

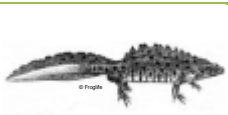
Inspection & Assessment in relation to Bats & Breeding Birds

August 2025

Project Reference: PR-25-0196

Smithie Garage
Spring Street
Bury
BL0 9JQ

National Grid Reference: SD 78924 16556



Smithie Garage, Spring Street, Ramsbottom, Bury, BL0 9JQ
Inspection & Assessment in relation to Bats & Breeding Birds

Document Title	Inspection & Assessment in relation to Bats & Breeding Birds
Project Reference	PR-25-0196
Issue Number	1.0
Prepared for	PPY Design Ltd
Prepared by	Tyrer Ecological Consultants Ltd

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Review Date	21/08/2025	-
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Date of Issue	21/08/2025	

Revision	Date	Amendment
-		

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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 a proposed planning application with Bury Council concerning Smithie Garage off Spring Street in Bury, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in June 2025.

The survey was commissioned by PPY Design Ltd; the scope of proposals is understood to involve the demolition of existing building.

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 '**Moderate**', in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

Table 7.2. Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
One survey visit. One dusk emergence survey ^a (structures). No further surveys required (trees).	Two separate dusk emergence survey visits ^b .	Three separate dusk emergence survey visits ^b .

Two dusk emergence surveys are recommended in order to establish if, and if so, how the building is being used by bats, identify the species present, abundance, roost locations and flight lines around the site following emergence. Three surveyors would be required to adequately monitor all elevations of the building that were identified as containing bat roost potential during the daytime inspection and assessment.

Breeding Birds:

In relation to wider breeding bird species, viable nesting platforms are present within an individual tree and minor features of the building 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 a proposed planning application with Bury Council concerning Smithie Garage off Spring Street in Bury, Tyrer Ecological Consultants Ltd carried out a daytime preliminary roost assessment in relation to bats with an inclusive inspection for breeding birds in June 2025.
- 1.2 The survey was commissioned by PPY Design Ltd; the scope of proposals is understood to involve the demolition of existing building. See **Figure 1.1** for location plan.

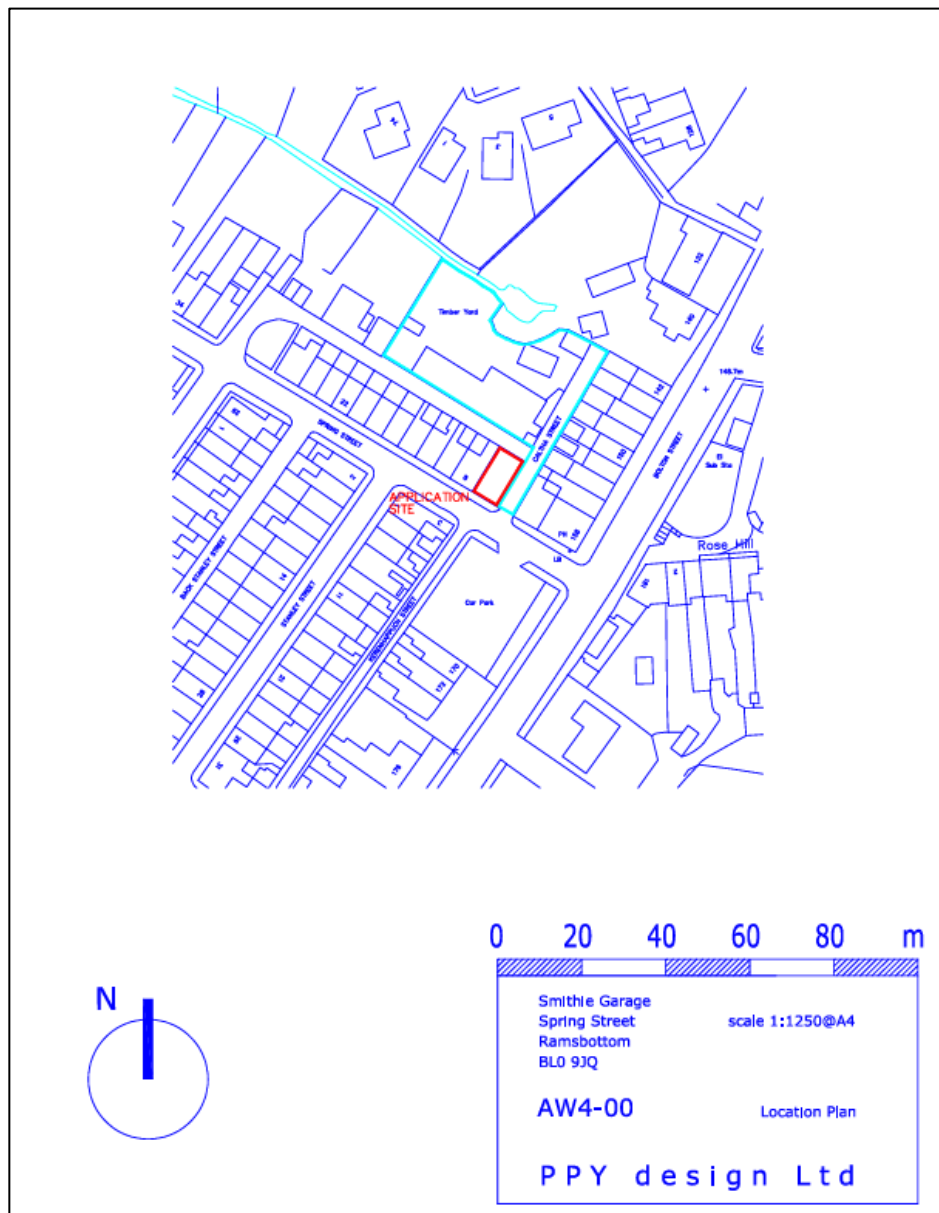


Figure 1.1 – Site Location Plan (© PPY Design Ltd)

- 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.
- 1.6 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.

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 ten bat species have been regularly recorded within Greater Manchester to date, most of which use built structures, notably occupied residential buildings, for roosting. The most frequently encountered bat species is the common pipistrelle (*Pipistrellus pipistrellus*) and its abundant status in Greater Manchester is reflected throughout the UK.

Breeding Birds

- 2.5 All wild birds, no matter how common, their eggs, young and nests, whilst being built or occupied, are protected under both the Wildlife and Countryside Act (WCA 1981) and Natural Environment and Rural Communities Act (NERC Act 2006).
- 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 Paragraph 193 of the National Policy Planning Framework (as revised in December 2024) states:

“When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons¹ and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

- 2.9 The Places for Everyone Joint Development Plan (PfE) (Adopted March 2024), which covers planning policy for nine of Greater Manchester Districts, including Bury Council, echoes this national focus on preserving biodiversity in Policy JP – G8 - A Net Enhancement of Biodiversity and Geodiversity, stating:

“Development will be expected to:

a. Follow the mitigation hierarchy of:

- i. Avoiding significant harm to biodiversity, particularly where it is irreplaceable, through consideration of alternative sites with less harmful impacts, then*
- ii. Adequately mitigating any harm to biodiversity, then*
- iii. Adequately compensating for any remaining harm to biodiversity*

b. Avoid fragmenting or severing connectivity between habitats;

c. Achieve a measurable net gain in biodiversity of no less than 10%

d. Make appropriate provision for long-term management of habitats and geological features connected to the development;

e. Where appropriate, development should: mitigate air pollution impacts on Manchester Mosses SAC; mitigate urban edge, functionally linked land and recreation disturbance impacts on the South Pennine Moors SAC/SPAs; and assess and potentially mitigate boat movement, water pollution, and light spillage and shading impacts on the Rochdale Canal SAC; and

f. Development proposals should be informed by the findings and recommendations of the appropriate biodiversity/ecological assessment(s) in the PfE evidence base and/or any updated or appropriate biodiversity/ecological assessments submitted as part of the planning application process.”

Priority Habitats & Species

- 2.10 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).

¹ For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat

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 Licenses (EPSML) and species records to further inform conclusions concerning such species in the context of the study site and its proposed development.
- 3.3 Historic satellite imagery was reviewed using sources such as Google Earth (© 2024/25) 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.
- 3.4 In addition, the Bury 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.
- 3.5 A commercial data request to the Local Environment Records Centre serving the area – in this case Greater Manchester Local Record Centre (GMLRC) – 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.*

- 3.6 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

- 3.7 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 7th July 2025 in dry, warm conditions (14°C), wind 2/12 (Beaufort scale), 50% 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 Junior Ecologist with a range of experience and currently undergoing extensive training; holds a BSc (Hons) in Ecology and Conservation and MSc in Conservation Management (a CIEEM accredited course), • Accredited agent on the Class 2 Natural England bat licence of Mrs. K. Wilding (CLS-14227), • Meets the requirements of CIEEM's Competency Framework Section S (surveying) to Capable or higher level.

Bats

- 3.8 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.”

- 3.9 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.
- 3.10 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.

- 3.11 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.
- 3.12 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 – 3.3** overleaf).
- 3.13 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).

Birds

- 3.14 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
- 3.15 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 Sch.1 of the Wildlife & Countryside Act (1981) (as amended), as well as those listed in s.41 of the NERC Act and on the Greater Manchester Biodiversity Action Plan.

Quality Assurance (QA)

- 3.16 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 <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 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

4.0 Limitations

- 4.1 The survey took place within the bat active season (broadly acknowledged to be May – September), therefore, there was a higher probability of encountering direct evidence of bats, such as through droppings. Survey timing is not considered a limitation in this instance.
- 4.2 The survey took place within the breeding bird season (March – August, inclusive) when active nesting behaviour can be frequently observed, and as such no limitations in regard to breeding birds were experienced.
- 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 Smithie Garage (referred to in-part as “the application site” and “the site”) is situated off Spring Street in Ramsbottom, approximately 5.8km north of Bury town centre (see **Figure 5.1** below). The site has an approximate area of 0.01 hectares (ha) and features the existing garage building.



Figure 5.1 – Location of the red line boundary within the landscape (© Google Earth 2025)

- 5.2 The immediate environment is sub-urban in nature, characterised by residential parcels with scattered commercial properties intersected by woodland blocks and urban green spaces, including Nuttall Park approximately 0.4km west and Top Park located 0.5km to the south. Beyond the immediate environment, the habitat becomes rural to all aspects, with large expanses of moorland and agricultural fields. To the east of the site, a railway line intersects the environment with scrub and tree lined vegetated banks which overlaps with the River Irwell approximately 300m east of the red line boundary.

Relevant Planning History

- 5.3 No previous planning applications are visible on the public access system at the site itself, and no prior ecological documentation has been produced as a part of the current planning application.
- 5.4 A number of applications have been made in proximity to the site, including the demolition of existing sawmill and associated outbuilding and construction of five dwellings to the immediate north within the wider site ownership (Ref.: 68578)². Documents include an Inspection & Assessment in relation to Bats & Breeding Birds report produced by Tyrer Ecological

² See: https://planning.bury.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal= BURY_DCAPR_59578

Consultants Ltd, with areas mentioned overlapping with the application site. Where appropriate, results of the above ecological survey have been included in the relevant sub-headings.

Designated Sites

- 5.5 Three statutory designated sites are present within 2.0km of the site (see **Table 5.1** below for details and **Figure 5.2** overleaf 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
Lower Red Lees Pasture SSSI (1.3km north)	Site of Special Scientific Interest (SSSI)	The Natural England citation ³ states the following: <i>"It is important as one of the few remaining examples of herb-rich unimproved neutral to slightly acidic pasture typical of south-east Lancashire. This vulnerable habitat has become scarce nationally and has almost been completely destroyed in Lancashire due to agricultural intensification."</i>
West Pennine Moors (0.8km west)	Site of Special Scientific Interest (SSSI)	The Natural England citation ⁴ states the following: <i>"The West Pennine Moors SSSI supports an extensive mosaic of upland and upland-fringe habitats. It is of special interest for nationally important features that occur within and are supported by the wider habitat mosaic including blanket bogs, wet and dry heathlands, acid and lime-rich flushes, rush pastures and mire grasslands, acid grasslands, neutral hay meadows and pastures, wet and dry broadleaved woodlands and scrub, diverse assemblages of upland moorland, in-bye and woodland breeding birds, breeding black-headed gulls (<i>Chroicocephalus ridibundus</i>), Mediterranean gulls (<i>Larus melanocephalus</i>) and grey herons (<i>Ardea cinerea</i>), and populations of starry lady's-mantle (<i>Alchemilla acutiloba</i>), large-toothed lady's-mantle (<i>A.subcrenata</i>) and floating water-plantain (<i>Luronium natans</i>)."</i>
Redisher Wood (1.7km south-west)	Local Nature Reserve (LNR)	The Natural England visitor information ⁵ states the following: <i>"One of the best ancient woodlands in the Borough with a good display of bluebells in the spring. It is home to a number of important woodland birds. Holcombe Brook runs through the wood and has stone loach and aquatic insects such as mayflies. The shallow ponds have interesting plants including marsh marigolds and common valerian. Habitats include semi-natural broad leaved woodland, scrub, neutral grassland, acid grassland, acid heath, marshy grassland, standing water/running water, swamp and bracken."</i>

³ See: <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1006305>

⁴ See: <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000830>

⁵ See: <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009235>

5.6 Based on the IRZ – Threshold Checker⁶ available on MAGiC Maps 2025, the proposals do not present a likely risk of having a harmful effect on the surrounding terrestrial SSSIs and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.

5.7 Where no impact to SSSI's is predicted, NE issue the following advice within their standing guidance on SSSI impact zones (NE, 2019):

“It is important to note that the SSSI IRZs only indicate Natural England’s assessment of likely risk to the notified features of SSSIs. Where they indicate such a risk is unlikely, this does not mean that there are no potential impacts on biodiversity or the wider natural environment.”

5.8 A number of non-statutory designated sites are present within 2.0km of the site, with the closest being Redisher Woods Site of Biological Importance (SBI) located 1.6km to the south-west, a site designated for its ancient woodland and associated locally important flora and fauna. Given the distance of the site from the SBI, it is unlikely that the application will have any impact upon this or any other locally designated site.

Habitats

5.9 An online search of MAGiC Maps identified the following priority habitats within a 2.0km search radius (see **Table 5.2** below and **Figure 5.2** overleaf).

Table 5.2 – Priority habitats located within 2.0km buffer

Habitat Type	Designation	Distance to site
Ancient replanted woodland	Ancient Woodland	1.2km north
Ancient & semi-natural woodland	Ancient Woodland	0.8km north
Blanket bog	Priority Habitat Inventory	1.6km west
Deciduous woodland	Priority Habitat Inventory	0.04km east
Good quality semi-improved grassland	Priority Habitat Inventory	1.1km south
Lowland dry acid grassland	Priority Habitat Inventory	0.7km north
Lowland fens	Priority Habitat Inventory	0.5km east
Lowland heathland	Priority Habitat Inventory	0.8km north
Lowland meadows	Priority Habitat Inventory	1.3km north
Purple moor grass and rush pastures	Priority Habitat Inventory	1.0km east
Traditional orchards	Priority Habitat Inventory	1.4km south
Upland flushes fens and swamps	Priority Habitat Inventory	1.0km south-west
Upland heathland	Priority Habitat Inventory	1.0km west

⁶See: [https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0121054322201¬es=&location=374549.418208%20%20\(IRZ%20polygon%20centre\)](https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0121054322201¬es=&location=374549.418208%20%20(IRZ%20polygon%20centre))

Smithie Garage, Spring Street, Ramsbottom, Bury, BL0 9JQ
Inspection & Assessment in relation to Bats & Breeding Birds

Bats

- 5.10 An online search of MAGiC Maps revealed that three European Protected Species Mitigation Licences (EPSMLs) for bats have been granted within a 2.0km radius of the site boundary (see **Table 5.3** and **Figure 5.2** below).

Table 5.3 – Bat EPSML data records from MAGiC Maps

Licence Number	Distance from site	Context (where relevant)
2014-5187-EPS-MIT	0.5km south	Common pipistrelle (<i>Pipistrelle pipistrellus</i>). & soprano pipistrelle (<i>Pipistrelle pygmaeus</i>); destruction of a resting place.
2017-29122-EPS-MIT	1.6km north	Common pipistrelle; destruction of resting place and breeding site.
2019-39548-EPS-MIT	1.2km north-east	Common pipistrelle; destruction of resting place.

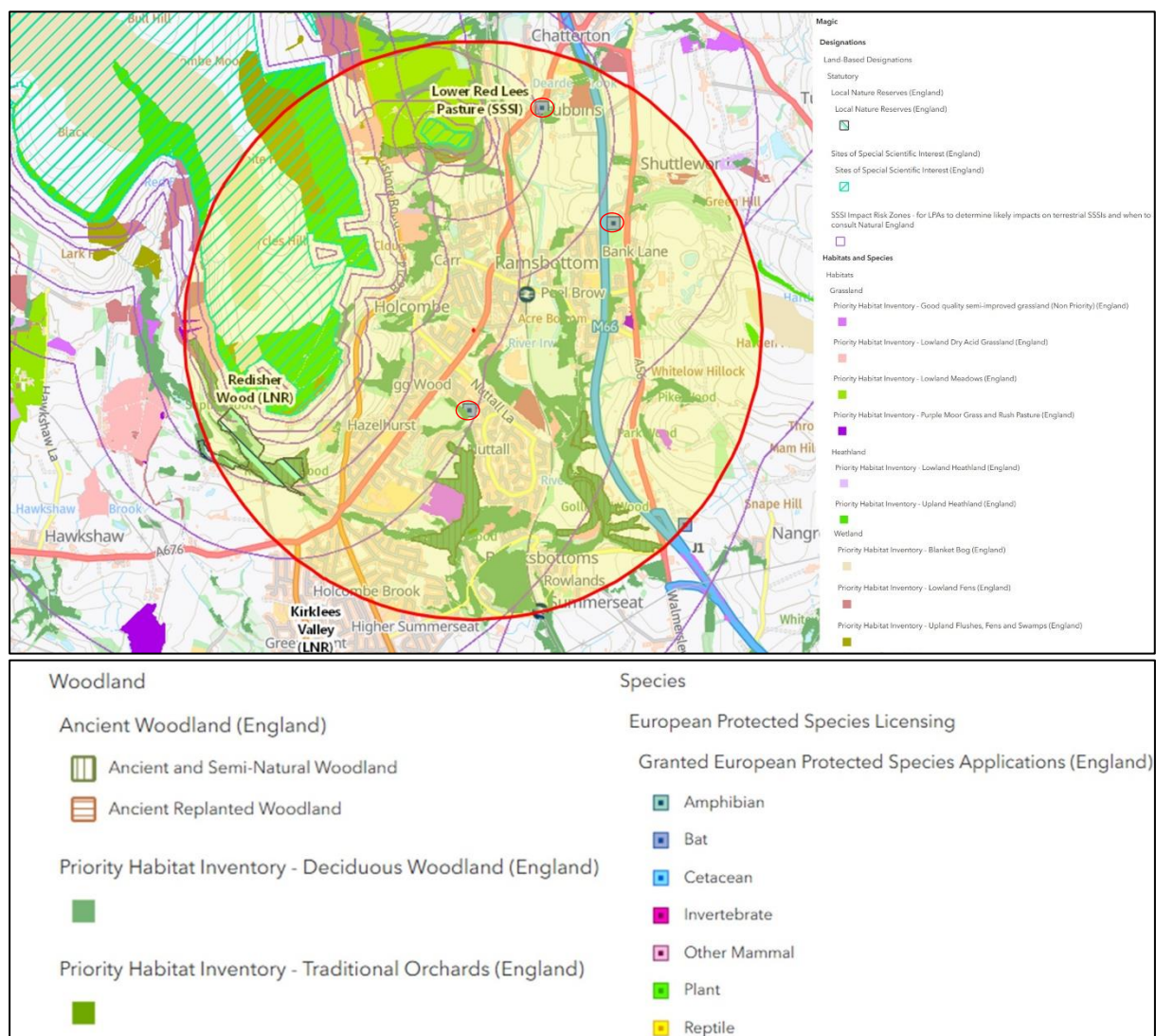


Figure 5.2 – Designated site, EPSML (circled, and priority habitat data within a 2.0km radius of the application site with additional key (© MAGiC maps 2025)

- 5.11 Habitats in the immediate vicinity of the site provide some commuting and foraging opportunities for bats, with individual trees to the north connecting to a wider network of treelines and pockets of woodland to the north, east and west which are likely to offer abundant foraging habitat. The area is likely dimly lit at night with minimal street lighting in close proximity to the application building. The woodlands to the west are likely to attract species such as the brown long-eared bat, whilst the common pipistrelle is likely to be present, a species associated with roosting in occupied dwellings.

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.*

- 5.12 Tyrer Ecological Consultants Ltd have previous and ongoing projects involving bats within the 2.0km area surrounding the site; as such, the following biological data (see **Table 5.4**) 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 GMLRC.

Table 5.4 – LERC submitted biological data records collected by Tyrer Ecological Consultants Ltd

Year	Distance from site	Context (where relevant)
2020	0.3km north	Day roost host to an individual common pipistrelle.

Birds

- 5.13 The habitats in proximity to the site are suitable to host an array of bird species; along with the West Pennine Moors SSSI which is host to breeding populations of ground nesting birds including merlin (*Falco columbarius*), curlew (*Numenius arquata*) and lapwing (*Vanellus vanellus*), the open agricultural fields to the extended environment are suitable for the hunting purposes of a variety of raptors, whilst woodland to all aspects are likely to support a variety of passerines.
- 5.14 The site-surrounding habitats provide suitable commuting habitat for birds, with the pathways listed previously for bats also considered likely to afford connectivity to bird species in the surrounding habitat.

6.0 Field Study Results

Bats

- 6.1 One building is present within the application site boundary; a disused, semi-detached, one-storey, part brick and part stone-and-mortar built garage structure with a pitched slate roof to the approximate dimensions of 13m x 7m x 3m (length x width x height). Other structural components include timber windows, metal rolling shutter door, timber barge boards, and UPVC guttering. Whilst the surveyor is not qualified to assess structural integrity, the building was adjudged to be in average condition with some signs of dereliction to timber elements and brickwork.
- 6.2 Internally, a loft space is present, accessible via a loft hatch and was of small size with a height of 0.5m at the apex. Conditions were found to be partially illuminated via gaps at the base of the loft space, as well as cold and subject to minor draught. In addition, the space is used for miscellaneous storage and is cluttered, however, given the garage is currently unoccupied, it is presumed that disturbance is rare. The building is therefore considered broadly unsuitable for the breeding purposes of loft-dwelling species such as the brown long-eared bat given the small, cluttered nature and sub-optimal thermal conditions. This species requires dark, open loft spaces with warm, consistent thermal characteristics in which to raise their young. No evidence of droppings were identified within the loft space; however, it is possible that evidence may have been obscured by the level of storage.
- 6.3 Bitumen 1F lining is present beneath parts of the roofing materials, with no lining present in the remaining sections of the building; 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 host to numerous viable ingress points and PRFs to all aspects, including gaps behind the barge boards on the eastern and northern elevations presenting access to the wall plate and internal features, slipped slates on the eastern and northern elevations, areas beneath slates where the mortar is damaged providing crevice opportunities on the eastern and southern gable verges, gaps beneath ridge tiles and at the apex where mortar has degraded on the eastern and western roof pitch, and behind the timber elements of the rolling shutter door on the eastern elevation, however this was noted to be cobwebbed.
- 6.5 Areas of the building do present some internal access opportunities. The building was not identified to host suitable internal features and conditions for roosting bats; however, a bat could feasibly roost against internal timber purlins where bitumen underfelt is present. While it is considered highly unlikely that this feature would be utilised given the high light ingress via numerous windows, this PRF cannot be ruled out as offering potential roosting suitability given the numerous internal ingress opportunities on most external elevations of the structure.
- 6.6 Given the numerous PRFs identified at the structure and taking into account suitable habitat alongside a roost record in close proximity to the application site, Smithie Garage is duly categorised as pertaining to **'Moderate'** bat roost suitability, in accordance with Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023).

- 6.7 From a habitat suitability assessment in relation to bat activity, the site provides low value foraging habitat being primarily formed of the garage structure and hardstanding. Scattered trees are present to the north of the site which provide suitable foraging opportunities and commuting value which may facilitate the movement of bats to larger woodland parcels to the west. The unoccupied nature of the building indicates that the site is dimly lit, with low levels of street lighting on the southern elevation.
- 6.8 No trees are present in the red line boundary of the application site. All trees should be considered of value to commuting and foraging bats, whereby they act as landmarks for navigation and foci around which invertebrate prey species gather.

Breeding Birds

- 6.9 In relation to WCA Schedule 1 specially protected bird species such as barn owl, no evidence of nesting was identified by the surveyor with no suitable nesting platforms to be utilised by this species observed within the development site boundary. Moorland and agricultural fields in the extended environment is likely to offer better value foraging habitat for this species with an abundance of prey items and suitable nesting structures.
- 6.10 In regard to general breeding birds, no evidence of nesting was identified within the red line boundary. A small ash (*Fraxinus excelsior*) tree on the northern elevation and certain aspects of the building such as gaps beneath slates and brickwork where nesting material may feasibly be inserted, could all offer suitable nesting platforms which could be utilised within the breeding bird season (March – August, inclusive).

7.0 Conclusions & Recommendations

Designated Sites

- 7.1 Three statutory designated sites for nature conservation occur within 2.0km of the site, including West Pennine Moors SSSI which the site lies within the Impact Risk Zone (IRZ) for. Based on the IRZ – Threshold Checker, the proposals do not present a likely risk of having a harmful effect on the surrounding terrestrial SSSIs and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.
- 7.2 No further consultation with Natural England (NE) in relation to specially protected sites is considered necessary.
- 7.3 Redisher Woods Site of Biological Importance (SBI) is located within 2.0km of the site. Given the distance of the site from the SBI, it is unlikely that the application will have any impact upon this or any other locally designated site. As such, no further recommendations are necessary.

Bats

- 7.4 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 '**Moderate**', 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 7.2. Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).		
Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
One survey visit. One dusk emergence survey ^a (structures). No further surveys required (trees).	Two separate dusk emergence survey visits ^b .	Three separate dusk emergence survey visits ^b .

Figure 7.1 – BCT extract on 'Moderate' suitability criteria

- 7.5 It is therefore recommended that **two dusk emergence surveys** are conducted at the site within the active season of bats (May – August, extending into September in some cases), in order to establish if / how the building is being used by bats, and if so, identify the species present, abundance, roost locations and flight lines around the site following emergence. A total of **three surveyors** would likely be required to cover the potential roosting features identified; the surveys must be spaced a minimum of three weeks apart in accordance with current BCT guidance.
- 7.6 The applicant should be aware that if, during further surveys, evidence is gathered that confirms bat(s) or their roost(s) are found on site and will be impacted upon, then a Protected Species licence may be required to legally commence with the proposals.
- 7.7 Natural England provides information and guidance about licensing, and the following extract is included in that guidance:

"If you intend to apply for a licence for development, you are advised to seek the guidance of a consultant ecologist. Natural England's view is that a licence is needed if the consultant ecologist, based on survey information and specialist knowledge of the species concerned,

considers that on balance the proposed activity is reasonably likely to result in an offence under the Conservation of Habitats & Species Regulations 2019 (as amended).

If the consultant Ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is reasonably unlikely to result in an offence being committed then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to minimise the effect on European protected species should they be found during the course of the activity. If European protected species are found, cease the work until you have assessed whether you can proceed without committing an offence. A licence should be applied for if an offence/s is unavoidable, and the work should not commence until a licence is obtained.

The application should be completed by the developer and a consultant ecologist. The ecologist will need to be able to demonstrate to the satisfaction of Natural England that they have the relevant skills and knowledge of the species concerned."

- 7.8 Where more detailed bat surveys are recommended by the Ecologist, following an initial daytime investigation, then Local Planning Authorities, on the advice of their ecological advisors, may not determine the application until such time that all relevant information is gathered, i.e., by conducting dusk / dawn surveys. The advice that is provided by the ecological advisors is also in accordance with the obligations placed upon Local Authorities by way of its duties under the Conservation of Habitats & Species Regulations 2019 (as amended). Therefore, it would be prudent to make enquiries to the relevant departmental Planning Officer before submitting a Planning Application that includes an ecological survey report that recommends more detailed surveys.
- 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 north and eastern elevations. 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, minor nesting platforms are present on the northern elevation and within the building structure, 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 As a precautionary measure, 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 might consider the erection of nesting boxes as part of their biodiversity enhancements aims for the proposed development. Appropriate nesting boxes suitable for an array of bird species are provided within **Appendix II**.

8.0 Bibliography

- **Bat Conservation Trust (BCT)**, 2023. *Bats and Artificial Lighting at Night, Guidance Note GN08/23*. Available from: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>
- **CIEEM et al**, 2019. *Biodiversity Net Gain: Good practice principles for development*. Available from: www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf
- **CIEEM**, 2016. *Guidelines for Ecological Impact Assessment in the UK and Ireland*, 2nd edition. Available from: www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf
- **CIEEM**, 2020. *Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK*. 2nd Edition. Chartered Institute of Ecology and Environmental Management. Winchester, UK
- **CIEEM**, 2017. *Guidelines for Preliminary Ecological Appraisal*, 2nd edition. Available from: www.cieem.net/data/files/Publications/Guidelines_for_Preliminary_Ecological_Appraisal_Jan2018_1.pdf
- **CIEEM**, 2019. *ON THE LIFESPAN OF ECOLOGICAL REPORTS & SURVEYS*. Available from: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>
- **Collins, J (ed.)** 2023. *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition). The Bat Conservation Trust, London.
- **Communities & Local Government (C&LG)**, 2024. *National Planning Policy Framework*. Available from: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- **DEFRA**, 2018. *Net gain: Consultation Proposals*. Available from: https://consult.defra.gov.uk/land-use/net-gain/supporting_documents/netgainconsultationdocument.pdf
- **Gunnell, K. Grant, G. and Williams, C.** 2012. 'Landscape and urban design for bats and biodiversity'. Bat Conservation Trust.
- **Magic Maps Application**, 2025. Available from: <https://magic.defra.gov.uk/MagicMap.html>
- **Mitchell-Jones, A.J. and McLeish, A.P.** (Eds) (2004). *Bat Workers' Manual*, Joint Nature Conservation Committee, Peterborough.
- **Reason, P.F. and Wray, S.** (2025). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.
- **UKHab Ltd.**, 2023. *UK Habitat Classification Version 2.0*. Available from: <https://ukhab.org/>

Appendix I: Site Photographs



Plate 1 – Eastern elevation of the site.



Plate 2 – Southern elevation of the site.



Plate 3 – *Northern elevation of the site, with small aspect of vegetation including an ash tree.*



Plate 4 – *Nature of the internal aspect of the building.*



Plate 5 – General character of the roof, with partial Bitumen 1f lining beneath the roof and areas of no roof lining.



Plate 6 – Nature of the loft space.



Plate 7 – Gaps at the base of the loft space.



Plate 8 – Slipped slates on northern elevation.



Plate 9 – Gaps behind barge board on northern elevation presenting internal access and to the wall plate.



Plate 10 – Crevice opportunities beneath slates and at apex ridge tile where mortar has degraded on eastern gable verge.



Plate 11 – *PRF behind barge board on eastern elevation.*



Plate 12 – *Gap behind metal rolling shutter although cobwebbed on eastern elevation.*



Plate 13 – *Example of slipped slates on eastern elevation and gaps beneath ridge tiles.*



Plate 14 – *PRFs on southern elevation where mortar is damaged presenting crevice opportunities beneath slates and ridge tiles.*



Plate 15 – *Generally well-sealed slates on western roof pitch with minor gaps beneath ridge tiles.*

Appendix II: Biodiversity Enhancement: General Recommendations

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 (*Viburnum 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 (<i>Quercus robur</i>)	Hawthorn (<i>Crataegus monogyna</i>)
Rowan (<i>Sorbus aucuparia</i>)	Honeysuckle (<i>Lonicera periclymenum</i>)
Wild Service Tree (<i>Sorbus torminialis</i>)	Guelder Rose (<i>Viburnum opulus</i>)
Silver Birch (<i>Betula pendula</i>)	Elder (<i>Sambucus nigra</i>)
Ash (<i>Fraxinus excelsior</i>)	Wild Privet (<i>Ligustrum vulgare</i>)
Goat Willow (<i>Salix capraea</i>)	Blackthorn (<i>Prunus spinosa</i>)
Beech (<i>Fagus sylvatica</i>)	
Wild Cherry (<i>Prunus avium</i>)	