



Bat Survey Report

Meadowbrook House, 52 Grenville Rd, Lostwithiel, Cornwall

Grid Reference: SX 1122 5980

23rd July 2023



Plan for Ecology Ltd
Tremough Innovation Centre
Tremough Campus, Penryn, Cornwall, TR10 9TA
Tel: 01326 218839
www.planforecology.co.uk

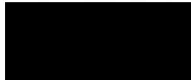
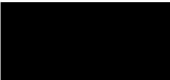


Document Control:

Site Name:	Meadowbrook House, 52 Grenville Road, Lostwithiel, Cornwall, PL22 0RA
OS Grid Reference:	SX 1122 5980
Report Authors:	Naomi Scala BSc (Hons) MSc ACIEEM
Document Approved by:	Dr Kim Jelbert BSc (Hons), MSc, PhD, MCIEEM (Bat licence no: 2015-10444-CLS-CLS; Registered Consultant: RC224; Barn owl licence no. CL29/00037; Dormouse license no: 2016-22394-CLS-CLS)
Client:	Poynton Bradbury Wynter Cole Architects Ltd
Report Reference Number:	P4E2964
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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."

Naomi Scala	
Kim Jelbert	

Report Lifespan:

Ecological features can change over time, particularly if site management/ use changes. Typically, bat surveys are valid for 18 months (until January 2025).



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1.0 Summary

Bat evidence?	<p>The survey results indicate that the two-storey building at Meadowbrook House, Lostwithiel, Cornwall supports a day roost used by an individual common pipistrelle bat (<i>Pipistrellus pipistrellus</i>) and a likely day and night roost/ feeding perch used by a small number of brown long-eared (<i>Plecotus auritus</i>) bats on occasion.</p>
Proposed works?	<p>Demolition of the existing building and replacement with two new purpose-built premises providing 121 care beds and parking</p>
Bat specific mitigation recommendations?	<p>Works will be carried out under an appropriate licence from Natural England.</p> <p>Works with potential to impact bats will be carried out under an ecological watching brief and scheduled for a time of year when bats are least likely to be negatively impacted. Two temporary bat boxes will be installed on a nearby structure or tree to accommodate any common pipistrelle or brown long-eared bats uncovered during works. NB: the bat boxes (2 x Schwegler 2F or a comparable product) will be installed in advance of works commencing.</p> <p>The common pipistrelle bat day roost located beneath a ridge tile and the brown long-eared bat day and night roost/ feeding perch located within the existing roof void, will be lost.</p> <p>Loss of the common pipistrelle bat day roost will be compensated by either re-creating an access into the roof void in the form of bat tiles over bitumen type 1F or by installing a bat box on the exterior of the replacement building. The location/ aspect of the alternative bat roost features will replicate those lost as closely as possible.</p> <p>Brown long-eared bats typically require flight space in their roost and, therefore, it will be necessary to retain a roof void within the new building, measuring 4 x 4 x 2m (or thereabouts) with appropriate bat access within the building. If this is not possible, then consideration should be given to enhancing a nearby structure for use by day and night roosting brown long-eared bats; or creating a stand-alone structure.</p> <p>Bitumen type 1F roofing felt or Orientated Strand Board (OSB) must be used to line the roof of the replacement building if made accessible to bats; this is because modern synthetic membranes are harmful to bats and their use will not be permitted by Natural England. No exterior lighting will be installed close to the temporary or permanent bat roost features or new access points.</p> <p>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).</p>



2.0 Introduction

2.1 Background

Poynton Bradbury Wynter Cole Architects Ltd commissioned Plan for Ecology Ltd to undertake detailed bat surveys of Meadowbrook House, Lostwithiel, Cornwall (OS Grid Ref: SX 1122 5980) in March 2023. The Preliminary Bat & Bird Assessment, undertaken on 9th February 2023, assessed the building as being of 'moderate suitability' for roosting bats (Plan for Ecology Ltd, 2023). Further bat surveys were recommended to inform the planning application and subsequent development works. The client proposes to demolish the existing buildings and construct two new purpose-built premises providing 121 care beds and parking.

In accordance with the 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (Collins, 2016), the recommended further survey work comprised two bat emergence or re-entry surveys and a static monitoring survey of the building during the bat active season (May to September inclusive).

This report describes and evaluates the use of the building by bats, and details mitigation recommendations to minimize impacts upon bats in accordance with the 'Bat Surveys for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2016).

2.2 Project Administration

Property Address:	Meadowbrook House, 52 Grenville Road, Lostwithiel, Cornwall, PL22 0RA
OS Grid Reference:	SX 1122 5980
Client:	Poynton Bradbury Wynter Cole Architects Ltd
Planning Authority:	Cornwall Council
Planning Reference Number:	Unknown
Report Reference Number:	P4E2964
Proposed work:	Demolish the existing building and construct two new purpose-built premises providing 121 care beds and parking (Appendix 1)
Visual Assessment Date:	9 th February 2023
Emergence Survey Dates:	6 th and 27 th June 2023
Ecologist & Licence Number:	Naomi Scala BSc (Hons) MSc ACIEEM; Bat licence No. 2018-34120-CLS-CLS. Chloe Balmer MSci (Hons) ACIEEM; Bat licence No. 2020-47040-CLS-CLS John Blackburn BSc (Hons), MSc; bat licence (level 2,) barn owl licence, dormouse license and white clawed crayfish license no. 2019-39576-CLS-CLS Rebecca Golder BSc (Hons) ACIEEM (Bat licence no: 2015-16519-CLS-CLS)



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 or Bat Mitigation Class Licence (CL21) 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 or method statement is assessed on a case-by-case basis by the bat ecologist. The Bat Mitigation Method Statement or EPSL 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

A visual assessment of Meadowbrook House, Lostwithiel was undertaken on 9th February 2023. The ecologist (Naomi Scala) assessed the suitability of the building and surrounding habitat to support bats in accordance with Collins (2016). A high-power torch was used to illuminate all accessible areas of the building with potential to support roosting bats. The ecologist searched for signs of bats including droppings, staining and feeding remains.

The assessment was carried out in accordance with the 'Bat Surveys for Professional Ecologists - Good Practice Guidelines' produced by the Bat Conservation Trust (Collins, 2016). Potential bat roosts identified during the visual inspection of the building were categorised as to their suitability in accordance with the Bat Conservation Trust's (BCT) Good Practice Guidelines (Collins, 2016) as described below:

Negligible: negligible features with potential to support roosting bats.

Low: one or more features with potential to support individual bats on an occasional basis. Unlikely to support large numbers of bats.

Moderate: one or more features with potential to support roosting bats but unlikely to be of high conservation status.

High: one or more features with potential to support large numbers of bats on a regular basis.

3.2 Emergence Surveys

Emergence surveys of the building were undertaken on 6th and 27th June 2023. An emergence survey involves an ecologist(s) counting the number of bats emerging from the building at dusk for a period of at least 1.75 hrs. The surveyor(s) records 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. Three ecologists were required to cover all elevations of the building. Surveyor locations are shown in Fig. 1 (below). NB only the two-storey section was surveyed according to the Preliminary Bat and Bird Assessment (Plan for Ecology, 2023).

In accordance with the interim guidance note on the use of night vision aids (BCT, 2022), the surveyors also used night vision recording equipment as detailed below; this enables identification of the species present and the location of bat access points (where applicable). Night vision aids increase the likelihood of detecting bats emerging later during the survey (45 minutes after sunset onwards) when light levels are low. The ecologists reviewed the video footage for the last 60 minutes of the survey (when light levels were low, and bats could be missed by the surveyor).

On both bat emergence survey occasions, surveyor 1 (Naomi Scala) used an Echo Meter Touch (EMT) 2 detector coupled with a Reolink RLC-811A camera and JC Security Infrared Illuminator 12-LED. On the first survey occasion, surveyor 2 (John Blackburn) used an Echo Meter Touch (EMT) 2 detector coupled with a Sony FDR-AX700 4K HDR camcorder and infrared light, and surveyor 3 (Chloe Balmer) used an Echo Meter Touch (EMT) 2 detector coupled with a Reolink RLC-811A camera and JC Security Infrared Illuminator 12-LED. On the second survey occasion, surveyor 2 (John Blackburn) used an Anabat Walkabout detector coupled with a Sony FDR-AX700 4K HDR camcorder and Infrared light, and surveyor 3 (Rebecca Golder) used an Echo Meter Touch (EMT) 2 detector. All cameras and infrared illuminators were mounted on tripods. The Reolink RLC-811A and Sony FDR-AX700 4K HDR camera are widely and successfully used to record bats emerging from buildings.



Different bat detector types use different methods of detecting; the EMT2 detectors use heterodyne and real-time expansion; and the Anabat Walkabout uses heterodyne, real-time expansion, frequency division and pitch shifting. Each method of detection is 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.



Figure 1: Emergence surveys – surveyor locations. The building surveyed is outlined in red. Yellow triangles show the approximate locations of surveyors and cameras on both emergence surveys.

3.3 DNA Analysis

One sample of bat droppings was collected from an accumulation of droppings found within the interior of the two-storey section of the building. The sample was sent for DNA analysis to provide further information on the bat species present. DNA analysis was carried out by SureScreen Scientifics Ltd, Derbyshire, U.K.



3.4 Ecological Evaluation

The value of the building for roosting bats is determined following the framework provided by Wray et al. (2010). 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.), as well as the type of roost (based on the results of the emergence/ re-entry and static detector surveys). 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 1 (below) categorizes bat species by their distribution and rarity in England. Table 2 (below) assigns a value for each roost type for the different rarity categories (Tables 1 and 2 are adapted from Wray et al. 2010).

Table 1: Relative rarity of bat species in England (adapted from Wray et al. 2010)

Rarity (within range)	Region
	England
Common	Common pipistrelle (<i>Pipistrellus pipistrellus</i>) Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>) Brown long-eared (<i>Plecotus auritus</i>)
Rarer	Lesser horseshoe (<i>Rhinolophus hipposideros</i>) Whiskered (<i>Myotis mystacinus</i>) Brandt's (<i>Myotis brandtii</i>) Daubenton's (<i>Myotis daubentonii</i>) Natterer's (<i>Myotis nattereri</i>) Leisler's (<i>Nyctalus leisleri</i>) Noctule (<i>Nyctalus noctula</i>) Nathusius' pipistrelle (<i>Pipistrellus nathusii</i>) Serotine (<i>Eptesicus serotinus</i>)
Rarest	Greater horseshoe (<i>Rhinolophus ferrumequinum</i>) Bechstein's (<i>Myotis bechsteinii</i>) Alcathoe (<i>Myotis alcathoe</i>) Greater mouse-eared (<i>Myotis myotis</i>) Barbastelle (<i>Barbastella barbastellus</i>) Grey long-eared (<i>Plecotus austriacus</i>)

Table 2: Value of bat roosts (adapted from Wray et al. 2010)

Value	Roost types
District, local or parish	Feeding perches (common species) Individual bats (common species) Small numbers of non-breeding bats (common species) Mating sites (common species)
County	Maternity sites (common species) Small numbers of hibernating bats (common and rarer species) Feeding perches (rarer/rarest species) Individual bats (rarer/rarest species) Small numbers of non-breeding bats (rarer/rarest species)
Regional	Mating sites (rarer/rarest species) including well-used swarming sites Maternity sites (rarer species) Hibernation sites (rarest species) Significant hibernation sites for rarer/rarest species or all species assemblages



Value	Roost types
National	Maternity sites (rarest species) Sites meeting SSSI guidelines
International	SAC sites

3.5 Weather Conditions

The emergence surveys and static detector survey were undertaken during suitable weather conditions, as described below:

- 6th June 2023: Dry with no cloud cover and a temperature of 13°C at the beginning of the survey, and dry with no cloud and 13°C at the end of the survey. In accordance with the Beaufort Scale, wind was no greater than 'light air'.
- 27th June 2023: Dry with full cloud cover and a temperature of 16°C at the beginning of the survey, and dry with full cloud cover and 14°C at the end of the survey. In accordance with the Beaufort Scale, wind was no greater than 'light air' throughout the survey.

3.6 Limitations

During the initial visual inspection, bat droppings were observed within the two-storey section of Meadowbrook House. A static detector survey was recommended, however, no access to the interior was available and it was, therefore, not possible to install the detector. The building supports a small number of exterior features that could not be fully inspected and provide potential roosting locations for bats. The building was viewed from ground level; it is, therefore, possible that some potential roost features (PRFs) at height may not have been visible from the ground. These limitations were addressed by undertaking two bat emergence surveys and DNA analysis of bat droppings to determine species. 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 (*Rhinolophus* spp.) have highly directional calls. The long-eared, barbastelle and horseshoe species can be easily missed during bat detector surveys. We presume all *Plecotus* spp. recordings are those of brown long-eared bat because Cornwall is outside the known range of the grey long-eared bat.



4.0 Bat Survey Results

4.1 Site Description and Habitat Assessment

Meadowbrook House is located off Grenville Road, on the eastern outskirts of the town of Lostwithiel, Cornwall, c. 7.9 km south of Bodmin, and c. 9.7 km north-east of St Austell, Cornwall. Beyond the site boundary, Grenville Road is situated to the south, with mixed farmland beyond; residential development is situated to the east and west and mixed farmland to the north. Buildings in the wider area comprise a mixture of period and modern properties with vegetated gardens, outbuildings and barns. In combination, these features provide potential high-quality foraging and roosting habitat for bats.

4.2 Visual Assessment Summary

The visual assessment was undertaken on 9th February 2023. For detailed visual assessment results, please see Plan for Ecology Ltd (2023).

Meadowbrook House comprises the original two-storey building with numerous single storey extensions.

The original building is an 1870's two-storey building of brick construction with a pebble dash finish and a pitched slate tile roof (Figs 2-4). The building supports Victorian ornate clay ridge tiles and wooden soffits. A gap/ vent on the north elevation provides potential bat access to the roof void. Internally, there is one large L-shaped void above the first floor with a traditional roof structure. The roof is bitumen lined and there is rolled insulation between the joists. There is a large central brick chimney and single water tank. Gaps at the wall tops provide access into the void. A scattering of c. 1000 bat droppings was observed throughout the void (Fig 5), with clusters of bat droppings observed under the central ridge. Moth wings (potential bat feeding remains) were observed centrally, beneath the central ridge and below the apex at the southern elevation (Fig 6). The original building was assessed as being of moderate suitability for roosting bats. The numerous single-storey projections were assessed as being of negligible suitability for roosting bats.



Figure 2: View of main entrance of Meadowbrook House, showing original two-storey building; red arrow shows approximate emergence point of one common pipistrelle bat on 6th June 2023.



Figure 3: View of south elevation of two-storey section of Meadowbrook House; red arrow shows approximate emergence point of one common pipistrelle bat on 27th June 2023.



Figure 4: View of north elevation of two-storey section of Meadowbrook House.



Figure 5: View of bat droppings within two-storey section.



Figure 6: View of bat droppings and moth wings beneath the apex at the southern elevation of the two-storey section. DNA analysis confirmed the droppings to have been deposited by brown long-eared bat.

4.3 Emergence Surveys

During the first emergence survey on 6th June 2023, a single common pipistrelle bat was seen to emerge at 21:31 from beneath a ridge tile and flew south over the garden (Fig. 2). During the second emergence survey on 27th June 2023, a single common pipistrelle bat was seen to emerge at 21.42 from the gable end (Fig. 3).

4.4 DNA Analysis

DNA analysis of bat droppings, collected from within the interior of the two-storey section of Meadowbrook House confirmed the droppings were deposited by brown long-eared bat.

4.5 Bat Species Evaluation

The combined survey results have shown that Meadowbrook House, Lostwithiel supports a day roost for a small number of common pipistrelle bats (likely one individual using two accesses); and a likely day and night roost/ feeding perch for a small number of brown long eared bats (based on DNA analysis of bat droppings and presence of feeding remains in association with droppings).

The common pipistrelle bat: is a crevice dwelling bat species that typically roosts between slates/ tiles and the roofing felt, or beneath fascia boards/ soffits. The common pipistrelle bat is common and widespread throughout the UK, and evidence indicates that the UK population has increased in recent years (BCT, 2023). Common pipistrelle is also considered common and widespread in Cornwall.

The day roost within Meadowbrook House supports an individual non-breeding common pipistrelle bat. This roost is considered to be of low conservation significance for this bat species.



Brown long-eared bat: Brown long-eared bat is widespread throughout the UK and its population is considered to have been stable since 1999 (BCT, 2021). The brown long-eared bat is also a UK Biodiversity Action Plan (BAP) priority species for conservation (JNCC, 2013)/ a species of principle importance under the NERC Act 2006 and is listed as vulnerable in the Red Data Book for Cornwall and the Isles of Scilly (Williams, 2009).

DNA analysis of bat droppings collected in 2021 indicate that the interior of the two-storey section at Meadowbrook House is used by brown long-eared bat(s) as a likely day and night roost/ feeding perch on occasion. No brown long-eared bats were observed during any of the emergence surveys (NB. Brown long-eared bat calls are very quiet and can be easily missed). These two roosts are considered to be of low conservation significance for this bat species.

Following the framework described by Wray et al (2010), as outlined in Section 3.4 above (Tables 1-2), the rarity of the bat species recorded on-site is 'common' for common pipistrelle and brown long-eared bats. The corresponding value for a day or night roost/ feeding perch of a small number of non-breeding bats (common species) is 'Local' level. Meadowbrook House is, therefore, considered to be of Local importance for roosting bats.



5.0 Impacts and Mitigation Recommendations

5.1 Evaluation of Development Proposals and Impacts

The further survey work has shown that Meadowbrook House supports a day roost for likely one individual common pipistrelle bat and an occasional day and night roost/ feeding perch for a small number of brown long-eared bats. The applicant proposes to demolish the existing buildings and construct two new purpose-built premises providing 121 care beds and parking.

In the absence of mitigation, the proposals have the potential to disturb, injure or kill bats and result in the loss of the identified roosts; the impact of this on the local bat populations is detailed below:

- One common pipistrelle bat day roost, supporting one individual (low impact).
- One brown long-eared bat occasional day roost, supporting at least one individual (low impact).
- One brown long-eared bat night roost/ feeding perch supporting at least one individual (low impact).

5.2 Mitigation

To avoid, mitigate and compensate for potential impacts on roosting bats, an outline of the recommended mitigation is provided below (to be agreed with the client). The proposals have potential to have a significant impact on roosting bats; a European Protected Species (EPS) licence or a Bat Mitigation Class licence (CL21) must be obtained from Natural England before works can lawfully commence. The appropriate licence will set out the mitigation required to maintain the favourable conservation status (FCS) of the bat species using Meadowbrook House.

Outline of recommended mitigation:

- Works will not commence until an appropriate licence has been obtained from Natural England. The licence cannot be obtained until planning consent is in place. If the works will commence later than April 2024, then the licence must be informed by at least one additional bat emergence survey, to be undertaken in the most recent bat survey season (May-September). This is a condition of the licence application and is not a planning requirement. The current level of survey effort (two bat emergence surveys and DNA analysis of bat droppings, and less than 18 months old) is sufficient to inform a planning application. No further survey effort is required to inform the planning application.
- Works will be scheduled for a time of year when bats are least likely to be impacted.
- Works with potential to impact bats will be carried out under an ecological watching brief. A licensed bat ecologist will oversee works to the roof/ fascias/ wall tops and the dismantling of the roof. Any common pipistrelle bats or brown long-eared bats uncovered will be relocated to a bat box installed within a nearby structure. NB: the bat box (2x Schwegler 2F or comparable product) will be installed in advance of works commencing and in a location that will not be disturbed as a result of building works. See <https://www.nhbs.com/> for product specification.
- The common pipistrelle bat day roost located beneath a ridge tile on the two-storey section and the brown-long eared bat occasional day and night roost/ feeding perch within the roof void of the two-storey section will be lost during the demolition works. Loss of the common pipistrelle bat day roost will be compensated by either installing a single raised ridge tile with 50mm x 25mm gap over bitumen type 1F on the new building; by installing an



integral bat tube within the fabric of the replacement building; or by installing a bat box on the exterior of the building. The location/ aspect of the alternative bat roost will replicate those lost as closely as possible.

- Alternative provision for day and night roosting brown long-eared bats will be created by either 1) retaining a dedicated, suitable roof void space within the new building, measuring c. 4m length x 4m width x 2m height (or thereabouts), lined with bitumen type 1F, and with appropriate bat access installed at the ridge or wall tops; or 2) by creating an alternative day/ night roost within a purpose-built structure (to be confirmed with the client). As a guide, a suitable alternative day roost would need to measure c. 4m in length, 4m in width and 2m in height (or thereabouts), feature an OSB or bitumen lined roof. In some instances, a bat box would be a suitable alternative day roost. A suitable alternative night roost/ feeding perch would need to measure a minimum c. 4m x 2m x 2m (or thereabouts), feature an OSB or bitumen type 1F lining and could either be enclosed on all sides as for the day roost or be partially open on one side (i.e., feature a minimum 1m wide open doorway). A bat box is not a suitable night roost or feeding perch for brown long-eared bat. Creation of a single roof void within the replacement building designed to accommodate both day roosting and night roosting brown long-eared bats is the preferred mitigation solution. Within the alternative roost, additional timbers and plywood baffles should be installed to create additional roost sites and a range of micro-climates for roosting bats.
- No exterior lighting will be installed close to the temporary or permanent bat roost features or new access points.
- 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).



6.0 References

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- Williams C.A. and Cornwall Bat Group (2009) Bats. In CISBFR, Red Data Book for Cornwall and the Isles of Scilly. 2nd Edition. Croceago Press, Praze-an-Beeble.
- Wray S., Wells D., Long E. and Mitchell-Jones T. (2010) Valuing Bats in Ecological Impact Assessment. In Practice, 70 (December), pp23-25. Chartered Institute for Ecology and Environmental Management (CIEEM).



7.0 Appendix 1: Indicative site layout

2.3 PROPOSED SITE PLAN

