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Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

Cloud Park Farm, Dial Lane, Congleton, CW12 3QJ

Client:

Mr. and Mrs Senn

Report date:

30th September 2024

Project:

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

Conversion of existing barn.

This report is supplementary to the Preliminary Ecological Appraisal and 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 Ecological Appraisal and 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 Preliminary Ecological Appraisal and Roost Assessment was conducted by Arbtech Consulting Ltd in September 2024. There is one building on site, B1, which will be subject to the proposed conversion. The internal inspection of the building did not locate any evidence of roosting bats within B1, including live bats, foraging remains, droppings or staining. The building was assessed as having low habitat value for roosting bats and subject to one emergence survey. This assessment was based on the damaged windows and permanently open doors which permit constant access points for roosting bats. The purpose of these surveys was to determine a presence/absence of bats utilising the building for roosting purposes.

BERS results

Building one was subject to survey. The surveys did not record any bat roosting activity. Regular foraging activity was observed in front of the northern and western elevations of B1. A likely absence of roosting bats is concluded from B1.

The site surveys were designed and managed by Nicola Baxter BSc (Hons) MSc Graduate Ecologist – Accredited Agent on Natural England Bat Licence Number 2018-33540-CLS-CLS

See surveyor locations in the BERS plan in Appendix 1

Limitations

The site was subject to a single survey conducted during the sub-optimal survey period. However, as the internal inspection conducted in September 2024 did not locate any evidence of roosting bats, and as bat

	foraging/commuting activity was observed throughout the duration of survey despite the suboptimal conditions this is not deemed a significant limitation.
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Field Survey							
Dusk Emergence Survey 1							
Building B1							
Surveyor and position		Lead Surveyor 1 – Beth Robinson – 4 years bat survey experience (BCT competency level 2) - observing the southern and western elevation and roof structure of B1. Surveyor 2 – Matthew Harper – 1 years bat survey experience (BCT competency level 1) – observing the northern and eastern elevation and roof structure of B1.					
Weather (start/end)		Temperature (°C): 10 Relative humidity (%): 67 Cloud cover (%): 30 Wind (m/s): 0 Rain: None			Temperature (°C): 8 Relative humidity (%): 74 Cloud cover (%): 10 Wind (m/s): 0 Rain: None		
Equipment used		2 x Wildlife Acoustic Echometer Touch 2, 2 x Magenta 4 bat detector, 2 x Nightfox Whisker IR camera, 2 x Nightfox XB5 PRO 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
27/09/2024	Sunset 19:00 18:45 – 20:30	No emergences observed.	NA	B1	NA	NA	NA

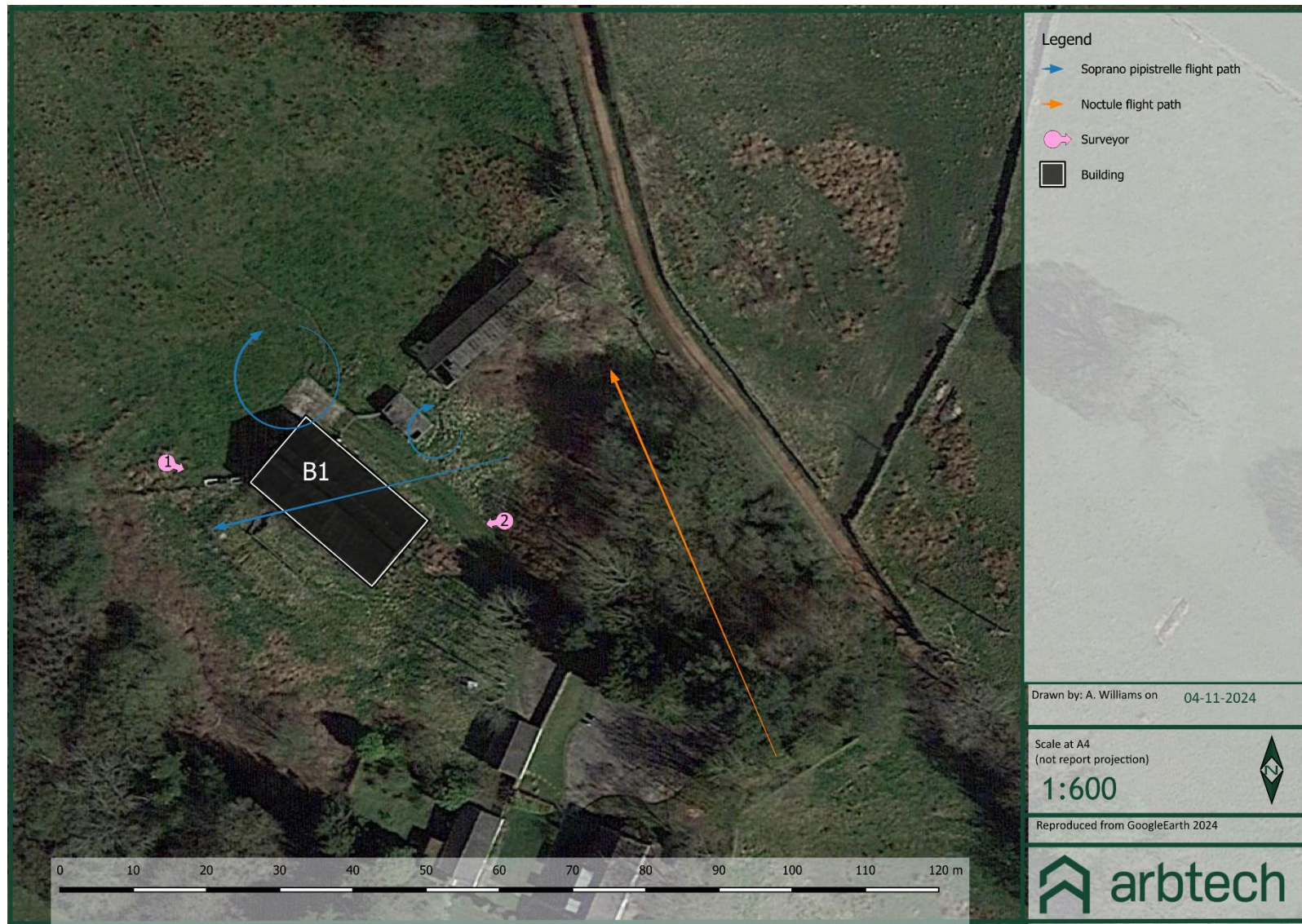
Surveyor observations		
Surveyor 1	No emergencies. The first activity recorded was at 19:08 when a noctule was seen foraging in the trees to the east of B1. A noctule was seen commuting north at 19:14. At 19:19 a soprano pipistrelle was seen commuting southwest. Between 19:33-19:40 two soprano pipistrelles were observed constantly foraging, mainly around the western elevation. This was the final bat activity. No further activity observed.	
IR position 1	IR 1 was positioned next to surveyor 1. The IR footage showed the same results as recorded by surveyor 1, with no additional bat activity recorded.	

<i>Surveyor 2</i>	No emergencies. The first activity recorded was at 19:20 when a soprano pipistrelle was heard not seen. Soprano pipistrelle activity was constant from 19:20-19:30 in front of the northern elevation. The final bat activity was a soprano pipistrelle which was heard but not seen at 19:42. No further activity observed.	 A color photograph of a long, single-story stone building with a gabled roof. The building is constructed of rough-hewn stone and has several windows and doors. The scene is set at dusk, with a soft orange and yellow glow on the horizon behind the building. In the foreground, there is a large pile of light-colored stones or rubble on a dark, uneven ground.
<i>IR position 2</i>	IR 2 was positioned next to surveyor 2. The IR footage showed the same results as recorded by surveyor 2, with no additional bat activity recorded.	 An infrared (IR) photograph of the same stone building shown in the color photo above. The image is in grayscale, showing the building's structure and the surrounding area. A timestamp in the bottom right corner reads "09/27/2024 20:34:56".

Conclusions, Impacts and Recommendations	
<i>Survey Results Summary</i>	There was no bat roosting activity observed during the survey. There was regular foraging activity observed from soprano pipistrelles in front of the northern and western elevations. Therefore, it is likely that roosting bats are absent from the building.
<i>Impact Assessment</i>	No impacts on roosting bats are foreseen from the proposed development. Any lighting implemented during and after the development onto the northern and western elevation may discourage bats from commuting and foraging in this area.
<i>Recommendations</i>	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</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 area in front of the northern and western elevations 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.
<i>Enhancements</i>	Integrated bat boxes x 2 will be installed in the newly converted barn. These will be placed high up at eaves level, face south/southwest if possible, and be unlit by artificial light.

Appendix 1: BERS plan



Version control			
Status	Issue	Name	Date
Draft	0.1	Amber Williams BSc (Hons) MSc Graduate Ecologist	30/09/2024
Proof	0.2	Ashleigh Domblides Graduate Ecologist	01/11/2024
Second Draft	0.3	Amber Williams BSc (Hons) MSc Graduate Ecologist	04/11/2024
Proof	0.4	Charlie Drapala BSc (Hons) AMRSB, Natural England Class 1 bat licence, Consultant Ecologist	12/11/2024
Final	1.0	Amber Williams BSc (Hons) MSc Graduate Ecologist	13/11/2024

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