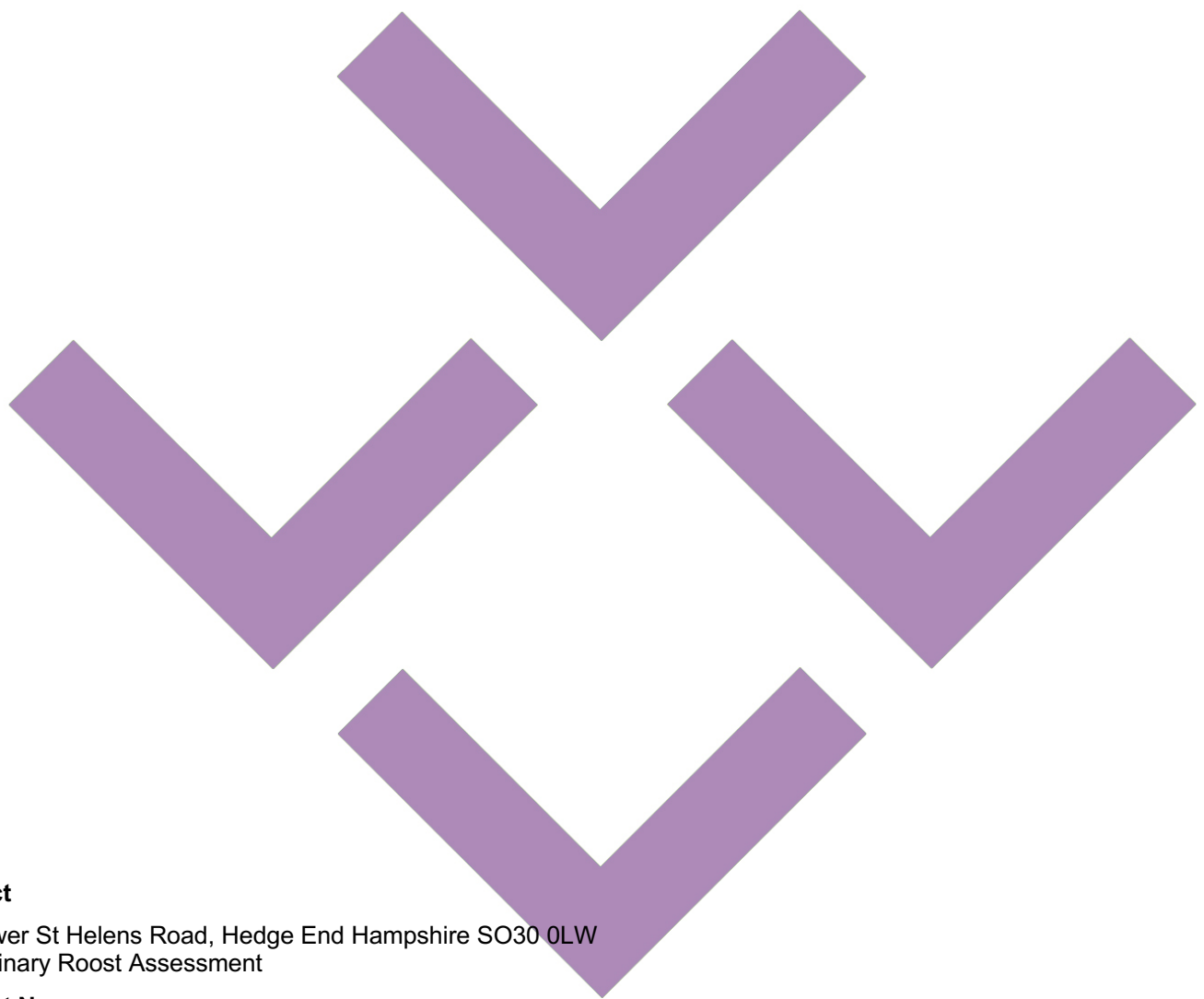




Project

18 Lower St Helens Road, Hedge End Hampshire SO30 0LW
Preliminary Roost Assessment

Project No

EC2106

Client

Joe Cross Linkert Homes Ltd

Date

January 2024

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Report consultants**Bat survey:**

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Project Manager Disclosure:

The advice which we have prepared and provided is true to the best of our knowledge and utilises information available at the time. The advice has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct.

Quality check completed by:

Clare Carter

Date

January 2024

This Assessment is only valid for the named client and the project described. enims Ltd accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purpose for which it was commissioned. The assessment is only valid for a period of 12 months. If the scope of works or timing of the project is altered the advice given in this report may not be valid.



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Summary

enims have been commissioned to carry out a Preliminary Roost Assessment (PRA) of a converted garage and an outbuilding at 18 Lower St Helens Road, Hedge End, Southampton, Hampshire (UK Grid Ref: SU 49291 12352). The aim of the preliminary assessment was to establish whether the buildings had the potential to support roosting bats.

The buildings are to be demolished and replaced with a bungalow.

The buildings (B1 and B2) were inspected internally and externally to search for bats, evidence of bats, and features that may support bats at different times of the year. Equipment included a high-powered torch and binoculars. The surrounding area was assessed for potential to support commuting and foraging bats within the landscape.

The site is located in a built-up residential area with further residential dwellings to the north, west, south and east. B1 was a garage that had been converted into living accommodation within the garden of number 18 Lower St Helens Road. B1 was constructed from rendered brick with concrete roof tiles, metal guttering and plastic soffits. Internally the roof space was sealed up. B2 was a plastic shed.

Suitable flight-line areas are present within the connected gardens and the surrounding landscape is considered to have moderate suitability for foraging and commuting bats.

Potential roosting features for bats were present on B1 under roof tiles and under mortar of missing hip tiles. A missing roof tile gave potential bat access into the roof void. However the roof void could not be inspected due to lack of access.

It is concluded that B1 has Moderate potential to support an active bat roost, as bat roosting features are present and the internal roof space could support a number of bats if suitable. No features to support roosting bats were observed on B2.

The proposed development will result in the loss of B1 and therefore there is significant risk of adverse impacts to roosting bats, should they be using the building, in the absence of appropriate mitigation.

Further survey is recommended in order to confirm the presence or likely absence of bats on site. This should include two dusk emergence bat survey visits between May and August.

B1 is to be replaced with a bungalow and therefore there is potential for increase of residents at the site. The Local Authority may require mitigation to compensate for the extra waste water being produced and processed due to the Solent Maritime SAC and Solent and Southampton SPA and Ramsar 1.5km south east of the site. The local authority may also require extra mitigation due to the potential for increase in recreational disturbance on nearby statutory designated sites.

Further Survey Effort/Ecology Requirements

Two dusk emergence survey visits must be undertaken between May and August.

The data from these will be required to inform mitigation required before works can start.

1 Introduction

1.1 Background to Commission

enims Ltd was commissioned by Joe Cross Linkert Homes Ltd in December 2023 to undertake a Preliminary Roost Assessment (PRA) at 18 Lower St Helens Road, Hedge End Hampshire. The PRA was performed in order to inform a planning application to demolish the current converted garage (B1) and shed (B2) and replace with a bungalow. The main dwelling (B3) at the application site is not to be impacted and therefore was not subject to a PRA.

All native bat species are material planning considerations, which must be accounted for before a planning decision is made. Therefore, it is important to establish their presence or likely absence prior to the removal/renovation of any features which may potentially act as roosts. For this reason, initial external and internal inspections were required in order to determine whether the building had potential to support roosting bats.

1.2 Site Description

The site is in the centre of Hedge End in a residential area and falls under the administrative authority of Eastleigh Borough Council.

The immediate surrounding landscape is built up towards the north, south, east and west of the site. The wider landscape supports a mosaic of grassland and tree habitats. Plans showing the location of the site and surrounding landscape are included in Figures 1 and 2 in Appendix A.

1.3 Project Overview

The buildings B1 and B2 (see Figure 2 in Appendix A for location of buildings on site) will be demolished and replaced with a bungalow. B3, the main dwelling will not be impacted.

1.4 Legislation

All native bat species are fully protected under nature conservation legislation. Protection is afforded under Section 9 of the Wildlife and Countryside Act 1981 (as amended) through the species' inclusion under Schedule 5. All native bat species are also defined as European Protected Species (EPS) through inclusion in Schedule 2 of the Conservation of Habitats and Species Regulations, 2017 (as amended) / Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (commonly referred to as the Habitats Regulations); the UK implementation of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

In brief, these legislative instruments make it an offence to deliberately or recklessly capture, injure, or kill any bat. Roosts are protected from damage or destruction. Furthermore, it is an offence to deliberately disturb a bat, whether roosting or otherwise.

In addition, the following native bats are identified as Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006:

- Barbastelle Bat - *Barbastella barbastellus*
- Bechstein's Bat - *Myotis bechsteinii*
- Noctule - *Nyctalus noctula*
- Soprano Pipistrelle - *Pipistrellus pygmaeus*
- Brown Long-eared Bat - *Plecotus auritus*
- Greater Horseshoe Bat - *Rhinolophus ferrumequinum*
- Lesser Horseshoe Bat - *Rhinolophus hipposideros*

1.5 Planning Policy

The National Planning Policy Framework (DfCLG 2023) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when making planning decisions. Paragraph 174 states that

“Planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, sites of biodiversity or geographical value and soils”. Paragraph 180 sets out the principles that local planning authorities should apply when determining planning application and states that “development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around development should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity”.

Other planning policies at the local level which are of relevance to this development include the Eastleigh Borough Local Plan 2016-2036 Policy DM11 Nature Conservation and Eastleigh Borough Biodiversity Action Plan 2012:

Aims

- 1. To establish coherent and resilient ecological networks that safeguard ecosystem services for the benefit of wildlife and people against the challenges of climate change and other pressures.*
- 2. To identify, protect, maintain, restore, create and enhance priority habitats.*
- 3. To identify, protect, maintain, restore and enhance viable populations of priority species.*
- 4. To focus conservation action in Priority Biodiversity Areas and Links to achieve maximum biodiversity benefit.*

2 Methodology

2.1 Desk Study

A search was undertaken to identify recently granted Natural England bat licences within 2km of the application site using the Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk). Any additional information relating to relevant statutory designated sites was also noted.

2.2 Site Survey

The aim of the inspections was to gather evidence to determine whether B1 and B2 either had the potential to support bat roosts or showed direct indications of current/previous use by roosting bats. All surveys were carried out in strict accordance with Good Practice Guidelines published by the Bat Conservation Trust (Collins, 2023).

During the survey, a search was made for direct evidence of bat activity, such as corpses, droppings, urine stains and scratch marks. Potential access points, particularly those free of cobwebs and other obstructions, were also recorded, irrespective of whether there was direct evidence of use in the vicinity. Equipment included high-powered torches and binoculars.

The survey was conducted on the 19th December 2023. The weather conditions during the survey visit were rain with a temperature of 10°C.

2.3 Impact Assessment

When assigning a level of bat roosting potential (none, negligible, low, moderate or high) to a feature/structure, the descriptions in Table 1 were considered.

Table 1. Criteria for the potential of features and habitats to support roosting and foraging/commuting bats (Collins 2023).

Suitability	Description of roosting habitat	Commuting or foraging habitat
None	No habitat features on site likely to be used by any roosting bats at any time of 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 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	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 of 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,	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e., not very well

Suitability	Description of roosting habitat	Commuting or foraging habitat
	appropriate conditions 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 still be used by individual hibernating bats).	connected to the surrounding landscape by other habitat. 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 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 and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity or 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. 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 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 a 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. 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. Site is close to and connected to known roosts.

Where a building is assessed as having low, moderate or high potential to support roosting bats then further survey is required to confirm presence or likely absence of roosting bats before a full impact assessment can be undertaken. Where the PRA itself confirms the presence of roosting bats, further survey is required in order to understand the characteristics of the roost.

2.4 Personnel

The survey was led by Fraser Gurney, Consultant Ecologist at enims Ltd. Fraser is experienced in bat ecology and field survey techniques and has assisted on ecological supervision of works under bat mitigation licences.

3 Survey Results

3.1 Desk Study

Information from MAGIC Maps evidenced five granted European Protected Species Mitigation Licences for bats within 2km of the site boundary. The locations in relation to the site and years granted are:

- Destruction of a common pipistrelle resting place between 2015-2020 approximately 0.7km south west
- Destruction of breeding site and destruction of resting place of brown long-eared, soprano pipistrelle and common pipistrelle approximately 1km south west between 2019-2029
- Destruction of a common pipistrelle resting place between 2013-2015 approximately 1.2 km north west
- Destruction of resting place of natterers, brown long-eared, soprano pipistrelle and common pipistrelle between 2013-2016, 2014-2017, 2014-2015 approximately 1.7km south east
- Destruction of common pipistrelle resting place between 2012-2014 approximately 1.8km north east

The site is in a residential area but connected to the wider landscape beyond by scattered gardens, trees and hedgerow; providing some commuting and nearby foraging opportunities for bats. Beyond the residential area, particularly to the south and east, there is good foraging and commuting habitat comprising numerous woodland parcels connected by lines of trees and hedgerows, and the River Hamble.

The application site is in close proximity to Solent and Southampton Water Special Protection Area (SPA) and Ramsar and Solent Maritime Special Area of Conservation (SAC) and falls within the catchment zone of these designated sites for which Nutrient Neutrality applies. The application site also lies within risk zones relating to statutory designated sites for which strategic approaches for recreational pressure also apply.

3.2 Buildings

There were three buildings on site (B1-B3). Only B1 and B2 were subject to a PRA. B1 was a converted garage being used for living accommodation and B2 was a plastic shed, both within the back garden of 18 Lower St Helens Road. B3 was the main dwelling at 18 Lower St Helens Road but was separated by a fence from the B1 and B2 and was not surveyed as it is not part of the proposed development.

B1

B1 was a single storey outbuilding with a pitched roof constructed from brick with concrete roof tiles and plastic soffit boxes. (Photographs 1- 2, Appendix B).

The roof was in good condition although a missing tile, missing mortar under roof tiles and gaps between missing hip tile mortar and tiles give potential for bats to roost under and between the tiles and potential access into roof void. (Photographs 3-4, Appendix B). Internally the roof was sealed off and therefore the roof space was unable to be inspected. (Photograph 5, Appendix B).

Moderate Potential for roosting bats

B2

B2 was located within the back garden and was a small shed constructed from plastic (Photograph 6, Appendix B). Due to the unsuitable material and lack of potential bat roosting features B2 does not have any potential for roosting bats.

No Potential for roosting bats

4 Impact Assessment and Recommendations

4.1 Discussion

It is concluded that B1 has **Moderate potential** to support an active bat roost, as there were a low number of external features present that were suitable for roosting bats and possible access into a roof space. The roof space of B1 gives potential for more than one bat to be present, however, given the size of the roof space and immediate surrounding habitat, it is thought unlikely that if a roost was present that it would be one of high conservation value such as a maternity roost.

B2 has no potential to support roosting bats as there was a complete absence of roosting features for bats.

4.2 Potential Impacts of Proposed Works

Short-term Impacts

Should bats be present at the time of demolition, bats could be disturbed, killed or injured and their roost destroyed.

Long-term Impacts

Without mitigation and compensation, the works may result in the loss of roosts.

There is potential for roosting, foraging and commuting bats to be disturbed by insensitive lighting during and after construction.

4.3 Further Survey

Further survey is required on B1 in order to determine the presence or likely absence of bats due to the **Moderate potential** for adverse impacts as a result of the proposed demolition. Further survey will consist of two dusk emergence survey which must be conducted May through August, as this is the peak activity season for maternity roosts. Should evidence of roosting behaviour be identified during the survey, further survey visits will be required, in accordance with best practice guidelines.

4.4 Mitigation

Further survey is required to determine if bats are using B1 as a roost. Appropriate mitigation measures for bats will be set out in the accompanying bat roost survey report. This report will be completed after the bat emergence survey required between May and August.

The use of external lighting on site during construction, and following development, should be sensitive to the presence of bats in the area. If possible, lighting should be avoided. But if lighting does need to be installed, the following measures are sympathetic to bats:

- Lighting kept to a minimum.
- Directional lighting carefully positioned and aimed to avoid illumination of vegetation.
- No/little upward tilt.
- Warm-white light with no/little UV component.
- Use of motion detection sensors or timers to limit the duration lighting is on.
- Consideration of internal light spill.

Further information can be found within Guidance Note 08/23 Bats and Artificial Lighting in the UK (Institution of Lighting Professionals 2023).

The application site lies within an area where increases in population require mitigation for the possible impacts of increased nutrient inputs and recreational pressure on important nature conservation sites. Replacement of a garage building with a bungalow may trigger the requirement for mitigation and this should be confirmed with the Local Planning Authority.

4.5 Ecological Enhancements

Biodiversity net gain is an approach aiming to leave biodiversity in a better state than how it was found. It encourages developers to take appropriate ecological measures, in an attempt to prevent biodiversity loss through development, and restore ecological networks.

Biodiversity enhancements should be incorporated into development plans from an early stage, as advised by the ecologists. Appropriate examples include:

- Integrating bat boxes and bird boxes into brickwork and/or soffits of new builds.
- Installing insect hotels close to nectar rich plants.
- Leaving an area of a garden to grow wild all year round.

4.6 Data Constraints

The data is valid for 12 months from the date of the site visit due to the mobile nature of bats.

The roof space of B1 could not be inspected however this has been taken into account in the assessment of moderate potential.

5 Conclusion

The building B1 has Moderate potential to support roosting bats and further survey is required to determine any bat species and bat roosts, and bat access and exit points. The survey will comprise of two dusk emergence survey visits. The survey visits are to be carried out between May and August inclusive.

Ecological enhancements for the site could include integrating bat and bird boxes into brickwork/soffits, installation of an insect hotel and leaving an area of a garden to grow wild all year round.

The development may require mitigation for an increase in nutrient neutrality and recreational disturbance due to the potential increase in population associated with the building of a residential dwelling. Any requirements should be confirmed with the Local Planning Authority.

6 References

Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th ed.). Bat Conservation Trust, London.

Eastleigh Borough Council. *Eastleigh Borough Local Plan 2016-2036*. Adopted April 2022

Institute of Lighting Professionals. (2023). *Guidance Note 08/23. Bats and Artificial Lighting in the UK. Bats and the Built Environment Series*. Institute of Lighting Professionals, Rugby.

MAGIC. www.magic.gov.uk. Accessed 11/01/2024.

Appendix A: Site Plans (QGIS 2023)



Figure 1. Far view of building indicated by red dot and surrounding landscape



Figure 2. Near view of whole site (red line) showing buildings surveyed (blue line) and building not surveyed (yellow line).

Appendix B: Site Photographs



Photograph 1. B1 former garage.



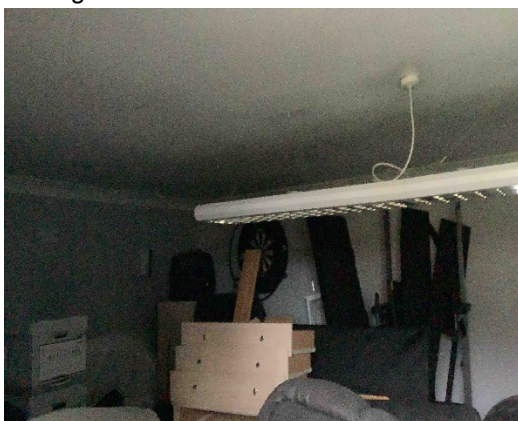
Photograph 2. B1 former garage.



Photograph 3. Roof of B1 showing areas of missing mortar under roof tiles.



Photograph 4. Roof of B1 showing missing tile and gaps between mortar and tiles.



Photograph 5. Inside B1 showing sealed roof.



Photograph 6. B2 plastic shed adjacent to B1