



PLAN FOR ECOLOGY

Bat Survey Report

Site: Borough Farm, Tresco, Isles of Scilly, TR24 0PX

Grid Reference: SV 89800 14920

24th July 2025; version 1



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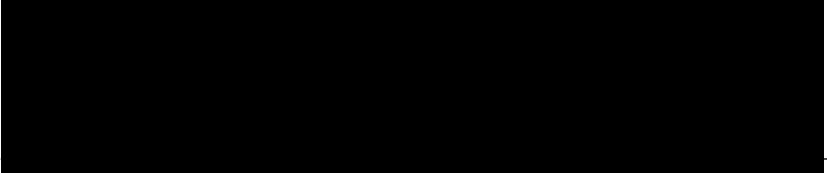
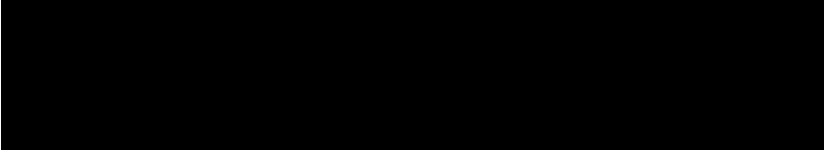


Document Control:

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OS Grid Reference:	SV 89800 14920
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Client:	Tresco Island Ltd
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Declaration:

"The information, evidence and advice, which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology & Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions."

Lucy Wright	
Kim Jelbert	

Report Lifespan:

Ecological features can change over time, particularly if site management/ use changes. At the time of writing, Local Planning Authorities (LPA) typically consider Ecology Reports to be valid for 12 months (until 20th June 2026), unless stated otherwise. Plan for Ecology Ltd considers phase 2 bat surveys to be valid for 24 months for planning purposes (until 20th June 2027).



CONTENTS

1.0	<u>SUMMARY</u>	3
2.0	<u>INTRODUCTION</u>	4
2.1	BACKGROUND	4
2.2	PROJECT ADMINISTRATION	5
2.3	LEGISLATION & PLANNING POLICY	5
3.0	<u>METHODOLOGY</u>	7
3.1	SUMMARY VISUAL ASSESSMENT AND DESK STUDY	7
3.2	ROOST CHARACTERISATION / EMERGENCE SURVEYS	8
3.3	DNA ANALYSIS	11
3.4	ECOLOGICAL EVALUATION	11
3.5	IMPACT ASSESSMENT	14
3.6	MITIGATION RECOMMENDATIONS	14
3.7	LIMITATIONS	14
4.0	<u>BAT SURVEY RESULTS</u>	15
4.1	SITE DESCRIPTION AND HABITAT ASSESSMENT	15
4.2	BAT VISUAL ASSESSMENT AND DESK STUDY SUMMARY	15
4.3	BAT EMERGENCE SURVEYS	21
4.4	DNA ANALYSIS	23
4.5	BAT SPECIES EVALUATION	23
5.0	<u>IMPACTS AND MITIGATION RECOMMENDATIONS</u>	25
5.1	EVALUATION OF DEVELOPMENT PROPOSALS AND IMPACTS	25
5.2	BAT MITIGATION	25
5.3	RESIDUAL IMPACTS	26
6.0	<u>REFERENCES</u>	27
7.0	<u>APPENDIX 1: PROPOSED SITE PLANS</u>	28
8.0	<u>APPENDIX 2: FIELD OF VIEW OF EACH CAMERA AT THE START AND END OF THE EMERGENCE SURVEYS</u>	29



1.0 Summary

Preliminary Bat Visual Assessment Summary:	<p>The buildings to be impacted by the proposed development at Borough Farm were visually inspected for evidence of roosting bats on 18th-19th March 2025.</p> <p>A single day roosting common pipistrelle bat (<i>Pipistrellus pipistrellus</i>) was found within the roof void of Borough Farmhouse. A number of potential roost features were also identified on the building exterior. Borough Farmhouse was assessed as a confirmed bat roost and as being of moderate suitability for roosting bats.</p> <p>The Staff Bungalow, Penolva and North Watch 1 and 2 also support potential roost features and were assessed as being of moderate suitability for roosting bats.</p> <p>The Artist Chalets 1 and 2 were found to support a small number of potential bat roost features and were assessed as being of low suitability to support roosting bats.</p> <p>In accordance with the 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (Collins, 2023), the following further surveys were recommended: two bat emergence surveys of Borough Farmhouse, the Staff Bungalow, Penolva and North Watch 1 and 2; and a single bat emergence survey of Artist Chalets 1 and 2.</p>
Bat Evidence:	<p>Borough Farmhouse, North Watch 1 and 2, and Artist Chalet 2 were confirmed to support roosting bats, as listed below.</p> <p>Borough Farmhouse: One common pipistrelle bat day roost beneath the ridge tiles/ within the eastern roof void, supporting a single individual.</p> <p>North Watch 1 and 2: One common pipistrelle bat day roost beneath the fascia board on the west gable end, supporting a single individual.</p> <p>Artist Chalet 2: One common pipistrelle bat day roost beneath the soffit board on the south-west corner, supporting a single individual.</p> <p>No bats were observed to emerge from or enter the Staff Bungalow, Penolva or Artist Chalet 1, indicating that these three buildings are not in current use by roosting bats.</p>
Proposed works:	<p>Demolition and replacement of Borough Farmhouse, North Watch 1 and 2, Penolva, the Artist Chalets 1 and 2; conversion of the Staff Bungalow to a sauna and gym; construction of two energy stores and two staff accommodation blocks.</p>
Bat specific mitigation:	<p>Works to Borough Farmhouse, North Watch 1 and 2 and Artist Chalet 2 will not commence until an appropriate licence has been obtained from Natural England. The licence cannot be obtained until planning consent is in place. The named ecologist or an accredited agent must deliver an on-site toolbox talk to the contractors immediately prior to commencement of works. Works will be scheduled for a time of year when bats are least likely to be impacted.</p> <p>Three alternative day roosts for common pipistrelle bat will be created within the replacement buildings comprising a combination of: raised ridge tiles/bat slates over a bat-safe membrane; spacing off timber fascia boards</p>



	<p>by 20mm x 50mm; and/or provision of integral bat boxes within the fabric of the proposed buildings.</p> <p>Where bats can make contact with the roof membrane, this must comprise bitumen type 1F or a non-bitumen coated roofing membrane (NBCRM) with a test certificate approved by Natural England</p> <p>No exterior lighting will be installed close to the temporary or permanent bat roost features and no bat roost features will be located close to potential sources of light spill such as glazing.</p> <p>Ahead of works, one bat box (Large Multi Chamber Woodstone bat box or comparable product) will be installed within a tree or structure on the site. Soft striping of the roofs/ fascias/ soffits prior to demolition will be completed under an ecological watching brief and following a thorough search of the buildings for bats; any common pipistrelle bats uncovered will be relocated to the bat box.</p> <p>Building contractors will be briefed prior to commencement of site works. Contractors will be notified about the presence of bats and informed that if a bat/s is uncovered during works, work must stop immediately (as soon as it is safe to do so) and advice sought from a licenced bat ecologist.</p> <p>No bat roosts were identified within the Staff Bungalow, Penolva or Artist Chalet 1. Precautionary recommendations are provided and must be implemented during the demolition/ conversion of these three buildings.</p>
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2.0 Introduction

2.1 Background

Plan for Ecology Ltd was commissioned by Tresco Island Ltd to undertake an Ecological Impact Assessment of land and buildings at Borough Farm, Tresco (OS Grid Ref: SV 89800 14920) in late February 2025. The Ecological Impact Assessment included a Preliminary Roost Assessment of buildings to be impacted by the proposed development. The applicant seeks planning consent to demolish and replace existing residential and holiday units, convert an existing residential property into a sauna and gym, erect two energy stores and construct two staff accommodation blocks. The indicative site plans are provided at Appendix 1.

During the initial visual assessment, a single day roosting common pipistrelle bat (*Pipistrellus pipistrellus*) was observed on-site within the roof void of Borough Farmhouse. Four buildings within the site (Borough Farmhouse, North Watch 1 and 2, Penolva and the Staff Bungalow) were assessed as being of 'moderate' suitability for roosting bats in accordance with Collins (2023). Two buildings within the site (the Artist Chalets 1 and 2) were assessed as being of 'low' suitability for roosting bats. A further four buildings within the site (Eastern Watch and Outbuildings 1-3) were assessed as being of negligible suitability for roosting bats (Plan for Ecology Ltd, 2025).

In accordance with the 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (Collins, 2023), further bat surveys were recommended, comprising a minimum of two bat emergence surveys (roost characterisation and presence/ absence surveys) of Borough Farmhouse, North Watch 1 and 2, Penolva and the Staff Bungalow, and one bat emergence survey of the Artist Chalets 1 and 2. **NB.** Following the first bat emergence survey of Artist Chalet 2, during which a bat was seen to emerge from the building, an additional bat survey was recommended.



In April 2025, Tresco Island Ltd commissioned Plan for Ecology Ltd to undertake the further survey work. This report describes and evaluates the use of the buildings by bats, and details mitigation recommendations to minimise impacts upon bats in accordance the 'Bat Surveys for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2023) and UK Bat Mitigation Guidelines (Reason and Wray, 2023).

2.2 Project Administration

Property Address:	Borough Farm, Tresco, Isles of Scilly, TR24 0PX
OS Grid Reference:	SV 89800 14920
Client:	Tresco Island Ltd
Planning Authority:	Council of the Isles of Scilly
Planning Reference Number:	Unknown
Report Reference Number:	P4E3797
Proposed work:	The applicant seeks planning consent to demolish and replace existing residential and holiday units, convert an existing residential property into a sauna and gym, erect two energy stores and staff accommodation blocks, and associated improvement of the site infrastructure and landscaping.
Visual Assessment Date:	18 th and 19 th March 2025 (Preliminary Roost Assessment and Nesting Bird Assessment)
Emergence Survey Dates:	12 th – 14 th May and 18 th – 20 th June 2025
Ecologists & Licence Number:	Dr Kim Jelbert BSc (Hons), MSc, PhD, MCIEEM; bat licence no: 2015-10444-CLS-CLS; Registered Consultant: RC224; BER0205 WML-CL47 (Annex A & B); Barn owl licence no. CL29/00037; Dormouse licence no: 2016-22394-CLS-CLS. Nicola Dyer BSc (Hons) MSc MCIEEM; bat licence: 2019-40485-CLS-CLS (CL18) Holly Thomas FdSc Qualifying CIEEM member. Dr Lucy Wright BSc (Hons) MSc PhD MCIEEM; bat licence no. 2024-11908-CL18-BAT.

2.3 Legislation & Planning Policy

Planning: The local planning authority has a statutory obligation to consider impacts upon protected species resulting from development. Planning permission will not be granted with outstanding ecological surveys, and if applicable an appropriate mitigation plan.

Bats: In Britain protection of European Protected Species (EPS) such as bats is achieved through their inclusion on Schedule 2 of the Conservation and Habitats Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (HM Government, 2019)), Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 12 of the Countryside and Rights of Way Act 2000 (HM Government, 1981, 2000, 2017, 2019).

As a result of this statutory legislation, it is an offence to:

- Deliberately capture, injure or kill a bat;



- Intentionally or recklessly disturb a bat/s in its roost;
- Intentionally or recklessly damage, destroy or obstruct access to a bat roost (even if bats are not occupying the roost at the time);
- Possess or sell or exchange a bat (dead or alive) or part of a bat.

Works with potential to cause significant disturbance to roosting bats may require a European Protected Species (EPSL) licence, Bat Mitigation Class Licence (CL21) or Bat Earned Recognition Class Licence (WML-CL47) from Natural England before works can legally commence. Works likely to result in less significant disturbance may be carried out under a Bat Mitigation Method Statement. The magnitude of disturbance and, therefore, the requirement for an EPSL, Bat Mitigation Class Licence, Bat Earned Recognition Class Licence or method statement is assessed on a case-by-case basis by the bat ecologist. The Bat Mitigation Method Statement or appropriate licence application must be prepared and/or applied for by a suitably experienced and licenced bat ecologist. Where planning permission is required, the appropriate licence cannot be obtained until planning permission has been granted.



3.0 Methodology

3.1 Summary Visual Assessment and desk study

A visual assessment of buildings at Borough Farm, Tresco was undertaken on 18th and 19th March 2025. Figure 1, below, shows the red line planning boundary incorporating the buildings included in the visual assessment. The ecologist (Kim Jelbert) assessed the suitability of the buildings and the surrounding habitat to support bats. A high-power torch was used to illuminate all accessible areas of the buildings with potential to support roosting bats. The ecologist searched for signs of bats including droppings, fur oil staining, urine staining, feeding remains, audible squeaking, bat-fly (Nycteribiid) pupal cases and odour.

The assessment was carried out in accordance with the 'Bat Survey for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2023). Potential/confirmed bat roosts identified during the visual inspections of the building were categorised as to their suitability in accordance with the guidelines (Collins, 2023) as detailed in Table 1 below:

Table 1: Categorisation of bat roost suitability in accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins, 2023).

Suitability Category	Description
None	No habitat features on site likely to be used by roosting bats at any time of year.
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more features with potential to support individual bats opportunistically at any time of year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts such as maternity or classic hibernation roosts.

A search of all ecological records and site designations held by the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS, to 2025) within a 1km radius of the site was undertaken to inform the Ecological Impact Assessment (Plan for Ecology Ltd, 2025). A further search of records of granted bat European Protected Species (EPS) licences within a 2km radius of the site shown on Natural England's MAGIC website <https://magic.defra.gov.uk/> was also undertaken.



Figure 1. Existing site plan showing buildings present within the red line planning boundary.

3.2 Roost Characterisation / Emergence Surveys

Bat emergence surveys were undertaken in May – June 2025; the survey dates, surveyors present, and the equipment used on each survey occasion are detailed in Table 2 below. An emergence survey involves an ecologist(s) counting the number of bats emerging from the building, commencing 15 minutes before sunset and continuing for a period of at least 1.75 hrs. The surveyor(s) record the calls of any bats that emerge using a bat detector and recording equipment; this enables identification of the species present and the location of bat access points.

The various types of bat detector use different methods of detecting: the Echo Metre Touch (EMT) detectors use heterodyne and real-time expansion; the Anabat Chorus and Full Spectrum Express detectors use frequency division; and the Elekon Batlogger M2 uses heterodyne, real-time expansion, frequency division and pitch shifting. These methods of detection are described below:

- Frequency division: this method automatically and continuously records bat calls at all frequencies and makes them audible to the human ear by dividing the call frequency by 10. Calls are played in real time and can be readily identified with sound analysis.
- Heterodyne: this method identifies bat calls echolocating at the frequency set by the operator but will fail to/ or only partially record bat calls outside this frequency.
- A real-time expansion bat detector digitally records ultrasonic bat calls and then plays them back at a slower rate and frequency to give an audible output.



- Pitch shifting compresses the ultrasonic spectrum into an audible band by shifting the pitch of the sound, allowing calls to be heard in real time. Harmonic components and amplitude of bat calls are kept in the process. Files are recorded for subsequent sound analysis

All surveyors used video recording equipment and infrared torches/ lamps or thermal imaging cameras in accordance with the interim guidance note on the use of night vision aids (BCT, 2022) and 'Bat Survey for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2023). The Nightfox Whisker infrared camera and Pixfra Arc A613 thermal camera are widely and successfully used to record bats emerging from buildings. The field of view from each camera at the start and end of the survey are shown in the images at Appendix 2.

Table 2: Borough Farm, Tresco - emergence survey metadata

Building	Emergence Survey Date	Surveyors	Equipment	Sunset Time	Start and End Times	Weather
North Watch and Penolva	12/05/2025	Kim Jelbert Nicola Dyer Additional cameras	Batlogger M2 Pixfra Arc A613 thermal camera EMT 2 & Anabat Chorus Nightfox Whisker Camera + XB5 Pro Infrared Torch x2 Nightfox Whisker Cameras + x2 infrared floodlights, each paired with a full spectrum Anabat Express, or Anabat Chorus	21:01	20:46 - 22:31	Dry and clear; 13°C (start and end); light air.
Staff Bungalow and Artist Chalet 1	13/05/2025	Kim Jelbert Nicola Dyer Additional cameras	Batlogger M2 Pixfra Arc A613 thermal camera EMT 2 & Anabat Chorus Nightfox Whisker Camera + XB5 Pro Infrared Torch x2 Nightfox Whisker Cameras + x2 infrared floodlights, each paired with a full spectrum Anabat Express, or Anabat Chorus	21:02	20:47 - 22:32	Dry and part cloud; 14°C (start and end); light breeze.
Borough Farmhouse and Artist Chalet 2	14/05/2025	Kim Jelbert Nicola Dyer Additional cameras	Batlogger M2 Pixfra Arc A613 thermal camera EMT 2 & Anabat Chorus Nightfox Whisker Camera + XB5 Pro Infrared Torch x2 Nightfox Whisker Cameras + x2 infrared floodlights, each paired with a full spectrum Anabat Express, or Anabat Chorus	21:04	20:49 - 22:34	Dry and clear; 13°C (start) - 12°C (end); light air.



Building	Emergence Survey Date	Surveyors	Equipment	Sunset Time	Start and End Times	Weather
North Watch and Penolva	18/06/2025	Lucy Wright	EMT 2 & Anabat Chorus Nightfox Whisker Camera + XB5 Pro Infrared Torch	21:37	21:22 - 23:07	Dry and clear; 16°C (start) - 14°C (end); light breeze.
		Holly Thomas	Batlogger M2 Nightfox Whisker Camera + Infrared Torch			
		Additional cameras	x2 Nightfox Whisker Cameras + x2 infrared floodlights, each paired with a full spectrum Anabat Express, or Anabat Chorus			
Staff Bungalow and Artist Chalet 2	19/06/2025	Lucy Wright	EMT 2 & Anabat Chorus Nightfox Whisker Camera + XB5 Pro Infrared Torch	21:37	21:22 - 23:07	Dry and full cloud; 17°C (start and end); moderate breeze.
		Holly Thomas	Batlogger M2 Nightfox Whisker Camera + Infrared Torch			
		Additional cameras	x2 Nightfox Whisker Cameras + x2 infrared floodlights, each paired with a full spectrum Anabat Express, or Anabat Chorus			
Borough Farmhouse	20/06/2025	Lucy Wright	EMT 2 & Anabat Chorus Nightfox Whisker Camera + XB5 Pro Infrared Torch	21:38	21:23 - 23:08	Dry and full cloud; 17°C (start) - 16°C (end); no wind.
		Holly Thomas	Batlogger M2 Nightfox Whisker Camera + Infrared Torch			

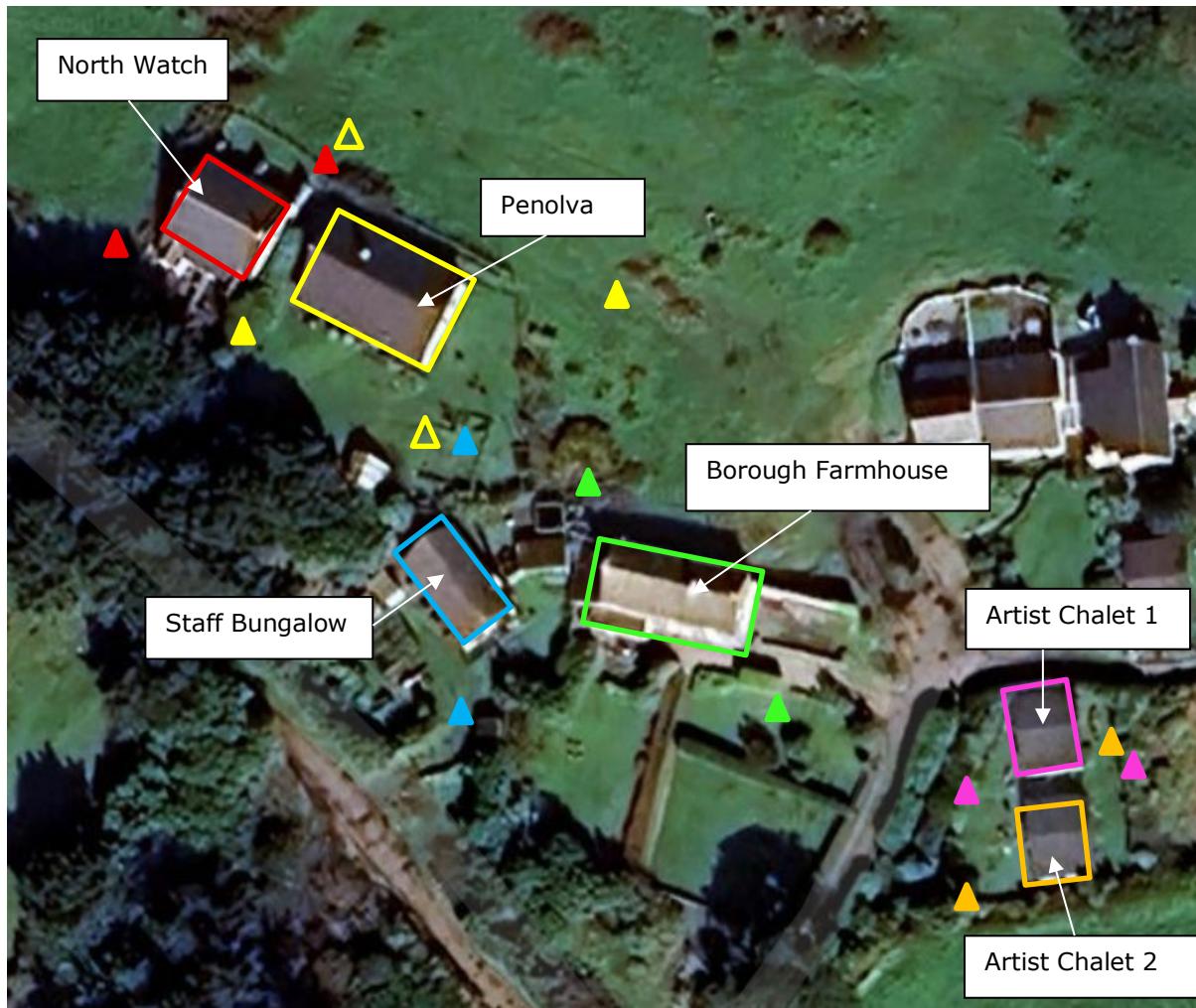


Figure 2: Emergence surveys – aerial view of the site showing the buildings surveyed. Triangles indicate surveyor and/or camera locations during the emergence survey(s) of each building. NB. Unfilled yellow triangles indicate location of surveyors/ cameras on first emergence survey of Penova and filled yellow circles on second emergence survey.

3.3 DNA analysis

Samples of mammal droppings collected from the roof voids of the Staff Bungalow, Penova and North Watch 1 and 2 were sent for DNA analysis to provide further information on the species present. DNA analysis was carried out by SureScreen Scientifics Ltd, Derbyshire, U.K.

3.4 Ecological Evaluation

The value of the buildings for roosting bats is determined following the framework provided by Reason and Wray (2023). This framework determines the appropriate value of a roost on a geographic scale, based on the relative rarity of the bat species using the site (based on the known distribution and population size in the U.K. and within the region in which the roost is located), as well as the type of roost (based on the results of the emergence/ re-entry and static detector surveys (where applicable). Where more than one bat species is present within the site, each species is valued individually, and the highest value obtained is assigned to the site.



Table 3 (below) categorizes bat species by their distribution and rarity in England. Table 4 (below) assigns a value for each roost type for the different rarity categories (Tables 3 and 4 are adapted from Reason and Wray 2023).

Table 3: Relative rarity of bat species in England (adapted from Reason and Wray 2023)

Rarity (within range)	Region
	Southwest England & South Wales
Widespread	Common pipistrelle (<i>Pipistrellus pipistrellus</i>) Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>) Brown long-eared (<i>Plecotus auritus</i>)
Widespread in many geographies, but not as abundant in all	Whiskered (<i>Myotis mystacinus</i>) Brandt's (<i>Myotis brandtii</i>) Daubenton's (<i>Myotis daubentonii</i>) Natterer's (<i>Myotis nattereri</i>) Noctule (<i>Nyctalus noctula</i>)
Rarer or restricted distribution	Lesser horseshoe (<i>Rhinolophus hipposideros</i>) Leisler's (<i>Nyctalus leisleri</i>) Nathusius' pipistrelle (<i>Pipistrellus nathusii</i>) Serotine (<i>Eptesicus serotinus</i>)
Rarest Annex II species and very rare	Greater horseshoe (<i>Rhinolophus ferrumequinum</i>) Bechstein's (<i>Myotis bechsteinii</i>) Barbastelle (<i>Barbastella barbastellus</i>) Grey long-eared (<i>Plecotus austriacus</i>)



Table 4: Value of bat roosts (adapted from Reason and Wray, 2023)

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	Autumn swarming sites (largely, vesper species which hibernate underground)	Maternity sites
Widespread all geographies	Site	Site	Site	Site/ Local	District/County	District/County	Unlikely to exceed District importance unless colonies are atypically large
Widespread in many geographies, but not as abundant in all	Site	Site	Site, dependent on local distribution	District	District/County importance dependent on size and number of species	County/Regional importance dependent on size; importance increased for larger sites that serve larger numbers/species	Unlikely to exceed County importance unless colonies are atypically large
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 and local distribution	County/Regional importance on size and local distribution	County/ Regional importance on size and local distribution
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 and local distribution	County/ Regional importance on size and local distribution	County/ Regional importance on size and local distribution' increased value for assemblages.



3.5 Impact Assessment

Where an impact (positive or negative) on the integrity of a defined feature (habitat, species or ecosystem) was identified, the impact significance has been described in the following terms: major, moderate, minor and negligible.

The likelihood of the impact occurring was described as: certain / near certain (probability estimated at 95% chance or higher), probable (probability estimated above 50% but below 95%), unlikely (probability estimated above 5% but below 50%) and extremely unlikely (probability estimated below 5%).

Reference has also been made to the extent and magnitude of impact (i.e., area affected) and duration (short-term impacts associated with construction and long-term impacts associated with the operational phase of the development).

The impact significance of the proposed development on the integrity of the site as a whole has been determined using the framework described above. A significant effect is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general (CIEEM, 2024).

Available guidance and information, notably on the distribution and status of the species, and characterisation of impacts on the species/ species group (Reason and Wray, 2023), along with professional judgment have been used to determine impact significance.

3.6 Mitigation Recommendations

Recommendations are provided using the Mitigation Hierarchy (British Standard, 2013; CIEEM, 2024). The Mitigation Hierarchy seeks to avoid impacts, then to mitigate unavoidable impacts, and, as a last resort, to compensate for residual impacts that remain after implementation of avoidance and mitigation measures.

3.7 Limitations

The buildings were fully accessible and could be inspected for evidence of bats. Some of the buildings within the site support exterior features that could not be fully inspected for roosting bats. The roofs and upper parts of the buildings were viewed from ground level, and it is possible that some potential roost features (PRFs) are present at height that were not visible from the ground. These limitations were addressed by undertaking one or two bat emergence surveys of buildings assessed as being of 'low' or 'moderate' suitability for roosting bats respectively, during the bat active season. There are no limitations associated with weather conditions.

The bat surveys were undertaken in accordance with best practice guidance; however, the results of these surveys represent only a snapshot of use at the time of survey.

The calls of four bat species are notoriously difficult to record: the long-eared bats (*Plecotus spp.*) and the barbastelle bat have a quiet echolocation call, and the horseshoe bats (*R. hipposideros* & *R. ferrumequinum*) have highly directional calls. The long-eared, barbastelle and horseshoe species can be easily missed during bat detector surveys. Where applicable, we presume all *Plecotus spp.* recordings are those of brown long-eared bat because Cornwall and the Isles of Scilly are outside the known range of the grey long-eared bat.



4.0 Bat Survey Results

4.1 Site Description and Habitat Assessment

The site, measuring c. 0.95 ha, comprises land within the red line boundary shown on Figure 1 above. The site is located c. 1km southeast of New Grimsby Harbour and c. 0.4km north of Pentle Bay on the island of Tresco, Isles of Scilly. Tresco is the second largest island in the Isles of Scilly archipelago, which is a group of c. 200 islands and rocky outcrops located c. 45km southwest of Lands' End, Cornwall, United Kingdom.

The site is located within an area designated as a 'National Landscape', formally referred to as an 'Area of Outstanding Natural Beauty' (AONB) and comprises part of a cattle grazed field enclosure, other coniferous woodland and several buildings in residential and holiday use with associated outbuildings, vegetated gardens and ornamental hedging. Beyond the immediate red line planning boundary, pasture grazed by cattle dominates to the north, east and immediate south, with coniferous woodland and introduced shrub planting immediately to the west. The coast lies c. 246m to the east at its nearest point. Habitats in the wider area comprise pasture, pockets of broadleaved and coniferous woodland, heathland, coastal and freshwater habitats. Buildings in the wider area comprise a mixture of period and modern properties with vegetated gardens, outbuildings and barns. In combination, these features provide potentially important foraging, commuting and roosting habitat for bats.

4.2 Bat Visual Assessment and Desk Study Summary

The desk study undertaken to inform the EcIA (Plan for Ecology Ltd, 2025) returned records for two bat species from within a 1km radius of the site: brown long-eared bat and common pipistrelle bat, plus records for *Pipistrelle* species (not identified to species level). In addition to the bat species records returned by the desk study assessment, the author is aware of several common pipistrelle bat roosts including two maternity roosts and multiple day roosts, and one brown long-eared bat day roost on the island of Tresco.

The search of granted bat European Protected Species (EPS) licences was undertaken on 21st July 2025. The search revealed no granted bat EPS licence within 2km of the proposed development site.

The visual assessment and inspection of the buildings for evidence of roosting bats was undertaken on 18th – 19th March 2025; for full details and further images of the visual assessment see Plan for Ecology Ltd (2025).

Borough Farmhouse:

Borough Farmhouse is a two-storey stone farmhouse in use as a holiday rental (Figs. 3-4). The building features a slate tile roof with concrete ridge tiles, one row of slate hanging tiles on the gable ends, three stone chimneys with clay pots, and timber fascia boards, windows and doors. A single storey mono-pitched protection is located on the west gable end, together with a tile roofed, single storey sunroom off the south elevation. Several gaps are present beneath the ridge tiles, notably towards the east gable end of the property. There are also gaps beneath the timber fascia boards and hanging tiles. These features have potential to provide suitable roost sites for bats or access to the roof void interior.

Internally, there are two accessible shallow, unlined roof voids above the first floor; each void measures c. 1.2m x 4m x 4m. Access was limited to the immediate vicinity of the loft hatches due to the shallow pitch of the roof. No bat droppings were found but a single common pipistrelle bat was observed roosting at the ridge within the most easterly roof void (Fig. 5). This bat, observed on a warm, sunny day on 19th March 2025, was very active and quickly moved away from the torch light, suggesting that this bat was day roosting as opposed to hibernating. NB. the roof void in which



the bat was located slopes south and would likely warm up on sunny days, even in winter. Hibernating bats require consistently cool and humid conditions, and the roof void within Borough Farmhouse does not provide these conditions.



Figure 3: South elevation of Borough Farmhouse.



Figure 4: North elevation and west gable end of Borough Farmhouse.



Figure 5: Eastern roof void interior of Borough Farmhouse and roosting common pipistrelle bat at ridge (red outline).

Borough Farmhouse is a confirmed bat roost and was assessed as being of '**moderate**' suitability for roosting bats, in line with Collins (2023).

Staff Bungalow:

The Staff Bungalow is in full-time occupation as a residential property (Fig. 6). The property is of block construction with a composite tile roof, concrete ridge tiles and a single rendered chimney. The window and door apertures and fascia boards are timber, and the exterior of the property features a pebbledash render and uPVC rainwater goods. The gable ends of the property are clad with hanging composite tiles. There are gaps beneath the hanging tiles, timber fascia boards and potentially beneath ridge tiles around the chimney. These features have potential to provide suitable roost sites for bats or access to the roof void interior.

Internally, the Staff Bungalow features a single large, uncluttered roof void above the ground floor. The void has a traditional timber structure without struts and purlins and is lined with a bitumen membrane.

The Staff Bungalow was assessed as being of '**moderate**' suitability for roosting bats, in line with Collins (2023).



Figure 6: South and east elevations of the Staff Bungalow.

North Watch 1 & 2:

North Watch comprises two semi-detached, residential, single-storey buildings in current use. The combined property features a slate roof with clay ridge tiles and two rendered chimneys (Fig. 7). The fascia boards, soffits, window and door apertures are timber. The property is likely of block construction and is rendered externally. There are gaps beneath three missing roof tiles, beneath the timber fascia boards, occasional gaps where the soffit meets the wall top, and a possible gap at the ridge was noted. These features have potential to provide suitable roost sites for bats or access to the roof void interior. Internally, there is a separate roof void above each property (North Watch 1 & 2). Both voids feature 'W' style crossing roof timbers and a synthetic roof lining and are boarded out for storage.

North Watch 1 and 2 were assessed as being of '**moderate**' suitability for roosting bats in line with Collins (2023).



Figure 7: North Watch 1 (left) and 2 (right) – south and west elevations.



Penolva:

Penolva comprises a single-storey, detached residential property (Figs 8-9). The property features composite roof tiles and concrete ridge tiles, timber fascia boards, soffits, window and door apertures, uPVC rainwater goods and a single rendered chimney. Penolva is likely of block construction and is rendered externally. Timber cladding is present on the gable ends of the property and the exterior of the property is stone-clad on the north elevation. Potential gaps were noted at the ridge, beneath the timber cladding on the gable ends, beneath the timber soffits and at the gable apex. These features have potential to provide suitable roost sites for bats or access to the roof void interior. Internally, the property features a single, large bitumen lined roof void over the ground floor. Light was noted penetrating the void indicating potential access points for bats. The roof void is partially boarded out and in use for storage. Rolled insulation is present between the timber floor joists.

Penolva was assessed as being of '**moderate**' suitability for roosting bats, in line with Collins (2023).



Figure 8: South elevation and east gable end of Penolva showing timber clad gable.



Figure 9: Roof void interior of Penolva.



Artist Chalets 1 & 2:

The Artist Chalets comprise two detached chalets of timber construction with timber soffits and fascia boards, a bitumen roof covering and uPVC windows and rainwater goods (Figs 10-11). The chalets have no accessible roof voids internally but there is likely a shallow void above the interior ceilings. Externally, there are 1-2cm gaps beneath the soffit board on the gable ends of each chalet. These features have some limited potential to provide suitable roost sites for bats or access to the roof void interior.

Artist Chalets 1 and 2 were assessed as being of 'low' suitability for roosting bats, in line with Collins (2023). **NB.** Following the first bat emergence survey of Artist Chalet 2, during which a bat was seen to emerge from the building, an additional bat survey was recommended.



Figure 10: Artist Chalet 1.



Figure 11: Artist Chalet 2 (right).



Four further buildings within the site (Eastern Watch and Outbuildings 1-3) were assessed as being of 'negligible' suitability for roosting bats and are not described further here. See Plan for Ecology Ltd (2025) for a description of these buildings.

4.3 Bat Emergence Surveys

Borough Farmhouse:

During the first emergence survey on 14th May 2025, one non-echolocating bat was observed to emerge from the roof ridge at the eastern end of the building (Fig. 12). Based on the results of the visual assessment, during which a common pipistrelle bat was seen day roosting below the ridge within the eastern roof void, this bat is assumed to be a common pipistrelle bat.

During the second emergence survey on 20th June 2025, no bats were observed to emerge from or enter the building.



Figure 12: South elevation of Borough Farmhouse showing bat emergence location.

Staff Bungalow:

No bats were observed to emerge from or enter the Staff Bungalow during the emergence surveys, undertaken on 13th May and 19th June 2025.

North Watch 1 and 2:

During the first survey on 12th May 2025, one common pipistrelle bat emerged from beneath the fascia on the west gable end (Fig. 13). During the second emergence survey on 18th June 2025, one non-echolocating bat emerged from the same access point as during the first survey; based on the results of the first emergence survey, this bat is assumed to be a common pipistrelle.



Figure 13: South elevation and west gable end of North Watch showing bat emergence location.

Penolva:

No bats were observed to emerge from or enter Penolva during the emergence surveys, undertaken on 12th May and 18th June 2025.

Artist Chalets 1 and 2:

No bats were observed to emerge from or enter Artist Chalet 1 during the emergence survey undertaken on 13th May 2025.

During the first emergence survey of Artist Chalet 2 on 14th May 2025, a single common pipistrelle bat emerged from beneath the soffit on the south-west corner of the building. During the second emergence survey, undertaken on 19th June 2025, a single common pipistrelle bat emerged from the same location as during the first survey. **NB.** A second survey of Artist Chalet 2 was required because a bat emerged from the building during the first emergence survey.



Figure 14: West elevation of Artist Chalet 2 (right) showing bat emergence location.



4.4 DNA Analysis

DNA analysis of mammal droppings collected from the roof voids of Penolva and North Watch 1 confirmed that the droppings from these buildings were deposited by lesser white-toothed shrew (*Crocidura suaveolens*), and not by a bat species. DNA analysis of the droppings collected from North Watch 2 could not determine species, and DNA analysis of the droppings collected from the Staff Bungalow confirmed the presence of brown rat (*Rattus norvegicus*).

4.5 Bat Species Evaluation

The combined survey results have shown that Borough Farmhouse, North Watch and Artist Chalet 2 within the Borough Farm site each support a common pipistrelle bat day roost, as detailed in Table 5 below. No bat roosts were identified within the Staff Bungalow, Penolva or Artist Chalet 1.

Table 5: Bat roosts located within buildings at Borough Farm: type, species, building, roost feature location, peak count and ecological importance.

Ref.	Building	Species.	Roost Types	Peak Count	Roost Feature	Status
1	Borough Farmhouse	Common pipistrelle	Day	1	Beneath ridge tile / within easternmost roof void; accessed via gap beneath ridge tile.	Site
2	North Watch	Common pipistrelle	Day	1	Beneath fascia board, west gable end; accessed via gap beneath fascia board.	Site
3	Artist Chalet 2	Common pipistrelle	Day	1	Beneath soffit at south-west corner of building; accessed via gap between soffit and wall top.	Site

NB. A common pipistrelle bat was observed roosting beneath the ridge within the eastern roof void of Borough Farmhouse during the visual assessment, undertaken on warm, sunny day on 19th March 2025. This bat was very active and quickly moved away from the torch light. It is likely that this bat was day roosting as opposed to hibernating. The roof void in which the bat was located slopes south and would likely warm up on sunny days, even in winter. Hibernating bats require consistent cool and humid conditions, and the roof void within Borough Farmhouse does not provide these conditions.

Common pipistrelle bat: Common pipistrelle bat is a crevice dwelling bat species that typically roosts between slates/ tiles and the roofing felt, or beneath fascia boards/ soffits. This species is common and widespread throughout the UK. The population of common pipistrelle in England is considered to have increased in the long-term (since 1999) and to have been stable in the short-term (since 2018) (Bat Conservation Trust, 2025).

Borough Farm supports three day roosts for common pipistrelle bat, as described in Table 5, above and shown in Fig. 15, below. The common pipistrelle bat day roosts at Borough Farm are all considered to be of **low conservation significance** for this bat species.

Following the framework described by Reason and Wray (2023), as outlined in Section 3.6 above (Tables 3-4), the rarity of the bat species recorded on-site is 'widespread' for common pipistrelle bat. The corresponding value for a day roost for a single non-breeding common pipistrelle bat (widespread species) is 'Site' level.



The site at Borough Farm, Tresco is, therefore, considered to be of **Site** importance for roosting bats.



Figure 15: Aerial view of Borough Farm showing location of identified bat roosts: yellow arrows indicate locations of common pipistrelle bat day roosts.



5.0 Impacts and Mitigation Recommendations

5.1 Evaluation of Development Proposals and Impacts

The survey results have shown that the buildings at Borough Farm support three common pipistrelle bat day roosts in total, each supporting likely a single individual, as described in Section 4.5, above. The proposed site plans are provided at Appendix 1. The applicant seeks planning consent to demolish and replace the existing residential and holiday units (including Borough Farmhouse, North Watch 1 and 2 and Artist Chalet 2), convert an existing residential property (Staff Bungalow) into a sauna and gym, erect two energy stores and construct two staff accommodation blocks.

In the absence of mitigation, the proposals have the potential to disturb, injure or kill bats during the construction phase, and are certain to result in the loss of the identified bat roosts due to proposed demolition of the existing buildings. The predicted impact of the proposed development on the local bat populations is detailed in Table 6 below:

Table 6: Predicted impact of the proposed development on the local bat populations in the absence of mitigation.

Building	Roost Type	Species	Location	Peak Count	Predicted Impact
Borough Farmhouse	Day	Common pipistrelle	Beneath ridge tile / within easternmost roof void.	1	Roost loss. Long-term, certain, negative, site.
North Watch	Day	Common pipistrelle	Beneath fascia board, west gable end.	1	Roost loss. Long-term, certain, negative, site.
Artist Studio 2	Day	Common pipistrelle	Beneath soffit at south-west corner of building.	1	Roost loss. Long-term, certain, negative, site.

In the absence of mitigation, the identified impact on roosting bats is considered likely to be **long-term in duration, of certain occurrence, negative within the site and of minor significance**.

5.2 Bat Mitigation

To avoid, mitigate and compensate for the potential impacts identified above, loss of the identified common pipistrelle bat roosts must be compensated by incorporating alternative roost provision within the replacement buildings. An outline of the recommended mitigation (to be agreed with the client) is provided below:

- Works to Borough Farmhouse, North Watch 1 and 2 and Artist Chalet 2 will not commence until an appropriate licence has been obtained from Natural England. The named ecologist or an accredited agent must deliver an on-site toolbox talk to the contractors immediately prior to commencement of works and supervise all works with potential to impact roosting bats (e.g. roof stripping prior to demolition). If the licence application is to be delayed beyond May 2026, then an update emergence survey(s) of the buildings is likely to be required, to be undertaken between May-September. **NB.** This is a condition of the licence application and is not a planning requirement. The current level of survey effort is sufficient to inform a planning application. No further survey effort is required to inform the planning application. The licence cannot be obtained until planning consent is in place.
- Works will be scheduled for a time of year when bats are least likely to be impacted. Works will not be permitted to commence between mid-November to mid-March; however, once the buildings have been made unsuitable for bats, works can continue through the winter.



- Soft-stripping of the roofs, fascias, soffits and guttering etc. will be carried out under the direct supervision of a bat-licenced ecologist and following an inspection of the buildings for roosting bats. Any common pipistrelle bats uncovered will be relocated to a bat box installed within a nearby tree. NB: the bat box (Large Multi Chamber Woodstone bat box or a comparable product) will be installed within a tree / structure within the site in advance of works commencing. See <https://www.nhbs.com> for product specification.
- The three common pipistrelle bat day roosts will be lost. Three alternative roost features must be provided within the replacement buildings. These should comprise a combination of raised ridge tiles/ bat slates over a bat safe membrane; 20mm x 50mm gaps beneath timber fascia boards; and/or bat boxes incorporated into the fabric of the proposed buildings (to be agreed with the client). The alternative roost features should be located as close as possible to the locations of the roosts to be lost.
- Where bats can make contact with the roof membrane, this **must** comprise **bitumen type 1F** or a non-bitumen coated roofing membrane (NBCRM) with a test certificate approved by Natural England. This is because modern synthetic membranes are harmful to bats and their use will not be permitted by Natural England.
- Lighting can have significant impacts on roosting bats. No exterior lighting will be installed close to the temporary or permanent bat roost features, and no bat roost features will be located close to proposed glazing so to avoid sources of potential light spill.
- Building contractors will be briefed prior to commencement of site works. Contractors will be notified about the presence of bats within the building and informed that if a bat/s is/are uncovered during works, then work must stop immediately (as soon as it is safe to do so) and advice sought from the licensed bat ecologist/s (Plan for Ecology Ltd, 01326 218839).
- No bat roosts were identified within the Staff Bungalow, Penolva or Artist Chalet 1. Although bats are not currently, at the time of the surveys, using these buildings, a number of features with potential to support bats were identified within these buildings during the visual assessment. A precautionary approach should be adopted. If, during demolition works, a bat(s) is uncovered, the bat must not be handled, and works must stop immediately (as soon as it is safe to do so). Advice must be sought from an experienced bat ecologist (Plan for Ecology Ltd: 01326 218839) or Bat Conservation Trust (Tel: 0345 1300 228).

5.3 Residual Impacts

The residual impact of the proposed development on roosting bats is predicted to be **neutral at a Site scale, subject to the successful implementation of the mitigation outlined in this report.**



6.0 References

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7.0 Appendix 1: Proposed site plans.



Indicative layout (excerpt from Llewellyn, Harker, Lowe, 2025; drawing no. 4171_01_010 L)



8.0 Appendix 2: Field of view of each camera at the start and end of the emergence surveys.

12/05/2025 emergence	
Start	End
North Watch	
Penolva	



13/05/2025 emergence		
Start	End	
Staff Bungalow		
Artist Chalet 1		



14/05/2025 emergence		
Start		End
Borough Farmhouse		
		
		
Artist Chalet 2		
		
		



18/06/2025 emergence		
Start	End	
North Watch		
		
		
Penolva		
		
		
19/06/2025 emergence		
Start	End	
Staff Bungalow		
		

