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Bat Emergence and Re-Entry Surveys (BERS)

Survey site:
Bryn Erddig, Erddig Road, Wrexham, LL13 7DS

Client:
Richard Pinefold

Report date:
12/06/25

Project:
This report is prepared to inform a planning application for the proposal described as:
The demolition of the existing bungalow dwelling

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 consultant for advice.**	
The site surveys were designed and managed by Mel Reid BSc (Hons) MRes AMRSB, Principal Ecologist (Natural England Bat Class 2 Licence Number: 2024-12491-CL18-BAT)	
See surveyor locations in the BERS plan in Appendix 1	
Limitations	The following limitations were present for all three site visits: • The north-western gable end is completely covered by adjacent dense tree canopy growth. Given that features were present on this gable-end two IR cameras (positions 3 & 4) and a bat detector were set-up to record the whole gable-end during all three surveys. As such this is not considered a major limitation to the survey effort. • Due to the complex nature of the northern end of the roof structure of B1, surveyor 5 observing the northern elevation could not see the entire the roof, as such an additional unmanned IR camera (position 6) was set-up to provide a full coverage, thereby overcoming the limitation ensuring no bat activity was missed.

Field Survey

Dusk Emergence Survey 1

Building B1

Building inspection prior to survey: No updated internal inspection carried out due to the previous internal inspection survey still being in-date and valid.

Surveyor and position

Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
1 - Lead	Mel Reid	7 years, Class 2 licence holder	3 - Accomplished	South-eastern
2	Isla Beech	1 year, None	2 – Capable	South-western
3	Unmanned IR	N/A	N/A	North-western
4	Unmanned IR	N/A	N/A	North-western
5	James Prendergast	5 years, None	2 – Capable	North-western
6	Unmanned IR	N/A	N/A	North-eastern
7	Lizzie Hill	1 year, None	2 – Capable	North-eastern
8	Nadia Patel	2 years, None	2 - Capable	North-eastern

Weather (start/end)

Temperature (°C):	21.8
Relative humidity (%):	55
Cloud cover (%):	95
Wind (m/s):	0
Rain:	None

Temperature (°C):	12
Relative humidity (%):	80
Cloud cover (%):	90
Wind (m/s):	6
Rain:	None

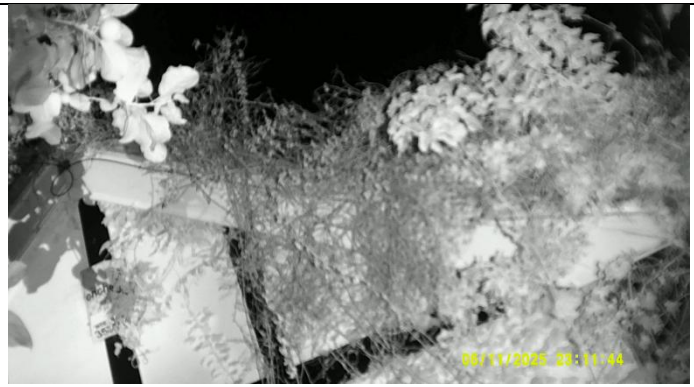
Equipment used

Equipment	Make	Model	Count
Additional Illumination	Nightfox	XB5 PRO	X8
Bat Detector	Magenta Electronics	Magenta Bat4	x8
Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	x5
NVA	Nightfox	Whisker	x8
Two Way Radio	BAOFENG	FV-88E	x5

Results						
Date of survey				**Sunset** **Start - End**		
11/06/2025				Sunset 21:37 21:22-23:07		
Roost reference	**Species and numbers**	**Roost type**	**Structure reference**	**Roost location**	**Access point**	**Dimensions (for lofts/internal voids)**
N/A	N/A	N/A	N/A	N/A	N/A	N/A

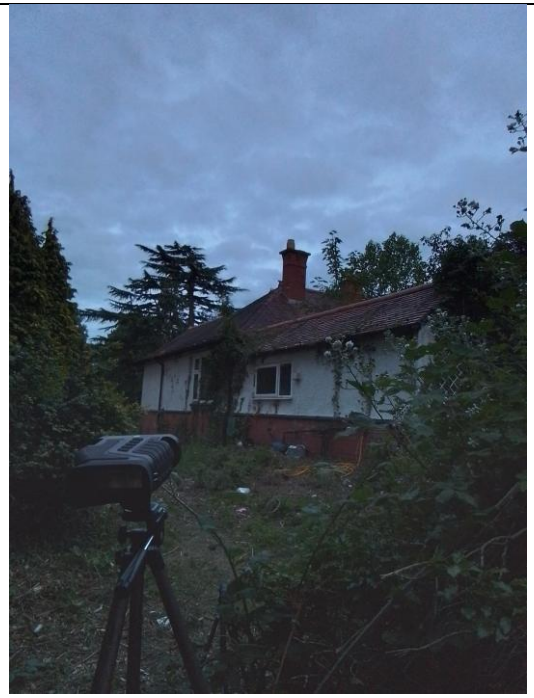
Surveyor observations		
Surveyor 1	**No bats were observed emerging from or re-entering the building** Species – CP, SP. Flight paths – Frequent activity along the southern treeline, with commuting and passes primarily east to west and occasional movement behind the treeline; one SP emergence recorded at 21:59. Foraging areas – Common pipistrelles exhibited sustained feeding activity between 22:01–22:33, particularly concentrated along the treeline to the south, including a noted 2-minute period of constant feeding.	 *Figure 1: View of surveyor 1*
IR position 1 (same view as surveyor 1) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (south-eastern) as surveyor position 1 Emergences observed: No Pipistrelle passes and foraging observed between 21:35 and 22:08. No further activity noted on the IR camera.	 *Figure 2: Screenshot from IR camera at darkest point*

Surveyor 2	**No emergences/re-entries observed.** Species – CP, SP. Flight paths – Repeated commuting movements, chiefly from south to north and south to west across the site, with occasional west-to-east and north-to-east passes overhead. Foraging areas – Sustained circling by common pipistrelles around adjacent tree canopies (22:12–22:27) suggests active foraging within the treeline.	 *Figure 3: View of surveyor 2*
IR position 2 (same view as surveyor 2) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (south-western) as surveyor position 2 Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 4: Screenshot from IR camera at darkest point*

IR position 3 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No observations or bat activity recorded upon review	 *Figure 5: Screenshot from IR camera at darkest point*
IR position 4 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No A single pipistrelle was observed at 21:45 passing over B1. No further activity was recorded during the survey.	 *Figure 6: Screenshot from IR camera at darkest point*

Surveyor 5	**No emergences/re-entries observed.** Species – CP, Noctule. Flight paths – One confirmed pass from the east across the roof; remaining detections were heard-only, with no other flight paths observed. Foraging areas – Brief feeding bouts in the clearing behind and left of the survey position (22:03–22:07) and again at 22:17.	 *Figure 7: View of surveyor 5*
IR position 5 (same view as surveyor 5) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 8: Screenshot from IR camera at darkest point*

IR position 6 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-eastern elevation as unmanned cameras due to lack of view for the nearest surveyor due to complex structure of roof Emergences observed: No First activity was a common pipistrelle heard not seen at 21:56. Constant common pipistrelle activity between 22:02-22:08, all heard but not seen. A soprano pipistrelle was heard but not seen at 22:11 and 22:15. Final activity was a common pipistrelle heard but not seen at 22:17.	 *Figure 9: Screenshot from IR camera at darkest point*

Surveyor 7	**No emergences/re-entries observed.** Species – CP, SP, Noctule, Myotis sp. Flight paths – Frequent bat passes travelling from the south across the building towards the west, with additional south-bound commuting movements. Foraging areas – Feeding and sustained activity recorded in front of the north-east elevation of the building.	 *Figure 10: View of surveyor 7*
IR position 7 (same view as surveyor 7) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (north-eastern) as surveyor position 7 Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 11: Screenshot from IR camera at darkest point*

Surveyor 8	**No emergences/re-entries observed.** First activity was a soprano pipistrelle seen passing the south side of the building heading east at 21:35. Frequent soprano and common pipistrelle activity was observed during the survey period including passes on the south side of the building early on and foraging activity in the adjacent trees. A noctule was heard but not seen at 22:31 and 22:41. A myotis bat was also heard but not seen at 22:40. Final activity was a soprano pipistrelle heard but not seen at 23:04. The survey concluded at 23:07.	 *Figure 12: View of surveyor 8*
IR position 8 (same view as surveyor 8) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (north-eastern) as surveyor position 8 Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 13: Screenshot from IR camera at darkest point*

Field Survey					
Dusk Emergence Survey 2					
Building B1					
Building inspection prior to survey	No updated internal inspection carried out due to the previous internal inspection survey still being in-date and valid.				
Surveyor and position	**Surveyor Position**	**Name**	**BERS Experience / Bat Licence**	**BCT Competency**	**Elevation**
	1	Margaret Warren	2 years, None	2 – Capable	South-eastern
	2	Jason Nash	4 years, None	2 – Capable	South-western
	3	Unmanned IR	N/A	N/A	North-western
	4	Unmanned IR	N/A	N/A	North-western
	5 - Lead	James Prendergast	5 years, None	2 – Capable	North-western
	6	Unmanned IR	N/A	N/A	North-eastern
	7	Paige Robertson	1 year, None	2 – Capable	North-eastern
	8	Dexter Green	2 years, None	2 - Capable	North-eastern
Weather (start/end)	Temperature (°C): 14.1 Relative humidity (%): 65 Cloud cover (%): 0 Wind (m/s): 5 Rain: None			Temperature (°C): 13.4 Relative humidity (%): 71 Cloud cover (%): 30 Wind (m/s): 6 Rain: None	
Equipment used	**Equipment**	**Make**	**Model**	**Count**	
	Additional Illumination	Nightfox	XB5 PRO	X8	
	Bat Detector	Magenta Electronics	Magenta Bat4	x8	
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	x5	
	NVA	Nightfox	Whisker	x8	
	Two Way Radio	BAOFENG	FV-88E	x5	

Results						
Date of survey				**Sunset** **Start - End**		
02/07/2025				Sunset 21:40 21:25 – 23:10		
Roost reference	**Species and numbers**	**Roost type**	**Structure reference**	**Roost location**	**Access point**	**Dimensions (for lofts/internal voids)**
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Surveyor observations		
Surveyor 1	**No bats were observed emerging from or re-entering the building** Common pipistrelle were heard infrequently between 22:06 and 23:10. Activity was more frequent between 22:29 to 22:36 and 22:47 to 22:53 during which times multiple passes were seen over and Infront of the building along the routes shown in the aerial drawing. There were occasional foraging calls, but mainly passing. Brown long eared were heard clearly and nearby at 22:49. Soprano pipistrelle was heard once passing nearby at 23:00.	 *Figure 14: View of surveyor 1*
IR position 1 (same view as surveyor 1) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (south-eastern) as surveyor position 1 Emergences observed: No Pipistrelle passes and foraging observed between 22:03 and 22:50. No further activity noted on the IR camera.	 *Figure 15: Screenshot from IR camera at darkest point*

Surveyor 2	**No emergences/re-entries observed.** First activity was at 22:02 which was a common pipistrelle which was heard only. A common pipistrelle was then seen Circling around my surveyor position. This activity was observed for until 22:46. A brown long-eared was observed flying over surveyor position at 22:38 with a Myotis sp observed at 22.42 flying W-E and the same again at 23.01.	 *Figure 16: View of surveyor 2*
IR position 2 (same view as surveyor 2) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (south-western) as surveyor position 2 Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 17: Screenshot from IR camera at darkest point*

IR position 3 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No observations or bat activity recorded upon review	Screenshot unavailable
IR position 4 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No observations or bat activity recorded upon review	 *Figure 18: Screenshot from IR camera at darkest point*

Surveyor 5	**No emergences/re-entries observed.** Activity began at 22.05 with a common pipistrelle which was heard but not seen, then again at 22:23, 22:30, 22:31, 22:35, 22:40, 22:50 and 23:04. One pass was observed from north to south overhead. Activity stopped at 23.10.	 *Figure 19: View of surveyor 5*
IR position 5 (same view as surveyor 5) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 20: Screenshot from IR camera at darkest point*

IR position 6 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-eastern elevation as unmanned cameras due to lack of view for the nearest surveyor due to complex structure of roof Emergences observed: No First activity was a common pipistrelle at 22:08 flying over B1 east to west. A second pass was observed at 22:30. A bat was observed foraging/circling around B1 from 22:41 until 22:48. No further bat activity was observed.	 *Figure 21: Screenshot from IR camera at darkest point*
Surveyor 7	**No emergences/re-entries observed.** First activity recorded was at 22:05 when a common pipistrelle was heard but not seen. A common pipistrelle was heard and not seen throughout the survey at 22:06, 22:26, 22:30, 22:35, 22:36, 22:41, 22:47, 22:48-22:50, 22:53 and 23:09. At 22:23 two common pipistrelles were observed commuting, one passed from east to west in front of the northeast elevation of B1 and over surveyor 6 and the other passed from north to south in front of the west elevation of B1. The final bat activity recorded was a myotis species heard but not seen at 23:16.	 *Figure 22: View of surveyor 7*

IR position 7 (same view as surveyor 7) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (north-eastern) as surveyor position 7 Emergences observed: No No other bat activity was recorded on the IR camera throughout the survey	 *Figure 23: Screenshot from IR camera at darkest point*
Surveyor 8	**No emergences/re-entries observed.** Activity started at 22:04 with a Common Pipistrelle heard but not seen. Common pipistrelles were heard but not seen throughout the survey (at 22:07, 22:19, 22:23, 22:27, 22:29, 22:32, 22:35, 22:47, 22:50, 22:53, 23:04 and were the last activity at 23:09 with some social calls during this period). Brown Long Eared bats were heard but not seen at 22:49. Soprano Pipistrelles were heard but not seen at 23:00. Myotis were heard but not seen at 23:05.	 *Figure 24: View of surveyor 8*

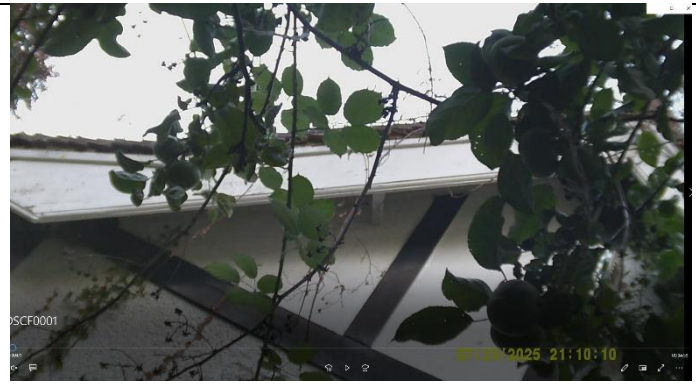
IR position 8 (same view as surveyor 8) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (north-eastern) as surveyor position 8 Emergences observed: No The only activity recorded was at 22:49 where a bat is seen entering the corner of the video footage flying in a Southernly direction. No other bat activity was recorded on the IR camera throughout the survey	 *Figure 25: Screenshot from IR camera at darkest point*

Field Survey					
Dusk Emergence Survey 3					
Building B1					
Building inspection prior to survey	No updated internal inspection carried out due to the previous internal inspection survey still being in-date and valid.				
Surveyor and position	**Surveyor Position**	**Name**	**BERS Experience / Bat Licence**	**BCT Competency**	**Elevation**
	1	Paige Robertson	1 year, None	2 – Capable	South-eastern
	2	Giorgina Shaw	3 years, None	2 – Capable	South-western
	3	Unmanned IR	N/A	N/A	North-western
	4	Unmanned IR	N/A	N/A	North-western
	5	James Prendergast	5 years, None	2 – Capable	North-western
	6	Unmanned IR	N/A	N/A	North-eastern
	7	Ben Whyman	2 years, None	2 – Capable	North-eastern
	8	Abbie Saul	4 years, None	2 - Capable	North-eastern
Weather (start/end)	Temperature (°C): 16 Relative humidity (%): 60 Cloud cover (%): 10 Wind (m/s): 0.5 Rain: None			Temperature (°C): 16 Relative humidity (%): 78 Cloud cover (%): 30 Wind (m/s): 0 Rain: None	
Equipment used	**Equipment**	**Make**	**Model**	**Count**	
	Additional Illumination	Nightfox	XB5 PRO	X8	
	Bat Detector	Magenta Electronics	Magenta Bat4	x8	
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	x5	
	NVA	Nightfox	Whisker	x8	
	Two Way Radio	BAOFENG	FV-88E	x5	

Results						
Date of survey				**Sunset** **Start - End**		
23/07/2025				Sunset 21:20 21:05-22:50		
Roost reference	**Species and numbers**	**Roost type**	**Structure reference**	**Roost location**	**Access point**	**Dimensions (for lofts/internal voids)**
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Surveyor observations		
Surveyor 1	**No bats were observed emerging from or re-entering the building** A common pipistrelle (CP) was first heard (not seen) at 21:44, with additional calls heard intermittently until 22:33. CPs were observed commuting along a southeast–northwest flight path near the front entrance and west elevation at 21:48, 21:50, 22:03, 22:04, and 22:16, with a Myotis species using the same route at 22:13. Foraging activity by a CP was seen above position 1 (south of B1) at 21:54, and another CP was seen passing along the southwest boundary at 21:55. A CP also commuted along the south elevation of B1 from east to west at 22:08. Brown long-eared bats were heard at 21:59 and seen crossing the east side of B1 at 22:24. A soprano pipistrelle was heard but not seen at 22:15.	 *Figure 26: View of surveyor 1*
IR position 1 (same view as surveyor 1) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (south-eastern) as surveyor position 1 Emergences observed: No No additional bat activity was observed upon review	 *Figure 27: Screenshot from IR camera at darkest point*

Surveyor 2	**No emergences/re-entries observed.** The first bat activity was a briefly seen soprano pipistrelle foraging from south to north at 21:35. A common pipistrelle was first detected at 21:41 foraging near the southwestern elevation, with continuous foraging activity along the same route from 21:42 to 22:08, and occasional activity thereafter until 22:51. Soprano pipistrelles were detected sporadically throughout, including visual sightings at 21:47 (along the initial path), and 22:09–22:11 around the southwestern elevation, with calls heard between 22:14–22:17. A brown long-eared bat was heard but not seen at 22:14, and the final activity recorded was a common pipistrelle, heard only, at 22:51.	 *Figure 28: View of surveyor 2*
IR position 2 (same view as surveyor 2) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (south-western) as surveyor position 2 Emergences observed: No No additional observations or bat activity recorded upon review	 *Figure 29: Screenshot from IR camera at darkest point*

IR position 3 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No observations or bat activity recorded upon review	Scrrenshot unavailable
IR position 4 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No observations or bat activity recorded upon review	 *Figure 30: Screenshot from IR camera at darkest point*

Surveyor 5	**No emergences/re-entries observed.** Activity began at 21.35 with a pass of a soprano pipistrelle. Common pipistrelle activity was mostly HNS behind me in trees. A brown long-eared was seen not heard passing towards position 6. A myotis species was heard not seen at 22.05.	 *Figure 31: View of surveyor 5*
IR position 5 (same view as surveyor 5) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-western elevation as unmanned cameras due to lack of view for the nearest surveyor due to tree canopy covering gable-end Emergences observed: No No additional observations or bat activity recorded upon review	 *Figure 32: Screenshot from IR camera at darkest point*

IR position 6 (unmanned IR) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the north-eastern elevation as unmanned cameras due to lack of view for the nearest surveyor due to complex structure of roof Emergences observed: No A bat was observed foraging in front of B1 at 21:55, as well as foraging observed between 22:07 and 22:17 behind B1. No further bat activity was observed	 *Figure 33: Screenshot from IR camera at darkest point*

Surveyor 7	**No emergences/re-entries observed.** First activity was a soprano pipistrelle heard but not seen at 21:36. Common pipistrelles were seen foraging between 21:41 and 22:03. A common pipistrelle passed in front of the north-eastern elevation at 21:50, heading southeast. Common pipistrelles were heard but not seen consistently between 21:49 and 22:02, and sporadically at 22:35 and 22:50. A brown long eared bat foraged in front of the north-eastern elevation at 22:01, and headed northwest. A brown long eared bat was heard but not seen at 22:14. A brown long eared bat passed from south to north in front of the north-eastern elevation at 22:26. A myotis was heard but not seen at 22:14.	 *Figure 34: View of surveyor 7*
IR position 7 (same view as surveyor 7) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (north-eastern) as surveyor position 7 Emergences observed: No No additional observations or bat activity recorded upon review	 *Figure 35: Screenshot from IR camera at darkest point*

Surveyor 8	**No emergences/re-entries observed.** The first activity was a faintly heard but unseen soprano pipistrelle at 21:31. A common pipistrelle was then faintly heard foraging frequently from 21:42 to 21:49, with regular passes noted throughout the survey along the eastern elevation. At 21:50, two common pipistrelles were seen—one commuting from north to southwest along the eastern elevation and the other along the west elevation. A brown long-eared bat was observed at 22:00 and again at 22:26 following the same northbound route along the eastern elevation. A Myotis species was seen at 22:09 flying west over the north elevation of B1 from the southeast. A faint noctule pass was heard at 22:48, and the final activity was a heard-only common pipistrelle at 22:49.	 *Figure 36: View of surveyor 8*
IR position 8 (same view as surveyor 8) *Nightfox Whisker + 1 IR lamp (XB5 PRO)*	**Post-survey analysis of IR footage confirmed no emergences/re-entries occurred during the survey** Camera position: observing the same elevation (north-eastern) as surveyor position 8 Emergences observed: No No additional observations or bat activity recorded upon review	 *Figure 37: Screenshot from IR camera at darkest point*

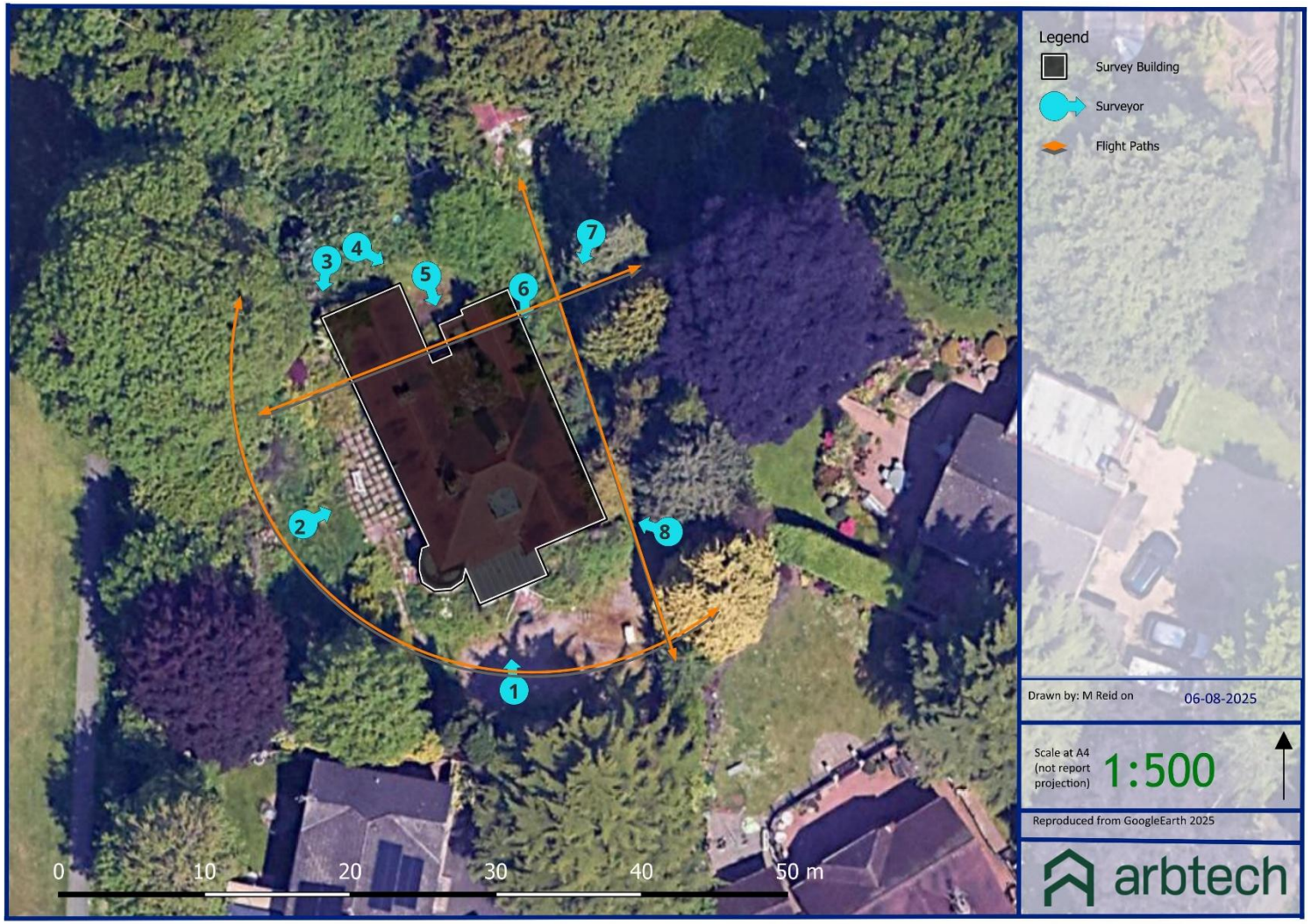
Conclusions, Impacts and Recommendations	
Survey Results Summary	The survey results concluded a likely absence of roosting bats within B1. The site was found to be regularly used by commuting and foraging common pipistrelles, soprano pipistrelles, and occasional brown long-eared bats and myotis bats. Of particular importance were the tree-lined boundaries which were found to be used as regular commuting routes.
Impact Assessment	No impacts foreseen to roosting bats, however due to the presence of a large number of roosting features across B1, suitable for large numbers of bats, as well as high value foraging/commuting both on and surrounding the site, there is a risk that bats may move into the building before demolition works take place. Foraging and commuting bats could be impacted by additional lighting on site which can reduce resources for the local population. Only common and widespread species were identified on site, therefore no impacts at population level are anticipated. Impact site level only.
Recommendations	Due to the high habitat value of the building, there remains an elevated risk that bats could be present during the works, as bats are highly mobile creatures known to roost switch regularly. If works are started prior to May 2026 the following measures should be adhered too: • Prior to any roof removal works, a visual inspection of the roof and any identified roosting features should be carried out by a suitably licenced ecologist using a torch and endoscope • Any roosting features should then be dismantled by hand under supervision from the ecologist

	• If bats are found during works, then all works must immediately stop and licenced may be required in order to allow the works to proceed • Once all roosting features have been removed then demolition works can take without further supervision If works are started after May 2026 then an updated internal inspection and dusk emergence survey will be carried out in the June/July prior to the start of works to check for any changes in roost status. If evidence of roosting bats is found then further surveys and a licence will be required to proceed with the works. 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 boundary tree-lines must 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	To enhance the site for roosting bats, it is recommended that tree-mounted bat boxes are utilised, such as Schwegler 2F Bat Box or Vivara Pro WoodStone Bat Box. These will provide roosting provision for a wide range of bat species. These should be placed on mature trees on site, at a height between 3m and 5m, in a south/south-westerly direction with a clear flight path, not blocked by vegetation.

Version control			
Status	**Issue**	**Name**	**Date**
Draft	0.1	Mel Reid BSc (Hons) MRes AMRSB, Principal Ecologist	04/08/2025
Final	1.0	Mel Reid BSc (Hons) MRes AMRSB, Principal Ecologist	06/082025

Appendix 1: BERS plan



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