reptile. The habitat of the Common will be unaffected by the proposed development. The single small dwelling will not result in a significant increase in footfall on the Common, and impacts associated with construction of the building will be contained within the Site boundary.

The reptile survey of the Site has confirmed the provisional assessment that the Site provides suboptimal habitat for reptiles and animals from the Common do not disperse onto the Site or use it as peripheral habitat. Therefore, no negative impacts on the reptile populations of Ewyas Harold Common are predicted.

Dore Abby SWS is located c. 480m from the Site boundary. The abbey supports large colonies of lesser horseshoe and natterer's bats. It is probable that bats from these roosts forage over the semi-natural habitats of Ewyas Harold common, but a habitat analysis of intervening habitats does not suggest that Hill Place lies on a key commuting route between the abbey and the Common. The interior of the Site has negligible foraging value and the hedgerows will be retained, so provided that a wildlife-friendly lighting scheme is in place, impacts on bat activity in the locality (including the colonies at Dore Abbey) are not anticipated.

There are no ecological impact pathways between the Site and other non-statutory designated wildlife sites within the local area.

5.4 Habitats

Under the NERC Act 2006, certain habitats of conservation concern should be conserved and enhanced through Public Body (i.e. Local Planning Authority) decision making processes, where reasonably possible. These habitats are listed under Section 41 of the NERC Act 2006, and are known as Habitats of Principal Importance. Habitats of Principal Importance are afforded protection under National Planning Policy Framework (NPPF) and applicable Local Policies.

The Hedgerow Regulations 1997 set out criteria for the Local Planning Authority to use in assessing whether a hedgerow is 'important'. The criteria relate to the value of the hedgerows from an archaeological, historical, landscape or wildlife perspective. Hedgerows less than 30 years old are excluded, but if a hedgerow is at least 30 years old and qualifies under any one of the criteria it is deemed to be important. The Hedgerows Regulations 1997 provide protection by prohibiting the removal of 'important' hedgerows without first notifying the Local Planning Authority.

All hedgerows composed of at least 80% woody species are Habitats of Principal importance. This includes the hedgerows (**H1 & H2**) within the Site.

Hedgerows **H1 and H2** will be retained unmodified. The proposed scheme does not require any removal, loss or fragmentation of these boundary features. The boundary trees will also be retained. No significant impacts on these habitats are anticipated.

The new dwelling will be built on approximately the same footprint as the current barn. The existing grassland will be disturbed or lost during the construction work of the new house and associated drainage and photovoltaic panel installation. The grassland of the Site has low intrinsic ecological value, and impacts resulting from a reduction in the area or loss of this habitat will be low.

5.5 Bats

Bats are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and under The Conservation of Habitats and Species Regulations 2017. All species of bat are present on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and are subject to the provisions of Regulation 42 of those Regulations. Taken together, these protect bats from disturbance, injury or killing and make it an offence to damage, destroy or obstruct a breeding site or resting place they use.

This study concludes with reasonable certainty that bats are not roosting in the barn. The simple nature of this building means that roosting opportunities are negligible and that an exhaustive inspection to rule out the presence of bats was possible. On this basis, it can be concluded that removal of the barn will not result in any significant impacts on bats or the places that they use for breeding, shelter and/or protection (roosts) and no specific mitigation is required. In addition, since no significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2017, a European Protected Species (bat) licence will not be required for the proposed works to proceed.

The hedgerows and trees will be retained within the development, so provided that dark conditions are maintained at the periphery of the Site, no impacts on local bat populations (as discussed in **Section 5.3**) are predicted.

5.6 Reptiles

As discussed in **Section 4.4**, the reptile survey has demonstrated that these species are absent from the Site, and that reptiles from Ewyas Harold Common are not dispersing onto the Site. Impacts on reptiles resulting from the proposed development are therefore not predicted.

5.7 Breeding Birds

Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between mid-March and August inclusive.

The hedgerow and mature trees will be retained unmodified so no impacts resulting from disturbance of nesting birds is likely to occur.

5.8 Other Species

There are no significant predicted impacts on other protected species. There is no loss of suitable habitat and Reasonable Avoidance Measures (RAMs) can be adopted

during construction to prevent accidental injury to individual animals (such as hedgehog).

6 Recommendations

6.1 Further Survey Work

No further ecological survey is required to support the proposed planning application.

The daytime inspection is considered adequate to provide a suitable level of confidence that bats are absent from the barn on Site. This advice is consistent with nationally published good practice guidelines (Collins 2023), which advocates a level of survey that is proportionate to the likelihood of bats being present.

6.2 Mitigation

6.2.1 Reasonable Avoidance Measures (RAMs)

To ensure protection of ground dwelling species such as hedgehog that may traverse the Site during construction, contractors can produce a RAMs that includes:

- All site clearance work undertaken during daylight hours avoiding issues associated with disturbance to nocturnal animals.
- If a hedgehog is found during site clearance work it will be carefully picked up (using gloves) and moved to the site boundary, which will not be affected by the proposed work.
- Any excavations or trenches that need to be left overnight should either be covered or fitted with a mammal ramp to ensure that any animals that enter the hole can safely escape.
- Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.
- All excavations, trenches or open pipework should be inspected first thing each morning. If an animal is found an ecologist should be consulted.

6.2.2 Maintain Dark Corridors at the Periphery of the Site

The Site is situated in a rural situation close to Ewyas Harold Common, and there are large colonies of bats roosting nearby at Dore Abbey, which may use the Common to forage. It is important therefore to ensure that no lightspill occurs beyond the boundaries of the Site to allow dark corridors for movement by bats and other nocturnal animals around the periphery of the Site and ensure that activity on the nearby Common is not impacted. The lighting strategy should minimize light spill (i.e. spilling of light beyond the boundary of the proposed area to be lit) on all Site boundaries.

Where lighting is required, appropriate light types (i.e. lamps with narrow spectrum and no UV output), low level lighting bollards, and hoods on lamps should be used to control light spill. The lighting proposal should be designed to illuminate only those areas where lighting is required for safety and security close to the building, but control illumination on the surrounding vegetation.

As a guide, controlling lighting within the proposed development to 0.5 lux at a position 3m from the site boundary will help prevent light spill on hedgerows.

The key principals for choosing a suitable type of lamp are:

- Avoid blue-white short wavelength lights: these have a significant negative impact on the insect prey of bats. Use alternatives such as warm-white (long wavelength) lights as this will reduce the impact on insects and therefore bats.
- Avoid lights with high UV content: (e.g. metal halide or mercury light sources), or reduce/completely remove the UV content of the light. Use UV filters or glass housings on lamps which filter out a lot of the UV content.

Selecting an appropriate lamp unit that is designed to be environmentally friendly will minimize light spill, but further controls can be imposed by installing directional accessories such as baffles, hoods and louvres on lamps to direct light away from ecologically sensitive areas (the boundary hedgerow and tree). LED (Light Emitting Diode) units are an effective way to direct the light into small target areas, and composite LEDs can be switched off to reduce/direct the light beam to specific areas

6.3 Enhancement

CDB Drawing 5384-02, a copy of which can be found in **Appendix 1**, illustrates the enhancement measures described below.

6.3.1 Wildlife Corridor and Landscaping

The hedgerows that surround the Site provide an almost continuous ring around the new development. They are species-rich and thick, and have the potential to quickly develop into a valuable wildlife corridor and refuge if managed specifically for wildlife. The following measures are recommended:

- The gappy section at the southern end of **H2** is gapped up with a diverse mix of native woody species.
- A new length of hedgerow is added along the southern edge of the Site (as shown in Appendix 1).
- The existing hedgerows are enhanced by the addition of native tree standards as shown in **Appendix 1**.

- The hedgerows are managed to maximise their value to wildlife, with minimal trimming (no more than every other year) to allow them to spread outwards and create a broad wildlife corridor with abundant foraging opportunities.
- A 'minimal management strip' of c. 5m is retained around the internal margins (facing into the Site) of the hedgerows. The inner 1m will be left unmown to allow the hedgerow to spread, the outer 5m will be left to grown long until mid-summer to allow plants to flower and set seed.
- Planted areas adjacent to the hedgerows will be sown with a mix of plants found in hedgerow bottoms for example, nettle-leaved bell flower, hedge bedstraw, native bluebell, wood anemone, wild honeysuckle and wood sage. These areas could be sown with mixture such as *Boston Seeds Hedgerow & Light Shade Wildflower Seed BS7P* or plug planted.
- At least 10 fruit trees will be planted to create new orchard habitat.

6.3.2 Bird and Bat Hedgehog Boxes

- Three artificial nest cups for swallow *Hirundo rustica* will be installed under the
 open frontage of the new house. Nesting habitat for swallow is declining
 rapidly as barns are converted into dwellings, and the open frontage to the new
 house presents an opportunity to create new habitat in a sheltered accessible
 location.
- One house sparrow nest terrace will be also be added to the building, on the northern gable of the house. This will provide a communal nesting area adjacent to garden habitats and away from direct sunlight.
- One bat box will be included on the north gable of the battery storage room. This location has been selected as it is situated away from windows and entrance lights and provides a direct flight route to the garden boundaries.
- The hedgerow boundary will provide a good commuting route and shelter for hedgehogs. To complement this, it is proposed that a hedgehog shelter (such as Hogitat hedgehog shelter) is provided. This should be positioned in a quiet, discreet position. Covering the shelter with leaves and brushwood will camouflage it.

A range of alternative bird boxes are available and can be incorporated depending on the proposed design and architecture. Boxes can be viewed on-line (for example www.nhbs.com or www.wildcare.co.uk).

7 References

Collins J. (2016, 2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. (3rd & 4th Ed.s) Bat Conservation Trust. London

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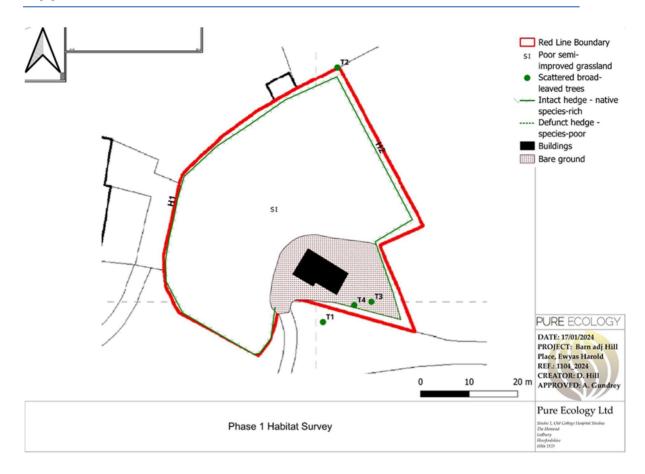
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Barn adjacent to Hill Place

Appendix 1. Proposed Site Plan

Barn adjacent to Hill Place

Appendix 2. Phase 1 Habitat Plan



Appendix 3. Legislative Framework

Conservation of Habitats and Species Regulations 2017

In relation to wildlife and nature conservation, two key Directives have been adopted by the European Community. These are (i) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds ("The Birds Directive" formerly 79/409/EEC); and (ii) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora ("The Habitats Directive"). These Directives provide for the protection of animal and plant species of European importance and the habitats which support them, particularly through the establishment of a network of protected sites.

The Habitats Directive is transposed into domestic law through the Conservation of Habitats and Species Regulations 2017. These regulations consolidate the many changes that have been made to the domestic law over the years since the predecessor regulations made in 1994. The regulations provide for the designation and protection of European Sites, the protection of European protected species and the adaptation of planning and other controls for the protection of European Sites.

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) (WCA) consolidated and amended existing national legislation to implement the Convention of the Conservation of European Wildlife and Natural Habitats (The Bern Convention) and the Birds Directive. There have been various amendments since the original enactment.

Schedules 1 and 5 of the Act identify species of bird and other animal in relation to which the Act makes killing, injury, taking and disturbance an offence while Schedule 8 to the Act lists species of plant in relation to which the Act makes it an offence to intentionally pick, uproot or destroy.

The Natural Environment and Rural Communities Act 2006

The Natural Environmental and Rural Communities Act 2006 (NERC) introduced changes intended to benefit rural communities and the environment. Section 40 of the Act creates a duty on public bodies to have due regard for habitats and species of principal importance for biodiversity in England when exercising their duties; Section 41 requires the Secretary of State to maintain a list of such habitats and species. This is important in the context of planning decisions as the National Planning Policy 19

Framework (paragraph 117) affords planning policy protection to the habitats of species listed by virtue of Section 41.

The Environment Act 2021

The Environment Act sets out legislation to make provision for targets, plans and policies for improving the natural environment, which includes, inter alia, nature and biodiversity. Part 6, Section 90 establishes the precedent for achieving a biodiversity gain as a condition of planning permission for major development. Schedule 14 establishes that a biodiversity gain is met if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the on-site habitat by at least 10%. Furthermore, any habitat enhancement must be maintained for at least 30 years after the development is completed. The Act came into effect in February 2024 for large developments, and is scheduled to come into effect for smaller developments in April 2024.

The Hedgerow Regulations 1997

These regulations, enforced under the Environment Act 1995, restrict the removal of hedgerows, or parts of hedgerows which are over 20m in length. In this case, removal includes digging up and replanting elsewhere, as well as removing from the land completely or destroying in the course of other actions.

This legislation only applies to country hedgerows, which includes hedge next to common land, Nature Reserve, Site of Special Scientific Interest (SSSIs) or land used for agriculture, forestry, or land used for the breeding/keeping of horses, ponies or donkeys. Domestic (e.g.garden) hedges are excluded from this legislation.

To be included in the regulation, a hedgerow must be over 20m long, but gaps of less than 20m do not count as gaps, therefore a 15m hedge plus 10m gap plus 15m hedge technically is classed as a 40m hedgerow.

To be defined as important, a hedgerow must be at least thirty years old, and must fulfil one of a number of criteria set out in the legislation. For example, one criterion is that the hedge is next to a public footpath, and contains a certain number of different species. Another is concerned with habitats of rare or protected birds and animals. Other criteria relate to the existence of a hedge as an ancient (pre 1850) border or boundary.

The UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework succeeds the UK Biodiversity Action Plan (BAP) and 'Conserving Biodiversity - the UK Approach'. The Framework continues the conservation work initiated by the UK BAP following the establishment of the Convention on Biological Diversity in 1992. The purpose of the Biodiversity Framework is to set a broad enabling structure for conservation action across the UK until 2020, in summary:

- To set out a shared vision and priorities for UK-scale activities, in a framework
 jointly owned by the four countries, and to which their own strategies will
 contribute.
- To identify priority work at a UK level which will be needed to help deliver biodiversity targets and the EU Biodiversity Strategy.
- To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK, where the four countries agree this will bring benefits compared to individual country work.
- To streamline governance arrangements for UK-scale activity.

Many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species and the plans for the priority species and habitats agreed under UK BAP still form the basis of the Framework.

Appendix 4. HBRC Non-statutory Sites Map

