Amber Williams, BSc (Hons), MSc
Assistant Ecologist
Email: amberwilliams@arbtech.co.uk
Arbtech Consulting Ltd
arbtech.co.uk

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

42 Ladybarn Road, Manchester

Client:

Dan Strain

Report date:

20th July 2024

Project:

This report is prepared to inform a planning application for the proposal described as:

"Erection of side and rear extension to deliver no.8 flats and one commercial office space"

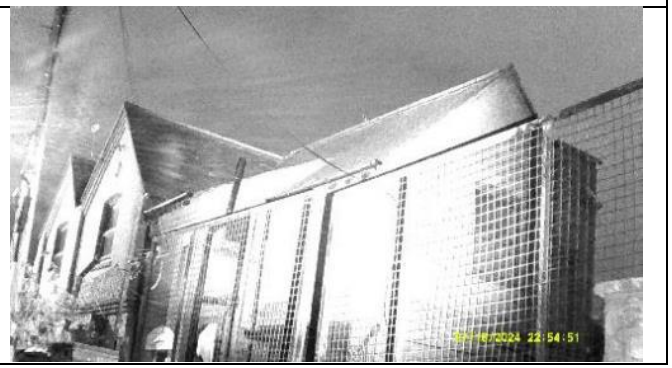
This report is supplementary to the Preliminary Roost Assessment report completed by Arbtech Consulting Ltd (2024).

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 Arbtech Consulting Limited (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 The PRA did not locate any evidence of bats such as droppings, foraging remains or live bats, within the roof structure of B1. The PRA concluded that B1 has low habitat value for roosting bats given the presence of two areas of missing mortar on the southern gable end of B1 that provide suitable access for crevice dwelling bats. One bat survey was recommended to confirm the absence of bats within B1. B2 was deemed to have negligible habitat value for roosting bats and was therefore not subject to further surveys. *BERS results* The surveys did not record any bat roosting activity. A commuting route was identified along the northern elevation and foraging activity was observed in the alleyway between B1 and B2.	
The site surveys were designed and managed by Amber Williams BSc (Hons) MSc Assistant Ecologist (Accredited Agent on Natural England Bat Licence Number: 2018-33540-CLS-CLS)	
See surveyor locations in the BERS plan in Appendix 1.	
Limitations	No limitations were associated with this survey.

Field Survey							
Dusk Emergence Survey 1							
Building B1							
Surveyor and position	**Lead Surveyor 1** – Oliver Dodd – 3 years bat survey experience – observing the north and eastern elevation and roof structure of B1. **Surveyor 2** – Kirk Mason – 2 years bat survey experience – observing the north and western elevation and roof structure of B1. **Surveyor 3** – Margaret Warren – 1 years bat survey experience – observing the southern elevation and roof structure of B1.						
Weather (start/end)	Temperature (°C): 22 Relative humidity (%): 66 Cloud cover (%): 100 Wind (m/s): 1.7 Rain: None				Temperature (°C): 20 Relative humidity (%): 74 Cloud cover (%): 100 Wind (m/s): 1 Rain: None		
Equipment used	3 x Echometer Touch, 3 x Magenta bat detector, 3 x IR camera, 3 x IR torches						
Results							
Date of survey	Sunset Start - End	Species and numbers	Roost type	Structure reference	Roost location	Access points	Dimensions and explanation of roost location
18/07/2024	Sunset 21:24 21:09-22:54	No emergences observed.	NA	B1	NA	NA	NA
Surveyor observations							

Surveyor 1	**No emergences observed.** First activity was a common pipistrelle commuting north over the building at 21:55. At 22:00 two common pipistrelles commuted southeast above the adjacent road and continued towards the treeline adjacent to the building. At 22:05 a common pipistrelle commuted northeast above the road and at 22:33 a second common pipistrelle followed the same path before continuing northeast towards the lumber yard. No further bat activity was observed.	
IR position 1	No emergences were observed.	

Surveyor 2	**No emergences observed.** First bat activity was a common pipistrelle which was heard but not seen at 21:50. A single common pipistrelle was observed passing from the northwest elevation to the northeast elevation at (time) ?. Constant activity was observed between 21:59-22:05 with two common pipistrelles observed commuting from the buildings northwest of the site .. Common pipistrelles were heard but not seen sporadically between 22:17-22:33. The last bat recorded was a heard but not seen common pipistrelle at 22:47. No further bat activity was observed.	
IR position 2	No emergences were observed.	

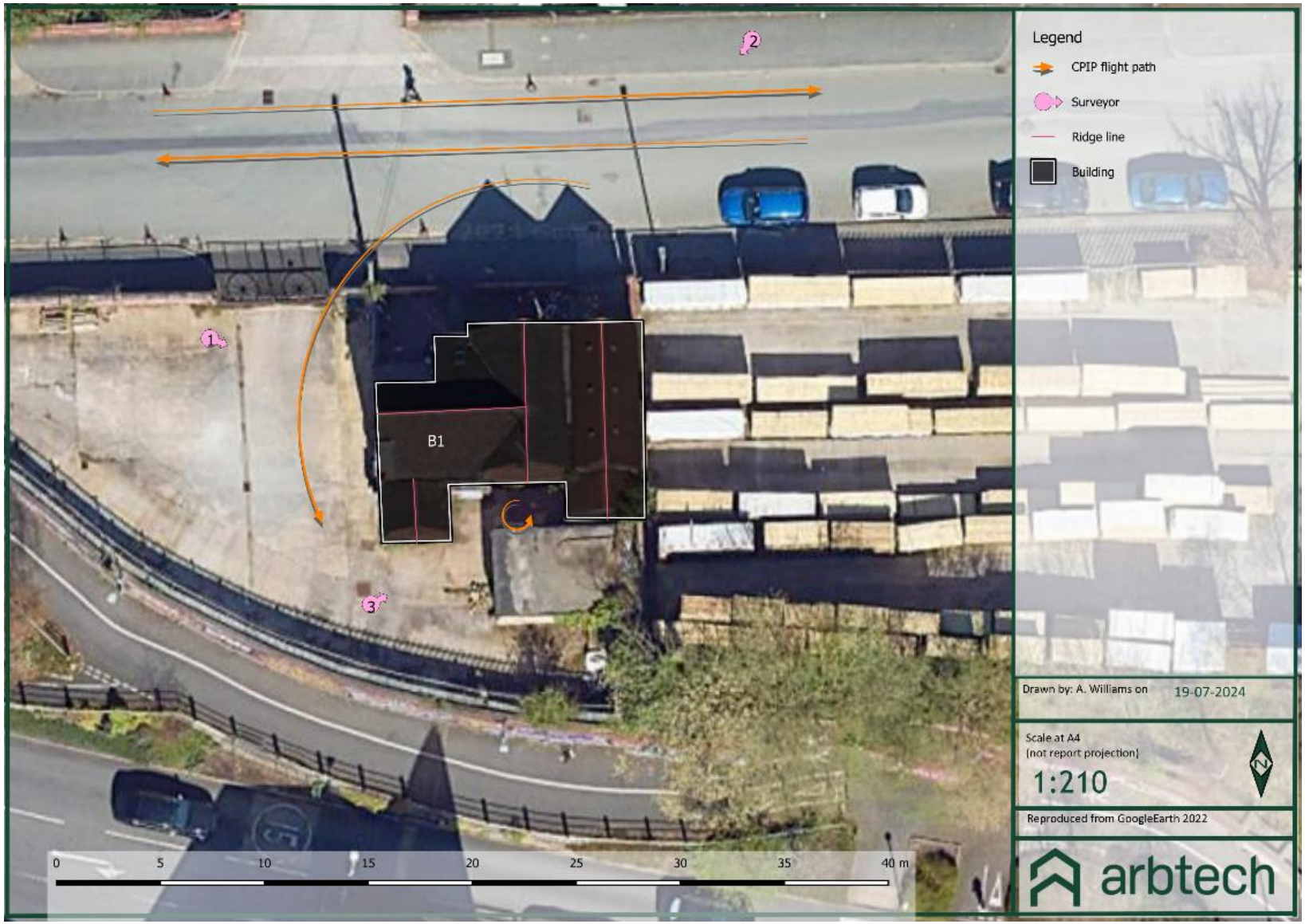
Surveyor 3	**No emergences.** First bat activity was a common pipistrelle observed commuting over the main road to the north of B1 and travelling east at 21:54. One common pipistrelle was observed foraging in the alley between B1 and B2 at 22:18. Final bat activity was a common pipistrelle which was heard but not seen at 22:47. No further bat activity was observed.	
IR position 3	No emergences were observed.	

Conclusions, Impacts and Recommendations	
Survey Results Summary	No bat roosting activity was observed during the survey. No evidence of bats was found during the PRA. The road to the north of the building was infrequently utilised as a commuting path for common pipistrelle species of bat. Foraging was observed along the alleyway between B1 and B2.
Impact Assessment	No impacts on roosting bats are foreseen from the proposed development. Any lighting implemented during and after the development onto the northern elevation and alleyway between B1 and B2 may deter bats from commuting and foraging in these areas if not mitigated.
Recommendations	A precautionary working method will be implemented during and post-development. This will include the following measures: - The potential roost features will be removed by hand prior to any mechanical demolition. In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. <u>Wildlife sensitive lighting strategy</u> 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 northern elevation and southern alleyway 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.
Enhancements	The installation of a single integrated bat box /brick should be incorporated into the new building during construction. Alternatively, boxes can be installed on a mature tree on site. Boxes should target the species of bat recorded within the vicinity during the survey e.g. crevice dwelling bat species Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for common pipistrelle bats such as the Beaumaris Woodstone Bat Box or a similar alternative brand.

Version control			
Status	**Issue**	**Name**	**Date**
Draft	0.1	Amber Williams BSc (Hons) MSc Assistant Ecologist	20/07/2024
Proof	0.2	Josephine McCarthy, Consultant Ecologist, [Natural England Bat Licence Number: 2019-41480-CLS-CLS (CL18 Level 2))	07/08/2024
Final	1.0	Amber Williams BSc (Hons) MSc Assistant Ecologist	07/08/2024

Appendix 1: BERS plan



Limitations and Copyright

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.