Rhiannon Jensen O'Brien BSc (Hons) MSc
Consultant Ecologist
Email: Rhiannonjob@arbtech.co.uk
Arbtech Consulting Ltd
arbtech.co.uk

Bat Emergence and Re-Entry Surveys (BERS)

Survey site:

Holme Cottage, Huntingdon Road Huntingdon, Cambridgeshire, PE28 2AD

Client:

Yvette Pinnington

Report date:

2nd October 2024

Project:

This report is prepared to inform a planning application for the proposal described as:
Alterations to the listed building including part demolition and extension to main dwelling and demolition of a separate outbuilding.

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 and client.

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

PRA – Arbtech January 2024

Number of buildings on site – 3, comprising a dwelling, garage and wooden shed.

Buildings requiring further survey – 1, the dwelling, (B1).

B1

Evidence of bats – no evidence identified during the PRA.

Habitat value – Moderate: There are gaps in the roof tiles and fascia that provide suitable roosting features for crevice dwelling bats.

BERS results

The 3 surveys confirmed the following roost on site:

1 x day roost comprising a maximum count of 5 soprano pipistrelle bats. The bats are using two closely positioned access points; entering and exiting from gaps at the eaves on the northwest corner.

An EPSL will be required to legally permit works. Further details are provided in the results section of this report.

The site surveys were designed and managed by Rhiannon Jensen O'Brien BSc (Hons), MSc, Accredited Agent under Natural England Bat Licence Number: 2019-41480-CLS-CLS.

See surveyor locations in the **BERS plan in Appendix 1, enhancement plan in appendix 2 and proposed plans in appendix 3.**

Limitations	None identified.

Field Survey							
Dusk Emergence Survey 1							
Building B1							
Surveyor and position	**Lead Surveyor 1** – Michelle Walding-Kelly- 1 year previous bat experience – observing the northern and western elevation **Surveyor 2** – Danielle Olding– Level 2 licenced – observing the southern and eastern elevation						
Weather (start/end)	Temperature (°C): 14 Relative humidity (%): 81 Cloud cover (%): 50 Wind (m/s): 10 Rain: None				Temperature (°C): 13 Relative humidity (%): 81 Cloud cover (%): 90 Wind (m/s): 10 Rain: None		
Equipment used	Echometer Touch x2, Nightfox Whisker IR camera x2, Nightfox XB5 IR torches x2						
Results							
Date of survey	**Sunset Start - End**	**Species and numbers**	**Roost type**	**Structure reference**	**Roost location**	**Access points**	**Dimensions and explanation of roost location**
14/05/2024	20:51 20:33 23:18	N/A	N/A	B1	N/A	N/A	N/A
Surveyor observations							
Surveyor 1	**No emergences observed.** The first activity was a soprano pipistrelle at 21:04. The bat was seen foraging above the surveyor. Soprano pipistrelles were observed passing the site at 21:11, 21:31, 21:44 and 22:02. The bats were seen passing from the south-west to north-east direction. A noctule was seen passing in a north-eastern direction at 22:01.						

IR position	**No emergences or additional bat activity were recorded.**	
Surveyor 2	**No emergences observed.** The first activity was a noctule at 20:40. The bat was heard but not seen. Noctules were recorded at 20:59, 21:39 and 22:28. All observations were passes that were heard but not seen. A soprano pipistrelle was observed at 21:20. The bat was seen foraging around the surveyor and then travelling north-east. A soprano pipistrelle was recorded at 21:45 and 22:24 which was heard but not seen passing over the site.	
IR position	**No emergences or additional bat activity were recorded.**	

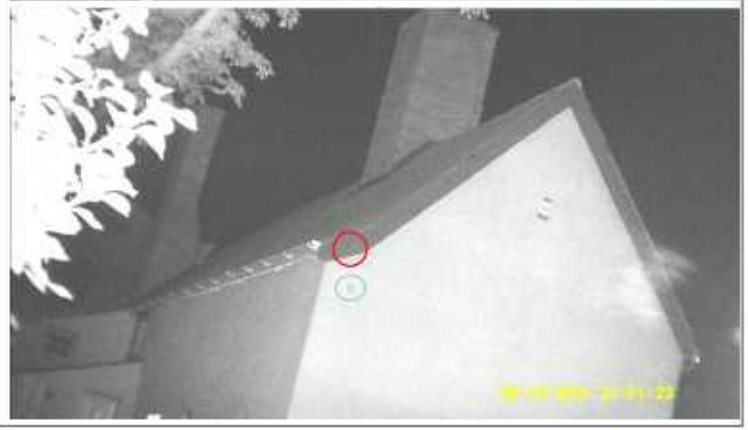
Field Survey							
Dusk Emergence Survey 2							
Building B1							
Building inspection prior to survey	An inspection of the loft space was completed, no evidence of bats was found. The interior appeared in a similar condition to the previous inspection from the PRA (Arbtech Consulting Ltd, 2024). 						
Surveyor and position	**Surveyor 1** – Becca Claxton – 2 years bat survey experience – observing the southern and western elevation **Lead Surveyor 2 -** Rhiannon Jensen O'Brien, Accredited Agent under Natural England Bat Licence Number: 2019-41480-CLS-CLS. – observing the eastern and southern elevation						
Weather (start/end)	Temperature (°C): 13 Relative humidity (%): 79 Cloud cover (%): 90 Wind (m/s): 7 Rain: None				Temperature (°C): 11 Relative humidity (%): 78 Cloud cover (%): 80 Wind (m/s): 10 Rain: Light rain		
Equipment used	Echometer Touch x2, Nightfox Whisker IR camera x2, Nightfox XB5 IR torches x2						
Results							
Date of survey	**Sunset Start - End**	**Species and numbers**	**Roost type**	**Structure reference**	**Roost location**	**Access points (1)**	**Dimensions and explanation of roost location**

04/06/2024	21:17 21:03 22:47	3x soprano pipistrelle	Day	B1	Fascia on western elevation	Eaves. Gap under fascia	Beneath fascia of western gable end
Surveyor observations							
Surveyor 1	**No emergences observed.** The first activity was a soprano pipistrelle at 21:18, the bat was heard but not seen. Soprano pipistrelles were observed at 21:45 and 22:07, the bats were seen passing behind the building travelling east. A soprano pipistrelle was seen passing near the building at 22:29, this correlates with the emergence described below. A common pipistrelles was observed at 21:59, the bat was heard but not seen foraging in the distance, this was the last activity recorded.						
IR position	**No emergences or additional bat activity were recorded.**						

Surveyor 2	The first activity was a soprano pipistrelle at 21:18, the bat was heard but not seen passing across the site. **At 21:23 a soprano pipistrelle is seen re-entering under the fascia on the gable end, this correlated with the IR camera noted below.** Soprano pipistrelles were observed at 21:48, 22:07 and 22:17, the bat was often seen passing north across the garden. A noctule was observed at 21:34 and 21:43, the bat was heard but not seen. A common pipistrelle was observed at 21:50, the bat was seen foraging in the garden. Common pipistrelles were also observed at 21:58 and 22:17.	
IR position	**A soprano pipistrelle was observed re-entering under the fascia at 21:23 (circled yellow opposite) as observed by surveyor 2.** **At 22:29 two soprano pipistrelles were seen the western elevation fascia (circled red opposite). The first bat travelled north and the second bat travelled south.** The camera was located next to the surveyor.	

Field Survey							
Dusk Emergence Survey 3							
Building B1							
Surveyor and position	**Lead Surveyor 1** – Michelle Walding-Kelly – 2 years bat survey experience – observing the southern and western elevation **Surveyor 2 –** Adam Walding-Kelly – 1 year bat survey experience – observing the eastern and southern elevation						
Weather (start/end)	Temperature (°C): 14 Relative humidity (%): 65 Cloud cover (%): 25 Wind (m/s): 1.3 Rain: None				Temperature (°C): 12 Relative humidity (%): 71 Cloud cover (%): 0 Wind (m/s): 3 Rain: None		
Equipment used	Echometer Touch x2, Magenta 4 x 1, Nightfox Whisker IR camera x2, Nightfox XB5 IR torches x2						
Results							
Date of survey	**Sunset Start End**	**Species and numbers**	**Roost type**	**Structure reference**	**Roost location**	**Access points (2)**	**Dimensions and explanation of roost location**
09/09/2024	19:28 19:13 21:05	1x Soprano Pipistrelle	Day	B1	Eaves on northwest corner	Eaves Beneath fascia of western gable end.	Gaps at Eaves (dimensions not measured)
		2x Soprano Pipistrelle	Day	B1	Tile above guttering on north-western corner	Eaves – beneath fascia of northwest corner.	Gaps at eaves (dimensions not measured)
Surveyor observations							

Surveyor 1	**At 19:45 1x soprano pipistrelle and emerged from beneath the fascia on the western gable end (See opposite top; red circle - emergence point, blue circle – bat). The bat was seen circling in the garden area then shortly after, still at 19:45, the same soprano pipistrelle was seen re-entering the building at the eaves on the north-western corner of B1 (See opposite bottom; red circle - re-entry point, blue circle – bat)** **At 19:56 1x soprano pipistrelle was seen emerging from the same area of fascia on the western elevation (see opposite top) and flew across the garden west.** **At 21:01 1x soprano pipistrelle was observed re-entering the building through the same location in the eaves as the previous bat (see opposite, bottom). Immediately after, 1x soprano pipistrelle was observed re-entering under the fascia on the western elevation (See opposite, top).** From 19:50 to 20:05 soprano pipistrelles could be seen foraging throughout the garden and adjacent trees to the southwest of the property. From 20:18 common pipistrelles were heard foraging close by but not seen until 20:26. From 20:41 common pipistrelles could be heard foraging and social calling until 20:46 and at 20:52 soprano pipistrelles could be heard distant foraging until the end of the survey. Brown long-eared bats were heard but not seen at 20:11 and 20:56.	 

IR position	Camera was located adjacent to surveyor 1. The footage captured correlated with that which was observed by the surveyor, that being **2x emergences and 3x re-entries from soprano pipistrelles**. No additional activity was recorded.	 

Surveyor 2	First bat activity was at 19:48, a soprano pipistrelle was observed foraging west to east across the front elevation of B1. At 19:50 2x soprano pipistrelles were seen flying around the tree on the western side boundary (roadside), heading west away from site. A noctule was heard not seen at 19:54, before a soprano pipistrelle was observed foraging in a south westerly direction next to the elevation. At 20:07 a further soprano pipistrelle was seen foraging in front of the southeastern elevation, before 2x soprano pipistrelles and a common pipistrelle were heard not seen at 20:13, 20:16 and 20:17 respectively. One final soprano pipistrelle was heard not seen at 20:26, before the activity concluded at 20:37 with a common pipistrelle which was also heard not seen.	
IR position	Camera was located adjacent to surveyor 2. The footage captured correlated with that which was observed by the surveyor, no additional activity was recorded.	

Conclusions, Impacts and Recommendations	
Survey Results Summary	As a result of the PRA and 3 surveys, 1 day roost comprising a maximum count of 5 soprano pipistrelle bats was recorded. The bats are using two closely positioned access points; entering and exiting from gaps at the eaves on the northwest corner. The results of the surveys identified the rear garden and mature trees to the west of the site as foraging and commuting habitats for common and soprano pipistrelle bats.
Impact Assessment	The proposed development comprises partial demolition, extension and renovation of the building including new windows and repaired tiles which will result in the damage of the bat roost present. Any bats present could be injured or killed during works.
Recommendations	An EPSL application to Natural England will be required to legally permit the proposed works. Due to the number of roosts and species present, the site is eligible for a Bat Mitigation Class Licence (BMCL). The BMCL application requires that surveys have been undertaken within the most recent active bat season (optimal May to August, suboptimal September). Planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission, where possible to do so. The survey effort should include at least one survey between May and June when the detection rate of bat roosts is highest. A Material Changes Check will be required within three months of the BMCL submission, if no survey work has been undertaken within that period. The BMCL will include the following measures: • The installation of one bat boxes at the site prior to works commencing to form a receptor site for any bats found during the works. The box may be installed on buildings or trees 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 Registered Consultant or an Accredited Agent, to inform them of the presence of bat roosts. • A pre-commencement inspection of the loft by the Registered Consultant or an Accredited Agent using a torch and an endoscope (this may be via ladders, scaffolding or a mobile elevated platform). • The removal of the fascia boards from the north and west elevations, and any associated roof tiles, by hand under the supervision of the Registered Consultant or an Accredited Agent (where it is not possible conclude absence of bats during the pre-commencement inspection). Any bats found will be moved by hand by the ecologist to the appropriate bat box. • 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. • 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. You must include a certificate that proves the roofing membrane has passed a 'snagging propensity test' if you're using a non-bitumen coated roofing membrane. A snagging propensity test checks that the membrane can stand the repeated snagging actions of roosting bats. To pass, a membrane must show no change in the average number of loops per cm2 as rotations are increased from 0 to 1000. You do not need a certificate for bitumen 1F felt that has a non-woven, short fibre construction. If a BRM is being used instead of a type 1f bitumen, the installation of the membrane will need to be supervised by the ecologist to ensure everything is installed as per manufacturers specifications and no damage occurs.

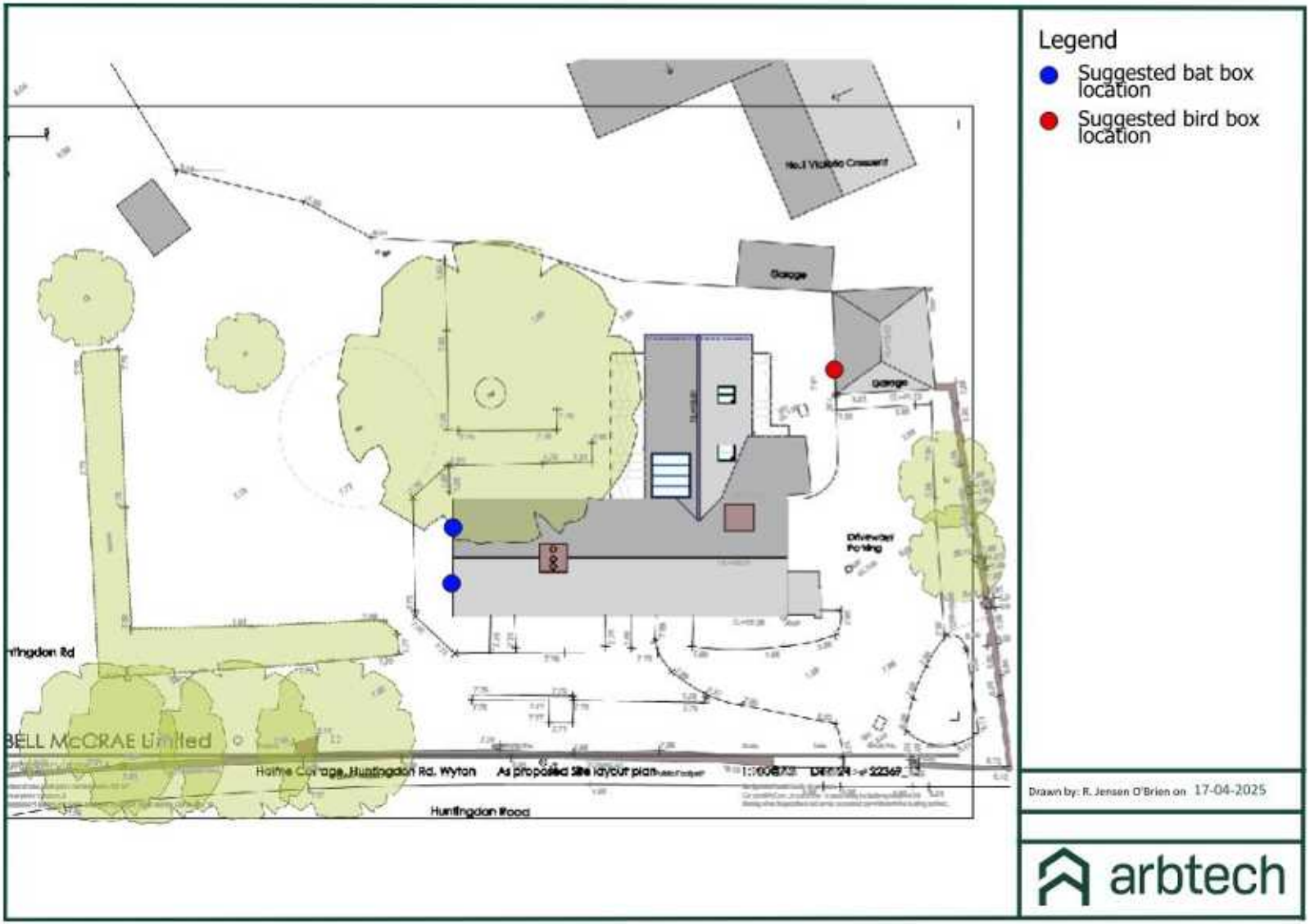
	This is because if any damage occurs or if it is not installed correctly, the BRM is no longer 'bat safe' and therefore would no longer be permitted under the terms and conditions of the EPSL. The BMCL will only include the bat species, numbers and roost types listed above. If bats are found during periods of adverse weather conditions, these must be left undisturbed until weather conditions become more favourable to move bats to the receptor bat box. BMCLs do not allow for the disturbance of hibernating bats. Therefore, if any bats are found during the hibernation period November to March or if any unexpected bat species or roost types are identified works must cease and advice must be sought from the Registered Consultant regarding the possible requirement for further bat surveys and whether a BMCL is still appropriate. Due to the high habitat value of the site, and the moderate bat activity recorded, a low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting
Enhancements	The installation of a bat box for crevice dwelling species, should be incorporated into the proposed development. Recommended bat boxes include: • Beaumaris Bat Box • Vivara Pro Woodstone Bat Box Bat boxes can be installed to the outside of buildings. Bat boxes 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.

	Suggested bat boxes are located on the western elevation of B1 to avoid light and noise disturbance from Huntingdon Road directly south of the site. Shrubs and trees across the gardens border provide cover from Huntingdon Road on the western elevation. A bird box can also be placed onsite to include examples of Vivara Pro WoodStone Nest Box or Woodstone Swift nest box. Small-hole boxes are best placed approximately 1-3m above ground. Swift and sparrow boxes should be positioned at the eaves of a building. A suggested location has been included on the garage to avoid bird/bat boxes being in close proximity.

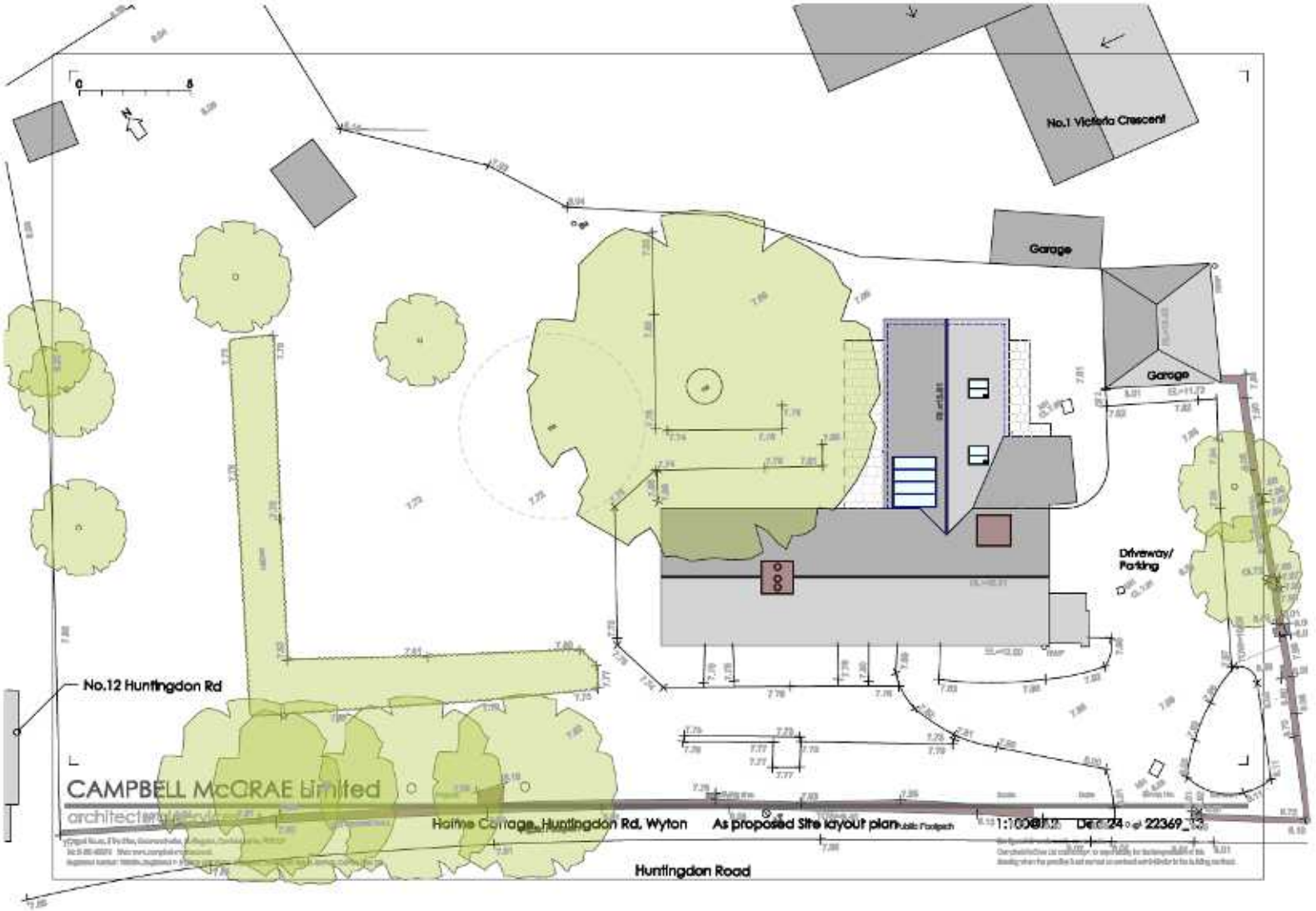
Appendix 1: BERS plan



Appendix 2: Suggested enhancement plan



Appendix 3: Proposed plans



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Version control			
Status	**Issue**	**Name**	**Date**
Draft	0.1	Rhiannon Jensen O'Brien Consultant Ecologist BSc (Hons) MSc	25/09/2024
Proof	0.2	Josephine McCarthy, Consultant Ecologist, Natural England Bat Licence Number: 2019-41480-CLS-CLS (CL18 Level 2)),	01/10/2024
Final	1.0	Rhiannon Jensen O'Brien Consultant Ecologist BSc (Hons) MSc	02/10/2024
Amended	2.0	Rhiannon Jensen O'Brien Consultant Ecologist BSc (Hons) MSc	17/04/2025