

Abbey Sanders Ecology



**Marians Lodge, Berry Hill,
Coleford, Forest of Dean**

**PRELIMINARY BAT ASSESSMENT
&
ECOLOGICAL APPRAISAL

2023**

Abbey Sanders CEcol CEnv MCIEEM

For

Mr & Mrs A Moore

Issue Details:

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SUMMARY

- The survey site is the dwelling and outbuilding at Marians Lodge, Berry Hill, Coleford in the Forest of Dean. The site owners now seek to extend the dwelling on one gable end and replace the outbuilding with a new garage.
- Abbey Sanders Ecology were appointed in 2023 to undertake an initial Preliminary Ecological Appraisal including a Preliminary Bat Roost including Daytime Bat Walkover 'DBW' and Breeding Birds Assessment to inform the proposed works and decision making process.
- The surveys and assessment have been carried out in accordance with current best practice guidelines including those issued by the Bat Conservation Trust (BCT) and Chartered Institute for Environmental Management (CIEEM). The works have been informed by a desk study and include an Ecological Impact Assessment.
- The initial daytime internal and external inspection in late September 2023 carried out by Abbey Sanders found the buildings to have negligible potential for bats to roost in areas affected by the works, in accordance with the BCT 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' 4th Edition (2023). The house was undergoing renovation and repair works including removal of render before repointing. No evidence of bat use was found during this initial survey.
- Whilst no further survey or mitigation for bats is considered appropriate, precautionary protective measures are proposed for the remaining repair and renovation works to the house, that do not require planning permission.
- The site is in an ecologically sensitive area, being adjacent to extensive woodland including ancient woodland area and with signs of Wild Boar and Fallow Deer visiting the gardens which have become overgrown with tall herbs in places. The site boundaries include a defunct native hedge with ornamental planting and some occasional native trees that will be retained within the grounds. A range of protected species close to the site were included in the records centre search results.
- Due to the nature and scale of the proposed works, it is considered appropriate for these to follow the Forest of Dean District Council's 'Biodiversity Specification

#1 'Precautionary Method of Working for Reptiles, Common Toads, Hedgehogs, Badgers and Nesting Birds' (or superceding version as appropriate).

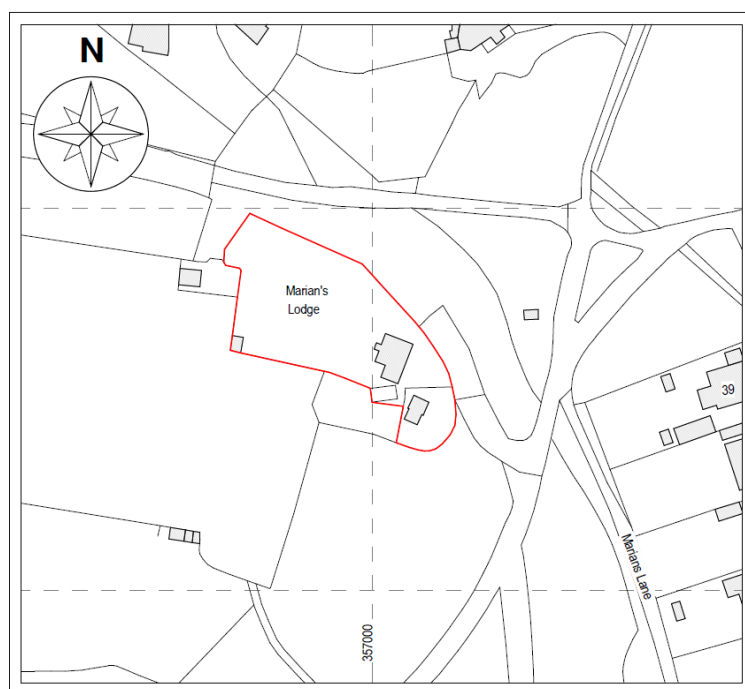
- Suitably low spill external lighting will be required should any alterations to the existing be proposed.
- To meet best practice, development works are proposed to include replacement bat roost and bird nesting provision as well as 'gapping up' native hedgerow planting as 'biodiversity enhancement' measures.

1.0 INTRODUCTION

The survey site, a dwelling, detached outbuilding and gardens known as Marians Lodge, Berry Hill, Coleford, in the Forest of Dean, is located at National Grid Reference: SO 57006 12567 (What3Words 'cheetahs.etchings.rounds').

Works to improve the accommodation are proposed, including replacing a single storey lean-to on the dwelling with a two-storey lean-to and replacing the outbuilding with a garage.

The works are subject to a proposed planning application to the Forest of Dean District Council for which ecological information will be required.



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Site location plan provided by Apex Architecture



Cottage and greenhouse viewed from garden to north



Cottage to rear (right) of image with outbuilding in foreground (left) from east

Abbey Sanders Ecology were appointed to undertake an ecological assessment of the site, including an initial daytime internal and external inspection of the site with particular regard to bats ‘Preliminary Roost Assessment’ with ‘Daytime Bat Walkover’ survey, carried out by Abbey Sanders on 29th September 2023. This aimed to identify the presence and potential use of the site by notable habitats and protected species and the potential for and scale of impacts to protected species, habitats or designated sites. Recommendations are made for avoidance, mitigation and enhancement measures and / or for further surveys where necessary as appropriate.

Abbey Sanders is a qualified professional consultant ecologist (BSc and MSc degrees), Chartered Ecologist, full Member of the Chartered Institute of Ecology and Environmental Management and Chartered Environmentalist. Abbey Sanders is trained and experienced in ecological surveying with over 20 years’ experience, including for bats (Natural England licence registration number **2015-12398-CLS-CLS**).

The results of the surveys are detailed in **4.0 Results** below.

2.0 SPECIES ECOLOGY, LEGISLATION & POLICY

Relating to species that have been identified as potentially relating to the scheme;

2.0 Bats

UK bat species are nocturnal, roosting by day and foraging during the night, particularly at dusk and dawn during the main active months, March to October. Summer roost sites include cavities and crevices within buildings or trees with bats relocating to winter roosts to hibernate, during which they can wake and emerge to feed for short periods. Winter roost sites are in more sheltered sites with relatively constant cool temperatures, such as disused mines or caves. When commuting to feeding sites or foraging, bats tend to follow linear features within the landscape such as hedgerows or rivers and feed on insects where these are readily found. Some bats commute through open areas and some feed over open habitat such as water bodies.

All bat species occurring in the UK are afforded full legal protection under the Wildlife and Countryside Act 1981 (as amended) and are included in Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994, amendments to which have been consolidated by the Conservation of Habitats and Species Regulations 2010, since updated in 2017 (as amended) which gives them protection under UK law. Through this protection it is illegal, among other offences to;

- Capture, kill or injure a bat
- Disturb bats
- Obstruct, damage or destroy the places where they breed or rest

unless a licence has been obtained to do so, for reasons of conservation, scientific research or through development (licences from Natural England / NE). Licences are only granted for these purposes where works are necessary and measures to adequately protect the bats are in place.

2.2 Reptiles

Species of reptile which may be expected to potentially occur in the wider area include four species of reptile; Common or Viviparous Lizard (*Lacerta vivipara*), Slow-worm (*Anguis fragilis*), Grass Snake (*Natrix natrix*) and Adder (*Vipera berus*). From the habitats present in site it is considered that Slow-worm and possibly Common Lizard would be the most likely to occur in site, although the site is quite exposed and isolated from surrounding similar habitats reducing the likelihood of their presence.

All of these reptile species are afforded some protection, including against killing or injury, under the Wildlife and Countryside Act (1981, as amended).

Reptiles are active during the summer months, emerging from hibernation from April to breed in the spring and early summer before returning to hibernation from around October. Grass Snakes are often found in association with water due to their preference for amphibian prey. Reptile species, including notably Adders, often hibernate together and mate on emergence before migrating potentially several hundred metres to habitat where they will spend the rest of the summer.

Reptiles require shelter and foraging habitat during the summer months and hibernate in well sheltered areas offering relatively constant temperatures, such as log or rock piles, stone walls, or underground cavities such as around tree roots.

2.3 Nesting Birds

The main bird breeding season is between March and August inclusive although breeding activity can also often take place in February and September. Whilst the specific requirements of different bird species are varied, any buildings and areas of vegetative cover including trees, hedgerow, scrub and tussocky grassland can provide potential nesting areas for birds. Under the Wildlife and Countryside Act, 1981, as amended, it is an offence to kill injure or take any wild bird, to take, damage or destroy the nest of a bird whilst it is being built or in use and to take or destroy eggs, or to possess or control a bird or eggs (unless done so legally). Some species have further protection including Barn Owls *Tyto alba* which are also listed on Schedule 1 of the Wildlife and Countryside Act, which gives them further special protection.

2.4 Planning Policy

The **National Planning Policy Framework (July 2021)** states in Section 15.

Conserving and Enhancing the Natural Environment (extracts from full text);

174. Planning policies and decisions should contribute to and enhance the natural and local environment by:

(a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

(b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

(c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

(d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

(e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

(f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate

180. *When determining planning applications, local planning authorities should apply the following principles:*

(a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

(b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

(c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons ⁶³ and a suitable compensation strategy exists; and

(d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate

Section 6.4 of the Forest of Dean District Council's Core Strategy (February 2012)

states that;

'The Forest of Dean has a large number and variety of protected sites and landscapes

. They include areas protected by European and national legislation and development within them is strictly controlled. Examples include the Special Areas of Conservation, Ancient Monuments and Sites of Special Scientific Interest. There are also locally protected Key Wildlife Sites and other areas of local interest. In addition it is essential to take proper account of the need to safeguard certain protected species which may be present throughout the district. As a general

principle development in these areas or development which adversely affects protected species is very unlikely to be permitted. Semi natural habitats such as ancient woodland will be protected from development. Enhancement will be sought either independently or as a part of new development. Combinations of sites forming larger general areas are of greater importance in nature conservation and it is therefore important to assess the impact of proposals on the wider area using such considerations as the Gloucestershire Nature Map. All protected areas and others can form part of particularly important networks of 'green infrastructure'. This can be multi-functional so for example recreational routes can be useful wildlife corridors.'

3.0 METHODOLOGY

The methodology for bat surveys was as follows, in accordance with current best practice including the BCT Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition, 2016, as current at time of surveys and with recommendations following 4th Edition, October 2023);

- **Desk study** - A data search through the Gloucestershire Centre for Environmental Records has been commissioned for protected species within 1km, local designated sites within 500m, national / international designated sites within 1km and for sites designated for bats within 10km.
- **An internal and external inspection of the building(s)** was undertaken by licensed bat worker and ecologist Abbey Sanders during daylight hours on 29th September 2023 during which conditions were dry with typical temperatures

for the time of year. A search of the buildings and grounds was made, with the use of high-power binoculars and a torch, for evidence of bats including;

- The chattering noise of bats
- The presence of droppings at entrances or beneath potential perching sites
- Signs of oil staining from bat fur or urine stains around the edge of potential roost entrances
- Feeding remains such as insect wings below potential perching sites.

An assessment of the potential for the building and surrounding area to support roosting bats was also undertaken. This identifies areas where bats may be able to access and use areas of the building for roosting in accordance with the best practice guidelines. The building is then given a score of 'negligible', 'low', 'moderate' or high bat roost potential which then determines whether further surveys at dusk and dawn are required and how many of these are needed where there is greater than 'negligible' potential.

During the survey searches were also made for signs of nesting birds and an assessment of other potential impacts to habitats and species was undertaken.

Constraints: None noted that affected the viability of the survey or assessment. We note that the dwelling was undergoing some renovation / repair works at the time of the survey which may have altered the condition of the building, these were understood to have begun in May 2023.

The results are described in **4.0 Results** below.

4.0 RESULTS

4.1 Data search and desk study

Protected species

The results of the data search conducted through the Gloucestershire Centre for Environmental Records (GCER) are summarised in Tables 1 and 2 below, with

‘distance’ reflecting the proximity of the closest record for each species, and ‘date’ the year of the most recent record for each species.

TABLE 1: Summary of GCER Data Search: Bat records within 2km of Marian’s Lodge

Scientific name	Common name	No. of records	Distance (km) (approx.) <i>(roost)</i>	Date (most recent record) <i>(roost)</i>	Conservation Status	Notes
<i>Nyctalus noctula</i>	Noctule Bat	5	0.47	2021	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NER C_S.41, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	field observation/ static detector survey records
<i>Chiroptera</i>	Bat	2	0.5 <i>(0.5)</i>	2013 <i>(2007)</i>	BAP-2007, Bern-A2, Bern-A3, CMS_A2, CMS_EUROB ATS-A1, England_NER C_S.41, HabDir-A2*, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	1 roost record - possibly Whiskered / Brandt's bat; 1 field observation record - possibly Barbastelle bat
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	16	0.5 <i>(1.08)</i>	2022 <i>(2022)</i>	CMS_A2, CMS_EUROB ATS-A1, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	1 roost record; 15 field observation records

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<i>Plecotus auritus</i>	Brown Long-eared Bat	6	1.04 (1.05)	2022 (2022)	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NERC_S.41, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	3 roost records, 1 a hibernation roost; 3 field observation records
<i>Rhinolophus ferrumequinum</i>	Greater Horseshoe Bat	3	1.06	2022	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NERC_S.41, HabDir-A2*, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	static detector survey/ field observation records
<i>Barbastella barbastellus</i>	Western Barbastelle	1	1.3	2021	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NERC_S.41, HabDir-A2*, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	static detector survey/ field observation records
<i>Eptesicus serotinus</i>	Serotine	1	1.3	2021	Bern-A2, CMS_A2, CMS_EUROB ATS-A1, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	static detector survey/ field observation records

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<i>Myotis</i>	Myotis Bat species	5	1.3	2021	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NER C_S.41, HabDir-A2*, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	static detector survey/ field observation records
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	6	1.3	2021	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NER C_S.41, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	field observation records
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	8	1.3 <i>(1.63)</i>	2021 <i>(2015)</i>	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NER C_S.41, HabDir-A2*, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	3 hibernation roost records; 5 static detector survey/ field observation records
<i>Plecotus</i>	Long-eared Bat species	3	1.5	2013	BAP-2007, Bern-A2, CMS_A2, CMS_EUROB ATS-A1, England_NER C_S.41, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	field observation records

<i>Nyctalus</i>	Nyctalus Bat species	2	1.6	2019	BAP-2007, Bern-A2, CMS_A2, CMS_EUROBATS-A1, England_NERC_S.41, HabDir-A4, HabReg-Sch2, WACA-Sch5_sect9.4b, WACA-Sch5_sect9.5a, WACA-Sch5Sect9.4c	field observation records
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Key to Conservation Status:

Bern=Bern Convention; CMS = Convention on Conservation of Migratory Species (Bonn Convention); EUROBATS = Agreement on the Conservation of Populations of European Bats; HabDir = Habitats Directive; HabDir-A2* = Habitats Directive Annex 2 Non-priority species; HabReg = The Conservation (Natural Habitats, &c.) Regulations 2010; WACA= Wildlife and Countryside Act 1981; UK Priority Species 2007= UK Biodiversity Action Plan (BAP) List of Priority Species; England NERC S.41 = Natural Environment and Rural Communities Act 2006–Species of principal importance in England; RedList_Global_Near Threatened = International Union for Conservation of Nature IUCN Red List Near Threatened Species.

TABLE 2: Summary of GCER Data Search Results: Rare and Protected Species within 1km of Marian’s Lodge

Scientific name	Common name	No. of records	Distance (km) (roost)	Date (roost)	Conservation Status	Notes
<i>Accipiter nisus</i>	Sparrowhawk	1	0	2016	CMS_A2, ECCITES-A, Bird-Amber,	field observation
<i>Fringilla montifringilla</i>	Brambling	1	0	2018	WACA-Sch1_part1,	field observation
<i>Milvus milvus</i>	Red Kite	8	0	2022	BirdsDir-A1, CMS_A2, ECCITES-A, WACA-Sch1_part1,	field observations
<i>Regulus ignicapilla</i>	Firecrest	1	0	2015	Bern-A2, WACA-Sch1_part1,	field observation
<i>Turdus philomelos</i>	Song Thrush	7	0	2022	BirdsDir-A2.2, Bird-Amber,	field observations
<i>Turdus pilaris</i>	Fieldfare	1	0	2018	BirdsDir-A2.2, Bird-Red, WACA-Sch1_part1,	field observations
<i>Turdus viscivorus</i>	Mistle Thrush	3	0	2022	BirdsDir-A2.2, Bird-Red,	field observations
<i>Erinaceus europaeus</i>	West European Hedgehog	21	0.14	2022	Bern-A3, BAP-2007, England_NERC_S.41,	live sightings of adults and juveniles. 1 roadkill record.

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<i>Satyrrium w-album</i>	White-letter Hairstreak	2	0.15	2022	BAP-2007, England_NER C_S.41, WACA-Sch5 sect9.5a,	field observations
<i>Ecliptopera silaceata</i>	Small Phoenix	21	0.23	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Ennomos fuscantaria</i>	Dusky Thorn	1	0.29	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Muscardinus avellanarius</i>	Hazel Dormouse	6	0.29	2022	Bern-A3, HabDir-A4, BAP-2007, England_NER C_S.41, WACA-Sch5 sect9.4b, WACA-Sch5 sect9.5a, WACA-Sch5Sect9.4c, HabReg-Sch2	4 live sightings; 1 nest record; 1 record of 2 juveniles killed by a cat
<i>Atethmia centrigo</i>	Centre-barred Sallow	2	0.32	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Eugnorisma glareosa</i>	Autumnal Rustic	2	0.32	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Hepialus humuli</i>	Ghost Moth	2	0.32	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Melanchra persicariae</i>	Dot Moth	2	0.32	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Melanthia procellata</i>	Pretty Chalk Carpet	6	0.32	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Anchoscelis litura</i>	Brown-spot Pinion	1	0.39	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Ennomos quercinaria</i>	August Thorn	4	0.45	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Ennomos erosaria</i>	September Thorn	5	0.49	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Diarsia rubi</i>	Small Square-spot	1	0.5	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Leptidea sinapis</i>	Wood White	6	0.5	2020	BAP-2007, England_NER C_S.41, WACA-Sch5 sect9.5a,	field observations
<i>Zootoca vivipara</i>	Common Lizard	24	0.5	2021	Bern-A3, BAP-2007, England_NER C_S.41, WACA-Sch5 sect9.1(k ill/injuring), WACA-Sch5 sect9.5a,	Juveniles and adults, including pregnant females (transect surveys)

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<i>Acronicta rumicis</i>	Knot Grass	2	0.55	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Apamea remissa</i>	Dusky Brocade	2	0.59	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Hemistola chrysoprasiaria</i>	Small Emerald	1	0.61	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Minoa murinata</i>	Drab Looper	3	0.71	2022	BAP-2007, England_NER C_S.41,	field observations
<i>Chloris chloris</i>	Greenfinch	82	0.73	2022	Bern-A2, Bird-Red,	field observations
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	2	0.73	2021	BirdsDir-A2.2, CMS_AEWA-A2, Bird-Amber,	field observations
<i>Columba palumbus</i>	Woodpigeon	87	0.73	2022	BirdsDir-A2.1 Bird-Amber,	field observations
<i>Passer domesticus</i>	House Sparrow	88	0.73	2022	Bird-Red, BAP-2007, England_NER C_S.41,	field observations
<i>Prunella modularis</i>	Dunnock	77	0.73	2022	Bern-A2, Bird-Amber,	field observations
<i>Pyrrhula pyrrhula</i>	Bullfinch	6	0.73	2022	Bird-Amber,	field observations
<i>Sturnus vulgaris</i>	Starling	98	0.73	2022	BirdsDir-A2.2, Bird-Red,	field observations
<i>Troglodytes troglodytes</i>	Wren	43	0.73	2022	Bern-A2, Bird-Amber,	field observations
<i>Turdus iliacus</i>	Redwing	1	0.73	2018	BirdsDir-A2.2, Bird-Amber, WACA-Schl part1,	field observations
<i>Scotopteryx chenopodiata</i>	Shaded Broad-bar	2	0.74	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Timandra comae</i>	Blood-vein	2	0.74	2017	BAP-2007, England_NER C_S.41,	light trap records
<i>Rana temporaria</i>	Common Frog	3	0.77	2021	Bern-A3, HabDir-A5, WACA-Sch5_sect9.5a,	1 record of spawn; 2 records of juveniles under artificial refugia (transect survey)
<i>Spilosoma lutea</i>	Buff Ermine	1	0.81	2017	BAP-2007, England_NER C_S.41,	light trap records

<i>Anguis fragilis</i>	Slow-worm	2	0.85	2021	Bern-A3, BAP-2007, England_NER C_S.41, WACA-Sch5_ssect9.1(kill/injuring), WACA-Sch5_ssect9.5a,	live sighting adult female (transect survey)
<i>Bufo bufo</i>	Common Toad	23	0.85	2021	Bern-A3, BAP-2007, England_NER C_S.41, WACA-Sch5_ssect9.5a,	juvenile toads under artificial refugia (transect survey)
<i>Columba oenas</i>	Stock Dove	1	1	2019	BirdsDir-A2.2, Bird-Amber,	field observations
<i>Strix aluco</i>	Tawny Owl	1	1	2016	Bern-A2 ECCITES-A, Bird-Amber,	field observations

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Designated Sites

Natural England’s MAGIC map application was checked for any statutory wildlife sites within 2km of Marian’s Lodge, and sites designated specifically for bats within 10km.

Designated sites within 2km (approximate distance from site)

- **Dingle Wood SSSI (1.2km)** – mixed replanted ancient woodland with a varied shrub layer and some uncommon plants such as herb Paris, *Paris quadrifolia*, common wintergreen *Pyrola minor*, birds-nest orchid *Neottia nidusavis* and greater butterfly orchid *Platanthera chlorantha*. Within the woodland are deep pits and uneven ground associated with ancient iron workings.
- **Wye Valley Woodlands Special Area of Conservation (2km)** – a composite site encompassing the ecologically diverse woodland habitats along the Wye Valley Gorge. The woodlands support a significant population of lesser horseshoe bats. The closest component site is **Upper Wye Gorge SSSI**, situated approximately 2km to the northwest.

Sites designated for bats within 10km

- **Wye Valley and Forest of Dean Bat Sites SAC (4km)** – encompasses a range of sites on the Gloucestershire-Monmouthshire border designated for their importance to lesser and/or greater horseshoe bats. The following component sites are within 10km of Marian's Lodge:
 - **Old Bow & Old Ham Mines SSSI (4km)** – a nationally important roost for lesser horseshoe bats which hibernate in the underground tunnels and caverns. Woodland cover provides nearby foraging habitat. Other bat species using the site include small numbers of greater horseshoe bats along with Daubenton's bat, Brandt's bat, Natterer's bat, whiskered bat and brown long-eared bat.
 - **Wye Valley Lesser Horseshoe Bat SSSI** – comprises four lesser horseshoe bat maternity roosts two of which are within 10km of Marian's Lodge; **Penallt Old Church (5.1km)** and **The Priory (9.4km)**. Penallt Old Church is the site of the largest known lesser horseshoe bat maternity roost in the UK.
 - **Newton Court Stable Block SSSI (5.2km)** - the only breeding roost for greater horseshoe bats in Monmouthshire and one of only three known in Wales. The site is also used by a small number of lesser horseshoe bats.
 - **Devil's Chapel Scowles SSSI (8.6km)** – horseshoe bat hibernation roost
 - **Westbury Brook Ironstone Mine SSSI (10km)** – horseshoe bat hibernation roost
 - **Dean Hall Coach House and Cellar SSSI (10.2km)** – greater horseshoe bat maternity roost

Locally Designated Sites

The GCER search did not find any local wildlife sites within 500m of the site.

Habitats at and around the site

The site is immediately adjacent to mapped ancient and semi-natural woodland to the west and north. Between this and the site to the west lies a small area of former pony

grazing paddock that is now an establishing orchard plantation on what is understood to be Forestry Commission owned land.

A mixture of planted woodland areas are also present to the east with scattered dwellings and the settlement of Berry Hill village beyond. To the north-west lies a Forest Holidays lodge accommodation site.

Internal inspection

House

The internal space of the dwelling was divided into various ground floor rooms with some ceiling plaster removed, the upstairs being fully opened up into the roof void, as the loft floor / first floor ceilings had been removed in readiness for replacement. This work had been undertaken recently and there was no 'fly in' access for bats or birds to the dwelling and no suitable internal undisturbed voids for these species. No evidence of any use by bats or birds was recorded although the roof space and other areas were undergoing works that could have removed any such evidence of previous use if present. The roof was lined with a modern breathable roofing membrane.

External inspection

House

The exterior of the house had been recently worked to remove the render from much of the exterior, exposing the stone and brick construction below. This had led to recent exposure of gaps between stonework and between the stone walls and fascias to the front and rear of the dwelling. There were also some gaps below lead flashing adjacent to the chimney on either end of the house roof on the east facing elevation.

The north gable end had some similar recently exposed gaps including behind the bargeboards although some render remained at the apex. The south gable end had most of the render still present at the time of the survey with no notable gaps at the bargeboards. The existing single storey lean-to on the south gable end also had no notable gaps that would allow bat access, being rendered and with a tight fitting roof.

In summary there were a range of gaps offering potential bat access on most elevations although not the southern elevation or lean-to, and these gaps were recently exposed due to render removal. No evidence of bat or bird use was observed.

Outbuilding

This comprised of a small **single storey brick / block shed** close to the south-west of the house that was fully enclosed with no roof void and a monopitch roof with glazing leading to moderate internal light levels, this was rendered externally, and contained no evidence of bat or bird use. Externally there were some small wall top gaps although these gave access to damp flat roofing material and no crevices considered suitable for likely bat use. To the southern end of this was a simple **wood store**, open to the east side and being an apparent later addition. The lean-to comprised of simple block structure with corrugated sheeting roof, some of which were transparent window panels allowing for high internal light levels. There were minimal potential perching areas for wildlife inside and the stored wood was at a high level, with 0.2 to 0.7m clearance between this and the roof underside, considered to further reduce the likelihood of bat or bird use. A thorough search was made although no droppings or other evidence was found.

Gardens and grounds

The **immediate surroundings of the house** were comprised of paths, paving and lawns with ornamental shrubs and planting – a small bed at the northern gable had become somewhat overgrown with ornamentals and ruderal herbs.

The **site boundaries** were of ornamental shrubs and defunct native hedgerow species to the east and south, with species including laurel, snowberry, leylandii, hawthorn, bramble, sycamore, oak saplings and honeysuckle.

To the west of the house was a larger **overgrown former lawn** with tall herbs including nettle *Urtica dioica*, ragwort *Senecio jacobaea*, bracken *Pteridium aquilinum* and a small group of **juvenile Prunus trees** at the north corner, bordering woodland. A **small rowan tree** *Sorbus aucuparia* was present close to the house adjacent to a greenhouse and a **larger yew tree** *Taxus baccata* present on the south-west corner of the site adjacent to an offsite recently planted orchard (within 15 years approx.). Signs of wild boar *Sus scrofa* and fallow deer *Dama dama* were prevalent. A small **collapsed former stone shed**, likely an outhouse, was present below the yew tree.

Site Photographs:

See also photos within Introduction section above



Inside ground floor of house



Inside first floor of house looking through removed ceiling area to exposed roof



Single storey lean-to at southern gable end of house



Southern gable end, some render removed on west side



Southern gable end – no gaps on lean-to or adjacent main building



Southern gable end lean-to illustrating tight fitting tiles and wall top



East facing elevation of house and adjacent lawn



Tight fitting recent roof – east elevation



West facing elevation and adjacent lawn



North facing gable end



North gable end with remaining render at apex



Outbuilding viewed from south-east



Outbuilding viewed from north-east with recently stored items



Interior of shed south end of outbuilding – high light levels and disturbance with absence of suitable likely perching locations and sufficient clearance reducing potential for bat or nesting bird use



Interior of store room – north end of outbuilding – well used and with no ‘fly-in’ access



Driveway and ornamental planting southeast of house



Lawn and view to garden, west of house



Overgrown garden bed at north gable end of house



Overgrown lawn with tall herbs west of house



Yew tree and collapsed stone shed at south-west corner of site



View from north end of garden back to house



Juvenile Prunus trees at north corner of site



Greenhouse and defunct hedgerow at north-east boundary



Ornanamental section of boundary hedgerow east of house



Defunct hedgerow east of outbuilding

Existing Site Plan:



All dimensions shall be checked on site by contractor prior to preparation of final drawings and dimensions shall be as shown.
 Drawing scale for this drawing:
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 This drawing has to read in conjunction with all relevant contracts, client's design brief and any correspondence or variations are to be read in light of the contract and the relevant contract documents.

EXISTING SITE PLAN LEGEND

- Woodland
- Orchard
- Concrete foundations
- Formal lawns
- Access paths/paths
- Area of no-go/undergrowth
- Gravel/soil
- Slabs (patio & paths)
- Existing walls
- Hedge/Undergrowth
- Existing fencing
- Existing driveway
- Site boundary
- Existing trees



Old House, Parkgate, Gloucestershire, GL15 6ET
 01292 890101
 The Silk, 24 Cloven View Rd, Cheltenham, GL51 1L1
 01242 610 980

Client: Mr & Mrs A Moore

Project: Mar ins Lodge
 Berry Hill, Coleford
 GL16 9GN

Title: Existing Site Plan

Job No.	Drawing No.	Revision
AA782ml	102	N/A
Scale: 1:200@A2	Issue: Planning	Date: August 2023

www.apexarchitecture.co.uk enquiry@apexarchitecture.co.uk

Provided by Apex Architecture

5.0 ASSESSMENT & CONCLUSIONS

Proposed works

The proposed works relating to planning are understood to involve;

- Replacement of southern single storey extension on house with double storey extension
- New porch on east elevation of house and roof lights
- New solar PV panels on house roof and in garden
- Replacement of outbuilding with garage

Other works, not subject to planning permission involve;

- Stone pointing and small scale rendering of house exterior with traditional materials
- Repair and reinstatement of house interior
- Garden management to include benefits to nature conservation

Existing plans and elevations:

House



Outbuilding

All dimensions to be checked on site by contractor prior to preparation of shop drawings and commencement of work on site.
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 This drawing is to be used in conjunction with all relevant consultants drawings and specifications and any discrepancies or contradictions are to be notified to Apex Architecture Ltd before the affected work commences.

FRONT ELEVATION - North East
Scale 1:100

SIDE ELEVATION - North West
Scale 1:100

REAR ELEVATION - South West
Scale 1:100

SIDE ELEVATION - South East
Scale 1:100

GROUND FLOOR PLAN
SCALE 1:50

ROOF PLAN
SCALE 1:50

Revision	Date	Description	Drawn by

APEX ARCHITECTURE

The Site: 24 Crown Rd, Chatterton, GL7 5L7
 One House, Aylesbury, Bucks/Bedfordshire, GL7 5BT
 Watlington Business Park, Watlington, WOX 3JL

Client: Mr & Mrs A Moore

Project: Marians Lodge, Berry Hill, Coleford, Glos, GL16 8DN

Title: Outbuilding drawing sheet

Job No: AAT/20m Drawing No: 101 Revision: 1
 Scale as indicated: As indicated Planning: August 2023
 www.apexarchitecture.co.uk info@apexarchitecture.co.uk

0m 1m 2m 3m 4m 5m VISUAL SCALE 1:50 @ A1
 0m 2m 4m 6m 8m 10m VISUAL SCALE 1:100 @ A1

Provided by Apex Architecture

Proposed plans and elevations;

All dimensions to be checked on site by contractor prior to preparation of shop drawings and commencement of work on site.
 Responsibility is not accepted for errors made by others in scaling from this drawing. All construction information should be taken from figure dimensions only (unless stated otherwise).
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 This drawing is to be used in conjunction with all relevant consultants drawings and specifications and any discrepancies or contradictions are to be notified to Apex Architecture Ltd before the affected work commences.

GROUND FLOOR PLAN
SCALE 1:50

FRONT ELEVATION - South East
Scale 1:100

SIDE ELEVATION - North East
Scale 1:100

REAR ELEVATION - North West
Scale 1:100

SIDE ELEVATION - South West
Scale 1:100

FIRST FLOOR PLAN
SCALE 1:50

SECOND FLOOR PLAN
SCALE 1:50

Indicates areas of 150mm head height and base

Revision	Date	Description	Drawn by
1			
2			

APEX ARCHITECTURE

The Site: 24 Crown Rd, Chatterton, GL7 5L7
 One House, Aylesbury, Bucks/Bedfordshire, GL7 5BT
 Watlington Business Park, Watlington, WOX 3JL

Client: Mr & Mrs A Moore

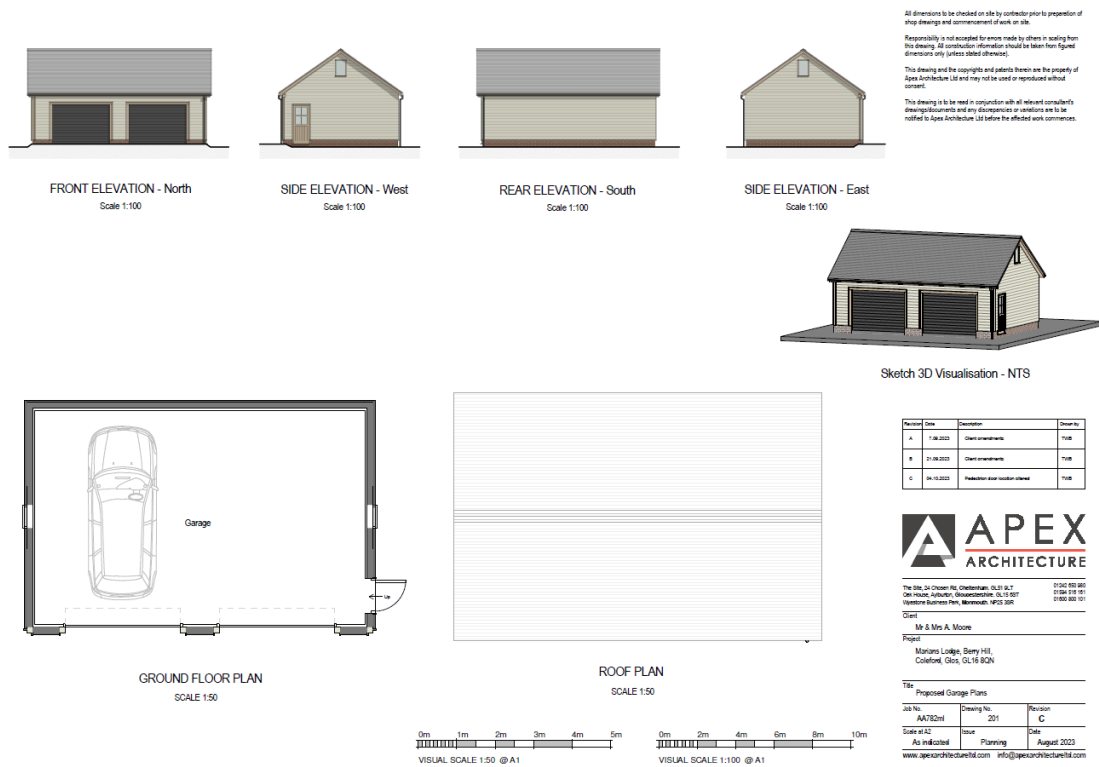
Project: Marians Lodge, Berry Hill, Coleford, Glos, GL16 8DN

Title: Proposed Plan Plans & Elevations

Job No: AAT/20m Drawing No: 200 Revision: B
 Scale as indicated: As indicated Planning: August 2023
 www.apexarchitecture.co.uk info@apexarchitecture.co.uk

0m 1m 2m 3m 4m 5m VISUAL SCALE 1:50 @ A1
 0m 2m 4m 6m 8m 10m VISUAL SCALE 1:100 @ A1

Garage



Provided by Apex Architecture

Bat Roost Potential Assessment

The site is located adjacent to extensive woodland **habitat** of high value to bats, with **historic records** of Noctule and Common Pipistrelle bats within less than 500m and records of Brown Long-eared, Soprano Pipistrelle, Serotine, Myotis and the more scarce species Barbastelle, Greater Horeshoe and Lesser Horseshoe within 1.5km. The closest component roost of the Wye Valley and Forest of Dean Bat Sites SAC is the Old Bow and Ham Mines SSSI within 4km.

At the time of the survey, the **house** was undergoing repair and renovation works that had included removal of much of the exterior render and internal removal of ceilings and the loft floor, whilst this may potentially have removed any previous evidence of use by wildlife, it was only possible to assess the building as it was at the time of survey. This was found to contain no potential for any internal bat roosting or bird nesting and low potential for external bat roosting, although the areas of opportunity were understood to have been largely recently created and soon to be removed due to repointing of stonework (works ongoing and not subject to planning consent). The

southern gable end main house and lean-to had render still mostly in place and no gaps suitable for bat roosting present.

The **outbuilding** was found to contain no fly-in accessible spaces that were considered likely to be used by bats and no suitable bat roosting crevice areas.

Overall, and taking into consideration the ongoing works, the **house** was considered to have low bat roost potential although **negligible potential in areas affected by the planning proposals and the outbuilding was considered to have negligible potential for bat roost use**. There were no trees with bat roost potential within the areas affected by proposals. **Therefore no further survey or bat roost mitigation is recommended in relation to the planning application.**

Due to the low to negligible overall potential for bat use relevant to ongoing repair and renovation works at the site, **precautionary working measures** are proposed below.

Other Ecological Impacts

The site is in an ecologically sensitive area, with historic records of protected species including Hazel Dormouse, Common Lizard, Common Frog and Hedgehog within less than 500m and records of Common Toad and Slow-worm within 850m. Signs of use of the wider site by Wild Boar and Fallow Deer were recorded during the survey and there is potential for nesting birds to use the boundary hedgerows although these are of limited connectivity at present reducing their potential for other protected species. There will need to be **controls on artificial lighting**.

Due to the scope of the wider site to support protected species, general best practice **precautionary working measures** are proposed for the works and longer term management of the site. Impacts are expected to be low, however, due to the ongoing 'baseline' disturbance to the buildings and their surroundings through the repair and renovation works, and the footprint of works and associated storage and vehicle movement areas comprising of hardstanding, paving and maintained lawns.

Measures for **biodiversity enhancement** are also proposed below.

In order to ensure that any potential low impacts to designated sites, habitats and protected species are minimised and to mitigate and compensate for these as well as providing some net biodiversity enhancements at the site, the following **ecological protection, mitigation and enhancement measures** are proposed;

Working Methodology – Buildings (Outside of Planning Application Works)

- Working methods will include careful **visual checks** of all working areas before works to include torchlight searches of crevices before repairs and repointing. Removal of roof tiles and other materials will follow a careful ‘lift and look’ process where individual pieces are lifted straight off without scraping and checked on all sides before being removed / stored.
- In the unlikely event that any **bats** are found during works, works will stop and a suitably qualified ecologist and / or Natural England will be contacted for advice before works to the relevant area recommence.
- Should any **nesting birds** be found during works, works to the relevant area will need to be delayed until the young birds have left the nest, as nesting birds are protected under the Wildlife and Countryside Act, 1981 (as amended).

Planning Works

- Clearance and construction works will proceed in accordance with the Forest of Dean District Council’s ‘Biodiversity Specification #1 **‘Precautionary Method of Working for Reptiles, Common Toads, Hedgehogs, Badgers and Nesting Birds’** (or superceding version as appropriate).
- **Lighting – if any additional or altered lighting is proposed, a lighting strategy** where required will need to be designed with the aim to minimise spill into the environment, in order to protect wildlife including foraging and commuting bats. Suitable lighting considerations include downward pointing shielded lamps below eaves level and lighting operated on a timed PIR system – refer to ILP / BCT Guidance Note 8 Bats and Artificial Lighting at Night 2023.

As biodiversity enhancement features;

- **2 x wood stone / wood concrete Starling nest boxes** - one to be installed on the northern gable end of the house and one on the east gable end of the garage.



- **1 x Elisa wood concrete bat box** to be installed on the northern gable end of the house



- **‘gapping up’ native hedgerow planting** along the northern and eastern sides of the site in accordance with the Forest of Dean District Council’s guidance (extracts below);

Main Matrix (Transplants/Quicks)

70% of planting stock

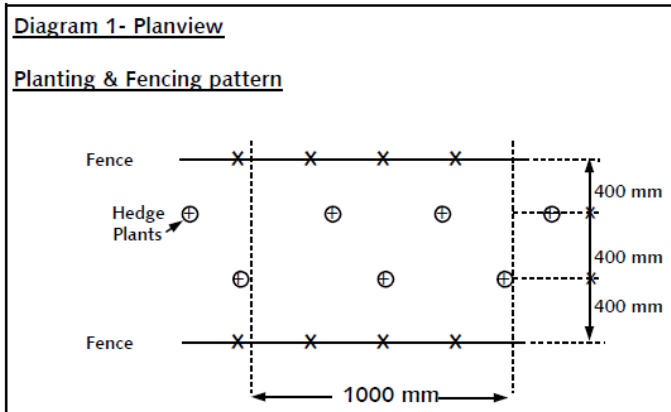
Hawthorn	<i>Crataegus monogyna</i>
Blackthorn	<i>Prunus spinosa</i>

Interplant (Whips/Transplants)

30% of planting stock

Hazel	<i>Corylus avellana</i>
Holly	<i>Ilex aquifolium</i>
Dog Rose	<i>Rosa canina</i>
Field Maple	<i>Acer campestre</i>
Dogwood	<i>Cornus sanguinea</i>
Spindle	<i>Euonymus europaeus</i>
Wild Privet	<i>Ligustrum vulgare</i>

Hedging should be planted in two, staggered rows at a density of not less than 5 per meter (see diagram 1), with approximately 450mm between plants in the same row, and 300-400mm between rows. The interplant whips/transplants should be planted within this pattern in groups of 2/3. The density of planting and distances between plants should be specified in the hedgerow scheme details.



Illustrations of Biodiversity Enhancement measures:





Base plans provided by Apex Architecture

KEY:

- Bird box on building exterior—Vivara Pro Starling
- Bat box on building exterior—Elisa
- Gapping up of hedgerow with native mix

Lifetime of the ecology survey and report: It should be noted that, whilst it is understood that the planning application and proposed works are due to take place in the near future, ecology surveys are generally considered up to date for a maximum of one and a half to 2 years, so if there is any significant delay it is recommended that update advice is sought from an ecologist before commencing.

6.0 REFERENCES

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Newton, J., Thackray, C. and Nicholson, B. **‘Working With Wildlife Site Guide’** CIRIA 2005

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