PRO VISION

Mews Cottage

Bat report

Prepared on behalf of Thames Valley Surveying Limited

May 2025

Mews Cottage

Ecology 8721

Version 02

Prepared by:	Emma Bennett	V.01	Jan 2025
Authorised by:	Alex Hannam MCIEEM	V.01	Jan 2025
Prepared by:	Alex Hannam MCIEEM	V.02	May 2025
Authorised by:	Louisa Standbrook-Jones MCIEEM	V.02	May 2025

Pro Vision Ecology

The Lodge

Highcroft Road

Winchester

SO22 5GU

COPYRIGHT: The contents of this document must not be copied or reproduced in whole or in part without the prior written consent of Pro Vision Ecology.

Contents

Page

1.0 EXECUTIVE SUMMARY 1

2.0 INTRODUCTION 2

BACKGROUND 2
SITE DESCRIPTION 2
BRIEF 2
RELEVANT LEGISLATION 2

3.0 METHODOLOGIES 4

DESK STUDY 4
PRELIMINARY ROOST ASSESSMENT 4

4.0 RESULTS AND ANALYSIS 7

DESK STUDY 7
PRELIMINARY ROOST ASSESSMENT 8

5.0 MITIGATION AND ENHANCEMENTS 10

ESSENTIAL PRE-APPLICATION FURTHER SURVEY WORK ..... **ERROR! BOOKMARK NOT DEFINED.**
IMPACTS AND REQUIRED MITIGATION FOR THE PROPOSED DEVELOPMENT 10
ENHANCEMENT MEASURES FOR THE PROPOSED DEVELOPMENT 10

6.0 REFERENCES AND BIBLIOGRAPHY 11

Appendices

Appendix A: Site Location

Appendix B: Survey Results

1.0 Executive Summary

1.1 The Client is proposing to re-roof the building and install additional roof insulation at 2A (Mews Cottages), Redlands Road, Reading, RG1 5EX. Pro Vision were commissioned to provide the ecological assessment for these works.

1.2 The building was assessed as having low potential to support roosting bats as the mortar underneath the majority of the hipped tiles was missing creating access and roosting opportunities. Vent grills were also missing from the soffit providing additional potential roost features.

1.3 One emergence survey was undertaken on the 12th May 2025. No bats were recorded emerging from the property.

1.4 The development presents an opportunity to enhance the site by providing additional roosting sites for bats, in compliance with national and local planning policy. Details regarding this are provided in **Section 5.0**.

2.0 Introduction

Background

2.1 Pro Vision Ecology were commissioned in November 2024 to carry out a Preliminary Roost Assessment (PRA) and subsequent emergence survey at 2A (Mews Cottages), Redlands Road, Reading, RG1 5EX. For the site location refer to **Appendix A**.

2.2 This report summarises the findings of the bat surveys. The results set out within this report are valid for 18 months from the issue date.

Site Description

Surrounding area

2.3 The application site is located within the town of Reading, Berkshire. The surrounding area comprises predominantly urban residential and recreational areas.

Development site

2.4 The site comprises a building, divided into three flats with a courtyard located to the south of the building.

Brief

2.5 To conduct bat surveys of Mews Cottages to inform the Client of any ecological implications of their proposals and advise them of mitigation and enhancements.

Relevant Legislation

2.6 Bats are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, inter alia, to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely:
    - to impair its ability to survive, breed, or rear or nurture their young;
    - to impair its ability to hibernate or migrate;
    - to affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or

- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

2.7 In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*);
- Lesser horseshoe bat (*Rhinolophus hipposideros*);
- Bechstein's bat (*Myotis bechsteinii*);
- Barbastelle (*Barbastella barbastellus*);
- Greater mouse-eared bat (*Myotis myotis*).

2.8 In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

3.0 Methodologies

Desk Study

3.1 A data-gathering exercise was undertaken to obtain records of the presence of bat species within a two-kilometre search radius around the central grid reference of the site. These records were provided by the local bat group: Berkshire and South Buckinghamshire Bat Group (BSBBG). The Defra run website MAGIC was also used to establish the presence of granted licence applications within one kilometre of the site.

Preliminary Roost Assessment

3.2 Bats use features within buildings such as stone crevices or cracks in brickwork, ridge beams, gaps between roofing materials and the main building structure, and any potential access points. An external inspection of the building was conducted by CL20 licenced ecologist Alex Hannam MCIEEM (Licence number available on request) on 9th December 2024. During the survey it was cloudy with a breeze and an ambient temperature of 5.5°C. Any evidence of bats such as droppings, urine staining, claw marks, feeding remains or bats themselves were recorded. An assessment of the potential of the building to support roosts was then made in line with Bat Conservation Trust (BCT) guidelines (2023) shown in **Table 1** below.

Table 1: Assessment of buildings to support roosting bats

Potential	Criteria
None	No features on site likely to be used by any roosting bats at any time of the year.
Negligible	No obvious features on site likely to be used by bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically.
Moderate	A structure with one or more potential roost sites due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation significance. A building with one or more potential roost features that may be used by bats due to their size, shelter, protection, condition, and habitats present. Unlikely to support a roost of high conservation value.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts.

3.3 An internal inspection was not undertaken as the building has been converted to flats and no roof voids are present.

Site constraints

3.4 Bats will often roost in places that are inaccessible to the surveyor, such as under tiles and crevices within structures. During the inspection of the buildings on site for bats, due regard was paid to the noting of features that have the potential to support crevice dwelling species. Consequently, it is not possible to definitively conclude that bats are absent from these areas.

Emergence Surveys

3.5 One emergence survey was conducted on the building on the 12th May 2025 in accordance with the Bat Conservation Trust Best Practice Guidelines (Collins, 2023). Three surveyors were positioned around the property to ensure potential roost features were sufficiently covered. A summary for the conditions on the survey is provided in **Table 2** below, surveyor locations are provided in **Appendix B**.

3.6 Surveys were completed by bat licenced ecologist Rachel Richards (licence numbers available on request) assisted by David Casson and Ross Allen.

Table 2: Phase II Bat Survey Details

Date	Start and end times and time of sunset	Equipment used	Weather Conditions
12/08/24	Start: 20:30 End: 22:15 Sunset: 20:45	2 x Echo meter Touch 2 Pro 1 x Anabat Scout 1 x Canon XA11 camera paired with 1 x 12 LED Infra-Red Illuminator flood lights 1 x Canon XA11 camera paired with 1 x Infra-Red Illuminator flood light and one IR torch 1 x Sony FDR AX53 paired with 3 x IR lamps and 1 torch	Start: 20°C End: 14°C 0/8 cloud cover 0/12 wind Dry
Comments (to include # of surveyors used for each visit): 3 surveyors undertook this survey.			

3.7 The surveyors were equipped with Echo Meter Touch 2 Pros and Canon XA11 with LED Infra-Red Illuminator flood lights as Night Vision Aids (NVAs). **Figure 1 - 3** shows the coverage of the camera during the surveys. The camera was positioned next to the surveyor watching the building, once it became too dark to see the building the surveyor viewed the building through the camera display. Post survey any emergences or suspected emergences were then reviewed using a computer and VLC media player with the motion detector filter activated to aid footage review. Where necessary footage was slowed down and reviewed frame by frame.

Figure 1: Still from camera on the Southwestern corner

Figure 2: Still from camera on the Southeastern corner

Figure 3: Still from camera on the Northwestern

3.8 Bat sound analysis was undertaken using Anabat Insight software to confirm the identity of the species recorded.

4.0 Results and Analysis

Desk Study

4.1 The BSBBG data search returned 688 records within two kilometres of the site for the following bat species post -2000 for the following species:

- Barbastelle (*Barbastella barbastellus*)
- Bat species (*Chiroptera*)
- Serotine (*Eptesicus serotinus*)
- Daubenton's bat (*Myotis daubentonii)*
- Myotis species (*Myotis sp.*)
- Leisler's bat (*Nyctalus leisleri*)
- Noctule (*Nyctalus noctula*)
- Nathusius' pipistrelle (*Pipistrellus nathusii*)
- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Pipistrelle species (*Pipistrellus sp.*)
- Brown long-eared (*Plecotus auritus*)
- Long-eared bat (*Plecotus sp.*)
- Vesper bat (*Vespertilionidae sp.*)

EPS Species Licences

4.2 The Defra run website, MAGIC, was searched for a list of granted European Protected Species Licences (EPSL's). Twelve records of granted EPSL's within two kilometres were returned. The closest of which lies approximately 0.2 kilometres west of the development and was noted for common pipistrelle. The licence allowed for the destruction of a resting place.

4.3 The presence of bat roosts in the area indicate that bats might use the site for foraging, commuting and roosting if suitable habitat and roosting locations are present.

Preliminary Roost Assessment

External inspection

4.4 Building 2A is a two-storey brick building. The roof is pitched and hipped and comprises slate roof and clay ridge tiles. Timber soffits are present which are generally in good condition however some peeling paint and missing soffit grills were noted. Timber doors and windows are present in reasonable condition, as well as uPVC guttering. Two boiler flues and two soil stack/vent pipes are present but well-sealed. The hayloft door entrance to flat three has slate cheeks on western and eastern elevations. The door is flush to the dormer and the timber gable and fascia are in good condition. (**Figure 1**).

Figure 1: Southern elevation of building 1

4.5 Mortar is missing on the corners of hip tiles leading to access points and potential roosting locations. The timber soffits are in poor condition with peeling paint and some missing grills are present over vent holes.

Summary

4.6 Building 1 is considered to hold **low potential** to support roosting bats due to the presence of access and potential roosting opportunities under the hip tiles from the missing mortar and the missing vents on the soffit grills creating more potential roosting opportunities. These features are considered suitable for low numbers of bats on an opportunistic basis. Due to the presence of suitable roost features in the proposed area of works a further emergence survey was completed on the property.

Emergence Surveys

4.7 One emergence survey was conducted on the building on the 12th May 2025. The results are provided in **Appendix B** and summarised below.

Emergence survey - 12th August 2024

4.8 No bats were recorded emerging from the building.

4.9 Activity was recorded throughout the survey with activity predominately from common pipistrelle bats which were recorded foraging intermittently along the western elevation between 21:08 and 21:54. One noctule pass was recorded at 22:12.

Summary

4.10 No bats were recorded emerging from Mews Cottage. It is therefore considered this building does not support a bat roost. Therefore, the works will not impact any bat roosts. Bats utilise the site and surrounding areas for foraging and commuting and recommendations for lighting have been made in **Section 5.0**

5.0 Mitigation and Enhancements

Impacts and Required Mitigation for the Proposed Development

Foraging and Lighting

5.1 Low numbers of foraging and commuting bats were recorded on site. To ensure bats continue to utilise the site post development the proposed development will require lighting which adheres to the following guidelines (ILP, 2023):

5.2 Any lighting proposed should adhere to the following principles (ILP, 2023):

- LED luminaires should be used of a warm white spectrum (<2700 Kelvin) which will feature peak wavelengths higher than 550 nm.
- Internal luminaires should be recessed to reduce light spill outside the building.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security lighting should be set on motion sensors and set to as short as possible.

Enhancement Measures for the Proposed Development

5.3 In accordance with the National Planning Policy Framework (NPPF, 2024) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged especially where this can secure measurable net gains for biodiversity.

5.4 The development should look to incorporate an integrated bat roost feature in the new roof or a bird box on a suitable elevation near the eaves. If this is not possible a woodcrete bat box or bird box should be installed on a suitable tree within the client's ownership.

6.0 References and Bibliography

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

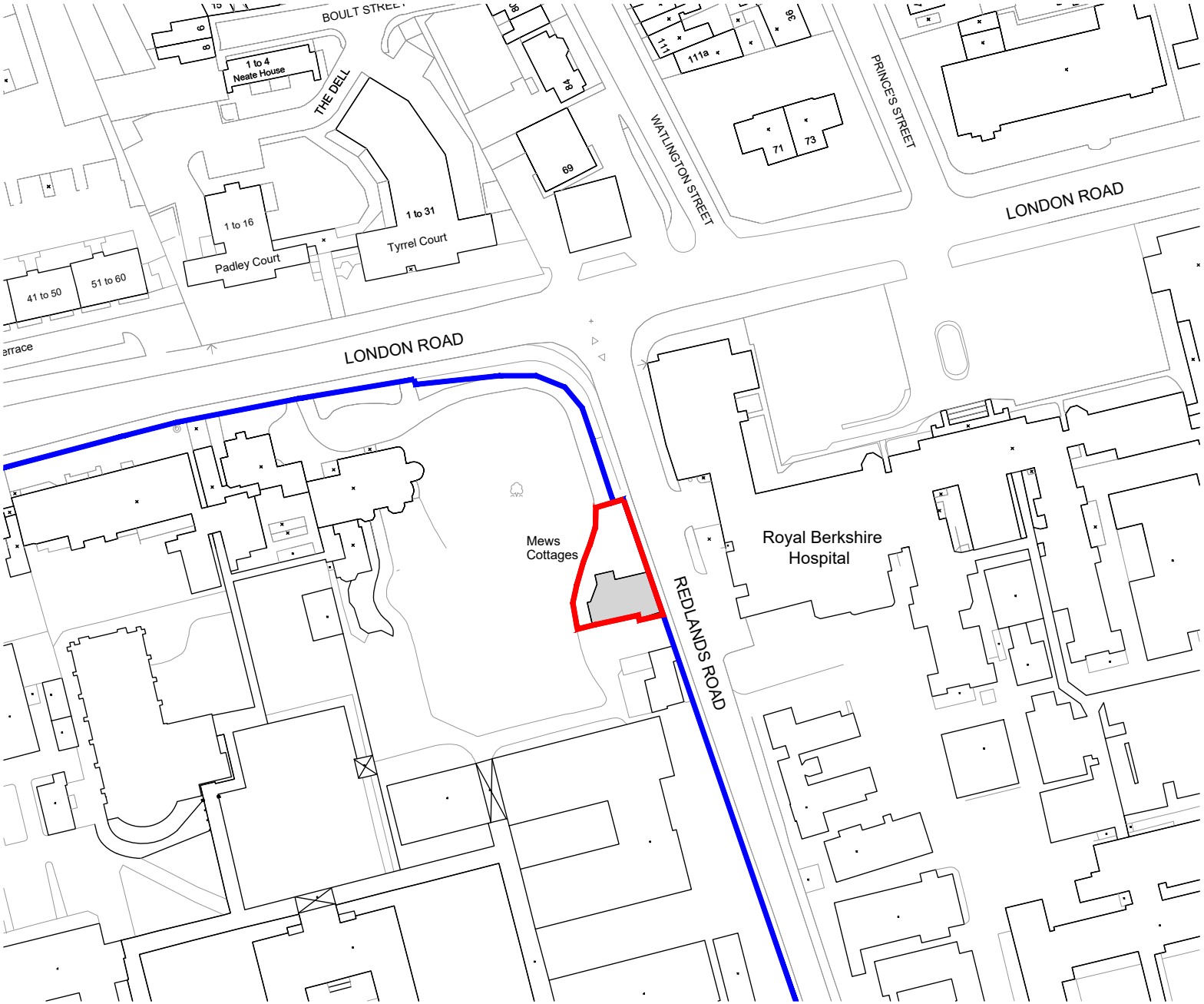
Berkshire and South Buckinghamshire Bat Group. *Bat Search: Mews Cottages 1288PV*

ILP (2023) *guidance note 8/23 Bats and Artificial Lighting at Night*

National Planning Policy Framework (2024). *National Planning Policy Framework.* Ministry of Housing, Communities and Local Government, London.

Appendices

Appendix A: Site Location



SITE BOUNDARY

LAND OWNERSHIP BOUNDARY

1:1250

0 5 10 15 20 30 40 50M

Rev	Date	Description	By	Checked

Thames Valley Surveying

Green Bank, University of Reading London Road Campus, London Road, Reading, RG1 5AQ
T. 01189 869 531
W. www.thamesvalleysurveying.co.uk

Client:	University of Reading
Project:	Mews Cottages
Title:	Location Plan
Drawn by	LL
Date	18/12/24
Scale:	1:1250@A4
Drawing Ref:	210121-10-001 Revison:

Appendix B: Survey Results

© The copyright of this drawing remains with Pro Vision and may not be reproduced in any form without prior written consent. Contains public sector information licensed under the Open Government Licence v3.0.

The plan shown here is for the purpose of supporting a planning application only. Only scale from this drawing for the purposes of determining a planning application. Do not scale from this drawing for construction purposes.

The proposal presented here is subject to review by specialist consultants, and is to be read in conjunction with all relevant specialist's drawings and information where available. Any discrepancies between this and any other consultant's drawings and information should be reported to Pro Vision immediately.

Legend

- Red Line Boundary
- Surveyor and Camera

0 2 4 6 8 10 m

N

ISSUE	DATE	DESCRIPTION	DRAWN	CHECKED
v1	20.05.25	First issue	EB	LSJ

CLIENT:	**Thames Valley Surveying Limited**	
PROJECT:	**Mews Cottages**	
DRAWING:	**Emergence Survey Results**	**1:250**
NUMBER:	**8721-XX-E0-02**	**A4**
ISSUE:	**v1**	**20.05.25**

PRO VISION
PLANNING | ARCHITECTURE | URBAN DESIGN | ECOLOGY

www.pro-vision.co.uk

Date:	**12/05/25**	**Surveyors:**	**David Casson, Rachel Richards and Ross Allen**
Time	**Species**	**Description**	
21:07-21:14	Common pipistrelle	Heard not seen, faint pass intermittently on the northern elevation	
21:12 – 21:15	Common pipistrelle	Foraging north of Mews Cottages	
21:12 – 21:53	Common pipistrelle	Foraging along the southern and western elevation of Mews Cottages	
21:18	Common pipistrelle	Foraging north of Mews Cottages before flying south along the western elevation	
21:23 – 22:15	Common pipistrelle	Up to two bats foraging in the garden north west of the site	
22:12	Noctule	Heard not seen to the east of Mews Cottages	