Brook Cottage, 3 Eccles Terrace, Grindleton BB7 4RD

PRELIMINARY ROOST ASSESSMENT AND DUSK EMERGENCE BAT SURVEY

July 2025

ERAP (Consultant Ecologists) Ltd Reference: 2025-236

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Document Control

Survey Type:	**Surveyors**	**Survey Date(s)**
Preliminary roost assessment	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM Principal Ecologist	14th July 2025
Dusk Emergence Survey	Victoria Burrows and two assistant surveyors	14th July 2025
Reporting	**Personnel**	**Date**
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Revised and issued	Victoria Burrows	30th July 2025
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SUMMARY

i. This report presents the results of an updated preliminary roost assessment and a dusk emergence bat survey carried out at Brook Cottage, 3 Eccles Terrace, Grindleton BB7 4RD in July 2025. The survey was requested to inform a planning application proposing the modification of the property and extension to the rear (north).

ii. The survey was carried out by an appropriately licensed, qualified and experienced ecologist (with assistants) and is in accordance with standard, recognised survey guidelines.

iii. No evidence of the current or previous use of the building by roosting bats was found during the preliminary roost assessment / daylight licensed bat survey. It is confirmed that the building is assessed to be of 'low' suitability for use by roosting bats.

iv. No bat emergence or re-entry activity was detected at the building during the dusk emergence survey.

v. Appropriate and proportionate survey effort and assessment, in accordance with standard survey guidelines, has been applied to reasonably discount adverse effects of the proposals on roosting bats. No further surveys are required to comply with relevant survey guidelines or to inform the planning application.

vi. It is advised that, if works have not commenced by the next bat activity survey season (i.e. May 2026), an updated bat activity survey will be required to ensure the survey findings remain valid.

vii. **Section 4.2** of this report provides a series of recommendations to be applied prior to and during works for the protection of wildlife. Recommendations on actions to be applied for the enhancement of the site for biodiversity as part of the proposals are also made.

viii. It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy.

1.0 INTRODUCTION

1.1 Background and Rationale

1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned to carry out an dusk emergence bat survey at Brook Cottage, 3 Eccles Terrace, Grindleton BB7 4RD (hereafter referred to as the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 75847 45635. An aerial image of the site and its surrounding habitats is appended at **Figure 1** (source image: ESRI World Imagery).

1.1.2 The survey was requested to inform a planning application proposing the modification of the property and extension to the rear (north).

1.1.3 It is understood that a separate preliminary roost assessment of the property assessed the building to have 'low' suitability for use by roosting bats and one dusk emergence survey was recommended.

1.2 Scope of Works

1.2.1 The scope of ecological works undertaken in July 2025 comprised

a. An updated daytime bat walkover survey, which has comprised an assessment of the suitability of the habitats for use by foraging bats and a licensed preliminary roost assessment (PRA) of the building; and

b. One dusk emergence survey supplemented by night vision aids (NVAs).

2.0 METHOD OF SURVEY

2.1 Daytime Bat Walkover Survey

Survey Personnel

2.1.1 The survey was carried out / coordinated by Victoria Burrows, Natural England Class Survey Licence WML CL18 (Bat Survey Level 2), Registration Number 2015-10390-CLS-CLS. The surveyor's qualifications and experience meet the criteria as defined in the *Technical Guidance Series Competencies for Species Survey: Bats* (CIEEM, 2013).

Habitat Assessment for Commuting / Foraging Bats

2.1.2 Habitats within and adjacent to the site were assessed for their value and suitability for commuting and foraging bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023). Reference has been made to the categories, descriptions and examples presented in **Table 2.1**.

Table 2.1: Consideration of Suitability of Foraging and Commuting Habitat for Bats

Suitability	Potential Flight Paths and Foraging Habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade / protection for flight-lines, or generate / shelter insect populations available to foraging bats).
Negligible [a]	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.

Suitability	Potential Flight Paths and Foraging Habitats
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
[a] Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).	

Preliminary Roost Assessment: Building

2.1.3 The survey and assessment of the building was carried out in accordance with standard methodology including the *Bat Mitigation Guidelines* (Mitchell-Jones, 2004), the *Bat Workers' Manual 3rd Edition* (Mitchell-Jones & Mcleish, 2004) and *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023).

2.1.4 An inspection of the external surfaces, walls and roofs of the building was carried out to find potential bat roosting habitat or accesses into internal areas where roosts may be present. Searches for evidence of bat presence in the form of droppings, urine stains, feeding signs, grease marks and other evidence were carried out.

2.1.5 The internal survey involved an examination of the accessible internal areas (including roof voids) to search for roosting bats or evidence of previous use of the building by bats such as droppings and prey remains.

2.1.6 The suitability of the building for use by roosting bats has been re-assessed in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023), taking into account any presence of gaps suitable for access by bats, features suitable for use by roosting bats within the building (including crevice dwelling species and species which can roost in the open in roof voids), and the suitability of the surrounding habitats for use by foraging and commuting bats. The suitability the building for use by roosting bats has been informed by the following categories as presented in **Table 2.2**.

Table 2.2: Suitability Categories for Roosting Habitats in Buildings

Suitability	Description
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices / suitable shelter at all ground / underground levels).
Negligible[a]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[b] and / or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats[c]).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[b] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
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[b] and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool / stable hibernation site.

[a]Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).
[b]For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
[c]Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al*., 2016 and Jansen *et al*., 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

Equipment

2.1.7 A list of equipment used is detailed in **Table 2.3**.

Table 2.3: Survey Equipment used during Daytime Bat Survey

Ladders
LED Lenser P14 torch
Canon Ixus digital camera
8x20 binoculars
Ridgid Micro Inspection Camera Borescope CA-300

2.2 Dusk Emergence Survey

2.2.1 The property has been assessed to be of 'low' suitability for use by roosting bats. In accordance with Tables 7.1 and 7.2 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023) one dusk emergence bat survey, supplemented by night vision aids (NVAs), was required to determine the presence or absence of roosting bats. The survey was completed on 14th July 2025 under suitable conditions. The details of the survey are presented in **Table 2.4**.

2.2.2 The dusk emergence survey commenced at least 15 minutes before sunset, and continued until at least 1.5 hours after sunset.

2.2.3 Surveyors, experienced in conducting bat surveys, were positioned at suitable locations to maximise the coverage of the building to determine any entry or emergence by roosting bats. Any bat emergence or re-entry activity was recorded, with brief notes relating to bat activity at each survey position collated at the end of the survey.

2.2.4 Anabat Scout bat detectors were used to determine any bat detected to species or group (*Myotis* species, for example, often cannot be reliably identified to species from their echolocation calls), and were also used to record and analyse echolocation calls after the survey using Anabat Insight bat call analysis software.

2.2.5 Night vision aids (NVA)[1], supplemented with additional infra-red lighting (comprising Nightfox XB5 torches) where necessary were used at the surveyor positions presented in **Table 2.3**. Footage was subsequently reviewed using VLC Media Player to determine any emergence / re-entry at the building.

2.2.6 Surveyor positions and NVA locations are annotated on **Figure 2**. Photographs showing each survey position from the darkest point of the survey are appended at **Photos 13** to **15**.

Table 2.4: Dusk Emergence Survey Date, Weather Conditions and Surveyors

Date	**14th July 2025**
Sunset time	21:35
Start & end time	20:20 until 23:10
Weather	Dry and calm (Beaufort scale 0) with a temperature of 16°C at 21:30 falling to 15°C at 23:00
Survey Position	**Surveyor, Detector and NVA**
1	Victoria Burrows, Anabat Scout, Canon XA60
2	Catie Haworth, Anabat Scout, Guide TK612 thermal camera
3	Ian Nelson, Anabat Scout, Guide TK612 thermal camera

2.3 Survey and Reporting Limitations

2.3.1 No limitations on the intended scope of survey were experienced.

2.4 Evaluation Methods

2.4.1 Government advice on wildlife, as set out in the NPPF and associated government circulars, has been taken into consideration. Legislation relating to protected species, such as those listed under Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, is referenced where applicable, and any impacts to protected species are evaluated in accordance with current guidance.

[1] Canon XA60 camcorder and Guide TK612 thermal cameras.

3.0 SURVEY RESULTS

3.1 Daytime Licensed Bat Survey

Habitat Assessment for Commuting and Foraging Bats

3.1.1 The garden habitats at the site that are bordered by trees and other gardens are likely to contribute to the wider foraging area of common species of edge-feeding bats associated with suburban areas, such as common pipistrelle (*Pipistrellus pipistrellus*).

3.1.2 Overall, the site is assessed to be of 'low' suitability for use by foraging and commuting bats in accordance with Table 4.1 of *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)* (Collins, J. (ed), 2023), as presented at **Table 2.1**.

Preliminary Roost Assessment

3.1.3 Refer to **Photos 1** to **12**. Brook Cottage is located at the western end of Eccles Terrace and comprises a two-storey stone building with stone cladding at the front (southern) elevation and concrete render at the eastern, western and northern elevations. Pitched slate covered roofs are present at the main house and a tile covered roof is present at a single storey porch attached to the northern elevation. The porch also has horizontal timber cladding. A slate covered porch canopy is present over the front door at the southern elevation.

3.1.4 The PVC and timber framed windows and doors are tightly fitted within stone sills, lintels and side casings; no gaps or opportunities were found at the window or doorframes. Inspection of the southern elevation found that the stone wall is well-pointed; no gaps or opportunities for bat access were noted in the stonework.

3.1.5 No bats or bat droppings were found around the external perimeter of the building.

3.1.6 Opportunities suitable for bat access were noted at the following:

a. Beneath the ridge copings;

b. At the roof verge at the western and northern gable ends;

c. Between roof slates where there are lifted section of slate (**Photo 8**).

3.1.7 Inspection of the internal areas confirmed that the roof void at the front-east of the building could not be viewed as the ceiling in the room below has been lowered to create a 30cm void between the current ceiling and the former ceiling and bags of insulation have been placed at the former ceiling which prevented further inspection.

3.1.8 The roof void at the front-west of the building was accessed. The search confirmed the presence of breathable roof membrane. The void, including the ridge board, is very dusty and heavily covered with cobwebs. No bats or bat droppings were found in the roof void.

3.1.9 The rooms to the rear of the building have vaulted ceilings and no roof void is present (refer to **Photo 12**).

3.1.10 It is confirmed that the previous assessment of 'low' suitability of the building for use by roosting bats is appropriate.

3.2 Dusk Emergence Survey 14th July 2025

3.2.1 No bat emergence or re-entry at the building was reported by the surveyors. Subsequent review of the NVA footage did not detect any bat emergence or re-entry.

3.2.2 The following specie(s) were recorded in flight around the survey area:

a. Common pipistrelle (*Pipistrellus pipistrellus*) were detected between 21:55 and 22:30 with the first bat detected entering the survey area from the south 21 minutes after sunset. A total of 10 call sequences were recorded during the survey.

b. Soprano pipistrelle (*Pipistrellus pygmaeus*) were detected between 22:23 and 22:52 with the first bat detected 48 minutes after sunset. A total of 10 call sequences were recorded during the survey.

3.2.3 The survey data are appended in **Table 7.1**.

3.3 Other Observations

3.3.1 Swift (*Apus apus*) activity was observed over the property and local area at the start of the dusk emergence bat survey. The swift left the area as dusk fell; no evidence of the current use of the building by swift or other nesting birds were present on the survey date.

3.3.2 Vegetation within the wider garden is suitable for use by nesting birds.

4.0 EVALUATION, ASSESSMENT AND RECOMMENDATIONS

4.1 Evaluation and Assessment

4.1.1 Appropriate and proportionate survey effort and assessment, in accordance with standard survey guidelines, has been applied to reasonably discount adverse effects of the proposals on roosting bats. No further surveys are required to comply with relevant survey guidelines or to inform the planning application.

4.2 Recommendations

Best Practice During Roof Works

4.2.1 During any works at the existing roof it is recommended that ridge copings and roof slates are removed by hand. The underside of the ridge copings and roof slates must be checked for bats prior to discard or stacking.

4.2.2 If at any point during the works a bat is found or suspected, all works in the area must stop immediately and ERAP (Consultant Ecologists) Ltd or the Bat Conservation Trust must be contacted for guidance.

4.2.3 If works have not commenced by the start of the next bat activity survey season (i.e. May 2026) then it is recommended that an updated dusk emergence survey is completed to ensure these findings remain valid.

Lighting

4.2.4 Inappropriate use of artificial lighting around the exterior of the property may have an adverse effect on use of the local area by foraging bats and other wildlife. In addition paragraph 198(c) in Chapter 15 (conserving and enhancing the natural environment) of the NPPF states that development should:

'limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

4.2.5 Any external lighting to be installed at the extended house must involve the use of appropriate products and screening, where necessary, to ensure no excessive artificial lighting shines over the garden habitats, as lighting overspill may deter use by wildlife such as foraging bats.

4.2.6 The lighting scheme will be designed with reference to current guidance, namely:

a. *Guidance Note 08/23: Bats and Artificial Lighting at Night* (Institution of Lighting Professionals & Bat Conservation Trust, 2023); and

b. *Bats and lighting: Overview of current evidence and mitigation guidance* (Stone, 2014).

Nesting Birds

Protection

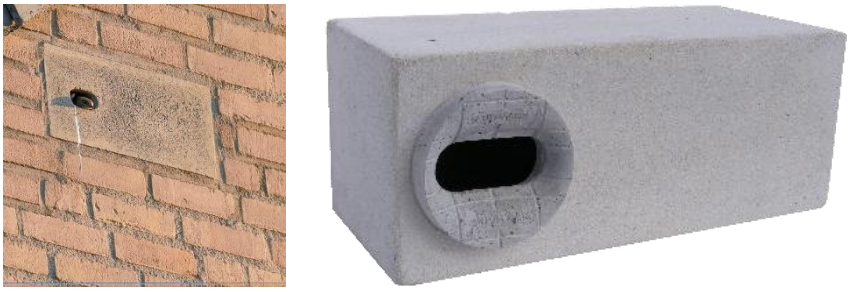
4.2.7 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are nesting. All contractors must be advised on the possible use of the building and the garden vegetation by nesting birds and the protection afforded to nesting birds. The bird breeding season typically extends between March to August inclusive.

4.2.8 If breeding birds are detected / present it is recommended that the area is left undisturbed until it is confirmed that the young birds have fledged / the nest is no longer active. Guidance from an ecologist should be sought, as needed.

Installation of Provisions for Swift

4.2.9 Swift has been added to *The Birds of Conservation Concern Red List* (Stanbury, et al., 2021) owing to the recorded recent declines and its identified status as a high conservation priority.

4.2.10 The construction of the extension provides an opportunity for the installation of a swift nest box to assist the conservation of swift. A built-in box is recommended and examples are provided at **Insert 1** below. Further guidance on the installation of a swift box is available at https://www.swift-conservation.org/



Insert 1: Woodstone Build-in Swift Nest Box (left) and Schwegler Lightweight Swift Box Type 1A (right). Both available from www.NHBS.com

5.0 CONCLUSION

5.1 No evidence of the current or previous use of the building at Brook Cottage, Eccles Terrace, Grindleton by roosting bats was found by the daytime licensed bat survey or the dusk emergence survey carried out in July 2025.

5.2 No further surveys are required to inform the planning application or to comply with the relevant survey guidelines.

5.3 **Section 4.2** of this report provides a series of recommendations to be applied prior to and during works for the protection of wildlife. Recommendations on actions to be applied for the enhancement of the site for biodiversity as part of the proposals are also made.

5.4 It is concluded that the proposals are feasible and acceptable in accordance with ecological considerations and relevant planning policy.

6.0 REFERENCES

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Stanbury, A. et al., 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds,* Issue 108, pp. 723-747.

7.0 APPENDIX: TABLES, PHOTOGRAPHS AND FIGURES

7.1 Survey Data from Dusk Emergence Survey

Table 7.1: Activity Survey 1, 14th July 2025, Sunset Time 21:35, Start Time 21:20

Survey Position 1: Victoria Burrows

Time	Species	Notes
22:05	Common pipistrelle	Flew into survey area from east. No emergence or re-entry detected.
The Anabat Scout made the following recordings: 2 call sequences of common pipistrelle at 22:04 and 22:30. 3 call sequences of soprano pipistrelle between 22:31 and 22:51.		

Survey Position 2: Catie Haworth

Time	Species	Notes
22:04	Common pipistrelle	Pass over adjacent land.
22:23 to end	Soprano pipistrelle Common pipistrelle	Foraging over garden / passes No emergence or re-entry detected.
The Anabat Scout made the following recordings: 4 call sequences of common pipistrelle between 22:04 and 22:30. 4 call sequences of soprano pipistrelle between 22:23 and 22:43.		

Survey Position 3: Ian Nelson

Time	Species	Notes
21:55	Common pipistrelle	Bat entered the survey area from the south.
22:45 to end	Common pipistrelle	Constant foraging over garden. No emergence or re-entry detected.
The Anabat Scout made the following recordings: 4 call sequences of common pipistrelle between 21:55 and 22:20. 3 call sequences of soprano pipistrelle between 22:38 and 22:52.		

7.2 Photographs

Photo 1: Front (southern) elevation of the property

Photo 2: Side (western) and front (southern) elevations

Photo 3: Western elevation

Photo 4: Northern elevation showing porch

Photo 5: Northern elevation

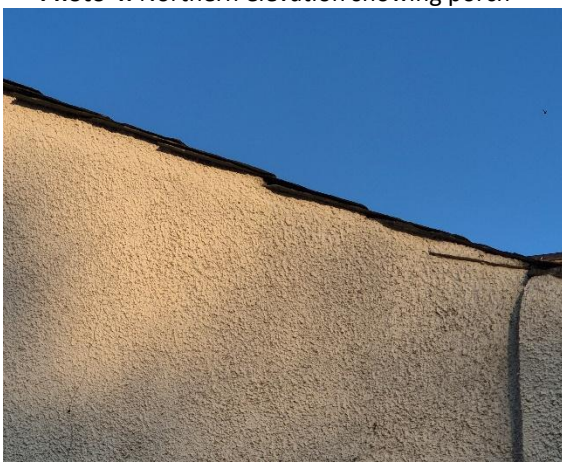

Photo 6: Gaps at roof verge at gable end

Photo 7: Gaps at roof verge at gable end

Photo 8: Lifted slates at west-facing roof pitch

Photo 9: Area above bedroom at front-east portion of the building

Photo 10: Roof void at front-west area of the building

Photo 11: Roof void at front-west area of the building

Photo 12: Vaulted ceilings to rear of building

Photo 13: NVA view at Survey Position 1

Photo 14: NVA view at Survey Position 2

Photo 15: NVA view at Survey Position 3

7.3 Figures

Figure 1: Aerial Image of the Site and its Surroundings

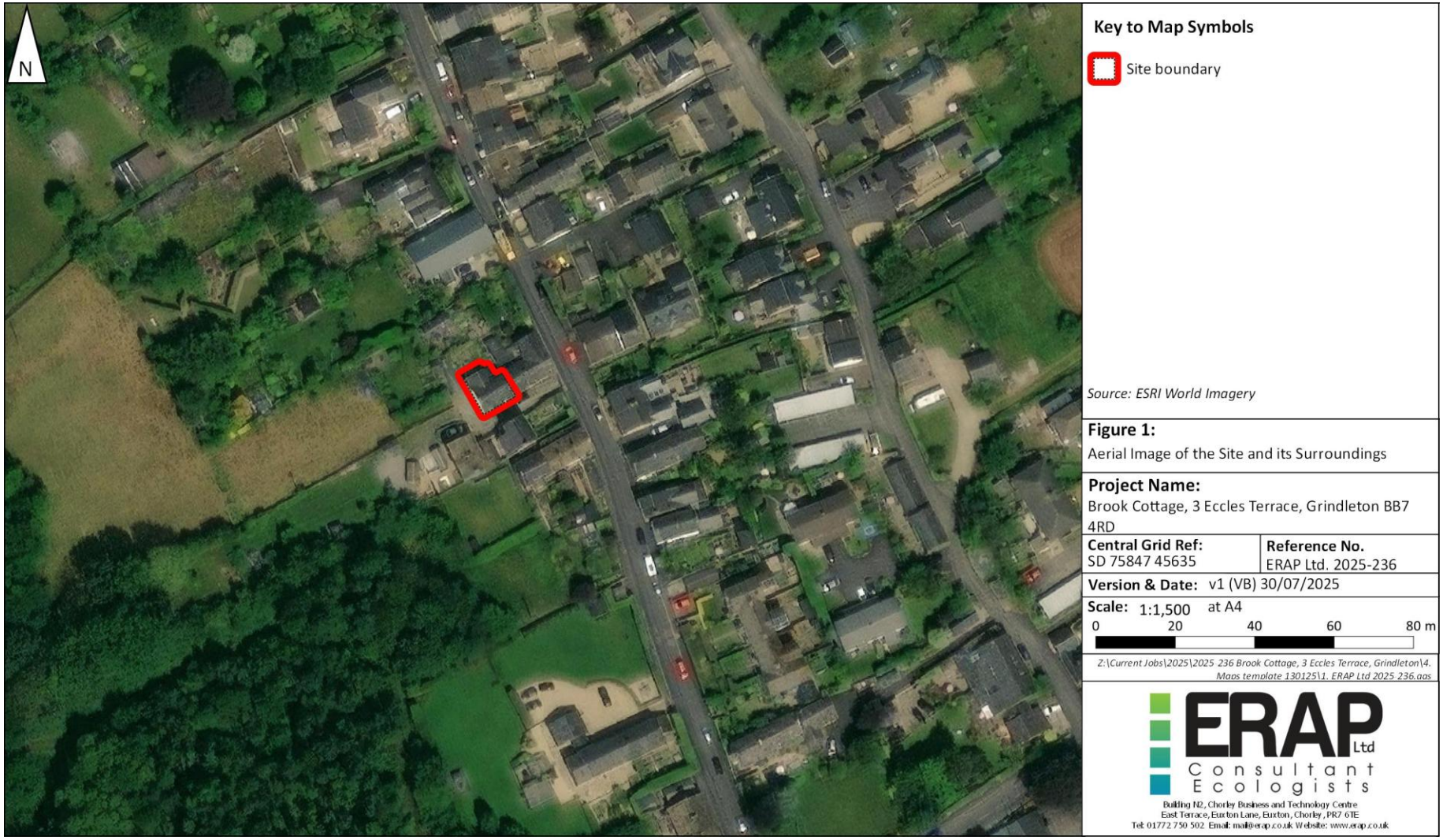

Figure 2: **Plan to Show Bat Surveyor and NVA Locations**