



Date of issue: 22/08/2023

# **Preliminary Bat Roost Assessment Report**

Garden Corner, Church Lane, Birdham, Chichester, PO20 7AT

On behalf of Mr and Mrs Firmston

Version 01

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## 1. Executive Summary

<b>Site Details</b>
<ul style="list-style-type: none"><li>Garden Corner, Church Lane, Birdham, Chichester, PO20 7AT (OS Grid Reference: SU 82443 00274)</li></ul>
<b>Scope of Works</b>
<ul style="list-style-type: none"><li>Imprint Ecology was commissioned to undertake an assessment for bats at a site which is required to inform a planning proposal for the demolition of a garage.</li></ul>
<b>Key Ecological Constraints</b>
<ul style="list-style-type: none"><li>In Britain, all bat species and their roosts are legally protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).</li></ul>
<b>Results</b>
<ul style="list-style-type: none"><li>A site visit was carried out on the 14<sup>th</sup> August 2023. A thorough inspection of the buildings found no evidence of bats using the building. The building was assessed as having negligible suitability to support roosting bats.</li><li>No further surveys are recommended.</li></ul>
<b>Mitigation</b>
<ul style="list-style-type: none"><li>Artificial Lighting At Night (ALAN) will be avoided on site. Construction lighting will be kept to a minimum. If ALAN is to be installed, this will be done under an ecologically sensitive scheme such as setting short timers, considering warm/red lights, and avoiding lighting nearby vegetation and trees.</li><li>Trees on site will be protected from construction work with appropriate buffer zones.</li><li>Pruning/removal of hedgerows, trees or shrubs will not be undertaken during bird nesting season unless following a nesting bird check.</li><li>Any habitats within the impact zone are carefully searched each day before works begin, to rescue any small mammals that may be present.</li></ul>
<b>Biodiversity Enhancement Recommendations</b>
<ul style="list-style-type: none"><li>Enhancements for birds and bats on site in line with local and national planning policies.</li><li>Planting and landscaping suggestions to support pollinating insects in line with local and national planning policies.</li></ul>

## 2. Introduction

### 2.1 Background and Proposed Development

Imprint Ecology was commissioned by Mr and Mrs Firmston to undertake a Preliminary Bat Roost Assessment (PBRA) for bats at Garden Corner, Church Lane, Birdham, Chichester, PO20 7AT (OS Grid Reference: SU 82443 00274), hereafter referred to as 'the site'. The extension and alteration of the existing single garage is proposed.

### 2.2 Experience of Ecologists

Emily Sabin BSc (Hons) (*Wildlife Conservation*) AMRSB, Accredited Agent under George Sayer's Natural England WML-CL18 Level 2 Bat Licence 2018-34434. She is an ecologist and bat rescuer for Sussex Bat Group with four years' experience in ecological consultancy and a background in conservation research. She is experienced in carrying out a range of protected species surveys and is also the Water Vole Officer at the People's Trust for Endangered Species.

### 2.3 Purpose of the Report

This report contains the findings of an ecological assessment of the building and surrounding habitat. It seeks to identify potential ecological constraints that the proposals may have upon bats or other protected species and provides recommendations for further survey, impact avoidance, mitigation and enhancements where required.

This report is valid for a maximum of 24 months from the date of issue. Should the proposals or site alter in any way, an ecologist should be consulted to re-inspect the site and confirm that this report is still accurate.

### 2.4 Site Description

The site is located within a semi-rural setting within the village of Birdham, south of Chichester. The garage is set within a large sized plot, comprising hardstanding, shrubs, amenity lawn. Trees, and a detached dwelling. Mature trees, hedgerow, ponds and ditches are present within nearby and adjacent habitats. Chichester Harbour lies 1km west. Connectivity between this habitat and the wider countryside is good. See Figure 1 for the site location and Figure 2 for an aerial view of the site.

# Garden Corner – Preliminary Roost Assessment for Bats

Figure 1 - Site Location. Map data ©OpenStreetMap contributors 2023.

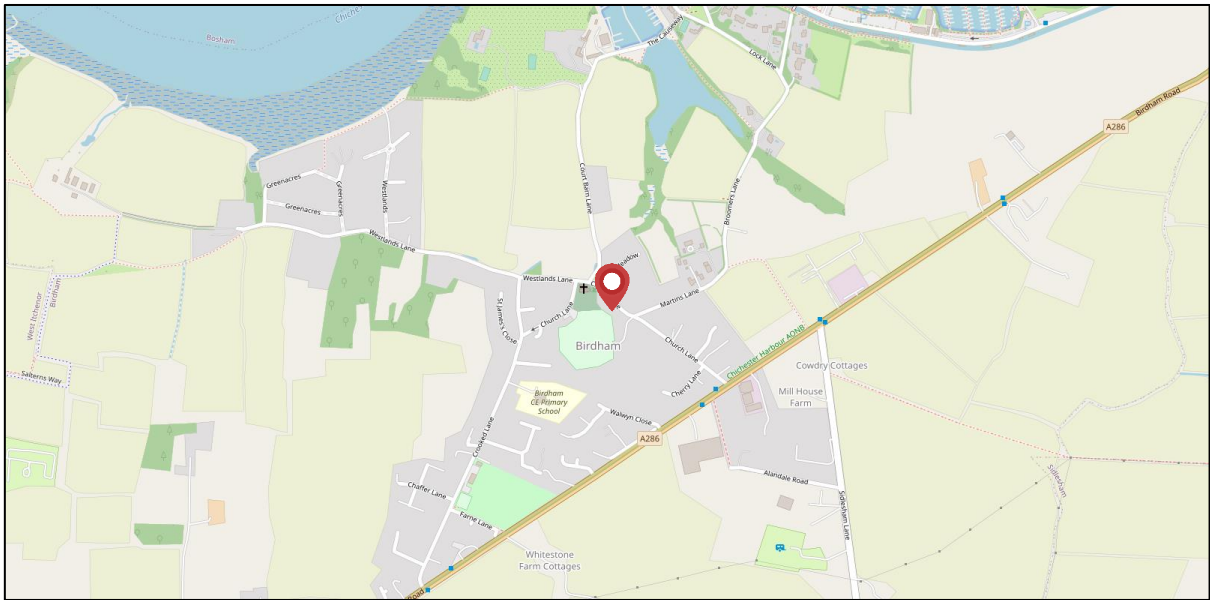


Figure 2 - Site boundary aerial view. Garage outlined in red. ©Google Earth (2023)



## 3. Methods

### 3.1 Desk Study

A desk study was undertaken to obtain ecological information about the site in context with the surrounding area. The [Multi-Agency Geographic Information for the Countryside \(MAGIC\)](#) website was accessed on 14<sup>th</sup> August 2023 to identify local statutory designated sites, priority habitats and European Protected Species Licences (EPSLs). The [Chichester District Council Interactive Map](#) was also used to search for non-statutory designated sites.

Satellite imagery from Google Earth, MAGIC and Ordnance Survey maps were used to understand the site's connections to surrounding countryside.

### 3.2 Site Assessment

A visual inspection of the site was undertaken during daylight hours by ecologist Emily Sabin (Accredited Agent under George Sayer's Natural England bat survey Class Licence WMLCL18 – number 2018-34434) on 14<sup>th</sup> August 2023, commencing at 14:00hrs.

A camera, binoculars, telescopic ladders, and high-powered torches were used to search for evidence of bats and determine the potential for the building to support bats and other protected species.

The presence of potential roosting features (PRFs) and access/exit routes which bats could use to enter these features were surveyed. Evidence of use by bats was also looked for, such as scratch marks, urine stains, lack of cobwebbing, feeding remains e.g. moth wings, droppings, and actual bats. An assessment of potential commuting routes and surrounding habitat was also undertaken to determine their potential to support bats.

Bat PRFs are usually found in specific areas, such as joints, cracks, gaps and cavities within structures like mature trees and buildings. These were prioritised as areas to check for bat evidence. Roosting bat evidence is not easy to find and not always visible, so any potential roosting locations were also noted.

Following inspection, the buildings were categorised as having either 'high', 'moderate', 'low' or 'negligible' potential to support bats or as a 'confirmed roost or resting place for bats'. These categories are based on observations made during the survey and in the context of the descriptions laid out in Table 1.

Table 1 - Categorisation of bat roosting potential of structures (adapted from Collins, J. 2016.)

Suitability	Description
<b>Confirmed bat roost or resting place</b>	Presence of bats or evidence of bats.
<b>High</b>	Structure with many areas suitable for large numbers of roosting bats, with numerous potential access points. With good connectivity to high-quality foraging habitat, such as hedgerows, woodland and/or waterbodies. No evidence of current use by bats. E.g. large, uncluttered, draft-free loft spaces with access point or gaps beneath hanging tiles in a rural location.
<b>Moderate</b>	Structure with features suitable for moderate numbers of roosting bats, with good connectivity to the wider countryside. No evidence of current use by bats. E.g. cracks in walls, wooden soffit box with holes, gaps beneath fascia boards, under lifted roof tiles or lead flashing in a suburban or rural setting.
<b>Low</b>	Structure that offers a low number of roosting opportunities which could be used opportunistically by individual bats. Unlikely to be used by large numbers of bats on a regular basis. No evidence of current use by bats. E.g. small gaps under roof tiles, fascia boards or lifted lead flashing, with limited connectivity to fair-quality foraging or commuting habitat.
<b>Negligible</b>	Structure with no or very limited roosting opportunities for bats and/or where the structure is isolated from foraging habitat. No evidence of use by bats.

### 3.3 Site Inspection Constraints

One single site assessment represents a ‘snapshot’ in time, and it is possible that bats may not have been present at the time of survey but are present at other times of the year. For this reason, the building, surrounding habitats and connecting features were assessed for their potential to support bats, even where no direct evidence of bats was found.

## 4. Baseline Ecological Conditions

### 4.1 Desk Study

#### 4.1.1 Statutory/non-statutory designated sites and protected/priority habitats

Designated sites information is summarised in Table 2.

Table 2 - Designated sites within 4km of the site. Source: MAGIC.

Site Name	Designation	Proximity to site	Reason for designation
Chichester Harbour	Area of Outstanding Natural Beauty (AONB)	Within	Chichester Harbour is a large estuarine basin. At low tide, extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the harbour and in the surrounding permanent pasture fields and ancient woodlands. The harbour boasts a wide range of habitats, most of which are nationally and internationally important for supporting high numbers of migrating and breeding birds.
Chichester Harbour	SSSI	738m W	
Chichester and Langstone Harbours	Special Protection Area (SPA) Ramsar	738m W	
Solent Maritime	Special Area of Conservation (SAC)	738m W	

The following non-statutory Sites of Nature Conservation Importance (SNCI) lie within 4km of the site:

- Fishbourne Meadows
- River Lavant Marsh
- Chichester Canal
- Salterns Copse

The following protected/priority habitats lie within 2km of the site:

- Ancient Woodland
- Deciduous Woodland
- Traditional Orchard
- Coastal and Floodplain Grazing Marsh



- Chalk River
- Mudflats
- Coastal Saltmarsh
- Saline Lagoon
- Lowland Meadows

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

#### 4.1.2 Protected/Priority Species

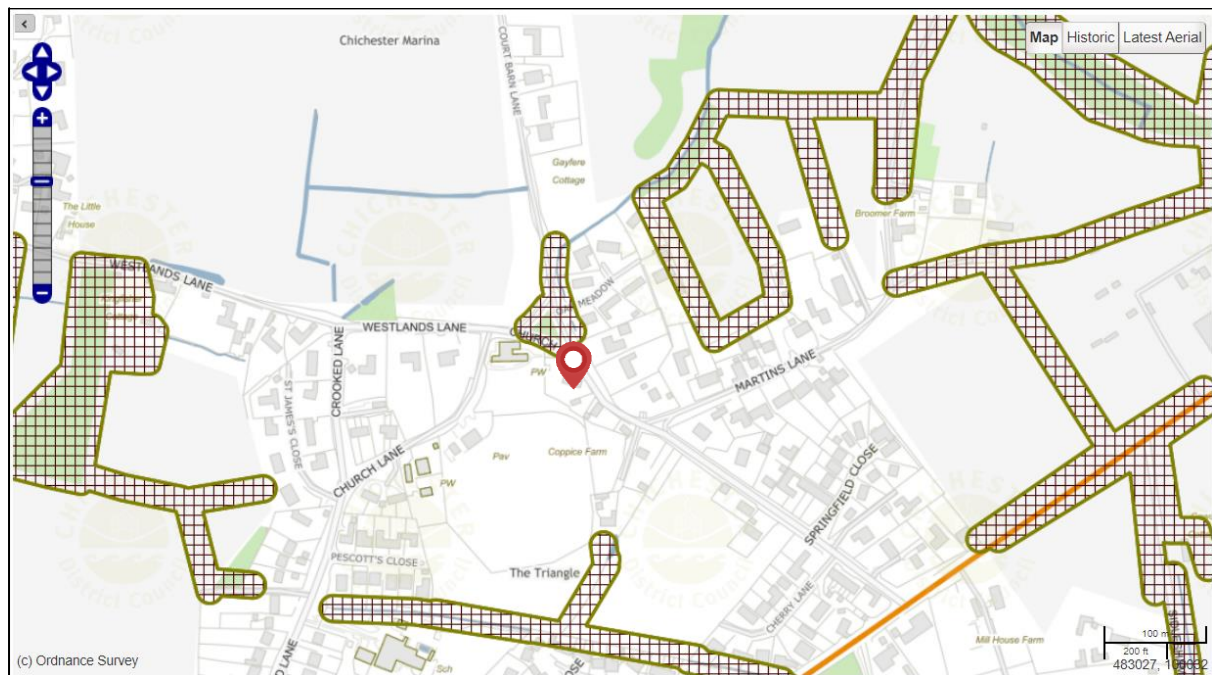
All 18 species of bat in the UK have been recorded in West Sussex. Six European Protected Species Licences have been granted by Natural England within 1km of the site allowing the purposeful destruction or disturbance of a bat roost or resting place. This is summarised in Table 3 below.

Table 3 - Details of EPSLs within 2km. Source: MAGIC.

Species	Licence number	Proximity to site	Licence start date	Licence end date
Brown long-eared <i>Plecotus auritus</i> ; Serotine <i>Eptesicus serotinus</i>	2016-26322- EPS-MIT	10m W	10/11/2016	10/11/2016
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	2017-31931- EPS-MIT	574m NW	01/11/2017	30/09/2019
Brown long-eared	EPSM2013-5609	595m S	26/03/2013	01/09/2014
Soprano pipistrelle; Common pipistrelle <i>Pipistrellus pipistrellus</i>	2018-37131- EPS-MIT	671m N	22/10/2018	30/09/2023
Common pipistrelle; Soprano pipistrelle; Brown long-eared	EPSM2011-3231	580m E	27/10/2011	01/08/2012
Common pipistrelle; Soprano pipistrelle; Natterer's <i>Myotis nattereri</i>	EPSM2012-5144	700m NE	23/11/2012	30/09/2014

The site is bound at the north by the Bat Movement Network (BMN). There are several BMN corridors within 500m of the site suggesting high quality habitat for bats in close proximity. Bats use linear features such as hedgerows, woodland edges, watercourses and lines of trees to navigate between different roosts and foraging areas. These natural corridors provide dark, sheltered, safe routes and sources of insects for foraging. See Figure 3 for the locations of the BNM.

Figure 3: Bat Movement Network. Copyright: Chichester District Council 2023



## 4.2 Preliminary Inspection for Bats

There were two buildings on site. The main dwelling is unaffected by the proposals and has not been included in this PBRA.

The single garage was a brick built building with rendered walls. The building had a hipped roof which was clad with machine made clay tiles. The roof and tiles appeared in a very good state of repair, with no gaps, cracks, missing or loose tiles noted across the building. No Potential Roost Features (PRF) suitable for bats were observed on the main roof.

There were soffits and fascia present made of uPVC material and these appeared in very good condition with no gaps, holes or cracks observed. There was a small lean-to conservatory/potting room at the south-facing elevation of the building which was well-sealed to the main garage. This was also made of uPVC material and very well lit internally.

The brick work was in good condition with no cracks or splits that would allow access for bats into the walls or interior wall cavity.

The windows were of a casement design with wooden frames and appeared in good condition with no visible signs of damage or obvious ingress opportunities for bats. The main garage

door was an up-and-over design and this was in good condition and regularly kept shut unless the shed is in use during the daytime.

Small shrubs were present on either side of the garage which had suitability to support low numbers of common garden birds during their nesting period, such as robin and wren.

#### Internal Inspection

An internal inspection found the dwelling to be in regular use for storing household and garden items. The windows make the interior very bright and there is no enclosed dark loft void. The timber roof frame was exposed and the roof was lined with bitumen roofing felt. There was no daylight visible from within the garage or from the vantage point of a mezzanine floor. Evidence of mice could be seen throughout the loft. No bat droppings were detected inside the loft.

#### Garden and surrounding environment

The site was laid to a well-maintained lawn to the west, surrounding the main dwelling, with occasional large ornamental shrubs and trees. These are well separated from the garage and driveway by a garden wall to the east of the main house. The garage was situated on existing unsealed gravel surface which was in constant use for car parking and access.

## 5. Mitigation

**In accordance with the findings of the inspection and the criteria given in Table 1, the preliminary assessment of the site established that the building on site has ‘negligible’ potential to support bats. The proposals can proceed lawfully and with minimal risk to bats at this time.**

No further surveys for bats are required at this time. Should works be delayed by more than 24 months beyond the date of this report, a re-inspection of the building by a suitably qualified bat ecologist should be conducted before proceeding.

It is important that the following mitigation measures are acknowledged to protect wildlife that may be using the site:

1. **Trees** – Trees on site near the construction works must be protected from the development. If heavy machinery are to be brought on site via the gate to the north of the site, root protection Areas (RPA) are to be established around the trees proposed for retention. A 1.5m buffer zone from the edge of the trees should be in place during construction works to prevent machinery, chemicals, heat and dust from damaging roots and foliage. A temporary hoarding-type fence should be erected for the duration of works to protect hedges/trees closest to the works, these protection measures should be made in accordance with British Standard 5837:2012.
2. **Bird nests** – Should the vegetation around the garage need removing, this should be done outside of nesting season (01 March - 31 August inclusive) or following a check for birds’ nests immediately before removal. Any nests discovered must be given a 5m buffer zone and left alone until the young have fledged.
3. **Lighting** – Artificial Light At Night (ALAN) adversely affects bats, invertebrates and other nocturnal animals (Bat Conservation Trust and the Institute of Lighting Professionals, 2023). ALAN creates a barrier for bats and disturbs their natural foraging and commuting patterns, and it must be avoided across the site.

If exterior lighting is to be installed on site, this will be kept to a minimum and the following measures will be taken:

- No exterior lighting, including during construction, will be directed at bat boxes, vegetation, or the oak trees at the rear of the site.
- Red spectrum lighting to be considered in place of white lighting. (Bats are more sensitive to white light compared to red light).
- Luminaires will face downwards and mounted horizontally, with no light output above 90° and no upward tilt.
- Security lighting will be set on motion sensors and set to a short timer. For residential purposes, a 1 or 2 minute timer is likely to be appropriate.
- All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component.

Bollard/low-level downward-directional luminaires will not be installed on site. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites.

Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely.

4. **Construction** – To be undertaken in accordance with best practice advice with regards to minimising dust, noise, light and emissions during and post-construction. The level of impact on designated sites and protected/priority habitats is expected to be negligible.
5. **Excavations/pipes** – All holes/excavations must be covered overnight, or provided with a safe escape route for small animals such as a gently sloping ramp e.g. a plank of wood with grooves/chicken wire wrapped over it for grip. Open pipework must be checked they are empty and then closed off at the end of each working day to avoid small animals entering them.

6. **Debris removal** – Any piles of rubble, debris, paving slabs or pots shall be checked by hand prior to removal, to avoid harming any ubiquitous species such as mice and voles, to accord with the Protection of Mammals Act 1996. The European hedgehog is a Species of Principal Importance, listed under Section 41 of the NERC Act 2006).
7. **Pollution** – Silt and water run-off must be managed so that it does not pollute the site. Any chemicals or fuel must be stored appropriately, fully-sealed and kept on existing hard surfaces.
8. **Planting replacements** – Any ornamental planting lost or damaged during works will be replaced post-construction with appropriate species from the [RHS 'Plants for Pollinators' lists](#).

## 6. Enhancements for Biodiversity

The proposed development has an opportunity to enhance habitats on site. Such enhancement measures are in line with the National Planning Policy Framework (NPPF) (2021) and within policies 40 and 49 of Chichester District Council Adopted Chichester Local Plan: Key Policies 2014-2029.

Paragraph 179 of the NPPF states that “*To protect and enhance biodiversity and geodiversity, plans should: /... promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*”

- Integrated bat boxes, external bat boxes or tiles with suitable gaps (or readymade ‘bat tiles’) will be incorporated into the new annexe building design. Erected at eaves height or onto a tree on site, facing south or west 3-5m above ground and receiving sunlight. No artificial lighting will shine on these new bat roosting opportunities. See Figures 4-9 for examples. [www.BirdBrickHouses.co.uk](http://www.BirdBrickHouses.co.uk) provide a range of high-quality integrated wildlife boxes.
- Any cladding to be installed in the new design could be enhanced for bats simply by leaving the ends of the boards slightly open at the bottom, to allow access for crevice-dwelling bats. Alternatively, cladding can also be ‘pegged’ leaving a suitable gap. See Figure 9.

Figure 4 – ‘Chillon’ Woodstone Bat Box



Figure 5 - ‘Vivara’ Pro Woodstone Bat Box



Figure 6 – ‘Tudor’ Bat access tiles



Figure 7 – BirdBrickHouses  
Integrated brick bat box



Figure 8 – BirdBrickHouses  
Integrated mesh-fronted bat box (suitable to  
install behind cladding)



Figure 9 – Pegged cladding technique



- Plants with night-time fragrance will attract nocturnal-flying insects such as moths will be planted in the garden of the main house, including honeysuckle *Lonicera periclymenum*, evening primrose *Oenothera biennis*, cherry pie *Heliotropium arborescens*; sweet rocket *Hesperis matronalis*; and currant bushes *Ribes sp.*
- Any new trees to be planted in the gardens should be native to the UK and chosen for their value to wildlife. Small trees in pots can also be easier to manage in a small garden and still provide benefits to wildlife. For example:
  - Bird cherry *Prunus padus*
  - Crab apple *Malus sylvestris*
  - Hazel *Corylus avellana*
  - Rowan *Sorbus aucuparia*
  - Silver birch *Betula pendula*
  - Wild cherry *Prunus avium*
- Bird boxes could be incorporated into the new north facing elevation of the annexe, or an external box could be installed onto a nearby tree. Bird boxes should face north or



east, avoiding direct sunlight and prevailing winds. One bird box is recommended for a site of this size. (Figures 10-13).

Figure 10 – [Vivara Pro](#) Woodstone Standard Bird Box



Figure 11 - [BirdBirckHouses](#) integrated sparrow terrace bird box (suitable to install behind cladding)



Figure 12 – [BirdBirckHouses](#) integrated brick sparrow terrace box



Figure 13 – [BirdBrickHouses](#) integrated standard bird box (brick or mesh-fronted available).



- Native wildflowers sown around the site or in hanging baskets will improve its ecological value greatly, especially for insects. Plants should be chosen from the [RHS 'Plants for Pollinators' lists](#).
- A solid wooden hedgehog house could be installed in a quiet corner of the garden (Figure 14). A 13cm by 13cm hole in the garden fence/gates could be installed. This size gap is sufficient for hedgehogs to pass through and is too small for most dogs/cats (Figure 15). Information for providing a hedgehog friendly garden can be found [online here](#).

Figure 14 - Solid wooden hedgehog house



Figure 15 - Hedgehog 'highway' example



Should you need further advice or clarification of the information provided above, please do not hesitate to contact Imprint Ecology at [emily@imprintecology.co.uk](mailto:emily@imprintecology.co.uk).

## 7. Conclusion

Once mitigation measures are taken into account, the proposals are considered to pose a negligible risk upon ecology.

Given the nature of the proposals, impacts upon nearby designated sites or significant habitats is considered to negligible, provided mitigation measures are followed.

There was no evidence of the use of the building by bats or other protected species. Mitigation has been proposed to minimise the risk of any harm to protected and ubiquitous wildlife and to avoid any contravention of legislation. Given the small scale of the proposals, these measures are considered proportionate and sufficient.

The suggested ecological enhancements will result in a slight positive net gain over time in line with local and national planning policies.

## 8. References

Bat Conservation Trust and Institute of Lighting Professionals (2018). Guidance Note 08/18 - *Bats and artificial lighting in the UK*. Available at: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>.

British Standards Institute (BSI) (2011). BS 5250:2011 Code of practice for control of condensation in buildings (+A1:2016). BSI, London.

British Standards Institute (BSI) (2013). BS EN 13707:2013 Flexible sheets for waterproofing. Reinforced bitumen sheets for roof waterproofing. Definitions and characteristics. BSI, London.

British Standards Institute (BSI) (2013). BS42020 - Biodiversity Code of Practice for Planning and Change of use. BSI, London. BSI Standards Publication, Trees in relation to design, demolition and construction – Recommendations (2021)

Chichester District Council Adopted Chichester Local Plan: Key Policies 2014-2029, Policies 40, 49 – 52. Available online at: <http://www.chichester.gov.uk/CHttpHandler.ashx?id=24759&p=0>

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 3rd edition, The Bat Conservation Trust, London

HM Government (1981). *Wildlife and Countryside Act 1981 (as amended)*. Available at: <http://www.legislation.gov.uk/ukpga/1981/69/contents>

HM Government (2000). *Countryside and Rights of Way Act, 2000*. Available at: <https://www.legislation.gov.uk/ukpga/2000/37/contents>

HM Government (2019). *National Planning Policy Framework*. Department for Communities and Local Government. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1005759/NPPF\\_July\\_2021.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf)

Mitchell-Jones, A.J., & McLeish, A.P. (eds). 2004., 3rd Edition *Bat Workers' Manual*, JNCC, Peterborough. Available at: <https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rdedn.pdf>

Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines*. English Nature, Peterborough

Office of the Deputy Prime Minister. (2005, August 16). *Biodiversity and geological conservation: circular 06/2005*

Waring, S. D., Essah, E., Gunnell, K. and Bonser, R. (2013) Double jeopardy: the potential for problems when bats interact with breathable roofing membranes in the United Kingdom. *Architecture & Environment*, 1 (1). Pp. 1-13. ISSN 2329-2296. Available at: [http://centaur.reading.ac.uk/33044/1/ae\\_1361785788.pdf](http://centaur.reading.ac.uk/33044/1/ae_1361785788.pdf)

## Appendix 1: Site photographs

Photo 1 – North facing elevation.



Photo 2 – East facing elevation.



Photo 3 – West facing roof.



Photo 4 – West facing elevation.



Photo 5 – Interior.



Photo 6 – Interior loft and roof space.



## Appendix 2: Planning Policy

The latest National Planning Policy Framework (NPPF) (Defra, 2022) was published in July 2021. The National Planning Policy Framework (2021) outlines the government's responsibility to minimise adverse impacts on biodiversity and bestow biodiversity net gains where possible.

Paragraphs of relevance within the NPPF include: Paragraph 174 of the NPPF states that *“Planning policies and decisions should contribute to and enhance the natural and local environment by: /... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.”*

Paragraph 179 of the NPPF states that *“To protect and enhance biodiversity and geodiversity, plans should: /... promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”*

Paragraph 180 of the NPPF states that “When determining planning applications, local planning authorities should apply the following principles:

- a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons<sup>1</sup> and a suitable compensation strategy exists; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments*



*should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

The NPPF is also complemented by the Circular 06/2005: Biodiversity and Geographical Conservation – Statutory Obligations and Their Impacts Within The Planning System (Office of the Deputy Prime Minister, 2005). Paragraph 99 states that “*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.*”

The site is within the Chichester District; the proposals should be assessed against the Chichester District Local Plan – Key Policies 2014-2029. Policy 49 covers Biodiversity; the following criteria must be met for planning applications to be supported:

1. *The biodiversity value of the site is safeguarded;*
2. *Demonstrable harm to habitats or species which are protected or which are of importance to biodiversity is avoided or mitigated;*
3. *The proposal has incorporated features that enhance biodiversity as part of good design and sustainable development;*
4. *The proposal protects, manages and enhances the District’s network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;*
5. *Any individual or cumulative adverse impacts on sites are avoided;*
6. *The benefits of development outweigh any adverse impact on the biodiversity on the site. Exceptions will only be made where no reasonable alternatives are available; and planning conditions and/or planning obligations may be imposed to mitigate or compensate for the harmful effects of the development.*

## Appendix 3: Legislation of Relevant Species/Habitats

The following legislation is relevant to survey findings and is only a summary.

### Statutory Designated Sites

Designation	Relevant legislation
SSSI (Site of Special Scientific Interest)	Wildlife and Countryside Act 1981 (as amended)
SPA (Special Protection Area)	Conservation of Habitats and Species Regulations 2017 (as amended)
SAC (Special Areas for Conservation)	Conservation of Habitats and Species Regulations 2017 (as amended)
AONB (Area of Outstanding Natural Beauty)	Countryside and Rights of Way Act (CROW) 2000
Habitats of Principal Importance	Section 41 of the NERC Act 2006 and National Planning Policy Framework (2021)

### Protected/Priority Species and Habitats of Principal Importance

#### Bats

All UK bats are European Protected Species.

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). All bat species in England are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which confers additional protection under Section 9 of the act, and through the Countryside and Rights of Way (CRoW) Act, 2000.

All UK bats are listed in Appendix II and III of the Bern Convention. Bats and their habitats are listed in Appendix II of the Bonn Convention. Seven bat species are listed under Section 41 of the NERC Act 2006.

This combined legislation means that it is a criminal offence to:

- Deliberately kill, injure or capture bats
- Deliberately disturb bats, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to rear or nurture their young, or their ability to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance

- Damage or destroy a breeding site or resting place of a bat
- Damage or destroy, or obstruct access to, any structure or place which any bat uses for shelter or protection
- Disturb bats while occupying a structure or place used for that purpose.

If proposed development work is likely to destroy or disturb bats or their roosts a license may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats. With suitable approved mitigation, exemptions can be granted from the protection afforded to bats under regulation 39 by means of a European Protected Species Licence (EPSL).

Natural England, for the Secretary of State for the Department for Environment, Food and Rural Affairs (DEFRA) is the appropriate authority for determining license applications for works associated with developments affecting bats. In cases where licenses are required, certain conditions should be met under the Habitats Regulations 2017 (as amended) to satisfy Natural England. These are:

1. Regulation 55(2)(e) states that licenses may be granted to 'preserve 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.
2. Regulation 55(9)(a) states that a license may not be granted unless Natural England is satisfied 'that there is no satisfactory alternative'.
3. Regulation 55(9)(b) states that a license cannot be issued unless Natural England is satisfied that the action proposed 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Natural England expects the planning position to be fully resolved as this is necessary to satisfy tests 1 and 2. Full planning permission, if applicable, will need to have been granted and any conditions relating to bats fully discharged. For test 3, Natural England should be satisfied that sufficient survey effort has been carried out and that the impact assessment and proposed mitigation measures (submitted with the license application) are adequate to maintain the species concerned at a favourable conservation status.