

19 Woodward Close
Winnersh
Wokingham
RG41 5NW

Preliminary Roost Assessment

Report ref.: R3003_PRA_a

Report Quality Control Information	
Author	Meghan Porter-Smith (qualifying member of CIEEM)
Reviewer	Vicky Potts MCIEEM
Authorised	John Wenman MCIEEM

August 2025



1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL
Telephone: 0118 3271810 Mobile: 07979 403099 E-mail: info@wenman-ecology.co.uk
www.wenman-ecology.co.uk

John Wenman Ecological Consultancy LLP is a limited liability partnership registered in England and Wales with registered number OC339057.
Registered office: 100 New Wokingham Road, Crowthorne, Berkshire RG45 6JP where you may look at a list of members' names.

CONTENTS PAGE

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	4
2.1	Project Background.....	4
2.2	Site Location and Context.....	4
2.3	Report Objectives	4
3	LEGISLATIVE AND POLICY BACKGROUND	5
3.1	Relevant Legislation.....	5
3.2	Planning Policy	5
3.3	Mitigation Licensing	6
4	SURVEY METHODOLOGY	7
4.1	Desk Study	7
4.2	Building Inspection.....	7
5	SURVEY RESULTS	10
5.1	Desk Study	10
5.2	Building Inspection.....	10
6	DISCUSSION	16
6.1	Assessment of Roost Suitability.....	16
6.2	Assessment of Roost Status.....	16
7	IMPACT ASSESSMENT	18
7.1	Potential Impacts of Development Proposals	18
7.2	Precautionary Method of Working.....	19
8	REFERENCES	20
	APPENDIX 1 – PLANNING DRAWINGS.....	21
	APPENDIX 2 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS	22
	APPENDIX 3 – DEFINITION OF BAT ROOST TYPES	24
	APPENDIX 4 – FURTHER SURVEY RATIONALE	25

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Mr Bikash Kumar Ghosh to undertake a Preliminary Roost Assessment for bats (PRA) at 19 Woodward Close in Winnersh, Wokingham. The PRA was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for a loft conversion to include enlarging the existing front dormer extension and the construction of a rear dormer (refer to planning drawings in **Appendix 1**).
- 1.1.2** The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities. A detailed inspection of the exterior and interior of the property was undertaken on the 8th July 2025 by Vicky Potts MCIEEM (CL18: 2016-27162-CLS-CLS) and Meghan Porter-Smith (CL17 2023-11300-CL17-BAT), in accordance with good practice guidelines (Collins 2023).
- 1.1.3** During the walkover survey, a gap was identified below the soffit at the apex of the southern gable, and a missing section of plastic ridge guard at the southern end of the ridge, the house has been assigned moderate potential suitability for roosting bats. The observation of approximately 150-200 small bat droppings, resembling those typically deposited by pipistrelle species, at the southern gable end inside the roof void is consistent with the house supporting a regularly used summer day roost.
- 1.1.4** The development proposals do not directly impact the confirmed bat roost at the apex of the southern gable end and the potential roost site at the apex of the northern gable end. The confirmed roost and the potential roost site will remain available to bats throughout the construction and post development. Under a precautionary method of working (see **Section 7.2**), the levels of disturbance are considered highly unlikely to cause any temporary or permanent abandonment of the confirmed roost. As such, it is considered highly unlikely that the proposals will result in the permanent loss or damage of a bat roost.
- 1.1.5** This report contains information regarding a mobile species so it will likely be valid for 12 months only (CIEEM 2019b).

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Mr Bikash Kumar Ghosh to undertake a Preliminary Roost Assessment for bats (PRA) at 19 Woodward Close in Winnersh, Wokingham.

2.1.2 The PRA was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for a loft conversion to include enlarging the existing front dormer extension and the construction of a rear dormer (refer to planning drawings in **Appendix 1**).

2.2 Site Location and Context

2.2.1 The property is a detached house on 19 Woodward Close in Winnersh, Wokingham (central OS grid reference: SU 78412 70508).

2.2.2 The house is in an urban setting, bordered on all sides by residential houses and their respective gardens. The Reading trainline runs approximately 40m to the north of the site, which is lined by trees. Open grassland and a small woodland copse is present approximately 250m to the south of the site, with further open land present 450m to the south-east alongside Wheatfield Primary School and Winnersh allotments. The Emm Brook stream and parcel of ancient and semi-natural woodland is present 850m to the east of the site,

2.3 Report Objectives

2.3.1 The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities.

3 LEGISLATIVE AND POLICY BACKGROUND

3.1 Relevant Legislation

3.1.1 In England and Wales, all bat species found in the wild are fully protected under the Wildlife & Countryside Act 1981 (as amended) (WCA) and Conservation of Habitats and Species Regulations 2017 (as amended); the regulations are commonly referred to as the Habitat Regulations and hereafter referred to as such. The Habitat Regulations refer to European Protected Species (EPS) and all species of bats in the United Kingdom (UK) are EPS. Although the UK left the European Union on the 31st January 2020 and is therefore no longer tied to European legislation, the Habitat Regulations have been retained in their current format.

3.1.2 The legal framework underpinned by the WCA and Habitat Regulations makes these specific actions an offence as follows:

- Deliberately kill, injure, capture or take a wild bat;
- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or to significantly affect local distribution or abundance;
- Damage or destroy a place used by a bat for breeding or resting; and
- Intentionally or recklessly obstruct access to any place used by a bat for shelter or protection.

3.2 Planning Policy

3.2.1 The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England. Government planning policy, such as the ODPM Circular 06/2005, requires LPAs to account for the conservation of protected species when considering and determining planning applications.

3.2.2 The ODPM Circular 06/2005 states that '*the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.*' This policy means that in instances where there is a reasonable likelihood of bats being present and affected by a development, surveys must be undertaken to inform a mitigation strategy to be agreed prior to granting planning permission.

3.3 Mitigation Licensing

3.3.1 The government's statutory nature conservation body, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (2)(e) – the derogation is for the purposes of *'preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.'*
- (9)(a) – there is *'no satisfactory alternative'* to the derogation; and
- (9)(b) – *'the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.'*

3.3.2 LPAs have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations to consider and determine whether these three tests are likely to be satisfied by planning proposals affecting EPS before granting planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

3.3.3 The Bat Mitigation Class Licence (BMCL) scheme allows ecologists to apply to become Registered Consultants to use this licence for low conservation status roosts, i.e. roosts comprising small numbers of seven commonly occurring species. A site registration form must be completed as a condition of the licence and submitted to Natural England at least three weeks before the licensable activities are due to start; Natural England aims to register sites within two weeks of submission.

3.3.4 Baseline survey information supporting EPS mitigation licence applications or BMCL site registrations must be up-to-date and have been completed within the current or most recent optimal season. A suitably experienced ecologist will be required to undertake a site walkover/check within three months prior to application/registration submission to confirm that conditions have not changed since the most recent survey.

4 SURVEY METHODOLOGY

4.1 Desk Study

4.1.1 A desk-based study for bats was undertaken to collate and review existing information about the site and the surrounding land. The study utilised the following open access resources:

- Google Earth – satellite imagery was used to identify potential flight paths and foraging habitats for bats;
- MAGIC – examined to locate granted European Protected Species licences; and
- pre-existing bat survey reports – any available reports were obtained from the client or relevant planning portal to provide background information for the site.

4.2 Building Inspection

Survey Details

4.2.1 A detailed inspection of the exterior and interior of the property was undertaken on the 8th July 2025 by Vicky Potts MCIEEM (CL18: 2016-27162-CLS-CLS) and Meghan Porter-Smith (CL17 2023-11300-CL17-BAT), in accordance with good practice guidelines (Collins 2023). The equipment used during the inspection comprised binoculars, a high-power (1 million candlepower) LED torch, a headtorch, ladder and PPE (facemask, gloves etc.). The inspection involved a systematic search of the exterior and interior of the structure during daylight hours to compile information on potential and actual bat access points; potential and actual bat roost sites; and any evidence of bat presence.

External Survey

4.2.2 Frequently used bat access points and/or roost sites include (but are not limited to) spaces:

- behind hanging tiles, weatherboarding, soffit boxes and barge boards;
- under lead flashing (particularly around chimneys) and roof tiles/slates; and
- in existing bat boxes.

4.2.3 It is important to note that the two most abundant and widespread bat species, common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), typically only require gaps measuring 15mm by 20mm to gain access to a roost inside a

building.

4.2.4 The external survey involved a systematic search for evidence of bats including:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining; and
- squeaking noises.

4.2.5 It should be noted that bats can be present in a building while leaving no visible signs externally and wet weather has the potential to wash any evidence away. The search for evidence was focused on (but was not limited to) the ground, windowsills, windowpanes and walls (including cladding and hanging tiles); particularly in places near to potential bat access points and/or roost sites.

Internal Survey

4.2.6 The internal survey comprised a systematic search for evidence of bats on the upper floors of the building (i.e. checking the exterior from windows) and inside the roof and eave spaces. Evidence of bats found during an internal inspection can include:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining;
- feeding remains (i.e. moth wings);
- squeaking noises;
- bat-fly (Nycteribiid) pupal cases; and
- odour.

4.2.7 It should be noted that only specimens or droppings can be relied upon in isolation to confirm the presence of a bat roost.

4.2.8 Frequently used roosting locations within the roof include (but are not limited to):

- the apex of the gable end or dividing walls;

- the top of chimney breasts;
- ridge and hip beams;
- mortise and tenon joints;
- behind purlins; and
- between tiles and roof lining.

Survey Limitations and Validity

- 4.2.9** There were no significant survey limitations because PRAs can be carried out at any time of year under any weather conditions and the building was fully accessible.
- 4.2.10** It should be noted that it is not always possible to inspect all potential roost sites during a survey, particularly for bat species which typically roost in hidden crevices. Therefore, an absence of bat evidence found during a survey does not necessarily equate to evidence of bat absence in a building.
- 4.2.11** This report contains information regarding a mobile species so it will likely be valid for 12 months only (CIEEM 2019b).

5 SURVEY RESULTS

5.1 Desk Study

- 5.1.1** The nearby trainline, open grassland and woodland parcels resemble connective high-quality habitat, offering flight paths and foraging opportunities for bats roosting locally.
- 5.1.2** Bat mitigation licences that have been granted within the last 10 years inside a 2km radius of the application site are detailed in **Table 1** below.

Table 1. Bat mitigation licences granted within a 2km radius (Source: MAGIC).

Case Reference of Granted Licence	Species on the Licence	Licensable Period	Licensable Works	Distance (m)
2015-13607-EPS-MIT-1	Common pipistrelle	01/12/2015 - 05/08/2020	Destruction of resting place	700SE
2016-24486-EPS-MIT	Common pipistrelle	19/07/2016 – 18/07/2021	Damage and destruction of resting place	1700E

- 5.1.3** The clients held no pre-existing bat survey reports and none were available for the property on the Wokingham Borough Council planning portal.

5.2 Building Inspection

Overview

- 5.2.1** The findings from the external and internal inspections carried out for the property are described with photographs and are annotated in a plan, as follows:

External Survey

- 5.2.2** The property was a detached house of modern brickwork construction, a pitched roof with a pitched gable extension and small pitched dormer window on the front elevation; an attached single-storey garage was present on the front elevation and a glass-roofed conservatory on the rear elevation (**Photographs 1 & 2**).



Photograph 1. Front of property viewed from north.



Photograph 2. Rear of property viewed from south.

- 5.2.3** The roof was covered with interlocking tiles that were flat and intact across all elevations (**Photograph 3**). The ridge tiles were dry fixed with a plastic guard along the bottom of the ridge tiles which was damaged at the southern end on the front elevation, which provides access under the ridge for crevice-dwelling bats (**Photograph 4; Target note 1**).



Photograph 3. Tight interlocking roof tiles (rear elevation).

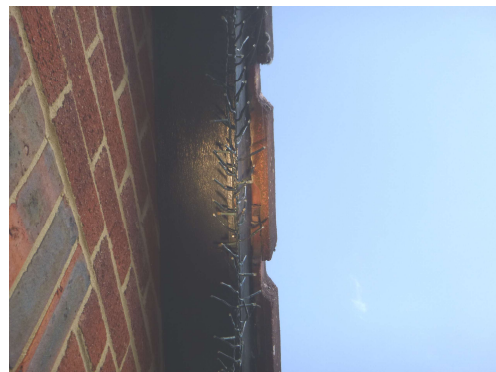


Photograph 4. Broken plastic guard below end ridge tile (front elevation).

- 5.2.4** The gable verges were covered with verge cap tiles which were tight to the fascias along the verges of the gables and dormer on the house (**Photograph 5**). The timber soffits were tight at the eaves along the sides of the house (**Photograph 6**).



Photograph 5. Verge cap tiles tight to the fascia (front elevation).



Photograph 6. Soffit tight to brickwork (front elevation).

- 5.2.5** There was a potential bat access point between the soffit and the brickwork at the southern gable (**Photograph 7; Target note 2**). One small-sized bat dropping was identified on the brickwork below the gap, resembling those typically deposited by pipistrelle species (*Pipistrellus* spp.). There was a section of lifted lead flashing around the chimney at the northern gable, which was cobwebbed and looked to lead to a gap of limited extent. A slight gap between the soffit and the chimney was also present, with some bird droppings on the brickwork indicating past use by nesting birds; no birds were observed using the property at the time of survey (**Photograph 8; Target note 3**).



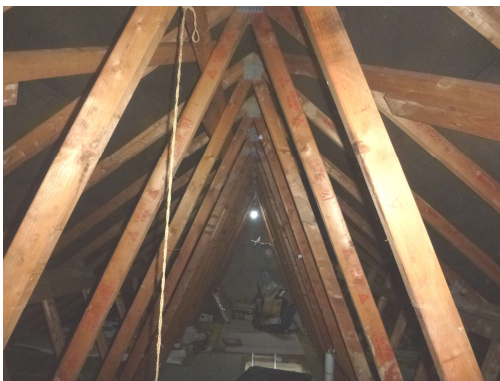
Photograph 7. Gap under soffit near apex of the gable (southern elevation).



Photograph 8. Lifted lead flashing around chimney and evidence of nesting birds at the soffit (northern elevation).

Internal Survey

- 5.2.6** The roof void was accessible via a first floor loft hatch. The void had an approximate floor-to-ridge height of 2m, was of trussed rafter construction and included the front gable extension (**Photographs 9 & 10**).



Photograph 9. Roof void.



Photograph 10. Front gable extension (roof void).

- 5.2.7** The main space had been boarded centrally for household storage and access to the boilers/water tanks at the southern gable end; the floor was insulated with fibreglass which extended up to the eaves, with plastic guards present blocking the eaves (**Photograph 11**). There was no ridge beam present, with intact hessian-reinforced

bitumen roofing felt present throughout the void (**Photograph 12**).



Photograph 11. Fibreglass insulation up to eaves blocked by a plastic guard (roof void).



Photograph 12. Intact bitumen roofing felt (roof void).

5.2.8 The small front pitched and dormer both had timber boards present, which were tight to the rafters (**Photograph 13**). The northern and southern gables were both of blockwork construction with two cobwebbed vent bricks present in gable walls; an extraction vent pipe was secured to one of the vent bricks on the southern gable, with fibreglass insulation visible around it (**Photographs 14 & 15**).



Photograph 13. Dormer timber boarded gable (roof void).



Photograph 14. Cobwebbed vent brick in northern blockwork gable (roof void).



Photograph 15. Extraction tube secured to vent brick with some spray foam present on the southern gable (roof void).

5.2.9 There were gaps over the top of the southern gable, with approximately 50 small-sized droppings on the blockwork and stuck in cobwebs resembling those typically deposited

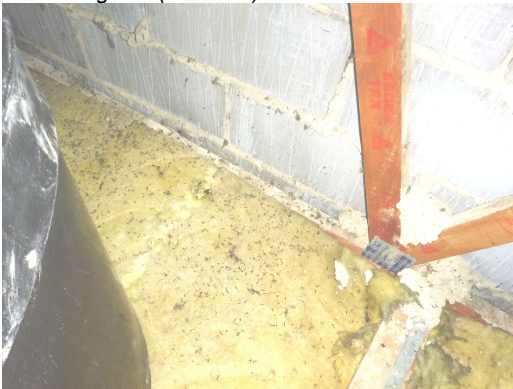
by pipistrelle species (*Pipistrellus* spp.), with a further approximately 300-400 small bat droppings accumulated on fibreglass at the base of the gable (**Photographs 16 – 19**). Expanding foam was visible along the edges of the gable wall.



Photograph 16. Gaps above blockwork on the southern gable (roof void).



Photograph 17. Small bat droppings stuck to blockwork and timbers on the southern gable (roof void).



Photograph 18. Accumulation of small bat droppings at base of southern gable (roof void).

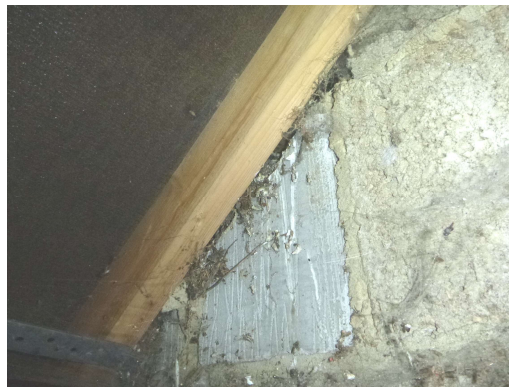


Photograph 19. Accumulation of small bat droppings at base of southern gable (roof void).

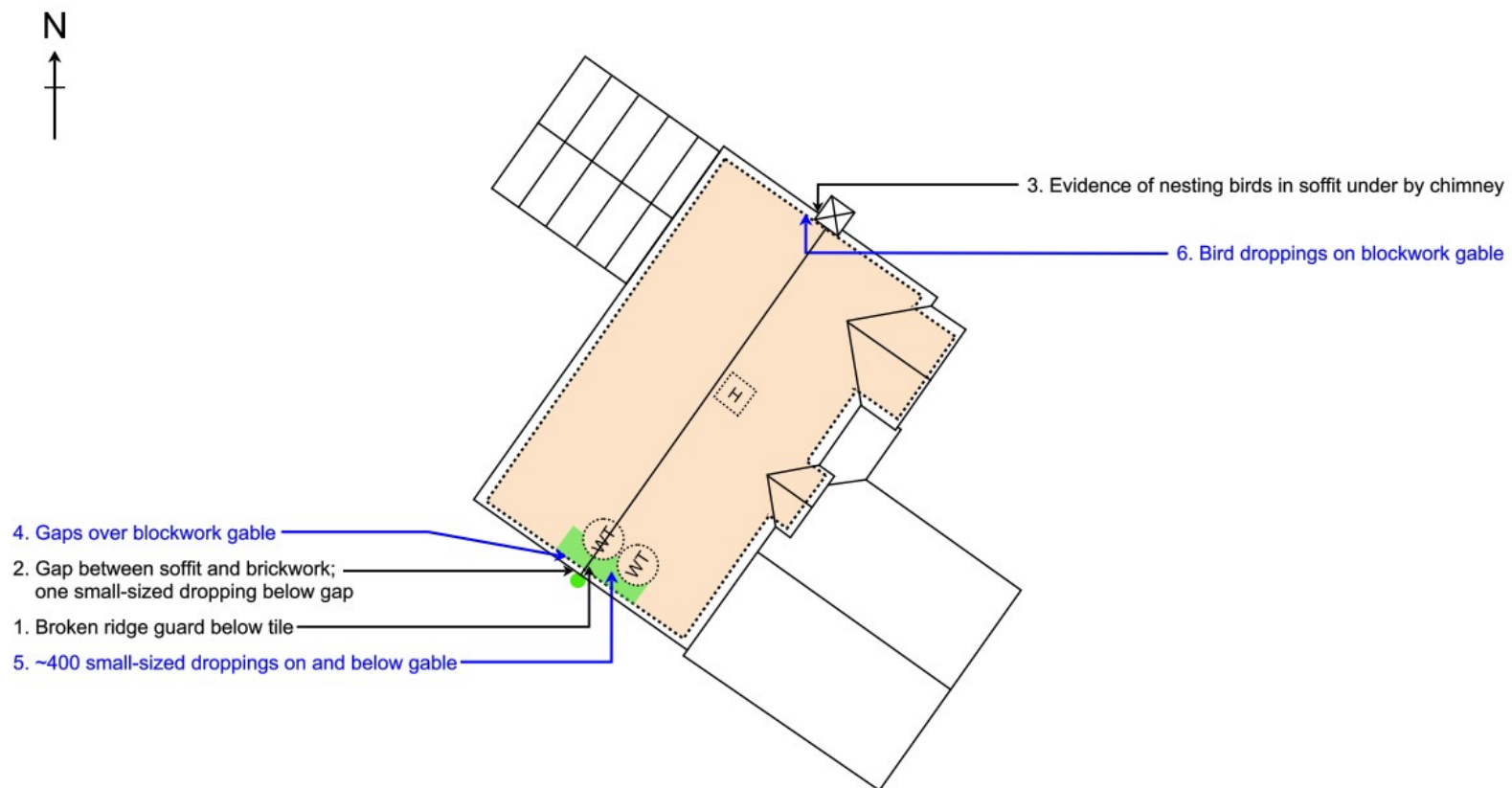
5.2.10 The northern gable was cobwebbed, and the rafters were tight to the blocks at the apex of the wall, with also gaps over the blockwork along the sides with bird droppings and evidence of nesting material visible on the internal wall (**Photographs 20 & 21**).



Photograph 20. Cobwebbed blockwork northern gable (roof void).



Photograph 21. Bird droppings and nesting material visible on and above blockwork on northern gable (roof void).



n. External target note Accumulation of small-sized bat droppings

n. Internal target note ● Small-sized bat dropping Chimney Roof void Loft hatch Water tank

Drawn by:	Date:	Scale:	19 Woodward Close, Winnersh	
MP-S	August 2025	Not to scale	Preliminary Roost Assessment Plan	

6 DISCUSSION

6.1 Assessment of Roost Suitability

6.1.1 The nearby trainline, woodland and open grassland, resemble good-quality habitat with flight paths and foraging opportunities for bats roosting locally. Furthermore, the search of bat mitigation licences identified two common pipistrelle (*Pipistrellus pipistrellus*) bat roosts within the local area.

6.1.2 The house had two localised areas, associated with gaps under the soffit at the southern gable and adjacent to the chimney at the northern gable apices, which provide suitable access to potential crevice roost sites and into the roof void. While the roof void is an optimal size for the internal flight exhibited by void-dwelling bats, such as the common brown long-eared (*P. auritus*), the void was cluttered by rafters and there was no evidence of presence (i.e. medium-sized bat droppings) during the internal inspection. Therefore, it is considered highly unlikely that void-dwelling bats are present in the house.

6.1.3 The potential roost features at the southern and northern gable apices are suitable for use by small crevice-dwelling bats, such as the locally recorded common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*). Due to the scale of the roost sites, in conjunction with the good-quality surrounding habitat, they are considered to have potential to support regular use by individuals or small groups of non-breeding bats; therefore, the house has been assigned moderate potential suitability for roosting bats (see **Appendix 2** for potential suitability categories).

6.2 Assessment of Roost Status

6.2.1 The observation of approximately 350-400 small bat droppings, resembling those typically deposited by pipistrelle species (*Pipistrellus* spp.), at the southern gable end inside the roof void is consistent with the house supporting a regularly used summer day roost by small numbers of bats. The distribution of the bat droppings internally corresponds to the potential access point associated with the gap under the soffit, along with the observation of one small bat dropping externally below the soffit gap, and confirms the presence of a roost. The quantity of bat droppings could be indicative of the presence of a small maternity colony but it cannot be definitively confirmed at this stage.

6.2.2 Common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*) are the most abundant and widespread bats in Great Britain. These species occur in almost any

habitat type and are well adapted to the built environments; they are the species most regularly reported roosting in houses and churches (Mathews *et al.* 2018). Roosts supporting these species hold site to district level conservation importance subject to the roost type (see **Appendix 3** for definitions of roost types), i.e. non-breeding roosts supporting individual bat or small groups through to maternity roosts supporting large numbers of female bats (Reason & Wray 2023).

7 IMPACT ASSESSMENT

7.1 Potential Impacts of Development Proposals

Overview

- 7.1.1** The development proposals are for the conversion of the loft into habitable space, with the installation of a full-length rear dormer and alterations to the existing small dormer on the front elevation (refer to planning drawings in **Appendix 1**). The impacts of the proposals, during construction and post development, have been assessed in accordance with the mitigation hierarchy as follows:

Construction Phase

- 7.1.2** The conversion of the roof void and the addition of the rear dormer will involve work close to the southern gable end. It is understood that several courses of roof tiles will be removed to construct the rear dormer. This tile removal will take place 850mm from the end of the roof where the location of the confirmed crevice roost at the apex of the southern gable end. These works will also occur near to the potential roost site at the apex of the northern gable end (where no evidence of bat presence was found inside the roof void) but will have no direct impact. The new internal wall within the void to create the habitable space will be 500mm from the southern gable end, to retain an enclosed area separating the living space from the for the confirmed bat roost in the gable wall. Therefore, under a precautionary method of working (see **Section 7.2**), the proposals are considered highly unlikely to result in the damage and/or destruction of a bat roost.
- 7.1.3** Considering the small-scale nature of development, the construction activities are considered unlikely to significantly raise the noise, vibration and light levels above the baseline for any prolonged period. Furthermore, if the timing of the work is set to take place outside of the breeding season (May to August), the level of disturbance under a precautionary method of working (see **Section 7.2**) is considered highly unlikely to impair bats' ability to survive, to breed or reproduce and to rear or nurture their young.

Post Development

- 7.1.4** The development proposals do not directly impact the confirmed bat roost at the apex of the southern gable end and the potential roost site at the apex of the northern gable end. The confirmed roost and the potential roost site will remain available to bats throughout the construction and post development. Under a precautionary method of

working (see **Section 7.2**), the levels of disturbance are considered highly unlikely to cause any temporary or permanent abandonment of the confirmed roost. As such, it is considered highly unlikely that the proposals will result in the permanent loss or damage of a bat roost.

7.2 Precautionary Method of Working

- 7.2.1** A worst case will be assumed i.e. that the confirmed roost observed at the southern gable end is a maternity colony, therefore the works within the loft and to remove tiles will be carried out outside of the pipistrelle breeding season i.e. May – August, to avoid disturbing roosting bats that could be using the house during the summer.
- 7.2.2** Any scaffold required will be designed to ensure that it does not block access to the roost thereby always allowing bats a clear flight path into and out of the roost. The scaffold design will be inspected and verified by the licenced ecologist prior to works commencing.
- 7.2.3** Before the commencement of construction activities impacting the house at the roof level, i.e. removal of roof tiles, a suitably licensed ecologist will provide a toolbox talk to all contractors working on site detailing how bats use buildings, legal protection, working methods, actual and potential roost sites, actions to be taken if a bat roost is found and personal safety procedures. The ecologist will carry out an updated inspection of the roof void to confirm that the assessment of the bat roost status in this report remains accurate and to confirm the continued absence of roosting bats within the void.
- 7.2.4** A soft strip approach to the roof works, i.e. careful removal of several courses of roof tiles at the southern gable end by gloved hands and handheld tools, will be adopted by the contractors and carried out under the direct supervision of a suitably licensed ecologist.
- 7.2.5** If these non-licensed avoidance measures are adhered to, the proposals are considered highly unlikely to impair the ability of bats to survive, breed or reproduce or nurture their young, or lead to the loss of a bat roost. Therefore, a European Protected Species (EPS) mitigation licence is not required to allow the works to go ahead lawfully.
- 7.2.6** In the unlikely event that a bat roost is found during the soft strip, by either uncovering bat droppings or encountering a bat, the work must stop immediately and must not continue until further written advice has been received. At this stage, a European Protected Species (EPS) mitigation licence may be required to permit the works to recommence lawfully.

8 REFERENCES

CIEEM (2019b). *Advice Note on the Lifespan of Ecological Reports and Surveys*. CIEEM, Winchester.

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

Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd edition)*. JNCC, Peterborough.

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. CIEEM, Ampfield.

APPENDIX 1 – EXISTING AND PROPOSED PLANNING DRAWINGS





APPENDIX 2 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS

The categories detailed in **Table 2** below are derived from the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) and provide guidance for assessing the potential suitability of buildings (and other structures) for roosting bats. These categories are applied using professional judgement and irrespective of whether the presence of a bat roost has been confirmed during a survey, as additional bat roosts could be present which have not yet been discovered.

Table 2. Categories for potential suitability of buildings (and other structures) for roosting bats.

Potential Suitability	Category Justification
None	A building (or structure) that has no features likely to be used by any roosting bats at any time of the year (i.e. a complete absence of cracks, crevices or voids that could provide suitable shelter).
Negligible	A building (or structure) that has no obvious features likely to be used by roosting bats, but in this case a small element of uncertainty remains as bats will occasionally use small and apparently unsuitable features. This category may also be used where a bat could potentially roost due to one attribute, but it is considered unlikely due to another attribute (e.g. a feature that is subject to constant illumination from artificial lighting).
Low	A building (or structure) that has one or more potential roost sites suitable for opportunistic use by individual bats at any time of the year. However, these potential roost sites for bats do not provide sufficient space, shelter, protection, conditions and/or surrounding suitable habitat to be used regularly or by large numbers (i.e. unlikely to be suitable for a maternity colony and not a classic hibernation site).
Moderate	A building (or structure) that has one or more potential roost sites suitable for regular use by individual bats, or small non-breeding groups, due to sufficient space, shelter, protection, conditions and surrounding habitat. However, these potential roost sites for bats are unlikely to support a roost of high conservation status with regards to the type of roost only (i.e. maternity colonies and classic hibernation sites).
High	A building (or structure) that has one or more potential roost sites suitable for use by large numbers of bats more regularly and for longer periods of time due to sufficient space, shelter, protection, conditions and surrounding habitat. These potential roost sites for bats are capable of supporting high conservation status roosts (i.e. maternity colonies and classic hibernation sites).

APPENDIX 3 – DEFINITION OF BAT ROOST TYPES

The potential suitability of a building in conjunction with any evidence of bat presence is used to provide an initial assessment of likely roost type and importance. The types of roost considered are based on the following Natural England definitions:

- Day roost – a summer resting place used by individual bats, or small non-breeding groups, during the day;
- Night roost – a resting place used by individual bats on occasion, or by a whole colony regularly, during the night;
- Feeding perch – a resting place used by individual bats, or a few individuals, primarily for short periods of feeding during the night;
- Transitional roost – a place used by a few individual bats, or occasionally small groups, for a short period of time upon waking from hibernation or in the period prior to hibernation;
- Maternity roost – a place used by small to large groups of female bats to give birth and raise their young to independence;
- Hibernation roost – a place used by individual bats, or in groups, during winter where there is a constant cool temperature and high humidity; and
- Satellite roost – a place used by a few individuals to small groups of breeding female bats found in close proximity to the main nursery colony throughout the breeding season.

The importance of a bat roost is underpinned by the conservation status of the suspected species (i.e. the distribution/rarity of a species in a specific geographic location) and the type of roost (i.e. not all roosts have the same level of importance in supporting the local bat population). Further roost characterisation surveys may be required to fully determine the importance of a confirmed roost to allow for a robust impact assessment.

APPENDIX 4 – FURTHER SURVEY RATIONALE

In cases where no evidence of use by bats is found during a building inspection but the possibility of their presence cannot be ruled out, further presence/likely absence survey is likely to be required if the development proposals will impact potential roost sites.

Emergence surveys are carried out to establish the presence or likely absence of roosting bats in buildings (and other structures) and these are designed in accordance with the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) detailed in **Table 3** below.

Table 3. Recommended further survey for establishing presence/likely absence of roosting bats in buildings (and other structures).

Potential Suitability	Further Survey
None	No further surveys are required.
Negligible	No further surveys are required.
Low	A minimum of one dusk emergence survey visit should be undertaken in the period of May to August. However, if all areas (including cracks, crevices and voids) can be thoroughly inspected and no evidence of use by bats is found, then emergence surveys may not be required. In cases where a complete inspection cannot be carried out, professional judgement and proportionality should be applied when assessing the impacts of the development proposals.
Moderate	A minimum of two dusk emergence survey visits should be undertaken in the period of May to September, with at least one of the surveys between May and August; the survey visits should be spaced at least three weeks apart.
High	A minimum of three separate dusk emergence survey visits should be undertaken in the period of May to September (inclusive), with at least two of the surveys between May and August; the survey visits should be spaced at least three weeks apart.

In cases where the PRA and/or further survey establishes the presence of roosting bats in a building (or structure), this will likely trigger the need for roost characterisation to collect sufficient information to inform the impact assessment and mitigation strategy. The roost characterisation comprises information collected during the PRA, emergence surveys and by other methods, such as DNA analysis of bat droppings, and ultimately aims to determine the bat species roosting; the number of bats the roosts support; the roost access points; the locations of the roosts and the types of roost present. This information is crucial when applying for planning permission and/or a European Protected Species mitigation licence.