Lowans Ecology & Associates
Louise Lowans BSc. (Hons), MCIEEM

Preliminary Roost Appraisal and Barn Owl Survey for barn at Cuffs Cottage, East Hatch, Tisbury, Wiltshire SP3 6PJ

Prepared for: Mr G Singleton of Singleton Design on behalf of Mr J Stern

Prepared by: Louise Lowans BSc. (Hons), MCIEEM

Prepared on: 30/06/2023
Version no: 1

Correspondence Address:
Suite 3, 7 The Square
Wimborne, Dorset BH21 1JA
Mob: 07983 664173
Email: lowansecology@gmail.com

Contents

1	**Executive summary**	3
2	**Introduction**	4
2.1	Background	
2.2	Field survey	
2.3	Report	
2.4	Site location	
2.5	Site and building description	
2.6	Description of proposal	
3	**Method**	5 - 6
3.1	Desk study	
3.1.1	Protected and other notable sites	
3.1.2	Data search	
3.1.3	Zone of Influence	
3.2	Date of survey	
3.3	Weather conditions	
3.4	Limitations of survey	
3.5	Survey scope	
3.5.1	Habitats	
3.5.2	Bats	
3.5.2.1	Daytime building survey	
3.5.2.2	Daytime survey trees	
3.5.3	Barn owl	
3.5.4	Nesting birds	
3.6	Field equipment	
3.7	Details of surveyor	
4	**Results and discussion**	7
4.1	Protected and other notable sites	
4.1.2	Data search	
4.2	Date of survey	
4.3	Weather conditions	
4.4	Limitations of survey	
4.5	Survey scope	
4.5.1	Habitats	
4.5.2	Bats	
4.5.2.1	Daytime building survey	
4.5.2.2	Daytime survey trees	
4.5.2.3	Interpretation of survey results	
4.5.3	Barn owl	
4.5.4	Nesting birds	
5	**Legislation**	8 - 9
6	**Recommendations and precautionary mitigation measures**	10
7	**References**	11
8	**Appendices**	12 - 15
8.1	Appendix A - Plans	
8.2	Appendix B - Figures	

1 Executive summary

Survey date: 15/05/2023
Grid reference: ST 92750 28147

Protected sites:
The site lies in Cranborne Chase & West Wiltshire Downs Areas of Outstanding Natural Beauty. The site falls within the Chilmark Quarries Bat Special Area of Conservation (SAC) Greater horseshoe 4000m buffer zone and barbastelle 6000m buffer zone. The site lies within a 1km radius of the following sites:- Deciduous woodland Priority Habitat, Good quality semi improved grassland Priority Habitat, Wood-pasture and Parkland Priority Habitat, Ancient Replanted Woodland and Cherryfield Wood Ancient & Semi-Natural Woodland.

The site lies within a 5km radius of the following designated sites:- Lady Down Quarry Site of Special Scientific Interest (SSSI), Gallows Hill SSSI, Upper Chicksgrove Quarry SSSI, Fonthill Grottoes SSSI, Gutch Common SSSI, Lower Coombe and Ferne Brook Meadows SSSI, River Avon System SSSI, Chilmark Quarries SAC and River Avon SAC.

Data search:
A data search was not requested from Wiltshire and Swindon Biological Records Centre as there are no features with the site to justify a search.

Habitats:
The site comprises a cottage and barn set in 0.264ha of driveway and garden. The barn is set on hard standing and lies adjacent to the gravel driveway.

Bats:
The barn has no potential to be used by bats. No further surveys are recommended. Bats are not considered to be present within the barn, there will be no adverse impacts on bats due to the proposed planning application.

Barn owl:
No evidence of barn owl was found within the barn. Barn owl are not considered to be present on site, there will be no adverse impacts on barn owl, due to the proposed planning application.

Nesting birds:
No evidence of nesting birds were found within or on the barn. The vegetation on the boundary walls have the potential to be used by nesting birds. Preventative mitigation measures will be required to ensure no adverse effects/long-term impact on nesting birds due to this development.

Surveyor:
Louise Lowans (Natural England Licences: Bat 2015-16733-CLS-CLS. Barn Owl CL29/00005. Dormouse 2016-21322-CLS-CLS.

2 Introduction

2.1 Background

Lowans Ecology & Associates were commissioned by, Mr G Singleton of Singleton Design on behalf of Mr J Stern, to carry out a Preliminary Roost Appraisal and Barn Owl Survey of the site prior to the proposed planning application.

2.2 Field survey

The aim of the ecology survey (extended Phase 1) was to confirm the presence/absence of; any protected/ notable plant or animal species, any suitable habitats for protected species, such as bats, badgers, reptiles, nesting birds, amphibians, barn owl, dormouse and/or any protected habitats on the site and provide mitigation and/or enhancement as appropriate.

The site was assessed for species and/or habitats protected by the Wildlife and Countryside Act 1981 (as amended), The Protection of Badgers Act 1996, The Hedgerow Regulations Act 2007, The CROW Act 2000 and the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019. Species and habitats of principal importance and general biodiversity interest of the site (Natural Environment and Rural Communities Act 2006) were also considered. Surveys were carried out following all relevant guidelines (refer to Section 7 References).

Local Planning Authorities are required to take into account nature conservation issues, incl. species and habitats protected under the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 and The Wildlife and Countryside Act 1981 (as amended) when making planning decisions. Local Planning Authorities also aim to conserve and enhance biodiversity (National Policy Planning Framework 2019 (NPPF)) and to have regard to conserving biodiversity, which includes restoring and enhancing a population or habitat under the Natural Environment and Communities Act 2006 (NERC 2006)).

The remit of the ecologist is to recommend a course of action that; a) protects the interest of the European Protected Species and other protected species, b) protects the owners and their agents from committing an offence under the legislation and is the best course of action for primarily the welfare of the protected species, but with some regard to the implementation of the owners' project.

2.3 Report

The aim of the report is to clearly set out the results of the survey, highlighting any effects of the proposed development on any protected species or habitats suitable for protected species on or adjacent to the site and provide mitigation and/or enhancement as appropriate.

2.4 Site location

The site is situated within East Hatch, OS Grid Reference ST 92750 28147. Appendix A - Plan 1.

2.5 Site description

The site comprises a cottage and barn set in 0.264ha of driveway and garden. Appendix A - Plan 2.

This report refers to the barn only.

The northeast, southeast and southwest boundaries of the site are lined with stonewalls. The northwest boundary is open. The northeast and southeast boundaries lies adjacent to agricultural land. The southwest boundary lies adjacent to the road. The northwest boundary lies adjacent to the driveway, cottage and woodland.

The barn is constructed of stone, brick and concrete blocks. It has a pitched cement fibre sheet roof, part of which is missing. Appendix B - Figures 1 to 3.

2.6 Description of proposal

It is proposed to apply for planning permission to covert the barn into auxiliary accommodation to Cuffs Cottage, with two parking bays, planning application PL/2023/03008. Appendix A - Plans 3 and 4.

3 Method

3.1 Desk study

3.1.1 Protected and other notable sites

The location was checked for habitats protected under the Wildlife and Countryside Act 1981 (as amended), and other habitats that could be County Wildlife sites or Biodiversity Action Plan habitats using the Multi-Agency Geographic Information for the Countryside (MAGIC) Defra website.

3.1.2 Data search

A data search was not requested from Wiltshire and Swindon Biological Records Centre as there are no features within the barn to justify a search.

3.1.3 Zone of Influence

The study area encompassed the Zone of Influence of the project. The Zone of Influence is defined as "... the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities" (CIEEM, 2018).

The Zone of Influence of the project encompasses different areas in respect of each important ecological feature depending on its location and sensitivity, and the spatial extent of the relevant biophysical change (e.g. light, noise, habitat loss).

However, the majority of the activities and resultant biophysical changes are unlikely to have an effect beyond the site and the immediate surrounding area. The exceptions to this include birds and bats due to their highly mobile nature, potentially 5-7km for birds and up to 6km for bats (based on Bat Conservation Trust Core Sustenance Zones, 2020), and activities such as uncontrolled discharges of pollutants, changes to ground and surface water drainage, air pollution and the increased demand for recreational activities when the site is occupied, which might extend beyond the immediate surroundings of the site in some instances; for the majority of designated sites in the area this is up to 5km.

Therefore, the Zone of Influence, and the study area, is broadly considered to extend across the site or just beyond the site boundary in most cases and potentially up to or exceeding 5km with regards to designated

3.2 Date of survey

The date and time of the survey were recorded.

3.3 Weather conditions

The weather conditions were recorded.

3.4 Limitations of survey

Limitations that may affect the overall survey result were recorded.

3.5 Survey scope

This report includes surveys for the wildlife detailed below (as habitats were not present, or were not deemed suitable, for other species):

Survey Scope: habitats, bats, barn owl and nesting birds

3.5.1 Habitats

The site was surveyed for important vegetation communities such as unimproved grassland, ancient woodland or hedges (that might be protected under the Hedgerow Regulations Act) and water features.

Hedgerow Regulations

Hedges were surveyed for features cited in the Hedgerow Regulations Act, namely features such as up to 7 woody species, presence of woodland plants, a ditch, bank, links to other hedges etc.

3.5.2 Bats

3.5.2.1 Daytime building survey

A daytime survey of the site was carried out, it investigated the status of bats by assessing the building's suitability for bat roosts and places of rest for bats.

This was achieved by:

Checking external walls, soffits, roof coverings, internal spaces, lofts, beams, ledges, window sills, floors, holes and cavities etc. that display use by bats - regular use is demonstrated by staining, droppings and worn surfaces.

3.5.2.2 Daytime survey trees

The trees within the development area were assessed for potential roost features (PRF's). PRF's that may be used by bats include: woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks and splits (such as frosting cracks) in stems or branches, partially detached platey bark, knot holes arising from naturally shed branches or branches previously pruned back to the branch collar, man made holes or cavities created by branches tearing out from parent stems, cankers (caused by localised bark death) in which cavities have developed, other hollows or cavities including butt-rots, double leaders forming compression forks with included bark and potential cavities, gaps between overlapping stems and branches, partially detached ivy with stem diameters in excess of 50mm, bat, bird or dormice boxes.

3.5.3 Barn owl

The following features were used to assess the building's suitability for nesting barn owl *Tyto alba*. Size, openings, ledges, old nest sites, white streaks from droppings and regurgitated pellets and any evidence of current use was noted. Barn owls have distinctive feathers and pellets enabling accurate identification. Nesting can be confirmed by a build-up of pellets, droppings and feathers from nestlings.

3.5.4 Nesting birds

The site was surveyed for signs of nests of swallows, house sparrows and other birds as building works should not conflict with bird breeding seasons.

3.6 Field equipment

Equipment available for use during the survey included. Maglite (LED bulb) torch, ladders, Snap-On endoscope, binoculars, compass, notebook, pen, chest waders, Echo Meter EM3+ bat detector, Echo Meter Touch Pro and Kaleidoscope software for data analysis.

3.7 Details of surveyor

Louise Lowans BSc. (Hons), MCIEEM. Director and Principal Ecologist of Lowans Ecology & Associates. Ecologist for over 20 years. Natural England Licences held Bat Licence 2015-16733-CLS-CLS. Dormouse 2016-21322-CLS-CLS. Barn Owl CL29/00005.

4 Results and discussion

4.1 Protected and other notable sites

The site lies in Cranborne Chase & West Wiltshire Downs Areas of Outstanding Natural Beauty. The falls within the Chilmark Quarries Bat Special Area of Conservation (SAC) Greater horseshoe 4000m buffer zone and barbastelle 6000m buffer zone.

The site lies within a 1km radius of the following sites:-

- Deciduous woodland Priority Habitat
- Good quality semi improved grassland Priority Habitat
- Wood-pasture and Parkland Priority Habitat
- Ancient Replanted Woodland
- Cherryfield Wood Ancient & Semi-Natural Woodland

The site lies within a 5km radius of the following designated sites:-

- Lady Down Quarry Site of Special Scientific Interest (SSSI)
- Gallows Hill SSSI
- Upper Chicksgrove Quarry SSSI
- Fonthill Grottoes SSSI
- Gutch Common SSSI
- Lower Coombe and Ferne Brook Meadows SSSI
- River Avon System SSSI
- Chilmark Quarries SAC
- River Avon SAC

4.1.2 Data search

A data search was not requested from Wiltshire and Swindon Biological Records Centre as there are no features with the barn to justify a search.

4.2 Date of survey

15/05/2023 at 17.45 hours.

4.3 Weather conditions

The weather conditions were dry with 10% cloud cover. The air temperature was 13°C. There was no wind.

4.4 Limitations of survey

There were no other limitations to the survey.

4.5 Survey scope

4.5.1 Habitats

The site comprises a cottage and barn set in 0.264ha of driveway and garden. The barn is set on hard standing and lies adjacent to the gravel driveway.

4.5.2 Bats

4.5.2.1 Daytime building survey

The barn has no potential to be used by bats. It has extremely high levels of natural light and is draughty. There is no loft void. There are no crevices that could be used by crevice dwelling bats. No evidence of bats (bat droppings, live or dead bats, staining or feed remains) were found within the barn. Appendix B - Figures 4 to 6.

4.5.2.2 Daytime survey trees

There are no trees with the application site.

4.5.2.3 Interpretation of survey results

The barn has no potential to be used by bats. No further surveys are recommended. Bats are not considered to be present within the barn, there will be no adverse impacts on bats due to the proposed planning application.

4.5.3 Barn owl

No evidence of barn owl was found within the barn. Barn owl are not considered to be present on site, there will be no adverse impacts on barn owl, due to the proposed planning application.

4.5.4 Nesting birds

No evidence of nesting birds were found within or on the barn. The vegetation on the boundary walls have the potential to be used by nesting birds. Preventative mitigation measures will be required to ensure no adverse effects/long-term impact on nesting birds due to this development.

5 Legislation

5.1 Hedgerows

The Hedgerows Regulations 1997 protect important hedgerows by controlling their removal through a notification system. It is against the law to remove most countryside hedgerows without permission. To get permission to remove a hedgerow you must contact your LPA. If the LPA decides to prohibit removal of an important hedgerow it must let you know within 42 working days. If you remove a hedgerow without permission (whether it is important or not) you may face an unlimited fine. You may also have to replace the hedgerow.

5.2 Bats

Bats and their places of rest are fully protected under UK and European Law. Within the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019, it is stated that it is illegal to intentionally damage, destroy or obstruct access to any place that a bat uses for shelter, including during the process of a development, unless a Natural England European Protected Species Licence (EPSL) has been granted.

Advice from Natural England is that a licence **is** needed if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is **reasonably likely** to result in an offence under Regulation 41; or

If the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is **reasonably unlikely** to result in an offence under Regulation 41 then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to minimise the effect on European protected species should they be found during the course of the activity. If they are found then work should cease and an application be made to Natural England.

Regulation 41 states that

(1) A person commits an offence if he—
- (a) deliberately captures, injures or kills any wild animal of a European protected species,
- (b) deliberately disturbs wild animals of any such species,
- (c) deliberately takes or destroys the eggs of such an animal, or
- (d) damages or destroys a breeding site or resting place of such an animal,

For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—
- (a) to impair their ability—
  - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
  - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate;

or
- (b) to affect significantly the local distribution or abundance of the species to which they belong.

(2) It is an offence for any person—
- (a) to be in possession of, or to control,
- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange.

5.3 Barn owl

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) against intentional killing and injuring. This also includes protection from damage, destruction or taking of a nest, eggs or young whilst the nest is in use or being built. Barn owls receive additional protection through being listed on Schedule 1 of the Act, which gives them special protection. It is illegal to undertake any work which could cause disturbance to breeding barn owls at or near the nest site. Anyone who could reasonably be expected to know that something they are about to do may disturb breeding barn owls, and fails to check whether barn owls are present, may be guilty of an offence under the Countryside and Rights of Way Act 2000.
It is an offence to:

- Intentionally kill, injure, or take (handle) any wild barn owl.
- Intentionally take, damage or destroy a wild barn owl nest whilst in use or being 'built' (barn owls do not 'build' a nest they make a scrape).
- Intentionally take or destroy a wild barn owl egg.
- Have in one's possession or control a wild barn owl (dead or alive), or egg, (unless one can show that it was obtained legally).
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing eggs or young.
- Intentionally or recklessly disturb any dependent young of wild barn owls

5.4 Nesting birds

All birds, their nest and eggs are protected by the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird. It is an offence to intentionally take, damage or destroy the eggs, young or nest whilst it is being built or in use or prevent parent birds access to their nests.

5.5 Western European Hedgehog

The hedgehog is a Priority Species for conservation action under the UK Biodiversity Action Plan and protected from harm in the UK under Schedule 6 of the Wildlife and Countryside Act 1981 and the NERC Act 2006, the hedgehog is categorised as a 'Species of Principal Importance' for biodiversity.

6 Recommendations, precautionary mitigation measures and enhancements

National Planning Policy Framework sets out national planning policies on the protection of biodiversity and geological conservation. Circular 06/05 (DEFRA 01/05): Biodiversity and Geological Conservation: Statutory Obligations and Their Impact within The Planning System provides administrative guidance on application of the law in England relating to planning and nature conservation.

The following recommendations will be conditioned as part of the planning application and will be adhered to.

6.1 Hedgerow

1. There are no hedgerows within the application site.

6.2 Bats

1. There are no timing constraints to when the proposed work is carried out.

2. This survey shows the situation at the time of the survey and before. Crevice dwelling bats in particular can roost in suitable places at any time after this survey and could be disturbed by building works.

3. If bats are found then work must stop by Law (Habitats Regulations) and the consultant ecologist contacted 07983 664173.

4. As the site falls within the Chilmark Quarries Bat SAC Greater horseshoe 4000m buffer zone and barbastelle 6000m buffer zone. Lighting used within the proposed development will therefore adhere to the following:

   a) lighting will be directed to where it is needed through the design of the luminaire and by using accessories such as cowls or hoods,
   b) the tree lined boundaries will not be lit,
   c) lights will not be on constantly throughout the night creating dark periods to allow bats to continue foraging without light spill affecting them,
   d) the lighting scheme will adhere to the latest guidance, as detailed in Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018),
   e) there must be no increase in light and light levels must be below 0.5 lux,

6.3 Barn owl

1. If barn owl or signs of barn owl are found during the proposed development work. Work in the local vicinity will stop and Lowans Ecology and Associates (07983 664173) contacted immediately for advice.

6.4 Nesting birds

1. The vegetation will be cut back between 1st September and 28th February so as to avoid the bird nesting season.

6.5 Hedgehog

1. Hedgehogs are known to be in the local area. Hedgehogs can roam between 1 to 2km each night during their active season. It is therefore critical that they can access a wide range of gardens. A 13cm by 13cm gap will be left at the base of each fence/wall to allow hedgehogs to pass through the site. Appendix B - Figure 7.

6.6 Further survey work

1. No further surveys are recommended. However, if the proposed work is not carried out within two years or the proposed plans change a follow up ecological survey maybe required, the ecologist will be contacted for advice.

7 References

Barn Owl Trust, Barn Owl Conservation Handbook: A comprehensive guide for ecologists, surveyors, land managers and ornithologists. Pelagic Publishing. 2012

Bats and Trees. Bat Conservation Trust www.bats.org.uk/data/files/publications/Bats_Trees.pdf

BS 42020:2013 Biodiversity. Code of practice for planning and development (2013).

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust, London.

Dietz, C., Helversen (von) O. and Nill, D. Bats of Britain, Europe and Northwest Africa, English Edition, A & C Black Publishers Ltd., 2009.

Institution of lighting professionals and Bat Conservation Trust. Guidance Note 08/18 Bats and artificial lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018)

Mitchell-Jones, A.J. Bat mitigation guidelines. English Nature. 2004.

National Bat Monitoring Programme Annual Report 2021, BCT/JNCC, 2021.

Royal Horticultural Society Perfect for Pollinators https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators

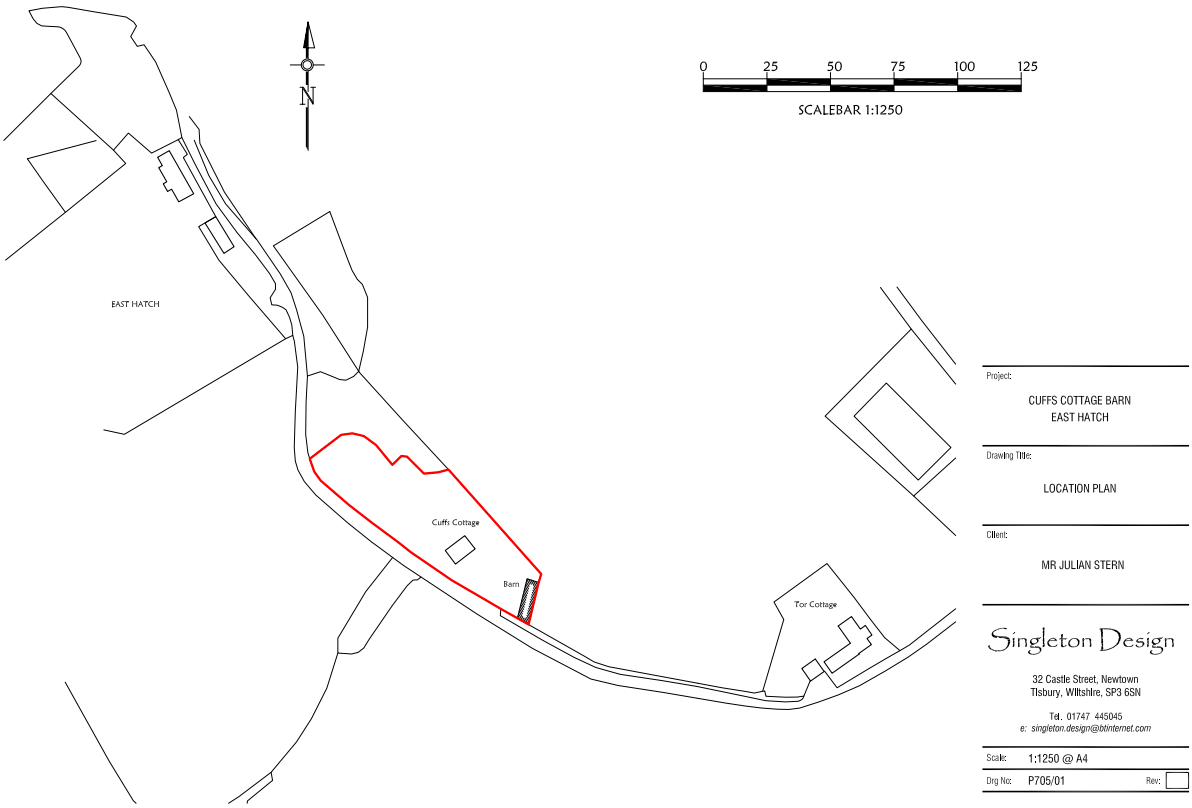
Schofield, H. W. and Mitchell-Jones, A.J. The bats of Britain and Ireland. 2nd Edition. Vincent Wildlife Trust. 2003.

Stebbings, R.E., Yalden, D.W. and Herman, J.S. Which bat is it? 3rd Edition. Mammal Society. 2007.

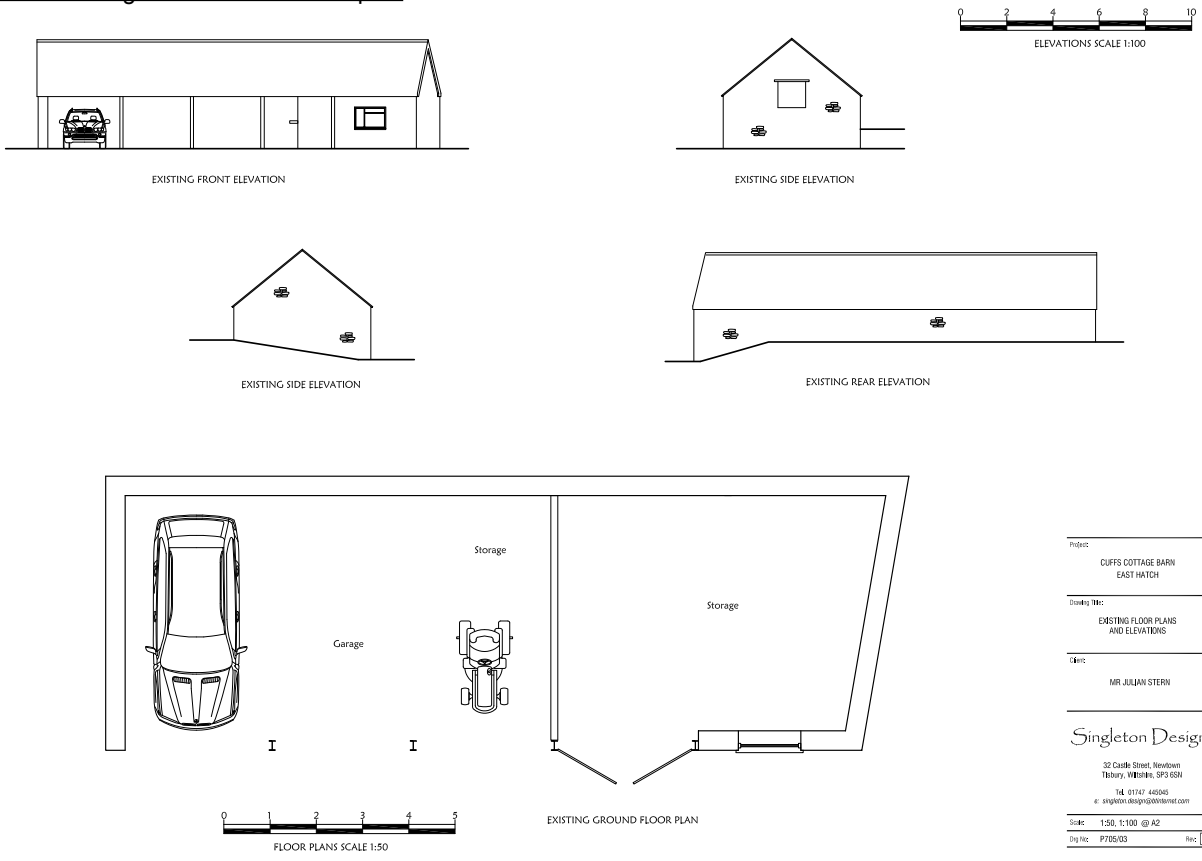
Swift, S. M. Long-eared bats. Poyser Natural History. 1998.

8 Appendices
8.1 Appendix A - Plans

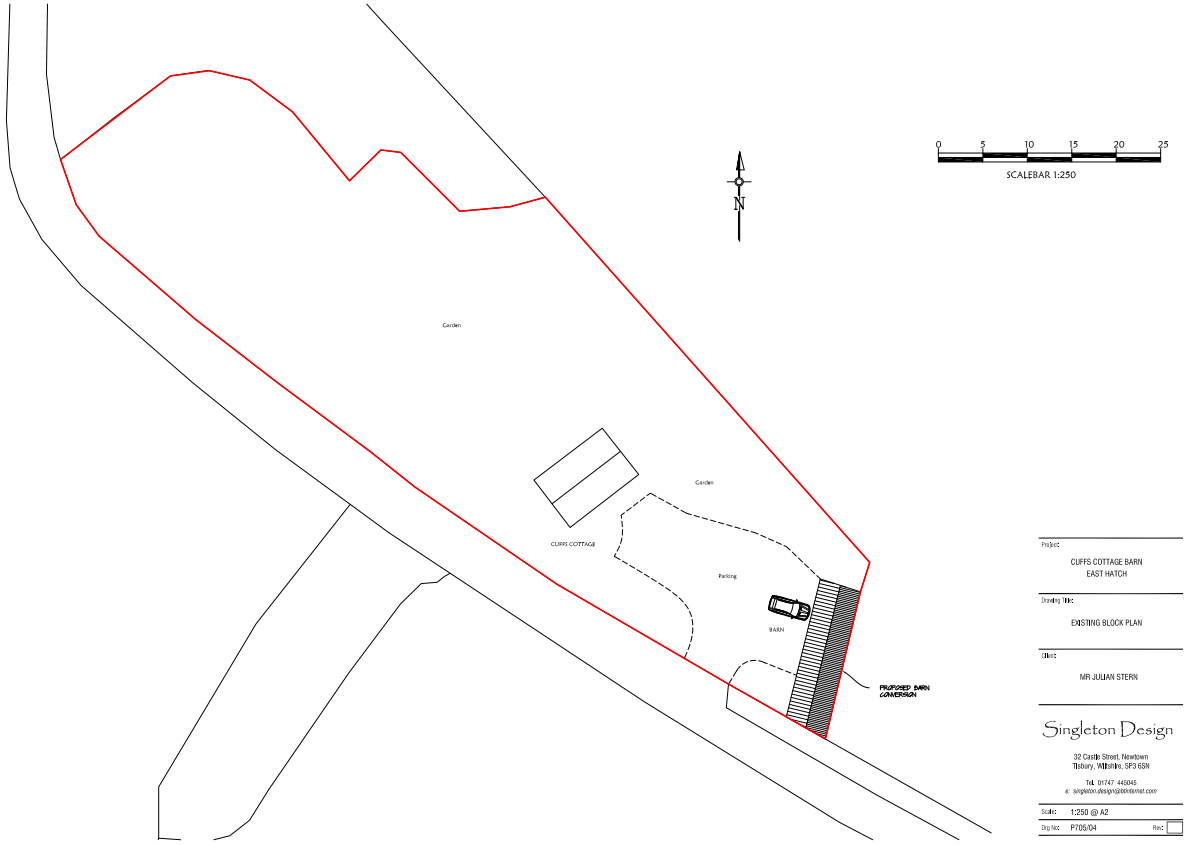
Plan 1 - Location plan and existing site plan



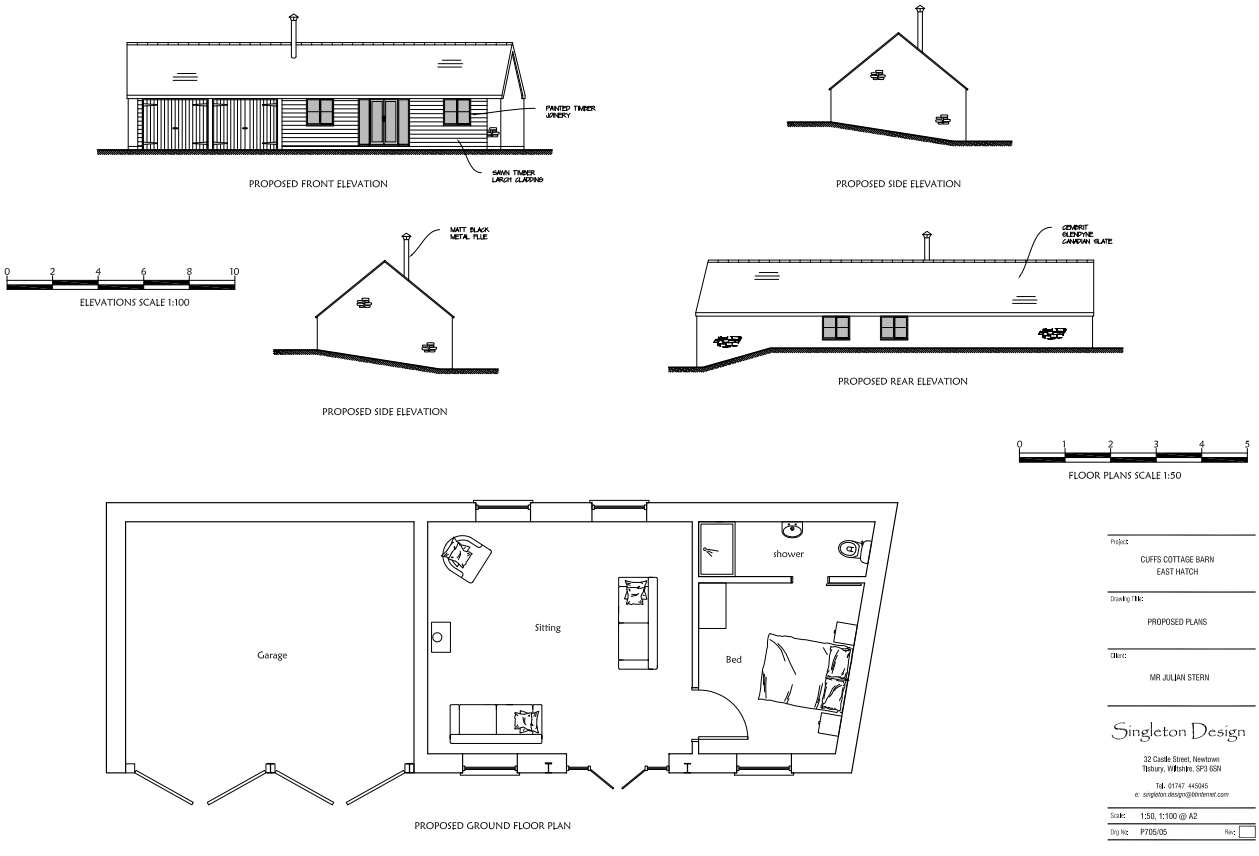
Plan 2 - Existing elevations and floor plan



Plan 3 - Proposed site plan



Plan 4 - Proposed elevations and floor plan



8 Appendices
8.2 Appendix B - Figures

Figure 1 - Northwest elevation



Figure 2 - Northwest elevation



Figure 3 - Southwest elevation



Figure 4 - High levels of natural light



Figure 5 - Open on northeast elevation



Figure 6 - Part of roof no longer present



Figure 7 - Part of roof no longer present

