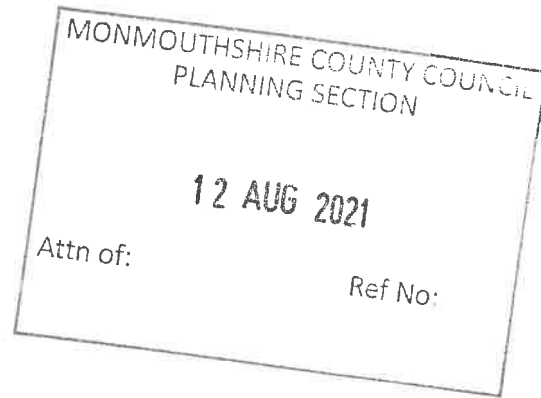




Ecological Surveys and Contracting

**Bat and roof nesting bird surveys**  
At  
**Great House West**  
**Trelleck Grange**  
**Monmouthshire**  
**NP16 6QN**



**Author. Steve Wadley**

**Version: V1**

**Issue Date: 27/07/2021**

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Site	Great House West
Project Number	AVA/GHW/2021/01
Client	Mr Herve Dehareng

Version	Date of Issue	Revisions
1	28/07/2021	

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Required actions: Enhancements to habitat

Approved and issued by: Steve Wadley

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**Non-Technical Summary:**

<b>Survey type</b>	Pre-planning application survey for bats and roof nesting birds.
<b>Purpose</b>	To assess the building potential for bat roosting and bird nesting.
<b>Methodology</b>	A daytime survey was carried out externally by a NRW bat licensed ecologist following current bat survey guidelines. Please note: Due to covid 19 restrictions, no internal inspection was carried out but this was not deemed a limitation to survey. Two bat emergence surveys and a desktop data search.
<b>Findings</b>	The inspection resulted in the building area (Extensions) proposed for development having no viable bat access areas. The surrounding habitat is of high value for bats and the main house roof does have bat access points, but they are around 3 meters above the extension area and will not be impacted directly by the proposed works. The proposed works will fall below the existing bedroom windows which are around 1.5m below the potential bat access points. As a safeguard and to ensure no delays in planning, the building was subject to two bat emergence surveys which resulted in no bats emerging from the building.
<b>Significance</b>	It is deemed appropriate in this instance for works to proceed without a NRW mitigation licence.
<b>Potential impacts</b>	The level of potential impact on bats and roof nesting birds from the proposed development is deemed to be negligible.
<b>Further survey requirements</b>	Further survey is not deemed necessary due to the extensions proposed for works having no viable bat access areas (See photos) and the building being classed as having an absence of bats.



## 1 Introduction

This survey and report were led by Mr Steve Wadley of AVA Ecology Ltd. Mr Wadley has extensive experience of bat conservation, research and commercial survey work in Wales and England.

### Licenses Held:

Natural England (NE) class 20 bat survey licence (Number 2016-20666-CLS-CLS)

Natural Resources Wales (NRW) bat licence (S085928/1)

Natural Resources Wales VBRV (Trainer) licence

### Memberships:

South Wales Bat Research group (chair)

Herefordshire Mammals group

### 1.1 Site and Building Description

The site is located at grid reference SO 4926901826 and is the west side of Great House which is situated in Trelleck Grange near to large fishing lakes. The main building is large and imposing and has smaller single storey extensions on the South West elevation. (See photos)



Figure 1

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## 1.2 Proposed Development

The proposed development includes demolition of the existing single storey extensions and re-modelling. (See plans)

## 1.3 Aims of the study

The aim of this study is to identify evidence of any use of the building by bat species. This survey report aims to assess the level of usage, classification of roost present, and any requirement for a UK Protected Species mitigation licence (UKPS). It will also provide mitigation proposals to be carried out prior to, during and after the works.

## 2 Methodology

### 2.1 Desk Study

A desk study was undertaken to identify any records of bats or roof nesting birds at the building and other bat activity within a 2km radius of the site. Records were obtained from AVA Ecology Ltd bat roost records only. A SEWBRc data search was not considered necessary in this instance. The data search also included information on European and UK designated sites (e.g. Special Areas of Conservation (SACs) and Site of Special Scientific Interest (SSSIs)). This information was provided by the Statutory Nature Conservation Organisation (SNCO) Natural Resources Wales. The local authority planning website was searched for information on historical developments within the zone of impact of the proposed works to assess cumulative impacts on bats.

### 2.2 Field Survey

The methods used were appropriate to achieve the aims of the survey and follow Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition) The Bat Conservation Trust London and BS 42020:2013 Biodiversity (Code of practice for planning and development).



Survey type	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Preliminary ecological appraisal - fieldwork												
Preliminary roost assessment - structures <sup>2</sup>												
Emergence/re-entry survey for maternity or summer roosts <sup>2</sup>												
Emergence/re-entry <sup>2</sup> survey for transitional roosts <sup>2</sup>												
Emergence survey for mating roosts <sup>2</sup>												
Hibernation survey - structures <sup>2</sup>												
Preliminary ground level roost assessment - trees <sup>4</sup>												
Potential roost feature (PRF) inspection survey - trees												
Ground level bat activity survey - transects and automated/static												
Pre-, during and post-hibernation - automated/static bat activity survey												
Swarming survey												
Back-tracking survey												
Trapping survey <sup>2</sup>												
Radio tagging and tracking survey <sup>2</sup>												

= optimal period     
  = sub-optimal period  
 = weather or location dependent (i.e. may not be suitable due to spring and autumn conditions in any one year or in more northerly latitudes). Note that October surveys are not acceptable in Scotland.

Plate 1

The building was inspected externally and internally using binoculars, ladders, camera and a high-powered torch. Photographs of any evidence of bat or bird activity and potential exit or entry points identified in the building were taken and noted for the report.

The following features were recorded for buildings:

- Location
- Type
- Size
- Age
- Construction materials
- Current use



Descriptions of potential and actual access points and roosting places were recorded (including height above ground level and aspect), as well as descriptions of evidence of bats found. The following types of evidence of use by bats were recorded:

- Location and number of any live bats
- Location and number of any bat corpses or skeletons
- Locations and number of bat droppings
- Notes on relative freshness, shape, and size of bat droppings
- Location and quantity of any bat feeding remains
- Location of clean, cobweb-free timbers, crevices, and holes
- Location of characteristic staining from urine and/or grease marks
- Location and quantity of bat-fly (Nycteribiidae) pupal cases
- Location of known and potential access points to the roost
- Location of the characteristic smell of bats

The potential of the building to support roosting bats was established using the following factors:

<b>Factors affecting the probability of a building being used by bats in summer</b>	
<b>Increase probability</b>	Disused or little used; largely undisturbed Large roof void with unobstructed flying spaces Large dimension roof timbers with cracks, joints and holes Uneven roof covering with gaps, though not too draughty Entrances that bats can fly in through Hanging tiles or wood cladding, especially on south-facing walls Rural setting Close to woodland and/or water Pre-20 <sup>th</sup> century or early 20 <sup>th</sup> century construction Roof warmed by the sun Within the distribution area of horseshoe bats and serotine
<b>Decrease probability</b>	Urban setting or highly urbanised area with few feeding places Small or cluttered roof void (esp. for <i>Plecotus</i> ) Heavily disturbed Modern construction with few gaps around soffits or eaves (but be aware these may be used by pipistrelles in particular) Prefabricated with steel and sheet materials Active industrial premises Roof shaded from the sun

Plate 2





### 3 Results

#### 3.1 Desk Study

##### 3.1.1 Designated Sites

Designated sites of importance to bats within the 10 km radius of the site include the following:

- Wye Valley and Forest of Dean Bat Sites SAC
- Llangovan Church SSSI
- Wye Valley Woodlands SAC

#### 3.2 Field Surveys

Date	20/04/2021
Weather	Sunny
Cloud Cover	10%
Temperature	12°C
Wind Speed	0 mph
Surveyor	Steve Wadley

##### 3.2.1 Habitat Description

The habitat is as follows:

	North	South	East	West
Habitat Type	Small fishing lake leading to a tree line and further to Arable crop fields	Utility lawn /grassland leading to hedgerows and residential units then further to Arable crop fields	Large fishing lakes with tree lines leading to Arable crop fields	Arable crop fields with hedgerows and tree lines
Commuting & Foraging	High	High	High	High
Roosting Potential	low	High – in buildings to south.	Moderate – possibly in trees near the lakes	Low



Connectivity Potential	High	High	High	High
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Figure 2. Habitat map

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### 3.2.2 External Survey

The external survey identified:

Potential Level	Justification of Assessment
Negligible	No areas of potential access for bats on the single storey structures, sealed roof tiles and lead flashing. There is some potential for bat access in the main roof, but this will not be impacted by the proposed work is well below (1.5m) the potential access points. The main roof is vaulted ceilings and roof windows, so no potential for Horseshoe bat species.

### 3.2.3 Internal Survey

The internal survey was not carried out due to covid19 restrictions. However, this is not deemed to be a limitation to survey.



### 3.2.4 Bat Activity Surveys

Surveyors were positioned around the building so that each elevation was fully observed at all times, visually and electronically. Equipment used included Elekon Batlogger full spectrum detector/recorder detector and recorder. All bat echolocation calls recorded were analysed using Elekon bat explorer analysis software. Calls were analysed by an ecologist trained in the use of the above sonogram analysis software and using references provided in "British Bat Calls" (Jon Russ, 2012). The analysis was then verified by Steve Wadley. Short wave radio / verbal contact was maintained by all surveyors throughout the surveys.

Surveyors	Bat Licence	Experience
Mr Steve Wadley	Yes	Experienced bat surveyor
Mr Graham Edwards		Experienced bat surveyor



Fig 3 Positions of surveyors

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**Dusk 1**

<b>Date</b> 13/07/2021	<b>Sunset Time</b> 21:25hrs
<b>Start Time (2055Hrs)</b>	<b>Finish Time (2255Hrs)</b>
<b>Temperature</b> 21°C start	
<b>Wind Speed</b> 0mph	
<b>Precipitation</b> 0	
<b>Cloud Cover</b> 100%	

The first dusk survey resulted in no bats emerging from the building, foraging and commuting bats included Common Pipistrelle bat, Daubenton's bat, Noctule bat, Natterer's bat and a possible pass by a single Serotine bat. Most bats recorded were commuting rather than foraging.

**Dusk 2**

<b>Date</b> 26/07/2021	<b>Sunset Time</b> 21:15
<b>Start Time (2045Hrs)</b>	<b>Finish Time (2245Hrs)</b>
<b>Temperature</b> 22°C start	
<b>Wind Speed</b> 0mph	
<b>Precipitation</b> 0	
<b>Cloud Cover</b> 90%	

The second dusk survey resulted in no bats emerging from the building. Foraging and commuting bats included Noctule bats, Common Pipistrelle bats, Serotine bats, Myotis Sp. bat (Probably Whiskered or Brandt's) and a single pass by a long-eared bat. The Serotine bat(s) was mostly foraging in trees to the Southeast.

## 4 Assessment

### 4.1 Survey Constraints (incl. equipment)

Any survey for bat species can only be a series of snapshots in time. Bats are very mobile with complex social structures and utilise multiple roost sites during the year. The implications of this are that surveyors have to make informed assumptions based on observations, recorded data, local information and a detailed knowledge of the species.



## 4.2 Potential Impacts

Roost type	Development effect	Scale of impact		
		Low	Medium	High
Maternity	Destruction			✓
	Isolation caused by fragmentation			✓
	Partial destruction; modification		✓	
	Temporary disturbance outside breeding season	✓		
	Post-development interference			✓
Major hibernation	Destruction			✓
	Isolation caused by fragmentation			✓
	Partial destruction; modification		✓	
	Temporary disturbance outside hibernation season	✓		
	Post-development interference			✓
Minor hibernation	Destruction			✓
	Isolation caused by fragmentation			✓
	Partial destruction, modification		✓	
	Modified management		✓	
	Temporary disturbance outside hibernation season	✓		
	Post-development interference		✓	
	Temporary destruction, then reinstatement	✓		
Mating	Destruction		✓	
	Isolation caused by fragmentation		✓	
	Partial destruction	✓		
	Modified management	✓		
	Temporary disturbance	✓		
	Post-development interference	✓		
	Temporary destruction, then reinstatement	✓		
Night roost	Destruction	✓		
	Isolation caused by fragmentation	✓		
	Partial destruction	✓		
	Modified management	✓		
	Temporary disturbance	✓		
	Post-development interference	✓		
	Temporary destruction, then reinstatement	✓		

NB This is a general guide only and does not take into account species differences. Medium impacts, in particular, depend on the care with which any mitigation is designed and implemented and could range between high and low.

Plate 3. Scale of impacts guidance taken from the Bat Mitigation Guidelines 2004.

### 4.2.1 Designated Sites

In the absence of mitigation, the proposed development would have no impact on designated sites. This is because the designations are for Horseshoe bats which are not using this building for roosting.

### 4.2.2 Bat Roosts

In the absence of mitigation, the proposed development would have a potentially no impact on bat roosts, bats were deemed absent from the single storey structures and the potential for bats in the main roof is at least 2m from the proposed works, therefore, if bats are present in the main roof void or materials, there would be no direct impacts. No bats emerged from the main roof during the surveys.



#### **4.2.3 Bat Foraging and Commuting Habitat**

In the absence of mitigation, the proposed development would potentially have negligible impact on bat foraging and commuting routes, no vegetation is planned for removal and no additional light spill would result from the proposals.

## **5 Legislation and Policy Guidance**

This legislation must be considered at all stages of development.

All bat species occurring in the UK are fully protected by European and UK law.

### **Under the Conservation of Habitats and Species Regulations 2017**

(1) A person who—

- (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,
- is guilty of an offence.

### **Environment (Wales) Act 2016**

Part 1 of the Environment Act sets out Wales' approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act.

#### **Section 6 - Biodiversity and resilience of ecosystems duty**

Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

#### **Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity**



This section replaces the duty in section 42 of the NERC Act 2006. The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Part 1 of the Act, including Sections 6 and 7, came into force on May 21, 2016.

#### **Well-being of Future Generations (Wales) Act 2015**

The Well-being of Future Generations Act became law in April 2015 and is concerned with improving the social, economic, environmental and cultural well-being of Wales.

It will make the public bodies in Wales listed in the Act think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach.

To help public bodies achieve the same vision, the Act puts in place seven well-being goals. Linked to the goals a set of National Indicators are currently under development to help measure whether we are achieving the goals including the Resilient Wales goal.

Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat..."

#### **Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:**

- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used by bats for shelter or protection.
- Intentionally or recklessly disturb bats whilst in their place of rest or shelter
- Sell or advertise for sale or transport bats (including their derivatives)

#### **The Countryside and Rights of Way Act 2000**

The Act places a duty on Government Departments and the National Assembly for Wales to have regard for the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

Schedule 9 of the Act amends SSSI provisions of the Wildlife and Countryside Act 1981 including provisions to change SSSIs and providing increased powers for their protection and management. The provisions extend powers for entering into management agreements; place a duty on public bodies to further the conservation and enhancement of SSSIs; increases penalties on conviction where the provisions are breached; and introduce a new offence whereby third parties can be convicted for damaging SSSIs. To ensure compliance with the Human Rights Act 1998, appeal processes are introduced with regards to the notification, management and protection of SSSIs.





Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', create a new offence of reckless disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.

### **Planning Policy Advice**

#### **Planning Policy Wales section 6 “Conserving and Improving Natural Heritage and the Coast”**

The Welsh Government’s objectives for the conservation and improvement of the natural heritage are to:

- Promote the conservation of landscape and biodiversity, in particular the conservation of native wildlife and habitats;
- Ensure that action in Wales contributes to meeting international responsibilities and obligations for the natural environment;
- Ensure that statutorily designated sites are properly protected and managed;
- Safeguard protected species, and to
- Promote the functions and benefits of soils and in particular their function as a carbon store.

**The UK Biodiversity Action Plan (UKBAP) includes objectives to conserve, and, where practicable, enhance:**

- The quality and range of wildlife habitats and ecosystems;
- The overall populations and natural ranges of native species;
- Internationally important and threatened species, habitats and ecosystems;
- Species, habitats and natural and managed ecosystems characteristic of local areas
- Biodiversity of natural and semi-natural habitats where this has been diminished over recent decades.

The Welsh Government is committed to promoting Habitat and Species Action Plans relevant to Wales prepared under the UKBAP in fulfilment of its obligations under the Countryside and Rights of Way Act.

### **Protected Species**

The presence of a species protected under European or UK legislation is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat. Local planning authorities should advise anyone submitting a planning application that they must conform with any statutory species protection provisions affecting the site concerned, and should consult Natural Resources Wales before granting permission. An ecological survey to confirm whether a protected species is present and an assessment of the likely impact of the development on a protected species may be required in order to inform the planning decision.





Developments are always subject to the legislation covering European protected species regardless of whether or not they are within a designated site. New developments for which development works would contravene the protection afforded to European protected species require derogations from the provisions of the Habitats Directive.

### **Conservation of Habitats & Species Regulations 2017 (as amended) - Regulation 9**

Requires local authorities to take account of the presence of European Protected Species at development sites. If they are present and affected by the development proposals, the Local Planning Authority must establish whether the three tests have been met, prior to determining the application.

The three tests that must be satisfied are:

- 1) That the development is in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.
- 2) That there is no satisfactory alternative
- 3) That the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range.

Derogations are granted by a licence issued by the Welsh Government. Local planning authorities are under a duty to have regard to the requirements of the Habitats Directive in exercising their functions. To avoid developments with planning permission subsequently not being granted derogations in relation to European protected species, planning authorities should take the above three requirements for derogation into account when considering development proposals where a European protected species is present.

### **Monmouthshire County Council LDP Policy Policy NE1 – Nature Conservation and Development**

Development proposals that would have a significant adverse effect on a locally designated site of biodiversity and / or geological importance, or a site that satisfies the relevant designation criteria, or on the continued viability of priority habitats and species, as identified in the UK or Local

Biodiversity Action Plans or Section 42 list of species and habitats of importance for conservation of biological diversity in Wales will only be permitted where:

- a) The need for the development clearly outweighs the nature conservation or geological importance of the site; and
- b) It can be demonstrated that the development cannot reasonably be located elsewhere.



Where development is permitted, it will be expected that any unavoidable harm is minimised by effective avoidance measures and mitigation. Where this is not feasible appropriate provision for compensatory habitats and features of equal or greater quality and quantity must be provided.

Where nature conservation interests are likely to be disturbed or harmed by development proposals, applications must be accompanied by an ecological survey and assessment of the likely impact of the proposal on the species /habitats, and, where necessary, shall make appropriate provision for their safeguarding.

Development proposals shall accord with nature conservation interests and will be expected to:

- i) Retain, and where appropriate enhance, existing semi-natural habitats, linear habitat features, other features of nature conservation interest and geological features and safeguard them during construction work;
- ii) Incorporate appropriate native vegetation in any landscaping or planting scheme, except where special requirements in terms of purpose or location may dictate otherwise;
- iii) Ensure the protection and enhancement of wildlife and landscape resources by appropriate building design, site layouts, landscaping techniques and choice of plant species;
- iv) Where appropriate, make provision for on-going maintenance of retained or created nature conservation interests.

#### **Policy S13 – Landscape, Green Infrastructure and the Natural Environment.**

Development proposals must:

1. Maintain the character and quality of the landscape by:

- (i) Identifying, protecting and, where appropriate, enhancing the distinctive landscape and historical, cultural, ecological and geological heritage, including natural and man-made elements associated with existing landscape character;
- (ii) Protecting areas subject to international and national landscape designations;
- (iii) Preserving local distinctiveness, sense of place and setting;
- (iv) Respecting and conserving specific landscape features, such as hedges, trees and ponds;
- (v) Protecting existing key landscape views and vistas.

2. Maintain, protect and enhance the integrity and connectivity of Monmouthshire's green infrastructure network.

3. Protect, positively manage and enhance biodiversity and geological interests, including designated and non-designated sites, and habitats and species of importance and the ecological connectivity between them.

4. Seek to integrate landscape elements, green infrastructure, biodiversity features and ecological connectivity features, to create multifunctional, interconnected spaces that offer opportunities for recreation and healthy activities such as walking and cycling.



## 6 Working Method Statement

Low	<b>Roost status</b>	<b>Mitigation/compensation requirement (depending on impact)</b>
Conservation significance ↓ High	Feeding perches of common/rarer species  Individual bats of common species  Small numbers of common species. Not a maternity site	Flexibility over provision of bat-boxes, access to new buildings etc. No conditions about timing or monitoring
	Feeding perches of Annex II species  Small numbers of rarer species. Not a maternity site	Provision of new roost facilities where possible. Need not be exactly like-for-like, but should be suitable, based on species' requirements. Minimal timing constraints or monitoring requirements
	Hibernation sites for small numbers of common/rarer species  Maternity sites of common species	Timing constraints. More or less like-for-like replacement. Bats not to be left without a roost and must be given time to find the replacement. Monitoring for 2 years preferred.
	Maternity sites of rarer species	Timing constraints. Like-for-like replacement as a minimum. No destruction of former roost until replacement completed and usage demonstrated. Monitoring for at least 2 years.
	Significant hibernation sites for rarer/rarest species or all species assemblages	
	Sites meeting SSSI guidelines	Oppose interference with existing roosts or seek improved roost provision. Timing constraints. No destruction of former roost until replacement completed and significant usage demonstrated. Monitoring for as long as possible.
	Maternity sites of rarest species	

Plate 4. Mitigation hierarchy taken from the Bat Mitigation Guidelines 2004.



## 6.1 Mitigation Proposals

The mitigation proposals for the development are as follows:

### 6.1.1 Pre-Works Mitigation

- a) A bat licenced ecologist must be employed to be on call prior to works commencing.
- b) Any change to the plans (amendments) after the date of the planning approval must be notified to the ecologist and biodiversity department at the local authority by the owner prior to works commencing.
- c) The owner must ensure that a copy of this report is issued to the building contractor prior to works, the owner must ensure the contractor is advised to follow this report carefully.

### 6.1.2 Construction Mitigation

- a) Roof materials on the single-story structures must be removed carefully in an upwards direction and the undersides inspected for bats prior to storage or disposal.
- b) If bats are discovered at any stage of the development the ecologist must be informed immediately and works stopped until the ecologist has given advice.
- c) The ecologist must have the necessary equipment to take a discovered bat into captivity and the captive bat will be either released that evening at dusk on site or be placed into a pre-positioned bat box and allowed to fly at its own will. If weather conditions are poor the bat will be kept overnight by the ecologist and released on site on an evening when the weather conditions are considered optimal.
- d) Any Roofing membrane used must be to BS 8747:2007 Please Note: Breathable Roofing Membranes have the potential to kill bats and must not be used under any circumstances.
- e) A lighting plan will need to be submitted which includes location of any external lights. The lights will need to be low level, low wattage, on a PIR timed switch and not shine directly at any mitigation roost.
- f) As an enhancement to bat habitat a Woodstone "Beaumaris" bat box must be installed onto the nearby stables wall on the south side at 2m height.

## 6.2 Further Survey

Further survey was not deemed necessary as enough information was gained during the surveys to attain a confident and accurate assessment of no use of the building by bat species.

## 6.3 Requirement for Licence

A protected species licence is not deemed necessary as the proposed development would not result in an offence being committed under *The Conservation of Habitats and Species Regulations 2017* as long as the mitigation is followed carefully.



## 7 Conclusion

Although the building surveyed is located within a habitat which has high potential for bats to roost, commute and forage, the proposed area of works has negligible potential for roosting bats. The structures are single storey extensions and the rooves are sealed and well maintained (See photos). The main house roof, which is several meters above the extensions, does have potential for bat access and roosting, but the proposed works is around 2m below the potential bat roosts so will not have a direct impact.

Bat emergence surveys were carried out as a precaution and resulted in no bats emerging from the main roof

Further survey for bats is not deemed necessary but vigilance for bat must be always maintained during works.

A NRW bat mitigation licence is not deemed necessary as no bats were observed emerging from the building.



## 8 References

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> Edition) The Bat Conservation Trust London

The bat workers' manual (3rd Edition). Joint Nature Conservation Committee  
Mitchell-Jones, A.J. & McLeish, A.P. (2004)

British Bat Calls. Russ. J 2012

Bat Mitigation Guidelines English Nature. Mitchell-Jones, A.J. (2004)

Bats and Lighting. A. Fure (London naturalist No. 85 2006)

The Conservation of Habitats and Species Regulations 2017

The Wildlife and Countryside Act 1981 (as amended)

Tan 5 Planning Policy in Wales

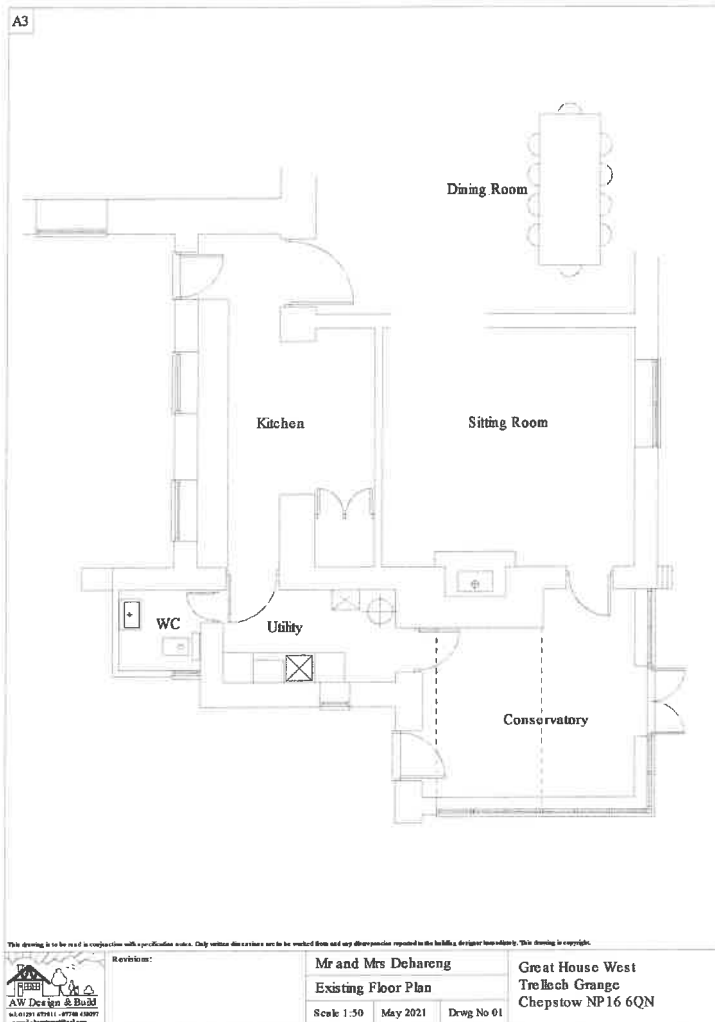
BS: 42020 / 2013 Biodiversity (Code of practice for planning and development).

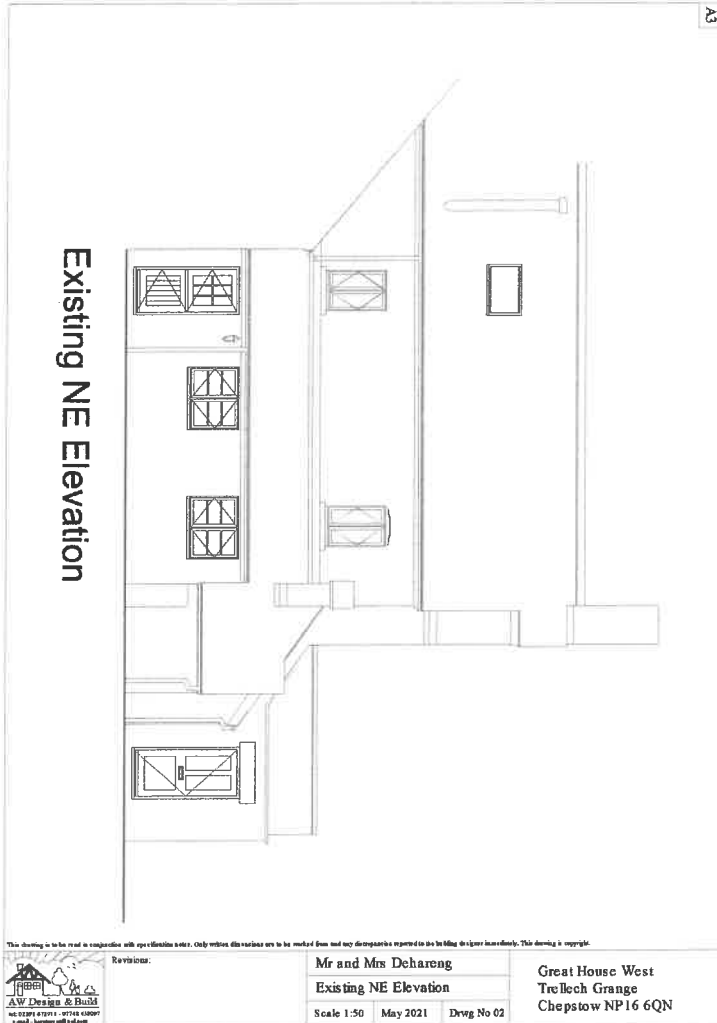
Environment (Wales) Act 2016

Chartered Institute of Ecology and Environmental Management's code of professional conduct.



### Appendix I: Plans





This drawing is to be read in conjunction with the specification notes. Only written alterations are to be marked down and any discrepancies reported to the building designer immediately. This drawing is copyright.

Revisions:		Mr and Mrs Dehareng	Great House West
		Existing NE Elevation	Trellech Grange
Scale 1:50	May 2021	Drawg No 02	Chepstow NP16 6QN






23

**Existing NW Elevation**

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	Provisions:	<b>Mr and Mrs Dehareng</b>	<b>Great House West</b> <b>Trellech Grange</b> <b>Chepstow NP16 6QN</b>
		<b>Existing NW Elevation</b>	
	Scale 1:50	May 2021	



A3

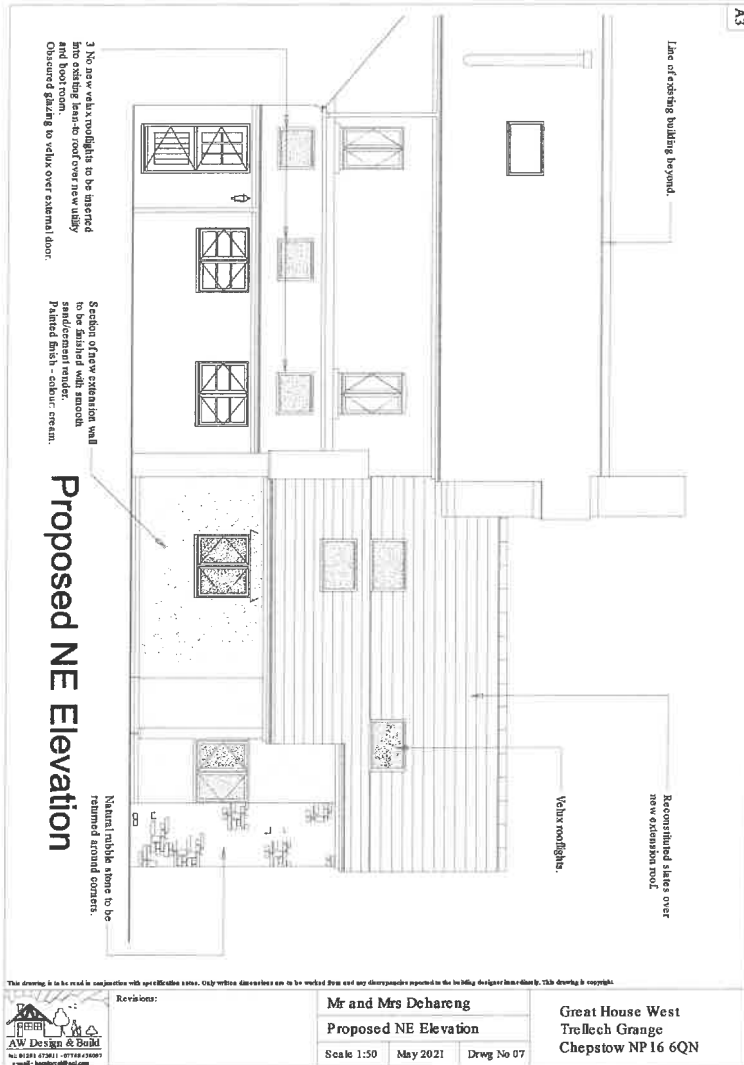
Existing SW Elevation

This drawing is to be read in conjunction with specification notes. Only written discussions are to be worked from and any discrepancies reported to the building designer immediately. This drawing is copyright.

<p><b>AW Design &amp; Build</b> tel: 01223 827911 - 07763 428897 e-mail: info@awdesignandbuild.com</p>	Revisions:	Mr and Mrs Dehareng	
		Existing SW Elevation	Great House West Trellech Grange Chepstow NP16 6QN
		Scale 1:50    May 2021    Drwg No 04	









A3

## Proposed NW Elevation

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 AW Design & Build tel 01291 47391   07748 45807 e-mail - hannah@awd.co.uk	Revisions:		Mr and Mrs Dehareng Proposed NW Elevation	Great House West Trellech Grange Chepstow NP16 6QN
	Scale 1:50	May 2021	Drwg No 08	



A3

Layer of existing building.

Reconstructed slates over new extension roof.

Valux rooflight.

Section of new extension wall to be finished with smooth plastered finish - colour: cream.

Natural rubble stone to be returned around corners.

Porcelain enamel aluminium or painted timber door and windows.

Proposed SW Elevation

This drawing is to be read in conjunction with specification notes. Only written discussions are to be made if you need any discrepancies reported to the building designer immediately. This drawing is copyright.

	Mr and Mrs Dehareng		Great House West Trellech Grange Chepstow NP16 6QN
	Proposed SW Elevation		
	Scale 1:50	May 2021	



## Appendix II: Supporting Photographs



Figure 1 – Single storey extensions planned for works



Figure 2 – Sealed roof materials and lead flashing



Figure 3 – Conservatory on the south elevation, Note: potential light spill.



Figure 4 – Sealed fascia.





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