

**Internal /External Bat Survey**

**18 Jubilee Drive**

**Earl Shilton**



Surveyor: Dr. Stefan Bodnar BSc (Hons) PhD MCIEEM Bat license, Class License CL18 (Survey level 2) CLS01159

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## 1.0. Introduction

A Detached 2 storey house comprising 18 Jubilee Drive, Earl Shilton LE9 7JF was subject to survey in relation to the potential for presence of bat species and roost sites in relation to a proposed development which will involve works affecting the roof and loftspace. (refer to Planning Application).

The brief of the survey was as follows;

- An external/Internal evaluation of the buildings for utilization signs by bat species.
- To determine whether any buildings and trees within the site had potential for use by bats for roosting or as a place of shelter, with consequent implication for development work with respect to Schedule 5 of the *Wildlife and Countryside Act 1981 and the conservation (Natural Habitats &c.) Regulations (and subsequent amendments)*.
- To determine the presence of any roosts within the site.
- To make an overall assessment of the value of the site as foraging, feeding and commuting areas.
- To make recommendations for the development work to take place including any mitigation/ compensation required.

## Bats and the Law

Prior to August 2007, all bat species in the UK were fully protected under the *Wildlife and Countryside Act 1981* (as amended) through an inclusion in Schedule 5. The amendment of the *Conservation (Natural Habitats) Regulations 1994*, in August 2007 now is the regulatory protection mechanism. In addition there are obligations within the Conservation of Species and Habitat Regulations (2017) and National Planning Policy Framework (2024) which replaced the former Planning Policy Statement 9 (PPS 9).

In England, Scotland, Wales and Ireland all bat species are fully protected by the Conservation (Natural Habitats &c.) Regulations, which defines 'European protected species of animals' (EPS). This gives protection to bats and their roosts.

The Regulations have slightly different amendments in the different countries. Under the regulations it is an offence to:

- a) Deliberately or recklessly to capture, injure, or kill a EPS.
- b) Deliberately or recklessly –
  - i. To harass a wild animal or group of wild animals of a EPS.
  - ii. To disturb while it is occupying a place of shelter (roosts).
  - iii. To disturb while it is rearing its young or caring for its young.
  - iv. To obstruct access to a breeding site or resting place, or otherwise deny the animal use of that site or resting place.
  - v. To disturb a EPS in a manner that is, or circumstances which are likely to significantly affect the local distribution or abundance of the species.
  - vi. To disturb a EPS in a manner that is, or circumstances which are likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for young.

In this interpretation, a bat roost is “*any structure or place which any bat uses for shelter or protection*”. As bats tend to reuse the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time.

### **Planning and Development**

All British bat species and their roosts are protected under the Wildlife and Countryside Act 1981, through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2.

The Act and Regulations include provisions making it illegal to:

- ☐ Intentionally or deliberately kill, injure or capture bats.
- ☐ Deliberately disturb bats.
- ☐ Damage, destroy or obstruct access to a roost.

Local Planning Authorities consult the Government’s guidance notes, National Planning Policy Framework (2024) and the Conservation of Species Habitat Regulations (2017) in England, and equivalents in Scotland and Wales, before making a planning decision where there may be protected species on a site.

The presence of a protected species should be a material consideration when considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat. If bats use the site, appropriate Statutory Nature Conservation Organization (Natural England, Scottish Natural Heritage or Natural Resources Wales) must be consulted before any work is carried out. Where necessary, a bat expert should visit and assess the site.

If planning permission is being sought from the local authority, any observations of bats should be reported to them and they can be reminded of their obligations within the National Planning Policy Framework (2024). If a bat roost is present and is affected by a proposed development, licensing will be required from the Statutory Nature Conservation Body, in England this is Natural England.

### **The Legislative Process (England)**

In determining whether or not to grant a license Natural England must apply the requirements of Regulation 535 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b)6 .

(1) 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”.

(2) Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”.

(3) 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.”

In determining applications for licenses under the Regulations Natural England is also aware of and, where appropriate, has regard to the following:-

☐ Planning Policy Statement 9 ☐ Circular 06/05 “Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System”

☐ Circular 2/2002 New Guidance for Local Planning Authorities on European Protected Species and Changes in Licensing Procedures

☐ the EU Guidance Document on the protection of animal species: February 2007, Managing Natura 2000,

EU Guidance Document on Hunting under Council Directive 79/409/EEC on the conservation of wild birds (Chapter 3) and The Report of the Article 12 Working Group under the Habitats Committee “Contribution to the interpretation of the strict protection of species (Habitats Directive article 12)”.

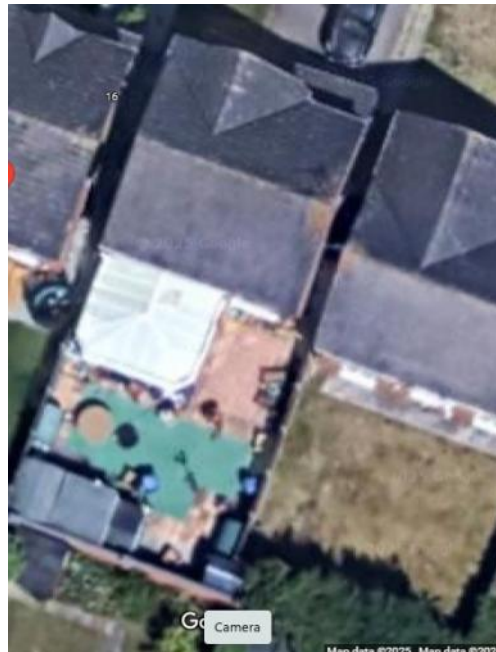
Developers need to be aware that:

- Assessment of current use, likely effects and mitigation or habitat enhancement should be incorporated into development proposals at an early stage.
- Where changes in land use could affect bats, the implications to bats should be considered and advice sought.
- When considering planning applications, authorities are required to take account of protected species, including all bats, and their habitats.

Bat feeding habitats can be some distance from their roost sites, therefore, bats seen in flight may roost nearby or some miles away. Bats use a range of sites for roosting, including buildings and trees. Signs of roosts, which are visible from the outside, include bats emerging from the roost (timing varies from before sunset to up to about an hour after) and bat droppings on surfaces near emergence points.

### 1.1. Site Location:

18 Jubilee Drive, Earl Shilton LE9 7JF

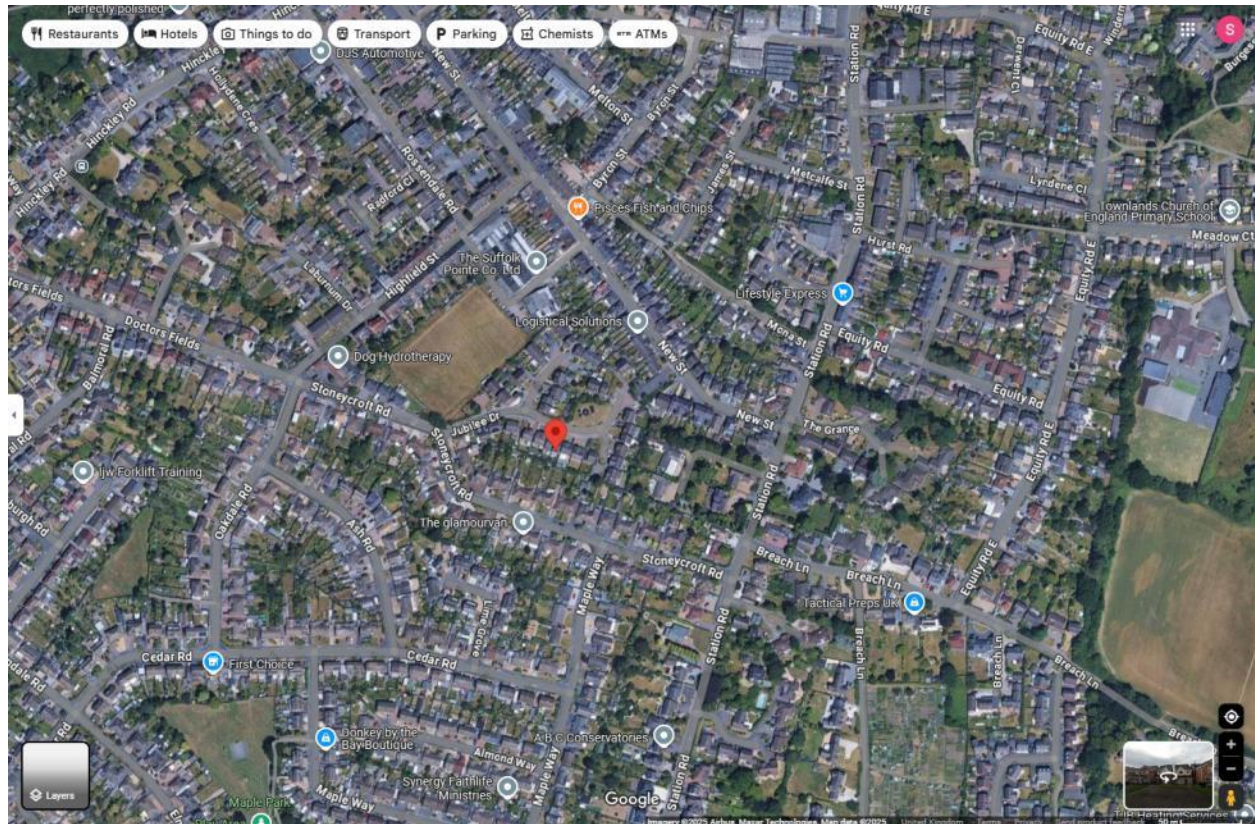


### 1.2. General Site Description and Status

The site consists of a detached two storey house of traditional brick and concrete tile construction, built in the 2002. It is concrete tile with a bitumen felt membrane beneath, loft to 2.0m, rockwool at base, boarded, used for storage. New UPVC soffits, doors, windows, main tiles and ridge tiles intact. No chimneys. To front is small porch of similar materials, rear is a UPVC conservatory on blockwork and brick base. Appendix 1 shows aerial photographs, Appendix 2 Site images.

#### 1.3.1. Immediate Surrounding Area

The property is in a suburban area of Earl Shilton, landscaped gardens and occasional public open spaces,) are the main opportunities for foraging and commuting bats in the immediate area. See below:



### 1.3. Bat Ecology (a Summary)

#### 1.4. Where do bats build roosts?

Different species of bat prefer different places; some creep into tiny spaces, cracks and crevices. Only occasionally do they hang free or are easily visible.

Outside they may roost:

- Under weather boarding or hanging tiles
- Above soffits and behind fascia and barrage boarding
- Between window frame and wall brickwork
- In gaps behind cladding tiles or wood
- Between underfelt and boards or tiles
- Inside cavity walls

Inside roof spaces they may roost

- Along the ridge beam
- Around the gable end
- Around the chimney breast

### **Looking for the evidence**

Bats do not make nests or cause structural damage. The most obvious sign of their presence is droppings.

- Bat droppings consist largely of insect remains and crumble easily between your fingers to a powder of semi-shiny fragments.
- Rodent droppings are smooth and plastic, quickly becoming hard. They cannot be crumbled.
- Bat droppings do not present any known health hazards.
- Droppings may not always be readily visible in a loft.
- Large accumulations may reflect use over a number of years rather than large numbers of bats at any one time.

### **When do bats use buildings?**

Bats use buildings at any time, but are most often found in houses between May and August.

- Mother bats have only one baby a year, suckling it for several weeks. The mothers gather in maternity roosts to have their young in summer, and this is the time they are most likely to be seen using buildings.
- The bats move away when the young can fly and feed themselves, and have usually left by September.
- Immature individuals, adult males and non-breeding females will occupy a variety of roosts, individually or in small groups, at any time of year.
- Disturbance or the use of chemicals at maternity roosts in houses can have a major impact on bat populations gathered from a wide area.
- Bats do roost in houses in winter, usually individually, but are difficult to see.

### **Which bats use buildings?**

All UK species have been recorded in houses, but some very rarely. Pipistrelles and Long-eared bats are the species most usually found.

#### **Pipistrelle bats**

There are three different species of Pipistrelle; the common Pipistrelle, Soprano Pipistrelle and the rarer Nathusius' Pipistrelle. They sometimes use houses as maternity roosts, choosing confined spaces. These are usually on the outside of buildings, such as under the soffits or behind barge boards or hanging tiles, where the bats can rarely be seen.

#### **Brown long-eared bats**

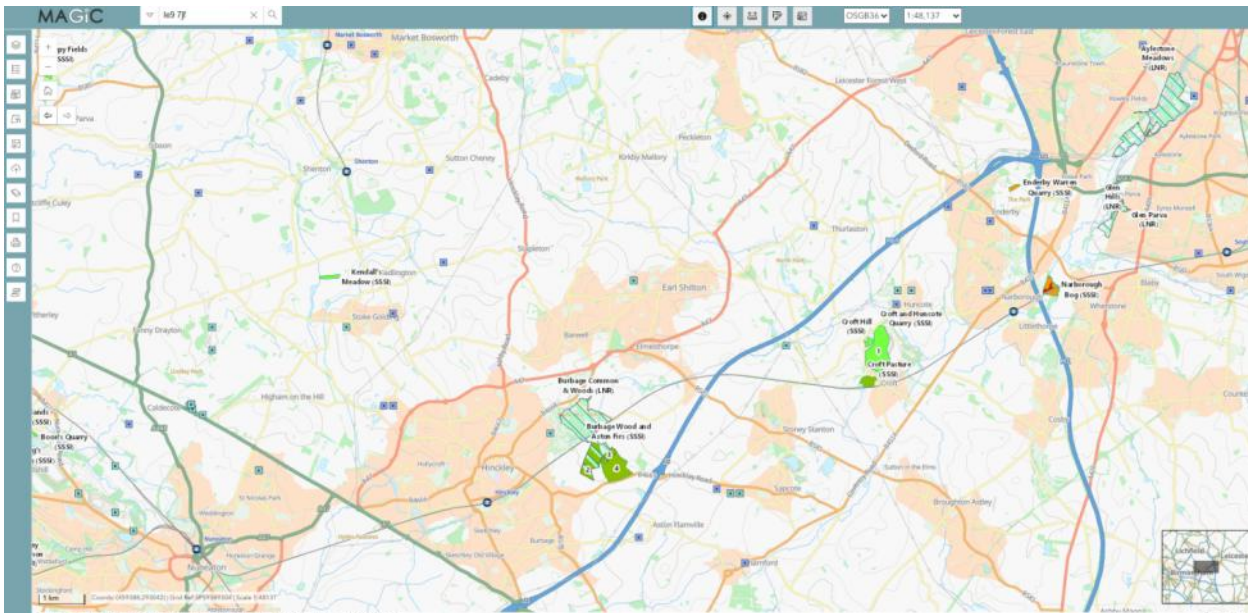
This species mostly prefers older houses with large roof spaces. Small clusters may be seen at junctions of roof timbers or under the ridge. It is the bat most frequently seen inside lofts, small numbers may stay longer than the other species.

### 1.5. Description of Works

Refer to Planning Application, the works are a two storey rear extension to the existing property. .

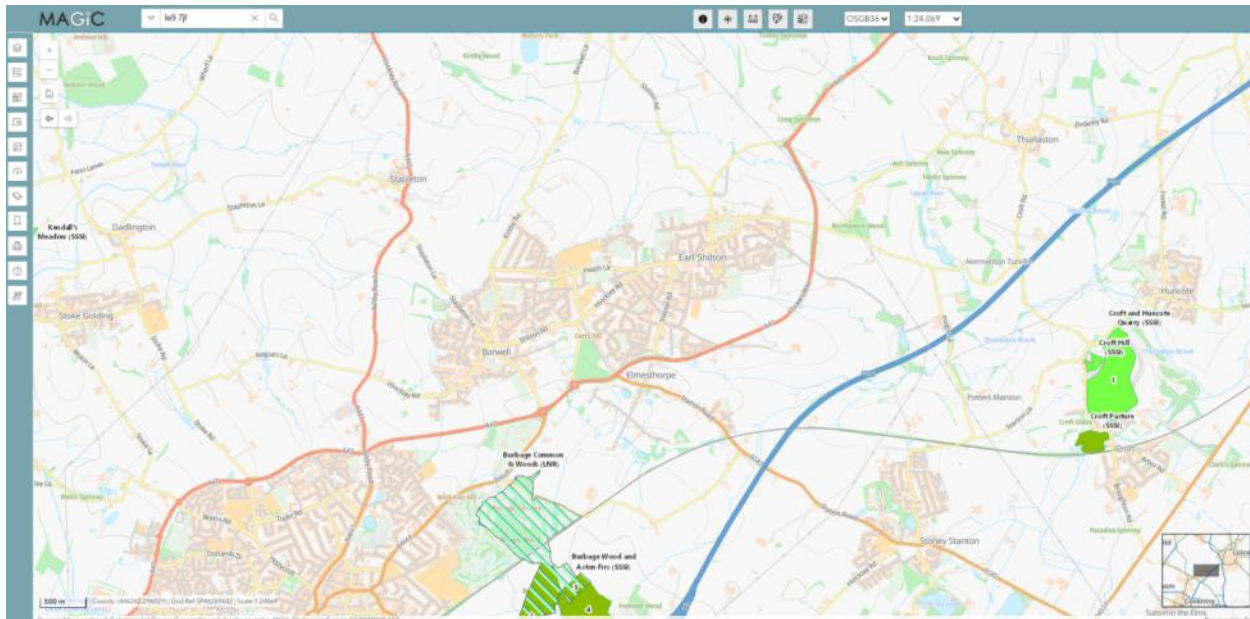
### 1.6 Bat Species Records

In relation to bat species the following were recorded from various web based data sources, the authors own records, and other sources, presented here with the approximate distances of the nearest record. In addition, a number of Ecological survey reports within the area have been interrogated for protected species records. All records are post-2000 unless otherwise stated and in this case derive mainly from the Natural England 'MAGIC' site inspected on 26<sup>th</sup> March 2025:



**EPSM Search (Source: Magic):** An EPSM search revealed that there are roosts of Common Pipistrelle and Brown long eared bat within 2Km, with Great Crested Newt records within 1 km. Bat roosts are shown as blue squares on the image above.

**Protected sites: (Source: MAGIC)**



The nearest protected site is Burbage Common and Woods LNR at 1.5km SW.

### **Interpretation of available biological data.**

The data search reveals that there are 2 bat species recorded with a 1km radius of the survey site.

There are no records of bats from the site or near it, and there are no Statutory Protected sites on site or potentially impacted by the proposal.

## **2.0. Survey Methodology**

The survey consisted of two elements:

- A day-time visual external assessment of the buildings and their potential in relation to use by bats as roosts.
- A day-time visual internal assessment of the buildings and their potential in relation to use by bats as roosts

## **2.1. Personnel**

The survey was conducted by Dr. Stefan Bodnar, assisted by Dr. Louise Sutherland. Dr. Stefan Bodnar is a full time member of the Chartered Institute of Ecology and Environmental Management, an experienced ecologist with over 35 years experience of bat surveys, working under Natural England class license: Level 2, survey: bats.

## **2.2. Visual External Assessment**

The external building inspection (from the ground using binoculars) focused particularly on roof areas, soffits, areas of wall with cracks and apertures, vents, openings into the building and the overall structure of the buildings including any features such as crevices or cavities that may be suitable for bats to roost in. Evidence of roosting such as droppings or staining around entrances was also recorded. Where appropriate gaps and cavities were checked using an endoscope.

The date of site visit was 25<sup>th</sup> March 2025

Methods of survey used have been based on those outlined in Joint Nature Conservation Committee's Bat Workers Manual (Mitchell-Jones & McLeish, 2004), Bat Surveys for Professional Ecologists (4th Edition) , BCT (2023), and English Nature's Bat Mitigation Guidelines (Mitchell-Jones, 2004).

## **2.3. Visual Internal Assessment**

The internal roof spaces were thoroughly checked for the presence of bats. All areas that bats might access were fully surveyed, and suitable features checked with an endoscope, where appropriate. The dwellings were examined by an experienced, licensed bat worker, Dr Stefan Bodnar. Equipment used included

powerful torches, camera, a set of telescopic ladders and binoculars and an endoscope to inspect any potentially suitable crevices or holes. The dwellings were examined for feeding remains, droppings, staining, worn surfaces and the bats themselves (alive or dead).

The date of site visit was 25<sup>th</sup> March 2025.

### 3.0. Results

#### 3.1. External Visual Assessment

The assessment was carried out using the guidance provided within the publication: **Bat Surveys for Professional Ecologists (4th Edition), BCT (2023)**, which states:

Bat Conservation Trust

**Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.**

| Potential suitability   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | Roosting habitats in structures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Potential flight-paths and foraging habitats                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| None                    | No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).                                                                                                                                                                                                                                                                                                                                        | No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).                                                                                                                                                                                                                         |
| Negligible <sup>a</sup> | 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 occasion.                                                                                                                                                                                                                                                                                                                              | No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.                                                                                                                                                                                                                                                                                            |
| 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 <sup>b</sup> 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 <sup>c</sup> ). | Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.<br><br>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.                                                                                                           |
| Moderate                | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions <sup>b</sup> 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).                                                                 | Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens.<br><br>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.                                                                                                                                                                                        |
| High                    | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions <sup>b</sup> and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.                                                                                                       | Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br><br>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.<br><br>Site is close to and connected to known roosts. |

**a** Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

**b** For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

**c** Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

- The site consists of a detached two storey house of traditional brick and concrete tile construction, built in the 2002. It is concrete tile with a bitumen felt membrane beneath, loft to 2.0m, rockwool at base, boarded, used for storage. New UPVC soffits, doors, windows, main tiles and ridge tiles intact. No chimneys. To front is small porch of similar materials, rear is a UPVC conservatory on blockwork and brick base. Appendix 1 shows aerial photographs, Appendix 2 Site images.
- Gable ends, flashing and chimneys intact including mortar

All of the brickwork and render is generally very intact throughout. Windows, doors and soffits (where exist) intact.

The original building, of relative recent construction, has been generally well maintained and extensively renovated there are no identified opportunities for bats to access the building. There are no missing or raised tiles and there are no gaps on the ridge. All ridge and gable ends, mortar is intact, including flashing, similarly have no features that bats could use either for access or as roosts. No signs of bat or bat access or use were found.

Overall categorization was: nil bat roost potential (BRP). (following inspection)

### **3.2. Internal Visual Assessment**

An internal visual assessment of the roof space were carried out on the same date. Access to all interior roof spaces was possible, rockwool at lower level. There were no signs of bat presence such as droppings, staining or scratch marks. The internal roof space is with a mineral felt lining, appearing intact with no obvious access points in evidence. The building was classified as nil in terms of bat roost potential.

Main building: There was no evidence of access to the internal roof space by birds. Refer to photographs, Appendix 2.

Overall categorization 18 Jubilee Street was: Nil bat roost potential (BRP). It could be clearly seen that there were no bat droppings in any part of the loft spaces.

#### **4.0. Conclusion**

The survey determined that the building was conclusively not being used as a bat roost site. The building overall was categorized as nil bat roost potential (BRP) in respect of access and potential use by bats.

#### **5.0. Mitigation/Compensation**

In relation to the National Planning Framework (2024) there will be no requirement for Mitigation/ Compensation measures for bats, no further surveys required, or cautions within the works specified. In addition, external lighting should be restricted and should conform with BCT guidelines (Appendix 3 has a summary) though more recent guidance 'Bats and External lighting, BCT, 2018', updated in 2023 should be followed.

#### **6.0. References**

Bats in Roofs. A guide for surveyors. English Nature, Peterborough, Mitchell-Jones, A.J. (2004).

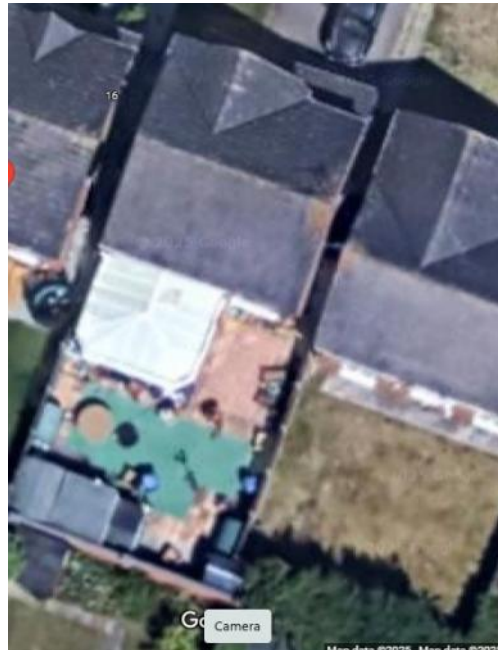
Bat Mitigation Guidelines. English Nature, Peterborough, Mitchell-Jones, A.J.& Mcleish, A.P. (Eds)(2004).

Bat workers Manual, 3<sup>rd</sup> Edn. Joint Nature Conservation committee, Peterborough.

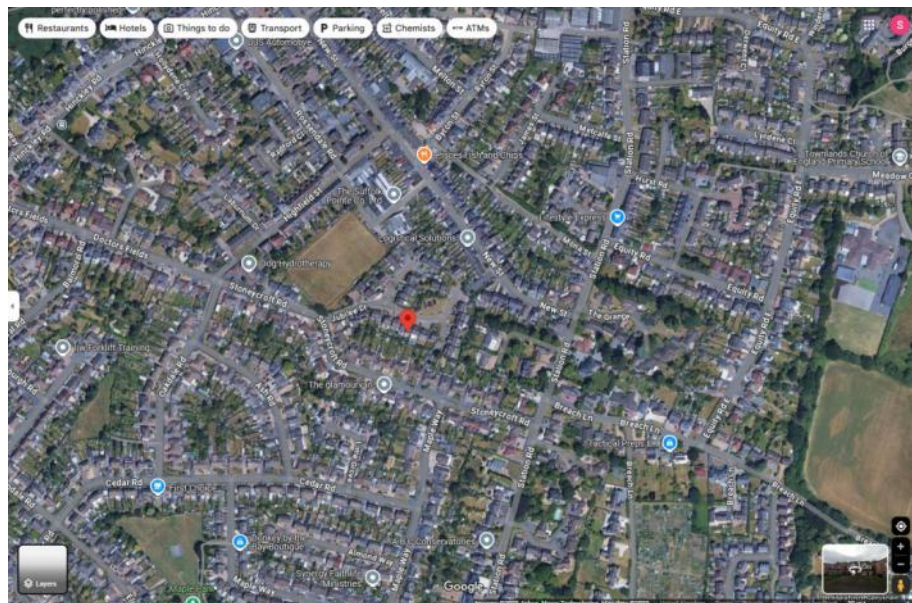
Bat Survey guidelines (2023), Bat Conservation Trust

NPPF, 2024

Appendix 1: Aerial Photographs: detail of area and location, existing layout



Wider landscape context



Appendix 2: Site images



Front elevation



Front detail



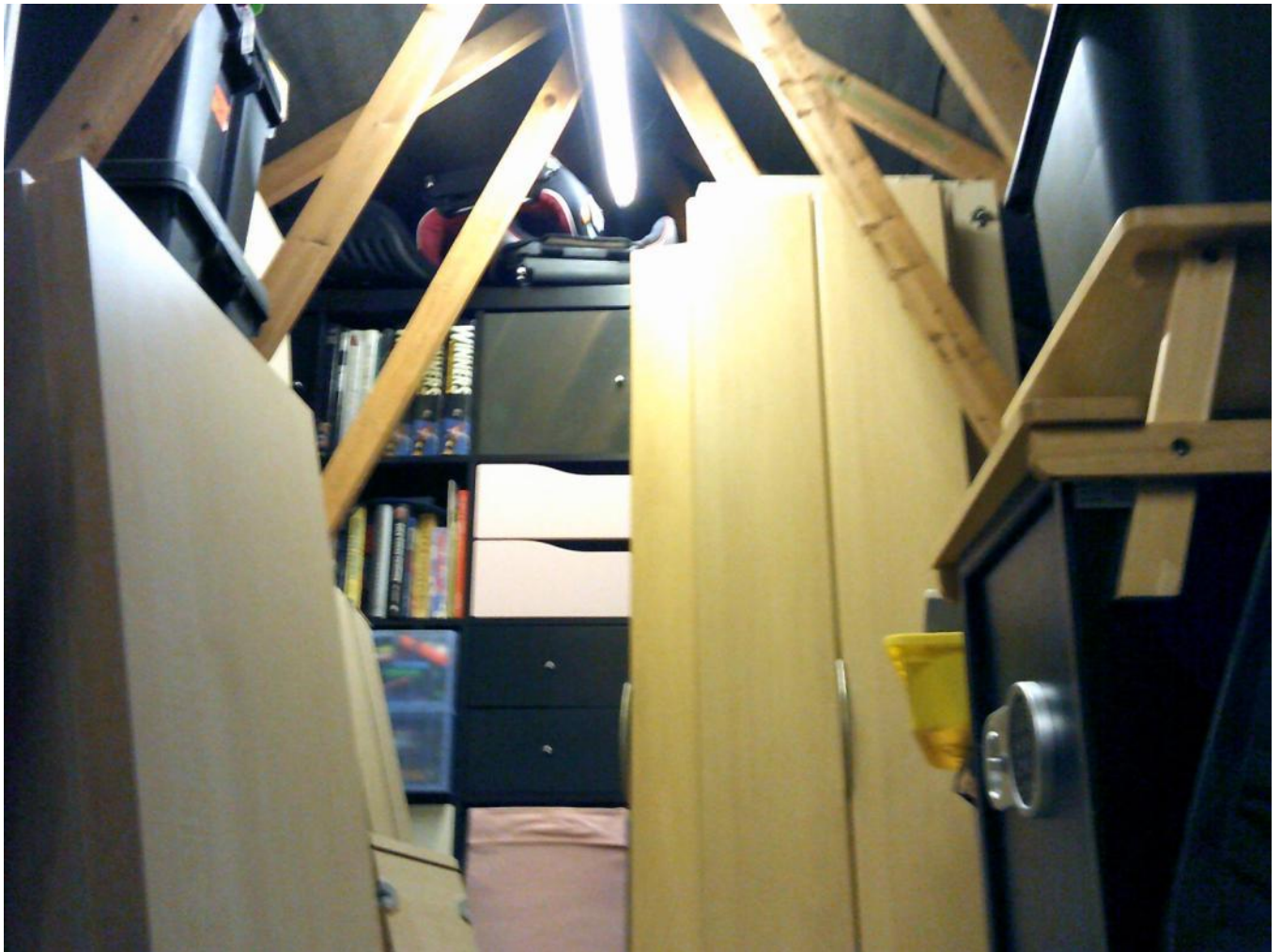
Gable end



Boxes UPVC soffits (over clad)



Rear elevation with solar panels



Loft space images



Loft space images