Middle Studlehurst Barn, Osbaldeston

Preliminary Roost Assessment (Bats)

Compiled by Ecology Services Ltd.

on behalf of

Ian Roberts

October 2024

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1.0 Introduction

1.1 Ecology Services Limited was commissioned by Ian Roberts in September 2024 to undertake a Preliminary Roost Assessment (PRA) of structures at Middle Studlehurst Barn, Osbaldeston Lane, Osbaldeston, BB2 7LZ, hereinafter referred to as 'the site'. The centre of the site is located by National Grid Reference SD 63979 33279. The location and boundary of the site is shown on Figure 1.

Site Description

1.2 The site is located to the north-east of the village of Baldestone and to the north-west of the village of Osbaldeston. It contains a mix of habitats including managed modified grassland, hedgerows and scattered trees.

Proposals

1.3 It is understood that proposed development activities at the site involve demolishing the existing small garage and replacing it with a new, larger garage. The slates on the current garage are going to be removed by hand and reused as part of the new garage roof.

Survey Objectives

1.4 The aim of the preliminary roost assessment was to:

- Undertake a visual inspection of the site to establish baseline conditions;
- Complete an assessment to ascertain if potential or evidence of use existed for bat species; and
- Determine if there are requirements for further and/or more detailed surveys.

1.5 The purpose of this report is to state the survey methodology, present the results of the survey, evaluate the findings, assess the impacts of the proposals and make recommendations concerning the protection of bat species that may be present at this site. Where possible the report will aim to provide sufficient information to allow a local authority to assess fully the potential impacts of the proposed development on roosting bats.

2.0 Planning Policy and Legislation

2.1 This section provides a brief overview of planning policy and legislation relevant to bats in the England. Further information is provided in Appendix 1.

Planning Policy

2.2 The National Planning Policy Framework (NPPF, 2023) places a clear responsibility on Local Planning Authorities (LPAs) to contribute to conserving and enhancing the natural and local environment. LPAs should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (e.g. Species of Principal importance, Local Biodiversity Action Plan species); and identify and pursue opportunities for securing measurable net gains for biodiversity. In accordance with the NPPF, local planning policy and guidance, development proposals should provide integrated improvement for biodiversity at the site and seek to maintain and enhance opportunities for bats. The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation.

2.3 Protected species within England, such as bats, are a 'material consideration' in the determination of a planning application. Therefore, an LPA is unlikely to determine an

application until all relevant information relating to protected species or habitats is submitted to fully inform the application. Relevant information includes adequate surveys and, where required, mitigation strategies, which will need to be submitted to inform a planning application.

2.4 The local planning authority (LPA) has a duty to ensure that protected and priority species (e.g. Species of Principal Importance, Biodiversity Action Plan species) are fully considered in a planning decision. Therefore, up to date survey information and, where required, mitigation strategies adequate to assess the impacts of the proposals and to demonstrate that opportunities for species using the site can be maintained, must be provided in support of a planning application.

Legislation

2.5 All bats and their roosts receive strict protection under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats & Species Regulations 2017 (as amended)[1]. In brief, this legislation makes it an offence to: kill, injure or capture a bat; to destroy, damage or obstruct access to a bat roost; or to disturb a bat occupying a roost. A Local Authority is a 'competent authority' within the context of Regulation 7 of the Conservation of Habitats & Species Regulations 2017 (as amended) when dealing with planning applications where a European Protected Species (EPS) (all bat species) may be affected. Therefore, planning decisions should only be made when European Protected Species and their habitats are fully taken into account.,

2.6 Where proposed works are likely to contravene the legislation protecting bats, a Natural England licence must be applied for, and approved, before works can proceed.

2.7 Section 40 of the Natural Environmental and Rural Communities (NERC) Act 2006 (as amended) places a statutory duty on public authorities, in exercising their functions, to further the conservation and enhancement of biodiversity in England. Species of Principal Importance for the conservation or enhancement of biodiversity in England, identified by the Secretary of State in consultation with Natural England, are listed under Section 41 of the NERC Act. The Local Planning Authority and government bodies (e.g. Natural England) will expect the overall design of the development to further the conservation and enhancement of populations of these species. Seven bat species are listed as 'Species of Principal Importance' under Section 41 of the NERC Act 2006 (as amended):

- Noctule (*Nyctalus noctula*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Lesser horseshoe (*Rhinolophus hipposideros*)
- Greater horseshoe (*Rhinolophus ferrumequinum*)
- Barbastelle (*Barbastella barbastellus*)
- Bechstein's (*Myotis bechsteinii*)
- Brown long-eared (*Plecotus auritus*)

[1] The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

3.0 Methodology

Desktop Study

3.1 Ecological data and records searches were undertaken by contacting the sources listed in Table 1.

Table 1: Ecological Desktop Study Sources

Source of information	Information supplied
Lancashire Local Biodiversity Action Plan (LBAP)	Identification of LBAP species known to occur in the region.
Natural Environment and Rural Communities (NERC) Act 2006 (as amended)	Review of Species of Principal Importance known to occur in the region.
Multi Agency Geographical Information for the Countryside (MAGIC) website	Statutory protected sites designated for their bat interest within 2km of the site. Records of bat roosts relating to Natural England EPS licences within 2km of the site.
National Biodiversity Network (NBN) Atlas	Records of bats and bat roosts within 5km of the site.

Core Sustenance Zones (CSZs)

3.2 CSZs provide an outline idea of the potential distances that particular species may be present. They are defined as the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence and the resilience and conservation status of the colony using the roost. CSZ's are very species specific with some species better studied than others and where they are known, are used to help define the Zone of Influence (ZoI) of a project, assist in consideration of impacts and guide mitigation.

3.3 Data search areas have been determined based upon the Core Sustenance Zones of bats that may potentially be present within the site and the immediate surrounding habitats.

3.4 The Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (2023) advise that the aim of a desk study for bats is to collate and review existing information about a site and its surroundings to inform the design of subsequent bat surveys (if needed) and inform the impact assessment for the project. The need for a data search for bats will be determined by the results of the PRA and need for further bat surveys.

Preliminary Roost Assessment Survey

3.5 Each structure was categorised according to its level of suitability; any evidence of roosting bats found during the inspection and suitability and quality of the surrounding habitat (see Appendix 2, Table 4.1).

3.6 The preliminary roost assessment followed the methodology set out in the Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (2023).

3.7 An interior and exterior inspection of the structures was undertaken to search for any potential roosting features and evidence of roosting bats. Signs surveyed for included droppings, dead bats, feeding remains (beetle, moth and butterfly remains), urine staining and grease marks around crevices and down walls, odour (ammonia type smell) and any noises such as scratching and audible bat calls. A ladder, a Clulite Long Ranger LED Pistol Light (1200 lumens) and close focusing binoculars were used to better assess any features of interest not accessible. High resolution photographs were taken for later review.

3.8 Preliminary roost assessments of buildings can be undertaken at any of the year and can provide conclusive results, which can save expense and time for a planning applicant. The optimum time to investigate the presence of bats is usually during their active season when signs of presence can be more easily located, although this is dependent on the type of roost being inspected.

Personnel

3.9 The PRA inspection survey was undertaken by Mrs. Z. Foster who holds a Bat Class Licence Level 2 (Registration number 2015-17219-CLS-CLS).

Timing

3.10 The PRA inspection survey was conducted on the 20th of September 2024.

3.11 The daytime survey was conducted at a time when bats are fully active, towards the end of the maternity season. Maternity colonies will be dispersing or have already dispersed as their focus turns to the mating season and the beginning of building up fat reserves. Evidence of bat occupation is likely to be detected, should they be present at the site.

Weather Conditions

3.12 Weather conditions during the survey were fine with no wind or rain, which could have adversely affected the survey results.

Roost Status

3.13 If evidence of a bat roost is recorded during the surveys, the status of the roost is evaluated based on its function. This requires sufficient survey effort to determine the species and numbers of roosting bats present, the time of year that the roost is used and characteristics of the roost itself. The Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' details types of bat roosts which may be defined in several ways, as below:

- Day roost – where individual bats or small groups of males, rest or shelter in the day.
- Night roost – where bats rest or shelter in the night but are rarely found during the day.
- Feeding roost – where individual or few bat/s rest or feed during the night.
- Transitional/occasional roost – used for short periods of time by few or occasionally small groups of bats on waking or prior to the hibernation period.
- Swarming site – large numbers of males and females gather during late summer to autumn.
- Mating sites – where mating takes place from late summer and through winter.
- Maternity roost – where females give birth and raise their young.
- Hibernation roost - where bats may be found during winter. To have a constant cool temperature with high humidity.
- Satellite roost – an alternative roost used by individual to small numbers of breeding females over the breeding season. Usually close to main nursery colony.

3.14 Roost selection is often closely correlated with presence of suitable foraging habitat within a reasonable commuting distance from the roost. Different roost sites are used throughout the active season which is most dependent upon roost microclimate and abundance of invertebrate prey nearby. Weather conditions can also affect the ability of bats to successfully forage. All British bats are insectivorous.

Limitations

3.15 There are no known constraints that would have adversely affected the PRA survey completed.

4.0 Results and Evaluation

Desktop Study

National Status

4.1 There are 18 species of bat that are native to the United Kingdom. The latest Review of the Conservation Status of British Mammals (2018) has shown that where change could be assessed with reasonable confidence there have been increases in the geographical range and population status of two species of UK bat (greater and lesser horseshoe bat) and decrease in the geographical range of one species (grey long-eared bat).

4.2 Increases in population were also identified in the following species: Bechstein's, Daubenton's, Natterers, serotine and brown long-eared although it is noted that the reliability of the results is poor.

4.3 Population data was not available for; Alcathoe, whiskered, Brandt's, Leisler's, noctule, Barbastelle and Nathusius pipistrelle.

4.4 Population estimates were given for common and soprano pipistrelle however could not be reliably compared to the results from Harris et al. (1995) as the two species had not been identified as separate species at the time of the survey. Pipistrelle spp. remain the commonest species of bat in the UK.

4.5 Serotine and barbastelle are considered vulnerable and Leisler's and Nathusius' pipistrelle, near threatened in Britain and England in the Red List for Britain's Terrestrial Mammals (Mathews and Harrower, 2020).

Regional Status

4.6 The north west of England appears to be a stronghold for Whiskered and Brandt's, both of which are reasonably rare in southern England.

Local Status

4.7 The Lancashire Local Biodiversity Action Plan (LBAP) lists eight bat species recognised as being resident in Lancashire (refer to Appendix 4) in a combined species action plan.

Designated Sites

4.8 There are no statutory or non-statutory protected sites designated on the basis of their interest for bats that are located within the vicinity of the site and which could be adversely affected by the proposed development of the site.

Records Data Search

4.9 There are three records of European Protected Species mitigation licences for bats in the area surrounding the site, which include, a licence relating to brown long-eared bats, pertaining to a location approximately 1km east of the site, dated between 2017 and 2027. A second licence was for a site located c.1.9km to the north-east of the site, dated between 2017 and 2022 and was related to Natterers and soprano pipistrelle bats. The last licence was for a site located c.1.9km to the south of the site, related to whiskered, common pipistrelle and soprano pipistrelle bats and was dated between 2017 and 2022.

Preliminary Roost Assessment

Habitat Assessment

4.10 The site is located in a rural location to the north-east of the village of Baldestone and to the north-west of the village of Osbaldeston. The property possesses a large, managed garden including mown lawns and a hedgerow. At the northern edge of the site, is a copse of mature trees.

4.11 Land surrounding the site is comprised of agricultural grasslands fields along with neighbouring residential properties to the west and south-west and stables with training paddock to the north. The residential properties have substantial maintained grounds complete with shrubs, trees and hedgerows. There are several waterbodies in the surrounding area, with the closest being located c.55m away from the site to the north-east. There is an un-named watercourse located c.90m away from the site, to the north-west and this is part of a network of watercourses which are connected directly to the River Ribble, which is located c.1.10km away from the site to the north-west. This network of watercourses, including the Sandiford Well, flow through the Mercyfield Woods which are c.130m away to the north-west. Long Dingle watercourse is found c.250m away to the north-east of the site and is surrounded by Flashers Wood. There are a number of other woodlands found around the site including Slaterfield Wood (c.700m away to the north-east) and Old Park Wood (c.840m away to the east). Old Park Wood is interconnected with Mire Wood and Horse Shoe Wood. These areas are likely to provide very good quality foraging habitat and other roosting opportunities for bats.

4.12 Overall, habitats within the immediate and wider surrounds of the surveyed buildings are considered of high value for foraging and commuting bats. Where suitable habitats are present in close proximity to buildings then there is generally an increased use of these for roost sites due to a higher abundance of food and better access to food sources.

Buildings

4.13 A description of the buildings can be found in the Table 2 below and overleaf. Photos of buildings/structure with annotations showing locations of potential roosting features are provided in Appendix 5.

Table 2: Description of Buildings.

Building 1 – Garage & Wood Store
Description:
A single-storey garage with a slate covered gable roof and ridge tiles. There are two sets of wooden double doors set in to the northern elevation and the remaining three walls are composed of a brick-built base with wooden planks above. There is chicken wire present in the gaps above the doors to prevent birds entering. Internaly, the floor is composed of concrete and the vaulted ceiling is supported by wooden beams. There is breathable roofing membrane present beneath the slates. The garage is currently used for storage and can be well lit internally with electric lighting. On the western elevation of the garage, a wood store is attached. It has a mono-pitched roof covered in slates and lead flashing is present where it joins the main garage structure. The northern and southern walls are constructed of wood and the western elevation is open. The floor is composed of concrete. Inside the wood store are cut logs and there is a gap present along the top of the southern elevation, which is covered in chicken wire, preventing access into the main garage. There is a swallow nest present in the top righthand corner of the wood store.
Roost potential signs:
The ridge tiles have recently been repointed and are therefore tight with no gaps present. There is a lifted slate on the southern elevation of the roof on the top row beneath the ridge tiles. The space

beneath the slate was illuminated and checked and there was no evidence of bats using the small area beneath the slate. The walls are tight. There was debris on the ground and inside the garage/wood store showing the areas had not been cleaned prior to arrival. No droppings or any other evidence of the presence of bats was identified which suggested present or historic use. The garage is considered to have **negligible** potential for roosting bats. The garage is considered to have **low** potential for hibernating bats due to the lack of suitable features for hibernation and it is constant use through-out the year. The adjoining wood store is considered to have **negligible** potential for roosting bats but there is a swallow nest present. The wood store has **low** potential for hibernating bats as there are no suitable features which could be utilised by hibernating bats.
Building 2 - Shed
Description:
A small shed located adjacent to the southern elevation of Building 1. The gable roof is covered in slates and there are ridge tiles present. The lower part of the walls are constructed of brick with the upper parts being composed of wood. There is wooden, double door located in the eastern elevation and there are no windows present. Inside, there is breathable roofing membrane beneath the slates, the roof is supported by wooden beams and the floor is composed of concrete. The shed is used for storage.
Roost potential signs:
The roof and walls are tight with no gaps or missing slates and no cracks or gaps in the wood. The doors are set tight in the eastern elevation with gaps present. There was debris on the ground and inside the shed showing the area had not been cleaned prior to arrival. No droppings or any other evidence of the presence of bats was identified which suggested present or historic use. The building is considered to have **negligible** potential for roosting bats. The shed is considered to have **low** potential for hibernating bats due to the lack of suitable features present.

4.14 An assessment of the winter roosting potential has been undertaken as detailed in Collins (2023).

4.15 Building 1 and Building 2 are both considered to have low winter roosting suitability due to their lack of suitable features. The wood store and shed are both small and unlikely to be thermally stable during the winter, especially with the open western elevation on the wood store. The ridge, roof (apart from the one minor lifted slate on the southern elevation) and walls are all tight on the garage and it is in constant use through-out the year. The small gap beneath the slate would not typically be regarded as providing the protection from weather or provide the favourable temperature and humidity conditions required during the winter period.

4.16 Buildings 1 and 2 have both been found to contain negligible potential to support roosting bats and no further activity surveys are deemed to be required for either of these buildings. However, as the slates on the current garage are going to be removed by hand prior to the structure being demolished, it is recommended that the lifted slate on the southern elevation is checked by an ecologist immediately prior to removal to ensure that no bats are utilising this small gap.

Summary and Evaluation

4.17 The preliminary roost assessment found Building 1 and Building 2 to contain negligible bat roost potential when considering the lack of potential roosting features, as noted within Table 2. Building 1 and Building 2 were assessed as having low winter roost suitability.

4.18 Habitats within the immediate and wider surrounds are considered to be of high value for foraging and commuting bats.

4.19 No evidence of past or present use of the buildings by roosting bats was identified.

5.0 Impacts and Recommendations

5.1 Building 1 and Building 2 at Middle Studlehurst Barn, Osbaldeston, have been found to contain negligible potential suitability for bat species and no evidence of past or present use of the buildings by roosting bats was found during the survey. Therefore, there are no apparent implications in relation to the proposed works and roosting bats. However, it is advised that the lifted slate on the southern elevation is checked just prior to its removal to ensure that no bats are utilising this small space.

5.2 If at any time a bat/s or evidence of bat/s is/are suspected or found, all works must cease immediately and advice should be sought from either Natural England or the acting Consultant.

5.3 As bats are mobile creatures and can form new roosts at any time if works are not started within one year of this report, then it may be necessary to repeat certain surveys.

Safeguards and Enhancement Measures

5.4 Lighting schemes should be designed in accordance with best practice and ensure there are no detrimental impact upon bat roosting and foraging habitats.

Other: Breeding Birds

5.5 The site also contains suitable breeding bird habitat. A swallow nest was discovered in the wood store. This wood store is going to be retained so it is recommended that it is positioned facing the same direction once it has been moved to its new location.

5.6 The Wildlife and Countryside Act (WCA) 1981 (as amended) states that all wild birds are protected at all times against killing or injury. Under the WCA, it is an offence to kill, injure or take any wild bird, to take damage or destroy the nest of any wild bird, or to take or destroy the egg of any wild bird. It is good practice to carry out any works outside of the breeding bird season that might affect nests and result in an offence being committed. The breeding bird season is generally considered to be between March to August inclusive.

5.7 It is good practice to remove all affected breeding bird habitat during the winter months prior to works starting to prevent delays. If suitable breeding bird habitat is affected during the breeding bird season, then an assessment by an Ecologist for breeding birds should be undertaken prior to works. If breeding birds are found, it is likely that works will have to be delayed until breeding has ceased.

6.0 Conclusion

6.1 To conclude, this report details the findings of the PRA survey that has been undertaken at this site.

6.2 The completed survey has been undertaken by a suitably experienced surveyor at the appropriate time of year and in line with current guidance.

6.3 Further presence/absence activity surveys are not required, however, the lifted slate on the southern elevation of Building 1 (the garage) must be inspected once again prior to its removal.

6.4 Lighting schemes should be designed in accordance with best practice and ensure there are no detrimental impact upon bat roosting and foraging habitats.

7.0 References

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Figure 1:
Site Plan

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Project Status

- [ ] PLANNING
- [x] PRELIMINARY
- [ ] TENDER
- [ ] CONSTRUCTION

Project Title

Middle Studdlehurst Barn

Client

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Drawing Title

Location Plan

Scale	1:1250
Paper Size	A4
Date	01/10/2024
Drawn by	DCA
Checked by	
Drawing No.	

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Appendix 1:
Planning Policy and Legislation

Disclaimer: Appendix 1 is a guide to legislation and procedure relating to biodiversity in England. It is general guidance and it does not give specific advice in relation to any site, species or project. It represents Ecology Services Ltd interpretation of legislation and procedure as at September 2024. Readers should note that legislation and procedure changes continually and is interpreted on a case-specific basis. Nothing in Appendix 1 should be construed as an offer of advice or legal opinion.

Planning Context

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF, 2023) places a clear responsibility on Local Planning Authorities (LPA) to contribute to conserving and enhancing the natural and local environment. LPAs should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (e.g. Species of Principal importance, Biodiversity Action Plan species); and identify and pursue opportunities for securing measurable net gains for biodiversity. The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation.

A Local Planning Authority (LPA) has a duty to ensure that protected species and habitats within the UK are a 'material consideration' in the determination of a planning application. Therefore, an LPA is unlikely to determine an application until all relevant information relating to protected species or habitats is submitted to fully inform the application. Relevant information includes adequate surveys and, where required, mitigation strategies, which will need to be submitted in support of a planning application.

Statutory Protection Afforded Bats

The Conservation of Habitats & Species Regulations 2017 (as amended), also known as the Habitats Regulations, lists all UK bat species on Schedule 2 which places an obligation to implement strict protection for these species. This legislation makes it an offence to:

- deliberately kill, injure or capture a wild bat;
- deliberately disturb* a bat;
- damage or destroy a breeding site or resting place of a bat.

*Disturbance, as defined by the Conservation of Habitats & Species Regulations 2017 (as amended), is that which is likely to:

- impair their ability –
  - to survive, to breed or reproduce, or to rear or nurture their young; or
  - in the case of animals of a hibernating or migratory species, to hibernate or migrate.
- affect significantly the local distribution or abundance of the species to which they belong.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 continue the same provision for European protected species, licensing requirements and protected areas after Brexit.

All UK bats and their roosts are afforded further protection through their inclusion on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended), which makes it an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;

- intentionally or recklessly obstruct access to a structure or place which a bat uses for shelter or protection.

Regulation 12 the Conservation of Habitats and Species Regulations 2017 (as amended) requires the appropriate authority in England and Wales to designate as Special Areas of Conservation such sites as the authority considers to be of national importance which contribute significantly to the maintenance, or restoration at favourable conservation status in the natural range of the species listed in Annex II of the EC Habitats Directive. Four bat species (greater horseshoe, lesser horseshoe, Bechstein's and barbastelle) are listed under Annex II.

When dealing with planning applications where a European Protected Species (EPS) (all UK bats) may be affected, a Local Authority is a 'competent authority' within the meaning of regulation 7 of the Conservation of Habitats & Species Regulations 2017 (as amended). The local authority must therefore exercise their functions under the provisions made within the 2017 Regulations (as amended), and planning decisions should only be made when European Protected Species and their habitats are fully taken into account.

Licensing of Works Affecting Roosting Bats

Where a bat roost is likely to be affected by development then a licence to derogate from the legal protection would be required. Licence applications are processed and issued by Natural England and can only be applied for once planning permission (if required) has been granted.

Natural England may grant a licence for the purposes specified in paragraph 55 of the Regulations. The purposes are:

- 55(2)(e) preserving public health or safety or other imperative reason of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment.
- 55(2)(f) preventing the spread of disease.

Natural England must not grant a licence under paragraph 55 unless it is satisfied that:

- 55(9)(a) there is no satisfactory alternative; and
- 55(9)(b) the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable status in their natural range.

In December 2016, Natural England introduced four policies for European Protected Species (EPS) licensing. The policies were revised in January 2022. The policies seek to achieve better outcomes for EPS and reduce unnecessary costs, delays and uncertainty that were inherent in the current system. In brief, the four policies are:

- **Policy 1.** Reduce mitigation measures for impacts on EPS
- **Policy 2.** Location of compensation habitats
- **Policy 3.** Let EPS use temporary habitats
- **Policy 4.** Alternative sources of evidence to reduce standard survey requirements

Policy 1 allows compensation for EPS impacts to be delivered without the need to relocate or exclude populations where: exclusion or relocation measures are not necessary to maintain the conservation status of the local population; the avoid-mitigate-compensate hierarchy is followed; and compensation provides greater benefits to the local population than would exclusion and/or relocation. This policy can be used to reduce mitigation measures, such as exclusion or relocation of EPS, by increasing compensation. This policy allows killing of EPS and destruction of their habitat without needing to exclude or relocate individual animals.

Policy 2 allows for the provision of off-site compensation measures where the licensing tests are met, the avoid-mitigate-compensate hierarchy is followed, there are good reasons for maximising development on the site of EPS impacts and where an off-site solution provides greater benefit to the local population than an on-site solution.

Policy 3 relates to developments, such as mineral extraction, which temporarily create habitat which is likely to attract EPS and enables works to proceed without the exclusion of EPS where the conservation status of the local population would not be detrimentally affected. On completion of development, such sites must contribute to the conservation status of the local population as much as or more than the land use which preceded development. The measures to achieve this should be set out in a management plan and secured by a legal agreement.

Under **Policy 4** Natural England may accept a lower than standard survey effort where: the costs or delays associated with carrying out standard survey requirements would be disproportionate to the additional certainty that it would bring; the ecological impacts of development can be predicted with sufficient certainty; and mitigation or compensation will ensure that the licensed activity does not detrimentally affect the conservation status of the local population of any EPS.

Natural Environmental and Rural Communities (NERC) Act 2006

Section 40 of the Natural Environmental and Rural Communities (NERC) Act 2006 (as amended) places a statutory duty on public authorities, in exercising their functions, to conserve and enhance biodiversity in England. Species of Principal Importance for the conservation of biodiversity in England, as identified by the Secretary of State in consultation with Natural England, are listed Section 41 of the NERC Act. The Local Planning Authority and government bodies (e.g. Natural England) will expect the overall design of the development to have regard for the conservation of these species. Seven bat species are listed as Species of Principal Importance under Section 41 of the NERC Act (refer to Section 2).

Appendix 2:

Guidelines for Assessing and Categorising Habitat & Roosting Suitability for Bats

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement (Taken from the Bat Conservation Trust Bat Surveys for Professional Ecologists: Good Practice Guidelines, 2023).

Potential Suitability	Description	
	Roosting habitats in structures	**Potential flight-paths & foraging habitats**
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices /suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/ protection for flight-lines, or generate/ shelter insect populations available to foraging bats).
Negligible[1]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically, at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[2] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation but could be used by individual hibernating bats[2]).	Habitat that could be used by small numbers of flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) of a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[1] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back to gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[3] and surrounding habitat. These structures have the potential to support high conservation roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broad-leaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

[1]Negligible is defined as 'so small or unimportant as to not be worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

[2]For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

[3]Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types un urban environments (Korsten *et al.*, 2016 and Jansen *et al.* 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

In addition to Table 4.1, if suitable potential features are present assessment of hibernation potential shall also be undertaken. None or very limited (negligible) shall be treated as LOW. Sites with PRFs such as cellars, tunnels and underground site (classic sites) shall be treated as HIGH and non-classic sites shall be treated as MODERATE, depending upon what can be surveyed at the site. The assessment shall include; the surrounding habitats which may reduce, maintain or increase survey effort based on the quality and connectivity of habitats and any presence of known roosts within or adjacent to the site or the immediate area.

Appendix 3:
Population Statuses of Bat Species in Lancashire

National Status

There are 18 species of bat that are native to the United Kingdom.

The latest Review of the Conservation Status of British Mammals (2018) has shown that where change could be assessed with reasonable confidence there have been increases in the geographical range and population status of two species of UK bat (greater and lesser horseshoe bat) and decrease in the geographical range of one species (grey long-eared bat). Increases in population were also identified in the following species: Bechstein's, Daubenton's, Natterers, Serotine and brown long-eared although it is noted that the reliability of the results is poor. Population data was not available for; Alcathoe, whiskered, Brandt's, Leisler's, noctule, Barbastelle and Nathusius pipistrelle.

Population estimates were given for common and soprano pipistrelle however they could not be reliably compared to the results from Harris et al. (1995) as the two species had not been identified as separate species at the time of that survey. *Pipistrellus* spp. remain the commonest species of bat in the UK despite their decline.

The State of Bats 2017 report produced by the Bat Conservation Trust used results from multiple survey types (hibernation, roost, waterway and field) of the National Bat Monitoring Programme (NBMP) to compile population trends between 1999, 2001 or 2002 to 2016. The report identified statistically significant (95% accuracy) population increase in Great Britain in the following species; greater horseshoe (hibernation and roost surveys), lesser horseshoe (hibernation and roost surveys), Daubenton's (hibernation surveys), Natterers (hibernation surveys), common pipistrelle (field surveys), soprano pipistrelle (field surveys). Significant decreases in population in Great Britain were identified in common pipistrelle (roost surveys), soprano pipistrelle (roost surveys) and brown long-eared (roost surveys).

These trends reflect relatively recent changes to bat populations since the 1990s. It is generally considered that prior to this there were significant historical declines in bat populations dating back to at least the start of the 20th century, although evidence is fragmented and few data were collected in a systematic way.

Serotine and barbastelle are considered vulnerable and Leisler's and Nathusius' pipistrelle, near threatened in Britain and England in the Red List for Britain's Terrestrial Mammals (Mathews and Harrower, 2020).

Local Status

There are eight bat species listed as being resident in Lancashire; these are as follows:

- Brown long-eared (*Plecotus auritus*)
- Whiskered (*Myotis mystacinus*)
- Brandt's (*Myotis brandtii*)
- Daubenton's (*Myotis daubentonii*)
- Noctule (*Nyctalus noctula*)
- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle *(Pipistrellus pygmaeus*)
- Natterer's (*Myotis nattereri*)

Nathusius pipistrelle (*Pipistrellus nathusii*) has also been recorded in the county more recently. Although there are no known roosts in Lancashire, they have been trapped and ringed at Pennington Flash, Wigan. Lesser horseshoe (*Rhinolophus hipposideros*) is historically known to be present in Lancashire, however, the most recent record is from East Lancashire in 2009.

Populations of bats in many parts of Lancashire are comparable in size and importance to some of the best areas in the country. Estimates have not been made for Lancashire from the national population estimates as they are of poor reliability and it is not felt that the estimates would be useful or statistically valid (White (Ed.) *et. al.,* 2017).

The valleys of the Lune, Wyre, Hodder, Ribble and their tributaries support substantial populations of pipistrelle and Daubenton's. Many colonies of the latter species roost in bridges over the rivers.

There are also good numbers of most of the other bat species listed as being present in this area.

Clusters of brown long-eared colonies are strongly skewed towards the west of the county and populations are known in the Silverdale area, Fylde and West Lancashire, and whiskered and Brandt's are probably more common in the north of the county than in southern Lancashire.

Ponds in the Fylde, mill lodges and reservoirs in eastern Lancashire and other areas provide concentrated feeding areas for many bats.

Swarming activity has been identified in two locations in Lancashire; Blackburn with Darwen and close to the Yorkshire border in Ingleton. It is known that bats will travel from Lancashire to swarming sites in Yorkshire.

Appendix 4:
Site Photographs

Photo 1: (20.09.2024) Eastern elevation of Building 1

Photo 2: Eastern & southern elevations of Building 1

Photo 3: Northern elevation of wood store attached to Building 1

Photo 4: Western elevation of wood store

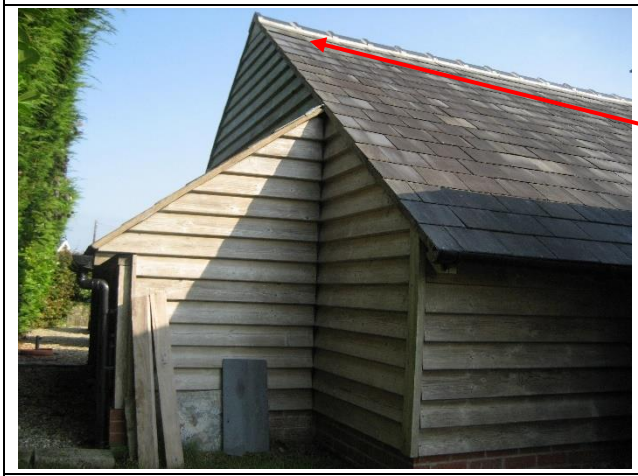

Photo 5: Western elevation of Building 1 & southern elevation of the wood store

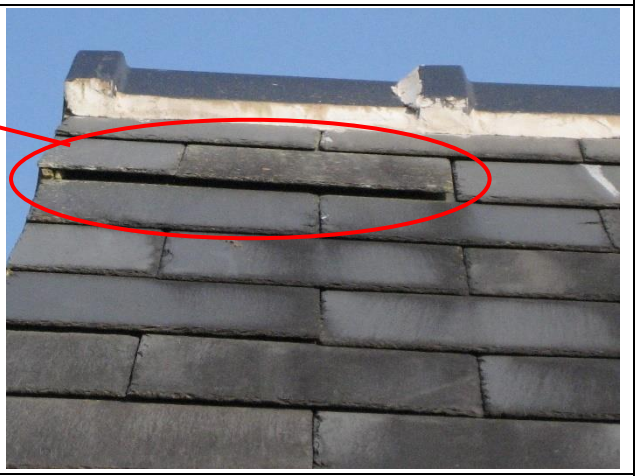

Photo 6: Lifted slate on southern elevation of Building 1

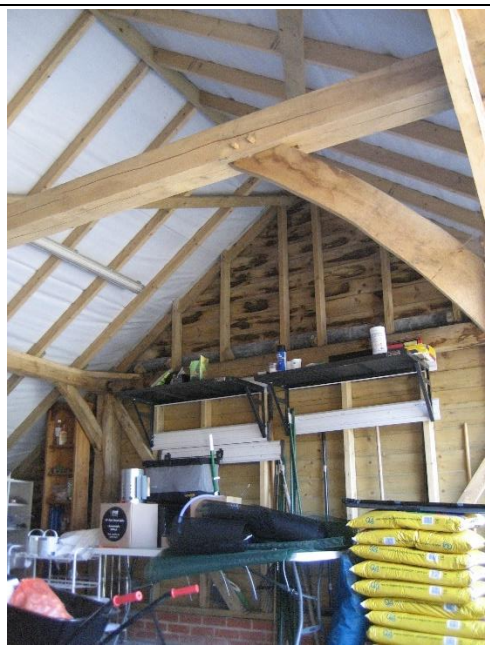

Photo 7: Inside Building 1

Photo 8: Breathable roofing membrane inside Building 1

Photo 9: Eastern elevations of Building 1 & Building 2.

Photo 10: Southern & western elevations of Building 2

Photo 11: Southern elevations of Building 1 & Building 2

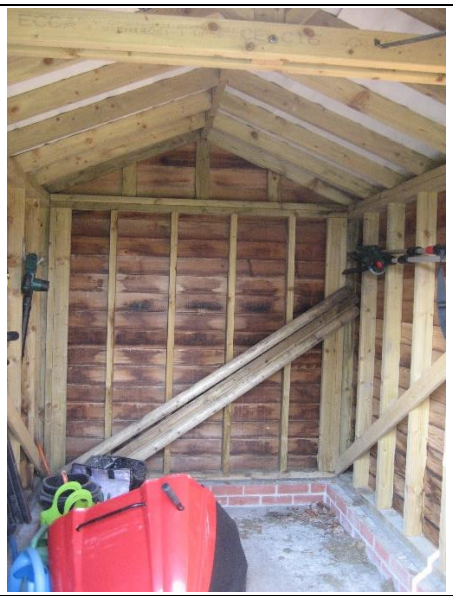

Photo 12: Inside Building 2