PRELIMINARY ROOST ASSESSMENT REPORT

GREENHAYES STUDIO

KETTLESBRIDGE
WEST CHILTINGTON LANE
CONEYHURST
WEST SUSSEX

14TH APRIL 2025

REF: 25011

CT Ecology Limited (Registered Office), 2 Hillside Crescent, Angmering, West Sussex, BN16 4AA
M: 07577 526525 E: carly@ctecology.co.uk W: www.ctecology.co.uk
Registered in England and Wales No.: 10836632

CT Ecology

CONTENTS **PAGE NO**

Executive Summary 3

1. Introduction 4

2. Methodology 5

3. Results 7

4. Conclusions, Evaluation and Impact Assessment 12

5. Recommendations 13

6. References 16

Appendix A - Survey Map

Appendix B - Legislation

Revision	Date	Author	Reviewer
0	14/04/2025	Carly Teague BSc (Hons) MSc MCIEEM	Jack Kellett BSc (Hons) MCIEEM

This report has been prepared for the exclusive use of the commissioning party and may not be reproduced without prior written permission from CT Ecology Limited.
No liability is accepted by CT Ecology Limited for the accuracy of data or opinions provided by others in the preparation of this report, or for any use of this report other than for the purpose for which it was produced.

EXECUTIVE SUMMARY

A preliminary roost assessment (PRA) in relation to bats was carried out at Kettlesbridge in Billingshurst in West Sussex on the 10th March 2025. Proposals are for the conversion of an existing stable unit and store for residential use. The assessment was required in order to ascertain whether bats could pose any constraints to the proposed conversion works.

The main findings of the bat assessment are as follows:

* The site is within a rural location, within the northern extent of Coneyhurst. Land-use in the immediate vicinity comprises a mix of agricultural fields together with residential properties and associated gardens.
* In the wider area, agricultural land and scattered residential properties extend in all directions. Agricultural fields, boundary tree lines and hedgerows, together with woodland blocks and gardens provide a network of habitats and habitat features of value to commuting, foraging and roosting bats.
* A single structure was subject to the current assessment which was in use at the time of the survey. No roosting bats or secondary evidence were found anywhere within or external to the building during the preliminary roost assessment.
* The building does not support any potential bat roosting features. No bats or secondary evidence to suggest any recent bat presence or activity was found at the building. Overall the building was assessed as providing **negligible** potential for roosting bats throughout the year.
* The proposed conversion works are not anticipated to impact upon any bat roosts and so may proceed without the need for any additional bat surveys and there are no significant constraints in regards to bats.
* The proposed works provide an opportunity to achieve a net gain in biodiversity, in accordance with local and national planning policy. Recommendations are provided in Section 5 of the report.

1. INTRODUCTION

Background

1.1 CT Ecology Limited was commissioned by Greenhayes Studio, on behalf of Ms Bryant-Cuddis to carry out a preliminary roost assessment in regard to bats at Kettlesbridge in Billingshurst, West Sussex (hereafter referred to as "the site") prior to works.

1.2 A single building is subject to the current proposals which is illustrated on Figure 1 in Appendix A.

1.3 This report provides an assessment of the status of bats, providing information on their presence/ likely absence. Potential impacts of the proposed development are identified along with the need for further surveys. Where possible at this stage, measures to mitigate the effects of the development on this species group is discussed in outline.

1.4 Land at Kettlesbridge comprises a stable block, within a rural location in the village of Coneyhurst in the Horsham District of West Sussex at National Grid Reference TQ106 245. Kettlesbridge is accessed from the east via an access track which extends from West Chiltington Lane, with a mix of commercial, agricultural and residential buildings extending in all directions. The centre of Billingshurst is approximately 2km to the west. Within the site, semi-natural habitats are restricted to a tree line bounding the building to the north. The remainder of the site is dominated by hardstanding with a discrete area of artificial grass adjacent to the east of the building.

1.5 In the wider area, agricultural land and scattered residential properties extend in all directions. Agricultural fields, boundary tree lines and hedgerows, together with woodland blocks and gardens provide a network of habitats and habitat features of value to commuting, foraging and roosting bats.

1.6 This report has been compiled in accordance with current guidelines: British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013; CIEEM, 2013 & 2016; Mitchell-Jones and McLeish, 2004; and Collins, 2023.

Proposed Works

1.7 Proposals are for the conversion of the existing stable block for residential use. The footprint of the existing building will remain the same together with the existing access.

2. METHODOLOGY

Desktop Study

2.1 The data search was based on information provided by Sussex Biodiversity Record Centre (SxBRC 2025); Multi-Agency Geographical Information for the Countryside (MAGIC, 2025); Ordnance Survey mapping; and aerial photography.

2.2 A search was carried out using the Multi-Agency Geographic Information for the Countryside (MAGIC) website (accessed 10th April 2025) to identify the presence of the following statutory designated sites for nature conservation in relation to bats:

- Statutory sites of European and international designation within 2km of the site including: Special Areas of Conservation (SAC); Special Protection Areas (SPAs); and Ramsar sites.
- Statutory sites of national or regional designation within 2km of the site, including Sites of Special Scientific Interest (SSSIs); National Nature Reserves (NNRs); and Local Nature Reserves (LNRs).

2.3 The MAGIC website was used to identify if the site falls within any of Natural England's Impact Risk Zones for SSSIs with bats as a qualifying feature.

2.4 MAGIC was also used to search for Protected Species Mitigation Licences (PSML's) which have been granted within 1km of the site in relation to bats. Typically, PSML's are granted for development works affecting bat roosts.

Bats

<u>Preliminary Bat Roost Assessment</u>

2.5 The PRA was carried out by Carly Teague BSc (Hons) MSc MCIEEM, a suitably qualified ecologist with over 17 years' experience as a professional ecologist. Carly has extensive experience in undertaking bat surveys and devising and implementing bat mitigation measures as part of Protected Species Mitigation Licences. Carly is named as an accredited agent on Jack Kellet's survey licence (Level 2 Class Licence for bats: WML-CL18) and the assessment was carried out under guidance from Jack Kellet.

2.6 The inspection of the structures was carried out on 10th March 2025. The survey and report have been undertaken in accordance with good practice guidelines (Collins, 2023).

2.7 The interior and exterior of the structure was inspected closely with the aim of identifying the presence of bats and any secondary evidence together with any potential roost sites. Secondary evidence includes droppings, feeding remains, scratch marks and oil and urine staining.

2.8 The external inspection comprised a detailed search of all accessible architectural features for bat droppings, urine staining, scratch marks, staining around suitable crevices and feeding remains. A high-powered torch was used to illuminate internal features at height, for instance the apex of the roof and associated supporting beams, and these were inspected using close focusing binoculars when required.

Constraints

Data Search Constraints

2.9 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

Bat Survey Constraints

2.10 Bats are mobile animals and can move roost sites throughout the year. It is possible that the PRA carried out in March could miss roosts occupied earlier or later in the year. However, where undisturbed, it is possible to find secondary evidence of bats inside a building throughout the year, although secondary signs may be missed where they are within an area that can't be fully accessed.

3. RESULTS

Desk Top Study

Baseline Conditions

3.1 The site is in a rural location, within the northern extent of Coneyhurst. Land-use in the immediate vicinity comprises a mix of agricultural fields together with residential properties and associated gardens.

3.2 Approximately 20 woodland blocks are present within 2km of the site, the closest of which is an area of ancient semi-natural woodland (ASNW) approximately 190m to the north-east.

Statutory Designated Sites

3.3 The site is not subject to any statutory designations. There are no statutory designated sites within 2km for which the presence of bats is a qualifying feature.

Protected Species Mitigation Licences (PSML's)

3.4 No PSML's relating to bats or associated licence returns are present within 1km of the site (MAGIC 2025).

Data Search

3.5 At least eight species of bat have been recorded within 2km of the site boundary. This includes pipistrelle species (*Pipistrellus* sp.); common pipistrelle; soprano pipistrelle (*P. pipistrellus*); myotis bat (*Myotis* sp.); natterers (*M. nattereri*); noctule (*Nyctalus noctula*); long-eared (*Plecotus* sp.); and brown long-eared (*Plecotus auritus*).

3.6 The most frequently recorded bat species was common pipistrelle with a total of 18 records returned for this species. The closest roost record is for unspecified roosts of common pipistrelle and long-eared, from 2011; located over 400m from the site. The closest record for bat foraging activity was returned from 2007, by common pipistrelle, approximately 370m to the south.

Survey Overview

3.7 A single structure is subject to the current assessment which was in use at the time of the survey.

3.8 No roosting bats or secondary evidence were found anywhere within or external to the building during the preliminary roost assessment.

3.9 Overall, based on the results of the assessment the building provided negligible potential for roosting bats. The structure was well-maintained and did not support any potential roosting features.

Preliminary Bat Roost Assessment

3.10 The building inspection was undertaken on the 10th March 2025, the weather conditions were dry and overcast with a gentle breeze. The temperature was 17˚C at the start of the survey.

3.11 The surveyed building is detailed below and a map showing the building location is provided in Appendix A.

Table 3.1: Building Description

Building Reference	Description	Potential Roosting Features	Summary of Findings
1	A single-storey, concrete block stable unit with a building footprint of approximately 130m^2. The structure was well-sealed with a pitched metal corrugated sheet roof and sealed ridge line. Tightly fitted metal facia sheeting was at the gable ends. The sheet roofing was sealed with concrete/expanding foam restricting ingress into the building from under the corrugated sheeting. UPVC guttering and sealed UPVC facias was present along the eastern and western elevations. Metal framed windows were also present on the eastern and western elevations. A broken pane of glass was observed in one window along the western elevation along with a series of timber doors. A metal garage door was on the southern gable end. This as completely sealed with no obvious gaps around the door. Internally, the building was open to the ridge line and the roof was plastered throughout. No void areas were present. The building had a combination of steel and timber supporting frame forming a truss roof with wide steel ridge. The majority of the roof structure was steel with timber rafters and purlins. These were painted. The supporting framework was tightly fitted and the ridge line was completely sealed; expanding foam was noted along the ridgeline. Dense cobwebs were also evident around the roof area together with a series of skylights resulting in high light levels throughout the building. The building was divided into three distinct sections/rooms. Each section was completely sealed from the other with plaster extending to the ridge line and around the supporting framework. The walls were single skinned with the block work painted internally. The southern most section was accessed via the garage door and was used to store household items. The central section (the largest room) was accessed via a timber door on the eastern elevation. This was used as a kitchen and store room with tiled floor. The northern most section comprised two stable units, accessed via a timber stable door on the eastern elevation. Ingress was possible via the open stable door on this section of the building however internally, the roof structure and condition were the same as that observed throughout the remainder of the building and no potential roosting features were present within the stable units. Overall, the structure was in good condition with no significant signs of damage or degradation.	None	No bats or secondary evidence of bats were noted within or external to the survey structure. Overall the building is considered to provide **negligible** potential for roosting bats throughout the year.



Photograph 1: A view of the front (southern) elevation of the building. The building was well sealed.



Photograph 2: A view of the eastern elevation.



Photograph 3: The western elevation of the building.



Photograph 4: A view of the northern gable end.



Photograph 5: A view within the central section of the building used for storage.



Photograph 6: A view within the central section of the building, showing the kitchen area.



Photograph 7: A view of the stable unit in the rear of the building (northern extent).



Photograph 8: A view of the roof within the stable unit in the rear of the building (northern extent).

4. DISCUSSION AND CONCLUSIONS

4.1 The site is within a rural location, within the northern extent of Coneyhurst. Land-use in the immediate vicinity comprises a mix of agricultural fields together with residential properties and associated gardens. In the wider area, agricultural land and scattered residential properties extend in all directions. Agricultural fields, boundary tree lines and hedgerows, together with woodland blocks and gardens provide a network of habitats and habitat features of value to commuting, foraging and roosting bats.

4.2 Proposals are for the conversion of the existing stable building for residential use. Proposals will be confined to the existing building footprint. Within the site, semi-natural habitats are restricted to a tree line bounding the building to the north. This tree line will be retained as part of the works.

Kettlesbridge

4.3 This building does not support any optimal potential bat roosting features. Although ingress opportunities are associated with the open stable door in the northern section of the building, there are no potentially suitable roosting features external to or within this section of the building.

4.4 No bats or secondary evidence to suggest any recent bat presence or activity was found at the building. Overall, this structure is assessed as having negligible potential to support roosting bats. The proposed conversion works are not anticipated to impact upon any bat roosts and so may proceed without the need for any additional bat surveys and there are no significant constraints in regards to bats.

5. RECOMMENDATIONS

5.1 Recommendations are detailed below. A summary of relevant legislation is provided in Appendix B.

Kettlesbridge

5.2 The proposed conversion works may proceed with no further bat surveys required and no constraints in regards to bats.

5.3 If bats are unexpectedly discovered during the works:

- All work must immediately stop and any machinery at the site switched off;
- A licensed bat ecologist be contacted as soon as possible;
- The bat/s must be left in-situ, if they have been uncovered, carefully replace the original covering ensuring the bat/s are not crushed. If this is not possible, the bat/s should be covered with a soft cloth or loose covering.

5.4 If a bat roost is found during the conversion works, all further works would need to be delayed whilst additional survey work is carried out and an appropriate licence is gained from Natural England. Appropriate compensatory measures would potentially need to be created at the site.

Wider Biodiversity Enhancement Measures and Net Gain

5.5 Re-development provides opportunities to provide biodiversity enhancement and net gain in accordance with current local and national policies regarding biodiversity.

Landscaping

5.6 Any new post-development planting should include a mixture of bio-diverse plants in order to attract a range of wildlife including insects which will be beneficial to bats, birds and other wildlife. Native trees and shrubbery of local origin are preferable.

5.7 New shrub and hedgerow planting could be undertaken as part of the proposals to increase connectivity through the site and create new boundary features around the site. New hedgerows should comprise at least five native species which could include (but not be limited to); hazel (*Corylus avellana*); guelder-rose (*Viburnum opulus*), spindle (*Euonymus europaeus*); dogwood (*Cornus sanguinea*); holly; dog rose (*Rosa canina*); honeysuckle (*Lonicera periclymenum*); and hawthorn (*Crataegus monogyna*). New shrub planting should also comprise a proportion of native specimens and should contain a percentage of night-flowering species could also be incorporated into the design to attract night-flying insects and in turn provide a food source for bats.

5.8 New grassland areas could be re-seeded with an appropriate lawn seed mix such as Emorsgate EG21 Fine Lawn Seed Mix. This supports a number of flowering species which benefit from regular mowing.

Bats and Lighting

5.9 Different species of bat have been found to react differently to night-time lighting however research has found that generally, all species of bats are sensitive to artificial lighting and that excessive lighting can delay bats from emerging, thus shortening the time available for foraging, as well as causing individuals to move away from suitable foraging grounds or roost sites, to alternative dark areas (Jones, 2000). Bats can also become isolated from their foraging grounds if the linear features they use for commuting are suddenly illuminated, creating a light barrier (Fure, 2006).

5.10 Currently the site receives a degree of light spill existing security lighting as well as from off-site sources. If any new lighting is required as part of the works, installation of this lighting should seek to minimise light spill in order to avoid any additional levels of illumination post development. This can be achieved by following accepted best practice (Institute of Ecology and Environmental Management 2006, Institute of Lighting Engineers 2009):

* The level of artificial lighting including flood lighting should be kept to a minimum, with light spill limited on all boundary features;
* recent LED technology should be utilised where possible. LED lights do not emit UV radiation, towards which insects are attracted, drawing them away from bat foraging areas in the surrounding landscape. All lights should be directed at a low angle with minimal light spillage wherever possible; and
* the adjacent garden areas, particularly the tree line to the north, should be kept dark at bat emergence (0-1 hour after sunset) and during peak bat activity periods (e.g., 1.5 hours after sunset and 1.5 hours before sunrise). Therefore, where possible, if lighting is required this should be installed with the light directed down onto the parking/access areas wherever possible and lighting should be controlled through the use of PIR and/or timers.

Bat Boxes

5.11 A bat box should be included in the design proposals to provide potential roosting opportunities post development. This should be attached to the building or a suitable mature/semi-mature tree in the wider site. There are a range of bat boxes on the market. A Greenwood's Ecohabitats small single crevice bat box is recommended as this box supports a number of bat species including those recorded within the locality.

Other

5.12 If the recommended further bat surveys are not carried out and the proposed works are not started within 18 months of the date of this survey, a re-survey of the site will be required.

6. REFERENCES

- British Standards Institute (2013). 24040:2013. *Biodiversity-Code of Practice for Planning and Development.* Standards Policy & Strategy Committee. Milton Keynes: BSI.
- Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines.* 3rd edn. The Bat Conservation Trust, London
- Hill, D. Fasham, M. Tucker, G. Shewry, M. Shaw, P (2005). *Handbook of Biodiversity Methods – Survey, Evaluation and Monitoring*. Cambridge: Cambridge University Press.
- ILE - Institute of Lighting Engineers. (2023). *Guidance Note 8 Bats and Artificial Lighting at Night*. ILE and the Bat Conservation Trust [on-line]. Available from Guidance Note 8 Bats and Artificial Lighting | Institution of Lighting Professionals (theilp.org.uk) [Accessed on 10/04/2025].
- Mitchell-Jones, T. & McLeish, A.P (2004). *The Bat Workers' Manual* (3rd Ed). Joint Nature Conservation Committee, Peterborough, UK.
- Natural England (2015). *Standing advice for local planning authorities to assess impacts of development on bats: Survey and Mitigation for development projects.* [on-line]. Available from https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects [Accessed on 10/04/2025].
- Sussex Biodiversity Record Centre (2024) *Data Search for Bats: Kettlesbridge, Billingshurst, West Sussex.* Unpublished report for CT Ecology. SxBRC: West Sussex.
- The British Standards Institution. (2013). *Biodiversity – Code of practice for planning and development BS42020:2013.* BSI Standards Limited

Appendix A
Survey Map

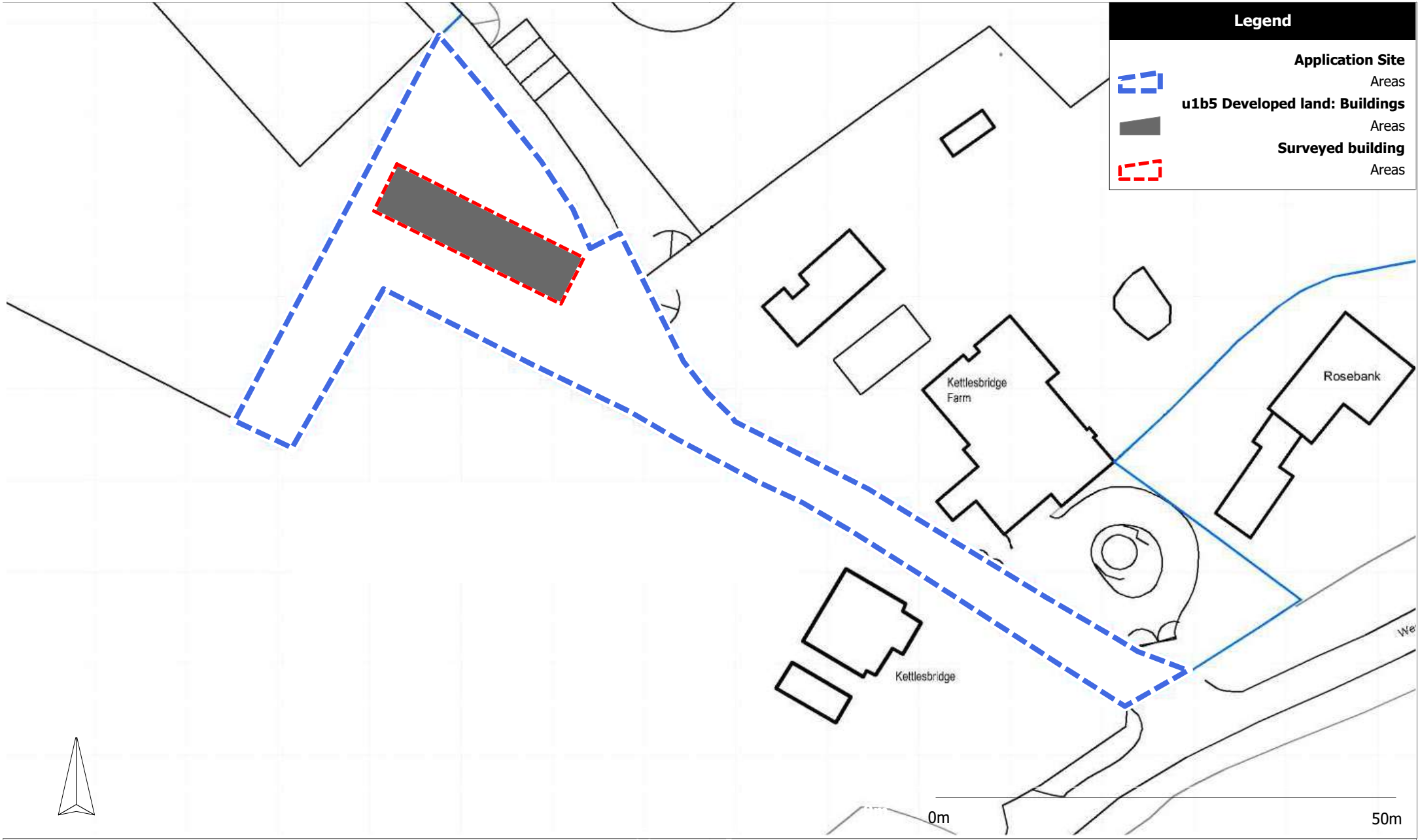


Figure 1: Kettlesbridge Preliminary Roost Assessment Map

Drawn by: CT
Date: 14/04/2025
Scale: See Map

CT Ecology

Appendix B
Legislation

LEGISLATIVE FRAMEWORK

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of the EC Habitats Directive[1] is to conserve plants and animals which are considered to be rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include

- Countryside and Rights of Way (CRoW) Act 2000
- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- intentional or reckless disturbance (at any level);

[1] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering or exposing for sale, possession or transporting for purpose of sale

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring or capturing of Schedule 2 species (all bats);
- deliberate disturbance of bat species as to impair their ability:
- (i) to survive, breed, or reproduce, or to rear or nurture young; and
- (ii) to hibernate or migrate.
- deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

A Protected Species Mitigation Licence (PSML) issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.