

AEWC Ltd

Animal Ecology & Wildlife Consultants

Bat Assessment Report

Mint Cottage

**Easebourne Lane
Easebourne
Midhurst
GU29 9AZ**

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**23-184
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Summary

- AEWCLtd were commissioned by Engineering Architecture Ltd on behalf of their client to undertake a daytime bat assessment at Mint Cottage, Easebourne Lane, Easebourne, Midhurst, GU29 9AZ at central grid reference SU 89095 22251 to help inform the proposed development of the site.
- This report details the results of the survey, which was carried out on 21st December 2023 by Annika Binet, a Natural England licensed bat ecologist assisted by Ivana Murphy, qualified ecologist.
- The site contains a two-storey dwelling and associated outbuilding. The proposal is for the removal of the chimney on the dwelling and construction of a single storey extension to the north-west elevation, which will involve the demolition of the outbuilding.
- The daytime assessment identified low potential for use by crevice-dwelling species within the batten spaces of the roof of the house. The outbuilding was assessed as holding negligible potential for use by bats.
- The proposed extension is single-storey and therefore the construction of the extension will cause no direct impacts to the roof tiles.
- Due to the proposed removal of the chimney having potential impacts on the roof tiles, these proposed works must be carried out under non-license method statement as a lack of mitigation could result in a negative impact on bats if present, through potential death, disturbance, or loss of roost space. A mitigation plan for the works is detailed in section 6 of this report.

This report has been prepared by AEWCLtd, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the Professional Guidance and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

- 1.1 AEWCLtd were commissioned by Engineering Architecture Ltd on behalf of their client to undertake a daytime bat assessment at Mint Cottage, Easebourne Lane, Easebourne, Midhurst, GU29 to help inform the proposed development of the site.
- 1.2 The bat surveys and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2023).
- 1.3 No ecological surveys are known to have been carried out for the site previously. Bat assessment was therefore required to ascertain whether bats, or potential for bats, is present at the site and represents a constraint to the proposed development.
- 1.4 This report details the results of the bat assessment and outlines recommendations in relation to bats and the proposed development of the site.

Aims and objectives

- 1.5 The objectives of the survey were to:
 - Identify the potential of the building on the site to support roosting bats;
 - Identify whether bats are present using the buildings on site;
 - Estimate the size and status of any existing bat roost within the building;
 - Determine the potential impacts on any bat roost from the proposed development schedule; and
 - Provide information for use in the design and development of ecological mitigation and enhancement measures where appropriate.

Site Location

- 1.6 The proposed development site is located at Mint Cottage, Easebourne Lane, Easebourne, Midhurst, GU29 9AZ at central grid reference SU 89095 22251. The site is located in a rural area on the edge of the town of Midhurst in the South Downs National Park. The surrounding landscape comprises residential development with associated amenity gardens, woodland and woodpasture, with agricultural land and further residential and commercial development within the wider landscape. See Figure 1.



FIGURE 1: SHOWING THE LOCATION OF THE SITE

1.7 The site contains a detached dwelling with an associated outbuilding within an amenity plot.

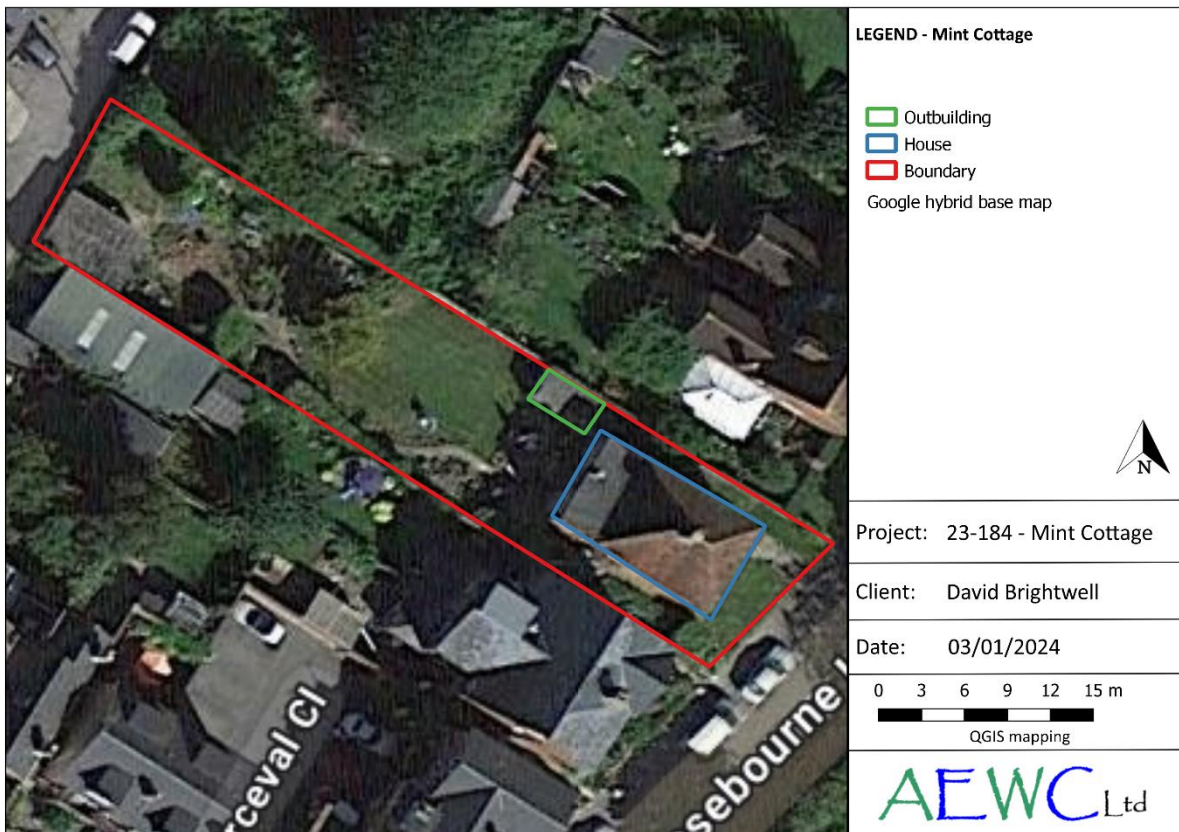


FIGURE 2: SHOWING THE BUILDINGS SUBJECT TO SURVEY.

Legislation

- 1.8 All species of bats are listed on *Schedule 5 of the Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9, as amended*. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:
- intentionally kill, injure or take (capture etc.);
 - possess;
 - intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
 - sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.
- 1.9 A roost is defined as ‘any structure or place which a bat uses for shelter or protection’. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.
- 1.10 Any disturbance of a bat occupying a roost can lead to prosecution. Disturbance can be caused by noise, vibration and artificial lighting. Penalties for breaking the law can include fines of £5,000 per bat, imprisonment and the seizure of equipment.
- 1.11 Furthermore, seven bat species (barbastelle, Bechstein’s, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41 of the Natural Environment and Rural Communities Act 2006*.

Development proposals

- 1.12 The proposal is for a single storey extension to the northwest elevation which will involve the demolition of the outbuilding, in addition to the removal of the chimneys on the main house.



FIGURE 3: SHOWING THE PROPOSED PLANS.

2 Methods

Daytime Assessment

- 2.1 A detailed bat building inspection was undertaken on the 21st December 2023 by Annika Binet, a Natural England licensed bat ecologist, assisted by Ivana Murphy, qualified ecologist.
- 2.2 A systematic internal inspection of the building was conducted using a high-powered torch to illuminate all areas thought to be suitable for roosting bats. Additionally, an external search around the perimeter of the building was conducted and any possible access points i.e. gaps and crevices were noted and surveyed with a high-powered torch and ladder as appropriate.
- 2.3 The building's suitability for bat roosting was assessed by examining structural features that may influence the suitability of a building to support roosting bats; these include the presence of a roof void, the presence of access points into the building (including gaps beneath barge boards, weatherboarding, soffits and fascias, gaps under lead flashing, gaps within masonry and under loose tiles, gaps between tenon and mortise joints), the complexity and size of any roof void and daytime light levels in the roof void.
- 2.4 The building's suitability for roosting bats was also assessed by examining the surrounding habitat. Important habitat features surrounding the structure which may influence roost potential include whether the structure is in a semi-rural or parkland location, its proximity to a significant linear habitat features such as a watercourse, mature hedgerow, wooded lanes or an area of woodland.
- 2.5 All surfaces were also surveyed for signs of bat presence. Features of potential value to bats were surveyed not only for the presence of bats but also for signs that could indicate use by bats, such as:
 - bat droppings that are dry and do not putrefy, but can crumble away to dust;
 - staining of access points used by bats to enter the structure; and
 - feeding remains such as moth and butterfly wings.
- 2.6 The survey included an external inspection of the trees present within the survey area to look for the presence of Potential Roosting Features including woodpecker and rot holes, horizontal cracks and splits in stems and branches, partially detached platey bark, cankers, hollows and cavities, double-leaders forming compression forks with included cavities, gaps between overlapping branches, partially detached ivy with stem diameter exceeding 50mm and bat, bird or dormouse boxes.
- 2.7 Taking account of these architectural, habitat features and signs of presence, the building was then assigned a level of roost suitability based the criteria given in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Collins, 2023) and professional judgement. The primary objective of this exercise was to identify the need for further detailed bat survey later in the year, or alternatively to obtain sufficient information that would dismiss the need for further assessment.

3 Constraints/Limitations

- 3.1 Bats are difficult to locate in large structures, with so many potential roosting areas, particularly in inaccessible areas such as large buildings, finding the exact roosting site can be difficult, especially male/single bat roosting sites. It should be noted that it is not always possible to identify bat presence by examining externally around buildings as poor weather conditions may have washed away droppings which were deposited on exposed surfaces.
- 3.2 Bats can have seasonal use of buildings and being so mobile may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. For this reason, bats may potentially be present but remain undetected, particularly during daytime assessment.
- 3.3 The survey was undertaken in late December outside of the main active season for bats, therefore any external evidence of the presence of bats earlier in the season would likely have been destroyed by weathering.

4 Results

Daytime Assessment

- 4.1 The site contains a brick-built two-story dwelling with a hipped roof supporting clay tiles. There is a two-storey extension with a flat roof attached to the north west elevation with a single-storey extension with mono-pitch clay tile roof.
- 4.2 The chimney is lined externally with lead flashing which was noted to be in good condition, with no raised areas or gaps.
- 4.3 The roof supports clay tiles which are largely flat, with some having a natural camber. Low numbers of gaps were noted beneath uneven or lifted roof tiles on all elevations which could provide potential access points for bats into the batten spaces of the roof and potentially into the roof void.
- 4.4 Internally there is a single roof void present extending over the full area of the main structure of the house. The roof is wooden framed and lined with a non-bitumen coated breathable membrane and has fibreglass wool insulation at floor level. The chimney breast runs through the centre of the void. High levels of dust and cobwebbing were noted amongst the rafters and throughout the majority of the void, especially in the apexes. No evidence of bats was recorded within the void.
- 4.5 A single storey shed with an asbestos corrugated unlined roof is present at the rear of the property. The shed is currently used for storage and has high levels of dust and cobwebbing around the edges of the roof. No evidence of bats was recorded within the shed.



Photograph 1: East corner of house



Photograph 2: North West elevation of house



Photograph 3: Void and chimney within



Photograph 4: Dust and cobwebbing around beams

5 Evaluation, Conclusions & Recommendations

- 5.1 Initial observations consider the local area suitable for bats. Extensive woodland and pasture in close proximity to the site with a network of connective tree and hedge lines provides excellent foraging and commuting habitat for a range of bat species. Buildings and trees within the local area additionally offer potential roosting opportunities.
- 5.2 The daytime assessment identified the house as having low potential to support roosting bats in the batten space of the roof due to the presence of gaps beneath the roof tiles providing potential access into the batten space of the roof.
- 5.3 Due to the high degree of dusty cobwebbing noted present within the void, it is considered that this area is unlikely to have been used by void dwelling bats recently if ever.

- 5.4 The flat roofed extension, and outbuilding were identified as having negligible potential for use by bats due to a lack of potential access points and roosting features.
- 5.5 The proposed developments will directly impact the northwest extension and the shed, these features have been assessed to hold negligible potential for use by bats. As these works only impact on an area of the property with negligible potential for use by roosting bats **it is considered that there are no likely impacts to bats from the current proposed works to the northwest elevation and therefore no further surveys are required for the removal of the northwest chimney or outbuilding.**
- 5.6 Installation of tile hangings on the extensions will result in the overall increase in potential roosting opportunities for bats, as well as suitability for nesting birds at the site.
- 5.7 The proposed works include the removal of the external central chimney. The tiles, and lead flashing around this area were noted to be tight fitting with no potential access points for bats present, however these works will cause disturbance to the roof.
- 5.8 Based on the low likely impact of the works, and the high level of cobwebbing around the internal chimney and lack of external features in this area it would be disproportionate to the level of likely impact to postpone works until an emergence survey has been carried out as this is unlikely to alter the proposed mitigation strategy for the chimney removal works.
- 5.9 It is therefore considered that no further surveys are required for the site, but the works to the central chimney must be carried out under non-license method statement as a lack of any mitigation could result in a negative impact on bats if present. A mitigation plan for the works is detailed in section 6 of this report will have to be carried out under a non-license method statement.**
- 5.10 Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance to bats within the local area. Additional external lighting should be avoided or kept to the minimum necessary, and preferably on a motion sensor to reduce lighting time.
- 5.11 Additional work lighting which may be required during the development must be positioned to ensure that it shines onto the area of works with minimal spread into the wider area.

6 Mitigation

- 6.1 Prior to works commencing the building must be fully inspected by a licensed bat ecologist to check for presence of bats.

- 6.2 When works commence, a licensed bat worker will provide a toolbox talk for all workers on site, detailing the mitigation to be followed during this stage of the development and the procedure to follow in the unlikely event a bat is found during works (detailed below).
- 6.3 In the unlikely event a bat is found present, works must stop and be assessed by a licensed Natural England bat worker and a Natural England licence may be required for works to continue.
- 6.4 All areas with potential for bats will be soft-stripped under direct supervision of the licensed ecologist, able to handle and check any bats found and move them to a safe place.
- 6.5 Stripping must only be conducted when the air temperature is sufficiently high (at least 8°C) and in the absence of strong wind and rain, so as to not risk harming bats which may be found.
- 6.6 Once all areas with suitability for bats have been soft-stripped, the remaining works can be undertaken without an ecologist present.
- 6.7 Any areas of new roofing and cladding must not be lined with a modern non-bitumen coated membrane; it must have a traditional Bitumen Type 1F (with a hessian Matrix) roofing felt. Polypropylene filaments used in the manufacture of modern breathable underlays are known to entangle and kill bats and warranty can be invalidated; therefore, they must not be used in known or potential bat roosts. This applies to existing roof areas to be fitted with a lining, as well as any new roofs over proposed extensions, and under tile hangings and weather boarding.

7 Procedure to follow in the event a bat is found on site at unsupervised times.

- 7.1 Bats are present within the vicinity of the site and may be found at any location on, in or around the buildings. Bats are protected species, and these procedures must be followed to avoid committing an offence.
- 7.2 If a bat is found at any location around the site DO NOT TOUCH unless necessary for the safety of the bat.
- 7.3 If the bat was uncovered in a roosting location carefully replace covering ensuring the bat is not crushed or harmed. If this is not possible cover the animal with a loose covering.
- 7.4 Stop all work at that area and the immediate vicinity. Work may continue at other areas around the site.

- 7.5 Call the AEWCLtd bat licensed project ecologist Annika Binet 07528 956486, call the office on 08452 505585, or licensed ecologists Daniel Whitby 07764813002 or Brigitte de Coriolis 07545130203.

8 References

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