



2 Sarum Road, Chandlers
Ford, Hampshire, SO53

For Dr N. Mujtaba

June 2026

B

EXECUTIVE SUMMARY

- A Preliminary Bat Roost Assessment (PBRA) was completed by Town and Country Ecology Ltd in relation to the proposed loft conversion of the residential dwelling at 2 Sarum Road, which has currently been submitted to Eastleigh Borough Council (planning reference: H/25/100668).
- The PBRA (Town and Country Ecology Ltd, 2026) found the property to be of moderate suitability to support roosting bats, owing to several access points within raised, broken and missing tiles and within bonnet hips across the roof. Further features were present beneath hanging tiles at the dormers, within fascia boards, and beneath sections of lead flashing.
- Based on the PBRA, and in line with current guidelines (BCT, 2023), two evening emergence surveys were recommended and undertaken within the appropriate survey window (May – September). These were undertaken a minimum of three weeks apart and included the use of night-vision aids (NVA's) supported with IR lamps, to ensure all potential emergence points on the building were covered.
- The emergence surveys did not find any evidence of bats roosting within the building, and therefore, there are no constraints to the loft conversion which has been proposed. Furthermore, bat activity was generally low, which is likely due to the relatively urban nature of the site.

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BACKGROUND / INTRODUCTION

A Preliminary Bat Roost Assessment (PBRA) was completed by Town and Country Ecology Ltd in relation to the proposed loft conversion of the residential dwelling at 2 Sarum Road, for which an application has currently been submitted to Eastleigh Borough Council (planning reference: H/25/100668).

The PBRA (Town and Country Ecology Ltd, 2026, Appendix B) found the property to be of moderate suitability to support roosting bats, owing to a few access points within raised, broken and missing tiles and within bonnet hips across the roof. Further features were present beneath hanging tiles at the dormers, within fascia boards, and beneath sections of lead flashing.

2 Sarum Road, lies within a predominantly residential, suburban part of Eastleigh Borough in south Hampshire, where the immediate landscape is characterised by housing, gardens, roads and other urban-fringe features, with the wider setting influenced by a mosaic of woodland, green spaces and surrounding countryside.

The local biodiversity context includes the Hampshire Sites of Importance for Nature Conservation (SINCs) network and other statutory and non-statutory nature conservation designations such as Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites and Local Nature Reserves (LNRs).

In the wider Chandler's Ford area, designated and notable sites such as Hocombe Mead Local Nature Reserve (LNR), Valley Park Woodlands LNR and Trodds Copse Site of Special Scientific Interest (SSSI) demonstrate that the site sits within a broader network of important biodiversity assets, notwithstanding its urban residential character.

AIMS AND OBJECTIVES

The aim of these surveys was to:

- Determine the use of the building (if any) by roosting bats, the species assemblage on site and the egress locations of any bats emerging from the building.
- Provide outline options for mitigation measures as appropriate; and
- Make recommendations for appropriate biodiversity enhancements in line with national and local planning policy.

This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist. The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Appraisal Notes are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

LEGISLATION AND POLICY

Relevant legislation, policy guidance and Priority Habitats, as listed under Section 41 of the NERC Act, are referred to throughout this report where appropriate. Their relevance to bat roosts in buildings, the potential effects of demolition, renovation, tree works and external lighting, and the need for avoidance, mitigation and licensing is explained in the relevant sections of the report.

In particular, bats are a material consideration in planning under the National Planning Policy Framework, which requires development to minimise impacts on biodiversity and incorporate features that support priority or threatened species such as bats. They are further protected by both European and National legislation.

The relevant articles of legislation are:

- Conservation of Habitats and Species Regulations 2017 (as amended)
- Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities Act 2006, Section 41; and
- The National Planning Policy Framework (NPPF, 2025).

METHODOLOGY

EMERGENCE SURVEYS

Bat emergence surveys were undertaken to determine whether the building on site supported roosting bats, and to identify any species present, roost type, and the level of bat activity associated with the site. Surveys were completed in line with Bat Conservation Trust good practice guidance (2023), which now places emphasis on the use of night-vision aids (NVAs) as the standard approach for emergence surveys of buildings and trees where bats may be present (BCT, 2023 and BCT 2026 NVA guidance).

Surveys were undertaken at dusk on the 6th of May 2026 and 4th June 2026, with observers positioned around the building to provide full coverage of all potential access points, such as rooflines, soffits, gable ends, lead flashing and missing / lifted tiles. Table 1 describes the start / end time and weather conditions. The surveys were undertaken by Hannah Knight MSc MCIEEM, who has over 14 years' experience in bat surveys, and is a full member of the Chartered Institute of Ecology and Environmental Management.

Table 1 – Summary of bat emergence surveys at 2 Sarum Road, Chandlers Ford

Date of Survey	Start / End time	Sunset time	Weather Conditions
06.05.2026	20:15 – 22:03	20:33	Cloud cover 7/8, 14 degrees, wind = 1
04.06.2025	21:00 – 22:45	21:15	Cloud cover 7/8, 18 degrees, wind = 1

High-quality night vision cameras Canon XA11 and Canon XA60 with IR lamps were used to record the building, supported by bat detectors (Batlogger M), were used to record emergence activity and to allow footage to be reviewed after the survey. Survey effort was targeted to achieve robust coverage of all suitable elevations or features, with cameras placed to maximise visibility of the roosting features and to minimise blind spots. Figure 1 illustrates the locations of the roosting features, surveyors and NVAs.

The survey period commenced a minimum of 15 minutes before sunset and continued for at least 90 minutes after sunset.

DATA ANALYSIS

All field observations and video recordings were reviewed after the survey to confirm emergence events, identify bat species where possible, and assess the likely function of the feature as a roost, commuting route or foraging location. A screenshot from the darkest point of the survey has been

provided (Appendix A) to demonstrate the field of view and the level of visibility achieved during the survey.

Bat sound analysis of calls recorded was undertaken using Bat Explorer. During manual analysis, calls were assigned to species according to their key parameters and where applicable their peak frequency, as shown in Table 2 (Russ, 2021).

Table 0: Bat Species and their Call Frequency Parameters

Species	Latin Name	Call Frequency
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	FM/qCF calls above 52 kHz
Pipistrellus spp.	-	FM/qCF calls between 40 and 42 kHz; and 48 and 52 kHz
Common pipistrelle	<i>Pipistrellus</i>	FM/qCF calls between 40 kHz and 48 kHz
Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>	FM/qCF calls below 40 kHz
Natterer's bat	<i>Myotis nattereri</i>	FM call with wide range between 23 and 107 kHz
Daubenton's bat	<i>Myotis daubentonii</i>	FM call with wide range between 30 and 81 kHz
Myotis spp.	-	FM calls greater than 30 kHz
Brown Long-eared	<i>Plecotus auritus</i>	FM calls greater than 30 kHz with two harmonics
Noctule	<i>Nyctalus noctula</i>	FM/qCF calls below 23 kHz
Leisler's bat	<i>Nyctalus leisleri</i>	qCF calls between 23 and 28 kHz
Nyctalus spp.	-	Low (less than 30 kHz) qCF or FM calls

FM – Frequency modulated call; CF – constant frequency call; qCF – quasi-constant frequency call. Bats combine variation within their echolocation pulses to create different call 'shapes'. These call shapes can be described in terms of the degree of FM, CF and qCF components they contain.

Call frequencies and shapes can be shared by bat species within the same genus and can change according to the habitat they are flying in, i.e.: open areas with no trees or structures such as moorlands; cluttered environments which contain trees, areas of scrub; or linear features such as burns and conifer plantation/woodland edge.

Bats adapt their call patterns within their habitats to enable prey detection and navigation and as such, the recordings may differ in parameters. For example, both Leisler's bat and noctules can echolocate at the same frequency and with the same call shape and therefore, where not possible to distinguish species, they have been assigned to the *Nyctalus spp.* category and not identified to species level. Similarly, a bat was classified as *Myotis spp.* if differences in call shape and frequency between Daubenton's bats and Natterer's bats (most likely *Myotis spp.* bat to be found in the area) could not be discerned.

CONSTRAINTS

The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for 18 months - two years, assuming no significant considerable changes to the site conditions.

RESULTS

BAT EMERGENCE SURVEYS

SURVEY 1: 6TH MAY 2026

The survey commenced at 20:15 and finished at 22:03, with sunset being at 20:33. Four NVA's (3 x Canon XA60 and 1 x Canon XA11) supported by IR lamps and Batlogger Ms were positioned around the building; with one surveyor also on site, located as per Figure 1.

No bats were recorded emerging from the building during the survey.

A single common pipistrelle pass was recorded in the north-east corner of the site at 21:44 but was not captured by any NVA. No other bats were recorded during the survey.

SURVEY 2: 4TH JUNE 2026

The survey commenced at 20:45 and finished at 22:40, with sunset being at 21:06. Four NVA's, supported by one surveyor carried out the survey (locations can be seen in Figure 1).

No bats were recorded emerging from the building during the survey.

No bats were heard during the course of the survey.

SUMMARY – EMERGENCE SURVEYS

No emergences were recorded during the survey period.

A single common pipistrelle pass recorded on the first survey, but none during the second survey.

EVALUATION, RECOMMENDATIONS AND CONCLUSIONS

ROOSTING BATS

The building on site was previously assessed to have moderate bat roosting suitability (Town and Country Ecology Ltd, 2026). All the recommended emergence surveys have been completed during the appropriate season, following the most up-to-date guidance.

No bats were recorded during the survey, and no evidence of a bat roost was identified within the building. Activity level around the site was extremely low, with only one common pipistrelle pass heard during both of the surveys combined.

The survey therefore indicates that the site does not support an active bat roost at the time of survey. Therefore, there are no constraints on the loft conversion which has been proposed.

This survey is valid for a period of 18-24 months, assuming no significant deterioration of the building occurs in the interim.

REFERENCES

Bat Conservation Trust and Institution of Lighting Professionals (2018). Guidance Note 8: Bats and artificial lighting. Institution of Lighting Professionals, Rugby.

CIEEM (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2019). Guidelines for Preliminary Ecological Assessment. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins J. (ed.) (2023). Bat surveys for Professional Ecologists: Good practice guidelines (4th Edition). Bat Conservation Trust, London.

Mitchell-Jones, A.J, & McLeish, A.P. (eds). 2004., 3rd Edition Bat Workers' Manual, JNCC, Peterborough, ISBN 1 86107 558 8

Town and Country Ecology Ltd (2026). Preliminary Bat Roost Assessment: 2 Sarum Road, Chandlers Ford, Hampshire.

FIGURE 1 – LOCATION OF PRFS' / NVA'S /
SURVEYORS



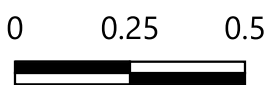
Legend

-  Application boundary
-  Building subject to emergence survey
-  Surveyor and NVA location
-  Field of view

Title:
Bat Emergence Surveys -
Surveyor location / results

Project:	Job Number:
Sarum Road,	HKA0141
Chandlers Ford,	

Knight, Hannah 05/29/2026 Figure 1



APPENDIX A – NVA FOOTAGE SCREENSHOTS AND SETUP

6TH MAY, NVA (REAR OF HOUSE)



6TH MAY, NVA (SIDE OF HOUSE)



6TH MAY, NVA (FRONT OF HOUSE)



4TH JUNE, NVA (FRONT OF HOUSE)



4TH JUNE, NVA (FRONT / SIDE OF HOUSE)



4TH JUNE, EXAMPLE SETUP



4TH JUNE, NVA (SIDE OF HOUSE)



4TH JUNE, NVA (REAR OF HOUSE)



APPENDIX B – PRELIMINARY BAT ROOST ASSESSMENT

(TOWN AND COUNTRY ECOLOGY, 2026)



2 Sarum Road, Chandler's Ford, Eastleigh, Hampshire, SO53 2AN Bat Survey Report

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Issue Date: 20 April 2026 (Draft Pending Emergence Survey Results)

N.B. Information on legally protected and/or vulnerable species may appear in ecological reports. In such cases, it is recommended that appropriate caution be used when circulating copies. Copies of this document and any associated ecological reports/licenses which are relevant to this site and any planning conditions are to be kept in a designated location (e.g., the site office) so that they are available for reference at any time.

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Report Information

Site Address:	2 Sarum Road, Chandler's Ford, Eastleigh, Hampshire, SO53 2AN
Grid Reference:	SU 44255 20990
Report Revisions:	Original Version (Draft Pending Emergence Survey Results) – 20 April 2026
Report Author:	Katie Warren BSc (<i>Hons</i>) MSc MEnvSc MRSB Natural England (NE) Level 1 Bat Licence: 2021-52120-CLS-CLS NE Barn Owl Survey Licence: 2021-52120-CLS-CLS NE Level 1 Great Crested Newt Licence: 2022-10883-CL08-GCN

Report Author

Katie Warren is the director of Town and Country Ecology Ltd and she has over eight years of experience in the ecology sector. Katie has Natural England survey licences for bats (Level 1), great crested newts (Level 1) and barn owls. Katie is a full member of the Institute of Environmental Sciences (MEnvSc) and full member of the Royal Society of Biology (MRSB). She has worked on a wide range of projects from residential developments to commercial developments to large infrastructure projects (highways and rail). Her ecological expertise includes Preliminary Ecological Appraisals, Preliminary Roost Assessments (Phase 1 bat surveys), Ecological Impact assessments (EclA) and surveying (and writing reports) for various notable and European Protected Species. Katie is skilled in the production of reports providing advice to ensure legal compliance and consistency with recognised best practice. Katie is an active member of the BatAbility Club, Worcestershire Mammal Group, Worcestershire Bat Group and Worcestershire Reptile and Amphibian Group.

Introduction

Background to the Development

Town and Country Ecology Ltd was commissioned by Dr Nadeem Mujtaba to undertake a Preliminary Roost Assessment at 2 Sarum Road, Chandler's Ford, Eastleigh, Hampshire, SO53 2AN.

The property is located within a residential area of Eastleigh, Hampshire. The site is immediately surrounded by residential properties with the environs including residential, commercial and industrial and greenspaces such as Fryern Recreation Ground, Hiltingbury Lakes and Goose Island.

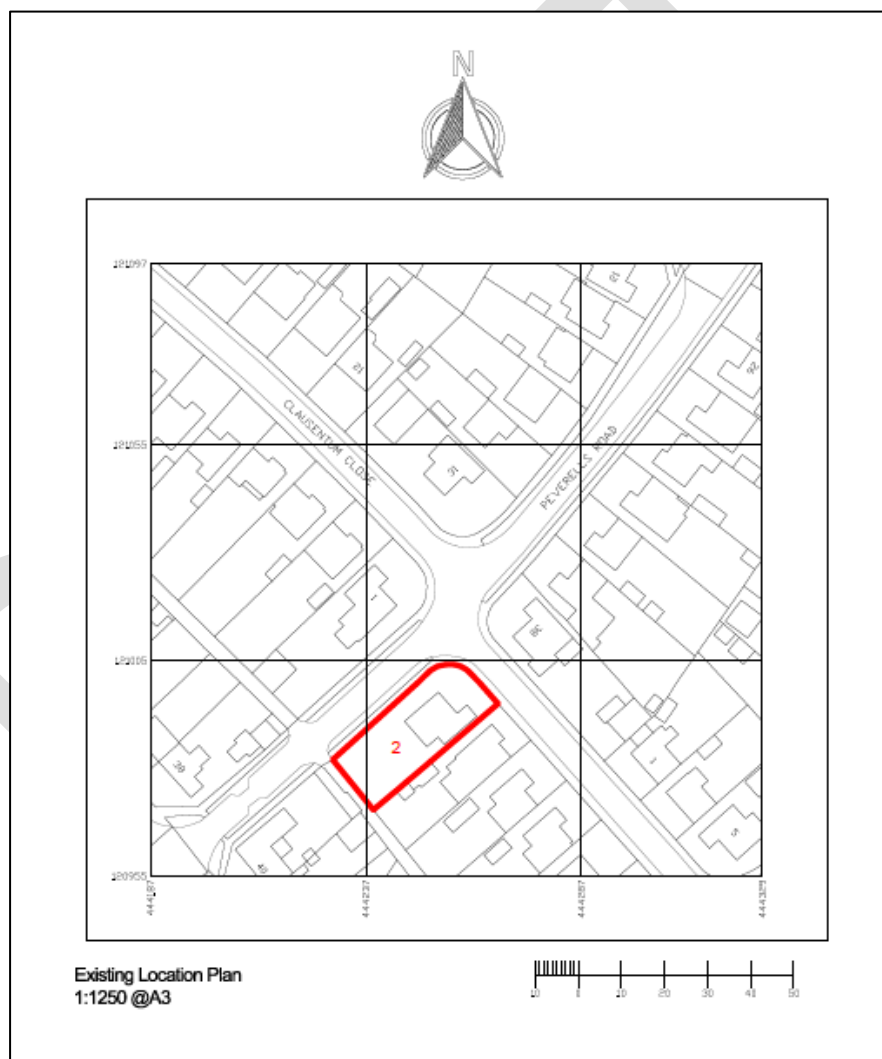


Figure 1. Site Location Plan (NA Planning).

Proposed Development

Planning permission is to be sought from Eastleigh Borough Council for the proposed loft conversion. Proposed plans can be viewed on the Eastleigh Borough Council planning portal under H/25/100668.

Survey Aims and Methodology

Survey Purpose and Aims

The purpose and aims of the survey were to:

- Undertake two bat activity surveys to identify and characterise any bat roosts present (if applicable).
- Determine how the proposed works may impact bats.
- Identify the requirement for further survey work, mitigation, compensation and / or assessment where necessary and propose suitable enhancements.

Desk Study Methodology

Existing ecological and nature conservation data relevant to the site was collated from various sources including the Multi Agency Geographic Information for the Countryside (MAGIC) online database. MAGIC was also searched for granted European Protected Species Mitigation (EPSM) licences within a 2km radius of the central grid reference.

Preliminary Roost Assessment Methodology

The survey was completed by Rebecca Oswain (Natural England Level 2 Bat Licence: 2025-84850-CL18-BAT) on the 9th April 2026. Weather conditions on the date of the survey were clouds and low winds, with a temperature of 20°C. The survey followed best practice guidelines and techniques recommended in Collins (2023) and Mitchell-Jones (2004). The building was assessed as holding either confirmed, high, moderate, low or negligible suitability (see Appendix 1 and 2) to support roosting bats and categorised using definitions as per Collins (2023). Equipment used during the survey included head torch and hand torch with red light filter, binoculars and camera.

Evidence of the building being used by nesting birds was also noted if applicable. Bats and birds were considered to be the only possible constraint with regards to protected species as all works are to be restricted to modified habitats.

Methodology for Summer Surveys

Bat emergence surveys have been commissioned in accordance with current guidance. This report will be updated, where relevant, upon completion of the surveys to include results, impact assessment and any necessary mitigation or enhancement measures.

The definition of any roost types and the value of any bat roosts (if applicable) can be viewed in Appendix 1 and Appendix 2 respectively.

Survey Limitations

A small number of limitations were noted but it is considered that an accurate assessment of the site's ecological value has been obtained:

- The desk study and field survey does not produce a comprehensive plant or animal species list as this will be limited by factors that influence their presence (such as activity and dormancy periods). However, an assessment can be made of the habitats within the survey area, their corresponding nature conservation value and the potential for them to support any protected or priority species.
- The wildlife and wider ecological interest of a site can change. Bats are highly mobile and can turn up from time to time unexpectedly. The report presented here is a statement of the findings found during the survey completed in April 2026.

Legislation and Planning Policy

Information relating to species and habitat legislation as well as planning policy can be viewed in Appendix 3 of this report. This is not considered to be an exhaustive list and it may be misleading to rely upon them as the information provided may not be up-to-date at the time of reading. Where there is doubt as to the current legal position then it is best to seek expert legal advice.

Longevity of Report

Given the transient nature of the subject, the survey results are considered valid for up to 12 months from the original date of publication of this report (i.e., until April 2027).

Results

Desktop Record Information

There are seven granted European Protected Species (EPS) Mitigation Licence for bats on MAGIC within a 2km radius of the site, including:

- A licence (2017-27981-EPS-MIT) for destroying a resting place of common pipistrelle, soprano pipistrelle, serotine and brown long-eared between 22/03/2017 and 20/03/2027. This is for a location 800m north-west of the site.
- A licence (2017-27981-EPS-MIT-1) for unknown impacts of common pipistrelle, soprano pipistrelle, serotine and brown long-eared between 04/01/2018 and 20/03/2027. This is for a location 800m north-west of the site.
- A licence (2020-49783-EPS-MIT) for damaging a resting place of soprano pipistrelle between 02/01/2021 and 04/09/2026. This is for a location 875m north-west of the site.
- A licence (2016-21370-EPS-MIT) for destroying a resting place of common pipistrelle and soprano pipistrelle between 01/03/2016 and 28/02/2021. This is for a location 1.2km north-east of the site.
- A licence (EPSM2012-4192) for impacting and destroying a breeding site and destroying a resting place of common pipistrelle, soprano pipistrelle, Natterer's and brown long-eared between 17/04/2012 and 30/09/2016. This is for a location 1.5km north-east of the site.
- A licence (2017-28716-EPS-MIT) for destroying a resting place of common pipistrelle, soprano pipistrelle and brown long-eared between 27/04/2017 and 27/04/2022. This is for a location 1.7km north-east of the site.
- A licence (2014-148-EPS-MIT) for destroying a resting place of common pipistrelle between 02/05/2014 and 31/12/2014. This is for a location 2km south-west of the site.

Preliminary Roost Assessment Results

The site comprises a detached dormer bungalow. The building is of brick construction with a multi-pitched roof clad in clay tiles, incorporating bonnet hips and a rounded mortared ridge. Two flat-roofed dormer structures are present on the north-east and south-west elevations, with hanging clay tiles to the cheeks. Flat-roofed, single-storey extensions are present on the south-west elevation, with roof coverings understood to comprise bituminous felt. The building includes brick chimneys with lead flashing at the base, and two flues are present on the north-east elevation. Eaves detail comprises overhanging soffits, including slatted PVC soffits on the north-east elevation, with PVC fascias present around the roofline. Numerous potential roosting features were identified, including gaps beneath

raised, broken and missing tiles and within bonnet hips across the roof. Further features were present beneath hanging tiles at the dormers, within fascia boards, and beneath sections of lead flashing.

Small eaves voids are present, wrapping around the south-western end of the building. These loft spaces are lined with a bituminous membrane, with an additional loose layer of reflective thermal lining overlaid. Fibreglass insulation is present at floor level and within the eaves. The roof structure comprises standard timber rafters and purlins. The loft voids were noted to be very warm, likely due to the extent of insulation and limited ventilation. The spaces are constrained, cluttered and offer limited internal void volume, reducing their suitability for void-dwelling species such as brown long-eared bats. No evidence of bats was recorded during the internal inspection. While small gaps are present, including areas where roof tiles are exposed at the flue entry point, no evidence of use by bats was identified.

Overall, the building is assessed as having moderate potential to support roosting bats, in accordance with Collins (2023), with suitability primarily limited to crevice-dwelling species. See Table 1 for further details and Appendix 4 for supporting photographs.

Table 1. Details of Bat Roosting Potential.

External Assessment		
Feature	Present	Notes
Lifted/warped/missing tiles	☒	Slipped and missing tiles at base of dormer windows on both elevations of the house. Numerous gaps under tiles and bonnets on south-east elevation.
Missing mortar (at roof level)	☐	/
Missing mortar (in brickwork)	☐	/
Lifted lead flashing	☒	Lead at base of dormer is lifted.
Gaps around lintels (windows and doors)	☐	/
Gaps at soffits/eaves/bargeboard	☒	Some small gaps noted.
Other	☐	/
Internal Assessment (Void)		
Feature	Present	Notes

Roof lining	☒	Loft spaces lined with bituminous felt and then another loose layer of silver thermal lining. Fibre glass insulation is also present at floor level and in the corners of the loft spaces.
Roof timbers/frame	☒	Standard wooden purlins and rafters.
Small/medium/large void	☒	Small eaves lofts which wrap around the south-west end of the building.
Light ingress	☐	/
Temperature		Temperature is very warm due to extensive insulation.
Cobwebs	☒	Minimal.
Other	☐	/
Evidence of bats found?		No
Suitability of building		Moderate potential. Most suitability for crevice-dwelling species such as pipistrelle species and small myotis species.

Bat Activity Surveys

Bat emergence surveys have been commissioned in accordance with current guidance. This report will be updated, where relevant, upon completion of the surveys to include results, impact assessment and any necessary mitigation or enhancement measures. Darkest Images from Night-Vision Aids will be provided in Appendix 5 and a Bat Survey Plan will be provided in Appendix 6.

Nesting Birds

No evidence of nesting birds was recorded during the survey. However, the building provides opportunities for nesting by common bird species, including passerines, due to the presence of suitable access points described above.

Mitigation, Compensation and Recommendations

Roosting Bats

The building was assessed as having moderate potential to support roosting bats. In accordance with current best practice guidance (Collins, 2023), the following surveys are recommended:

- At least two bat activity surveys comprising dusk emergence surveys.
- Surveys should be undertaken during the optimal survey period between May and September, with at least one survey completed between May and August.
- Surveys should be suitably spaced at least three weeks apart to account for seasonal variation in bat activity.
- Surveys must be undertaken by suitably experienced bat ecologists supported by night-vision aids and follow Bat Conservation Trust guidelines.

The results of these surveys will confirm whether bats are roosting within the buildings and, if so, identify the species present, roost type and conservation status, allowing proportionate mitigation measures to be designed where required. A third emergence survey may be required if a bat roost is identified. Where a bat roost is confirmed, any works that would result in the disturbance, damage or destruction of the roost would require a European Protected Species Mitigation (EPSM) licence from Natural England prior to works commencing.

Bat emergence surveys have been commissioned in accordance with current guidance. This report will be updated, where relevant, upon completion of the surveys to include results, impact assessment and any necessary mitigation or enhancement measures (e.g., see Appendix 7 for example toolbox talk to support soft demolition if no bats are identified).

Foraging and Commuting Bats (Lighting and Connectivity)

A sensitive lighting scheme must be implemented during and after construction to avoid indirect disturbance to commuting and foraging bats present locally. Where any additional lighting is essential, the following lighting controls must be adopted:

- Any new / additional external lighting to be limited to illuminate doorway entrances only,
- Any new / additional external lighting unit fitted will be downlighter type only with a maximum 5 Watt equivalence bulb strength LED in warm white tone (<2700K),
- Downlighters to be PIR type,

- Any new / additional internal lighting within two metres of a window / glazed opening will be a recessed directional spotlight pointed away from the openings with maximum 5 Watt equivalence bulb strength LED in warm white tone (<2700K).
- Any new / additional external lighting (e.g., parking areas) to be avoided in the first instance, or if necessary, to be maximum 3 Watt waymarker type illumination.

All additional lighting must be sensitively positioned to avoid unnecessary spill onto adjoining habitats, including the large oak tree on the boundary of the garden, and any mitigation, compensation and enhancement features. These documents contain further information: Bat Conservation Trust and Institute of Lighting Professionals (2023) and Matthews et al. (2015).

Nesting Birds

Any building work must avoid the nesting bird season (typically late February to August inclusive) or otherwise be checked by a suitably qualified Ecologist immediately prior to construction to check for nesting birds if undertaken during the nesting season. If any nests or evidence of nesting is found, then suitable buffer zones will have to be implemented until the chicks have fledged or until the nest has been confirmed as redundant. The netting of any suitable habitat is prohibited (CIEEM and RSPB, 2019).

Biodiversity Enhancements

Local planning authorities have a duty to seek to maintain and enhance biodiversity in the exercise of their functions. Several enhancements have been suggested and these should be incorporated into the scheme where possible:

- In line with local and national policy on biodiversity, a minimum of one bird box and one bat box will need to be installed on a retained building or tree within the land ownership. Suggestions for bird boxes include sparrow boxes (e.g., Schwegler 1SP Sparrow Terrace) and traditional bird boxes (e.g., Schwegler 1B Bird Box). Suggestions for bat boxes include Schwegler 1FF, Schwegler 2FN or Schwegler 2FE Bat Box (or equivalent) (see Appendix 8). All boxes must be retained on site in perpetuity and all the boxes must be placed away from artificial light sources and CCTV / IR systems.
- To increase the connectivity and foraging opportunities for bats, species of local provenance and of some benefit to wildlife should be used in any landscape plans. Planting could include hawthorn, blackthorn, hazel, field maple and spindle. Night flowering plants such as honeysuckle, field scabious and vervain will benefit the invertebrate prey of bats.
- Planting additional trees, hedgerows and shrubs as part of a landscaping scheme should comprise native and locally appropriate species. If possible, species that provide pollen, nectar

and fruit should form part of the landscaping to provide a food source for common birds.

Species which could be considered include hazel, blackthorn, dog-rose, wayfaring tree, sweet-briar, dogwood, buckthorn and guelder rose. Night flowering plants such as honeysuckle, evening primrose and night scented jasmine will benefit the invertebrate prey of bats.

- Habitat piles and invertebrate boxes / towers should be incorporated into the design plans to offer invertebrates valuable places of shelter and help to encourage their presence on the site. These should be preferably placed in south-facing locations. These can be built to any size and provide overwintering sites for a range of invertebrates such as solitary wasps, lacewings and red mason bees which are essential for pollination and pest control in most ecosystems. These will increase the number of invertebrates locally for bats to consume.
- The inclusion of green and blue infrastructure habitats within the development and creation of habitats of value would offer substantial enhancements to commuting and foraging bats. Habitats could include bioswales, ponds, SuDS, rain gardens, species-rich grassland, hedgerows, mixed scrub, green roofs, green walls and tree planting.

Bibliography

- Bat Conservation Trust. (2012) Landscape and Urban Design for Bats and Biodiversity. BCT.
- BCT and Institute for Lighting Professionals. (2023) Bats and Artificial Lighting in the UK. Bats and the Built Environment Series. Guidance Note 08/23.
- Chartered Institute of Ecology and Environmental Management (2015). Guidelines for Ecological Report Writing. CIEEM, Winchester.
- Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.
- Department for Communities and Local Government. (2019) National Planning Policy Framework.
- His Majesty's Stationary Office (1981) The Wildlife and Countryside Act. His Majesty's Stationary Office, London, UK.
- His Majesty's Stationary Office (2006) The Natural Environment and Rural Communities Act. His Majesty's Stationary Office, London, UK.
- His Majesty's Stationary Office (2017) The Conservation of Habitats and Species Regulations. His Majesty's Stationary Office, London, UK.
- Joint Nature Conservation Committee (2004) Bat Worker's Manual (3rd Edition). Joint Nature Conservation Committee, Peterborough, UK.
- Joint Nature Conservation Committee. (2006) UK Biodiversity Action Plan. Joint Nature Conservation Committee, Peterborough, UK.
- MAGIC. (2026) Interactive Map. Available from: <http://magic.defra.gov.uk/website/magic/>.
- Matthews, F., Roche, N., Aughney, T., Jones, N., Day, J., Baker, J. and Langton, S. (2015) Barriers and Benefits: Implications of Artificial Night-Lighting for the Distribution of Common Bats in Britain and Ireland. *Journal of Philosophical Transactions of the Royal Society B*. **370**.
- Mitchell-Jones, A. (2004) Bat Mitigation Guidelines. English Nature, Peterborough, UK.
- NA Planning Ltd. (2026) Existing Location and Proposed Site Plan, Existing and Proposed Ground Floor Plans, Existing and Proposed Loft Floor Plans, Existing and Proposed Roof Plans, Existing and Proposed Front Elevations, Existing and Proposed Rear Elevations, Existing and Proposed East Elevations, and Existing and Proposed West Elevations. DWG Nos. 339, 01-08, P16. February 2026. PDFs Available on Request.
- NA Planning Ltd. (2026) Existing and Proposed Ground Floor Plans. DWG No. 339, 02, P16. February 2026. PDF Available on Request.
- Reason, P. and Wray, S. (2023) UK Bat Mitigation Guidelines: A Guide to Impact Assessment, Mitigation and Compensation for Developments Affecting Bats. CIEEM, Ampfield.
- Wray, S., Wells, D., Long, E. and Mitchell-Jones, T. (2010) Valuing Bats in Ecological Impact Assessment, CIEEM In Practice.

Appendix 1 – Roost Type Definitions

Roost Type	Definition
Day Roost	A place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.
Night Roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony
Feeding Roost	A place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
Transitional / Occasional Roost	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
Swarming Site	Where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites
Mating Site	Sites where mating takes place from later summer and can continue through winter.
Maternity Roost	Where female bats give birth and raise their young to independence.
Hibernation Roost	Where bats may be found individually or together during winter. They have a constant cool temperature and high humidity. Sites where hibernating bats have been confirmed by appropriate survey effort should be classed as 'hibernation confirmed'.
Satellite Roost	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.
Other	Please explain what the roost type is if not one of the above (it is recognise that roost types are interchangeable and not always easy to classify according to the nuances of certain species).
An 'Alternative Roost'	A purposely installed bat box; an existing roost which will not be impacted by the works; or other new/enhanced roosting opportunities. Any alternative roost must be suitable for the species, within or close to the existing roost and free from additional disturbance or development pressure.

Appendix 2 – Bat Roosts and Geographic Variations

The table below provides geographic valuations for the different roost types (from Reason and Wray, 2023).

Roost category: note this table relates to VALUATION and does not mean that all such sites are 'places of shelter' as referenced in the W5CA or Habitats Regulations. Inclusion in this table does not indicate that a licence <u>would</u> be required; this would be driven by roost status, any impacts and the likelihood of an offence.							
Conservation status/ distribution	Feeding perches; night-roosts; Individual or very small occasional/ transitional/ opportunistic roosts	Non-breeding day roosts (small numbers of species)	Mating sites (excluding individual trees and larger swarming sites); small numbers of hibernating bats	Larger transitional roosts	Hibernation sites ^a	Autumn swarming sites [largely, vesper species which hibernate underground	Maternity sites ^c
Widespread all geographies	Site	Site	Site	Site/Local	District/County [Larger hibernation sites rare in the UK]	District/County [Very large pipistrelle swarming sites as yet unknown in the UK91, but see Section 6.7	Unlikely to exceed District importance unless colonies are atypically large; importance increased for assemblages.
Widespread in many geographies, but not as abundant in all	Site	Site	Site, dependent on local distribution [For <i>Myotis</i> , see swarming site column]	District	District/County importance dependent on size ^b and number of species	County/Regional importance dependent on size ^b ; importance increased for larger sites that serve larger numbers/species	Unlikely to exceed County importance unless colonies are atypically large; importance increased for assemblages.
Rarer or restricted distribution	Site (very well-used night roosts may be of District importance for some species)	Site/Local/District, dependent on local distribution	Site/Local/District, dependent on local distribution	District	District/County importance dependent on size ^b and local distribution; increased value for assemblages.	County/Regional importance on size ^b and local distribution; increased value for assemblages.	County/Regional importance on size ^b and local distribution; increased value for assemblages.
Rarest Annex II species and very rare	Site (very well-used night roosts may be of District importance for some species)	Site/Local/District, dependent on local distribution	Site/Local/District, dependent on local distribution	District	County/Regional importance on size ^b and local distribution; increased value for assemblages	County/Regional importance on size ^b and local distribution; increased value for assemblages.	County/Regional importance on size ^b and local distribution' increased value for assemblages.

- Sites within or functionally linked to SACs are of International importance for Qualifying Species. Sites that could be functionally linked to SACs may or may not have that level of importance [Example: a small lesser horseshoe bat maternity roost from a multi-component 'bat' SAC may be too far away to be a direct satellite of a maternity roost within the SAC, but may be part of the same population through intermediate unidentified roosts. Sites meeting SSSI guidelines are of National importance (though note that many SSSI citations do not reflect the 'bat' importance of the sites they describe, and not all sites of National importance are designated).
- In all cases, 'size' needs to be interpreted as 'relative to typical sizes for the species'.
- Satellite roosts (i.e. alternative roosts found in close proximity to the main nursery colony) should be considered with the associated main colony.
- For tree-roosting bats that are likely to use multiple trees for breeding and then hibernate in small numbers (which means individual hibernation sites are difficult to detect and many may be missed), the **importance of the roost resource** (i.e. the collection of PRFs which are available to bats) rather than individual confirmed roosts, should be assessed.



Appendix 3 – Planning Policy and Legislation

Please note, the below legislation and planning policy is not exhaustive and is not legal advice.

Bats

Bats are a European Protected Species. Individual bats and their roosts have strict protection and are listed in Annex IV of the EC Habitats Directive 1992 (transposed into law through the Conservation of Habitats and Species Regulations 2017). Some bats have a higher conservation concern in Europe. The habitats supporting these species can be designated as Special Areas of Conservation and the bat species concerned are then listed under Annex II of the Habitats Directive. Species listed on Annex II include the barbastelle, Bechstein's bat, greater horseshoe and lesser horseshoe.

Substantial penalties, which include fines and custodial sentences, are now in place for offenders under the Conservation of Habitats and Species Regulations 2017. The actions and activities that are prohibited are:

- Deliberate capture, injury or killing of a bat,
- Damage or destruct a breeding site or resting place (even if currently vacant),
- Possess, control, transport, sell or exchange, or offer for sale or exchange, of any bat or any part of a bat or anything derived from one, and
- Deliberate disturbance of a bat, in particular disturbance which is likely to impair their ability to: survive, breed or reproduce; rear or nurture their young; hibernate; migrate; or affect the local distribution or abundance of the species.

The Wildlife and Countryside Act 1981 (as amended), which is the primary legislative Act covering wildlife in the UK, affords protection to all the species of bats in the UK. Various amendments have been made to the Act and recent changes include an offence for the reckless damage of roosts or disturbance of bats. Legal precedence also ensures that roost sites are protected on a regular basis year on year regardless of whether bats are present at the time of inspection.

Many bats are described as being of principal importance for the purpose of conserving biological diversity under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The NERC Act places a biodiversity duty upon local and national government departments to ensure the conservation of biodiversity. The National Planning Policy Framework (NPPF) also sets out the government's planning policies within England and this aims to promote and ensure sustainable development.

The Wildlife and Countryside Act 1981 (as amended)

The Act and its various amendments have been created from pre-existing legislation and support the Conservation of Habitat and Species Regulations (2017, as amended) in implementing the Berne Convention (1979) and Directive 2009/147/EC on the conservation of wild birds. The schedules within this Act provide a list of protected species and habitats as well as prohibited actions. The Act also contains measures for controlling invasive non-native species under Schedule 9 and amendments to a number of laws including public rights of way. Further details have been provided above for specific species.

The Conservation of Habitats and Species Regulations 2017 (as amended)

These Regulations are the primary method by which the Council Directive 92/43/EEC under Conservation of Natural Habitats and of Wild Fauna and Flora (the 'Habitats Directive') is transposed for England and Wales and their territorial seas. These Regulations form the basis for implementation of Europe's nature conservation policy through habitat and species level protection. It also requires the designation of European sites known as Special Areas of Conservation (SAC). Taken collectively with the Special Protection Areas (SPAs), which are underpinned by the Birds Directive, these form the Natura 2000 Network of protected sites. Public bodies must exercise their nature conservation responsibilities in order to ensure compliance with these Regulations. These Regulations also require conservation of natural habitats and habitats of species through selection process which are afforded protection under the Habitats Directive. The Regulations contain provision for the appropriate management of sites such as the control of damaging operations special nature conservation orders and restoration orders. The Regulations offer strict protection to European Protected Species under Schedule 2 and plants under Schedule 5. Such offences may include the deliberate capture, killing, disturbance or trade of these animals. Similarly, plants listed under schedule five are typically protected from picking, collection, cutting destruction or trade.

Appendix 4 – Photos



Figure 1. External image of eastern elevation.



Figure 2. External image of western elevation.



Figure 3. Dormer on western elevation.



Figure 4. Raised tiles near to flat roof extensions and gaps in fascias.



Figure 5. Internal view of eaves voids.



Figure 6. Internal view of eaves voids.

Appendix 6 – Bat Survey Plan

To be confirmed.

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Appendix 8 – Example Bat Enhancement and Mitigation Features

Or equivalent models



Schwegler 1FF Bat Box



Schwegler 2FE
Wall-Mounted



Schwegler 2FN Bat Box



Raised roof tiles © Darwin Ecology



Raised ridge tiles © Darwin Ecology



Schwegler 1FR Bat Tube

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END OF REPORT

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