

139 Wilderness Road
Earley
Wokingham
RG6 5RD

Bat Emergence Survey

Report ref.: R2960_BES_a

Report Quality Control Information	
Author	Jake Morgan (Qualifying member of CIEEM)
Reviewer	John Wenman MCIEEM

September 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: 1 Diesel House, Honey Hill, Wokingham Berkshire RG40 3BL 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.....	5
2.3	Report Objectives	5
3	LEGISLATIVE AND POLICY BACKGROUND	6
3.1	Relevant Legislation.....	6
3.2	Planning Policy	6
3.3	Mitigation Licensing	7
4	SURVEY METHODOLOGY	8
4.1	Background Data Search.....	8
4.2	Emergence Survey	8
4.3	Survey Limitations and Report Validity	8
5	SURVEY RESULTS	9
5.1	Overview.....	9
5.2	Background Data Search.....	9
5.3	Emergence Survey	9
6	DISCUSSION AND RECOMMENDATIONS	16
6.1	Assessment of Bat Roost Status.....	16
6.2	Impact Assessment.....	16
7	MITIGATION AND COMPENSATION PROPOSALS	17
8	REFERENCES	19
	APPENDIX 1 – DARKEST POINT OF SURVEY AND/OR VIEWPOINT FOR NIGHT VISION AIDS	20
	APPENDIX 2 – BAT EMERGENCE SURVEY RAW DATA TABLES	21
	APPENDIX 3 – PROPOSED ELEVATIONS	24

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Prasad Duddi to undertake a Bat Emergence Survey (BES) at 139 Wilderness Road in Earley, Wokingham. The survey was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for a proposed part single storey front, part single storey rear and two storey side and part front extensions (see drawings in **Appendix 3**).
- 1.1.2** The BES follows a Preliminary Roost Assessment for bats (PRA) conducted by John Wenman Ecological Consultancy in May 2025 (Report ref.: R2960_PRA_a). During the PRA a single small-sized bat dropping, of a size and shape of those typically deposited by *Pipistrellus* species was visible internally on the southern gable,. The dropping's location corresponded with potential bat access points via gaps in verge mortar at the apex of the southern gable. The property was assigned moderate suitability – confirmed roost.
- 1.1.3** In line with good practice guidelines (Collins 2023), two dusk emergence survey visits were undertaken and these were completed on the 21st July and 11th August 2025. A peak count of four *Pipistrellus* sp. bats (identified as common pipistrelle (*Pipistrellus pipistrellus*) based on subsequent recordings) were observed emerging from crumbling mortar at the apex of the southern gable. The survey findings demonstrate that the house supports a day roost for low numbers of male or non-breeding common pipistrelle *Pipistrellus pipistrellus* bats, i.e. a roost of low conservation significance.
- 1.1.4** A European Protected Species (EPS) Mitigation Licence will be required to allow the work to proceed lawfully, and the survey findings establish that the site would qualify for registration under the Bat Mitigation Class Licence (BMCL) WML-CL21 (Low Impact). Under the terms of a full EPS mitigation licence or BMCL, mitigation for the impacts of the work will be required to avoid harming bats and the mitigation strategy is set out in **Section 7**.
- 1.1.5** This report contains information regarding a mobile species so it will likely be valid for up to 12 months only (CIEEM 2019b).

2 INTRODUCTION

2.1 Project Background

2.1.1 John Wenman Ecological Consultancy LLP was instructed by Prasad Duddi to undertake a Bat Emergence Survey (BES) at 139 Wilderness Road in Earley, Wokingham.

2.1.2 The survey was commissioned to accompany a householder planning application to be submitted to Wokingham Borough Council seeking consent for proposed part single storey front, part single storey rear and two storey side and part front extensions (see drawings in **Appendix 3**).

2.1.3 The Bat Emergence Survey follows a Preliminary Roost Assessment for bats (PRA) conducted by John Wenman Ecological Consultancy in May 2025 (Report ref.: R2960_PRA_a). The PRA report states the following:

'The property possesses potential bat access points via gaps in verge mortar at the southern gable end. These potential access points are considered likely to lead to a suitable crevice roost location at the apex of the southern gable end within the wall cavity and soffit box.

*The potential access points correspond to the location of a small bat dropping found inside the roof void. The small bat dropping, resembling those typically deposited by the abundant and widespread common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*), confirms the presence of a roost within the southern gable end.*

Based on the above assessment, i.e. one suitable crevice roost location where evidence has confirmed bat presence, the property has been assigned moderate suitability – confirmed'.

2.1.4 The PRA report recommends the following:

'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. If roosting bats are present, these survey visits enable the roost characterisation necessary to inform an impact assessment and mitigation strategy.'

2.2 Site Location and Context

- 2.2.1** The property is a link-detached house located on the eastern side of Wilderness Road by the junction of Elm Road and Pepper Lane in Earley, Wokingham (central OS grid reference: SU 73857 71136).
- 2.2.2** The property is set amongst other suburban properties with connected private gardens. The University of Reading's Whiteknights Campus is on the opposite side of Wilderness Road and this has open space with grassland, lakes and woodland – habitats suitable for feeding and commuting bats.

2.3 Report Objectives

- 2.3.1** The aim of the bat emergence survey is to determine the presence or absence of roosting bats and to characterise the bat roost(/s) in cases where presence is confirmed. The emergence survey findings inform an impact assessment and mitigation strategy for the development proposals and ascertain whether a European Protected Species (EPS) mitigation licence would be required to allow the works to proceed lawfully.

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 Background Data Search

- 4.1.1** The Berkshire & South Buckinghamshire Bat Group (BSBBG) was commissioned to undertake a search of their records within a 1 kilometre radius of the property.

4.2 Emergence Survey

- 4.2.1** In line with good practice guidelines (Collins 2023), dusk emergence survey visits were undertaken on the 21st July and 11th August 2025. The survey visits were undertaken by experienced bat surveyor Conor Watson ACIEEM (CL18: 2024-11877-CL18-BAT). The surveyor covered the single potential bat access point at the southern gable end during both visits - refer to emergence survey plan in **Section 5** below.
- 4.2.2** The equipment used during the survey was a full-spectrum sampling bat detector (Batlogger M2) and night vision aid (Sionyx Aurora Pro nightvision camera with infrared floodlights/torches). A still shot of the darkest point/viewpoint of the surveys has been included for the night vision aid in **Appendix 1**.
- 4.2.3** The emergence surveys started 15 minutes before sunset and continued for 1 hour and 30 minutes after sunset. Within a five-day period after the survey, the bat call recordings were processed and analysed using the BatExplorer computer software packages and the night vision video footage was reviewed in the VLC Media Player.
- ### **4.3 Survey Limitations and Report Validity**
- 4.3.1** There were no significant constraints to the bat emergence surveys, which were undertaken during the optimal survey season, i.e. May to August, (particularly for detecting and characterising breeding roosts) and in conditions suitable for bat activity, i.e. dry and calm with air temperatures 10°C or above at sunset (Collins 2023).
- 4.3.2** This report contains information regarding a mobile species so it will likely be valid for up to 12 months only (CIEEM 2019b).

5 SURVEY RESULTS

5.1 Overview

- 5.1.1 The results from the data search are detailed below. The bat emergence survey findings are described, summarised in **Tables 1 – 4** and illustrated in **Figures 1 & 2** below; the raw detector data is supplied in **Appendix 2**.

5.2 Background Data Search

- 5.2.1 The BSBBG data search revealed that at least seven species have been recorded locally within the last 10 years: serotine (*Eptesicus serotinus*), Daubenton's (*Myotis daubentonii*), noctule (*Nyctalus noctula*), Ntahusius' pipistrelle (*Pipistrellus nathusii*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), and brown long-eared (*Plecotus auritus*). The nearest records are for *N. nyctalus* at a residential site within 100 metres where several passes were recorded whilst a juvenile *N. nyctalus* was being flown. The next closest recordings are for *P. pipistrellus* that was found injured within 200 metres. No bat mitigation licences have been granted within the last 10 years inside a 2km radius of the application site.

5.3 Emergence Survey

21st July 2025

- 5.3.1 Four pipistrelle bats (*Pipistrellus* sp.) (which did not call at emergence but were identified as likely common pipistrelle (*Pipistrellus pipistrellus*) from subsequent recordings) were observed emerging from crumbling verge mortar at the apex of the southern gable at 21:19 (12 minutes after sunset), 21:26 (19 minutes after sunset) and 21:32 (25 minutes after sunset) (**Photographs 1 – 4**).



Photograph 1. *Pipistrellus* sp. emergence at 21:19.



Photograph 2. *Pipistrellus pipistrellus* emergence at 21:26.



Photograph 3. Pipistrellus sp. emergence at 21:32.



Photograph 4. Pipistrellus sp. emergence at 21:32.

Table 1. Weather conditions and survey timings

Weather	Wind (BF0-12)	Cloud cover (oktas)	Rain	Temperature (°C)	
	0	1/8	None	Start	Finish
Start	20:52	Sunset	21:07	Finish	22:37

Table 2a. Surveyor recordings at location 1

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle	65	4 – 21:19, 21:26, 21:32, 21:32 (no calls made by emerging bats but identified as common pipistrelle based on subsequent calls)	21:28 (21)
Soprano pipistrelle	1	0	21:31 (24)
Noctule	2	0	21:26 (19)

5.3.2 The first recorded bat that did not emerge from the building was a noctule (*Nyctalus noctula*) heard and seen by the surveyor at 21:26 (19 minutes after sunset) commuting high overhead from northeast to west. This was then followed by common pipistrelle (*Pipistrellus pipistrellus*) heard at 21:28 (21 minutes after sunset) and soprano pipistrelle (*Pipistrellus pygmaeus*) heard at 21:31 (24 minutes after sunset). Whilst only a single *P. pygmaeus* was heard, the recording falls within the typical emergence period for this species indicating that it is likely roosting nearby.

5.3.3 Activity was moderate throughout the survey period and was primarily dominated by common pipistrelle (*Pipistrellus pipistrellus*) foraging activity across the southern gable, within the rear garden and over the front driveway.

11th August 2025

5.3.4 A single pipistrelle bat (*Pipistrellus* sp.) (subsequently identified to be a common pipistrelle (*Pipistrellus pipistrellus*) based on subsequent calls) was observed emerging from crumbling verge mortar at the apex of the southern gable at 20:36 (3 minutes after sunset) (**Photograph 5**).



Photograph 5. Pipistrellus sp. emergence at 20:36

Table 3. Weather conditions and survey timings

Weather	Wind (BF0-12)	Cloud cover (oktas)	Rain	Temperature (°C)	
	Start	Finish			
	0	7/8	Light	23	20
Start	20:18	Sunset	20:33	Finish	22:03

Table 4a. Surveyor recordings at location 1

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
Common pipistrelle	41	1 – 20:36	20:31 (2 minutes before sunset)
Soprano pipistrelle	8	0	20:35 (2)
Noctule	4	0	21:03 (33)
Serotine	1	0	21:06 (30)

- 5.3.5** The first recorded bat was a common pipistrelle (*Pipistrellus pipistrellus*) at 20:31 (2 minutes before sunset) that was heard and seen by the surveyor passing along the southern gable from south to west. This was then followed by a soprano pipistrelle (*Pipistrellus pygmaeus*) that was heard at 20:35 (2 minutes after sunset). These recordings fall early within the typical emergence periods of these species, indicating that these recorded individuals were very likely to have emerged nearby. Serotine (*Eptesicus serotinus*) and noctule (*Nyctalus noctula*) were also recorded within their typical emergence periods at 21:06 (30 minutes after sunset) and 21:03 (33 minutes after sunset) respectively.
- 5.3.6** Activity was moderate throughout the survey period and primarily dominated by *P. pipistrellus* and *P. pygmaeus* foraging passes across the southern gable, over the front driveway and within the rear garden. The single *E. serotinus* was also observed passing across the southern gable from west to east.

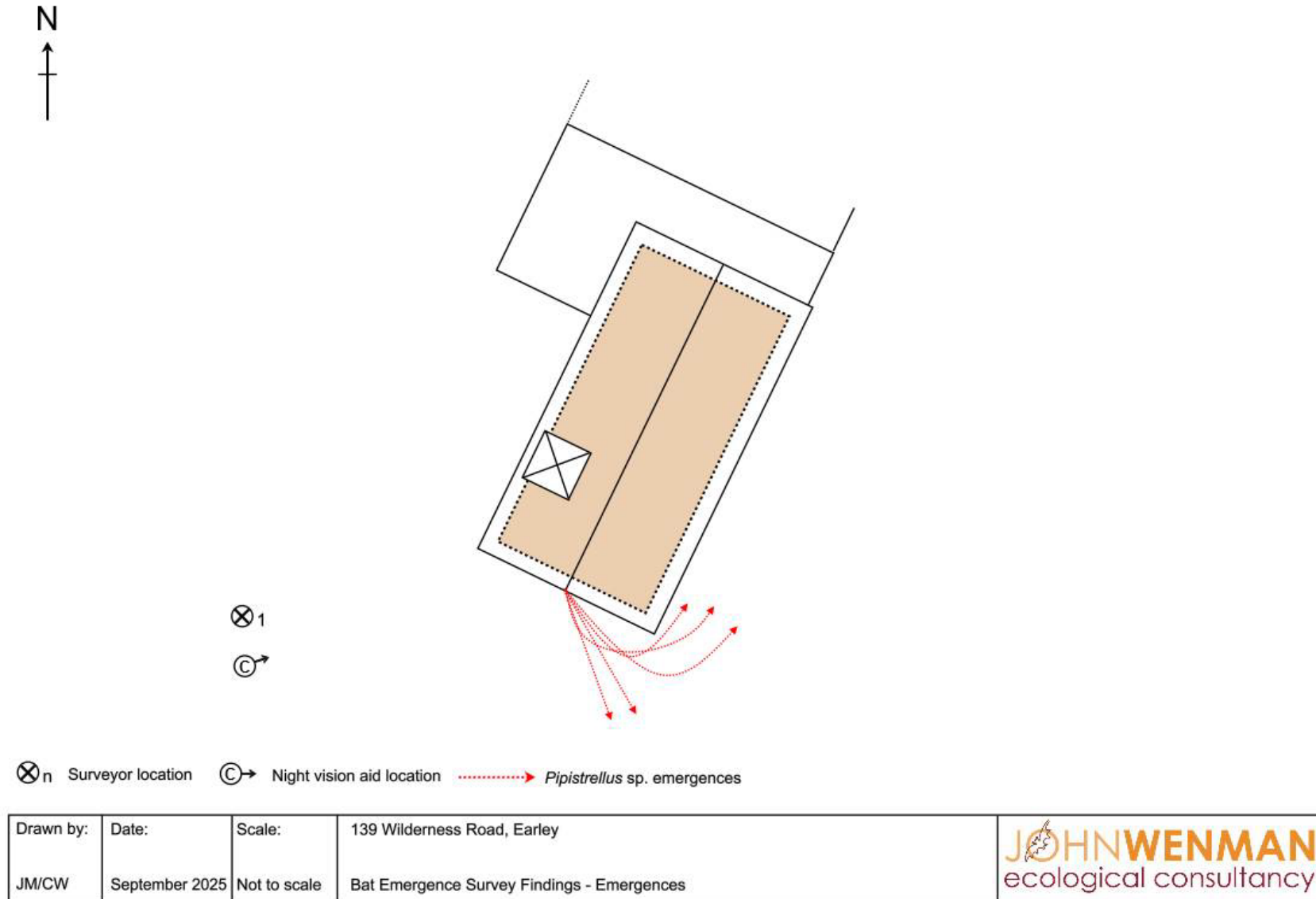


Figure 1 – Bat Emergence Survey Findings – Emergences

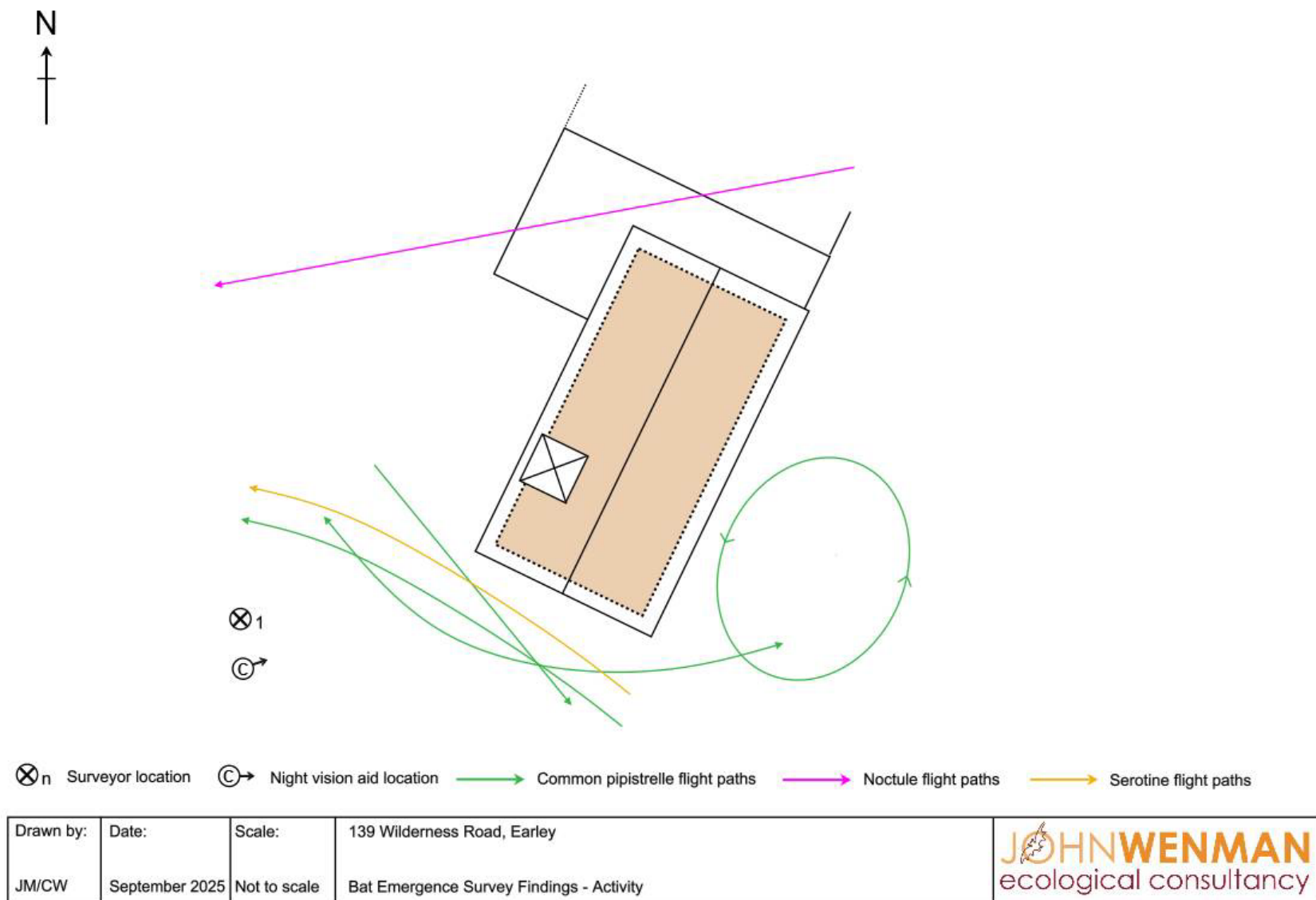


Figure 2 – Bat Emergence Survey Findings - Activity

6 DISCUSSION AND RECOMMENDATIONS

6.1 Assessment of Bat Roost Status

6.1.1 During the emergence surveys, a peak count of four *Pipistrellus* sp. bats were recorded emerging from crumbling mortar at the apex of the southern gable. These recordings were all silent but were identified to most likely to be from common pipistrelle (*Pipistrellus pipistrellus*) due to subsequent recordings; soprano pipistrelle (*Pipistrellus pygmaeus*) was recorded early within the typical emergence period for the species so the presence of this species in the future cannot be ruled out. These findings are consistent with the building acting as a day roost (i.e. summer resting place used by individual or small groups of male or non-breeding bats) for common pipistrelle bats.

6.1.2 Common pipistrelle (*P. pipistrellus*) is a crevice-dwelling species that is one of the most abundant and widespread bat species in Great Britain. This species occurs in almost any habitat type and is well adapted to the built environments; a species most regularly reported roosting in houses and churches (Mathews *et al.* 2018). Day roosts of this species hold site level conservation importance only and the loss of such roosts is not usually significant beyond the scale of the site (Reason & Wray 2023).

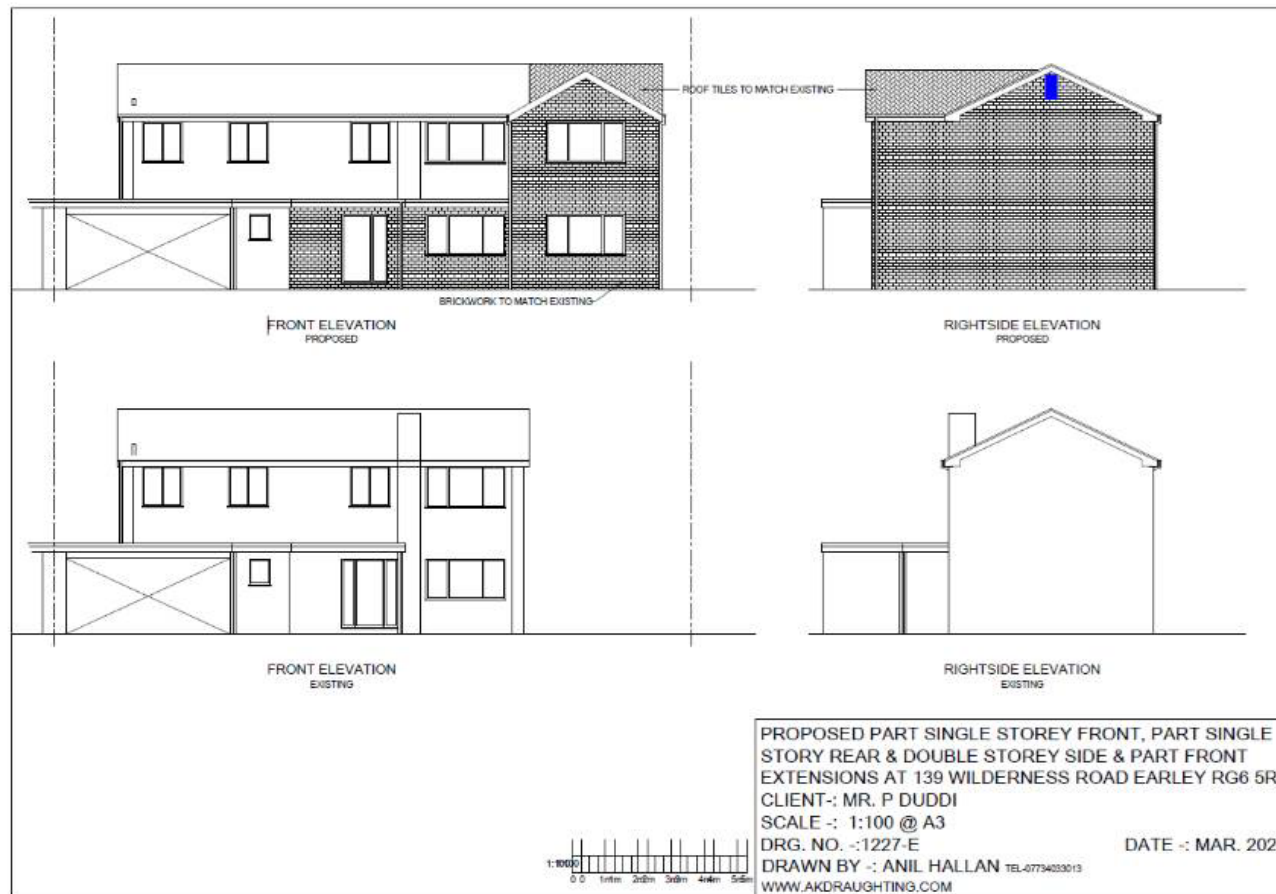
6.2 Impact Assessment

6.2.1 The survey data demonstrates that the planning application seeking consent for part single storey front, part single storey rear and two storey side and part front extensions (refer to proposed plans in **Appendix 4**) will result in the permanent loss of a confirmed common pipistrelle (*Pipistrellus pipistrellus*) day roost. In the absence of mitigation measures, the works could cause disturbance, injury and or death of bats.

6.2.2 A European Protected Species (EPS) Mitigation Licence will be required to allow the work to proceed lawfully, and the survey findings establish that the property would qualify for registration under the “low impact” Bat Mitigation Class Licence (BMCL) WML-CL21. Under the terms of a full EPS mitigation licence or BMCL, mitigation for the impacts of the work will be required in order to avoid harming bats and the mitigations proposals detailing the strategy to be adopted are set out in **Section 7** below.

7 MITIGATION AND COMPENSATION PROPOSALS

- 7.1.1** Following the grant of planning consent, before the licensable work begins i.e. removal of roof tiles and mortar across the southern gable end, a European Protected Species Mitigation Licence (EPSML) or confirmation of the registration of the site under the Bat Mitigation Class Licence (BMCL) (Low Impact) WML-CL21 will be obtained.
- 7.1.2** All licensable works to the house i.e. removal of roof tiles and mortar across the southern gable end, will be undertaken outside of the winter hibernation season (mid-November to February) to minimise the risk of disturbing torpid bats. One woodcrete bat box will be fixed to a suitable mature tree or purpose-built pole in the garden to the east of the property prior to the works starting and will be in place for a minimum of five years (boxes can only be removed after the five years if no evidence of use has been found at this stage).
- 7.1.3** Removal of the tiles and mortar along the southern gable will be carried out by a soft strip i.e. hand removal with handheld tools if necessary. Before the soft strip begins, the licensed ecologist or 'Registered Consultant' if working under the BMCL, will give a toolbox talk to the contractors on site detailing bats are present, the legislation protecting bats, the location of the roosting site in the buildings, good working practices, the measures that are required to protect bats during the work and what to do if bats are found. A copy of the licence will be available for inspection on site during all licensable works.
- 7.1.4** The tiles and mortar will be carefully removed by gloved hands under the supervision of a licensed ecologist, or Registered Consultant if working under the BMCL. If bat(s) are discovered during the work, the licensed ecologist or Registered Consultant would capture the bat(s) and transfer it/them directly to a bat box erected in advance of the works.
- 7.1.5** In the long-term, compensatory roosting opportunities will be incorporated into the final design and will correspond to the location of the existing common pipistrelle day roost access point by installing an integrated bat box such as the 1FR Schwegler Bat Tube (or suitable equivalent) with an access slot made within the new southern gable (see **Figure 3** below).



 Integral 1FR Schwegler Bat Tube

Drawn by: Anil Hallan Amended by JM	Date: September 2025	Scale: Not to scale	139 Wilderness Road, Earley Bat Roost Mitigation	
--	-------------------------	------------------------	---	---

Figure 3 – Bat Roost Mitigation

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.

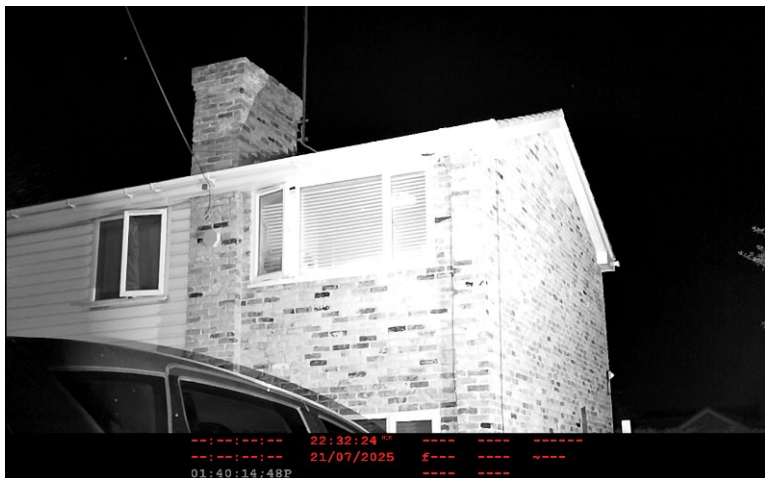
Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England,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

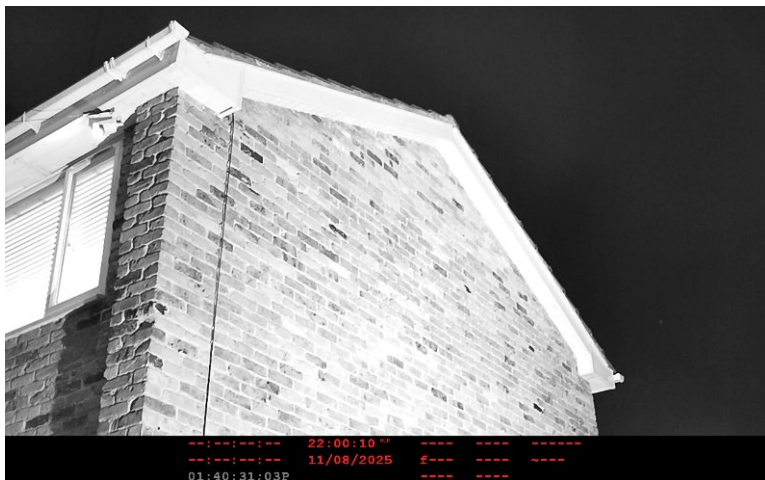
APPENDIX 1 – DARKEST POINT OF SURVEY AND/OR VIEWPOINT FOR NIGHT VISION AIDS

21st July 2025



Sionyx Aurora Pro at Surveyor Location 1.

11th August 2025



Sionyx Aurora Pro at Surveyor Location 1.

APPENDIX 2 – BAT EMERGENCE SURVEY RAW DATA TABLES

21st July 2025

Surveyor Location 1 – Batlogger M2

Time	Species	Number of calls [#]
21:26	<i>Nyctalus noctula</i>	12
21:27	<i>Nyctalus noctula</i>	16
21:28	<i>Pipistrellus pipistrellus</i>	7
21:31	<i>Pipistrellus pipistrellus</i>	12
21:31	<i>Pipistrellus pygmaeus</i>	6
21:31	<i>Pipistrellus pipistrellus</i>	2
21:31	<i>Pipistrellus pipistrellus</i>	1
21:32	<i>Pipistrellus pipistrellus</i>	1
21:33	<i>Pipistrellus pipistrellus</i>	1
21:34	<i>Pipistrellus pipistrellus</i>	1
21:35	<i>Pipistrellus pipistrellus</i>	1
21:35	<i>Pipistrellus pipistrellus</i>	3
21:35	<i>Pipistrellus pipistrellus</i>	5
21:35	<i>Pipistrellus pipistrellus</i>	5
21:37	<i>Pipistrellus pipistrellus</i>	1
21:40	<i>Pipistrellus pipistrellus</i>	2
21:42	<i>Pipistrellus pipistrellus</i>	1
21:43	<i>Pipistrellus pipistrellus</i>	2
21:43	<i>Pipistrellus pipistrellus</i>	1
21:44	<i>Pipistrellus pipistrellus</i>	1
21:46	<i>Pipistrellus pipistrellus</i>	1
21:47	<i>Pipistrellus pipistrellus</i>	2
21:48	<i>Pipistrellus pipistrellus</i>	1
21:48	<i>Pipistrellus pipistrellus</i>	1
21:48	<i>Pipistrellus pipistrellus</i>	1
21:48	<i>Pipistrellus pipistrellus</i>	1
21:49	<i>Pipistrellus pipistrellus</i>	3
21:49	<i>Pipistrellus pipistrellus</i>	6
21:50	<i>Pipistrellus pipistrellus</i>	1
21:51	<i>Pipistrellus pipistrellus</i>	1
21:51	<i>Pipistrellus pipistrellus</i>	1
21:51	<i>Pipistrellus pipistrellus</i>	1
21:51	<i>Pipistrellus pipistrellus</i>	1
21:52	<i>Pipistrellus pipistrellus</i>	1
21:52	<i>Pipistrellus pipistrellus</i>	6
21:53	<i>Pipistrellus pipistrellus</i>	2
21:53	<i>Pipistrellus pipistrellus</i>	1
21:54	<i>Pipistrellus pipistrellus</i>	4
21:54	<i>Pipistrellus pipistrellus</i>	2
21:55	<i>Pipistrellus pipistrellus</i>	2

21:55	<i>Pipistrellus pipistrellus</i>	1
21:55	<i>Pipistrellus pipistrellus</i>	1
21:55	<i>Pipistrellus pipistrellus</i>	1
21:56	<i>Pipistrellus pipistrellus</i>	1
21:56	<i>Pipistrellus pipistrellus</i>	1
21:56	<i>Pipistrellus pipistrellus</i>	1
21:57	<i>Pipistrellus pipistrellus</i>	1
21:57	<i>Pipistrellus pipistrellus</i>	1
22:03	<i>Pipistrellus pipistrellus</i>	14
22:09	<i>Pipistrellus pipistrellus</i>	1
22:09	<i>Pipistrellus pipistrellus</i>	3
22:09	<i>Pipistrellus pipistrellus</i>	5
22:09	<i>Pipistrellus pipistrellus</i>	4
22:10	<i>Pipistrellus pipistrellus</i>	1
22:10	<i>Pipistrellus pipistrellus</i>	5
22:11	<i>Pipistrellus pipistrellus</i>	1
22:16	<i>Pipistrellus pipistrellus</i>	1
22:17	<i>Pipistrellus pipistrellus</i>	1
22:19	<i>Pipistrellus pipistrellus</i>	1
22:24	<i>Pipistrellus pipistrellus</i>	1
22:34	<i>Pipistrellus pipistrellus</i>	12
22:35	<i>Pipistrellus pipistrellus</i>	3
22:35	<i>Pipistrellus pipistrellus</i>	1
22:35	<i>Pipistrellus pipistrellus</i>	1
22:35	<i>Pipistrellus pipistrellus</i>	2
22:36	<i>Pipistrellus pipistrellus</i>	1
22:36	<i>Pipistrellus pipistrellus</i>	3
22:37	<i>Pipistrellus pipistrellus</i>	1

11th August 2025

Surveyor Location 1 – Batlogger M2

Time	Species	Number of calls [#]
20:31	<i>Pipistrellus pipistrellus</i>	13
20:35	<i>Pipistrellus pygmaeus</i>	1
20:52	<i>Pipistrellus pipistrellus</i>	2
20:52	<i>Pipistrellus pipistrellus</i>	6
20:52	<i>Pipistrellus pipistrellus</i>	16
20:53	<i>Pipistrellus pipistrellus</i>	2
20:53	<i>Pipistrellus pipistrellus</i>	22
20:53	<i>Pipistrellus pipistrellus</i>	4
20:53	<i>Pipistrellus pipistrellus</i>	2
20:53	<i>Pipistrellus pipistrellus</i>	1
20:53	<i>Pipistrellus pipistrellus</i>	3
20:54	<i>Pipistrellus pipistrellus</i>	1
20:54	<i>Pipistrellus pipistrellus</i>	5

20:54	<i>Pipistrellus pipistrellus</i>	3
20:54	<i>Pipistrellus pipistrellus</i>	1
20:54	<i>Pipistrellus pipistrellus</i>	1
20:55	<i>Pipistrellus pipistrellus</i>	3
20:55	<i>Pipistrellus pipistrellus</i>	3
20:55	<i>Pipistrellus pipistrellus</i>	3
20:56	<i>Pipistrellus pipistrellus</i>	2
20:56	<i>Pipistrellus pipistrellus</i>	6
20:56	<i>Pipistrellus pipistrellus</i>	5
20:57	<i>Pipistrellus pipistrellus</i>	5
20:57	<i>Pipistrellus pipistrellus</i>	6
21:03	<i>Eptesicus serotinus</i>	18
21:04	<i>Pipistrellus pygmaeus</i>	1
21:06	<i>Pipistrellus pipistrellus</i>	40
21:06	<i>Nyctalus noctula</i>	6
21:06	<i>Nyctalus noctula</i>	20
21:08	<i>Pipistrellus pipistrellus</i>	1
21:08	<i>Nyctalus noctula</i>	5
21:27	<i>Pipistrellus pipistrellus</i>	12
21:27	<i>Pipistrellus pipistrellus</i>	5
21:29	<i>Pipistrellus pygmaeus</i>	0
21:39	<i>Pipistrellus pygmaeus</i>	2
21:39	<i>Pipistrellus pygmaeus</i>	1
21:39	<i>Pipistrellus pygmaeus</i>	6
21:39	<i>Pipistrellus pygmaeus</i>	3
21:41	<i>Pipistrellus pygmaeus</i>	3
21:44	<i>Pipistrellus pipistrellus</i>	2
21:44	<i>Nyctalus noctula</i>	6
21:44	<i>Pipistrellus pipistrellus</i>	9
21:45	<i>Pipistrellus pipistrellus</i>	1
21:45	<i>Pipistrellus pipistrellus</i>	2
21:45	<i>Pipistrellus pipistrellus</i>	11
21:47	<i>Pipistrellus pipistrellus</i>	17
21:47	<i>Pipistrellus pipistrellus</i>	21
21:47	<i>Pipistrellus pipistrellus</i>	4
21:47	<i>Pipistrellus pipistrellus</i>	2
21:48	<i>Pipistrellus pipistrellus</i>	1
21:48	<i>Pipistrellus pipistrellus</i>	1
21:48	<i>Pipistrellus pipistrellus</i>	7
21:55	<i>Pipistrellus pipistrellus</i>	1
22:04	<i>Pipistrellus pipistrellus</i>	2

APPENDIX 3 – PROPOSED ELEVATIONS

