

HIGHDOWN AVENUE

PHASE 1 BAT SURVEY REPORT

Prepared for Mr & Mrs K. Fischer

by

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1 INTRODUCTION

1.1 Site location and summary description

1.1.1 This report describes a Phase 1 bat scoping survey of buildings within approximately 0.08ha of land at 28 Highdown Avenue, Emmer Green, Reading, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SU 710768. The study was commissioned by Mr and Mrs K. Fischer in March 2019.

1.1.2 The site is located within an area of suburban residential development at the western edge of the settlement of Emmer Green and comprises a detached bungalow and adjoining garage set within a maintained formal garden. Highdown Avenue borders the site to the north and residential development borders the site to the south and east. A fenced storage yard and grassland field border the site to the west. The location and boundary of the site are shown in *Appendix A*.

1.2 Legislative context

1.2.1 All UK bat species are 'European Protected Species' (EPS) protected under the 2017 Conservation of Habitats and Species Regulations, which implements the EC Habitats Directive 92/43/EEC in the United Kingdom. In relation to an EPS, the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong;
- Damage or destroy a breeding site or resting place of such an animal; and/or
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

1.2.2 In addition, all UK bats are protected under the 1981 Wildlife and Countryside Act (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

1.2.3 If works are planned that are likely to constitute an offence under the current legislation, an application for an appropriate derogation licence should be made to Natural England.

1.2.4 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are also identified as Species of Principal Importance under Section 41 of the 2006 Natural Environment and Rural

Communities (NERC) Act. Section 40 of the Act, together with planning policy and guidance, require planning authorities to regard these species as a material consideration in the planning process.

1.3 Development proposals

1.3.1 Current development proposals include extension and redevelopment of the existing buildings to provide a two-storey residential dwelling.

1.4 Scope and purpose of the report

1.4.1 The proposed redevelopment of the site will affect the existing buildings which have been identified as having potential to contain features suitable for use by roosting bats. In view of this and within the legislative context set out in *Section 1.2*, a Phase 1 bat scoping survey has subsequently been undertaken by HDA in order to identify whether suitable features for roosting bats are present and determine any requirements for further Phase 2 bat roost survey work, mitigation and/or licencing.

1.4.2 Specifically, the aims of the survey are:

- i) To identify and provide a preliminary assessment of potential bat roosting sites provided by buildings within the site;
- ii) To record any evidence of current or recent use by bats;
- iii) To determine any further survey, licensing and/or mitigation requirements relating to roosting bats;
- iv) To provide outline recommendations for any mitigation and/or enhancement measures to ensure that the development avoids adverse impacts on bats, and, where possible, provides enhancements to support the long-term favourable conservation status of bats in accordance with nature conservation legislation, planning policy and the 2006 NERC Act.

2 METHODOLOGY

2.1 Introduction

2.1.1 The methodology followed in relation to bat survey work undertaken at the site is consistent with current legislation and good practice guidelines set out by the Bat Conservation Trust (BCT, 2016). The following sections detail the specific bat surveys undertaken to inform the proposed works.

2.2 Phase 1 bat scoping survey

2.2.1 The Phase 1 bat scoping survey of the site was carried out by Anna Senior MCIEEM of HDA on 26th March 2019.

- 2.2.2 All buildings within the site were inspected externally from ground level using binoculars and a powerful torch to identify and investigate any potential entry and exit points such as missing roof tiles, loose fascias and lifted lead flashing, and to look for evidence of entry/exit in the form of staining, discolouration and/or scratch marks.
- 2.2.3 Internally, buildings were searched exhaustively where possible, to look for evidence of current or former occupation by bats. A powerful torch was also used to investigate any accessible cavities, crevices and recesses in each building.
- 2.2.4 In view of the findings of the internal/external inspections, the potential of the buildings to support roosting bats ('confirmed roost', 'high', 'moderate', 'low', 'very low' or 'negligible') was assessed in accordance with current best practice guidelines. Assessment of bat roosting potential requires consideration of a number of criteria, including the design and construction of the building or structure, the size and location of potential features and access points, the position of the building or structure, aspect, geographical location, surrounding land use and adjacent landscape linkages.
- 2.2.5 No trees with potential to support roosting bats will be affected by the redevelopment proposals.

2.3 Limitations of surveys

- 2.3.1 The Phase 1 bat scoping survey followed best practice guidelines and was not subject to any constraints. The level of survey work carried out at the site to date is therefore considered sufficient to inform an assessment of the likely effects of the proposed development on bats and inform the recommendations provided in *Section 5* of this report with regard to the protection of individual bats during works and the maintenance of the favourable conservation status of the local bat population.

3 RESULTS

3.1 Phase 1 bat scoping survey

- 3.1.1 All buildings within the site were inspected during the Phase 1 bat scoping survey. The results of the Phase 1 building survey are summarised in *Table 1* below and the location of the buildings are shown in *Appendix A*. Photograph references relate to the photographs provided in *Appendix B*.

Table 1: Results of the Phase 1 bat scoping survey

Building	Description	Findings	Bat roost potential
Bungalow (photos 1 to 3)	Detached bungalow of brick and breeze block construction with a pitched concrete-tiled roof. A flat felt-covered roof section forms a link to the adjoining garage.	External: The exterior roof and walls of building are generally very well sealed. Very limited bat roosting opportunities for crevice-dwelling bats are available within a crack in the concrete apex ridge and cracks/gaps in the cement mortar at the end of the roof tiles at the north and south gable ends. Internal: Single loft space present. The interior of the roof is very well sealed throughout with expanding insulation foam. No evidence of bats recorded.	Very low bat roost potential
Adjoining garage (photos 4 and 5)	Single storey garage of brick construction with a pitched concrete-tiled roof.	External: The roof and exterior walls are well sealed. No features of bat roosting potential were recorded. Internal: The structure is open to the roof internally and the roof is lined with bitumen felt. The interior is lit by a window on the southern elevation. No evidence of bats recorded.	Negligible bat roost potential

3.2 Foraging and commuting habitat

3.2.1 The managed garden habitats within the site provide limited opportunities for foraging bats and similar and higher quality opportunities for foraging and commuting bats are abundant in the surrounding area. Notwithstanding this, measures are given in *Section 5* to maintain opportunities at the site for foraging and commuting bats following redevelopment.

4 SUMMARY AND IMPACT ASSESSMENT

4.1 No evidence of bats was recorded within the Bungalow or Garage during the Phase 1 bat scoping survey. The Bungalow contains a small number of features on the exterior of the roof which have very limited potential to support individual/small numbers of crevice-dwelling bat species however no access is available for bats into the roof space and the building is considered overall to have 'very low' potential to support roosting bats.

4.2 No suitable bat roost features were identified within the Garage and in isolation this building is considered to have 'negligible' potential to support roosting bats.

4.3 In view of the survey findings, it is considered highly unlikely that the proposed development would have any adverse effect on roosting bats or on the favourable conservation status of the local bat population.

4.4 Notwithstanding the above, due to the limited opportunities for roosting bats present within the bungalow, and the highly mobile nature of bats, often using roosts on a seasonal or transitory basis, although no further Phase 2 bat surveys are recommended in support of the planning application, a precautionary approach to demolition/building stripping works is however recommended in *Section 5*.

4.5 In addition to implementing precautionary measures to avoid any effects of the development on roosting bats during construction, development proposals should also seek to maintain and enhance opportunities for roosting, foraging and commuting bats within the site following development in accordance with planning policy and the 2006 NERC Act. Measures by which this can be achieved are further identified in *Section 5* below.

5 RECOMMENDATIONS

5.1 This section identifies measures to be implemented during redevelopment of the site in order to avoid, mitigate and compensate potential impacts on bats, and to maintain the favourable conservation status of the local bat population. In addition, recommendations for enhancement of the site for roosting and foraging bats are included in accordance with the 2019 National Planning Policy Framework (NPPF) and the 2006 NERC Act.

5.2 Roosting Bats

5.2.1 Current knowledge suggests that there are no bat roosts associated with either the Bungalow or the Garage and therefore a licence will not be required for the redevelopment of these buildings. Due to the very limited opportunities for roosting bats that are present within the Bungalow, and in view of the highly mobile nature of bats, it is however recommended that a precautionary approach is taken to demolition/stripping of this building, either through further survey to confirm the absence of roosting bats at the time of works or through a sensitive approach to works as set out below.

5.2.2 The Garage was identified as having negligible potential to support roosting bats and therefore no further precautions are required in relation to this building. No trees with potential to support roosting bats will be affected by the redevelopment proposals.

Further survey

5.2.3 In view of the limited opportunities for roosting bats present within the Bungalow it is recommended that a Phase 2 bat roost survey of this building, comprising either a single emergence survey or an endoscope inspection of potentially suitable features, is carried out immediately in advance of works to this building commencing. This would avoid the need for supervised works assuming no bats are encountered (see below).

Approach to works

5.2.4 Alternatively, unless a future survey is carried out which confirms the absence of roosting bats as detailed above, all demolition or stripping works involving the removal of features with the potential to conceal roosting bats should be overseen by a licensed bat worker under an Ecological Watching Brief. Potential features at the site include gaps below the end of roof tiles on the north and south roof gable ends, and a crack at the northern end of the concrete roof ridge. These features should be inspected prior to demolition/stripping and a cautious approach should be employed, with features removed by hand, where appropriate.

5.2.5 In the event that a bat is discovered during further survey or demolition/stripping works at the site, works to the building must cease and an appropriate Natural England derogation licence should be applied for, and approved, before works can continue.

Replacement of lost roosting opportunities

5.2.6 It is recommended that a minimum of two bat roosting features (Schwegler 1FF¹ box, Schwegler 2F² box or Schwegler 1FR Bat Tubes, or similar) are mounted in south to west-facing locations on the redeveloped building and/or any suitable retained mature trees within the site in order to offset any loss of potential roosting habitat and offer new and enhanced long-term provision for roosting bats at the site in accordance with the 2019 NPPF and the 2006 NERC Act. Ideally, bat boxes should be provided prior to the commencement of demolition/stripping works of features with bat roosting potential in order to maintain current roosting opportunities at the site throughout the construction phase.

5.3 Protection and enhancement of roosting, foraging and commuting opportunities

5.3.1 Notwithstanding the current low interest of the site for foraging and commuting bats, wherever possible, development proposals should seek to maintain and enhance the value of the site for foraging and commuting bats in accordance with the 2019 NPPF and the 2006 NERC Act. This could be achieved through the retention of mature trees and native or wildlife-friendly shrubs where appropriate, and through provision of new planting and the avoidance of significant light spill from adjacent development. In order to maximise the value of garden planting for the local bat population, consideration should be given to the use of nectar- and pollen-rich plant species in order to encourage invertebrate prey for foraging bats.

¹ In a study conducted by the Vincent Wildlife Trust (Colin Morris, pers. comm.), Schwegler 1FF bat boxes were identified as the box design that attracts the most species of bat, as well as being the most favoured by rare species such as Bechstein's Bat.

² In the same study, Schwegler 2F bat boxes were identified as the box design most likely to contain bats.

- 5.3.2 Additional bat boxes to those described in *Section 5.2* could be provided on the redeveloped building and/or retained trees in order to further enhance opportunities for roosting bats at the site. Bat boxes should be positioned on south- to west-facing elevations of buildings or trees and avoid areas affected by (existing or proposed) artificial lightspill.

6 CONCLUSION

- 6.1 The findings of the Phase 1 bat scoping survey indicate that there are no active bat roosts within buildings affected by the proposed redevelopment of the site. Limited opportunities for roosting bats are however present within the Bungalow and it is therefore recommended that the precautionary measures identified in *Section 5* above are implemented during construction to avoid any unexpected impacts on bats and/or contravention of UK and EU legislation relating to this group.
- 6.2 Notwithstanding the low value of the site for bats, development proposals for the site should seek to maintain and where possible enhance opportunities for roosting, foraging and commuting bats in accordance with planning policy and guidance and Section 40 of the 2006 NERC Act. Measures by which this can be achieved are given in *Section 5.3* of this report.

7 REFERENCES

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APPENDIX A

Phase 1 Bat Survey Summary Plan



1:100 at A3 - metres:
0 1 2 3 4 5



KEY

 Site boundary

BUILDINGS*

 Very Low bat roost potential

 Negligible bat roost potential

*Roosting categories relate to roost potential in accordance with the BCT 2016 guidelines.

CLIENT:
Mr and Mrs K. Fischer
PROJECT:
Highdown Avenue
TITLE:
Phase 1 Bat Survey Summary Plan
SCALE AT A3:
1:100
DATE:
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APPENDIX B

Photographs



Photo 1: Northern and eastern elevations of Bungalow



Photo 2: Southern gable apex of Bungalow showing cracks in cement mortar



Photo 3: Interior of Bungalow roof space



Photo 4: Northern elevation of Garage



Photo 5: Interior of Garage