LIZARD
Landscape Design and Ecology

PRELIMINARY ROOST ASSESSMENT

The Lamb Inn, Lambs Green, Rusper

On behalf of: Mr B Bokor-Ingram

Client:	Mr B Bokor-Ingram			
Project:	The Lamb Inn, Lambs Green, Rusper			
Reference:	LLD3381-ECO-REP-001-00-PRA			
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Validity:

This report is valid for 18 months from the date of the site visit. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

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SUMMARY

Lizard Landscape Design and Ecology has been commissioned by Mr B Bokor-Ingram to undertake a Preliminary Roost Assessment (PRA) of The Lamb Inn, Lambs Green, Rusper (located around central grid reference: TQ 21971 36804 – hereafter referred to as 'the site'). A site visit was completed on the 25th October 2024 to allow the presence or potential presence of a bat roost to be identified, and to identify the need for further assessment prior to application, where required.

The main body of the site is dominated by a former public house building and associated amenity space with driveway, parking and patio surrounding the building; habitats on site were of low ecological value. Scattered trees found to the north and east of the site are of higher value and shall be retained within the scheme.

During the site visit an internal bat roost assessment revealed the loft cavity to be open to the rafters with sections of ceiling removed to the first floor and a large window allowing high light levels throughout. Bitumen felt was present behind the pitched roof tiles and no signs of bats noted.

The proposals involve removal of the existing dormer window and all extensions to the southern aspect of the building. Due to the relatively small areas of the building being altered which offer negligible / low bat roost suitability, a series of mitigation measures have been formulated within this report which shall ensure that works can proceed in accordance with all relevant wildlife legislation. Mitigation measures shall include ecological supervision during the hanging tile removal from the dormer window, and removal of roof tiles to the catslide extension. Should any bats or evidence of a bat roost be found during the works, all work should stop until a natural England licence is in place.

The site also offers some suitable habitats for breeding birds. Avoidance and mitigation measures have been built into the design of the scheme in accordance with the mitigation hierarchy and BS42020: 2013.

Once avoidance, mitigation and compensation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible and non-significant.**

1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned by Mr B Bokor-Ingram to undertake a Preliminary Roost Assessment (PRA) of The Lamb Inn, Lambs Green, Rusper (located around central grid reference: TQ 21971 36804 – hereafter referred to as 'the site').

1.2 The purpose of this report has been to determine the presence or evaluate the likelihood of the presence of roosting bats on site and to determine the need for further bat surveys prior to application. This assessment has been undertaken with due consideration to existing best practice guidelines *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2023).

Site Information

1.3 The survey area covers c. 0.1 hectares (ha) of a former public house. The site is enclosed by Lambs Green Road to the north, a mature tree line to the east and neighbouring residential dwelling to the south.

Surrounding Landscape

1.4 The surrounding landscape is semi-rural. Lambs Green is a hamlet in the civil parish of Rusper and the Horsham District of West Sussex. It lies on the Rusper to Ifield Road 3.1 miles west of Crawley. A network of mature hedgerows adjoins woodlands and arable fields in the wider landscape, the surrounding habitat is considered to be suitable for a range of UK bat species.

Development Proposals

1.5 It is understood that the proposals are for the conversion of the former public house building into flats, keeping the majority of the external built structure and features.

Scope of the Assessment

1.6 The aim of the Preliminary Roost Assessment has been to:

- Identify features that bats could use for access and roosting;
- Assess the building for signs of current or previous bat presence, such as droppings or feeding remains;
- Determine the actual or potential presence of bats in accordance with best practice criteria; and
- Identify the need for further survey required to assess the potential impact of proposals and / or develop and appropriate mitigation strategy.

2.0 METHODOLOGY

2.1 Desk Study

2.1.1 The Multi-Agency Geographic Information for the Countryside (*MAGIC*) website was consulted for all designated sites within a practicable zone of influence of the site. This included Local Nature Reserves (LNRs), National Nature reserves (NNR) and Sites of Special Scientific Interest (SSSIs) within a 2.0km radius of the site, and international statutory designated sites including SAC's designated for their bat interest are present within 12.0km of the site, in accordance with recent guidance (SDNP, 2021).

2.1.2 MAGIC was also used to provide information on all Priority Habitats within a 2.0km radius of the site, and all records of granted European Protected Species Mitigation licences within a 1.0km radius of the site.

2.1.3 Given the quantum of development proposed / broad low ecological value of the site and the surrounding area, a local biological records centre search has not been provided. This is an approach in line with current guidance (CIEEM, 2020).

2.2 Field Survey

2.2.1 A Daytime Bat Walkover (DBW) survey was undertaken on 25th October 2024 by experienced licenced surveyor, Louise Barker (Bat Level 2 Class Licence; 2023-11422-CL18-BAT). Weather conditions were mild (c.14°C), with a light wind (Beaufort Scale 1), 100% cloud cover with no rain.

2.2.2 The Daytime Bat Walkover (DBW) survey entailed a slow walkover of the site, during which time the surveyor identified any structures, trees and other features that could be suitable for bats to roost in, and any habitats which could be suitable for bats to commute, forage or swarm in.

2.2.3 During this survey any direct evidence of bats was searched for and recorded, such as grease marks, urine stains, bat droppings, feeding remains and dead / live bats. Furthermore, any structures or trees which offered features with the potential to support bats were noted. For trees this included the identification of features such as, but not limited to, cracks, crevices and holes naturally formed by trees. For structures this included the identification of features such as, but not limited to, slipped, missing or uneven tiles, gaps around the soffit / barge board, raised flashing.

2.3 Evaluation Criteria

2.3.1 All suitable bat habitat was assessed in accordance best practice criteria (Collins, 2023), which is outlined herein. During the survey all trees within and immediately adjacent to the site were assessed using the following criteria:

Table No. 01 – Criteria for Assessing the Bat Roosting Suitability of Trees

Suitability	Description
None	Either no potential roosting features in the tree, or highly unlikely to be any.
FAR	Further assessment required to establish if potential roosting features are present in the tree.
PRF	A tree with at least one potential roosting feature present.

2.3.2 Furthermore, all structures were assessed externally, and internally wherever possible for their potential to support bats, using the following criteria:

Table No. 02 – Criteria for Assessing the Bat Roosting Suitability of Structures

Potential Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of year.
Negligible	No obvious habitat features on site likely to be used by roosting bats. However, some small uncertainty remains, as bats can use small and apparently unsuitable features occasionally.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these do not provide enough shelter, space, protection, appropriate conditions or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.

Potential Suitability	Description
Moderate	A structure with one of 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, irrespective of species conservation status.
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, with the potential to support high conservation status roosts irrespective of species conservation status.
Confirmed	Direct evidence of bats identified.

2.3.3 Finally, an assessment of the winter hibernation potential of the structures was made, in accordance with the following criteria:

Table No. 03 – Criteria for Assessing the Winter Bat Roosting Suitability of Structures and Trees

Potential Suitability	Description
Low	No or very limited potential winter roosting habitat
Moderate	Non classic site
High	'Classic sites', which offer stable humidity and consistent temperatures throughout the winter period, such as underground sites, cellars, tunnels etc.

2.4 Constraints and Limitations

2.4.1 Access to all areas of the building were available for the survey and no major constraints were identified.

3.0 RESULTS

3.1 Desk Study

3.1.1 The following designated sites are not necessarily representative of the existing site's ecology but are indicative of the ecological context of the surrounding area; a factor that may be important when assessing the presence / absence potential of certain species groups. Statutory Designated Sites identified within a potential zone of influence of the site include:

Table No. 04 – Statutory Designated Sites

Site	Description	Location
International Statutory Designated Sites within 12.0km		
None		
National Statutory Designated Sites within 2.0km		
House Copse SSSI	Ancient woodland formed of small-leaved lime and hornbeam, previously managed as coppice, under oak standards.	1.0 km southeast

Non-Statutory Designated Areas

3.1.2 There were no non-statutory designated areas identified within 2.0km of the site. With the nearest area of Ancient Semi-Natural Woodland (0.69ha) is c. 500m southwest of the site.

Priority Habitats

3.1.3 In accordance with the MAGIC dataset, within 2.0km of the site there are priority habitats (NERC, 2006) of *Lowland Mixed Deciduous Woodland* and *Lowland Meadows.* Much of the woodland in the surrounding area is classified as *Ancient Semi-Natural Woodland.*

Protected / Notable Species Records

3.1.4 Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Long-eared bat *Plecotus* sp., Noctule *Nyctalus noctula,* Leisler's N*yctalus leislerii*, Serotine *Eptesicus serotinus*, and Natterer's *Myotis nattererii* bats have been recorded within 2.0km of the site area.

European Protected Species Mitigation Licences Records

3.1.5 There are no mitigation licences in relation to bats that have been issued within 1.0km of the site.

3.2 Survey Results

Tree

3.2.1 No trees were identified as offering any level of bat roost suitability during the ground level assessment.

Building

3.2.2 The building on site was subject to an internal and external assessment, the former public house building is brick built with a timber framed pitched roof with clay tiles. The northeast aspect of the main roof (roadside) was re-roofed more recently due to storm damage, no misaligned, missing roof tiles, notable gaps forming potential roof features (PRFs) were noted for crevice dwelling bats on this aspect.

3.2.3 On the south-east aspect of the main roof, a large flat roof dormer window is present and a two-story catslide extension forms below (these sections of the roof are proposed to be removed). The corner hung tiles on the dormer window contain gaps suitable for crevice dwelling bat species.

3.2.4 On the south-east elevation, a ground floor flat roof extension is present. This extension contains no potential roosting features (PRF) and is proposed for demolition.

3.2.5 On the south-west elevation, a single storey extension with a pitched roof, clay roof and hung tiles are present there are PRFs between the wooden soffit and hung tiles (this roof section and hung tiles are to be retained).

3.2.6 On the north-east elevation is another single storey extension with a pitched roof and clay roof tiles (this roof is to be retained), no notable gaps or misaligned tiles forming PRFs were noted.

3.2.7 During the internal inspection, the high levels of light were recorded through the south-east aspect dormer window. The loft area was formed of traditional rafters backed by bitumen felt. On the north-east aspect (the more recently reroofed aspect) all felt backed onto the rafters were intact with no notable tears (this main roof aspect is to be retained). The roof was open at the eaves on all aspects making the space draughty. No evidence of bats was noted internally, and much of the internal ceilings and plasterboard has been removed. For further detail, please refer to Appendix A – Site Photos.

Winter Roosting Potential

3.2.8 The building on site was also assessed for its winter hibernation potential. And, due to the large window in the roof area producing high light levels throughout, it would lack the constant regulatory properties a hibernation roost may require for thermal stability. While the roof tiles were also of low thermal mass making them unsuitable. There also appears to be no access for bats into any cavity walls.

Foraging and Commuting Suitability

3.2.9 The site comprises of adjacent mature trees which provide a linear commuting route and foraging resource for bats. The site and its surroundings are therefore considered to suitable for the majority of UK bat species. On-site habitats to be affected by the works consist of hardstanding only.

Nesting Birds

3.2.10 Old nesting material from birds was noted within the eaves of the main roof. Any habitat suitable to support nesting birds scheduled for removal, should be cleared outside of the main bird nesting season (March – September inclusive) or, be subject to a bird nesting check prior to removal, this should be conducted by suitably qualified ecologist.

4.0 EVALUATION AND RECOMMENDATIONS

4.0.1 The following section provides recommendations to avoid, mitigate or compensate potential impacts to protected or notable species, in line with the 'Mitigation Hierarchy' (BSI, 2013) (CIEEM, 2018). If potential impacts are anticipated, recommendations for further assessment and or mitigation are provided, to ensure that the presence, or potential presence of these species are adequately considered in the scheme design.

4.1 Potential Impacts

4.1.1 Overall, due to the number of PRFs the building has been assessed as offering moderate bat roost suitability. Impacts in the absence of further assessment or mitigation it is not possible to scope out the potential that works could result in the killing or injuring of individual bats and permanent loss of the roost which would constitute an offence under the *Conservation of Habitats and Species Regulations (2017) (as amended)* and the *Wildlife and Countryside Act (1981) (as amended)*. Resulting to adverse impacts to bats significant at the **site** level.

4.1.2 However, only specified south-east elevated sections of this building are proposed for alteration and demolition. PRFs on the dormer window and catslide roof elevation (south-east aspect main roof) require ecological supervision. No works should take place without a suitably qualified ecologist present.

4.1.3 All scaffolding installed should not block any potential bat access points (either position the scaffold platform above the guttering line or provide at least a 1.5 metre gap below), including the eaves of the main building and all hung tile areas.

4.2 Recommendations

4.2.1 The Building B01 shall require ecological supervision during any hung tile removal of the dormer window, as well as removal of any roof tiles to the catslide extension during demolition, and all roof tiles which require removal for construction of the link section of the new extension. Should an active bat roost be found, all works shall stop until a European Protected Species Derogation Licence is acquired from Natural England to allow works to progress. Works on the roof should only be undertaken during the winter months to lower the potential of crevice dwelling bats using hung tiles.

4.2.2 Proposals should be mindful of the potential for bats to occur in the area by ensuring that all existing potential roost features within the building, all boundary vegetation and all habitat creation areas are protected from inappropriate nocturnal lighting, and by limiting the need for nocturnal lighting in the first instance. Any lighting plans should be assessed by a suitably qualified ecologist to advise on their accordance with best practice standards in regard to lighting and bats (BCT & ILP, 2023).

5.0 OPPORTUNITIES FOR ECOLOGICAL ENHANCEMENT

5.1 There is a requirement laid out in national planning policy (Ministry of Housing, Communities & Local Government, 2023) that development should result in net gains for biodiversity. Opportunities for ecological enhancements which could be incorporated into the scheme design are provided below:

- The use of seed and fruit bearing species of tree such as cherry, rowan, birch, hawthorn and crab apple to provide a foraging resource for birds and insects;
- Installation of 1no. crevice bat box to the southern aspect of mature trees;
- Installation of 1no. integrated bat box into the building on either the south-west or south-east elevations;
- The use of flowering lawn in areas which require regular mowing rather than a standard amenity mix.

6.0 CONCLUSIONS

6.1 The survey area covers c. 0.1 hectares (ha) and centered around a former public house surrounded by hard standing with a small amenity space to the north with a couple of individual trees.

6.2 Overall, the building was assessed as offering moderate potential for crevice dwelling bat species only. However, given the scale of the works to the existing roof elevation and specified area of hung tile removal, the number of potential roosting features is reduced and, a series of mitigation measures have been proposed which shall ensure works proceed lawfully. These measures shall ensure that works proceed in accordance with all relevant wildlife legislation.

6.3 The site also offers some suitable habitat for breeding birds. Avoidance and mitigation measures have been built into the design of the scheme in accordance with the mitigation hierarchy and BS42020: 2013.

6.4 A series of recommendations are provided to ensure the scheme accords with best practice in regard to ecological receptors and complies with all local and national planning policy guidance and legislation. Overall, no constraints were identified which would preclude the provision of a scheme which is well designed, and sensitive to the presence, or potential presence of ecological receptors. Once avoidance, mitigation and compensation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible and non-significant.**

7.0 REFERENCES

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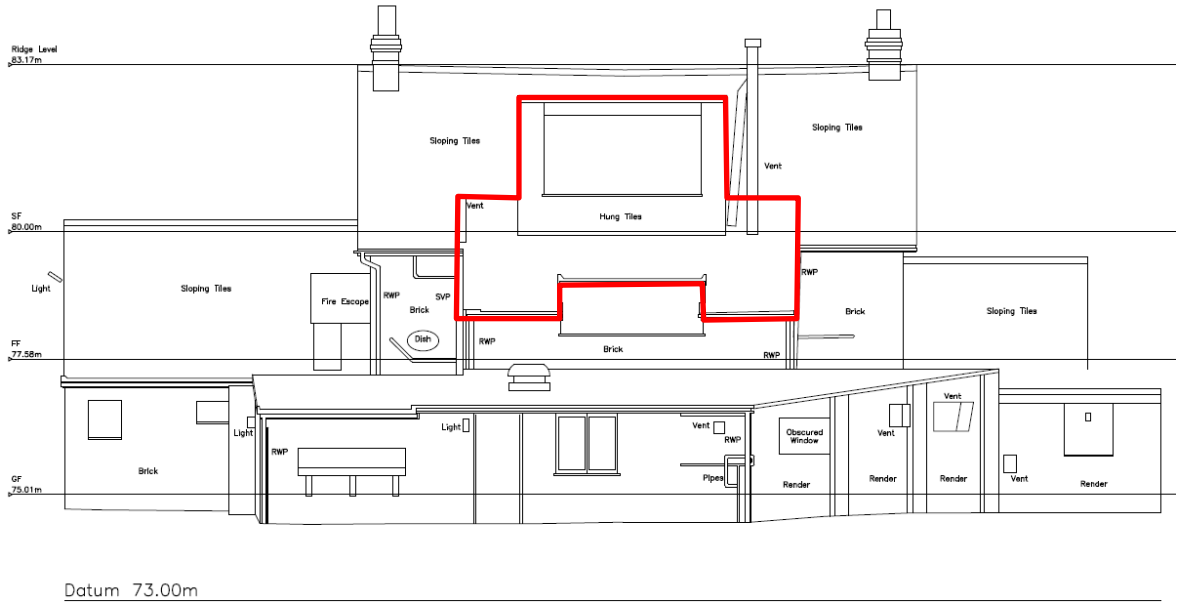
Figure No. 01 – Existing Elevation Plan



South East Elevation as Existing 1:100

Ecological supervision shall be undertaken of the area outlined red, to be carried out in the winter months only.

Figure No. 02 – Proposed Elevation Plan



West Elevation 1:100 @ A1

Proposed elevation, with recommended bat box installation (blue star).

Appendix A – Site Photographs



Image 1 – Internal inspection, main roof area with high levels of light throughout from the window and open floor areas and light from the windows on the lower floor.



Image 2 – Internal inspection, first floor roof and window, also providing high light levels.



Image 3 – External assessment, southeastern aspect, flat roof dormer window catslide extension and single storey flat roof sections are proposed for removal. Red circled area to be undertaken with ecological supervision.



Image 4 – Southwest aspect of lower floor, to be hung tiles to be retained.



Image 5 – Northwest aspect (roadside view) of former public house. Many of the features to be kept and retained, including the pitched roof areas on this elevation.



Image 6 – Northeast gable ends, proposed for retention.