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Report prepared for: Carey London Ltd

For the Site of: The Barn, Great North Road, Radwell, Baldock, Hertfordshire, SG7
5EN

Version:	Written by:	Checked by:	Final:
Draft	Julian Newman 22/06/2026		
Final	Julian Newman 16/07/2026	Martin O'Connor 17/07/2026	Julian Newman 17/07/2026

Cherryfield Ecology has prepared this report for the client. Please see our T&C's.

Ecological reports are limited in shelf life, Natural England usually expect reports for licences to be from either the most current season, e.g. May 2026 to May 2027, or the most recent season for bats e.g May 2025 to May 2026. Therefore, should the project not proceed within 12-18 months of this report an updated survey should be undertaken in order to check for changes that may have occurred on site. Information is believed to be accurate at the time of the survey; recommendations are made without bias based on good practice guidelines within the industry. However, species presence and ecological parameters can change over time.

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Emergence and Activity Bat Survey (EBS)

0.0 Non-Technical Summary

0.1 Background

This report follows national guidelines Collins (2023) allowing for dusk and dawn surveys and recommends mitigation and compensation if considered necessary. If a deviation from the guidelines has been made, this will be detailed in the Method Section.

The following report details the findings and recommendations for the site of The Barn, Great North Road, Radwell, Baldock, Hertfordshire, SG7 5EN, where proposals include for retrospective alterations to the lighting on site under planning reference: 25/03197/FP.

A preliminary ecological appraisal (PEA) of the site was undertaken by Greengage Environmental Ltd in 2021. The PEA recommended that two emergence/re-entry surveys be carried out due to B1 providing **moderate** bat roost potential. The subsequent bat emergence surveys (Greengage Environmental Ltd, 2021) **confirmed** the presence of three day roost locations in use by at least three common pipistrelles and one soprano pipistrelle.

As more than 12 months has passed since these surveys were undertaken, the client has commissioned Cherryfield Ecology to undertake the update EBS, which includes two dusk emergence surveys.

0.2 Results and Findings

The update surveys have shown no emergences observed from B1.

The second survey has shown that the surrounding grounds are being used by bats for foraging and commuting.

0.3 Impact Assessment and Recommendations

As no emergencies have been observed during the update surveys, the following recommendations are based on the findings of the 2021 surveys. Please refer to the Bat Survey Report (Greengage Environmental Ltd, 2021) for full details.

Two common pipistrelle day roosts and one soprano pipistrelle day roost will be lost when works are carried out.

A bat mitigation class licence will be required post-grant of planning in order to allow the demolition to proceed lawfully. (Please refer to **Section 4.3** of this report for further details).

The findings outlined in this report are valid for 12 to 18months, after which updated surveys will be required.

Enhancements and mitigation are recommended (please see Section 4.3 for further details).

1.0 Introduction

1.1 Aim

The aim of this survey is to gather additional information from the site to establish species, population and entry/exit points of bats to aid in the design of mitigation and compensation for bats in the development. The information is used to help inform a licence application (if required) and to inform the client and their architect/planner of necessary changes in the design that may be required to ensure bats are protected during works. It should be read in conjunction with any Stage 1 survey such as a Preliminary Roost Assessment (PRA) that may have been undertaken.

1.2 Background Information

The client, Carey London Ltd, has commissioned Cherryfield Ecology to undertake an EBS for the site of The Barn, Great North Road, Radwell, Baldock, Hertfordshire, SG7 5EN. Planning permission is being sought for a retrospective alteration to the lighting on site under planning reference: 25/03197/FP.

This survey has checked all buildings, trees (from ground level only) or structures due to be affected by the proposals for bats, signs of bats or habitat value e.g. crevices, gaps or holes that cannot be checked for a variety of reasons. In addition, surveyors have been positioned around the building, tree or structure to allow for emerging/re-entering bats to be watched for.

The inspections were conducted on 22/06/2026 and 13/07/2026.

The survey can only ever provide a 'snapshot' of the site at the time of the survey and circumstances may change following this report. Health and Safety restrictions or obstructions may limit the ability to find or see emergence, re-entry and/or evidence. Biological records have been requested to give the report context and allow a study of the surrounding area. The information is often sensitive and, therefore, a synopsis is provided.

The survey can be conducted between May and September with the optimal season for surveying maternity colonies limited to mid-May to August inclusive, however, it can also be limited due to bad weather, when bats are less active.

All 18 species of bat common in the UK (17 known to be breeding) are fully protected under the Wildlife and Countryside Act (as amended) 1981 through inclusion in Schedule V of the Act. All bat species in the UK are also included in Schedule II of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which transpose Annex II of the Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“Habitats Directive”) which defines United Kingdom protected species of animals.

Bats species are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

This combined legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats, whether at roost or not.
- Damage, destroy or obstruct access to bat roosts.
- Possess or transport bats, unless acquired legally.
- Sell, barter or exchange bats.

A bat roost is well-defined by the legislation as the ‘resting place’ of a bat. However, the word roost is used to describe this resting place and is generally accepted as the word describing where a bat or bats rest, feed or sleep.

1.3 Roost definitions

Roost definitions from Natural England’s licensing documents (NE, 2024).

Day roost - a place where individual bats, small groups of males, rest or shelter in the day but are rarely found by night in the summer.

Night roost - a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be regularly by the whole colony.

Feeding Roost - a place where individual bats or a few individuals rest or feed during the night but are rarely present in the day.

Transitional/occasional roost - used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

Swarming site - where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.

Mating sites - sites where mating takes place from late summer and can continue through winter.

Maternity roost - where female bats give birth and raise their young to independence.

Hibernation roost - where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

Satellite roost - an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

Other - roosts not meeting the above definitions.

2.0 Methods

The survey follows the national guidelines Collins (2023) and Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys (Bat Conservation Trust, May 2022) the following equipment is available for the inspection:

- Torches (e.g. LED Lensar type).
- Ladders (Standard 4m telescopic surveying ladder).
- Endoscope where holes, cracks and crevices are accessible.
- Mirrors (extendable and movable mirror face).
- Binoculars (Pentax close focus).
- Thermometer/hygrometer.
- Camera.
- Sample bags for collecting dropping and feeding evidence.
- Echo Meter Touch, EM3, and Pettersson D240X.
- IR night vision HD Camcorder, 12v IR flood lights or Nightfox whisker.

Night Vision Aids (NVAs) are used to cover the building alongside surveyors. These are not designed to replace surveyors, rather provide night vision, allowing for more accurate survey effort and when found, roost locations. **The cameras may not always capture bats entering/exiting roosts due to the size of the building, terrain, narrower field of view and other factors.** Video is processed in a video editor and checked in the office after the survey is completed, stills and snapshots are taken and used in reports, as per the guidelines.

Surveyors are positioned around the building(s), tree or structure in order to cover all elevations. The survey then observes emerging or entering bats from suitable features such as holes, cracks and crevices. Notes on commuting and foraging bats are also made in the surrounds.

2.1 Limitations

This survey provides a snapshot of the site at the time of the survey(s) only. Bats are highly mobile and can turn up from time to time unexpectedly. All care has been taken to ensure the results and recommendations are suitable to the context of the development and the information gathered on surveys.

If a deviation from the guidelines has been made, the reason and justification will be explained below:

No deviation from the standard guidelines has been made for this survey set.

Table 1: Roosting features (likelihood) of bat presence assessed against Collins (2023) guidelines *Source: Adapted from Collins (2023, pp44, table 4.1).*

Likelihood of bat presence (Habitat Value)	Features that bats can use, regardless of evidence being present.
Confirmed Bat Presence	Bats are found to be present during the survey. Evidence of bats is found to be present during the survey.
Higher likelihood of bat presence.	Pre-20th century or early 20th century construction. Agricultural buildings of traditional brick, stone or timber construction. Large and complicated roof void with unobstructed flying spaces. Large (>20 cm) roof timbers with mortice joints, cracks and holes. Entrances for bats to fly through. Poorly maintained fabric providing ready access points for bats into roofs, walls, bridges, but at the same time not too draughty and cool. Roof warmed by the sun, in particular south-facing roofs. Weatherboarding and/or hanging tiles with gaps. Low level of disturbance by humans. Bridge structures, follies, aqueducts and viaducts over water and/or wet ground.
Moderate and Lower likelihood of bat presence.	Modern, well-maintained buildings or built structures that provide few opportunities for access by bats. Small, cluttered roof space. Buildings and built structures comprised primarily of prefabricated steel and sheet materials. Cool, shaded, light or draughty roof voids. Roof voids with a dense cover of cobwebs and no sections of clean ridge board. High level of regular disturbance. Highly urbanised location with few or no mature trees, parkland, woodland or wetland. High levels of external lighting.

Negligible likelihood of bat presence.	No obvious features suitable for roosting, minor foraging or commuting.
None	No features suitable for roosting.

3.0 Results

The following section details the results of the desk study, inspection and survey; it includes MAGIC information, biological records data and map/aerial photo information. The results detail the building, structure or tree (numbered for reference) description of any evidence found and habitat value if no evidence has been located.

3.1 Desk Study

The desk study is centred on Grid Reference - TL 23519 36320 and Postcode - SG7 5EN.

3.2 MAGIC

The following statutory sites and Natural England Protected Species (NEPS) have been located within the 2km search area (Figure 1).

Table 2: MAGIC search results

Receptor	Distance and Direction to Nearest (m/km)	Description
Statutory sites	~1463m SSE	Ivel Springs LNR
	~878m WNW	Stotfold Mill Meadows LNR
Priority habitat	~600m NNE	Traditional Orchard
	Adjacent to W boundary	Deciduous Woodland
	~571m SW	Chalk Rivers
	~1497m SE	Lowland Meadows
	~771m SW	Good Quality Semi-Improved Grassland
Granted protected species licences	n/a	None within search area

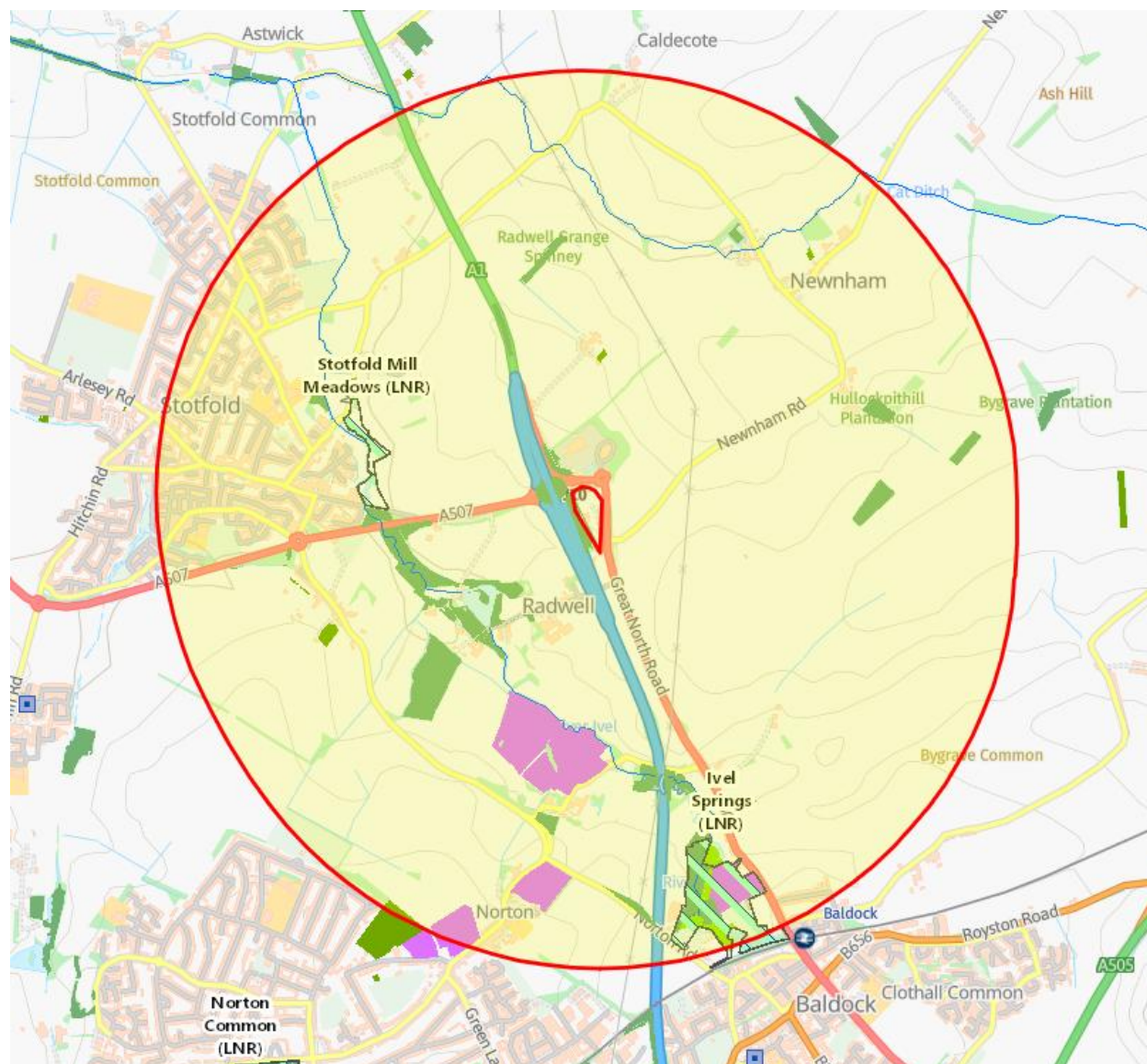


Figure 1: MAGIC Map Search.

3.3 Biological Records Data

A standard search of existing records for protected species and nature reserves has been commissioned, below details the results and site context. *Data older than 10 years old will not be included.*

Biological records were obtained from Herts Environmental Records Centre (2026).

Table 3: Biological Records

Species	Number of Records	Closest record (accuracy)	Most recent record (year)
Barbastelle <i>Barbastella barbastellus</i>	-	-	-
Brown Long-Eared <i>Plecotus auritus</i>	2	420m (10m)	2017
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	6	0m (1km)	2017
Daubenton's <i>Myotis daubentonii</i>	-	-	-
Leisler's <i>Nyctalus leisleri</i>	-	-	-
Nathusius' Pipistrelle <i>Pipistrellus nathusii</i>	-	-	-
Natterer's <i>Myotis nattereri</i>	-	-	-
Noctule <i>Nyctalus noctula</i>	2	0m (1km)	2016
Serotine <i>Eptesicus serotinus</i>	3	0m (1km)	2017
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	1	0m (1km)	2017
Unidentified Bat <i>Chiroptera</i>	-	-	-
Unidentified Long-Eared <i>Plecotus sp.</i>	-	-	-
Unidentified Myotis <i>Myotis sp.</i>	-	-	-
Unidentified Pipistrelle <i>Pipistrellus sp.</i>	-	-	-
Unidentified Vesper <i>Vespertilionidae</i>	-	-	-
Whiskered <i>Myotis mystacinus</i>	-	-	-
Whiskered/Brandt's <i>Myotis mystacinus/brandtii</i>	-	-	-

3.4 Site Location and Surrounds

The site is located in Radwell, Hertfordshire and is surrounded by arable fields, pasture, woodland and the A1 in the immediate locale. Table 4 details the commuting, feeding and habitat features in a 1km radius of the site.

Table 4: Habitat features suitable for bat use.

Feature	Description
Watercourses	The river Ivel is ~640m SW.

Waterbodies	There is a pond ~70m N. There is an oxbow lake ~500m SW. There is a cluster of approximately 11 ponds and ditches to the SW, the closest is ~690m. There are nine ponds to the W, the closest is ~809m.
Woodland	Woodland is adjacent to the W site boundary. Woodland and trees can be found lining the edges of the river throughout the search area. Additional small areas of woodland can be found scattered within the search area.
Linear e.g. hedgerows	Field margin hedgerows are abundant within the search area.
Pasture/arable/grassland	Arable fields and pasture dominate the search area.
Other	n/a

3.5 Building, Tree or Other Structure

The following section details the structure(s) reference, bats located, evidence located and observed emergence/re-entry (see Figure 10 for Site Plan).

Building reference - B1 (Main Building)

Table 5: Weather Records

Date	Survey	Time: from/to	Weather: Start	Weather: Finish
22/06/2026	Dusk	21:10 to 23:10 SS: 21:25	Temp: 20° C Humidity: 84% Cloud: 100% Wind: 1/12 Precip: Light rain	Temp: 18° C Humidity: 87% Cloud: 95% Wind: 3/12 Precip: None
13/07/2026	Dusk	21:01 to 23:01 SS: 21:16	Temp: 20° C Humidity: 70% Cloud: 95% Wind: 2/12 Precip: None	Temp: 18° C Humidity: 79% Cloud: 50% Wind: 3/12 Precip: None

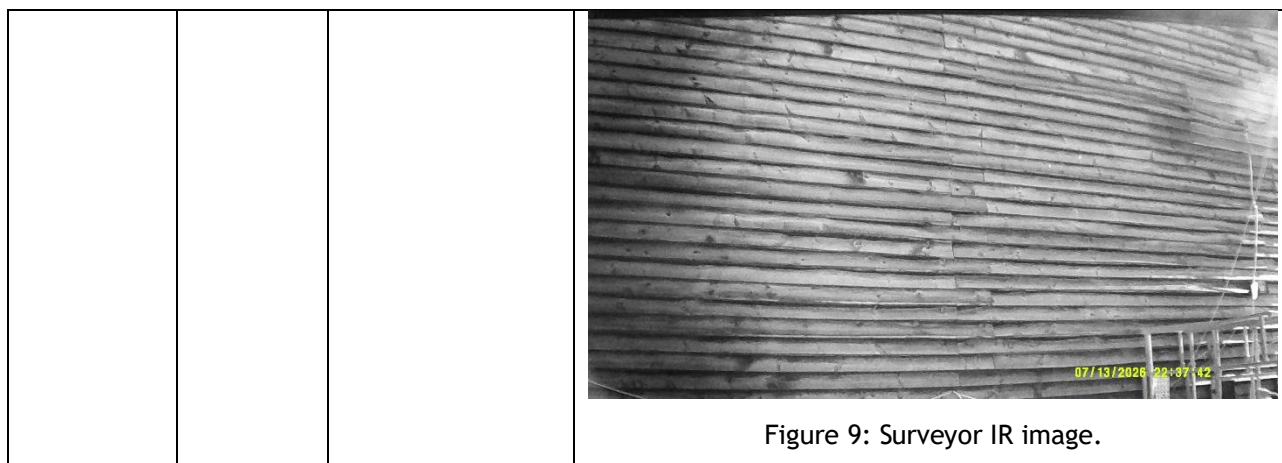
3.6 Observations

Table 6: Results and observations of the building, tree or structure.

Surveyor	Building	Dates, Times and Survey Type	Bat Activity Observed
SD	B1	22/06/2026 21:10 to 23:10 SS: 21:25	No activity recorded.  Figure 2: Surveyor IR image.
AM	B1	As above	No activity recorded.  Figure 3: Surveyor IR image.
RB	B1	As above	No activity recorded.

			 Figure 4: Surveyor IR image.
CAM	B1	As above	No activity recorded.  Figure 5: Surveyor IR image.
KW	B1	13/07/2026 21:01 to 23:01 SS: 21:16	A noctule pass was seen at 21:56, and another heard but not seen at 22:02. A Leisler's pass was heard but not seen at 22:15, and a distant pass was seen at 22:23.  Figure 6: Surveyor IR image.

AM	B1	As above	Noctule passes were heard but not seen at 21:55 and at 22:01. Unidentified big bat passes were heard but not seen at 22:10 and at 22:14.  Figure 7: Surveyor IR image.
RB	B1	As above	A noctule pass was seen at 22:03, and another heard but not seen at 22:23.  Figure 8: Surveyor IR image.
MF	B1	As above	A noctule pass was heard but not seen at 22:14.



Summary of surveys and supplementary observations:

22/06/2026 - No activity recorded.

13/07/2026 - Light noctule and Leisler's activity recorded in the area.

Any other protected species that would be affected by the development:

See Ecological Appraisal (Cherryfield Ecology, 2026) for breeding bird recommendations.

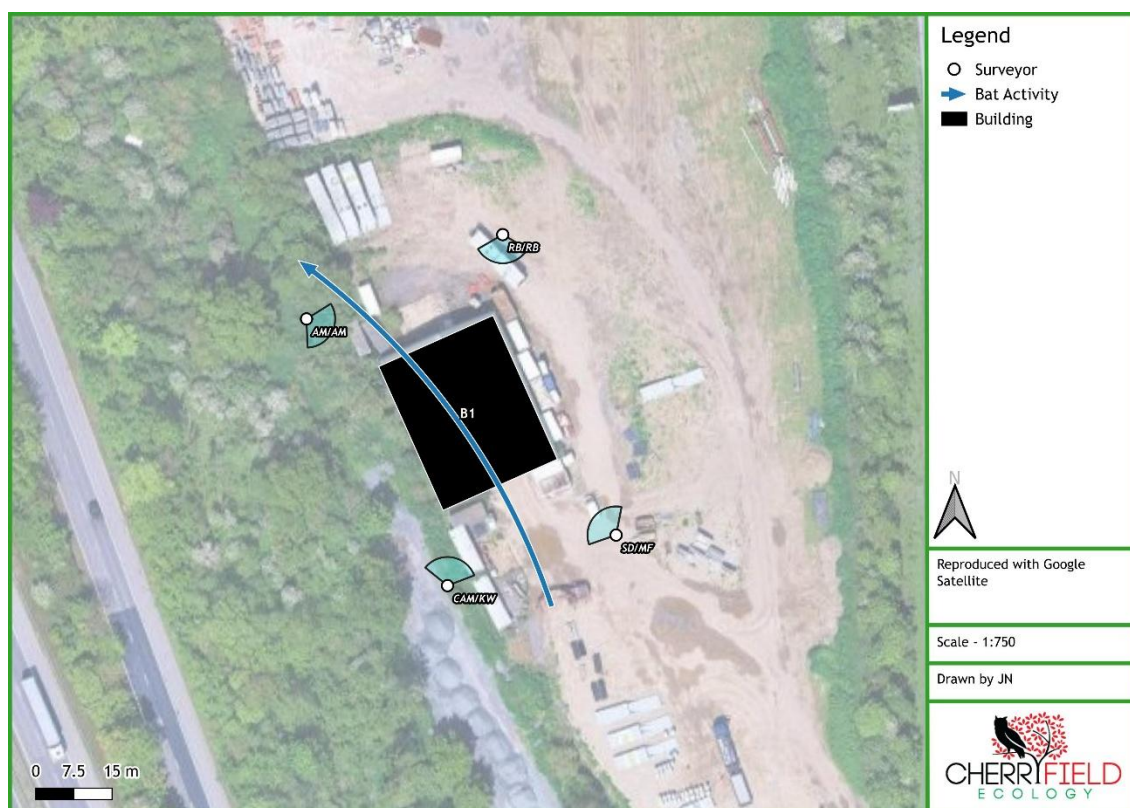


Figure 10: Site Plan.

4.0 Conclusions, Discussion, Impacts and Recommendations

The following section details the conclusions, discussion and recommendations in the context of the proposed works.

Building reference - B1 (Main Building)

4.1 Conclusion and Discussion

The proposals include for retrospective alterations to the lighting on site under planning reference: 25/03197/FP.

The update surveys have shown no emergences observed from B1.

The second survey has shown that the surrounding grounds are being used by bats for foraging and commuting.

4.2 Potential Impact

Impact assessments must be proportionate to the scale of the development (CIEEM, 2018) and the following details a proportionate impact assessment based on current information.

Table 7: Impact Assessment.

Impact	Two common pipistrelle day roosts and one soprano pipistrelle day roost will be lost in the development.
Characterisation of unmitigated impact on the feature	A low-level loss/impact at a local level.
Effect without mitigation	Without mitigation, individual bats could be killed, injured or trapped during the works.
Mitigation and or enhancement	See Table 8 and 9
Significance of effects of residual impacts (after mitigation)	If lost roosts are replaced by bat boxes, the effects would be negligible.

4.3 Recommendations

The below details the recommended mitigation and compensation required.

License type required: Bat Mitigation Class

Roost type: Day x3

Table 8: Mitigation and Compensation

Work	Specification
General Information	A Natural England Protected Species Licence must be applied for in order to allow the works to proceed, post-grant of planning. The Three Tests to be answered before planning can be granted (NE, 2017): <i>Test 1:</i> Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”. Test 1 can be achieved via the ‘imperative reasons of overriding public interest’. Although not for the ecologist to determine the planning officer will on grant of consent. <i>Test 2:</i> Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”. Test 2 would be achieved on the grant of consent as no other sites have been considered for the development. <i>Test 3:</i> Regulation 53(9) (b) states: the appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.” Test 3 will be achieved once full mitigation appropriate to species and population has been designed and implemented via a NEPS licence issued from the statutory authority (Natural England).
Roof and tile linings	‘When a bat roost is present and being mitigated/compensated we advise that the type of linear for the tiles/roof used is a bitumen type 1 traditional felt.

	The reasoning for this is twofold; firstly, bats can damage the Modern Roofing Membrane (MRM), meaning that the MRM will become useless allowing water to pass through from above and, secondly, bats will become trapped in the fibres and die from dehydration and starvation. There is no reason that building regulations will not allow a traditional ‘cold roof’ and, therefore, this should be designed into any project where bats will be able to access the roof/loft or hung tile/weatherboarding etc. However, Natural England will accept an MRM being used in a bat roost under the following circumstances - The MRM must have passed the testing regime set out in Essah <i>et al.</i> (2020) and a certificate must be provided as proof of this.’ Natural England will accept an MRM being used in a roost of any type with evidence of the MRM having passed the propensity snagging test.
Mitigation and compensation to be installed via a Bat Mitigation Class Licence application	Bat Mitigation Class Licence: Works can occur at any time under a Bat Mitigation Class Licence (BMCL) once granted by Natural England. Any demolition will require the supervision of a bat-licensed ecologist. The suitable roosting features will be stripped by hand only. All areas within the timber cladding will be checked for bats i.e. endoscope (where possible). If bats are found, these will be removed by hand and placed in bat boxes that will be in place before works begin. Bat boxes will be installed on site. A minimum of three (one box per roost) Chillon Woodstone bat boxes (Figure 11) will be hung on the trees or the building at a minimum of 3m from ground level and face south/southwesterly. These boxes are known to be used by brown long-eared bats (BLEB) and crevice-dwelling species.

	 Figure 11: Chillon Woodstone Bat Box (British-made). No further mitigation or compensation is required under this licence. Commuting bats were using the grounds and surrounds; therefore, any tree, hedges or linear feature should be retained if possible.
Lighting	Any lighting near or shining onto any trees will be designed to minimise the impact it has on potential bat roosting and commuting. Lighting will be in line with the BCT lighting guidelines (Bats and Lighting in the UK (Bat Conservation Trust, 2023) https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/) This lighting, where possible, will be of low level, be on downward deflectors and be on PIR sensors. Using LED directional lighting can also be a way of minimizing the light spill affecting the habitat. No up-lighting should be used. This will ensure that the roosting and commuting resources that the bats are using are maintained.

The local planning authority has a duty to impose enhancements. The following table details the affordable and simple enhancements suitable for the site (Table 9).

Table 9: Enhancements to allow a net gain for protected species.

Work	Specification
Enhancements to provide a net gain as per	Bat boxes (see Figure 11) can be installed on site. These should be of the Chillon type e.g. Woodstone, be no less than three metres off ground level and face

the LPA's duty.	south/southwesterly. No artificial light should shine on the boxes and clear flight paths to and from the boxes should be considered.
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5.0 References

- CIEEM (2018), Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, September 2018. Chartered Institute of Ecology and Environmental Management, Winchester, online at <https://www.cieem.net/data/files/ECIA%20Guidelines.pdf>
- Collins, J. (ed.) (2023), Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition, BCT, London
- Essah *et al.* (2020), Method for evaluating the snagging propensity of roofing membranes in buildings by roosting bats, online at tandfonline
- Google Earth (2025), Located on site postcode, online
- Greengage Environmental Ltd (2021), Bat Survey Report
- MAGIC (2026): Magic maps, NEPS licences and designated sites, online <http://www.magic.gov.uk/Login.aspx?ReturnUrl=%2fMagicMap.aspx>, accessed at report date.
- Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield
- National Planning Policy Framework, 2023
<http://www.communities.gov.uk/publications/planningandbuilding/nppf>
- Office of the Deputy Prime Minister (2005), Circular 06/2005: Biodiversity and Geological Conservation. Para.99
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/147570.pdf>
- Records: Herts Environmental Records Centre (2026)