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Inspection & Assessment in relation to Bats & Breeding Birds

October 2026

Project Reference: PR-26-0249

Bryn Y Cabanau Farm
Marchwiel
Wrexham
LL13 0SR

National Grid Reference: SJ 34274 48523



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Tyrer Ecological Consultants Ltd will however consider forwarding data that is collected as part of its reports to the relevant wildlife records centre.

As per CIEEM Guidelines, in most cases ecological surveys are likely to be valid for 12 – 18 months. Beyond this, an updated site visit, desk study and/or report are likely to be required.

Executive Summary

As part of an ongoing planning application (Ref.: P/2026/0409) with Wrexham County Borough Council concerning Bryn Y Cabanau Farm, Marchwiel, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in September 2026.

The survey was commissioned by Blueprint Architectural Services; the proposals are understood to involve the conversion of an existing barn into a dwelling.

Detailed methods, findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following **Key** points:

Bats

Based upon the findings of the DBW and associated GLTA, covered through sections 5.0 – 6.0 of the report and supported by **Appendix I**, the building on site is determined to pertain to a bat roost suitability of '**None**', in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

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.

Potential suitability	Description	
	Roosting habitats in structures	**Potential flight-paths and 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).

No further dusk emergence or dawn re-entry surveys are recommended to be conducted at the site during the active season of bats.

The barn is absent of any features considered to offer either classic or non-classic hibernation potential, and no further recommendations apply.

Breeding Birds:

In relation to wider breeding bird species, viable nesting platforms are present within the barn which could provide suitable nesting locations within the nesting bird season of March – August, inclusive.

Any works impacting upon any of the above areas of nesting potential should therefore be carried out outside of the breeding bird season, typically March – September inclusive. For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.

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1.0 Introduction & Reasons for Survey

1.1 As part of an ongoing planning application (Ref.: P/2026/0409)[1] with Wrexham County Borough Council concerning Bryn Y Cabanau Farm, Marchwiel, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in September 2026.

1.2 The survey was commissioned by Blueprint Architectural Services; the proposals are understood to involve the conversion of an existing barn into a dwelling. See **Figure 1.1** for a proposed site plan.



Figure 1.1 – *Proposed Site Plan (© Blueprint Architectural Services)*

1.3 The aim of the survey was to ascertain whether the building or surrounding vegetation are of value for bats / bat roosts, whilst an assessment of nesting and general suitability for birds was also carried out. If any potential roost features (PRFs) were found to be suitable for bats, or signs of use were observed, where suitable habitats and / or bat records exist in the locality, then more detailed surveys would be recommended i.e. dusk emergence surveys during the main active season of bats which is May – August (extending into September).

1.4 If additional surveys are required following the initial site visit, this report will outline the details of those further requirements, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

1.5 If it was determined that bat(s) or their roost / place of rest / shelter will be subsequently impacted by the works then a European Protected Species (EPS) licence would be legally required to proceed with the development.

[1]See:https://register.wrexham.gov.uk/pr/s/detail/a0lSq000002KaPZIA0?language=en_GB&c__r=Arcus_BE_Public_Register

1.6 If evidence indicated breeding birds may be impacted by proposals, tailored recommendations would be made accordingly, species pending.

1.7 As part of the local authority's planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted where protected / priority habitats and species are, or may be present, that could be affected by the proposals for which the application seeks consent. Where more detailed surveys are recommended by the ecologist, following an initial daytime investigation, then Local Planning Authorities (LPA), on the advice of their ecological advisors, will not grant permission until such time that all relevant information is gathered.

1.8 In accordance with Welsh planning policy the site visit should identify opportunities for net biodiversity benefit, and to provide information to satisfy the requirements of a green infrastructure statement. However, the proposals are restricted to the existing footprint of the structure with no green spaces or semi-natural habitats present within the site boundary. As such, a green infrastructure statement has not been provided with proposals understood to result in a net-neutral impact.

2.0 Protected Species & Their Requirements

Bats

2.1 All British bats and their **roosts are afforded full protection under the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of the Conservation of Habitats and Species Regulations (2019) (EU Exit). When dealing with cases where an EPS (all UK bats) may be affected, a planning authority is a competent authority within the meaning of Regulation 7 of the Regulations, and therefore has a statutory duty, as the local authority, to have due regard to the provisions of the Regulations in the exercise of its functions.

2.2 Uses of Buildings by Bats

a) Summer breeding roost, and day/occasional roost (May – August)
b) Hibernation roost (October – March)
c) Transitional or temporary roost (other months)

2.3 Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance; climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

*** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats and Species Regulations (2019) (EU Exit) (Regulation 43 (d) the term roost is not used but refers to "a breeding site or resting place of such an animal" and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.*

2.4 Up to 12 bat species have been recorded in the vice-county of Clwyd, which includes Wrexham, many of which use built structures for roosting. A variety of building types and features are utilised by bat species at different times of year ranging from occupied residential dwellings to disused barns and bridges. The most frequently encountered species is the common pipistrelle (*Pipistrellus pipistrellus*); its abundant status in Wrexham is mirrored throughout the UK.

Breeding Birds

2.5 All wild birds, no matter how common, together with their eggs, young, and nests (while being built or in use), are protected under the Wildlife and Countryside Act 1981. In addition, the Natural Environment and Rural Communities Act 2006 places a duty on public authorities to have regard to the conservation of biodiversity, which includes wild birds.

2.6 Any work that would damage an occupied nest, eggs or young of breeding birds, regardless of priority status, must be avoided; any damage to nests that may occur as a result of the development should be outside of the main breeding bird season (March – August). On occasions nests can become unoccupied during the breeding season but the status of the nest(s) should be determined by a suitably experienced ecologist / ornithologist.

2.7 Birds listed on Schedule 1 (Sch.1) of the WCA 1981, for example barn owl (*Tyto alba*) are afforded a greater level of protection and are also protected from disturbance as well as destruction.

Policy

2.8 The Environment (Wales) Act 2016 ("the Act") – requires local planning authorities to have regard to area statements in the development of Local Development Plans. The Act introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty). This duty applies to public authorities in the exercise of their functions in relation to Wales and will help maximise contributions to achieving the well-being goals. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of ecosystems by taking specific action focused around objectives for habitats and species.

2.9 Part 1 of the Act promotes sustainable management of natural resources, and in Part 1 section 6 states:

"A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions."

2.10 Section 7 of the Act places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists and encourage others to take such steps. Section 7 of 'The Act' alongside the UK Biodiversity Action Plan (UKBAP) provided a statutory basis for lists of habitats and species of national conservation importance - now transposed under section 41 (s.41) of the NERC Act.

2.11 Planning Policy Wales (PPW) 12th Edition (2024) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. PPW, the TANs, MTANs and policy clarification letters comprise national planning policy.

2.12 PPW 12th Edition (2024) states:

"The presence of a species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 is a material consideration when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat and to ensure that the range and population of the species is sustained. Planning authorities should advise anyone submitting a planning application that they must conform with any statutory species protection provisions affecting the site, and potentially the surrounding area, concerned. An ecological survey to confirm whether a protected species is present and an assessment of the likely impact of the development on a protected species may be required in order to inform the development management process. It is considered best practice that screening to determine the presence of protected species should be carried out by a competent ecologist on the basis of data provided by the relevant Local Environmental Record Centre."

2.13 PPW and the National Development Framework (published as Future Wales – the National Plan 2040) set out how the planning system at a national, regional and local level can assist in delivering these requirements through Strategic Development Plans (SDPs) and Local Development Plans (LDPs).

2.14 PPW also requires developments to achieve a Net Benefit for Biodiversity (NBB):

"Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or

populations of species (not including non native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems. A net benefit for biodiversity is the concept that development should leave biodiversity and the resilience of ecosystems in a significantly better state than before, through securing immediate and long term, measurable and demonstrable benefit, primarily on or immediately adjacent to- the site. The stepwise approach outlined below is the means of demonstrating the steps which have been taken towards securing a net benefit for biodiversity. In doing so, planning authorities must also take account of and promote the resilience of ecosystems, in particular- the following attributes, known as the DECCA Framework:

- ***d**iversity between and within ecosystems;*
- *the **e**xtent or scale of ecosystems;*
- *the **c**ondition of ecosystems including their structure and functioning;*
- *the **c**onnections between and within ecosystems; and*
- ***a**daptability of ecosystems including their ability to adapt to, resist and recover from a range of pressures likely to be placed on them through climate change for example.*

2.15 As well as consider Green Infrastructure (GI), at both a local and landscape scale:

"The Environment (Wales) Act 2016 provides a context for the delivery of multi-functional green infrastructure. Its protection and provision can make a significant contribution to the sustainable management of natural resources, and in particular to protecting, maintaining and enhancing biodiversity and the resilience of ecosystems in terms of the diversity within and connections between ecosystems and the extent and condition of these ecosystems, so that they are better able to resist, recover from and adapt to pressures. This means that the development of green infrastructure is an important way for local authorities to deliver their Section 6 duty."

2.16 There are several plans, strategies and national, sub-regional and local policy statements which provide a framework for development in the Plan area. The Planning and Compulsory Purchase Act (2004) makes it a requirement for local planning authorities in Wales to prepare a Local Development Plan (LDP) for their areas.

2.17 Cyngor Bwrdeistref Sirol Wrecsam / Wrexham County Borough Council prepared a Local Development Plan 2013-2028 which was formally adopted in December 2023 and superseded any previous development plans for the area. The Local Plan 2013-2028 was, however, withdrawn in May 2025, and so the previous Wrexham Unitary Development Plan 1996-2011 remains in effect.

2.18 Policies PS11, GDP1h, and EC6 of the Wrexham Unitary Development Plan 1996-2011[2] mirror these statements within PPW 2024 and go on to state the following:

Table 2.1 – Relevant policies

Title	Summary
Policy PS11 - Biodiversity	Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.

[2] See: https://www.wrexham.gov.uk/service/development-plans-and-other-planning-policy/unitary-development-plan-1996-2011

Title	Summary
Policy GDP1 (h) – Development Objectives	All new development will safeguard sites and areas of nature conservation and wildlife interest, and to provide new habitats where there is an unavoidable loss of existing habitats and areas of wildlife interest.
Policy EC6 – Biodiversity Conservation	Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.

Priority Habitats & Species

2.19 In the United Kingdom, legal protection and otherwise legislative recognition is afforded to particular habitats and species based on a variety of ecological factors. These are typically referred to as priority habitats and species and can be identified under a variety of legislation and local policy, notably the UK Biodiversity Action Plan (UKBAP), Section 41 (s.41) of the NERC Act as well as under Local Biodiversity Action Plans (LBAPS).

3.0 Survey Methodology

3.1 As part of the Inspection & Assessment in relation to Bats & Breeding Birds report, a desk-top and field-based study is conducted. Methods for both components of the appraisal are given below.

Desktop Study

3.2 Prior to a site visit, a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations for nature conservation within 2.0 kilometres of the site boundary. To do so, the Multi Agency Geographic Information for the Countryside (MAGiC – provided by DEFRA) was accessed to gather such information; this particular interactive mapping service was also used to locate any locally granted European Protected Species Mitigation Licences (EPSML) and species records to further inform conclusions concerning such species in the context of the study site and its proposed development.

3.3 Additionally, the Natural Resources Wales (NRW) and Joint Nature Conservation Committee (JNCC) websites were accessed to provide citation details for statutory designated sites as well as habitat information in proximity to the site.

3.4 Historic satellite imagery was reviewed using sources such as Google Earth (© 2025/26) to help establish past use of the land and determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.

3.5 In addition, the Wrexham County Borough Council planning portal, was utilised to help inform the desktop study by analysis of existing publicly accessible ecological survey results that have been carried out locally within the previous five years.

3.6 A commercial data request to the Local Environmental Records Centre serving the area – in this case Cofnod – North Wales Environmental Information Service – has not been sourced and is justified through application of the following recent guidance:

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states:

"*It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. Freely available web-based sources of data and contextual information should always be used; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:*

ii) Situations where the ***data search would be extremely unlikely to provide information needed to inform the assessment, due to the scale and location of the proposed development****. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.*

iii) In some cases for Preliminary Roost Assessments of buildings in ***low impact / small-scale scenarios,*** *such as an extension to a residential property, loft conversions (full or partial), installation of Velux/dormer windows,* ***single modern agricultural or similar building conversion or demolition****; however, it should not be assumed that data searches are*

never required for such scenarios and this must be judged on a case by case basis and justified accordingly.

3.7 As exemptions as made **bold** above can be applied at the site, whilst following best practice, it is considered unnecessary to conduct a commercial data request following the desk study effort and daytime assessment at this time, which offers a proportionate level of survey effort. If, however, a data search is considered necessary by the Local Authority advisory body to inform the ecological impact assessment following any further surveys recommended in this report, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued / updated report.

Field Survey

3.8 In context with the above, a diurnal inspection and assessment of the building and the immediate environment in relation to bats and breeding birds was conducted on 18th September 2026 in dry conditions (11ºC), wind 2/12 (Beaufort scale), 80% cloud, by the following surveyor (see **Table 3.1**):

Table 3.1 – Site surveyor credentials

Name	Description of most relevant credentials
Miss. H. McGlynn Qualifying CIEEM	• A Consultant Ecologist with a range of experience and training; holds a BSc (Hons) in Ecology and Conservation and MSc in Conservation Management (a CIEEM accredited course), • Accredited agent on the Natural Resources Wales Licence of Mrs. K. Wilding (S093795-1) • Meets the requirements of CIEEM's Competency Framework Section S (surveying) to Capable level.

Bats

3.9 Criteria for roost assessment are based upon the determinants given in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023): (see **Figures 3.1 – 3.4** overleaf).

3.10 Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023), states:

"*The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. The questions should not be whether the guidelines were followed, but were the defined objectives of the surveys met? Where examples are used in the guidelines, they are descriptive rather than prescriptive."*

3.11 The site was assessed for bats; a daytime bat walkover (DBW) was undertaken to observe, assess and record any habitats or features suitable for usage by bats, either as commuting, foraging or roosting provision. Wider connectivity to other habitats was also considered during the DBW.

3.12 Buildings and other permanent / semi-permanent structures (where present) were subject to a preliminary roost assessment (PRA), to identify potential areas which may be of value to bats and to determine evidence of use. This typically involves a systematic search of the external aspects of any structure(s), comprising an investigation of features known to be used by bats (for example roofing material, soffits, fascia, lead flashing hanging tiles) using a high-

powered torch and close-focus binoculars, where necessary. An internal assessment of the structure(s) was also carried out, with the aid of a high-powered torch and endoscope, where necessary, to identify any evidence of bat use of a structure. Field signs of bats typically comprise bat droppings, urine splashing, fur-oil staining, incidental animal presence, dead specimens and / or the presence of prey items, such as moth wings.

3.13 This assessment also included an assessment of any structures relative to their potential to offer winter roosting suitability for bats, with environmental conditions noted, including temperature, relative humidity, and a systematic inspection of any cracks, crevices and voids for bats undertaken. The information recorded was assessed relative to the non-classic hibernation site criteria contained within the BCT guidelines, and derived from 'Assessing Sites for Hibernation Potential. A Practical Approach, including a Proposed Method & Supporting Notes (*Middleton, 2019)*.

3.14 Trees (where present) would be subject to a ground level tree assessment (GLTA) using equipment such as close-focus binoculars and a high powered-torch. Potential roost features (PRFs) can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached climbing species with stem diameters in excess of 50mm or pre-existing bat / bird boxes. These PRFs can then be determined as PRF-I or PRF-M, dependent on their suitability for individual / low numbers of bats or their capability to host multiple bats.

3.15 Factors considered during the preliminary roost assessment include:

- Practical experience of the surveyor,
- Knowledge of bat species relevant to the site location and geographical range,
- Nature of the immediate / surrounding habitat in relation to foraging opportunities,
- Presence / absence of roost potential,
- Value and types of roost potential, if present (i.e. – maternity, hibernation, transitional).

<u>Birds</u>

3.16 The site and any built structure(s) on site were inspected for evidence of nesting and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting – this can take the form of searching structures, woody vegetation, semi-aquatic vegetation such as reeds and / or ground flora. Elevations of any buildings or structures on site were inspected for evidence of birds that show a high dependency upon built structures, many of which are in a state of decline. These might include the following species for example (list non-extensive):

- Starling (*Sturnus vulgaris*): Birds of Conservation Concern (BoCC) red status
- House sparrow (*Passer domesticus*): BoCC red status
- House martin (*Delichon urbica*): BoCC red status
- Swift (*Apus apus*): BoCC red status

3.17 Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for wider capacity to support species with extra protection under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended), as well as Section 7: Living Organisms of Principal Importance in Wales under the Environment Act (Wales) or on a Local Biodiversity Action Plan (LBAP).

Quality Assurance (QA)

3.18 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, the Director of Tyrer Ecological Consultants Ltd, and her assessment is consistent with that of the surveyor Miss. H. McGlynn.

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.

Potential suitability	Description	
	Roosting habitats in structures	**Potential flight-paths and 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[a]	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[b] 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 site, but could be used by individual hibernating bats[c]).	Habitat that could be used by small numbers of bats as 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) or 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[b] 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 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[b] and surrounding habitat. These structures have the potential to support high conservation status 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 broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

a Negligible is defined as 'so small or unimportant as to be not 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).

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

c 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 in 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.

Figure 3.1 – *BCT guidelines extract on categorisation of roost potential in structures and habitat suitability*

Table 4.2. Guidelines for assessing the suitability of trees on proposed development sites for bats, to be applied using professional judgement.

Suitability	Description
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Figure 3.2 – *BCT extract on tree roost suitability criteria*

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Figure 3.3 – *BCT extract on tree roost categorisation criteria*

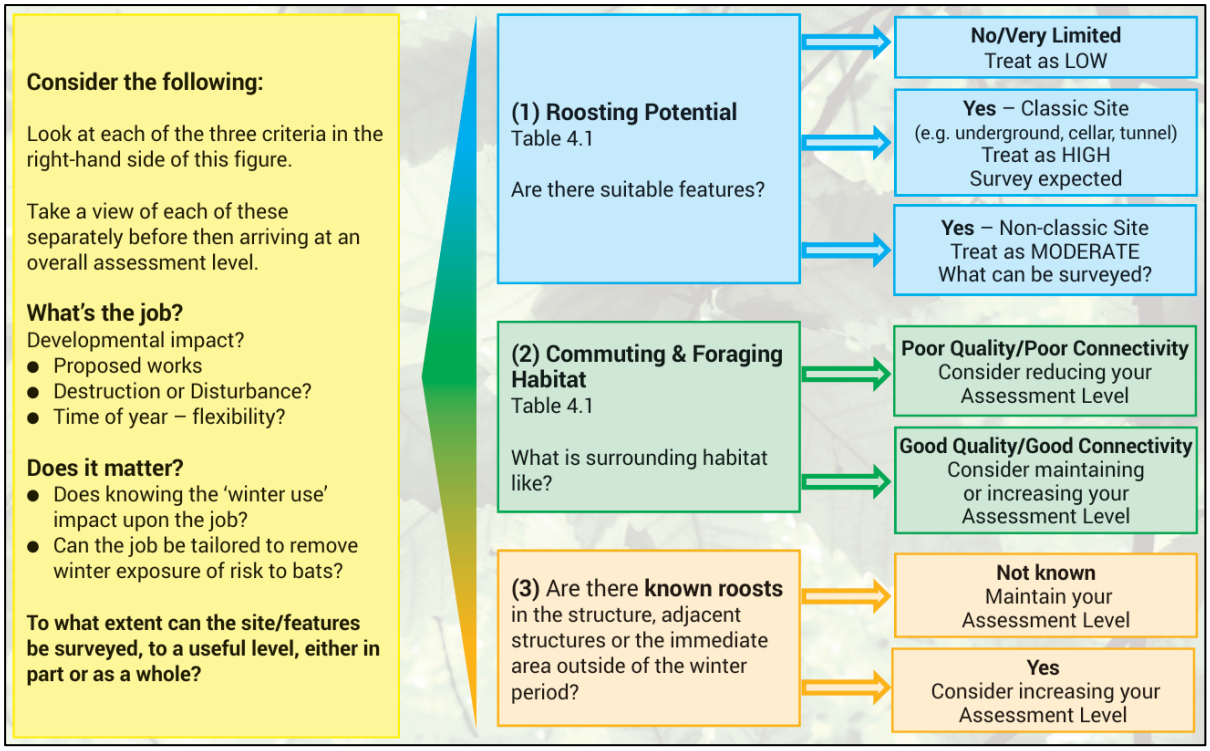


Figure 3.4 – *BCT extract on hibernation roost categorisation criteria*

4.0 Limitations

4.1 The survey took place within the bat active season (broadly acknowledged to be May – September), at a time when bats are beginning to enter the mating season and build up fat reserves. Survey timings are therefore not considered to be a limitation in relation to bats

4.2 The survey was conducted within the breeding bird season, when evidence of nesting and other breeding behaviours can be most readily identified

4.3 In considering all potential survey constraints, no significant limitations were experienced that might adversely influence the results, conclusions, and recommendations of this report.

5.0 Desk Study Results

5.1 Bryn Y Cabanau Farm (referred to in-part as "the application site" and "the site") is situated to the west of Bryn-Y-Grog Road within Marchwiel, approximately 1.6km south-east of Wrexham town centre (see **Figure 5.1** below). The site has an approximate area of 0.11 hectares (ha) and features a barn and areas of hardstanding.



Figure 5.1 – *Location of red line boundary within surrounding landscape*

5.2 The immediate environment is distinctly rural in nature, characterised by agricultural land of both an arable and pastoral use demarcated by hedgerows, treelines and drainage ditches. Further north of the landscape, the land becomes predominantly residential whereas the southern aspect remains broadly semi-natural. Interspersed within the southern agricultural land are numerous parcels of ancient woodland notably ancient semi-natural woodland 60m west and 0.1km north of the site, alongside lowland fens and reedbeds 0.5km south-west, with wet woodland and purple moor grass and rush pastures recorded 0.4km north-west of the application boundary. Marchwiel Reservoir is located 0.3km east of the site, a large standing waterbody surrounding by grassland and treelines.

Relevant Planning History

5.3 Numerous planning applications are visible on the public access system at the site itself, with the most recent beyond the current application pertaining to a single storey rear extension to a building located in the wider site ownership, submitted in 2016 (Ref.: P/2016/0508)[3]. No ecological documentation was submitted as part of this application or submitted within the current planning application.

[3]See:https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000TwsOIAS?c__r=Arcus_BE_Public_Register&language=en_GB

5.4 A number of applications have been made in proximity to the site. Considered most relevant to the site is an application 0.3km to the south-west of the development, at Mill House, for the refurbishment of an existing dwelling and the erection of a two-storey extension (Ref.: P/2019/0890)[4]. Submitted as part of this application includes an Inspection & Assessment in Relation to Bats & Breeding Birds including Dusk Survey Results produced by The Tyrer Partnership in 2015 and Phase 2 Habitat Survey with Dusk and Dawn Results produced by Tyrer Ecological Consultants in 2019. Where applicable, survey findings of both reports have been included within the relevant subheading.

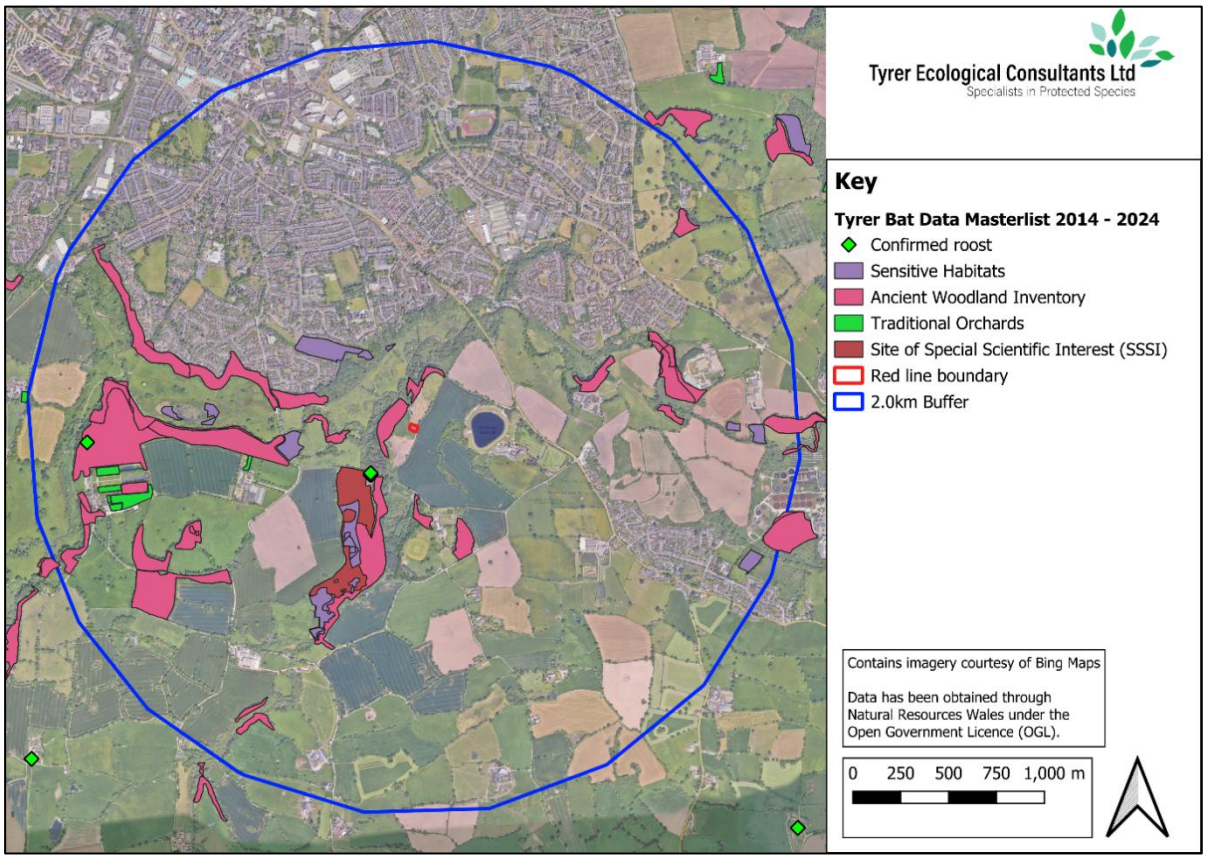


Figure 5.2 – *Priority habitat, designated site, and protected species data within 2.0km of application site*

Designated Sites

5.5 One statutory designated site is present within 2.0km of the site (see **Table 5.1** below for details and **Figure 5.2** above for a visual aid).

Table 5.1 – Statutory designation types and reasons for designation within 2.0 kilometres buffer

Site name	Designation type	Interest features
Sontley Marsh[5] (0.3km south-west)	Site of Special Scientific Interest (SSSI)	A site designated for its botanical interest, described as the best wetland examples in Clwyd of the "southern mesotrophic mire" type. Extensive areas of wet woodland are present with tall fen vegetation and herb-rich damp grassland habitat also supported.

[4]See:https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000TvxCIAS?language=en_GB&c__r=Arcus_BE_Public_Register
[5] See: https://cdn.cyfoethnaturiol.cymru/655861/SSSI_0950_Citation_EN001caa5.pdf

5.6 While the site is located in close proximity to Sontley Marsh SSSI, the proposals are largely restricted to the existing building and areas of hardstanding and thus, it is considered highly unlikely that the proposals will impact upon the designated site or its designatory features.

Bats

5.7 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bat roosts within the 2.0km area surrounding the site; as such, the following biological data (see **Table 5.2** below) is readily available to the Ecologist from the company database. All data has been previously submitted to the LERC serving the area, which, in this case, is Cofnod.

Table 5.2 – LERC submitted biological data records collected by Tyrer Ecological Consultants Ltd

Year	Distance from site	Context (where relevant)
2015	1.0km south-east (Mill House)	Common pipistrelle; day roost, 2 bats Whiskered/Brandt's (*Myotis mystacinus* / *brandti)* bat; day roost, 1 bat Brown long-eared (*Plecotus auritus*) bat; day roost, 5 bats Soprano pipistrelle (*Pipistrellus pygmaeus*); day roost, 5 bats
2019	1.0km south-east (Mill House)	Common pipistrelle; day roost, 11 bats Whiskered/Brandt's bat; day roost, 3 bats Brown long-eared bat; maternity roost, 14 bats Soprano pipistrelle; satellite roost, 8 bats Lesser horseshoe (*Rhinolophus hipposideros*) bat; day roost, 1 bat
	1.7km west	Soprano pipistrelle; day roost, 1 bat.

5.8 The surrounding land provides high value foraging and commuting habitats for bats, with a network of ancient woodland blocks to the west of the site that extend further north and south, and other semi-natural habitats, as described above, that provide a range of foraging opportunities. Scattered agricultural structures alongside the residential development to the north present areas suitable for roosting which are feasibly connected to the previously mentioned foraging and commuting habitats. The species considered most likely to be within the surrounding habitat are the soprano pipistrelle, linked with roosting in buildings, notably occupied dwellings, the brown long-eared bat, which are more commonly associated with broadleaved woodland, the Daubenton's bat (*Myotis daubentonii*) which may find suitable foraging habitat within Marchwiel Reservoir to the west and the River Clywedog within the eastern ancient woodland and the lesser horseshoe bat which may frequent the surrounding ancient woodland and open pastures with suitable commuting pathways via linear hedgerows and treelines.

NB: *Where quality habitat is present close to buildings then the percentage use of those buildings, by bats, increases given that roost opportunities are available and vice versa.*

Birds

5.9 The open, rough grassland present across much of the immediate and wider landscape would provide high value habitat for barn owl, with a likely abundance of prey species present alongside agricultural structures which could facilitate both nesting and roosting behaviour.

5.10 The agricultural land surrounding the site may provide suitability for ground nesting species such as curlew (*Numenius arquata*), lapwing (*Vanellus vanellus*), meadow pipit (*Anthus pratensis*) and skylark (*Alauda arvensis*). However, the land in proximity is likely subject to regular disturbance via vehicle disturbance with tramlines visible on relevant satellite imagery. Ancient woodland habitat in proximity to the site is considered to support a variety of passerine

species such as chiffchaff (*Phylloscopus collybita*), greenfinch (*Chloris chloris*) and blackbird (*Turdus merula*).

6.0 Field Study Results

Bats

Buildings

6.1 One building is present within the application site boundary, a large barn that is predominantly constructed of concrete breezeblock with a stonework wall on the northern elevation to the approximate maximum dimensions of 21m x 20m x 5m (length x width x height). The barn features a pitched, part-corrugated metal and transparent UPVC panelled roof with metal barge boards and soffits, UPVC guttering, rolling metal shutter doors, UPVC windows and doors, and corrugated metal panelling on the eastern and western gable verges. On the southern aspect of the barn, a pitched extension is present, constructed of metal and open sided on the eastern and western elevations, which appears to be used for miscellaneous storage. Whilst the surveyor is not qualified to assess structural integrity, the barn was adjudged to be in good aesthetic condition with no obvious signs of dereliction and dilapidation.

6.2 Internally, the barn is used as a workshop, split into three compartments with all sections of the building open to the roof. Climatic conditions were found to be similar throughout; namely cold and draughty with high light ingress via numerous windows and roofing panels. Three small, mezzanine floors are present, one in each compartment, and were all noted to be relatively cluttered. The building is therefore considered broadly unsuitable for the breeding purposes of loft-dwelling species such as the brown long-eared bat; a species which requires dark, open loft spaces with warm, consistent thermal characteristics in which to raise their young. This does not necessarily discount use of the building for purposes other than breeding by such species, however, no evidence was found attributable to this species.

6.3 No roof lining is present beneath the roofing materials throughout the barn; where present, a bitumen 1F underfelt or other traditional roof lining can improve the value of a building for crevice-dwelling bats such as those of the *Pipistrellus* genus, whereby they roost between the roofing cover and the underlining. No evidence of such species was encountered by the surveyor; however, this is often the case owing to their crevice-dwelling nature.

NB: *The breeding roosts of Pipistrelle bats are proportionally higher in occupied residential dwellings where the warm, dry conditions favour the requirements of a maternity colony but other structures are also used, especially for hibernation or by male bats which do not need the same conditions as a maternity colony.*

6.4 Externally, the building is broadly absent of suitable PRFs on all aspects with roofing elements noted to be tightly fitted, metal barge boards and soffits well-sealed with a lack of ingress opportunities and the northern stone wall in good condition with no suitable crevices. On the eastern and western gable verges, minor gaps are present in between the corrugated metal panelled sections which could provide a feasible roosting opportunity within the metal soffit. However, these features are broadly unsuitable for use as a crevice space given the features are comprised entirely of metal which presents no thermal stability and lacks suitable grip for bats. As such, these minor gaps are determined to be broadly unsuitable for bats.

6.5 Owing to the absence of suitable PRFs and unfavourable climatic conditions, the barn is duly categorised as pertaining to '**None**' bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

6.6 As per the building description above, no features considered to offer "classic" hibernation potential were located on site, such as cellars, ice houses or tunnels. The site is therefore absent of classic hibernation potential.

6.7 In addition to the above assessment on classic hibernation value, the structure was also assessed for its potential to hold non-classic hibernation value as per **Figure 3.4**. A Hibernation roost is defined as the following: "*A place where bats may be found individually or together during winter. They have a constant cool temperature and high humidity*". While the surrounding habitat is of a high value and known roosts are present in a proximity, no features suitable for use by bats were located at the site.

6.8 In line with guidance, the structure therefore holds negligible value as a non-classic hibernation site and further assessment in relation to hibernation potential is scoped out of this appraisal.

Trees

6.9 No trees are present within the site boundary and thus, none were assessed in relation to bats and their roosting suitability.

Activity

6.10 From a habitat suitability assessment in relation to bat activity, the site itself provides '**Low**'; value foraging habitat, primarily comprising the building and hardstanding with scattered ruderal vegetation. However, a hedgerow is located adjacent to the east of the application boundary with several mature trees that likely provides a favourable commuting pathway to favourable semi-natural habitat in proximity. Additionally, while the site is likely subject to some lighting, this is not considered to be significant, and the development boundary may form part of a network of commuting pathways facilitating the movement of bats through the landscape.

Breeding Birds

6.11 In relation to WCA Schedule 1 specially protected bird species such as barn owl, the site is broadly absent of suitable habitat for this species, comprising hardstanding and the barn with an absence of suitable open grassland that may support favoured prey items. The building was also adjudged to be unsuitable for use by nesting barn owl, with no available ingress opportunities into the structure. The surrounding agricultural land is deemed to be of a greater value to barn owl than the application site presenting suitable structures and trees for roosting and grassland favourable for foraging. As such, it is considered highly unlikely that barn owl would be present within the application boundary.

6.12 Owing to the absence of suitable vegetation within the development site, the presence of common breeding birds is also unlikely. However, the connected pitch extension on the southern aspect may provide opportunistic nesting platforms for a variety of passerine species via the metal structural beams and thus, the building may be used by breeding birds within the nesting season (March – August, inclusive).

7.0 Conclusions & Recommendations

Designated Sites

7.1 One statutory designated site for nature conservation occurs within 2.0km of the site, namely Sontley Marsh SSSI located 0.3km south-west of the application boundary.

7.2 Given the proposals are restricted to the barn and areas of hardstanding, it is considered highly unlikely that the proposals will impact upon the designated site and designatory features. As such, no further recommendations are applicable.

Bats

Buildings

7.3 Based upon the findings of the DBW and associated GLTA, covered through sections 5.0 – 6.0 of the report and supported by **Appendix I**, the building on site is determined to pertain to a bat roost suitability of '**None**', in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023). See **Figure 7.1** below for a BCT guidelines extract.

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.

Potential suitability	Description	
	Roosting habitats in structures	**Potential flight-paths and 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).

Figure 7.1 – *BCT extract on 'None' suitability criteria*

7.4 No further dusk emergence surveys or dawn re-entry surveys are recommended to be conducted at the site during the active season of bats.

7.5 The site is absent of any features considered to offer either classic or non-classic hibernation potential, and no further recommendations apply.

7.6 Bats are a transient group, and buildings can deteriorate over time. In the highly unlikely event that bat(s), or evidence of bat(s), are found during the proposed works, then, as a legal requirement, the work at the site should immediately cease and an Ecologist should be contacted for further advice. If bat(s) or their roost(s) will be affected, then an EPSML may be required to legally commence with the works. See **Figure 7.2** for indicative evidence of bats.



Figure 7.2 – *Evidence of bats – droppings on the left / a common pipistrelles bat on the right - indicative*

Trees

7.7 No trees are present within the site boundary and thus, none were assessed in relation to suitability for roosting bats.

Activity

7.8 The site does provide areas of '**Low**' value commuting and foraging habitat for bats and given the small size of the site and the perceived low impact nature of the proposals, a nighttime bat walkover (NBW) is not deemed necessary.

7.9 Installation of overly harsh artificial lighting as part of any development that exceeds current levels may have a negative impact upon foraging / commuting bats in the landscape, subject to their presence, particularly if increased light spillage occurs in areas that are currently free from illumination such as the adjacent eastern hedgerow and trees. A bat-sensitive lighting plan is therefore recommended in order to avoid potential impacts to bats. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Trust's 'Bats and Artificial Lighting at Night' guidelines (August 2023) for further information.

Appropriate luminaire specifications: Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed (as opposed to using a pendant fitting) where installed in proximity to windows to reduce glare and light spill.
- Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges.

- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting should be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate.
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand.
- Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS.
- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues.
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

Birds

7.10 No impacts are applicable in relation to any Sch.1 (WCA) specially protected bird species such as barn owl, and no further surveys or recommendations are necessary in relation to specially protected birds, with no evidence of Sch.1 raptors within the site boundary.

7.11 In relation to wider breeding bird species, viable nesting platforms are present within the barn which could be utilised within the nesting bird season of March – August, inclusive.

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981 (as amended). It is a punishable offence to interfere in any way with an active nest.*

7.12 Any works impacting upon any of the above areas of nesting potential should therefore be carried out outside of the breeding bird season, typically March – August inclusive. For works within the breeding bird season, any areas that can support nesting birds should be checked by a professional Ecologist for nesting birds within 48 hours or less prior to works commencing.

Point 3.24 of the British Standards Publication 42020:2013 defines a professional ecologist as: "*a person who has, through relevant education, training or experience, gained recognised qualifications and expertise in the field of ecology and environmental management.*"

7.13 Where / if active nests are / have been located by the Ecologist, then any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, this can be aided, for example, via implementation of appropriate buffer zone(s) around the nest site (typically 5 – 10 metres) in which no disturbance is permitted until the nest is no longer in use. This would have to be coordinated through the expert judgement of the professional ecologist and species pending.

7.14 The applicant may consider the erection of nesting boxes as part of their biodiversity enhancement aims for the proposed development. Appropriate nesting boxes suitable for an array of bird species are provided within **Appendix II**.

8.0 Bibliography

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Appendix I: Site Photographs



Plate 1 – *Eastern aspect of the barn, with open-side extension on the southern aspect.*



Plate 2 – *Western aspect of the barn.*



Plate 3 – *Nature of open-sided extension, taken facing east.*



Plate 4 – *Northern elevation of the barn with stone wall.*



Plate 5 – *Internal character of the barn used as a workshop.*



Plate 6 – *Internal character of barn, with cluttered mezzanine floor.*



Plate 7 – *Minor gaps noted on eastern gable verge.*

Appendix II: Biodiversity Enhancement: General Recommendations

Bats

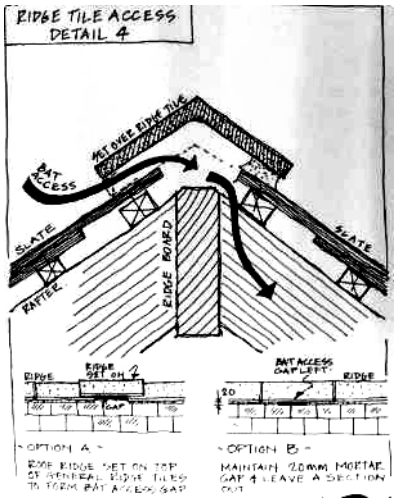
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Ridge access

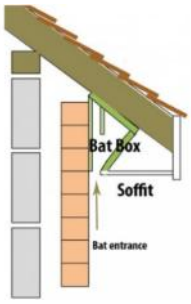
Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.



Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.





Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Eco Kent Bat Box.



Breeding Birds – House Sparrow



The sparrow terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population is now half of what it previously was in 1980 and this is widely attributed to habitat destruction and lack of suitable nesting spaces. House sparrows are social birds and like to nest in company, therefore, this terrace provides ideal nesting opportunities for three families. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of buildings.

Breeding Birds – Starling



Starling populations have declined dramatically in recent years and are now on the Red List of birds of high conservation concern. Loss of habitat is one of the major pressures on this species and household renovations and new buildings offer much fewer nesting sites than have previously been available. Providing these birds with a safe and secure habitat and nesting environment is a great way to help ensure their future survival.

This Vivara Pro WoodStone® Starling Nest Box has a 45mm diameter entrance hole which makes it ideal for starlings. It should be sited on an external wall or tree at a height of at least 1.5m using an aluminium nail or screw and wall plug (not included). Site near to vegetation if possible as this will provide additional protection and cover.

Breeding Birds – Swallow



Swallows are a migratory species which can typically be seen in the UK from Spring to Autumn. They create an open topped nest type referred to as a ‘cup’, often situated within open-sided or dilapidated barn buildings which provide shelter but allow free ingress.

The Vivara Pro Woodstone® Swallow Nest Box recreates these nesting opportunities, and should be situated beneath roofing materials with free access; suitable locations might include overhanging eaves or within an open-sided garage or bin-store.

Breeding Birds – Other



This traditional design has proved to be highly effective in attracting Robins, as well as other small species such as Black Redstart, Spotted Flycatcher and Wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in Ivy, Honeysuckle or other climbing plants.

Invertebrates – Bee bricks



The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Specification:

* Material: Concrete
* Origin: Cornwall, UK
* Dimensions: W 215mm x D 105mm x H 65mm
* Weight: 2.9kg
* Colours: White grey, yellow, dark grey and red

Native Planting and/or Landscaping

New feature landscaping should incorporate native woody plants as opposed to non-native species that are of significantly less benefit to biodiversity. Species such as Blackthorn (*Prunus spinosa*), Honeysuckle (*Lonicera periclymenum*), Rowan (*Sorbus aucuparia*), Guelder-rose (*Vibernum opulus*) and Hawthorn (*Crataegus monogyna*) are native and will provide a valuable resource for a myriad of wildlife as opposed to non-native, exotic species which are generally much less effective, particularly to pollinator groups including bees, butterflies and moths.

Suitable Trees	Suitable Woody Shrubs
English Oak (*Quercus robur*)	Hawthorn (*Crataegus monogyna*)
Rowan (*Sorbus aucuparia*)	Honeysuckle (*Lonicera periclymenum*)
Wild Service Tree (*Sorbus torminialis)*	Guelder Rose (*Vibernum opulus*)
Silver Birch (*Betula pendula*)	Elder (*Sambucus nigra*)
Ash (*Fraxinus excelsior*)	Wild Privet (*Ligustrum vulgare*)
Goat Willow (*Salix capraea*)	Blackthorn (*Prunus spinosa*)
Beech (*Fagus sylvatica*)	
Wild Cherry (*Prunus avium*)	