PURE ECOLOGY

Holywell Cottage, Upper House Farm

Craswall, HR2 0PP

Ecological Assessment Report

April 2024

PURE ECOLOGY

Client	Collins Design and Build
Job name	Holywell Cottage, Upper House Farm, Craswall, HR2 0PP
Report title	Ecological Assessment Report
Reference	1197 EAR 10-04-24.v2.docx

	Signed	**Name**	**Position**	**Date**
Prepared by	[redacted]	Anna Gundrey MCIEEM	Consultant Ecologist	10-04-2024

Pure Ecology
Studio 1
Old Cottage Hospital Studio
The Homend
Ledbury
Herefordshire
HR8 1ED

info@pureecology.co.uk
www.pureecology.co.uk
01531 633732

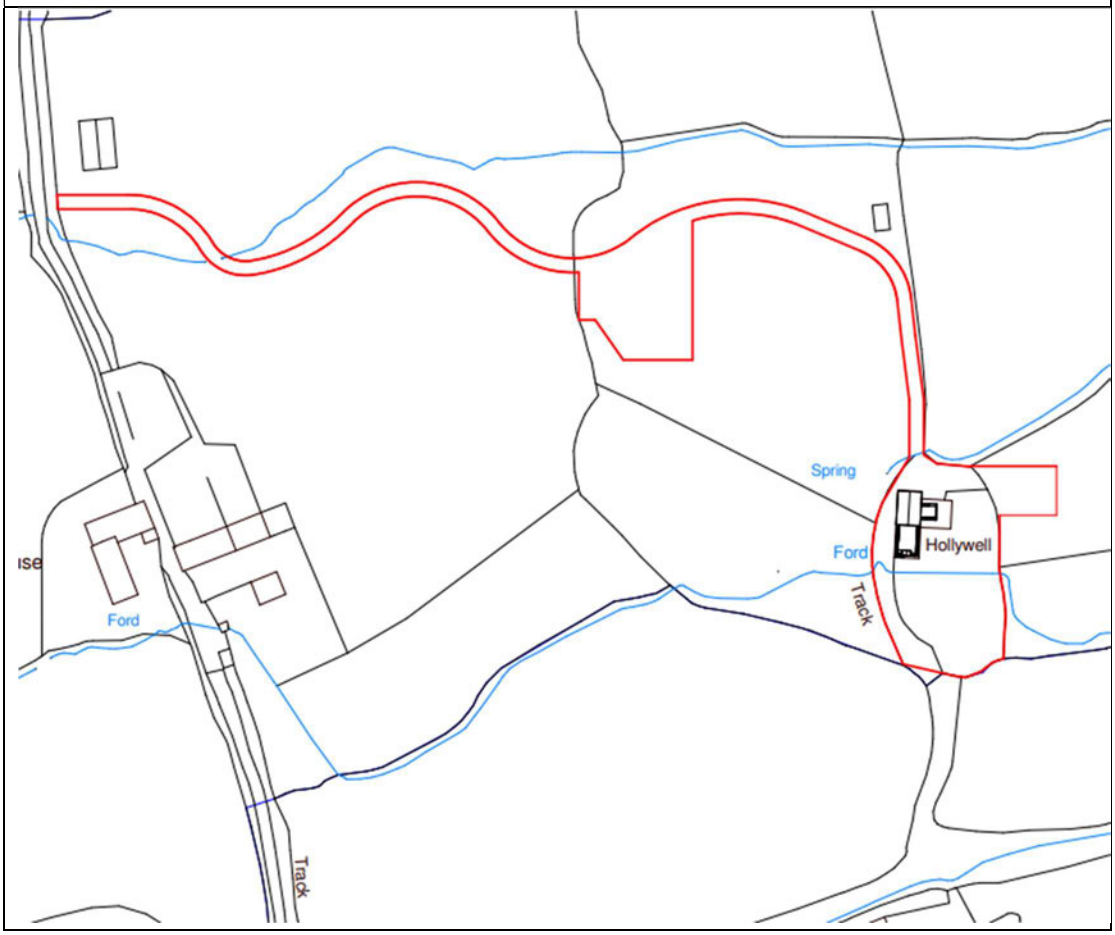
Table of Contents

1 Introduction

1.1 Site Description

The subject of this report (the 'Site') is a derelict stone cottage and adjoing barn situated at Ordnance Survey Grid Reference SO2881234334, c. 2km south-east of Craswall. The Site boundary includes the building and curtilage, the route of a proposed new access track and small areas of associated land as shown in **Figure 1**.

Figure 1. Site Boundary



1.2 Proposed Scheme

The Proposed Scheme is to renovate the derelict building to create a new dwelling. A new access track, consisting of two gravel strips with grassland between will be created. A solar PV array and wind turbine will be installed in a field to the north of the property and a package treatment plant will be sited to the east.

The proposed development plan is shown on *CDB Drawing HC-5477-02,* a copy of which is provided 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 March 2024 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) website (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 21st March 2024. 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 hedgerow that crosses the Site was assessed to determine whether it meets 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 building by roosting bats. A daytime inspection of the building was undertaken on 21st March 2024 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, 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 individual, 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.

2.3 Personnel

The surveys were carried out by Dominic Hill Grad CIEEM (seven years' 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 local 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 wildlife-rich 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 is one nationally designated Sites of Special Scientific Interest (SSSI) within 2km. The Black Mountains SSSI is located c. 0.4km west of Holywell Cottage. It is designated for its extensive moorland habitats.

There are no internationally designated Sites within 5km of Holywell Cottage.

4.1.2 Non-statutory Designated Sites

Table 1 lists the nine non-statutory locally designated sites, known as Special Wildlife Sites (SWS) in Herefordshire, that are within 2km of Holywell Cottage They are shown on the HBRC map in **Appendix 4**.

Table 1. Locally Designated Sites within 2km of Holywell Cottage

Name	**Interest**	**Proximity (approx.)**
SO23/02 Black Mountains and adjoining Woodlands	Moorland habitat	0.4km W
SO23/17 River Monnow	Riparian habitats and species	0.6 km E
SO33/03 Ashen Coppice, Holly and Court Woods	Ancient woodland	1.5km E
SO23/13 Wood near Rockyfold Farm	Broadleaved woodland	1.5 km N
SO23/07 Field at The Place	Unimproved grassland	1.5km SW
SO23/16 Olchon Brook	Riparian vascular plants and bryophytes	1.6km SW
SO23/18 Olchon Court	Neutral grassland with green-winged orchid.	1.6km SW
SO23/09 Meadows and woodlands along lower Canddu valley	Woodland and unimproved grassland	1.8km N
SO23/11 Field near Blackhill Farm	Unimproved grassland	2km S

4.2 Habitats

The following description of habitats should be read with reference to the Phase 1 Habitat Plan in **Appendix 2**. Features of interest (Target Notes **TN**) are marked on the plan and referenced below. Illustrative photographs accompany the text.

The Site boundary encompasses Holywell Cottage itself and its curtilage, which is mostly bare ground **TN3**); two areas of semi-improved grassland (**TN1** and **TN2**); the access track; and an area of improved grassland at **TN5**.

4.2.1 Grassland

The proposed access track runs through three fields of agriculturally improved sheep-grazed pasture. The fields, including the area that is included within the boundary at **TN5** (**Photo 1**) have a very short sward and are dominated by grasses, with sparse broadleaved species – mainly clover *Trifolium repens*, *T. pratense*, creeping buttercup, *Ranunculus repens*, common mouse-ear *Cerastium fontanum* and yarrow *Achillea millefolium*. The proposed track follows an existing well-used vehicular route and as such consists of compacted ground with relatively sparse vegetation cover and a high proportion of bare ground (**Photo 2**).

Photo 1. Improved grassland at TN5	*Photo 2. Access Route (TN4)*
	

Two portions of grassland are included with the Site boundary to the east (**TN1, Photo 3**) and south (**TN2, Photo 4**) of the cottage. At **TN1** the grassland is species-poor semi-improved grassland, dominated by grasses (mostly Yorkshire fog *Holcus lanatus*). Broad-leaved species include broad-leaved dock *Rumex obtusifolius*, common sorrel *Rumex acetosa*, meadow buttercup *Ranunculus acris* and lesser celandine *R. ficaria*. The field was unmown at the time of survey, but appears to be regularly managed, as there is no evidence of scrub incursion or build up dead vegetation.

The grassland at **TN2** is a shaded glade, bounded by mature trees and streams. The vegetation is semi-improved grassland, but the species present reflect the proximity to the streams and the surrounding trees and include Yorkshire fog, soft rush *Juncus effusus*, common bent *Agrostis capillaris*, hogweed *Heracleum sphondylium*, herb bennet *Geum urbanum*, broad-leaved dock, lesser celandine, lords-and-ladies *Arum maculatum*

and dense patches of nettle *Urtica dioica*. There are patches of opposite-leaved golden saxifrage *Chrysosplenium oppositifolium*, by the streams.

Photo 3. Grassland at TN1	*Photo 4. Grassland at TN2*
	

4.2.2 Water Courses

Small streams bound the grassland at **TN2** as described above, and the track route will cross a stream at **TN6** (**Photo 5**). There is an existing crossing at this point, with the stream running under a culvert. The stream is c.1-2m wide and is grazed right up to its margins. Occasional hawthorn and alder *Alnus glutinosa* trees grow alongside.

Photo 5. Track crossing stream at TN6	*Photo 6. Hedgerow at TN8*
	

4.2.3 Hedgerows and Trees

The access route crosses a single hedgerow at **TN8** (**Photo 6**). The hedgerow is defunct, being extremely gappy and heavily grazed at base. It is composed of hawthorn *Crataegus monogyna* and hazel *Corylus avellana*.

A row of trees runs adjacent to the proposed access track at **TN7** (**Photo 7).** The species include hazel, holly *Ilex aqifolium* and hawthorn, and they are separated from the track by a post and wire fence.

The trees that ring the glade at **TN2** (**Photo 4**) are composed of alder, ash *Fraxinus excelsior*, field maple *Acer campestre*, sycamore *A. pseudoplatanus*, holly, hawthorn and crab apple *Malus sylvestris*.

There are also scattered mature hawthorn trees within the field at **TN4** (**Photo 2**).

4.2.4 Bare Ground

The immediate surroundings of the building (**TN3**) are heavily disturbed, and consist of bare ground and rubble piles as shown in **Photo 8**.

Photo 7. Row of trees at TN7	*Photo 8 Bare ground and rubble at TN3*
	

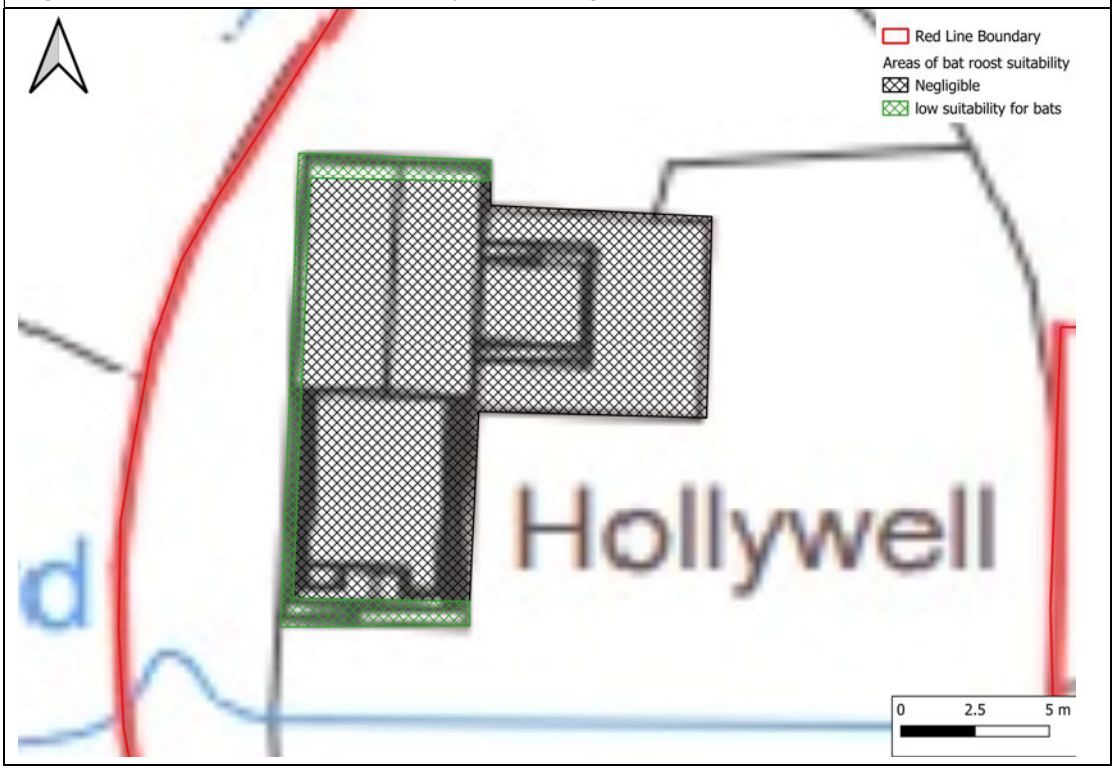
4.3 Bats

4.3.1 Evidence of Bats

No evidence of bats was found in the building, and it is classed as having low – (**Category 2**) potential to support bats.

The high level of disturbance that the building has undergone means that the majority of the building has negligible potential to support roosting bats. Only the external north, south and west- facing walls support undisturbed crevice features. These were thoroughly examined during the survey. No evidence of bats was found, but some crevices extend deep into the wall and could not be exhaustively inspected. For this reason the external faces of the north, south and west-facing walls are classed as having low potential, but the remainder of the building has negligible potential (see **Figure 2** below). Details of the building inspection are provided in **Section 4.3.3**.

Figure 2. Bat Roost Potential at Holywell Cottage



4.3.2 Desk Study

HBRC provided 120 bat records from approximately 16 different locations within 2km of the Site, recorded during the past 25 years. The bat species present within the search area were:

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

The most relevant findings of the desk study were:

- There are no previous records of bats from the Site itself.

- The closest data are three records of common pipistrelle and *Myotis* sp. bat activity recorded in 2016, c. 0.7km east of the Site.
- The closest roost data are a set of 19 records from 2006 located c. 1 km east, which include roosts of up to three lesser horseshoe and six common pipistrelle bats.
- The most significant roost data (and only record of a large colony) are 8 records dating between 2003 and 2008 relating to a roost of up to 123 lesser horseshoe bats, located c.. 2km east.
- At 1.2km east are 44 records dating from 2016 that include up to two roosting common pipistrelle bats, and 'possible' roosts of single lesser horseshoe, natterers, soprano pipistrelle and whiskered bats.
- At 1.4km north are 13 records dating from 2015 that record one roosting whiskered bat and one long eared bat species.
- At 1.6km west are 19 records dating from 2017 that include a single roosting lesser horseshoe bat.
- All other records are of activity only.

4.3.3 Building Inspection

The building consists of the walls of a cottage and the adjoining stone barn. There was a small lean-to structure on the eastern elevation of the barn, which is only partially re-built. All walls are composed of stone. A pitched roof of gappy corrugated metal sheeting covers the barn (approximately a quarter of the property), with the remaining structure unroofed. No internal fittings remain, but window and door lintels have been newly replaced.

Eastern Aspect (cottage)

The photo to the left shows the partially re-built eastern elevation of the cottage, with the roofed barn in the background. The scaffolding marks the location of the lean-to. The eastern elevation (cottage and lean-to) is too recently disturbed to provide established roosting habitat.

North gable (barn) and east-facing lean-to

The north elevation of the building is the gable of the barn. This wall has not been disturbed and has numerous crevices extending into thick stone walls. The roof cover has protected the wall from the elements, and it is dry and intact.

The lean-to has a partially rebuilt wall – too recently disturbed to be utilized by bats.

South gable (cottage) and west elevation (barn and cottage)

There are crevices throughout the un-mortared external faces of the south and west walls. Both walls are unroofed so are open to the elements and very damp, which reduces the suitability of the crevices to roosting bats.

West wall (internal) and barn roof

The internal wall faces are pointed and do not have any crevice features. The partial roof-cover on the barn is not sufficient to provide a sheltered open space for bats – all areas are light and exposed to the elements.

Chimney on south elevation of cottage.

The chimney breast has been newly rebuilt. The chimney flue is short and open topped and wet. The stonework is lined. No roosting opportunities for bats. .

4.3.4 Tree and Habitat Assessment

The majority of the trees within the Site boundary do not have potential to support roosting bats. However, four trees were noted to have features that could be utilized for roosting, including rot holes, missing limbs with cavities, overlapping branches and general decay. These trees are marked **T1 – T4** on the Phase 1 habitat plan in **Appendix 1.** The network of tree-lined field boundaries within the landscape in which the Site is situated are likely to be used as commuting routes by bats. Within the Site, the tree line at **TN7** and the trees that ring **TN2** are part of this network and likely to be traversed by bats.

4.4 Dormice

HBRC hold two records of dormouse *Muscardinus avellanarius* with the same date and location. They are located at Park Wood, c. 2km east of the Site and date from 1999. The intervening River Monnow separates the Site from Park Wood, so these records have no bearing on the assessment of likely presence/absence of dormice on the Site.

There are no blocks of broadleaved woodland in the locality, but the extensive network of wooded field margins in the landscape surrounding the Site may potentially support a population of dormice. This network includes the tree line at **TN7** and the trees that ring **TN2**. Dormice could potentially be present in these wooded features.

4.4.1 Great Crested Newts

HBRC holds one record of great crested newt *Triturus cristatus* dating from 2003 and located c. 2km east of the Site, on the opposite side of the River Monnow.

Examination of OS mapping and satellite imagery does not reveal any ponds within 250m of the Site. The absence of nearby breeding habitat rules out the presence of great crested newts from the Site.

4.4.2 Reptiles

HBRC holds one reptile record (common lizard *Zootoca vivipara*) from the 2km search radius. This was recorded in 2010, on the southern moorland margin of Black Hill, c. 1.5km south of the Site.

The wooded boundaries of the Site, which form part of a wide network in the landscape could potentially support common species of reptile, but the fields within which the Site is located are too tightly sheep-grazed to offer suitable habitat for these species.

[redacted]

4.4.4 Breeding Birds

No birds' nests were noted on the building, but the trees within the Site boundary are likely to support nesting birds.

4.5 Other Notable Species

Hedgehogs *Erinaceous europaeus* could potentially be present within the wooded field margins within which the Site is situated.

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 Designated Sites

Under the European Union (Withdrawal) Act 2018, EU-derived domestic legislation, such as existing environmental regulations that implement EU Directives, and Direct EU legislation (such as The Conservation of Habitats and Species Regulations 2017) which were in force immediately prior to the end of the transition period continue to form part of UK domestic law. Special Areas of Conservation (SAC) are designated under The Conservation of Habitats and Species Regulations 2017. 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. SSSI are notified and protected under the Wildlife and Countryside Act 1981 (as amended). These sites are notified for nature conservation purposes as they support the best examples of the UK's habitats, flora and/ or fauna.

There are no predicted impacts on any statutory or non-statutory sites. The development is small scale, and distances are such that any potential negative effects will be buffered.

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 native hedgerows with at least 80% native woody species are Habitats of Principal Importance. This includes the hedgerow at **TN8**. However, it does not qualify as an Important hedgerow according to the ecological criteria of the Hedgerow Regulations due to its species-poorness and defunct state. The proposed access track will follow the existing informal vehicular route that crosses the hedgerow, which will not involve any removal or disturbance to this feature. New hedgerow planting is proposed as part of the development, which will result in a net positive impact on the hedgerow resource on the Site.

There are no other habitats of Principal Importance on the Site. The grassland is of low ecological value, and all trees within the Site boundary will be retained. Proposed new tree planting will result in a net positive impact on habitats within the Site.

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.

It has been established with sufficient certainty from the building appraisal that the building interior has not been used by roosting bats in 2023/2024 and does not form a suitably sheltered and dark place in which bats could roost, and does not offer any potential for colony roosts. A large proportion of the property is unroofed and parts have been recently re-built following partial collapse. These areas are too recently disturbed to offer established roosting habitat for bats. Potential roosting features are therefore restricted to the outer faces of the walls on the north, south and west aspects of the building. The south and west walls are very damp so have relatively limited potential, but the north wall has a roof cover and is therefore drier and has greater potential.

The proposed development entails the renovation of the property, but the existing walls will not be removed and will not be mortared. So, whilst the building is assessed as having Category 2 'Low Potential' to support roosting bats because of the presence of crevices on the external walls , these features will not be modified and impacts on any bats that might be present are not likely to occur.

It is concluded that bats can be reasonably assumed to be absent from those parts of the property that will be affected by the renovation, and the very low risk of significant impacts can be managed through careful working and ecological supervision. Careful working methods during building work would provide a proportionate approach and an ecological watching brief with direct supervision is a more appropriate and effective method for avoiding disturbance to individual bats (in the unlikely event that they might be present) than undertaking a bat activity. This is in line with the BCT Guidelines (2023), which state that '*If the structure has been classified as having low suitability for bats, an ecologist should make a professional judgement on how to proceed based on all of the evidence available and the balance of probabilities. Thought processes and decision making should be adequately recorded as a paper trail. If all areas (including voids, cracks and crevices) of a structure have been inspected and no evidence found (and is unlikely to have been removed by weather or cleaning or be hidden), then further surveys are not appropriate*.'

On this basis, it can be concluded that the renovation of Holywell Cottage 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.

All trees will be retained within the development, so provided that dark conditions are maintained at the periphery of the Site, no impacts on bat activity are predicated.

5.6 Dormice

Dormice 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. Dormice are present on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and are subject to the provisions of Regulation 41 of those Regulations. Taken together, these protect dormice from disturbance, injury or killing and make it an offence to damage, destroy or obstruct a breeding site or resting place they use.

The tree and hedgerow habitats within the Site boundary will be retained undisturbed so no impacts on dormice are predicted.

5.7 Reptiles

The linear features within the Stie will be retained, and reptiles are unlikely to be present in interior habitats, so no impacts on these species are anticipated.

5.8 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 tree and hedgerow habitats within the Site boundary will be retained undisturbed so no impacts on breeding bird habitat is predicted. No evidence of nesting birds was noted in the building.

5.9 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. It is concluded that precautionary measures for the (continued) building work would provide a proportionate approach for the protection of bat roosts and an ecological watching brief with direct supervision is a more appropriate and effective method for avoiding disturbance to individual bats than undertaking a bat activity survey/s. This is in line with the BCT Guidelines (2023), which state that '*If the structure has been classified as having low suitability for bats, an ecologist should make a professional judgement on how to proceed based on all of the evidence available and the balance of probabilities*'.

6.2 Mitigation

6.2.1 Reasonable Avoidance Measures (RAMs) for Bats

Holywell Cottage has been assessed as having low potential to support roosting bats based on the presence of crevice features with the exterior stone walls of the property. These crevices will be retained, and the low risk of disturbance to bats will be managed by ecological supervision by an appropriately experienced (licensed) ecologist where renovation work will risk disturbance to the north, south and west walls (as shown in **Figure 2**).

- Prior to commencement of renovation, the ecologist will provide a toolbox talk to the applicant / contractor that will cover aspects such as: bats and the law; evidence of bats and what to look out for; good working practice; and what to do in the event of finding a bat.
- Where renovation work will affect the north, south and west walls (for example when a new roof is installed over these walls). The ecologist will re-survey the affected walls and directly examine the wall tops (or relevant affected area) via scaffolding to confirm absence of bats and to ensure that no potential roost features are blocked.
- Once the new roof is installed and all work that might affect the fabric of the north, south and west walls is complete, the work can continue unsupervised.
- If a bat is encountered at any time, all work will stop and the ecologist will be consulted.

6.2.2 *Reasonable Avoidance Measures (RAMs) for Breeding Birds*

No trees or hedgerow vegetation will be removed, but if localized scrub removal is required for any reason, it should be done outside the season in which birds breed, which is generally considered to be from 1st March to 31st August. This option will

avoid the need for a pre-works inspection to determine the presence of nesting/breeding birds.

If it is not feasible to remove vegetation outside the bird breeding season, then the following action will be taken:

- A nesting bird inspection immediately prior to the commencement of the specified work will be undertaken by a qualified ecologist, ornithologist or other suitably qualified individual. If nesting birds or birds constructing a nest are subsequently identified to be present, work in that area must cease until the nest is clear. This could involve avoiding individual trees/shrubs whilst holding a watching brief on the area to establish when the nest is clear.

6.2.3 Reasonable Avoidance Measures (RAMs) for Ground-dwelling Species

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.

6.2.4 Maintain Dark Corridors at the Periphery of the Site

The Site lies in a rural location so it will be important to ensure that no light spill occurs beyond the immediate curtilage of the house to allow dark corridors for movement by bats and other nocturnal animals around the periphery of the Site. 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

The proposed mitigation and enhancement measures are shown on *CDB drawing HC-5477-02*, a copy of which is provided in **Appendix 1**.

6.3.1 Hedgerows and Trees

Native hedgerows will be planted as shown in **Appendix 1**. Approximately 100m of new hedgerow will be planted to the south of the access track, and a further 100m of existing defunct hedgerow will be gapped up. The hedgerows will be composed of hawthorn, dogwood *Cornus sanguinea*, dog rose *Rosa canina* and hazel, and other appropriate species could include blackthorn *Prunus spinosa* holly, spindle *Eonymous europaeus*, wild damson *Prunus institia* and grey willow *Salix cinerea*.

It is recommended that the hedgerows are protected with stock-proof fencing to prevent grazing damage and are managed to maximize their value to wildlife by allowing them to grow into a thick bushy corridor.

Approximately 20 new trees will be planted within the field to the south of the access track as indicated on the plan in **Appendix 1**. The species will include pedunculate

oak, field maple, hazel and hawthorn. The trees should be protected with stockades to prevent livestock damage.

6.3.2 Bat, Bird and Hedgehog Boxes

The network of tree-lined field boundaries provides good interlinked wildlife corridors, but sheep grazing prevents sheltered ground cover from developing. It is proposed that two hedgehog shelters (such as Hogitat hedgehog shelter) are provided to enhance the habitat for this species. This should be positioned in a quiet, discreet position under tree cover around the margins of the Site. Covering the shelter with leaves and brushwood will camouflage it.

Bat and bird boxes (two of each) will be erected on mature trees surrounding Holywell Cottage as indicated on the plan in **Appendix 1**. The boxes will be general purpose models suitable for erection on trees such as the Schwegler 2F general purpose bat box for bats, and the Schwegler 1B nest box for birds. However, other durable models would also be suitable. Boxes can be viewed on-line (for example www.nhbs.com or www.wildcare.co.uk).

7 References

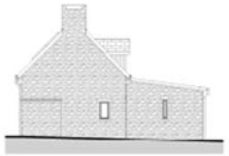
Collins J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. (4th Ed) Bat Conservation Trust. London

JNCC, 2010. Handbook for Phase 1 Habitat Survey - a technique for environmental audit. JNCC Revised reprint 2003, reprinted 2007 & 2010.

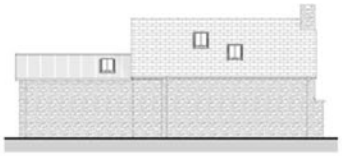
Mitchell-Jones, A. (2004). *Bat Mitigation Guidelines.* English Nature.

Appendix 1. Proposed Site Plan

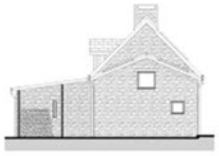
Eastern elevation- Proposed
1 : 100



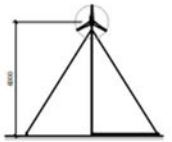
Southern elevation- Proposed
1 : 100



Western elevation- Proposed
1 : 100



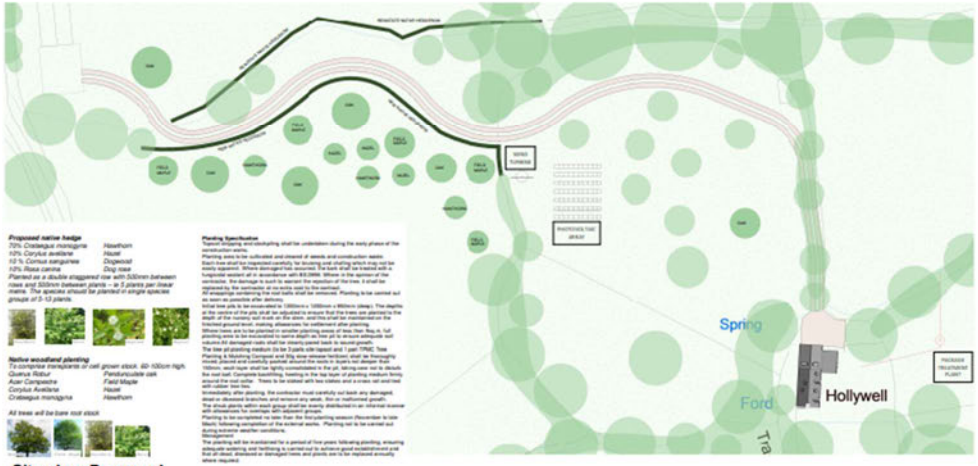
Northern elevation- Proposed
1 : 100



Wind turbine
1 : 100

Ground floor- Proposed
1 : 100

First floor- Proposed
1 : 100



Site plan- Proposed
1 : 500

Site plan 2
1 : 200

Collins Design & Build & Project Management
TEL: 01981 240682

Proposed plans and elevations. Ecological & landscape enhancement
PLANNING

Restoration of Holywell Cottage

Holywell cottage, Craswall Herefordshire

Tim Hollingsworth

gcm

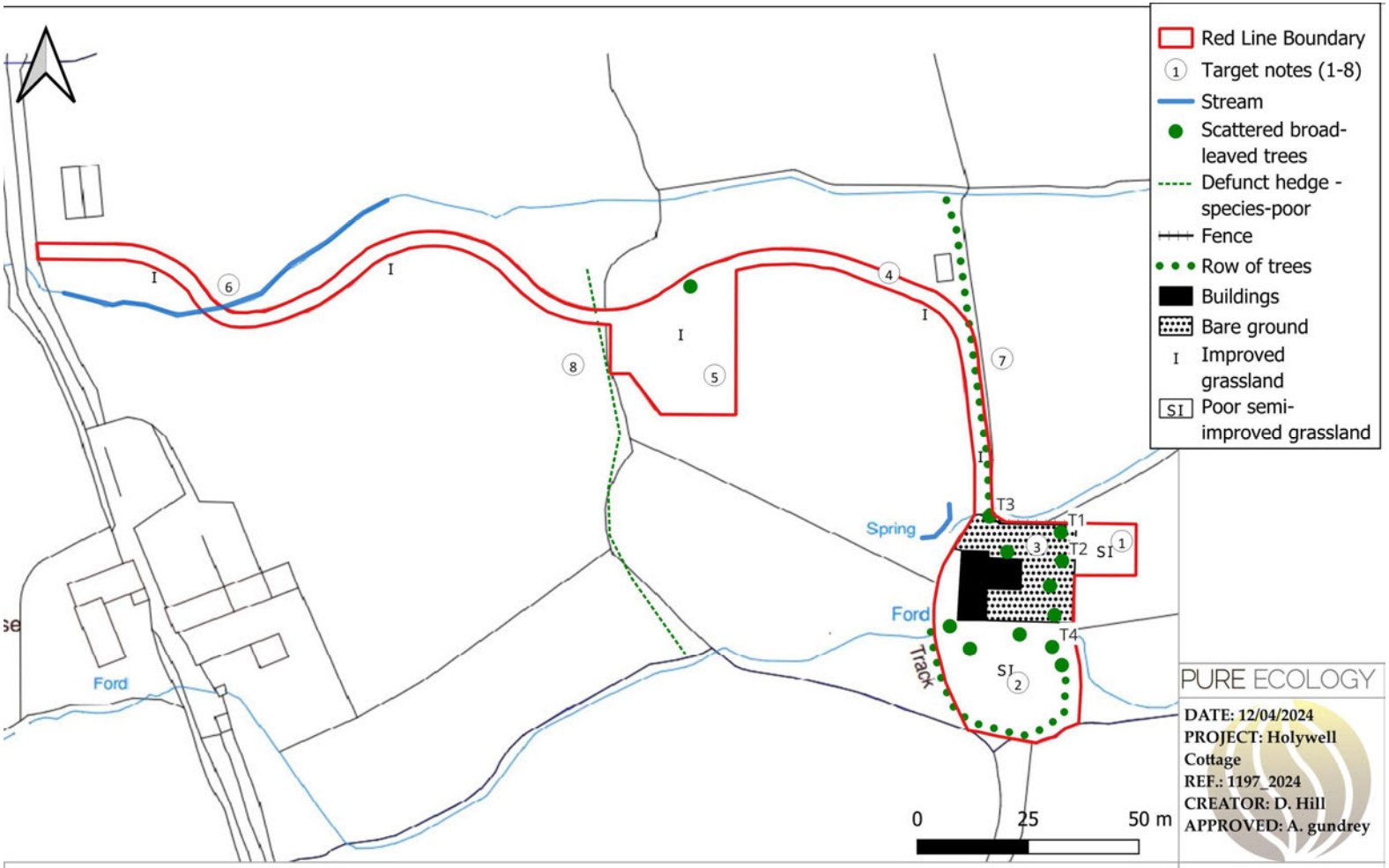
5477

HC-5477-02

A1

Scale 1:20 0m 0.5 1 1.5 2m
Scale 1:50 0m 1 2 3 4 5m
Scale 1:100 0m 2 4 6 8 10m
Scale 1:200 0m 4 8 12 16 20m
Scale 1:250 0m 5 10 15 20 25m
Scale 1:1250 0m 25 50 75 100 125m

Appendix 2. Phase 1 Habitat Plan


Red Line Boundary
Target notes (1-8)
Stream
Scattered broad-leaved trees
Defunct hedge - species-poor
Fence
Row of trees
Buildings
Bare ground
Improved grassland
Poor semi-improved grassland
Spring
Ford
Track
Ford
T1
T2
T3
T4
SI
0
25
50 m
PURE ECOLOGY
DATE: 12/04/2024
PROJECT: Holywell Cottage
REF.: 1197_2024
CREATOR: D. Hill
APPROVED: A. gundrey
Phase 1 Habitat Survey
Pure Ecology Ltd
Studio 1, Old Cottage Hospital Studios
The Homend
Ledbury
Herefordshire
HR8 1ED

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 for larger developments in February 2024 and 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