

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

Old Manor, Shaftenhoe End, Barley, Royston, Hertfordshire, SG8 8LE

Client:

Philip and Celia Noblet

Report date:

3rd July 2025

Project:

This report is prepared to inform a planning application for the proposal described as: “Extension to the lodge, and internal renovations of the main house, to include skylights and reglazing of the western extension”

This report is supplementary to the Preliminary Roost Assessment report completed by Arbtech Consulting Ltd (2025).

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 (2025) 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.

Biodiversity Data has been requested but was unavailable at the time of writing. Data will be integrated when available.

Executive Summary

Report Validity: This report is valid for up to 18 months for the purposes of planning/LBC applications. For the purposes of bat licencing, the report is considered 'up to date' and suitable for licence application until the start of the following bat activity season. After those timeframes, some level of updated surveys will be required. The level of survey effort will depend on the specific circumstances of the site.

Results

Roost number	Species	Roost type	Roost location	Impact
B1				
1	Common pipistrelle	Day	Northern side under the tile adjacent to B1's western extension.	Skylights being put into the western extension will damage roosts, and could disturb, injure or kill any bats present.
B2				
2	Soprano pipistrelle	Day	Western gable end, underneath the wooden cladding.	The extension on the northern elevation of B2 will disturb any bats present.
3	Common pipistrelle	Satellite maternity roost	Western gable end, underneath the wooden cladding.	The extension on the northern elevation of B2 will disturb any bats present.

A Bat Licence is required to legally permit the works. This requirement exists independently of the planning system and is required whether planning permission is needed or not, and whether this is listed as a condition of planning or not.

If the licence is not submitted by 27th September 2025 a material changes check will be required.

If the licence is not submitted by 1st May 2026 updated dusk surveys will be required.

The licence can be applied for once planning permission has been granted (where required), and within 3 months of the start of works. Any pre-commencement wildlife related planning conditions that require sign off from the council will need to be discharged prior to licence submission.

Background

The PRA conducted by Arbtech Consulting Ltd in April 2025 assessed B1 and B2 on site. Both were found to have moderate habitat value, particularly for crevice-dwelling bats, due to presence of raised roof tiles. There were no voids accessible due to the construction of the buildings, and any sealed voids were deemed negligible or sub-optimal due to their size.

Number of buildings on site – 4 buildings

Number of buildings surveyed – 2 buildings.

Several buildings within the wider site complex have not been subject to detailed roost assessment but are considered to offer limited potential to support crevice-dwelling bat species in low numbers. A satellite maternity roost has been confirmed within Building B2. Although the unsurveyed buildings lie outside the footprint of the proposed works, precautionary measures will be implemented to avoid any risk of indirect disturbance to bats, given the presence of a confirmed roost elsewhere on site. The proposed development is limited in scope and location, and no direct impacts are anticipated on any roosts potentially present within the wider site complex.

Proposed development

Current use of building – Residential

Proposed use of building – No change

Structural changes to building – Plans include the addition of skylights to the western extension of B1, and the addition of a single-storey extension to the northern elevation of B2.

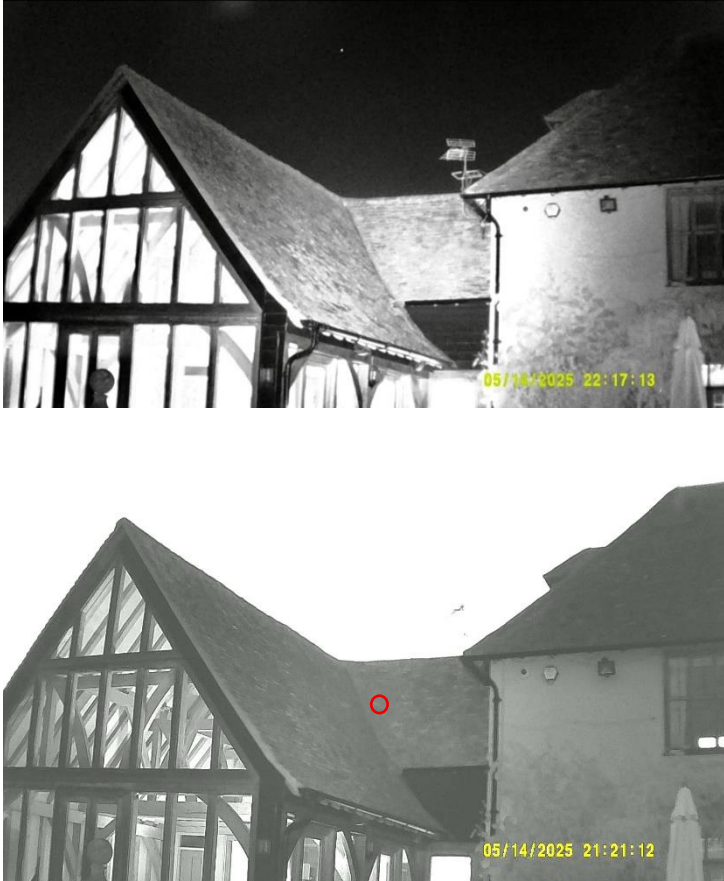
Cosmetic/repair work – Internal renovations to B1 on the first and second storeys. Addition of skylights to the B1 western extension.

Type of permission required – Listed building consent

The site surveys were designed and managed by Carly Preen, Graduate Ecologist BSc (Hons) MSc - Bat License 2024-12326-CL17-BAT					
See surveyor locations in the BERS plan in Appendix 1					
Limitations	An infrared (IR) security light was visible in Surveyor 2’s footage during the final half hour of each survey. However, the light only affected visibility of the easternmost brick wall of the main building (B1), where no potential roosting features were identified during the Preliminary Roost Assessment (PRA). Furthermore, this section of the building is not subject to external works, and the planned renovations are internal only, meaning the light interference does not affect the validity of the survey results. External lights were present on survey 1. However, these were soft lighting and low to the ground, so had minimal impact, and were turned off for following surveys.				
Field Survey					
Dusk Emergence Survey 1					
Building B1 and B2					
Building inspection prior to survey	N/A				
Surveyor and position	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	1	Karin Patel	1 st season	Level 1	Southeast elevation of B1 extension
	2-Lead	Ceri Archer	1 st season	Level 2	Northwest elevation of B1 extension
	3	Amber Chapman	2 nd season	Level 2	Southeast elevation of B2
	4	Indy Jai	5 th season	Level 1	Northern elevation of B2
	5	Unmanned IR Supervised by surveyor 4	N/A	N/A	Western elevation of B2

Weather (start/end)	Temperature (°C): 13 Relative humidity (%): 58 Cloud cover (%): 5 Wind (m/s): 0.3 Rain: None			Temperature (°C): 10 Relative humidity (%): 75 Cloud cover (%): 5 Wind (m/s): 0.3 Rain: None		
Equipment used	Equipment	Make		Model		Count
	NVAs	Nightfox		Whisker		5
	Additional Illumination	Nightfox		XB5 PRO		5
	Bat Detector	Wildlife Acoustics		Echo Meter Touch 2		5
		Magenta Electronics		Magenta Bat4		2
	Two Way Radio	BAOFENG		FV-88E		5
Results						
Date of survey				Sunset; Start - End		
14/05/2025				Sunset 20:46; 20:31 – 22:16		
Roost reference	Species and numbers	Roost type	Structure reference	Roost location	Access point	Dimensions (for lofts/ internal voids)
1	CP x 1	Day	B1	Northern side under the tiles adjacent to B1's western extension.	Small gap under roof tile	N/A
2	SP x 3	Day	B2	Under wooden cladding of B2 western gable end	Western gable end of B2 lifted wooden cladding	N/A

Surveyor observations		
B1		
Surveyor 1	Emergences observed - Yes <u>Roost 1:</u> Number: 1 Time: emerged at 21:21 Location of access point: Tiles at join of extension to main property. Direction of travel on emergence: Emerged and flew in a westerly direction Species ID confirmed on site as common pipistrelle. The first bat was a soprano pipistrelle, heard, at 21:09. Soprano and common pipistrelles were then heard passing continuously from 21:16 to 21:21. A pass east to west was observed from common pipistrelle at 21:22 and at 21:36. From 21:24 till 21:38, constant activity was observed from common pipistrelle, soprano pipistrelle and serotine, where they were foraging from the hedge line to the northeast. Constant activity from common pipistrelle occurred till the end of the survey at 22:17.	 Emergence point of single Common pipistrelle (Red)

<i>IR position 1</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: observing southeast elevation of B1 Emergences observed: Yes <u>Roost 1:</u> Number: 1 Time: emerged at 21:21 Location of access point: Tile at join of extension to main property. Direction of travel on emergence: Emerged and flew in a westerly direction. Species ID confirmed on site as common pipistrelle. Surveyor 1 observed the emergence No additional observations were made.	 Emergence point of single Common pipistrelle (Red)
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<i>Surveyor 2</i>	No emergencies observed. The first bat seen was a common pipistrelle passing low east to west over the B1 ridgeline at 21:09. From 21:12 onwards there was consistent foraging and commuting activity recorded from common and soprano pipistrelles. The activity occurred on a north-south corridor along the treeline to the west of B1 and continued until the end of the survey. Further, common pipistrelles were recorded on 4 occasions commuting east to west along the ridge line of B1, and over the western extension. A single occurrence of serotine was heard at 21:43. No further activity.	
<i>IR position 2</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing northwest elevation of the western extension of B1. A full review of the IR footage did not reveal any additional bat activity.	

B2		
Surveyor 3	No emergencies observed. The first activity of the survey was a silent pass at 21:09 appearing near the eastern-most portion of the pitched roof on the southern elevation. Two further silent passes occurred at 21:33 from the north to the east. These observations are consistent with foraging paths of soprano pipistrelles observed by surveyor 4. At 21:16 a common pipistrelle passed from east of B2, within close proximity to the eastern gable end. 4 common and soprano pipistrelles were seen commuting along the same corridor throughout the night. At 21:24 a common pipistrelle passed north to south over B2. Common and soprano pipistrelles were also observed intermittently foraging above and south of B2 between 21:33 and 21:46. Common and soprano pipistrelles were heard foraging intermittently until the end of the survey.	

<i>IR position 3</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing southeast elevation of B2. A full review of the IR footage did not reveal any additional bat activity.	
<i>Surveyor 4</i>	Emergences observed - Yes <u>Roost 2: Soprano pipistrelle day roost</u> Number: 3 Times: 3 consecutive emergences at 21:08. Location of access point: Under the wooden cladding on the western elevation of B2. Directions of travel on emergence: All individuals emerged and flew in a northerly direction. Species ID confirmed on site as Soprano pipistrelle A soprano pipistrelle passed from east to west alongside the building at 21:10. Foraging activity of soprano pipistrelles was then observed in the garden adjacent to B2 between 21:12 and 21:16, and 21:40 (2 individuals). Common pipistrelle foraging activity was seen continuously between 21:19 and 21:43, and between 21:56 and 22:01. A noctule passed from south to west at 22:12.	 Soprano pipistrelle emergence point (Red arrow)

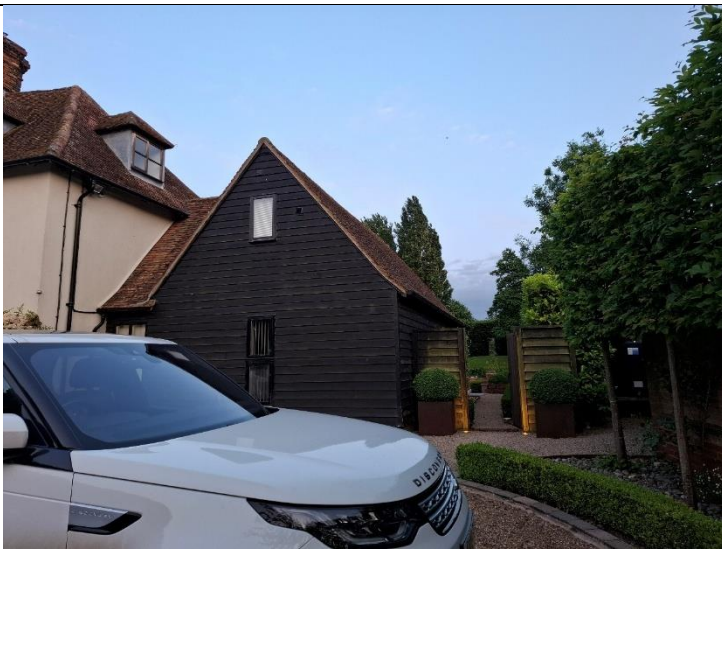
<i>IR position 4</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing north elevation of B2. A full review of the IR footage did not reveal any additional bat activity. A tree obscured the gable end of the camera, and emergences were not observed. This was not considered a significant limitation as camera 5 had a clear view of the elevation.	
<i>IR position 5</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing west elevation of B2. Emergences observed: Yes <u>Roost 2:</u> Number: 3 Times: Three consecutive emergences at 21:08. Location of access points: From under the wooden cladding on the western elevation of B2. Directions of travel on emergence: All individuals emerged and flew in a northerly direction. Species ID confirmed on site as soprano pipistrelle. Surveyor 4 observed the emergence. No additional bat activity was observed.	

		 Soprano pipistrelle emergence point (Red)
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Field Survey					
Dusk Emergence Survey 2					
Building B1 and B2					
Building inspection prior to survey	Carly Preen, Bat License 2024-12326-CL17-BAT carried out a torch inspection under the wooden cladding on the western gable end of B2. Two bats were seen in-situ under the second panel from the ground, confirming previous roost observations.				
	 Bats in-situ, under the wooden cladding				
Surveyor and position	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	1	Emma Cantu	5th season	Level 2	Southeast elevation of B1 extension
	2	Ceri Archer	1 st season	Level 2	Northwest elevation of B1 extension
	3	Shaliza Malik	1st season	Level 1	Southeast elevation of B2
	4-Lead	Carly Preen	7 th season/ Bat License 2024-12326-CL17-BAT	Level 3	Northwestern elevation of B2
	5	Unmanned IR supervised	N/A	N/A	Western elevation of B2

		by surveyor 4.			
<i>Weather (start/end)</i>	Temperature (°C): 14 Relative humidity (%): 70 Cloud cover (%): 20 Wind (m/s): 0 Rain: None			Temperature (°C): 13 Relative humidity (%): 60 Cloud cover (%): 95 Wind (m/s): 0 Rain: None	
<i>Equipment used</i>	Equipment	Make	Model	Count	
	NVAs	Nightfox	Whisker	5	
	Additional Illumination	Nightfox	XB5 PRO	5	
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	5	
		Magenta Electronics	Magenta Bat4	1	
	Two Way Radio	BAOFENG	FV-88E	5	

Results						
Date of survey				Sunset; Start - End		
04/06/2025				Sunset 21:14; 20:58 – 22:45		
Roost reference	Species and numbers	Roost type	Structure reference	Roost location	Access point	Dimensions (for lofts/ internal voids)
2	SPx3	Day	B2	Under wooden cladding of B2 western gable end	Western gable end of B2 lifted wooden cladding	N/A
Surveyor observations						
B1						
Surveyor 1		No emergencies observed. The first recorded activity was a common pipistrelle at 21:37. It travelled south over the ridge of B1 and into the garden to the south. This flight path was observed again at 21:38 and 21:42 by 2 common pipistrelles Other bats during the survey were heard passing, including a noctule at 21:45, a barbastelle at 22:17, brown long eared bat at 22:19 and 22:22 and a myotis identified as Daubenton's at 22:37. The final bat was heard at 22:42. No further activity.				

<i>IR position 1</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing southeast elevation of B1 A full review of the IR footage did not reveal any additional bat activity.	
<i>Surveyor 2</i>	No emergencies observed. The first recorded activity was a common pipistrelle at 21:37 passing east to west over the ridgeline of B1. 2 further individuals were observed following this route at 21:42 and 22:29. Common pipistrelles were then observed consistently commuting and foraging between 21:39 and 22:28 on a north-south corridor, along the treeline, with up to 3 individuals seen together at a time. At least 3 individuals were also observed foraging overhead in front of the northern elevation from 21:58 to 22:47. A barbastelle was heard passing at 22:18. A myotis sp. (Confirmed as Natterer's bat) was heard passing at 22:34. No further activity.	

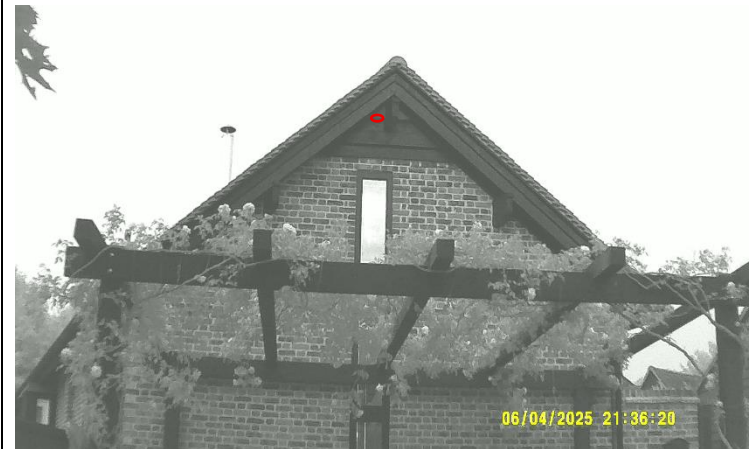
<i>IR position 2</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing northwest elevation of B1 extension. A full review of the IR footage did not reveal any additional bat activity.	
B2		
<i>Surveyor 3</i>	No emergencies observed. The first activity was a common pipistrelle, heard at 21:35. A further 15 common pipistrelle passes, were heard between 21:38 and 22:47. The first sighting was a common pipistrelle observed at 21:45, flying along a clockwise route to the south of B2. Another sighting followed at 21:46 of a common pipistrelle passing south to east, to the south of B2. Common pipistrelles were observed foraging on a north-south corridor to the south of B2 between 22:02 and 22:29. There were two <i>Myotis</i> sp, identified as Daubenton's bats, heard passing at 22:33 and another at 22:37. The latter was much fainter. No further activity.	

<i>IR position 3</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing southeast elevation of B2. A full review of the IR footage did not reveal any additional bat activity.	
<i>Surveyor 4</i>	Emergences observed - Yes <u>Roost 2:</u> Number: 3 Times: Two consecutive emergences at 21:20, and a third at 21:36. Location of access points: Under the wooden cladding on the western elevation of B2. Directions of travel on emergence: All individuals emerged and flew in a northerly direction. Species ID confirmed on site as soprano pipistrelle.	 Soprano pipistrelle emergence point

<i>IR position 4</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing north elevation of B2. A full review of the IR footage did not reveal any additional bat activity.	
<i>IR position 5</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing west elevation of B2. Emergences observed: <u>Roost 2:</u> Times: Two consecutive emergences at 21:20, and a third at 21:36. Location of access points: From under the wooden cladding at the western elevation of B2. Directions of travel on emergence: All individuals emerged and flew in a northerly direction. Species ID confirmed on site as soprano pipistrelle. Surveyor 4 observed the emergence. Foraging activity was observed in front of and above the elevation intermittently from 21:24 to 22:22.	



Emergence point 2 soprano pipistrelles from roost 2.

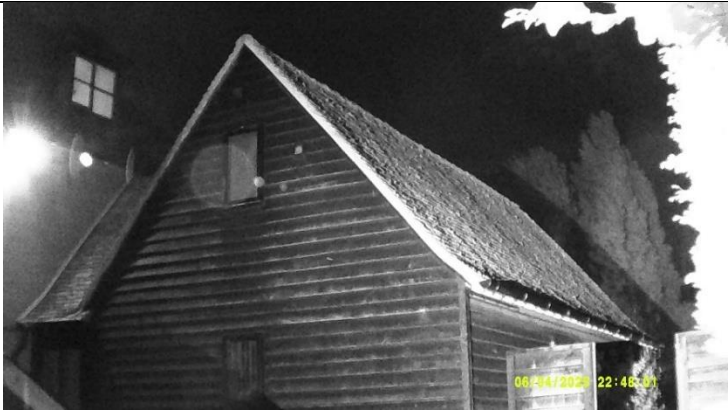


Emergence point of soprano pipistrelle from roost 2.

Field Survey					
Dusk Emergence Survey 3					
Building B1 and B2					
Building inspection prior to survey	N/A				
Surveyor and position	Surveyor Position	Name	BERS Experience / Bat Licence	BCT Competency	Elevation
	1	Karin Patel	1 st season	Level 1	Southeast elevation of B1 extension
	2-Lead	Ceri Archer	1 st season	Level 2	Northwest elevation of B1 extension
	3	Shaliza Malik	1 st season	Level 1	Southeast elevation of B2
	4	Emma Cantu	5 th season	Level 2	Northwestern elevation of B2
	5	Unmanned IR Supervised by surveyor 2.	N/A	N/A	Western elevation of B2
Weather (start/end)	Temperature (°C): 22 Relative humidity (%): 64 Cloud cover (%): 0 Wind (m/s): 0.8 Rain: None			Temperature (°C): 20 Relative humidity (%): 75 Cloud cover (%): 0 Wind (m/s): 1.2 Rain: None	
Equipment used	Equipment	Make	Model	Count	
	NVAs	Nightfox	Whisker	5	
	Additional Illumination	Nightfox	XB5 PRO	5	
	Bat Detector	Wildlife Acoustics	Echo Meter Touch 2	5	
		Magenta Electronics	Magenta Bat4	1	
	Two Way Radio	BAOFENG	FV-88E	5	

Results						
Date of survey				Sunset; Start - End		
27/06/2025				Sunset 21:23; 21:06 – 23:06		
Roost reference	Species and numbers	Roost type	Structure reference	Roost location	Access point	Dimensions (for lofts/ internal voids)
2	CPx1	Day	B1	Northern side under the tiles adjacent to B1's western extension.	Small gap under roof tile	N/A
3	CPx10	Satellite maternity roost	B2	Under wooden cladding of B2 western gable end	Western gable end of B2 lifted wooden cladding	N/A
Surveyor observations						
B1						
Surveyor 1	Emergences observed - Roost 1: Number: 1 Time: emerged at 21:57 Location of access point: Tiles at join of western extension to main building B1. Direction of travel on emergence: Emerged and flew in a westerly direction. Species ID confirmed on site as common pipistrelle. The first activity was a common pipistrelle commuting northeast to southwest at 21:52. Common and soprano pipistrelles were observed commuting along this route throughout the night. At 22:34 a brown long-eared bat was observed flying from the garden over the building.			 Emergence point of Common pipistrelle (Red)		

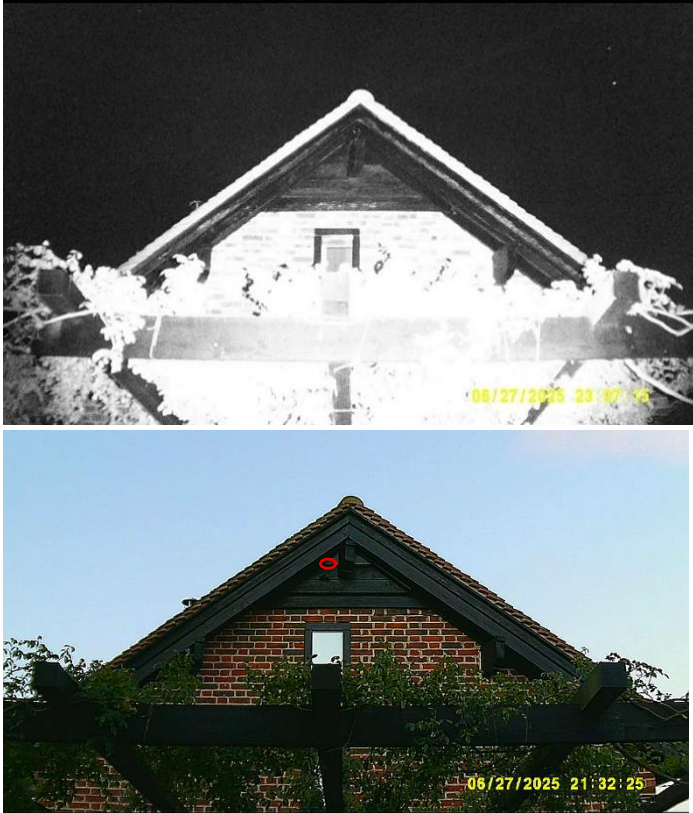
	At 22:47 a bat thought to be a Nathusius's' pipistrelle passed from the garden, south to north, to the west of B1. Activity concluded with a final pass by a common pipistrelle at 23:02.	
<i>IR position 1</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: observing southeast elevation of B1 Emergences observed- Yes <u>Roost 1:</u> Number: 1 Time: emerged at 21:57 Location of access point: Tiles at join of western extension to main building B1. Direction(s) of travel on emergence: A single Common pipistrelle emerged and flew in a westerly direction. Species ID confirmed on site as common pipistrelle. Surveyor 1 observed the emergences. No additional observations were made.	 Emergence point of Common pipistrelle (red) from roost 1.

<i>Surveyor 2</i>	No emergencies observed. The first recorded activity was a common pipistrelle seen commuting from north to south over the B1 ridgeline at 21:54. Common pipistrelles were then seen on 11 occasions continuously commuting on an east-west corridor alongside B1 between 21:55 and 22:54. A further 9 common pipistrelle passes, were heard between 22:40 and 23:04. Two soprano pipistrelles passed, one observed at 21:57 commuting on an east-west corridor along B1. The second was heard passing. Two brown long eared bats were recorded passing east to west alongside the building at 22:39. No further activity.	
<i>IR position 2</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing northwest elevation of B1 extension. A full review of the IR footage did not reveal any additional bat activity.	

B2		
Surveyor 3	No emergencies observed. The first recorded activity occurred at 21:54, in which a common pipistrelle was seen passing east to west behind Position 3. This was followed by two common pipistrelles seen travelling north to south between a gap between the tree and B2 at 22:55. Common pipistrelles were then seen foraging consistently along this route between 22:01 and 22:12. Common pipistrelles were observed foraging north-east to south-west in front of the elevation at 22:14. A common pipistrelle was observed foraging in front of the southern elevation of B2 between 22:24 and 22:26. Common pipistrelles were heard social calling between 22:21 and 23:05, with 2 individuals heard. A brown long-eared bat was heard passing at 22:38. No further activity.	

<i>IR position 3</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing southeast elevation of B2. A full review of the IR footage did not reveal any additional bat activity.	
<i>Surveyor 4</i>	Emergences observed - Yes <u>Roost 3:</u> Number: 10 Times: Emergences occurred between 21:32 and 21:41. Location of access points: Underneath wooden cladding on the western elevation of B2. Directions of travel on emergence: All individuals emerged and flew in a northerly direction. Species ID confirmed on site as common pipistrelles. Continual emergence and re-entry of common pipistrelles was observed between 21:32 and 22:12 under the top and second panels of the wooden cladding on the western elevation of B2. Due to a return behaviour beginning at 21:42, emergence numbers became more difficult to record after this point. Upon emergence, the pipistrelles continued to forage around B2 and B1 during this time.	 Emergence point of Common pipistrelle

	Return behaviour was then noted again between 22:46 to 23:01. A Nathusius's' pipistrelle was heard passing at 22:16, followed by a leisler's noctule at 22:19. A brown long-eared bat pass, was heard at 22:33. A barbastelle pass was heard at 22:53 and 22:57. No further activity.	
<i>IR position 4</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch with</i> <i>Magenta Bat4 detector</i>	Camera position: Observing north elevation of B2. No emergencies observed. Common pipistrelles (confirmed by magenta Bat4 detector audio during IR review) were observed passing on a south-north corridor and foraging above and north of B2 between 21:38 and 23:00, with a maximum of 5 individuals seen together at one time.	

<i>IR position 5</i> <i>IR nightfox whisker</i> <i>and XB5 Pro torch</i>	Camera position: Observing west elevation of B2. Emergences observed: <u>Roost 3:</u> Number: 10 Times: emerged between 21:32 and 21:41. Location of access points: Underneath wooden cladding on the western elevation of B2. Directions of travel on emergence: All individuals emerged and flew in a northerly direction. Species ID confirmed on site as common pipistrelle. Surveyor 5 observed the emergences. A full review of the IR footage did not reveal any additional bat activity.	 Emergence point of Common pipistrelle (red) from roost 3.
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Conclusions, Impacts and Recommendations						
Survey Results Summary	Three confirmed roosts were found to be present on B1 and B2, Details below:					
	Roost number	Species	Roost type	Peak number of individuals	Roost location	Impact
	B1					
	1	Common pipistrelle	Day roost	1	Northern side under the tiles adjacent to B1's western extension.	Skylights being put into the western extension will damage roosts, and could disturb, injure or kill any bats present. Level of impact: Site
	B2					
	2	Soprano pipistrelle	Day roost	3	Western gable end, underneath the wooden cladding.	The extension on the northern elevation of B2 will disturb any bats. Level of impact: Site
	3	Common pipistrelle	Satellite maternity roost	10	Western gable end, underneath the wooden cladding.	The extension on the northern elevation of B2 will disturb any bats. Level of impact: Site
<u>General bat activity on site:</u> Key foraging areas – Common and soprano pipistrelles were frequently observed foraging in the garden area north of B2, and in the gravel parking area between B1 and B2 during all 3 surveys. Key flight lines – Common and soprano pipistrelles were observed using a north-south corridor along the hedge to the west of B1 frequently in all 3 surveys. 2 brown-long eared bats also followed this corridor during survey 3. Common and soprano pipistrelles were observed commuting north to southeast over B2 in all 3 surveys.						

	Species observed – Common and soprano pipistrelles, brown long-eared, serotine, barbastelle, Daubenton's and Natterer's bats. Hibernation suitability - Low – Due to the presence of a maternity roost of common pipistrelle bats, it is possible that the roost will be used all year round. However, the building does not present any typical hibernation sites and will fluctuate in temperature and humidity across the season, therefore does not provide a stable cool and humid environment generally needed for hibernation. It is unlikely that any other species would hibernate here, and therefore additional hibernation surveys are considered disproportionate and unnecessary for the purposes of licencing. Additional notes/discussion – The common pipistrelle roost 1 is accessed under a roof tile on the western extension of B1. The installation of skylights on the western extension is likely to damage this access point. The western extension extends into the main building and larger roof area, offering multiple potential places to roost within the wider context of B1.
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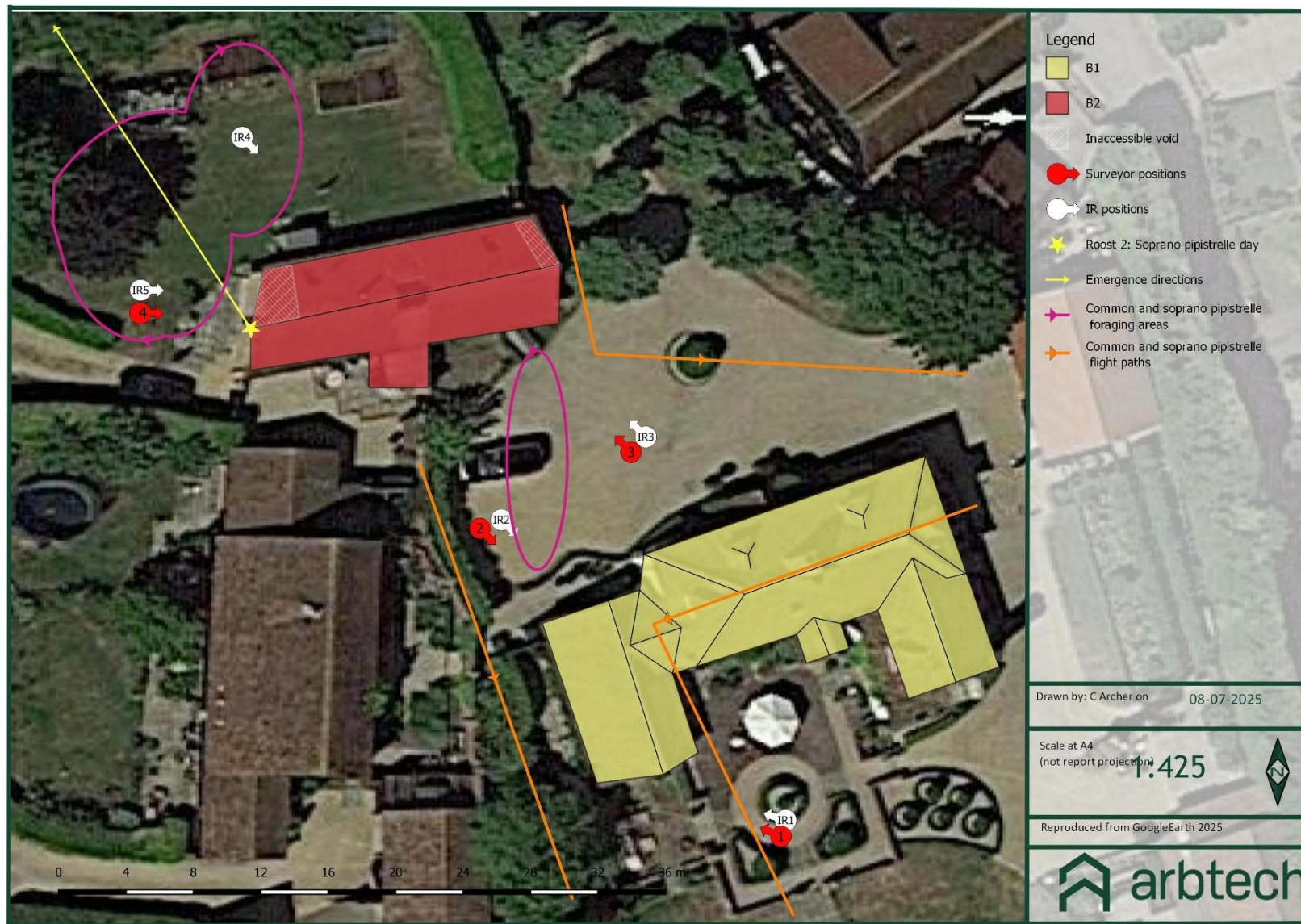
<i>Impact Assessment</i>	Roost number	Impact
	B1	
	1	The roost will be damaged by the proposed skylight installation on the B1 western extension.
	B2	
	2	The roost will be disturbed when the extension is created on the northern extension of B2. According to current proposed plans, access to the roost would be maintained.
	3	The roost will be disturbed when the extension is created on the northern extension of B2. According to current proposed plans, access to the roost would be maintained.
<i>Recommendations</i>	A Bat Licence from Natural England is required to legally permit the works. This requirement exists independently of the planning system and is required whether planning permission is needed or not, and whether this is listed as a condition of planning or not. Additional survey requirements: • If the licence is not submitted by 27th September 2025 a Material Changes Check will be required. • If the licence is not submitted by 1 May 2026 updated dusk surveys will be required. The licence can be applied for once planning permission has been granted and within 3 months of the start of works. Any pre-commencement wildlife related planning conditions that require sign off from the council will need to be discharged prior to licence submission. For maternity roosts we will recommend a detailed bat mitigation and compensation plan prepared by an experienced EPSL writer, to ensure that the LPA can have full confidence that the licence application would be successful and that the 3 tests can be met. The information below gives an outline of the likely requirements. An EPSL application to Natural England will be required to legally permit the proposed works. The EPSL application requires that surveys have been undertaken within the most recent active bat season, and at a	

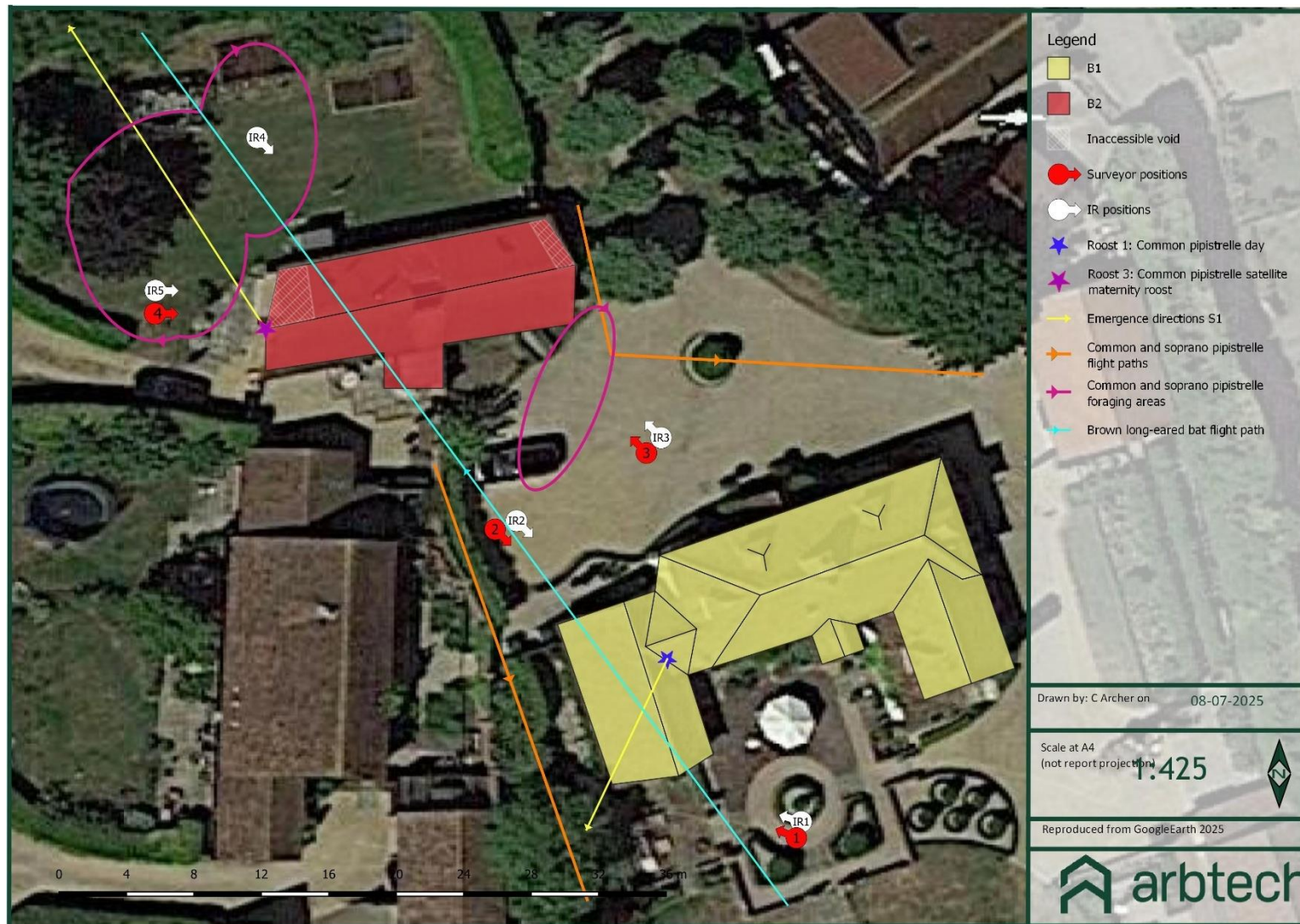
	suitable time of year to fully characterise the roosts present. Planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission, where possible to do so. A Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period. The named ecologist on the EPSL will need to have visited the site, so a pre EPSL inspection may also be needed regardless of the passage of time between surveys and EPSL. The EPSL will detail any mitigation and compensation measures that will be required for the proposed development to comply with the standing advice and will be designed to reduce any impacts to an acceptably low level so as to maintain (or enhance) the Favorable Conservation Status (FCS) of the local bat population. The EPSL will include (but are not limited to) the following measures: ▪ Timing of works to avoid the maternity season (May to September) ▪ Where possible, destructive works should be timed to take place in the 'shoulder' seasons October-November or March-April. ▪ The installation of bat boxes or replacement bat roosts prior to works commencing to form a receptor site for any bats found during the works. Boxes may be installed on buildings or trees or can be pole mounted but must be in an undisturbed location and will need to be maintained in this location post-development. 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 provision of a toolbox talk to contractors, by the Named Ecologist or an Accredited Agent, to inform them of the presence of bat roosts. ▪ A pre-commencement inspection of any roost features by the Named Ecologist or an Accredited Agent using a torch and an endoscope (this may be via ladders, scaffolding or a mobile elevated platform). ▪ Avoiding the use of unnecessary lighting, particularly at night, or implementing a low impact lighting strategy to avoid illumination of retained or newly created roosts or roost features.
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	▪ Avoiding excessive noise or vibration disturbance e.g. from power tools or radios, within close proximity of retained or newly created roosts or roost features. ▪ All roosts and access points will need to be retained, therefore no roost compensation is required. ▪ Post development monitoring will be required in years 2 and 4 post development. This will involve a dusk emergence survey to cover all replaced roosts, and inspection of any bat roosts where possible. The EPSL will only include the bat species, numbers and roost types listed above. If bats are found during periods of adverse weather conditions, these must be left undisturbed until weather conditions become more favorable to move bats to the receptor bat box. EPSLs do not allow for the disturbance of hibernating bats. Therefore, if any bats are found during the hibernation period or if any unexpected bat species or roost types are identified, works must cease and advice must be sought from the Named Ecologist regarding the possible requirement for timing restrictions for works, the completion of further bat surveys or a modification to the EPSL. Any new roof lining will need to be type 1f bitumen or a if a BRM is required this will need to have passed the snagging propensity test. Wildlife Sensitive Lighting Strategy A low impact lighting strategy will be adopted for the site during and post-development, and this should be designed in accordance with Guidance Note GN08/23 Bats and Artificial Lighting at Night (Institution of Lighting Professionals, 2023). The following measures could be included: ▪ Light spill on to the pond or the western hedge-line west of B1, and the garden north-west of B2 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.
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	▪ 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. Given the increased likelihood that bats could be utilizing other buildings on site, to protect potential bat roosts, it is recommended to establish a 5-meter buffer zone around all buildings within the complex that have been identified as having habitat value. This buffer should be free from site traffic, storage, lighting, access points, or any development activities to prevent disturbances to existing roosts. If maintaining this buffer is not feasible, conducting Phase 2 bat surveys will be necessary to assess bat activity and habitat utilization. <i>Additional surveys may be required dependent upon the activity recorded.</i>
<i>Enhancements</i>	The installation of three bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be integrated within the new build extension. Bat boxes should be positioned 3-5m above ground level (at the eaves of buildings), facing in a south or south-westerly direction, with a clear flight path to and from the entrance, away from and unlit by artificial light, and not above any windows. The bat boxes will be a specification suitable for crevice dwelling species such as Vivara Pro Build-In Woodstone Bat Tube (integrated), Ibstock Enclosed Bat Box 'C' (integrated), or a similar alternative brand.

Appendix 1: BERS plans**Appendix 1a) BERS plan survey 1**

Appendix 1b) BERS plan survey 2

Appendix 1c) BERS plan survey 3

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