

Bat Assessment Report

Site: Alderbury

Client: John Dixon

Version 001

Issued By:

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Report	This report remains valid for 12 months from the date of issue. The report, conclusions and recommendations are valid for current development plans only. If these plans are changed, it will be necessary to review this report in the context of the proposed changes and to assess whether further desk study and survey work will need to be undertaken.		
Survey Data	Survey data are valid for 12 months from the date the survey was undertaken.		

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1 Summary

Site Address
Alderbury, Church Hill, Pulborough, RH20 1AB (OS grid reference: TQ 0476 1862).
Scope of Works
Gray's Ecology were commissioned to undertake an assessment for bats for the above site.
Development Proposals
To construct two single storey detached holiday homes within the garden.
Key Ecological Constraints
All British bat species and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
Results
- An inspection of the Site was carried out on the 16 January 2025 by ecologist Nick Gray, licenced under Natural England bat survey Class Licence WML CL18. - A thorough inspection at the Site concluded that the trees and buildings within and adjacent to the site had 'negligible' potential for bats to roost and afforded 'moderate potential for foraging and flightpaths. - As the planned works will be unlikely to disturb or impact roosting, foraging and commuting bats, it has been judged that further surveys for bats and other protected species will not be required in order for the proposed works to proceed at this time.
Recommendations
- It is recommended that additional bat and bird boxes are installed within the Site. - The introduction of water features and plants that attract a range of nocturnal insects will encourage more bats and birds into the garden.

2 Introduction

2.1 Background and Proposed Development

Gray's Ecology were commissioned by owner, John Dixon to undertake an assessment for bats at Alderbury, Church Hill, Pulborough, RH20 1AB (OS grid reference: TQ 0476 1862).

The owner is planning to construct two single storey detached holiday homes within the garden of the property (the Site).

2.2 Experience of Ecologist

Nick Gray is registered under a Natural England's Bat Survey Class Licence WML-CL18 (Bat Survey Level 2 – registration number 2017-32546-CLS-CLS). Nick is an ecological consultant with considerable experience surveying and monitoring habitats for bats and has been the Named Ecologist on numerous Natural England Protected Species Mitigation Licences for bats. He has provided services as an expert witness on bats to Local Authorities for matters relating to planning and development, which has on occasions included representation to the Planning Inspectorate during planning enquiries.

Nick is also a member of Sussex Bat Group committee and the coordinator and a team leader for the Bat Conservation Trusts' National Bat Monitoring Programme (Winter Hibernation Counts) for several important bat hibernation roost sites across West Sussex. He also holds Natural England Survey Class Licences WML-CL08 (great crested newt, Level 1 – registration number 2017-32546-CLS-CLS) and WML-CL10a (hazel dormouse, Level 1 - registration number 2021-55169-CLS-CLS).

2.3 Purpose of the Report

This report presents the findings of a preliminary roost assessment (PRA) for bats for the garden within the Site. The report has considered the impact of the proposed project upon bats and other protected species that may be present within or near to the Site. The report seeks to identify potential ecological constraints and to provide appropriate recommendations for further ecological survey, impact avoidance, mitigation and enhancements, where these are deemed to be required.

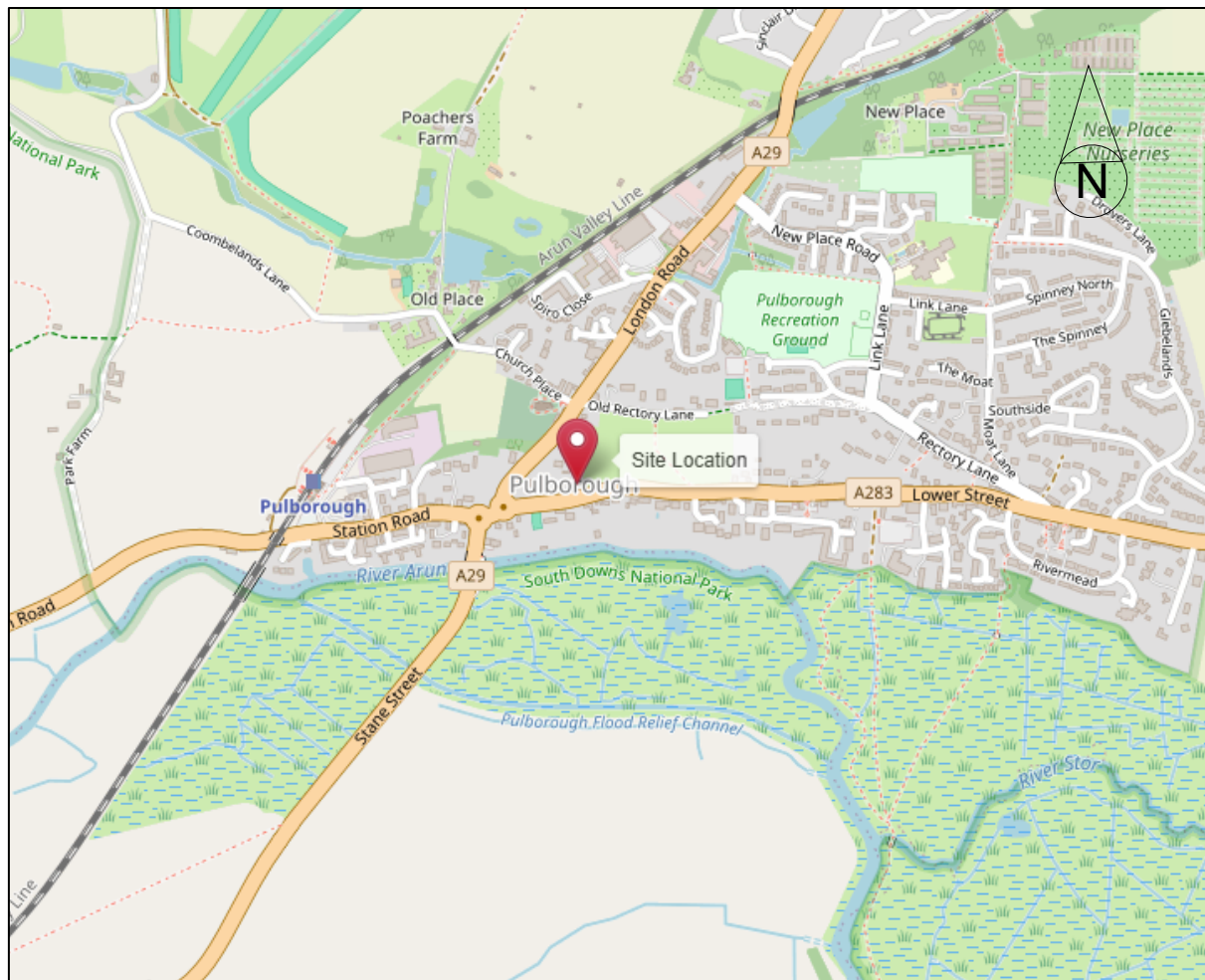
2.4 Site Description

The Site is located within the village of Pulborough in West Sussex, which is positioned just to the north of the River Arun and its extensive flood plain and water meadows. The village is characterised by a mixture of housing, including several large houses, with large gardens containing mature trees and shrubs. Most of the housing is close to the two main roads within the settlement.

The proposed development site is located at the eastern end of a large garden, approximately 65 m to the east of the main house. The garden is set on two levels on a south-facing bank and is characterised by short mown amenity grassland, mature trees and shrubs, with a duck pond and a terraced area devoted to the cultivation of soft fruits. There are five ancillary structures present within the proposed development footprint, including two small sheds, a tree house and two open-sided timber-framed structures, with clay-tiled roofs. The Site is bordered by mature trees and hedging, with rough pasture to the east, gardens to the north and west and a wooded bank to the south. The surrounding habitat presents good foraging, commuting and roosting potential for bats and is well connected to the wider landscape.

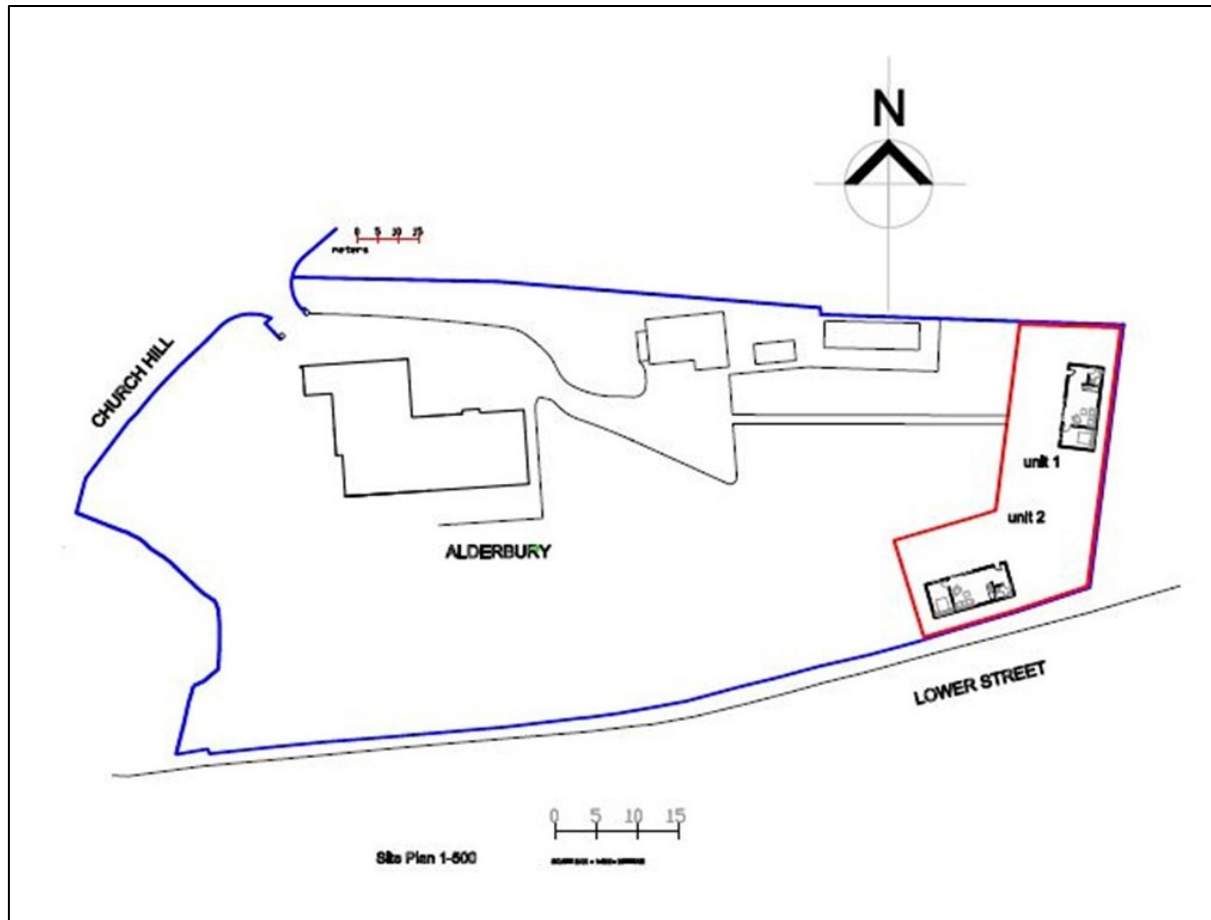
A map showing the geographical location of the Site can be seen in Figure 1 and the block plan with the Site outlined in red can be seen in Figure 2.

Figure 1. Map showing the geographical location of the Site.



(Map data © [OpenStreetMap](#) contributors 2025. Licenced under the [Creative Commons Attribution-ShareAlike 2.0](#) licence (CC BY-SA)).

Figure 2. Showing the block plan location with the Site outlined in red.



(Adapted from original drawing by RE Consultancy Ltd July 2023).

3 Summary of Relevant Legislation and Planning Policy

The results of this assessment will be used to determine if any ecological impacts are likely and if necessary, to advise on impact avoidance measures and/or an appropriate mitigation strategy, that ensures compliance with UK wildlife legislation and relevant planning policy.

All British bat species are defined in UK law as 'Protected Species' under Schedule 2 of the Conservation of Habitats and Species Regulations 2017, as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations).

All bat species in England are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (WCA), which confers additional protection under Section 9 of the act and through the Countryside and Rights of Way Act, 2000 (CRoW Act 2000). This combined legislation means that it is a criminal offence to:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats¹.

¹ Disturbance of bats include any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to significantly affect the local distribution or abundance of the species to which they belong.

- Damage or destroy a bat resting place or roost (even if bats are not occupying the roost at the time).
- Possess, advertise, sell or exchange a bat (dead or alive) or any part of a bat, or to transport a bat or any part of a bat for this purpose.
- Intentionally or recklessly obstruct access to a bat roost.

The UK is a signatory to “The Agreement on the Conservation of Populations of European Bats,” or “EUROBATS,” which came into force in 1994, under the auspices of the “Convention on the Conservation of Migratory Species of Wild Animals” – more widely known as “The Bonn Convention 1991.” Under the Bonn Convention 1991, the UK is required to identify and provide protection from damage or disturbance to important feeding areas for bats. Under the agreement, a bat roost is “*any structure or place which any bat uses for shelter or protection*”. Bats tend to regularly reuse the same roosts. Therefore, legal opinion is that the protection of bat roosts is required regardless of whether bats are present or not – there is currently no guidance on when a roost ceases to be protected if it is not used by bats.

If planned works would constitute an offence, they may only be carried out under a European Protected Species Mitigation Licence (EPSML), issued by Natural England. Works or mitigation activities involving interference with bats, their shelters, or their places of rest, must only be carried out by a bat worker, who is currently licensed by Natural England for such activities.

Under powers conferred by the Secretary of State under **Regulation 55(2) (e) and 55(9) (a-b) of the Habitats Regulations 2017 (as amended)**, Natural England has authority to issue a Protected Species Mitigation Licence (PSML). In determining whether-or-not to grant a PSML, Natural England must apply the requirements of Regulation 55, which includes three tests set out in subparagraphs (2)(e), (9)(a) and (9)(b) of Regulation 55, as follows:

- **Regulation 55(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”*”.
- **Regulation 55(9)(a)** states: “*the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”*”.
- **Regulation 55(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.”*”

A licence application would require appropriate supporting evidence of the proposed provisions to accommodate any bats known to be using the Site – for example, an alternative roost may need to be provided, together with a detailed method statement, describing the conduct of the activities proposed.

Activities likely to harm bats include the following:

- renovating, converting or demolishing a building
- cutting down or removing branches from a mature tree
- repairing or replacing a roof structure or roof covering
- repointing brickwork
- insulating or converting a loft
- installing lighting in a roost, or outside if it lights up the entrance to the roost
- removing ‘commuting habitats’ like hedgerows, watercourses or woodland

- changing or removing foraging areas used by bats
- using insecticides or treating timber within or near to an occupied bat roost or resting place.

Local authorities in England are required to consider biodiversity and protected wildlife under their obligation to the Habitats Regulations, and Section 40 of the Natural Environment and Rural Communities Act 2006 (NERC Act 2006).

The following National and Local Planning Policies apply in respect to ecology:

- National Planning Policy Framework (December 2023) (NPPF), Chapter 15.
- Horsham District Planning Framework, 2015. Policies 25 and 31.

4 Preliminary Assessment

This report has been produced in accordance with the following current guidelines:

- BS42020:2013: Biodiversity – Code of Practice for Planning and Development.
- Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Ecological Report Writing, Second Edition*. Technical Guidance Series. CIEEM.
- Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Preliminary Ecological Appraisal, Second Edition. Technical Guidance Series*. CIEEM.
- Collins, J. (ed) (2023). *Bat Surveys for Professional Ecologists. Good Practice Guidelines (4th edition)*. Bat Conservation Trust, London.
- Mitchell-Jones, A.J, & McLeish, A.P. (eds). 2004., 3rd Edition *Bat Workers' Manual*. JNCC, Peterborough.
- Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. CIEEM.

A preliminary assessment of the Site was conducted, comprising a daytime bat walkover (DBW) inspection and a desk study, to help determine the potential for bats and other protected species to be present within the Site.

4.1 Methods – Preliminary Assessment

4.1.1 Desk Study

A search of on-line mapping resources, including the MAGIC website resource (www.magic.gov.uk) was undertaken to identify the location of any sites designated for nature conservation, Priority Habitats (Habitats of Principal Importance) and PSMLs granted within a 2 km radius of the survey site, and to identify the locations of any other features of potential ecological interest close to the Site; including the functional connectivity of the Site to woodland, scrub, water courses and hedgerow networks, likely to be used by bats and other protected species present within the wider landscape.

4.1.2 Site Inspection

The visual inspection of the Site was undertaken during daylight hours by ecologists Nick Gray BSc (Hons) ACIEEM (licenced under Natural England bat survey Class Licence WMLCL18 (licence number 2017-32546-CLS-CLS) on 16 January 2025, commencing at 10:28 hrs.

The weather conditions were as follows: Temperature = 4° C; wind speed = Force 1 (Beaufort scale); 90% cloud cover; dry.

An endoscope, camera, inspection mirror, binoculars and a high-powered torch were employed to assist in the search for evidence of bats and to help determine the potential for the buildings and trees within the site to support bats and other protected species.

The presence of access and exit routes for bats into and out of any potential roosting features and evidence of the use of such features by bats, such as urine staining or scratch marks around entrances, feeding remains, bat guano (droppings) and any other signs indicative of bats (including actual bats) was sought. Where possible, samples of bat droppings and other relevant biological evidence were collected for laboratory DNA analysis. An assessment of likely commuting routes and nearby habitat was also undertaken to determine the potential of the Site to support bats. All evidence obtained was documented and where possible is supported by photographs.

Where relevant, evidence of other wildlife (including protected and/or invasive non-native species) found to be using the Site was also noted.

Where applicable, trees within the impact area of the Site were recorded using reference numbers similar to those used within Harverson, B. (2024) *Arboricultural Method Statement: Alderbury, Church Hill, Pulborough*.

Following inspection, the buildings, trees and surrounding habitat were categorised as having either 'none', 'negligible', 'low', 'moderate' or 'high' potential to support bats in the context of the information set out in Table 1, Table 2 and Table 3 below.

Table 1. Categorisation of the bat roosting potential of structures (adapted from Collins, J. 2023. Table 4.1, p.44).

Level of Bat Roosting Potential	Rationale
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. complete absence of crevices/suitable shelter at all ground/underground levels.
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasions.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically, at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.
Confirmed Roost or Resting Place	Presence of bats or evidence of use by bats.

Table 2. Potential of bat flightpaths and foraging habitat (adapted from Collins, J. 2023. Table 4.1, p.44).

Bat flightpath and foraging potential	Rationale
None	No habitat features on site likely to be used by any roosting bats at any commuting or foraging bats at time of the year (i.e. no habitats that provide continuous lines of shade/protection for flightpaths or likely to generate/shelter invertebrate populations for bats to forage upon).
Negligible	No obvious habitat features on site likely to be used as flightpaths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flightpaths, such as gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats, such as lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flightpaths, such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging, such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flightpaths, such as river valleys, streams hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats, such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Confirmed Roost or Resting Place	Presence of bats or evidence of use by bats.

Table 3. Guidelines for assessing trees on proposed development sites for potential roost features (PRF's) for bats (adapted from Collins, J. 2023. Table 4.2, p.45).

Suitability	Description
None	No PRF's or highly unlikely to be present
FAR	Further assessment required to establish if PRF's are present
PRF	At least one PRF present

4.1.3 Limitations to Site Inspection

An initial site assessment such as this represents a 'snapshot' in time, it is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

There were no limitations to the survey in terms of the following:

- Site access.
- Available specialist survey equipment.
- Time of year.
- Weather conditions (dry).
- Personal competence (qualifications, training, skills and experience).
- Time spent surveying.

4.2 Results – Desk Study

4.2.1 Statutory and Non-statutory Designated Sites

The Site is NOT located within any sites designated for nature conservation importance.

The Site falls within the impact risk zone for Pulborough Brooks Site of Special Scientific Interest (SSSI), which is located 840 m to the south-east of the Site.

The Site is located within the 6.5km key conservation area for The Mens Special Area of Conservation (SAC), for which Bechstein's bat *Myotis bechsteinii* and Barbastelle bat *Barbastella barbastellus* are a qualifying species; and within the 12km wider conservation area for Ebernoe Common SAC, for which Barbastelle bat is a qualifying species (The Sussex Bat SAC Protocol (Jackson, C. (2018)).

The Site is located within the 3 km radius core-sustenance-zone (Collins, J. (ed) 2023) for a large maternity roost of soprano pipistrelle *Pipistrellus pygmaeus* located 131 m to the north-west.

4.2.2 Habitats of Principal Importance (Priority Habitats and Ancient Woodland)

The Site does not contain any Habitats of Principal Importance. However, the following Habitats of Principal Importance and Priority Habitats are located within 2 km of the Site:

- Coastal and floodplain grazing marsh
- Good quality semi-improved grassland
- Ancient and semi-natural woodland
- Deciduous woodland
- Hedgerows
- Ponds

Habitats of Principal Importance are listed in Section 41 of the NERC Act, 2006. Section 40 of this act places a duty on Local Planning Authorities to have due regard to biodiversity.

4.2.3 Bats

Two PSML for bats are shown to have been granted by Natural England for mitigation projects concerning bats within 2 km of the Site:

- Licence reference 2016-24617-EPS-MIT soprano pipistrelle (impacts unknown) in 2016.
- Licence reference 2016-25246-EPS-MIT for destruction of a resting place for soprano pipistrelle in 2016.

4.2.4 Other protected and/or notable species

One PSMLs was granted by Natural England for a mitigation project concerning other protected species identified within 2 km of the Site:

- Licence reference EPSM2013-6059 for destruction of a resting place for great crested newt *Triturus cristatus* in 2013.

4.3 Results – Preliminary Site Inspection

The area of the Site is shown bordered in red on the map in Figure 2.

The preliminary Site inspection found the site to comprise part of a large domestic garden, which included amenity grassland, native and ornamental shrubs and herbs, and scattered trees, which offered good connectivity for foraging and commuting bat species (Photo 1).

4.3.1 Buildings

Five small timber ancillary buildings were present within the site, which included a tree house (B1), two sheds (B2 and B3), an open-sided patio shelter (B4) and a corner pavilion (B5). These buildings were inspected and assessed for their potential to be used by roosting bats. The results of the inspections and an assessment of their roosting potential are detailed in Table 4, below.

Table 4. Buildings inspection assessment in accordance with Table 1.

Building Reference	Inspection results	Level of bat roosting potential
B1	Tree House. Constructed with a timber frame with wooden shingles cladding the walls and roof. Located in an elevated position within a cluster of sycamore <i>acer pseudoplatanus</i> (Photo 2). Very open to the elements with few PRFs and likely to experience high levels of human disturbance.	Negligible
B2	Small (blue) garden shed. Constructed from timber with bituminous mineral felt covering a sloping roof (Photo3). No entry points for bats to access the structure and no external PRFs visible.	None.
B3	Small garden shed. Constructed from timber with bituminous mineral felt covering an apex roof (Photo 4). No entry points for bats to access the structure and no external PRFs visible.	None.
B4	Patio shelter. Constructed with open-sides and a clay-tiled hipped roof supported by a timber frame. The roof tiles are unlined and are visible from below (Photo 5). Interior lighting present.	Negligible.
B5	Corner pavilion. Constructed with clay brick with a timber frame and a clay tiled roof. The roof tiles are unlined and are visible from below (Photo 6). Interior lighting present.	Negligible.

4.3.2 Trees

A number of trees were present within and bordering the site (Harverson, B., 2024). These were inspected from the ground to assess their bat roosting potential and their potential to support bat flightpaths and foraging. The results of the inspections and an assessment of their roosting potential are detailed in Table 5, below.

Several small fruit trees (<3 m high) were also present within the Site. None of these were large enough to offer any potential benefits to roosting bats.

Table 5. Tree inspection assessment in accordance with Table 2 and 3. References correspond to

Tree Reference	Inspection results	Level of bat roosting potential	Level of bat foraging and flight-path potential
T1	Mature Monterey Cypress <i>Cupressus macrocarpa</i> (Photo 7). Located off site, just beyond the north-eastern site boundary. This tree has some PRFs within its multi-stemmed trunk and larger limbs. The tree is located within a tree line that forms part of a gappy hedgerow and is well connected to the wider landscape.	Low	Moderate
T2	Immature common ash <i>Fraxinus excelsior</i> located just outside the eastern boundary of the site (Photo 7). This is a small tree with its stem heavily cloaked with a broad canopy of ivy <i>Hedera helix</i> and leaning eastward, away from the site.	Negligible	Low.
T3	Multi-stemmed immature sycamore with dense ivy on lower parts.	Negligible	Moderate.
T4	Single-stemmed mature sycamore, sparse 'dead' ivy on lower parts.	Negligible	Moderate.
T5	Multi-stemmed young sycamore without ivy or understory (Photo 3).	Negligible	Moderate.
T6	Multi-stemmed immature sycamore with dense ivy on lower parts.	Negligible	Moderate.
T7	Multi-stemmed cluster of sycamore with wooden tree house. Devoid of any ivy or understory (Photo 3).	Negligible	Moderate.

4.3.3 Photographs

Photo 1. Showing the Site, looking eastward.



Photo 2. View of the Tree House (B1) and tree cluster (T7).



Photo 3. View of the small shed (B2) and tree (T5).



Photo 4. View of the small shed (B3).



Photo 5. View of the patio shelter (B4), with inset showing the internal view of the roof structure.



Photo 6. View of the corner pavilion (B5), with inset showing the internal view of the roof structure.



Photo 7. Trees (T1 and T2) located outside the north-eastern corner of the site boundary.



Photo 8. Trees (T3, T4 and T6) just on the site boundary.



4.3.4 Other protected and/or notable species

No other protected and/or notable species were recorded on the Site during the Preliminary Site Inspection.

No evidence of European hedgehog *Erinaceus europaeus* was observed within the Site during the survey. However, due to the accessibility of well-connected domestic gardens with mature shrubs and open grassland in the vicinity, the Site was deemed to have 'moderate' potential to support European hedgehog, which is listed as a species of principal importance under Section 41 of the NERC Act 2006.

No evidence of great crested newt was observed within the Site during the survey. Although great crested newt has been recorded within 500 m of the site and habitat surrounding the site does have potential to support this species, the proposed area of impact is restricted to a small area of short-mown amenity grassland and an area of cultivated ground, which are both of negligible benefit to great crested newt.

4.3.5 Invasive Non-native Species

No invasive non-native species listed under Schedule 9, Section 2 of the Wildlife and Countryside Act, 1981 (as amended) were observed on the Site during the survey.

4.4 Evaluation and Recommendations

The Preliminary Assessment for bats that was undertaken for the buildings and trees within the Site, established that in accordance with Table 1 (above) the buildings all had either 'None' or 'negligible' potential to support summer roosting bats. Except for tree T1, which was assessed to have 'Low' potential to support roosting bats, all remaining trees were assessed to have 'Negligible' potential to support roosting bats. Collectively, the trees were considered and assessed to offer a 'Low' to 'Moderate' Level of bat foraging and flight-path potential.

The Arboricultural Method Statement (Harverson, B. 2024) advocates the removal of some dead ivy from the mature sycamore (T4), severance of the ivy at ground level from the mature sycamore (T3), the removal of two small apple trees *Malus* spp, along with some pruning of the remaining small apple trees. These trees were assessed by Gray's Ecology to have 'None' or 'Negligible' PRFs. These works will not affect the foraging or flightpaths of bats.

No habitat suitable for bats will be removed or obstructed and in accordance with current best practice (Collins, J. 2023), it has been judged that **further surveys for bats will not be required for the proposed works to proceed as planned at this time.**

Many species of bats and their invertebrate prey are vulnerable to disturbance from artificial lighting. Therefore, it is recommended that the introduction of additional artificial lighting within the Site is carefully considered. Great care should be taken to avoid artificial light spilling onto the nearby hedges and the tree canopy. The use of low-lux luminaires, which are shielded and directed away from the hedges and the tree canopy are recommended. Where practical, any security lighting should use time-limiting controllers. All Site works should be restricted to the hours of daylight only. Blinds or curtains should be fitted to the windows of the building, and care should be taken to ensure that these are closed if internal lighting is used within the buildings after dark.

If the above advice is followed, the proposed development will avoid a negative impact upon bats or other protected and/or notable species, such as invertebrates, amphibians, birds and hedgehogs.

The proposed works will not have a negative impact upon the designated Sites and Priority Habitats identified in Section 4.2 above.

5 Biodiversity Enhancement Opportunities

An opportunity exists to provide additional bat roosting and bird nesting features within the Site.

It is recommended that bird nesting boxes or artificial nests are installed within the pavilion building or the patio shelter, such as those types designed to encourage swallow or house martin (see <https://housemartinconservation.com/artificial-nests>) and a bat roost box, such as the 'Vincent Pro' is placed above 3 m on the east side of Tree T3, where it will be partially shaded from sunlight (see Appendix A, below).

All UK bats come out at night to eat insects, so garden features such as water and plants that attract a range of nocturnal insects will encourage more bats and birds into the garden. Some further helpful advice on this is available via the Bat Conservation Trust at <https://www.bats.org.uk/advice/gardening-for-bats/bed-and-breakfast>.

Such enhancement measures are in line with the recommendations of the NPPF (2023).

Should you need further advice or clarification of the information provided above, please do not hesitate to contact Gray's Ecology at nickg@clara.co.uk.

6 References

- Bat Conservation Trust and Institute of Lighting Professionals (2023). Guidance Note 08/23 - *Bats and artificial lighting in the UK*. Available online at: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>.
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7 Appendix A – Recommended Enhancements for Biodiversity

Figure 3. Examples of bird and bat roosting boxes that are available from suppliers, such Wildcare.

<https://www.wildcare.co.uk/wildlife-nest-boxes/bird-boxes/house-martins-swallows.html>

