

17 Wilderness Road
Earley
Reading
Berkshire
RG6 7RU

Preliminary Roost Assessment

Report ref.: R2707_PRA_a

Report Quality Control Information	
Author	Meghan Porter (Qualifying member of CIEEM)
Reviewer	Sarah Foot MCIEEM

July 2024



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, 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 Potential Roost Suitability.....	16
6.2	Assessment of Confirmed/Potential Roost Status	16
7	IMPACT ASSESSMENT	18
7.1	Potential Impacts of Development Proposals	18
7.2	Recommended Actions.....	18
8	RECOMMENDATIONS	19
8.1	Further Surveys	19
8.2	Indicative Mitigation Strategy.....	19
9	REFERENCES	21
	APPENDIX 1 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS	22
	APPENDIX 2 – DEFINITION OF BAT ROOST TYPES	23
	APPENDIX 3 – FURTHER SURVEY RATIONALE	24

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Mr Vaseem Qureshi to undertake a Preliminary Roost Assessment (PRA) for bats at 17 Wilderness Road in Earley, Reading. The aim of the PRA is to determine the actual or potential presence of bats in the property and whether further survey and/or mitigation would be required for future proposed development activities.
- 1.1.2** The suburban area surrounding the property with gardens and woodland to the west of the site surrounding Whiteknight Lake provides continuous habitat that could be used as a flight path connecting to high-quality foraging habitats for any bat(s) roosting in the property.
- 1.1.3** No evidence of roosting bats was found within the roof void and therefore it is considered highly unlikely that void-dwelling species such as long-eared (*Plecotus* sp.) bats are present. Externally, approximately 5 small-sized bat droppings, of a size and shape typically deposited by *Pipistrellus* sp. bats were observed beneath a lifted hanging tile on the bay window on the front of the property. There were further potential roost features suitable for crevice-dwelling bats beneath ridge tiles with missing mortar on the single-storey rear extension. The property has been assigned moderate potential suitability for bats.
- 1.1.4** The development proposals will directly impact the external potential roost features observed on the rear elevation of the property. If bats are roosting in the property, the work would obstruct access to and result in the damage/destruction of bats roosts and lead to direct/indirect disturbance, injury and/or death of bats, which may have the potential to significantly affect the local distribution or abundance of a bat species.
- 1.1.5** The future development proposals cannot be altered to avoid the potential adverse effects on bats in the property; therefore further surveys are recommended to establish the presence or absence of bat roosts in the property, in order to be able to assess fully whether the development proposals will have an adverse effect on bats and design a mitigation strategy if necessary. A minimum of two dusk emergence survey visits should be undertaken in the period of May to early September.
- 1.1.6** This report contains information regarding a mobile species so it will likely be valid for less than 12 months (CIEEM 2019b).

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Mr Vaseem Qureshi to undertake a Preliminary Roost Assessment (PRA) for bats at 17 Wilderness Road in Earley, Reading.

2.1.2 The PRA was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for a two-storey side extension above the existing garage and a double-storey and single-storey rear extension, following the removal of the existing conservatory and single-storey section at the rear.

2.2 Site Location and Context

2.2.1 The property is a two-storey residential dwelling situated on the eastern side of Wilderness Road in Earley, Berkshire (OS grid reference: SU 74398 71823).

2.2.2 The property is within a suburban setting bordered by residential properties and their associated gardens along Wilderness Road and Aldbourne Avenue. Over 99ha of mixed woodland priority habitat (NERC Act 2006 Section 41 habitat of principle importance) surrounding Whiteknight Lake is situated approximately 20m to the western side of Wilderness Road. Sol Joel recreational park is situated approximately 200m to the northeast, with open grassland and bordered by mature trees.

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 future 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:

- OS maps and Google Earth – maps and satellite imagery were used to identify potential flight-paths and foraging habitats for bats;
- DEFRA Data Services Platform and MAGIC – maps were used to locate relevant designated sites, habitats and granted European Protected Species licences; and
- existing bat survey reports – any available reports were obtained from the client or relevant planning portal.

4.2 Building Inspection

Survey Details

4.2.1 A detailed inspection of the exterior and interior of the property was undertaken on the 9th July 2024 by Meghan Porter registered under Natural England Bat Survey Class Licence CL17 (Registration no. 2023-11300-CL17-BAT) and assisted by Sam Wenman, in accordance with good practice guidance (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 less than 12 months (CIEEM 2019b).

5 SURVEY RESULTS

5.1 Desk Study

- 5.1.1** Neighbouring gardens along Wilderness Road with woodland present on the western side of the road in close proximity to the site provide continuous habitat that could be used as a flight-path connecting to high-quality nearby foraging habitats such as Whiteknights lake present within Reading University Campus, approximately 515m to the west of the site.
- 5.1.2** Bat mitigation licences that have been granted within the last 10 years inside a 2-kilometre radius of the property are detailed in **Table 1** below.

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

Case Reference of Granted Licence	Species on the Licence	Licensable Period	Licensable Works	Distance (m)
2014-500-EPS-MIT	Common pipistrelle and soprano pipistrelle	29/04/2014-30/09/216	Unknown	455 W
2014-441-EPS-MIT	Common pipistrelle and soprano pipistrelle	14/04/2014-30/09/2019	Destruction and damage of a resting place	1147 N
2014-3941-EPS-MIT	Common pipistrelle and soprano pipistrelle	21/10/2014-30/11/2019	Destruction and damage of a resting place	1753 W

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 annotated in a plan, as follows:

External Survey

- 5.2.2** The detached house had a hipped roof with catslide roof on the southern side, a pitched front and rear gable, with a single-storey hipped roof extension on the northern and rear elevation, a glass roofed conservatory and a single-storey pitched extension to the rear of the garage (**Photographs 1 & 2**).



Photograph 1. Front of property viewed from the northwest.



Photograph 2. Rear of property viewed from the east.

5.2.3 The roof was covered with tightly fitting roof tiles, with two broken roof tiles on the rear elevation, with half the tile remaining in situ, and therefore there was no roosting opportunities (**Photographs 3 & 4; Target note 1**). The hip and ridge tiles were all fully mortared across the second-storey roof (**Photograph 5**).



Photograph 3. Closely fitted roof tiles (front elevation).



Photograph 4. Mostly tight roof tiles; broken roof tile, offering no roosting opportunities (rear elevation).



Photograph 5. Intact hip and ridge mortar.

5.2.4 A gap was observed under verge tiles on the single-storey extension to the rear of the garage, but upon closer inspection, the gaps were filled with mortar, deemed to be of limited extent and offered no roosting opportunities for bats (**Photograph 6; Target note 2**). Mortar was missing beneath the hip tiles on the single-storey rear extension, creating roost access opportunities for crevice-dwelling bats (**Photograph 7; Target note 3**).



Photograph 6. Lifted verge tiles; no suitable gap observed (rear elevation).



Photograph 7. Missing mortar under the hip of the single-storey roof (rear elevation).

- 5.2.5** The soffit box around the eaves was tightly fitted to the external wall around the property offering no potential access opportunities for bats (**Photograph 8**). The lead flashing was tight around the chimneys and above the glass-roofed conservatory (**Photograph 9**).



Photograph 8. Timber soffit tight to brickwork (rear elevation).



Photograph 9. Tight lead flashing around chimney (southern elevation).

- 5.2.6** The front gable and area above the bay window were clad with hanging tiles that were uneven and lifted, especially on the corners, and offered multiple roosting opportunities behind the tiles (**Photograph 10**; **Target note 4**). Further investigation of the gaps with a torch revealed a small number of small-sized bat droppings beneath a lifted tile on the northern corner of the gable (**Photograph 11**; **Target note 5**).



Photograph 10. Lifted and uneven hanging tiles on front gable (front elevation).



Photograph 11. Small-sized bat droppings observed under lifted hanging tile (front elevation).

Internal Survey

- 5.2.7** There was one roof void in the property, that was accessible via a loft hatch on the first floor and covered the second-storey footprint of the house. The main section was of hipped construction with front and rear pitched gable ends. The main hipped section had a ridge height of 1.75m, was lightly cobwebbed at the ridge beam and was lined by a breathable roofing membrane that was tight throughout (**Photograph 12**). The floor was centrally boarded and insulated with fibreglass, which went up to and covered the eaves in places, with polystyrene boards blocking the eaves along the front pitched gable

(**Photograph 13**). A chimney was present at the eaves at the southern hipped end, with tight timber boarding and cobwebs visible (**Photograph 14**).



Photograph 12. Cobwebbed ridge; intact breathable membrane (roof void).



Photograph 13. Eaves blocked with polystyrene boards (roof void).



Photograph 14. Tight timber boarding around chimney at the eaves (roof void).

5.2.8 The front pitched gable was covered with breathable membrane that was tight to the timbers (**Photograph 15**). The rear pitched gable was of brickwork construction and was tight to the rafters along the edge. Shredded cavity insulation was visible coming out of gaps where the timber beams entered the gable (**Photograph 16**).



Photograph 15. Breathable membrane on the front gable end (roof void).



Photograph 16. Shredded cavity insulation coming out of the rear gable around the timber beams (roof void).

5.2.9 A small lofted area was present at the front of the garage, beneath the catslide roof. The half gable was of blockwork construction, which was tight to the roofing felt and rafters with the brickwork wall of the house on the northern side (**Photograph 17**). The top of the brickwork wall was open up to the roof void, while the eaves were blocked by fibreglass insulation (**Photographs 18 & 19**).

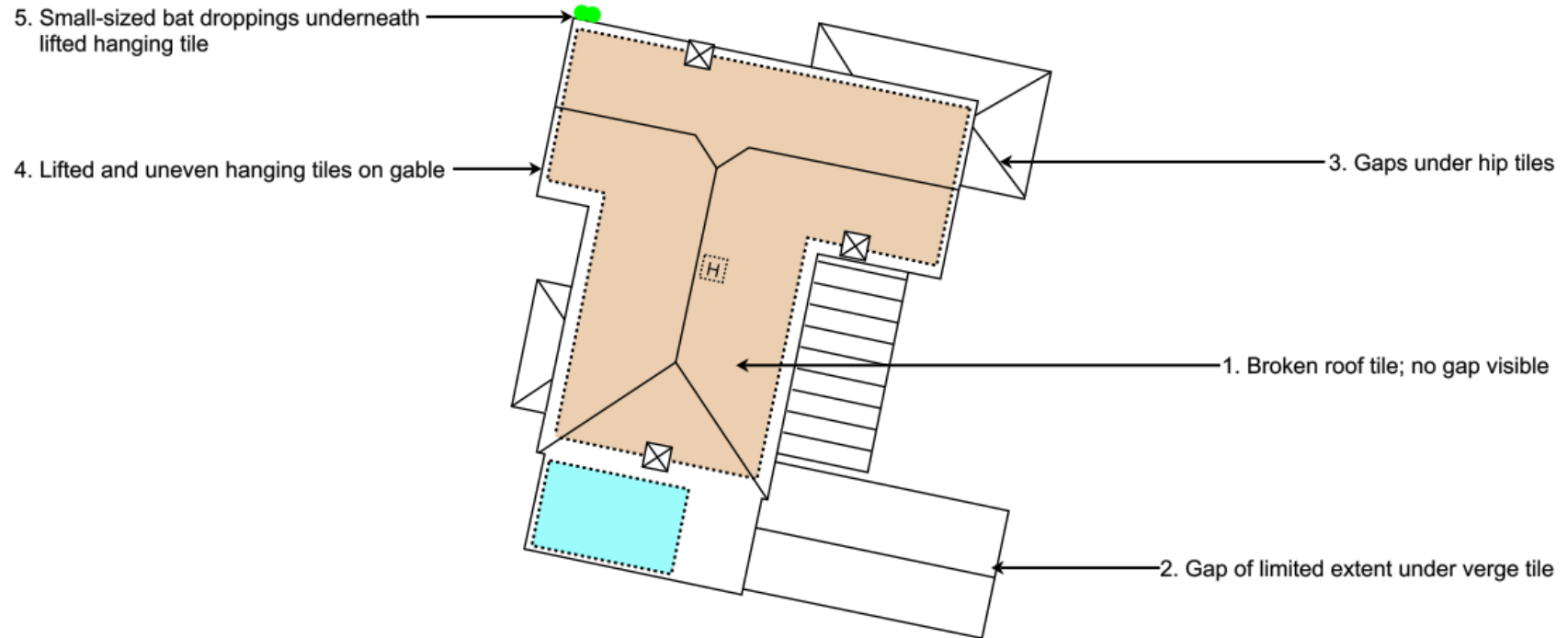


Photograph 17. Blockwork front gable (garage loft).



Photograph 18. Gap above brickwork wall (garage loft).

5.2.10 No evidence of roosting bats were observed during the internal inspection of the property.



● Small-sized bat dropping
 n. External target note
  Chimney
  Roof void
  Lofted area
  Loft hatch

Drawn by:	Date:	Scale:	17 Wilderness Road, Earley	
MP	July 2024	Not to scale	Preliminary Roost Assessment Plan	

6 DISCUSSION

6.1 Assessment of Potential Roost Suitability

- 6.1.1** The suburban area surrounding the property with gardens connect to high-quality foraging habitats, such as the lake and woodland to the west, for any bat(s) roosting in the property. Furthermore, the search of granted bat mitigation licences identified common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) day roosts in the local area; species that favour crevice roosts.
- 6.1.2** The suitable/potential bat access points on the property included gaps under hip tiles on the rear elevation (**Photograph 7; Target note 3**) and lifted and uneven hanging tiles on the front gable end (**Photographs 10 & 11; Target note 4**). These external features are likely to have sufficient space, shelter, protection, conditions and surrounding habitat for use by small numbers of crevice-dwelling bats, such as the locally recorded common and soprano pipistrelle bats.
- 6.1.3** Taking into account the number and type of features present, the house has been assigned moderate potential suitability for bats (see **Appendix 1** for potential suitability categories).

6.2 Assessment of Confirmed/Potential Roost Status

- 6.2.1** No evidence of roosting bats was found inside the roof void therefore confirming the likely absence of void-dwelling bat species such as the brown long-eared bat (*Plecotus auritus*). The void offers suitable conditions for a long-eared bat roost, however access opportunities are restricted to potential gaps at the hanging tiles on the front gable end and these were internally tightly sealed from the exterior.
- 6.2.2** Approximately 5 small-sized bat droppings, of a typical size and shape to those deposited by *Pipistrellus* sp., were observed beneath hanging tiles on the north-western corner of the gable end (**Photograph 11; Target note 5**). This confirms the presence of a roost within the property, likely to be a day roost used by a small number of crevice-dwelling bats. The external features offer roosting opportunities for a range of crevice-dwelling species, such as the abundant, widespread and locally recorded common pipistrelle (*P. pipistrellus*) bat and potentially the rarer Brandt's / whiskered bats (*Myotis brandtii* / *mystacinus*). The presence of a maternity colony is considered unlikely given the scale and nature of the features and extent of evidence observed.
- 6.2.3** The common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*Pipistrellus 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). Brandt's / whiskered bat (*Myotis brandtii* / *mystacinus*) are small *Myotis* species that are widespread and will roost in the same buildings as the much more abundant pipistrelle species (Mathews *et al.* 2018). Roosts supporting these species hold site to county level conservation importance subject to the roost type, 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 consist of a second-storey addition above the existing garage, a two-storey rear extension and rear extension to the existing single-storey extension. The impacts of the proposals have been assessed in accordance with the mitigation hierarchy during construction and post development as follows:

Construction Phase

- 7.1.2** The development proposals will result in the direct removal of the hip tiles with roost access features on the rear elevation in order to construct the proposed rear elevation, which may result in the damage and/or destruction of bat access points and roost sites. The construction activities could therefore lead to direct/indirect disturbance, injury and/or death of bats during the removal of the hip tiles. All construction activities are focused on the rear elevation and therefore the confirmed roost under hanging tiles on the front elevation will not be impacted during the construction phase.

Post Development

- 7.1.3** If further surveys confirm the presence of a bat roost on the rear elevation under the hip tiles, in the absence of mitigation and/or compensation, the development proposals could result in the permanent loss of a bat roost. The loss of a roost has potential to significantly affect the local distribution or abundance of a bat species, subject to its conservation status. The confirmed roost on the front elevation will be unaffected in the long-term.

7.2 Recommended Actions

- 7.2.1** The development proposals cannot be altered to avoid the potential adverse effects on bats in the house. Therefore, further surveys are recommended to determine the presence or likely absence of bat roosts in the property, in order to be able to assess fully whether the development proposals will have an adverse effect on bats (see **Appendix 3** for further survey rationale). The recommended further surveys are detailed in **Section 8.1** below.

8 RECOMMENDATIONS

8.1 Further Surveys

- 8.1.1** Further surveys are recommended to determine the presence or likely absence of bat roosts in the property, in order to be able to assess fully whether the development proposals will have an adverse effect on bats.
- 8.1.2** 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. These survey visits will determine the presence or likely absence necessary to inform an impact assessment and mitigation strategy. An additional emergence survey may be deemed necessary to characterise the roost if bats are recorded.
- 8.1.3** Once roost characterisation is complete, an impact assessment with reference to the mitigation hierarchy will be made. In cases where the adverse effects caused by the development proposals are unavoidable, an application for a European Protected Species (EPS) mitigation licence or the registration of the site under the Bat Mitigation Class Licence (BMCL) would be required to permit the work to proceed lawfully. An EPS mitigation licence or BMCL can be issued by Natural England if the three licensing tests (detailed in **Paragraph 3.3.1**) have been satisfied by the proposals.
- 8.1.4** To satisfy one of the licensing tests, it would be necessary to demonstrate that the 'favourable conservation status' of the bat species using the property is maintained during the construction phase and post development. A mitigation strategy setting out avoidance, mitigation, compensation and enhancement measures would be required to achieve this. Indicative and provisional measures are summarised in **Section 8.2** below.

8.2 Indicative Mitigation Strategy

- 8.2.1** If further surveys and the impact assessment have demonstrated that an EPS mitigation licence or Bat Mitigation Class Licence (BMCL) (for low conservation roosts) is required to permit lawful development, the commencement of construction activities impacting the bat roosts would be timed to avoid the periods when bats are most susceptible to disturbance, i.e. winter hibernation period if there is a reasonable likelihood of hibernating bats (mid-November to mid-March) and peak breeding season (May to August) in the unlikely event that a maternity colony is found.

- 8.2.2** Alternative roost sites would be made available to bats prior to and throughout the construction phase by installing at least one woodcrete bat box (suitable for the type of roost/species present) on a suitable mature tree or a pole mount. The bat box should be positioned at least 4 metres from the ground, away from artificial lighting and sheltered from strong wind while being exposed to sunshine (usually south, southeast or southwest facing).
- 8.2.3** Before the commencement of construction activities impacting the bat roost (i.e. the licensable works), a licensed ecologist or 'Registered Consultant' under the BMCL would provide a toolbox talk to all contractors working on site detailing how bats use buildings, legal protection, working methods (i.e. soft demolition/roof strip by hand), actual and potential roost sites, actions to be taken if a bat is found and personal safety procedures.
- 8.2.4** A soft demolition/roof strip approach to the works affecting the bat roosts would be adopted, i.e. careful removal of cladding by gloved hands and handheld tools under the direct supervision of a licensed ecologist or 'Registered Consultant'. In the event that a bat is found during the course of the works, the licensed ecologist or 'Registered Consultant' would capture the bat and transfer it directly to a woodcrete bat box installed in advance.
- 8.2.5** Replacement bat access points and roost sites may need to be created and/or reinstated into the property as part of an EPS mitigation licence or BMCL site registration. This compensation should aim for like-for-like roost sites with access points corresponding as closely as possible to the previous locations.
- 8.2.6** Where access is provided for bats, a bituminous roofing felt that does not contain polypropylene/polyethylene filaments (e.g. bitumen felt type 1F) or a non-bitumen coated 'breathable' membrane that has passed the snagging propensity test (e.g. TLX 'Bat Safe') should be used; other non-bitumen coated membranes are harmful to bats and must be avoided.

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 – POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS

The categories detailed in **Table 1** 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 1. 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 2 – 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 3 – FURTHER SURVEY RATIONALE

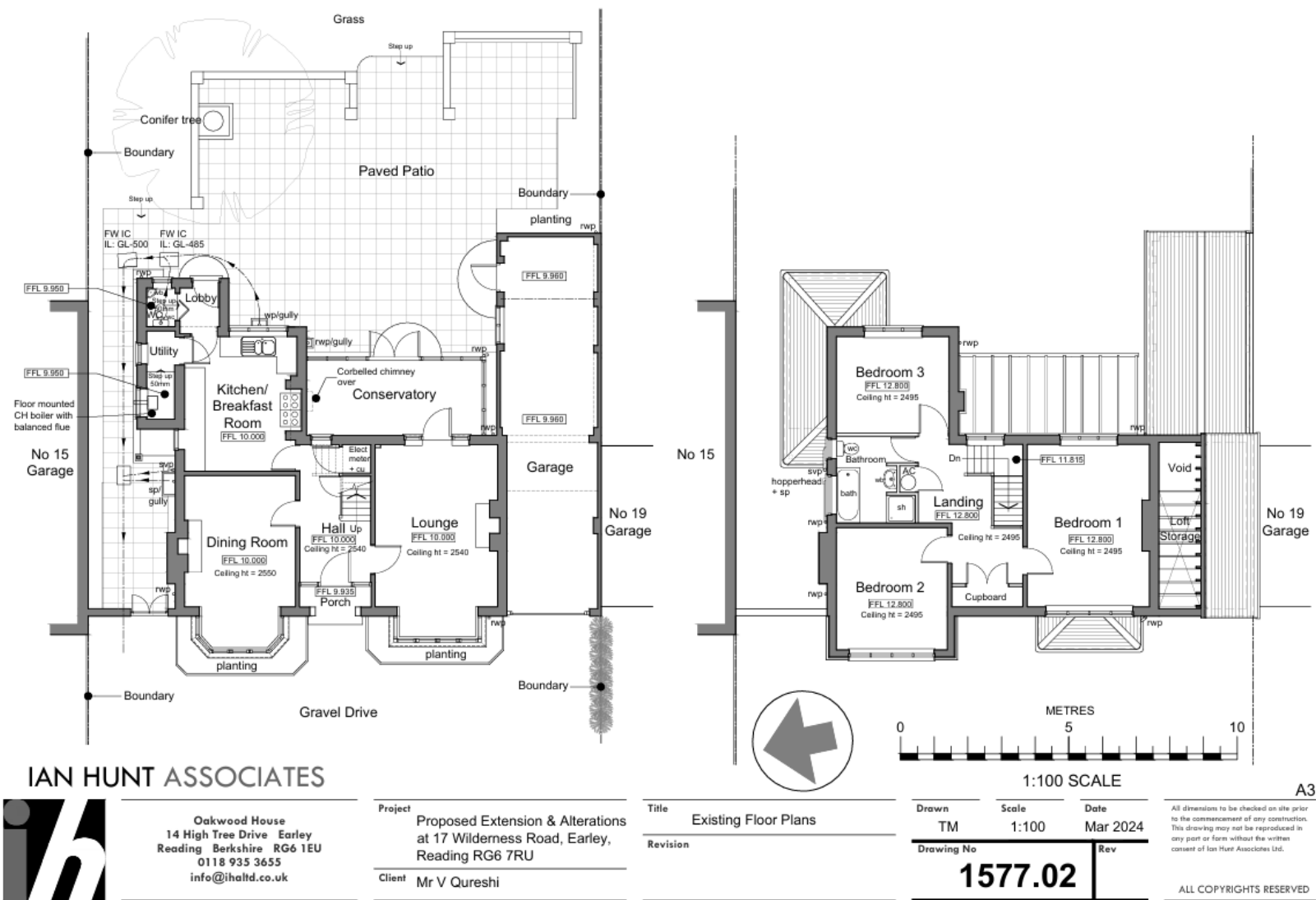
In cases where no evidence of use by bats is found during a building inspection but the possibility of their presence cannot be ruled out, further presence/likely absence survey is likely to be required if the development proposals will impact potential roost sites. Emergence surveys are carried out 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 2** below.

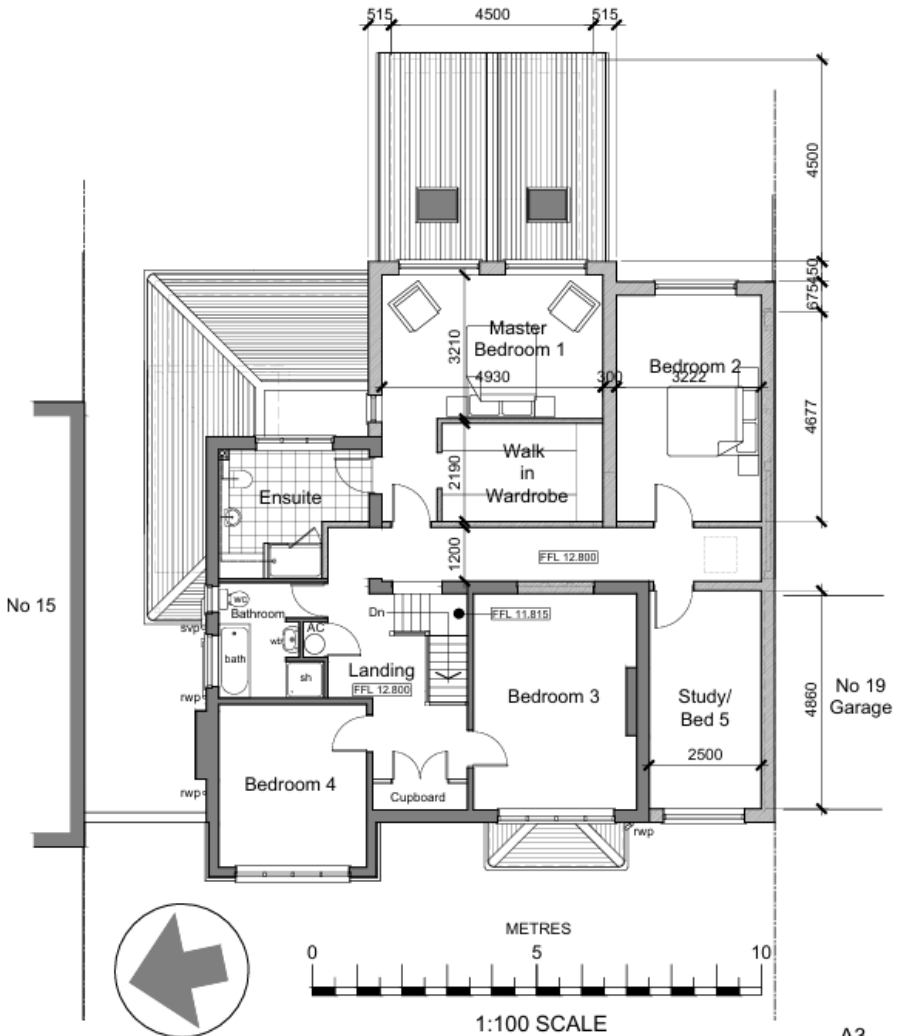
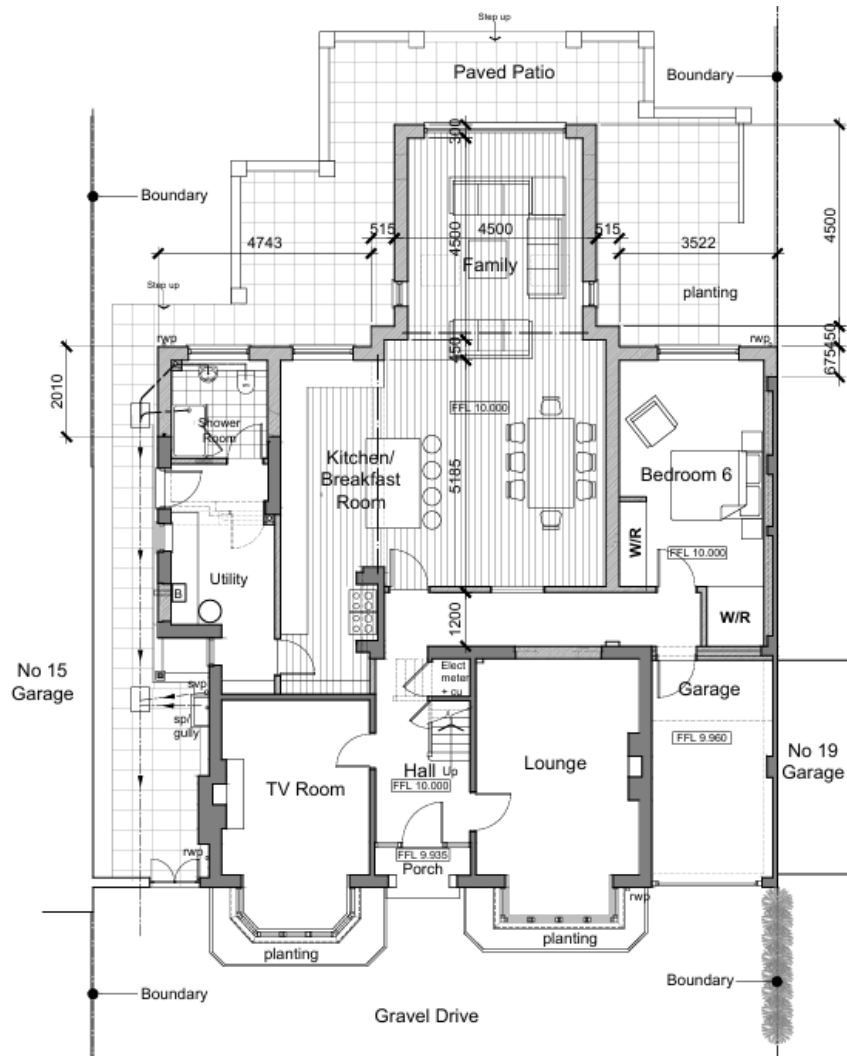
Table 2. Recommended further survey for establishing presence/likely absence of roosting bats in buildings (and other structures).

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.

APPENDIX 4 – EXISTING AND PROPOSED PLANS





IAN HUNT ASSOCIATES



Oakwood House
14 High Tree Drive Earley
Reading Berkshire RG6 1EU
0118 935 3655
info@ihalt.co.uk

Project Proposed Extension & Alterations
at 17 Wilderness Road, Earley,
Reading RG6 7RU
Client Mr V Qureshi

Title Proposed Floor Plans
Revision

Drawn IRH Scale 1:100 Date Apr 2024
Drawing No 1577.05 Rev

All dimensions to be checked on site prior
to the commencement of any construction.
This drawing may not be reproduced in
any part or form without the written
consent of Ian Hunt Associates Ltd.

ALL COPYRIGHTS RESERVED



West Elevation



North Elevation

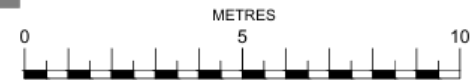
IAN HUNT ASSOCIATES



Oakwood House
14 High Tree Drive Earley
Reading Berkshire RG6 1EU
0118 935 3655
info@ihalt.co.uk

Project Proposed Extension & Alterations
at 17 Wilderness Road, Earley,
Reading RG6 7RU
Client Mr V Qureshi

Title Proposed Elevations Sheet 1
Revision



1:100 SCALE

A3

Drawn	Scale	Date
IRH	1:100	Apr 2024
Drawing No	Rev	
1577.06		

All dimensions to be checked on site prior to the commencement of any construction. This drawing may not be reproduced in any part or form without the written consent of Ian Hunt Associates Ltd.

ALL COPYRIGHTS RESERVED



East Elevation



South Elevation

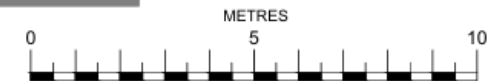
IAN HUNT ASSOCIATES



Oakwood House
14 High Tree Drive Earley
Reading Berkshire RG6 1EU
0118 935 3655
info@ihald.co.uk

Project Proposed Extension & Alterations
at 17 Wilderness Road, Earley,
Reading RG6 7RU
Client Mr V Qureshi

Title Proposed Elevations Sheet 2
Revision



1:100 SCALE

A3

Drawn IRH	Scale 1:100	Date Apr 2024
Drawing No 1577.07	Rev	

All dimensions to be checked on site prior to the commencement of any construction. This drawing may not be reproduced in any part or form without the written consent of Ian Hunt Associates Ltd.

ALL COPYRIGHTS RESERVED