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Summary

Administration Details					
	The Grange and Garage				
Property Assessed	Treviades				
,,	Falmouth				
	TR11 5RG				
Grid Reference	SW748287				
Name & Address of Owner	Rebecca Morgan				
	C/O The Grange				
	Treviades				
	Falmouth				
	TR11 5RG				
Tel:	07802 434937				
Name & Address for Invoice payment	As above				
Planning Authority Involved	Cornwall Council				
Planning Reference Number					
Consultancy Reference Number	CEC4396				
	Steve Marshall 2015-11878-CLS-CLS (CL18 Bat Survey Level 2)				
Surveyor Names & Licence Numbers	Rick Payne 2018-37267-CLS-CLS				
	Tom Simpson (CEC Ecologist)				
Report Compiled by	Steve Marshall 2015-11878-CLS-CLS (CL18 Bat Survey Level 2)				
Report complica by	BTO Barn owl nest recorder Cornwall				
Report reviewed by	Steve Adams (2015-15960-CLS-CLS)				
Issue Date	20/11/2023				
Proposed work: Demolition / Conversion / Restoration	 It is proposed to add accommodation to the property by building an extension into roof void and extending the southern elevation of the building. The outbuilding is proposed to be converted to form accommodation. 				

Bat Surveys – CEC 4396 The Grange



Report Valid for planning purposes	22/08/2024			
Report valid for licensing purposes	22/03/2024			
Summary of Results and Recommendations				
Evidence of bats found	Surveys have confirmed The Grange and the adjacent out-building are in use by common pipistrelle bats as a nursery roost.			
Bat survey recommendations	A bat mitigation class licence (A13) will be required to be in place before works commence.			
Evidence of nesting birds	House sparrows are nesting behind fascia boards.			



Figure 1. The Grange.



Figure 2. Outbuilding.



I. LEGISLATION

I.I. Bats

All British bats are European protected species (EPS), included on Annex IV(a) of the European Communities Habitats Directive.

Annex IV(a) species are protected in this country under Schedule 2 of the Conservation of Habitats and Species Regulations 2017. Additionally, bat species in the UK are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 12 of the Countryside Rights of Way Act 2000. In combination this makes it an offence to:

- Deliberately kill, injure or capture bats;
- Intentionally or recklessly disturb a bat in its roost, or deliberately disturb a group of bats;
- Intentionally or recklessly damage, destroy or obstruct access to a bat roost (a bat roost is interpreted as any structure or place which is used for shelter or protection, regardless of whether bats are present at the time or not);
- Possess or transport a bat or any part of a bat, unless acquired legally; and
- Sell, barter or exchange bats or parts of bats.

The bat ecologist will assess the significance of the bat roost and the scale of impact. Works involving significant disturbance to bats and/or roost destruction (including changes to the roost) may require an EPS licence or a Bat Mitigation Class Licence (BMCL) before the work can lawfully commence. Natural England is the licensing authority in England. Only a suitably licensed and experienced ecologist can act as the named ecologist in the licence application. Our company can provide a quotation for this additional work. The development must take into account the presence of bats and retain access and a suitable roosting site for bats.

For further information and advice contact Natural England on 0845 601 4523 (local rate).

I.2. Barn owls and other birds

The nests and eggs of all wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981. Barn owls (Tyto alba) are given greater protection against disturbance while breeding under Schedule 1 of the Act.

I.3. Planning Authority

If further bat surveys are recommended to enable suitable mitigation to be designed, the Local Planning Authority will not be in a position to make a decision on the planning application until the surveys have been completed and appropriate mitigation included within the proposals.



2. ASSESSMENT INFORMATION

2.1. Assessment Methodology

2.1.1. Visual Assessment

An initial assessment as to the suitability of the buildings and surrounding habitat for bats and barn owls was made on the 12th of July 2023 (CEC 4360).

Numerous references to methodology were employed and are referenced at the end of this report. The buildings were surveyed using a high-powered lamp to illuminate all areas thought suitable for roosting bats and barn owls. This included searching for bats and barn owls in situ, droppings, pellets, staining, liming, feathers and feeding remains. A search around the perimeter of the buildings was then conducted and any gaps and crevices which had the potential for roosting bats checked.

Magic, the interactive mapping resource from DEFRA was accessed for bat and Schedule 1 bird species within 1. Km of the survey site.

The Magic interactive resource identified two granted European Protected licence applications for bats and another site which is voluntarily monitored for bats on a yearly basis, both sites are within 1.5km of the site. One of the sites was licenced for greater horseshoe (*Rhinolophus ferrumequinum*), lesser horseshoe (*Rhinolophus hipposideros*), barbastelle (*Barbastella barbastellus*) common pipistrelle (*Pipistrellus pipistrellus*), Brown Long-eared (*Plecotus auritus*) and Natterer's (*Myotis nattereri*) and the other site for greater and lesser horseshoe bats.

3. SURVEY INFORMATION

3.1. Introduction

3.1.1. It is proposed to extend the accommodation within The Grange and the Outbuilding and as part of the process, a bat and nesting bird survey was undertaken on the 12th of July 2023 (CEC4360). The assessment found droppings from use by pipistrelle sp. bats within several areas of the roof voids. As evidence of use by bats had been confirmed within the building, the report advised that further survey work, in the form of emergence surveys, were required to confirm species and use by bats within the building.

Visual surveys were undertaken on 12^{th} July 2023 and emergence surveys on the 22^{nd} of August and the 5^{th} of September 2023. Three surveyors were employed to ensure that the building was adequately surrounded to record emerging bats and bat activity within the immediate surrounding area.



4. BAT ASSESSMENT RESULTS

4.1. Description of buildings and surrounding habitat

4.1.1. The Grange and Outbuilding

The Grange and Outbuilding are stone built, which are both covered with a part bitumen and breathable under-lined, slate roof. The Grange is two storied, which has been extended on the southern and eastern aspects. The Outbuilding is in use as a store and laundry room.

Both of the buildings once formed part of a working farm and are located in a rural location close to the south Cornwall coast, approximately 1.5km to the north from the village of Port Navas. The immediate surrounding habitat consists of cattle grazed pasture with a good network of hedgerows and small areas of trees. These conditions will provide good foraging and roosting opportunities for bats and barn owls.



Figure 3. Site location

4.2. Pre-existing information on bat species at the survey site

Prior to the original assessment there were no pre-existing information on bat species at this site.

4.3. Survey methodology

Visual survey

An assessment as to the suitability of the buildings and surrounding habitat for bats

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was made during the initial assessment. The exterior of the building was searched for evidence of use by bats using a high-powered lamp to illuminate all areas thought suitable for roosting bats. This included searching for droppings, staining and feeding remains. The walls, soffits and fascia boards were checked.

Night Vision Camera Survey

In line with the interim guidance from The Bat Conservation Trust and Natural England, the surveyors used night vision aids (NVA's) and infra-red illuminators to enable potential bat exit/entry points to be viewed in complete darkness.

Emergence surveys

Emergence surveys were undertaken using three surveyors on the 22nd of August and the 5th of September 2023. To ensure that potential emerging bats were recorded, one surveyor was positioned to the west, one to the south and one to the east of The Grange. The surveyors positioned to the south and west of the Grange were also able to record bats emerging from the Outbuilding and an additional infrared camera was located to record bat emergence from the Outbuilding. These locations provided the surveyors with a good view of the buildings and the surrounding area. The dusk emergence survey commenced approximately 15 minutes before sunset and to ensure late emerging bats would not be missed, continued for two hours after sunset.

The surveys were undertaken with the surveyors using either an EM Touch or Elekon M2 full spectrum bat detector. When using these detectors on location the 'time-expanded' signal is automatically saved and analysed by the internal automated software, Kaleidoscope Pro. The recordings were then later further analysed to confirm species recorded. Using this method an objective assessment is available for determining bat species and all the nuances of the bat calls can be heard. These detectors use the following methods of detection.

Table 1. Weather conditions and personnel

Date	Survey	Start time — end time (sunset time)	Weather conditions	Personnel
12/07/23	Visual	N/A	Dry, clear and a temperature of 18°C	S. Marshall
22/08/23	Emergence	19:55– 22:15 Sunset 20:14	Overcast with light rain and a temperature of 18°C	S. Marshall R. Payne
05/09/23	Emergence	19:40– 22:05 Sunset 19:57	Clear, dry with a temperature of 17°C	S. Marshall R. Payne T. Simpson

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5. SURVEY RESULTS

5.1. Visual surveys

The Grange

This building is two storied and there are four roof voids within the building and apart from one which could not be safely accessed, the interior of each was searched. The floors, walls and roof ridge of each were searched for evidence of use by bats. Where present, the fibre wool insulation was carefully lifted in several areas to search for historical use by bats and an endoscope inserted between the roofing felt and slates.

The exterior of the building was then assessed, and it was noted that there are gaps within slates, flashing, the ridge and beneath fascia boards.

Droppings from use by bats were noted within three roof voids which appear to have fallen from gaps within the bitumen felt, lining the underside of the roof.





Figure 4. Droppings found within roof voids.

The Outbuilding.

The outbuilding is single storied and built from local stone with a slate roof which has conservation roof lights and is underlined with breathable membrane. The exterior of the building has wooden fascia boards and there is a slate verge on the gables.

The interior of the building is divided into two separate sections, one is in use for storage while the other is in use as a laundry room. The floor, walls and stored items within the building were searched for evidence of use by roosting bats, which was followed by a search of the exterior. No evidence of use by bats was noted but the gap beneath the slate verge could not be fully accessed.



5.2. Emergence surveys

The Grange

28th August 2023

Sunset was at 20:14 and the surveyors were onsite at 19:55. The first bat recorded was a common pipistrelle (*Pipistrellus pipistrellus*) bat which was noted to emerge from beneath a fascia board on the eastern elevation (Fig. 5) of the building at 20:13. This bat was quickly followed by another common pipistrelle at 20:17 close to the first emergence point. At 20:20 a common pipistrelle bat emerged from under the fascia board fixed to the lower floor extension.

The surveyor located at the western elevation (Fig. 6) recorded a common pipistrelle bat emerging from beneath a fascia board fitted to the building at 20:16 and was followed by a further four common pipistrelle bats between 20:17- 20:20. Three common pipistrelle bats were recorded emerging from a separate location close to a downpipe at 20:22 and a further common pipistrelle bat was recorded to emerge at 20:26 close to the southern elevation of the roof.

The surveyor located on the southern elevation (Fig.7) recorded six common pipistrelle bats emerging at 20:15 from beneath a section of slate verge, close to the roof apex. A seventh common pipistrelle bat emerged from beneath the slate verge, but slightly further down the roof slope.

Brown long-eared (*Plecotus auritus*) bats were recorded by all surveyors close to sunset, indicating that this light sensitive species is roosting close to but not within the building. The surveyors also recorded lesser horseshoe (*Rhinolophus hipposideros*) bats foraging within the grounds and several recordings from Noctule (*Nyctalus noctula*) bats were recorded flying over the survey site.

5th September 2023

The survey commenced at 19:35, sunset was 19:57 and the initial bat recorded by the surveyor located on the western elevation (Fig. 6) was a common pipistrelle bat which emerged from a gap beneath the southern fascia, next to a down pipe at 20:11. A further three common pipistrelle bats were recorded to emerge from the same location between 20:16- 20:18.

The surveyor on the southern elevation (Fig. 7) recorded four common pipistrelle bats emerge at 20:13 - 2014, from a gap beneath the slate verge. At 20:30, two common pipistrelle bats returned to the building and re-entered and then reemerged at 20:34.

The surveyor located at the eastern elevation (Fig. 5) recorded single common pipistrelle bats emerge from beneath gaps within the fascia boards at 20:14, 20:15 and 20:36.

Noctule bats were again recorded flying and foraging over the survey site and brown long-eared and lesser horseshoe bats were recorded within the garden and grounds

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surrounding The Grange.

Outbuilding.

The surveyor located on the western elevation of The Grange was positioned to allow potential emerging bats from the outbuilding to be recorded. A single common pipistrelle bat was recorded emerging from beneath the slate verge on the eastern gable at 20:11 on the 28th of August, sunset was 20:14.

No bats were noted to emerge from the building on the subsequent survey undertaken on 5th September.



Figure 5. Bat emergence points, eastern elevation.





Figure 6. Western Elevation. Bat emergence points



Figure 7. Southern elevation. Bat emergence points.





Figure 8. Bat emergence point





Figure 9. Existing elevations & bat emergence points



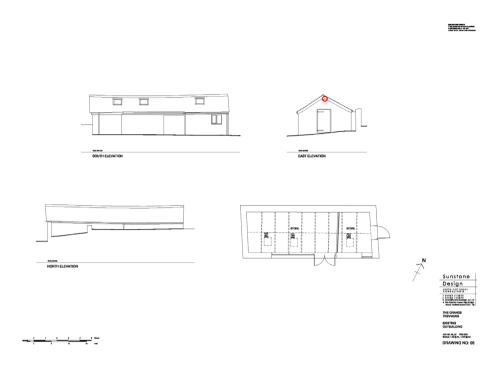


Figure 10. Outbuilding current elevations & bat emergence point

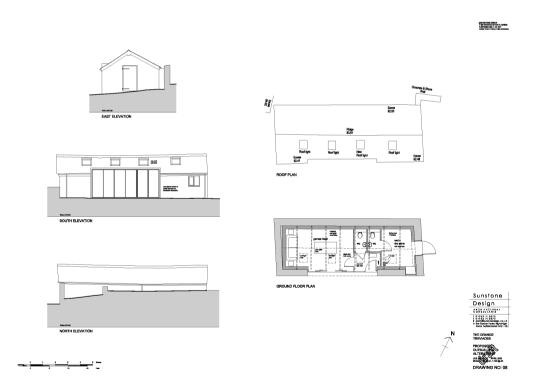


Figure 11. Outbuilding Proposed



5.3. Evaluation of results

The initial visual assessment of the buildings concluded that The Grange had evidence of use by roosting bats and that further surveys should be undertaken to confirm species and use by bats. The subsequent emergence surveys recorded common pipistrelle bats emerging from various locations within the roof on all aspects.

No evidence of use by bats was found within The Outbuilding but the emergence surveys recorded a single common pipistrelle bat to emerge from a gap beneath the eastern apex slate verge. The surveyors also noted that both brown long-eared bats were recorded shortly after sunset and lesser horseshoe bats were recorded flying within the gardens and grounds. The surveyors also recorded noctule bats recorded flying over the survey site during the surveys.

6. RECOMMENDATIONS AND MITIGATION

The surveys undertaken have used a variety of methods and surveys to confirm presence/absence of use by bats and the results show a high degree of confidence that the bats recorded during the survey events are an accurate assessment of use by bats.

The Grange and Outbuilding are in use by common pipistrelle bats, the number of bats recorded emerging from the slate verge on the southern apex is indicative of this area being used as a nursery roost and the other roosting locations around The Grange and Outbuilding are in use as roosts by a lower number of common pipistrelle bats as day roosts.

Outbuilding

The proposed works for the Outbuilding have been considered and from the plans provided and show that the gable, roof and slate verge in use by bats is not proposed to have an impact on the roosting location used by a single common pipistrelle and will not be subject to further surveys or licensing. However, if the proposal changes, this should be discussed with a bat ecologist and if necessary, a Natural England licence may be required to be in place.

The Grange

The proposed works will include the addition of a roof extension, and conservation roof lights to be set into the roof. Although the proposed works are away from the entry/exit points the works if not appropriately mitigated may result in disturbance and the loss of roosting opportunities.

In order to allow for the proposal to be legally undertaken and based on the number of common pipistrelle bats and roosts found, the works will require a Natural England bat mitigation licence (A13) to be in place before any works are undertaken.

The licence application may only be made once planning consent is in place and all conditions relating to wildlife have been fulfilled. Please note: Natural England advise that an application will require at least 30 working days to be considered.



CEC is able to offer this service and can provide a quotation to undertake this additional work.

The licence will include a method statement describing how the work will be undertaken to minimise the impacts to bats. The method statement will include the following:

- 1. To ensure the roost will remain, the works will be subject to seasonal restrictions to ensure the works are undertaken when bats are least likely to be present.
- 2. The roof of the building will be removed in sections and under an ecological watching brief. Bats found will be removed by the named ecologist and placed in a purpose-built bat box which will be secured to tree or part of the building which will remain undisturbed.
- 3. When bats have been removed by the ecologist works may commence to convert the roof void and build an extension.
- 4. When the roof of the building is replaced, the roof will be underlined with Type 1 bitumen roofing felt or a membrane that has passed the 'Snagging Propensity Test' 1
- 5. Access to the gap between the slate covering and roofing felt will be provided to replicate the current roosting locations used by bats.

¹ https://www.gov.uk/government/publications/bats-apply-for-a-mitigation-licence



7. **NESTING BIRDS**

It was noted that house sparrows (*Passer domesticus*) were noted actively nesting within roof of The Grange and gaining access beneath the wooden fascia boards. The nests and eggs of all wild birds are protected against taking, damage or destruction under the Wildlife and Countryside Act 1981. To avoid disturbing nesting birds the works should ideally be carried out between October and February, i.e. outside the breeding season. However the methodology to minimize disturbance to bats may specify an alternative working season. If so, it may be necessary to implement measures to exclude birds from the building before the nesting season. Advice should be sought from the ecologist who prepares the licence application. It is recommended that alternative provision is made for nesting birds: this could include access into other buildings within the site, ledges in dark areas, bird bricks built into the walls and the erection of nest boxes.