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Bat and Protected Species Survey, &					
Bat Emergence Survey			E		
Hillside View					
Burlescombe					
Tiverton					
Devon					
EX16 7JX					
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Planning			Report	220752 rev02	
Reference:			Reference:	22010210002	
Client/s:	Georgie Bushin				
Architect/Agent:					
Survey Date/s:	11 <sup>th</sup> and 19 <sup>th</sup> August & 7 <sup>th</sup> September 2022				
Report Date:	September 2022		OS Grid Ref:	ST 07831 15685	
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# 1.1 Introduction

It is understood that it is proposed to remove an existing extension and replace with a larger extension to the property at Hillside View, Burlescombe, Tiverton, Devon EX16 7JX.

# 1.2 Bats

The internal inspection identified approximately twenty brown long-eared (*Plecotus auritus*) bat droppings around the chimney and gable wall within the attic void. Subsequent bat emergence surveys identified no emerging bats. Therefore, the combined surveys confirm the property supports a bat roost for:

 Brown long-eared – used infrequently by low numbers as a summer (nonmaternity) roost. Roosting positions included internal crevices within the roofing layers and gable wall-top.

# **1.2.1** Implications of the Proposal

The proposed works will modify/destroy the identified bat roost and could potentially cause disturbance and or injury to any roosting bats present at the time of the proposed works.

Therefore, it will be necessary to apply and obtain European Protected Species (EPS) licence or Bat Mitigation Class Licence (BMCL) from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.

# **1.2.2 Mitigation & Compensation for Bat Species**

Following approval of an EPSL, mitigation and compensatory measures will be required to include:

- Commencement of works, including ecological supervision, to include careful removal of the roof covering where required to expose the roof timbers and wall tops in association with the new extension and any skylights;
- Any bats discovered/uncovered, would be removed and moved to safety by the supervising ecologist;
- Positioning of a temporary bat roosting provision, consisting of at least one bat box positioned upon a peripheral tree at the site. This would be used to relocate any bats found during the ecological supervision;

- Retention of existing roosting features within the roofing layers; and,
- Incorporation of permanent bat roosting provisions, consisting of one inbuilt bat provision within the external walls of the new extension with a southerly aspect (see Appendix 2 for examples of bat provisions).

# 1.3 Nesting Birds

No active or former bird nests were identified in association with the surveyed property. Precautionary recommendations are provided to ensure the proposed works do not disturb any active bird nest site(s), which could be newly established during any future bird-nesting seasons.

# 1.4 Ecological Enhancements

Provisions for birds and invertebrates, detailed within Section 7.3, should be incorporated into the proposal to increase opportunities for wildlife on site.

# **SECTION 2**

**SECTION 3** 

### SURVEY OBJECTIVES

It is understood that it is proposed to remove an existing extension and replace with a larger extension to the property at Hillside View, Burlescombe, Tiverton, Devon EX16 7JX.

The survey specifically aimed to identify the following:

- The presence of, or past use of the site by, any species of bat;
- The presence of, or past use of the site by, barn owl, or other nesting birds;
- The sites potential for use by any of above;
- Any other ecological issues relating to the proposal.

#### SURVEY SITE DESCRIPTION

Hillside View is a bungalow property located within a parcel of land adjacent to the A38 and 0.3 km to the south of the M5 Motorway, approximately 1 km to the south of the village of Burlescombe.

The immediate surroundings to the property included a shared access driveway from the A38, a transport café to the southeast and a neighbouring property to the north. The property was further bound by agricultural land to the east and west (see Figure 1).

Hillside View was constructed of concrete block and externally rendered. The rear of the property included a small kitchen extension. The roof was constructed of simple timber trusses supported by a single purlin to each elevation. The remains of a former chimney projected through the roof void terminating below the ridge. The roof covering included a covering of concrete tiles underlined with modern breathable felt indicating a relatively recent re-roofing and deconstruction of the chimney. The roof had a surround of wooden soffiting and barge tiles (see Figures 2 & 3).



Figure 1. Hillside View highlighted in yellow



Figure 2. The west elevation of the property



Figure 3. The east elevation and north gable of the property

#### 4.1 The Bat & Protected Species Survey

The survey comprised of internal and external inspections of the building, conducted on 11<sup>th</sup> August 2022. The survey was undertaken with the aid of head torches, an endoscope, an extendable ladder and a digital camera.

The aim of the survey was to assess levels of use by bats through the presence of actual animals or their field signs, such as droppings, insect prey remains and/or urine staining, and the potential suitability of the building for roosting.

The presence of other protected species, notably nesting birds and barn owl/s, was also investigated, including the presence and behaviour of any actual animals or their field signs, such as whitewash, pellets and or nest debris.

# 4.2 The Bat Emergence Surveys

The bat emergence surveys consisted of evening survey visits undertaken of the building on 19<sup>th</sup> August 2022 by Martin Clements & Paul Lott, and 7<sup>th</sup> September 2022 by James Baker & Andy Hobbs. Each survey visit was undertaken from 15 minutes prior to sunset until 1½ hours after sunset.

The surveyors were positioned to cover all aspects of the building, with particular emphasis placed on the areas, which had, potential to be utilised by emerging bats.

When a bat was detected, it was identified with its position and activity noted on a field base plan. The time and position of each bat was recorded, along with its direction of flight (light permitting) and whether the bat was emerging, foraging or commuting. Cloud cover, wind strength, precipitation, humidity and temperature were all recorded at the start and on completion of the survey.

The surveyors were each equipped with a bat detector, comprising of a Peersonic RPA2 detector or Pettersson D240X (full spectrum bat detector) linked to a digital recorder. To aid species identification, all recordings were analysed using Kaleidoscope Viewer (ver4.5.5) or BatSound (ver4.03) computer software.

# 5.1 The Bat & Protected Species Survey

Date	Date Temperature (°C)		Cloud cover (%)	Precipitation	
11 <sup>th</sup> Aug 2022	20	1	0	None	

Table 2. Environmental conditions

#### Constraints on the survey/s:

There were no constraints to the survey. All accessible internal areas, and all accessible external surfaces were examined, with an assessment made of the roof structure.

#### 5.1.1 Bats

Potential bat access points into the property included multiple gaps beneath the roofing tiles, barge tiles and ridge tiles.

Field signs of bats were limited to accumulations of a low number of droppings around the chimney and gable wall confirmed by DNA analysis as originating from the brown long-eared bat (see Figures 4 & 5).



Figure 4. Brown long-eared droppings on insulation next to the chimney



Figure 5. Brown long-eared droppings on insulation next to the north gable wall

# 5.1.2 Nesting Birds

No active or former bird nests were identified in association with the surveyed property.

# 5.2 The Bat Emergence Surveys

The bat emergence surveys were undertaken on the evenings of the 19<sup>th</sup> August and 7<sup>th</sup> September 2022 . Weather conditions recorded at the start and end of the survey visits are presented in Table 2.

Date & Times	Start/End	Temp (⁰C)	Wind Speed (Beaufort Scale)	Cloud Cover %	Precipitation	Humidity %
19 <sup>th</sup> August 2022 Sunset: 20:26	Start of Survey	17	4	90	None	76
Start Time: 20:10 End Time: 21:50	End of Survey	15	3	90	None	84
7 <sup>th</sup> Sept 2022 Sunset: 19:45	Start of Survey	18	3	10	None	52
Start Time: 19:30 End Time: 21:10	End of Survey	17	3	30	None	59

Table 2. Timings and environmental conditions relating to the bat emergence survey.

# 5.2.1 The Bat Emergence Survey Visit – 19<sup>th</sup> August 2022

No bats were recorded emerging from the property.

Several passes by common pipistrelle bats (*Pipistrellus pipistrellus*) where observed and recorded during the survey. In addition, three passes by a noctule bat (*Nyctalus noctula*) where recorded during the survey.

# 5.2.2 The Bat Emergence Survey Visit – 7<sup>th</sup> September 2022

No bats were recorded emerging from the property.

Three passes by common pipistrelle bats were observed and recorded during the survey.

#### 6.1 Bats

# 6.1.1 Roost Characterisation

The combined surveys confirm the property supports a bat roost for:

 Brown long-eared – used infrequently by low numbers as a summer (nonmaternity) roost. Roosting positions included internal crevices within the roofing layers and gable wall-top.

#### 6.1.2 Legislation

Bats are protected under several articles of UK and European legislation, notably the Wildlife & Countryside Act 1981, the CroW Act 2000, and the Conservation (Natural Habitats, &c) (Amendments) 2017 Regulations [referred to as HR]. Under this legislation, it is illegal to:

- Intentionally or deliberately kill or injure bats;
- Deliberately disturb bats;
- Recklessly disturb roosting bats or obstruct access to their roosts; and,
- Damage or destroy bat roosts.

Where works are proposed that would result in offences being committed, a European Protected Species License (EPSL) is required under the Habitats Regulations (2017). An EPSL or BMCL must be applied for from Natural England, permitting activities that would otherwise be deemed illegal.

This site is applicable for the BMCL, which can be applied for by a registered consultant when the site meets the following specification:

- Only three or fewer species of bat may be present on site;
- Only three or fewer number of separate roosts may be present on site; and
- The roosts present on site must be of a low level (e.g. feeding, day night and occasional/transitional roosts) and support low numbers of bats.

#### 6.1.3 Impact of the Proposed Development

The proposed works will modify/destroy the bat roosts and could potentially cause disturbance and or injury to any roosting bats at the commencement of the proposed works.

Therefore, subject to receiving planning approval, it will be necessary to apply and obtain an EPS licence or BMCL from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.

In order to obtain an EPS licence or a BMCL, the following three regulations must be satisfied:

- The proposed works or development may be 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." [R.44(2) (e)];
- 2) "There is no satisfactory alternative" [R.44(3)(a)]; and,
- "The action will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range." [R.44(3)(b)].

Mitigation and compensatory measures will need to be detailed within the EPSL application, including; appropriate/sensitive timing of the commencement of works, initial ecological inspection and supervision, retention and/or replacement of suitable species-specific bat roosting provisions.

Providing that such measures are implemented, the proposed works at Hillside View, Burlescombe, Tiverton, Devon EX16 7JX will mean that the proposal will not necessarily have a detrimental population effect.

# 6.2 Nesting Birds

No active or former bird nests were identified in association with the surveyed property.

Care will need to be taken to ensure that any newly formed bird nests are protected and not disturbed by the works.

Ideally building works should be scheduled to commence outside of the bird-nesting season, removing any potential for undue delays caused by nesting birds. Alternatively, a nesting bird check would be required to confirm the presence or absence of active bird nests, with any active nests protected accordingly.

The bird-nesting season is considered to extend from March to August inclusive, although, depending upon the species, geographical area and the weather conditions, nesting can extend outside this period.

# 6.3 Ecological Enhancements

The National Planning Policy Framework outlines the Government's commitment to minimise impacts on biodiversity and to provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Therefore, for the development to result in a biodiversity gain the development will need to include provisions for birds and invertebrates as well as mitigation determined for bat species.

#### 7.1 Roosting Bats

#### 7.1.1 European Protected Species License (EPSL)

The proposed works will modify/destroy the identified bat roost, and cold potentially cause disturbance and or injury to any roosting bats present at the time of the proposed works.

Therefore, it will be necessary to apply and obtain European Protected Species (EPS) licence or Bat Mitigation Class Licence (BMCL) from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.

In order to apply for the licence, it will be required to successfully obtain full planning permission from the Local Planning Authority (LPA).

#### 7.1.2 Bat Mitigation & Compensation

Specific mitigation and compensatory measures would need to be incorporated into the proposal/s, including:

- Commencement of works, including ecological supervision, to include careful removal of the roof covering where required to expose the roof timbers and wall tops in association with the new extension and any skylights;
- Any bats discovered/uncovered, would be removed and moved to safety by the supervising ecologist;
- Positioning of a temporary bat roosting provision, consisting of at least one bat box positioned upon a peripheral tree at the site. This would be used to relocate any bats found during the ecological supervision;
- Retention of existing roosting features within the roofing layers; and,
- Incorporation of permanent bat roosting provisions, consisting of one inbuilt bat provision within the external walls of the new extension with a southerly aspect (see Appendix 2 for examples of bat provisions).

# 7.2 Nesting Birds

No active or former bird nests were identified in association with the surveyed property.

Care will need to be taken to ensure that any newly formed bird nests are protected and not disturbed by the works.

Ideally building works should be scheduled to commence outside of the bird-nesting season, removing any potential for undue delays caused by nesting birds. Alternatively, a nesting bird check would be required to confirm the presence or absence of active bird nests, with any active nests protected accordingly.

The bird-nesting season is considered to extend from March to August inclusive, although, depending upon the species, geographical area and the weather conditions, nesting can extend outside this period.

# 7.3 Ecological Enhancements

For the proposed extension to the property to result in a positive biodiversity impact the following will need to be implemented.

- One nesting terrace for house sparrow positioned within/upon external wall/s (see Appendix 3); and,
- One invertebrate brick positioned within the external wall/s of the new extension with a southerly aspect (see Appendix 4).

Any external lighting associated with the development is to be adapted to be based on a Passive Infrared Sensor (PIR) system (being motion-sensitive only to large objects) and on a short timer (no longer than 2 minutes). Such lighting is to specifically not be positioned where it could illuminate the bat roosting provisions, surrounding vegetation (woodland, trees, hedgerows, hedgebanks etc) or any areas beyond the site.

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# APPENDICES

- Appendix 1: LegislationAppendix 2: Examples of Inbuilt Bat Roosting ProvisionsAppendix 3: Examples of Bird Nesting Provisions
- Appendix 4: Examples of Invertebrate Provisions

#### **Bat Species**

All bat species and their roosts are legally protected in the UK. All bats are listed as European protected species of animals in the European Union's Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the Habitats Directive. This Directive is implemented in the UK by The Conservation of Habitats and Species Regulations 2017 (better known as the Habitats Regulations).

There is also some protection for bats and roosts in England and Wales under the Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). For practical purposes, the protection of bats and their roosts now falls mostly under the Habitats Regulations

In summary, it is an offence to

- deliberately, capture, injure or kill a bat
- deliberately, disturb in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young
- damage or destroy a roost (this is an 'absolute' offence)
- possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat

('Deliberately' may be interpreted as someone who, although not intending to injure, kill, etc, performed the relevant action, being sufficiently informed and aware of the consequences their action will probably have.)

A person who needs to carry out actions that would result in an offence being committed should apply for a derogation licence from Natural England. They have powers to grant Habitats Regulations derogation licences in certain circumstances, for certain reasons and with certain terms attached, so that the licence holder remains within the law. Application for a derogation licence should be made in plenty of time, and the services of a bat expert utilised in making the application. It is an offence to make a false statement to obtain such a licence.

This information is not provided as legal advice and before making decisions relating to the law a qualified legal representative should be consulted.

#### Barn Owl

All birds, their nests and eggs are protected by law under Part 1 of the Wildlife and Countryside Act 1981 (as amended). Barn Owls are listed on Schedule 1 which provides them with special protection.

It is an offence to:

- Intentionally kill, injure, or take (handle) any wild barn owl.
- Intentionally take, damage, or destroy any wild barn owl nest whilst in use or being 'built'.
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing eggs or young.
- Intentionally or recklessly disturb any dependent young of wild barn owls.

#### **Nesting and Nest Building Birds**

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Nesting is determined as being from when birds first initiate nest building up until the point when fledglings stop returning to the nest.

# APPENDIX 2 EXAMPLES OF INBUILT BAT ROOSTING PROVISIONS

# Schwegler 1FE Bat Access Panel with Optional Back Panel

Material: Woodcrete (75% wood sawdust, concrete and clay mixture) Width: 300mm Height: 300mm Depth: 80mm Weight: 7.8kg Entrance: 20mm slit

Position: Within external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.

Additional Information: Installation of access panel alone would allow bats to access into a building, potentially into a cavity wall spaces or loft spaces.

By fitting the optional back panel, the Schwegler 1FE becomes a self-contained bat roosting unit at the dimensions shown above. Can be inbuilt and rendered over or covered with cladding.

#### Sergovia Build-in Woodstone Bat Box

Material: Woodstone and Plyboard Width: 220mm Height: 500mm Depth: 160mm Weight: 7.8 kg

Position: Within external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level. Can be inbuilt and rendered over or covered with cladding.

#### Integrated Eco Crevice Bat Box

Material: Recycled Plastic lined with OSB Two internal crevices 22mm wide Width: 215mm Height: 440mm Depth: 110mm Weight: 3 kg

Position: Within external walls with a southerly aspect. Can be mounted within masonry or timber cladding for a flush fit or be recessed and rendered/clad over leaving the entrance slot open.

Self cleaning as the droppings simply fall out the entrance slot.







### **APPENDIX 3**

# Build in Woodstone Half Open Nest Box

Suitable for: robin, pied wagtail and spotted flycatchers. Material: Woodcrete Dimensions 170 x 210 x 180 mm Weight 4.2kg

Position: Within external walls with a northerly aspect, beneath eaves, at a height of 2m or above



#### Woodstone Sparrow Terrace

Suitable for: House sparrows and individual blue & great tits Material: Woodcrete Height: 220mm Width: 290mm Depth: 165mm Weight: 7kg

Position: At a height of at least 2m within external wall



#### **APPENDIX 4**

#### **Bee Brick**

Each bee brick includes nesting compartments for solitary nesting bees, including for egg laying and hibernation.

Bee bricks to be positioned within southerly elevations, which includes part or full sun, between 1m to 2m above ground level, and ideally facing garden or boundary habitats.





Bee Brick - case in concrete: 215mm x 105mm x 65mm http://greenandbluebuild.co.uk/product/bee-brick/

### Woodstone Insect Block

These durable homes will attract insects such as wild bees, lacewings and ladybirds.

Dimensions: 185 x 270 x 90 mm Weight 3.2 kg

Position: Place the insect block preferably in a sunny spot, ideally next to areas with flowers close by. The front where possible aimed at the south. Hang the insect block up at least 2 metres high.

The insect block can also be directly built into a façade or wall.

