

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

208 Henley Road, Berkshire, Reading, RG4 6LR

Client:

Mr Visha

Report date:

2nd August 2024

Project:

This report is prepared to inform a planning application with the Reading Borough Council for the proposal described as:

“The construction of a first-floor side extension and rear two-storey extension”

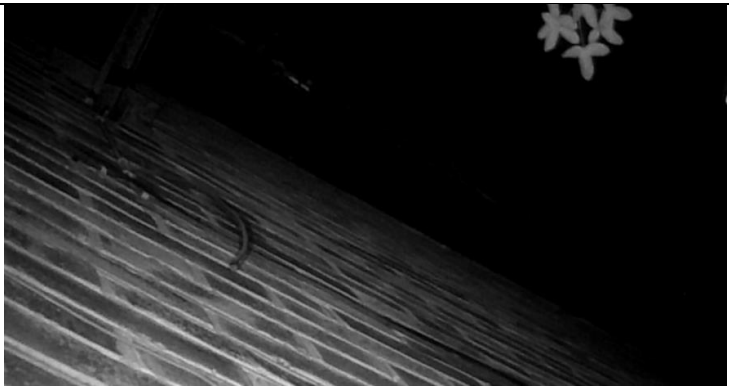
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This report is supplementary to the Preliminary Roost Assessment report completed by Arbtech Consulting Ltd (2024).

BERS survey methodology and legislation can be found in the Arbtech Supplement: [BERS Methodology and Legislation - 2024.](#)

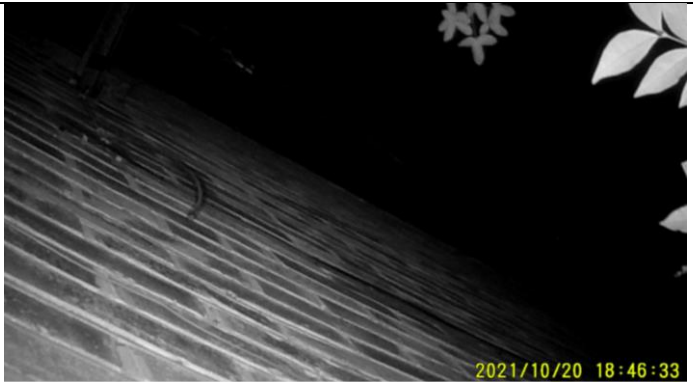
This report is an addendum to and must be read in conjunction with the Preliminary Roost Assessment completed by Focus Environmental Consultants (2024) for the same site address. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.	
Executive Summary	
Background A PRA was conducted on B1 by Arbtech in July 2024, with no limitations. The PRA identified no evidence of bats to the exterior or interior of the building. B1 was assessed as moderate suitability for roosting bats due to the following features identified: missing mortar from under the verge tiles on the northern and southern elevations, raised roof tiles, missing tiles on the northern elevation around the chimney and on the western elevation directly under the ridge tiles. As a result of the PRA, two surveys were required to assess the presence/absence of roosting bats.	
BERS results As a result of one survey on B1, no bat roosts were identified. A licence will not be required to legally continue works. However, to compensate for disturbance foreseen to commuting and foraging bats as an impact of the proposed development, a low lighting strategy should be adopted, and 1 bat box should be erected onsite.	
The site surveys were designed and managed by Beth Ellison-Perrett BSc (Hons) MSc (Hons) MRSB Consultant Ecologist, Natural England Bat Licence Number: 2023-11066-CL17-BAT	
See surveyor locations in the BERS plan in Appendix 1	
Limitations	The surveys were conducted without any limitations

Field Survey							
Dusk Emergence Survey 1							
Building B1							
<i>Surveyor and position</i>		Surveyor 1 - Tom Drew – 3 years of bat survey experience - observing the northern elevation Unmanned camera position – observing the southeastern elevation Lead surveyor 2 – Beth Ellison-Perrett - Natural England Bat Licence Number: 2023-11066-CL17-BAT – observing the southern and western elevations					
<i>Weather (start/end)</i>		Temperature (°C): 17.5 Relative humidity (%): 89 Cloud cover (%): 100 Wind (m/s): 6.9 Rain: None			Temperature (°C): 16.8 Relative humidity (%): 92 Cloud cover (%): 90 Wind (m/s): 10.1 Rain: None		
<i>Equipment used</i>		Echometer Touch, Batbox Duet, IR camera (Nightfox Whisker), IR torches (XB5 Pro), Handheld radios					
Results							
Date of survey	Sunset Start - End	Species and numbers	Roost type	Structure reference	Roost location	Access points (0)	Dimensions and explanation of roost location
09/07/2024	Sunset: 21:19 21:04–22:49	None	N/A	N/A	N/A	N/A	N/A
Surveyor observations							
<i>Surveyor 1</i>		No emergences of re-entries observed. First bat seen was a soprano pipistrelle passing north-west to east at 21:42. This was followed by further soprano pipistrelle passes at 21:44 and 21:48, following the same route. A Daubentons' was observed passing west to east over the roof of the house at				N/A	

	22:23. soprano pipistrelle's were heard but not seen at 21:36 to 22:33. A common pipistrelle was heard but not seen between 21:57 and 22:20. No further activity.	
<i>IR position 1</i>	The footage reflected the view of surveyor 1. No emergences or re-entries observed after review.	 Figure 1. Northern elevation – darkest point
<i>Unmanned IR Camera – IR position 2</i>	No emergences or re-entries observed after review. The footage reflected the view of the unmanned IR camera position. The camera was unmanned, with a heterodyne detector connected, during the survey, with supervision provided by surveyor 1 to ensure safety of the equipment and that the correct footage being recorded. A full review of the footage recorded was undertaken following the survey.	 Figure 2. Southeastern elevation – darkest point
<i>Surveyor 2</i>	No emergences of re-entries observed. The first activity was from a soprano pipistrelle passing north-west to south	N/A

	between the houses at 21:38. At 20:39 a soprano pipistrelle was observed passing east to south-west around the building. Between 21:44 and 22:00 a soprano pipistrelle was observed passing, eight times, north-west to south between the houses. A common pipistrelle was heard but not seen at 22:02, 22:28 and 22:33.	
<i>IR position 3</i>	The footage reflected the view of surveyor 2. No emergences or re-entries observed after review.	 Figure 3. Southern and western elevations elevation – darkest point

Field Survey							
Dusk Emergence Survey 2							
Building B1 and B2							
<i>Surveyor and position</i>		Surveyor 1 – Sarah Cooke – 4 years of bat survey experience - observing the northern elevation Unmanned camera position – observing the southeastern elevation Lead surveyor 2 – Beth Ellison-Perrett - Natural England Bat Licence Number: 2023-11066-CL17-BAT – observing the southern and western elevations					
<i>Weather (start/end)</i>		Temperature (°C): 24 Relative humidity (%): 61 Cloud cover (%): 0 Wind (m/s): 5 Rain: None			Temperature (°C): 22 Relative humidity (%): 65 Cloud cover (%): 0 Wind (m/s): 5 Rain: None		
<i>Equipment used</i>		Echometer Touch, Batbox Duet, IR camera (Nightfox Whisker), IR torches (XB5 Pro), Handheld radios					
Results							
Date of survey	Sunset Start - End	Species and numbers	Roost type	Structure reference	Roost location	Access points (0)	Dimensions and explanation of roost location
30/07/2024	Sunset 20:54 20:39–22:25	None	N/A	N/A	N/A	N/A	N/A
Surveyor observations B1							
<i>Surveyor 1</i>		No emergences of re-entries observed. First bat seen was a soprano pipistrelle at 21:15. There was constant soprano pipistrelle activity flying from the south around the SW corner across the NW elevation and circling and foraging in the rear garden. There was also constant activity with a Soprano pipistrelle flying west to north and back again				N/A	

	also foraging in the rear garden. This activity continued from 21:15 until 21:57pm. At 21:24 a Natterers Myotis was heard but not seen and a daubentons myotis was heard but not seen at 21:52 and 22:13.	
<i>IR position 1</i>	The footage reflected the view of surveyor 1. No emergences or re-entries observed after review.	 Figure 4. Northern elevation – darkest point
<i>Unmanned IR Camera – IR position 2</i>	No emergences or re-entries observed after review. The footage reflected the view of the unmanned IR camera position. The camera was unmanned, with a heterodyne detector connected, during the survey, with supervision provided by surveyor 1 to ensure safety of the equipment and that the correct footage being recorded. A full review of the footage recorded was undertaken following the survey.	 Figure 5. Southeastern elevation – darkest point
<i>Surveyor 2</i>	No emergences of re-entries observed. First bat was a Soprano Pipistrelle at 21:16 which was heard but not seen. At 21:21 and again at 21:39 a Common Pipistrelle was observed passing north to south. At	N/A

	21:23 two Common Pipistrelles were observed passing along the same route. A Soprano Pipistrelle was heard but not seen at 21:48 and 21:55. The last bat was a heard but not seen Common Pipistrelle at 21:57. No further activity.	
<i>IR position 2</i>	The footage reflected the view of surveyor 2. No emergences or re-entries observed after review.	 Figure 6. Southern and western elevations – darkest point

Conclusions, Impacts and Recommendations	
<i>Survey Results Summary</i>	As a results of two bat surveys, no bat roosts were identified . A licence will not be required to legally continue works. However, the results of the surveys conclude the site is of value to commuting and foraging bats.
<i>Impact Assessment</i>	The proposed development will result in the modification to the northern and western aspects of B1. Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development. No major impact is foreseen to the surrounding habitat of value, providing the surrounding trees are retained. However, an increase/change in artificial lighting on site could disrupt bat roosting, foraging and commuting behaviour.
<i>Recommendations</i>	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to the front and rear vegetated gardens and tree lines should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.

	As B1 is has moderate value for roosting bats, there is still a risk of roosting bats in the proposed development. In the event a bat roost is identified, works must <i>cease</i> and advice must be sought from a suitably qualified ecologist. Loss of vegetation should also be avoided. This report is valid for 12-18 months, (CIEEM, 2019), therefore it is recommended for works to be started before this time. Parameters can be found on the CIEEM website: https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf
<i>Enhancements</i>	The installation of a bat boxes or integrated bat bricks should be incorporated into the proposed development, of which should be a minimum of 1 bat box per building impacted by development. Boxes should target the species of bat recorded within the vicinity during the survey e.g. crevice dwelling bat species. Recommended bat boxes include: • Vivara Pro Woodstone Bat Box • Schwegler 1FR Bat Tubes Bat boxes can be installed retrospectively and attached to the outside of buildings. Bat bricks require material consideration and should be integrated into the fabric of the building. Bat boxes/ bricks should be positioned 3-5m above ground level facing in a south, south-easterly or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. Alternatively, boxes can be installed on mature trees on site.

Appendix 1: BERS plan



Version control			
Status	Issue	Name	Date
Draft	0.1	Beth Ellison-Perrett BSc (Hons) MSc (Hons) MRSB, Consultant Ecologist	02/08/2024
Final	1.0	Beth Ellison-Perrett BSc (Hons) MSc (Hons) MRSB, Consultant Ecologist	08/08/2024

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