

**David Leach Ecology Ltd.**  
**Ecological Consultants**

**Flood Street Farm**  
**Fordingbridge**  
**Hampshire**

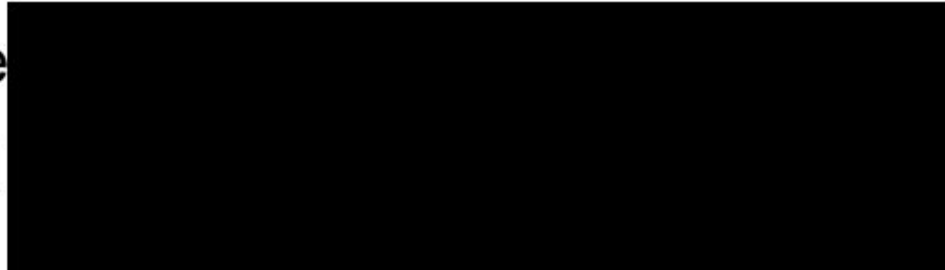
**Biodiversity Appraisal v2**

**Date: September 2022**

**Report compiled by D. V. Leach. M.C.I.E.E.M**

Mobile

E-mail



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Company Reg. No. 8846666

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## 1.0 Executive summary.

- This biodiversity appraisal was commissioned to look for protected species and habitats, or potential for protected species, as part of a planning application to extend the farm house.
- A walkover survey of the site was undertaken in August 2022.
- There are no sites of statutory conservation designation within 1km of the proposed development site that will be significantly affected by the proposed development.
- The site comprised a farmhouse, outbuildings, gardens, a group of trees and a paved patio area.
- No area of roof of the farmhouse will be affected, directly or indirectly.
- No rare or uncommon plants were found in the lawn where the extension will be built.
- No potential roosting features were noted in nearby trees.
- There are no ponds within 500m of the site.
- No signs of protected species or habitats were found during the survey.
- To achieve a net biodiversity gain as required by national and local planning policies there will be features for bats, birds and insects installed on the site.
- **In the unlikely event that a protected species is found during the proposed works, work must stop and David Leach, an experienced ecologist or Natural England contacted for advice on how to proceed.**
- This survey and report are valid for 18 months and should be updated if conditions on the site change or if signs of protected species are found on the site in the future.

## **2.0 Introduction.**

### **2.1 Background.**

Client: Mr. P. Bolt.

Property Surveyed: Flood Street Farm  
Fordingbridge  
Hampshire  
SP6 2BS

Grid reference: SU 14939 17299

Date of Survey: 25<sup>th</sup> July 2022

Lead Surveyor: David Leach BSc. (Hon), CBiol. M.S.B., M.C I.E.E.M.  
(Natural England WML CL18 & CL21 registered bat worker).

### **2.2 Aims of the Survey.**

- A biodiversity appraisal was undertaken to accompany an application to extend an existing farmhouse.
- The survey was commissioned to check for the presence of, or potential for, bats and other protected species or habitats that would be affected by proposals and to recommend features to achieve a net biodiversity gain.

### **2.3 Site Description.**

- The site comprised a farmhouse, gardens and a paved patio area.
- The site is located 3km north of Fordingbridge in Hampshire in Dorset.
- There site is surrounded by open countryside, mainly mixed farmland.



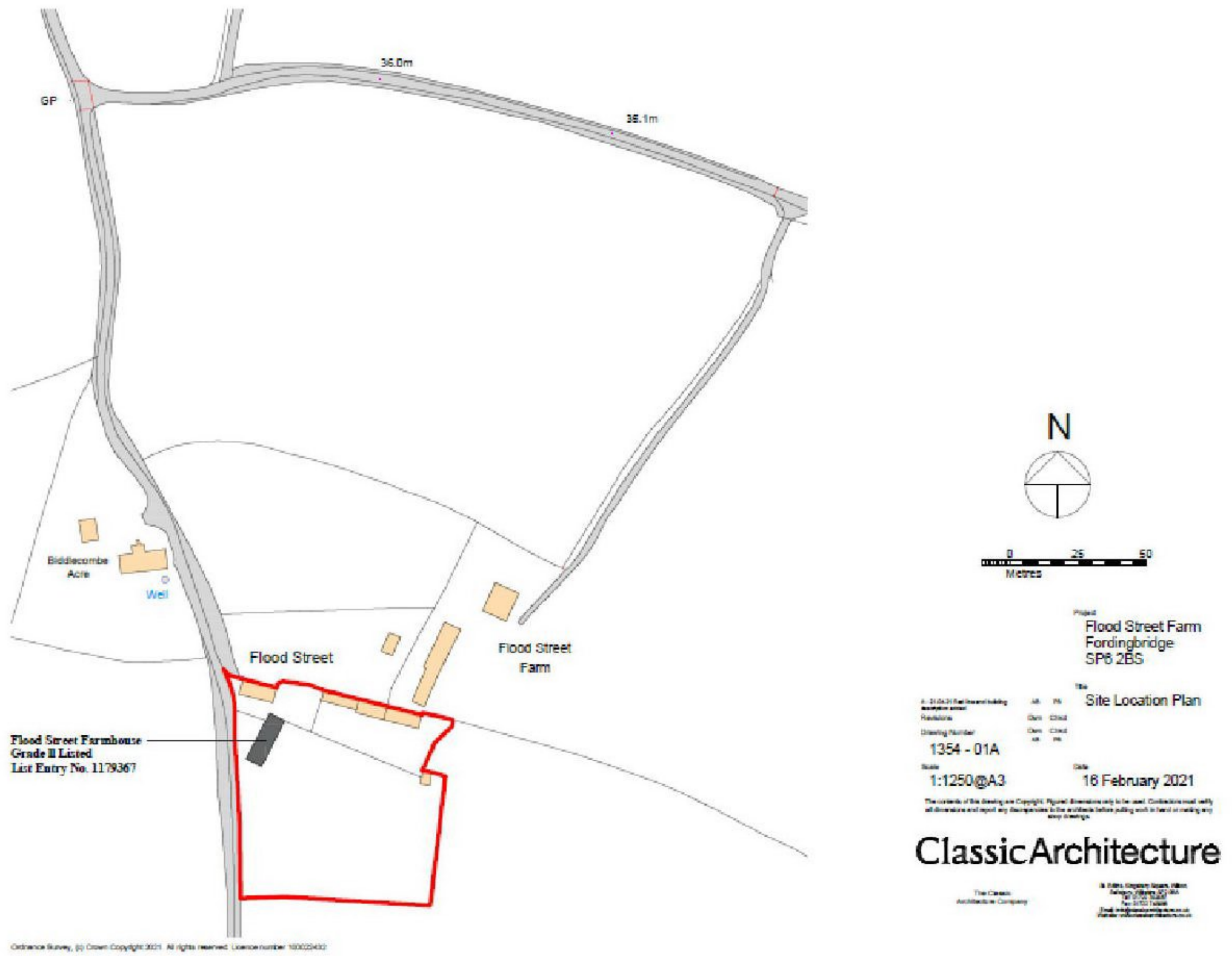


Figure 1. Plan of the site location.

### 3.0 Methodology

#### 3.1 Desk Study

- The Magic.gov web site was accessed to determine whether there were any nature reserves or protected areas local to the site that would be affected by the proposed works.
- A data search of the Local Records Centre has not been requested due to the small-scale nature of the works.

#### 3.2 Site Survey

- This consisted of a walkover survey of the application site and land within 50m of the application site boundaries where necessary.
- Any habitats identified as having potentially high botanical value will be subject to further botanical surveys, if deemed necessary. The site was inspected for non-native invasive species such as Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Himalayan Balsam (*Impatiens glandulifera*).
- The survey methodology included an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly.
- Indicative methods for protected species are outlined below following recognised guidelines: Chartered Institute of Ecology and Environmental Management (CIEEM), Amphibian and Reptile Conservation (ARC), Bat Conservation Trust (BCT) and Joint Nature Conservation Committee (JNCC).

#### **Bats.**

The external and internal areas of any building or structure on site were inspected following guidelines set out in the BCT Bat Surveys for Professional Ecologists Good Practice Guidelines 3<sup>rd</sup> edn. Collins. J (2016) and the JNCC Bat Workers' Manual (Mitchell-Jones A. J). The presence of bats or signs of bats and possible entry points into buildings was looked for.

Extant trees were inspected for potential roosting areas that could support bats. Particular attention was paid to the following:

- Mature trees with ivy covering and/or crevices and peeling bark.



Evidence searched for to indicate usage of bats included:

- Droppings
- Urine staining
- Worn entrances or claw marks around potential access points
- Insect feeding remains
- Oil staining left from bat fur
- Live/dead bats
- All accessible areas of any internal space were carefully inspected for bats (live or dead) or signs of bats such as droppings, urine stains, signs of feeding such as moth wings, etc. Cobwebs which indicate no or infrequent use by bats were also looked for. Equipment available included 3.8m telescopic ladder, Leica 8x42 binoculars, digital camera, head torch and Clulite CB2 high powered torches, See snake inspection camera.
- The bat roosting potential of buildings was assessed according to the scale negligible, low, moderate or high:
- Negligible: This category describes buildings of a simple structure where all structural features can easily be surveyed with a visual inspection or investigated with an endoscope. For example a simple wooden garden shed, a corrugated iron barn or precast concrete modular garage may fit this category.
- Low: This category is used to describe simple structure buildings that have very few potential bat roosting features but all areas cannot be surveyed visually or investigated with an endoscope.
- Moderate: This category is used to describe buildings that have some potential to support roosting bats, but is considered to be less than ideal in some way. Some but not all modern industrial and agricultural buildings may fit this category if they are of a simple structure with single layer walls and unlined roof areas.
- High: This category is used to describe buildings with multiple internal and external structural features suitable for roosting bats. Most brick built dwellings and timber or stone barns will be covered by this category. Features that may be used by bats are e.g. loft spaces and other smaller roof voids, gaps between overlapping clay tiles, gaps in-between the tiles or slates and the roofing felt, cavities under ridge tiles, under soffits fascia and barge boards, by the brickwork of chimney stacks, under lead flashing, inside cavities of flat roofs, under wall hanging tiles, behind wooden cladding or other wooden structures,

inside cavity walls or other smaller wall cavities, in gaps and cracks of stone walls and inside wooden beam mortise and tenon joints.

- **Confirmed:** This category is used where evidence of bats such as live or dead bats or bat droppings are present, or where there are records of a bat roost in the building within the last 5 years.
- The site was surveyed for other protected species following recognised guidelines, Chartered Institute of Ecology and Environmental Management (CIEEM), Amphibian and Reptile Conservation (ARC), Bat Conservation Trust (BCT) and Joint Nature Conservation Committee (JNCC).

### ***Birds.***

Any habitat features, for example, scrub, trees and hedgerows which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

### ***Great Crested Newts.***

Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts (*Triturus cristatus*) was assessed.

### ***Reptiles.***

Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

### ***Badgers.***

Any area that could be used for foraging or could potentially contain a Badger sett was surveyed and any signs noted including:

- Evidence of active or disused setts
- Evidence of potential badger diggings
- Latrines / dung pits
- Evidence of badger foraging ('snuffle holes')
- Footprints
- Badger hairs

***Otters and Water Voles.***

Any riparian habitat present on-site, or immediately adjacent to the site, was searched for signs of otters (*Lutra lutra*) and water voles (*Arvicola amphibious*). Signs included:

- Otter spraints or sign heaps
- Water vole latrines and feeding stations
- Evidence of potential holts or burrows
- Footprints

***Dormice.***

The suitability of the habitat was assessed for dormice (*Muscardinus avellanarius*). Any small mammal feeding signs were checked and assessed, including:

- Examination of hazel nuts
  - Evidence of nest building
- 
- The survey was carried out by David Leach, an experienced ecological surveyor who is a Natural England WML CL18 registered bat worker, a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Biologist.
  - David Leach is a Registered Consultant under the Bat Mitigation Class Licence - WML- CL21 annexes B, C & D and also holds a Natural Resources Wales bat survey licence.



## **4.0 Results.**

### **4.1 Desk Study**

- No existing or potential ecological networks will be affected by the proposals.
- There are no designated sites within 1 km of the site that will be affected by the proposals.

### **4.2 Site Survey**

Weather for initial survey

Dull and overcast at 13:00

The external temperature was 27°C.

#### **4.2.1 Habitat**

- The area of the site to be affected site the gable of a farmhouse, concrete slabbed patio and an area of short mown lawn.
- The extension will be joined to the main farm house by a glass linking structure which will join the main house at the south gable and be built on an area currently part of a concrete patio. It will not affect the roof or any roof voids. There are a few small shrub, field maple and Hawthorne nearby that will be trimmed back.
- The main extension will be constructed on an area of close mown lawn. Only a few individual plants of cats-ear, selfheal, narrow leaved plantain and some white clover were found in the lawn.
- No rare or uncommon plants or invasive plants were found within or near the site.
- There is a large English oak and a hazel tree near where the extension will be built.

#### **4.2.2 Protected fauna.**

##### **Bats**

- The trees around the site provided moderate foraging and commuting habitat for bats
- No potential roosting features were noted in the trees.

##### **Birds**

- The trees provided suitable habitat for nesting birds.

##### **Reptiles and amphibians**

- The vegetation around the site provided sub-optimal habitat for common species of reptiles such as slow worms and grass snakes.



**Badgers**

- No badger setts were found on site or nearby

**Dormice**

- There is no suitable habitat for dormice and it is unlikely any will be on site.

**Great crested newts**

- There are no ponds on site or within 500m and it is unlikely that any great crested newts (*Triturus cristatus*) will be on site.

**Water voles and otters**

- There was no suitable habitat on site or nearby.

**Hedgehogs**

- The site provided suitable foraging habitats for hedgehogs.

## 5.0 Conclusion.

### 5.1 Assessment.

- There are no designated sites nearby that will be significantly affected by the proposed development.
- No notable habitats of principal importance are present within or adjacent to the application site.
- No rare or uncommon plants were found during the survey.
- There were no potential roosting features at the gable end of the building or in nearby trees.
- No signs of protected species were found on or adjacent to the site.
- The habitat on site provides sub optimal habitat for reptiles.
- The area to be affected site has little ecological value.
- The impact of the proposed development will be at site level only.

### 5.2 Limitations of the survey.

- A survey of this type only provides a snapshot of what was found at the time of the survey and it is sometimes necessary to carry out a number of surveys to show the presence or absence of bats or other protected species.
- **In the unlikely event that a protected species is found during the proposed works, work must stop and David Leach, an experienced ecologist or Natural England contacted for advice on how to proceed.**
- This survey and report are valid for 18 months and should be updated if conditions on the site change or if signs of protected species are found on the site in the future.

### 5.3 Mitigation.

#### 5.3.1 Bats

- Extra care will be taken to ensure that external lights are kept to a minimum and will not illuminate bat access points or flight paths around the buildings. A suitable lighting scheme and regime in accordance with Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rubgy) (2018) must be approved by the Natural Environment Team. This will include:
  - Any lights will be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. A shield or hood will be used to control or

restrict the area to be lit and limit “light spillage” on the site.

- Security lights will be on motion sensors and on for a maximum of 1 minute.
- Lighting units will be of low intensity - up to 15 watts, and red, amber or warm light with a maximum lighting colour temperature of 2700 K.
- White, blue and green light sources including metal halide, mercury and CDO / CPO Ceramic Outdoor Lamps bulbs have a significant effect on bats and will not be used.

### **5.3.2 Birds**

- Birds’ nests, when occupied or being built, receive legal protection under the Wildlife and Countryside Act 1981 (as amended). It is highly advisable to undertake clearance of potential bird nesting habitat (such as hedges, scrub, trees, suitable outbuildings etc.) outside the bird nesting season, which is generally seen as extending from March to the end of August, although may extend longer depending on local conditions.
- If there is absolutely no alternative to doing the work during this period then a thorough, careful and quiet examination of the affected area must be carried out by a qualified ecologist before clearance starts. If occupied nests are present, then work must stop in that area, a suitable (approximately 5m) stand-off maintained, and clearance can only recommence once the nest becomes unoccupied of its own accord.

### **5.3.3 Good practice precautions.**

- All construction and building materials must be stored on areas of hard standing or on raised pallets or sealed-based containers at least 5m away from suitable reptile habitat to prevent reptile colonisation during works
- Any deep holes or footings must be back-filled overnight or if this isn't possible then earth ramps must be left in the trench to allow wildlife such as reptiles and hedgehogs to easily climb out. Alternatively, any foundation excavations left open at the end of a day will be covered over with plywood and the edges sealed with sand or soil.
- The site manager must check the footings at the start of each day to look for reptiles (and other wildlife) which could not get out of the footings. If any are found and ecologist must be informed and they will advise on how to proceed



#### **5.3.4 Hedges and trees**

- Heras fencing must be erected at least 2m away from the inner base of the trees around the site to protect the roots from damage and compaction by construction vehicles.
- Building materials must be stored away from the trees etc. to avoid root compaction.
- Heras fencing must be erected to create a tree root protection zone around the trees at the perimeters of the site. The distance of the root protection zone must be determined following British Standard 5837: Trees in relation to design, demolition and construction – recommendations.

#### **5.4 Enhancements.**

In accordance with local policies, Section 40 of the Natural Environment and Rural Communities Act 2006, paragraphs 8, 170 and 175 of the National Planning Policy Framework (2019) and local Policy DM2, measures will be implemented to enhance the biodiversity on site and ensure that there is a net biodiversity gain and no net biodiversity loss in the long term as per Government planning policy. These will include but not be limited to:

##### **5.4.1 Bats**

- Two bat access tiles will be fitted on each elevation of the new roof. Type 1 f bitumen felt must be used under the tiles (see appendix F).

##### **5.4.2 Birds.**

- A pair of house martin cups will be installed under the eaves on the south east elevation of the main house (see appendix F).

##### **5.4.3 Insects.**

- Two bee hotels will be fixed to suitable trees on site in a sunny but sheltered position between 1m and 2m above the ground and in areas that will not be obscured by plants (see appendix F).

##### **5.4.4 Trees, shrubs and flowering plants.**

- Any planting will be of native or wildlife friendly trees and plants.
- **Conifers, rhododendrons and Portuguese or cherry laurel are not suitable.**



## 6.0 Appendices

### A. Legislation (a brief summary only. Please refer to full text of legislation or policy for full details).

#### Bats

Under section 9 of the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way (CroW) Act 2000, all bats have legal protection. In addition any structure which shows signs of use by bats either currently or in the past, for shelter or protection, is classed as a bat roost and both the roost and any bats using it are protected by law which makes it an offence to:

- Intentionally or recklessly kill or injure or take any bat.
- Intentionally or recklessly damage or destroy any bat roost and to obstruct access to that roost.
- Intentionally or recklessly to disturb any bat using a structure as a roost.

All native bat species are also defined as European Protected Species (EPS) through inclusion in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); the UK implementation of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. Addition IV lists all bats.

Regulation 39 makes it an offence to:

- Deliberately kill or capture a bat.
- Deliberately disturb a bat.
- Damage or destroy a resting place or breeding site of any bat.

In addition, the following native bats are identified as Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities Act 2006:

- Barbastelle bat - *Barbastella barbastellus*
- Bechstein's bat - *Myotis bechsteinii*
- Noctule - *Nyctalus noctula*
- Soprano pipistrelle - *Pipistrellus pygmaeus*
- Brown long-eared bat - *Plecotus auritus*
- Greater horseshoe bat - *Rhinolophus ferrumequinum*
- Lesser horseshoe bat - *Rhinolophus hipposideros*

If any proposed development would result in the otherwise illegal acts above, a licence must be

obtained from Natural England prior to any work being carried out. A licence will only be granted if there is no satisfactory alternative and the authorised action will not be detrimental to the maintenance of the population of the species concerned.

### **Reptiles**

The Wildlife and Countryside Act 1981 (as amended) also protects all reptiles from killing, injury and sale.

### **Birds**

The Wildlife and Countryside Act 1981 (as amended) makes it an offence to damage or destroy the nests of birds of breeding birds (with the exception of certain pest species). The bird nesting season is generally defined as being between mid-February and August inclusive although nesting outside of the period is not unusual if conditions are favorable.

### **Hedgehogs**

Hedgehogs are protected by British law under Schedule 6 of the Wildlife and Countryside Act 1981, making it illegal to kill or capture them using certain methods.

Similar protection exists in Northern Ireland under Schedule 6 & 7 of the Wildlife Order 1985. They are also protected in Britain under the Wild Mammals Protection Act (1996), prohibiting cruelty and mistreatment.

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in England. This list is largely derived from the 'Priority Species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies. Hedgehogs are included as a Priority Species on this list.



**B. References**

- **Collins, J. (Ed.) 2016. Bat Surveys for Professional Ecologists - Good Practice Guidelines: 3rd edition.** Bat Conservation Trust, London, United Kingdom.
- **English Nature 2004. *Bat Mitigation Guidelines.***
- **IEEM 2006.** Guidelines for Ecological Impact Assessment in the United Kingdom (version 7 July 2006), Institute of Ecology and Environmental Management [online]. Available: <http://www.ieem.org.uk/ecia/index.html> [accessed February 2011]
- **JNCC 2004. *Common Standards Monitoring Guidance for Mammals.*** Joint Nature Conservation Committee, Peterborough.
- **Mitchell-Jones A. J. & McLeish, 2004. *Bat Workers' Manual.*** Joint Nature Conservation Committee, Peterborough.
- **Natural England and Countryside Council for Wales, 2007. *Disturbance and protected species: understanding and applying the law in England and Wales. – A view from Natural England and the Countryside Council for Wales.*** United Kingdom
- **Stebbins R.E., 1986. *Which bat is it?*** The Mammal Society and the Vincent Wildlife Trust, London.



Appendix C. Photographs



Plate 1. South gable where linking structure will join the main house.

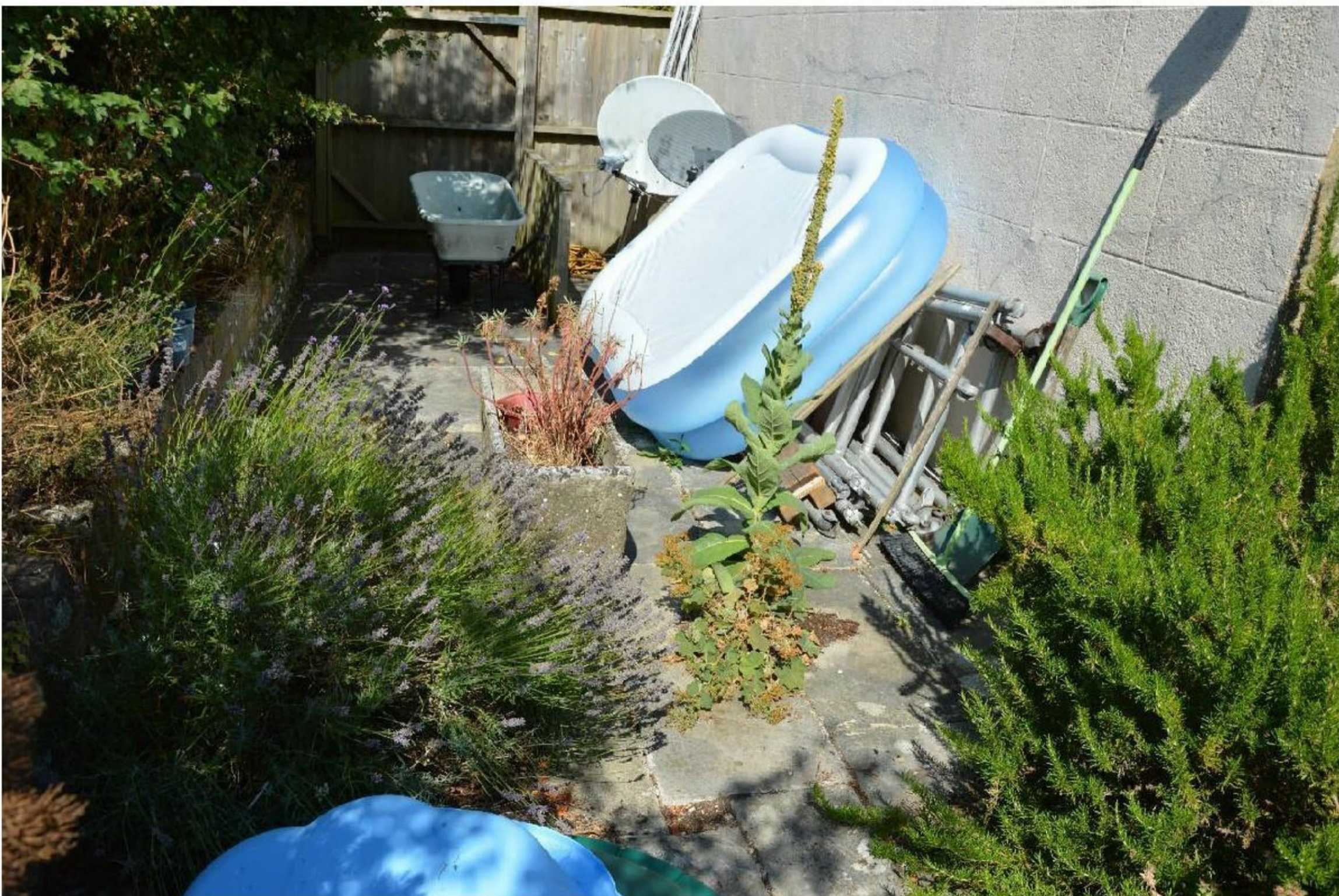


Plate 2. Habitat where the linking structure will join the main house.





Plate 3. View of the Field maple and hawthorn to be cut back.



Plate 4. Short mown grass where the extension will be built.





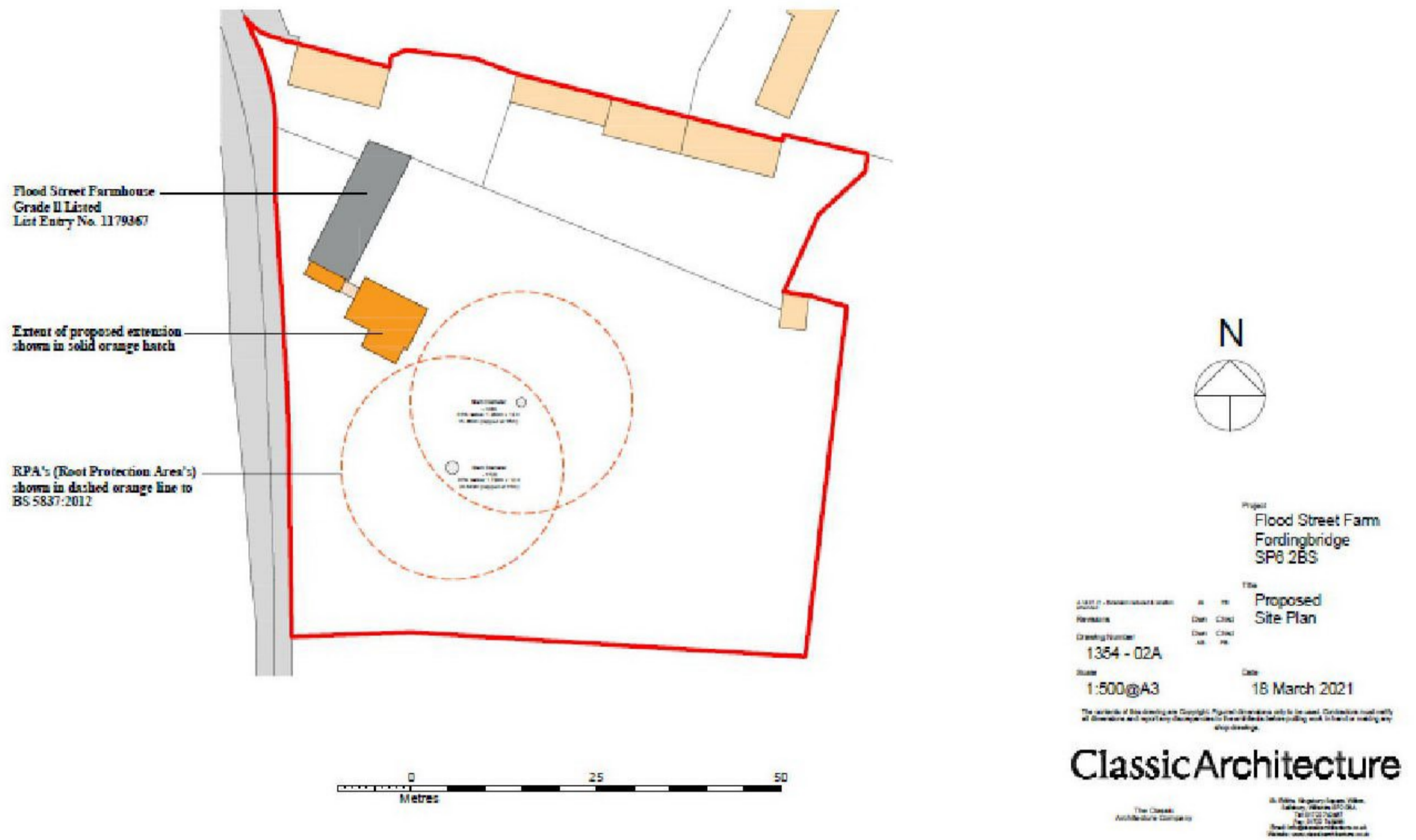
Plate 5. Short mown grass where the extension will be built.



Plate 6. Trees at the east of where the extension will be built.



### Appendix D. Proposed site plan.





### Appendix E. Enhancement feature locations.



**PROPOSED SOUTH EAST FACING ELEVATION**  
Scale 1:100



**PROPOSED NORTH EAST FACING ELEVATION**  
Scale 1:100



B-140702 I  
A-130702 I  
Revised  
Drawing N  
135  
Scale  
1:10  
The center  
of drawing

Cl:



**PROPOSED SOUTH-WEST FACING ELEVATION**  
Scale 1:100

Bat tiles 

House martin terrace 



## Appendix F. Enhancement features

### Bat Access Tile Kit



<https://www.nhbs.com/bat-access-tile-set?bkfno=187129>

Available in 9 colours



### House Martin Nests

It is increasingly difficult for Swallows and House Martins to find suitable nest-building and mud they do find, if any, is often poor quality. In addition, the walls of buildings are nowadays often very smooth, so as a result, nests tend to fall down, sometimes with the nestlings inside. In many places, the vibration caused by heavy vehicles shakes the nests loose.

Easily fixed under the eaves on the outside walls of buildings, these nest boxes are perfect for house martins to return to year after year. The bowl-shaped nest is made of air-permeable wood-concrete and a backing board made of exterior grade, formaldehyde-free chipboard to prevent warping.

**Double nest:** House martins are very sociable and will more readily use nests that are arranged in pairs. They can also be installed in groups to form large colonies. The backing board may be painted to match the building.

**Siting:** Under eaves on the external walls of buildings. Install on the sheltered side of the building at a minimum height of 2m above the ground.

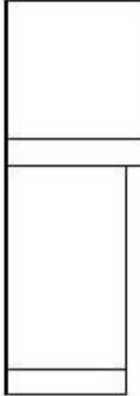
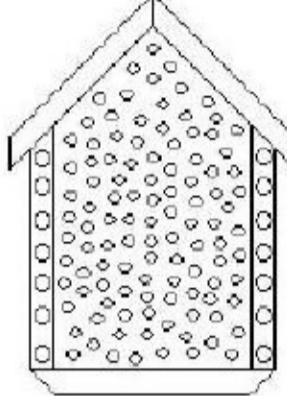
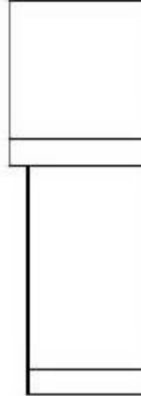

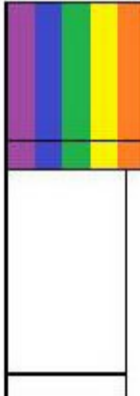
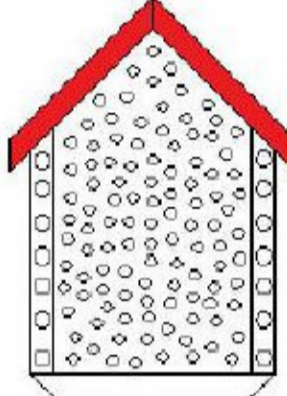


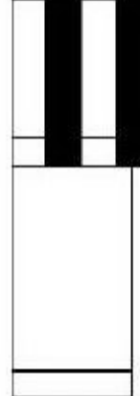
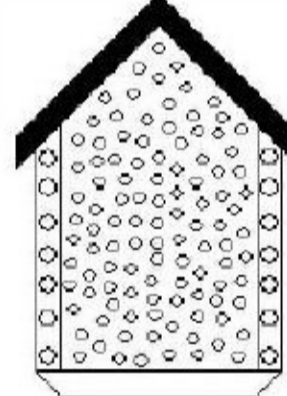
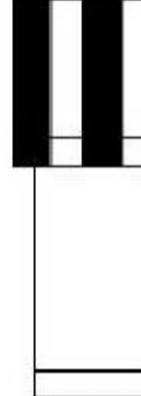
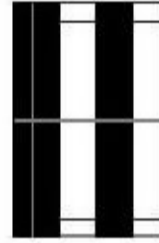
These nests can be used for years without cleaning. However, if possible it is recommended to inspect them frequently and to clean them when necessary.



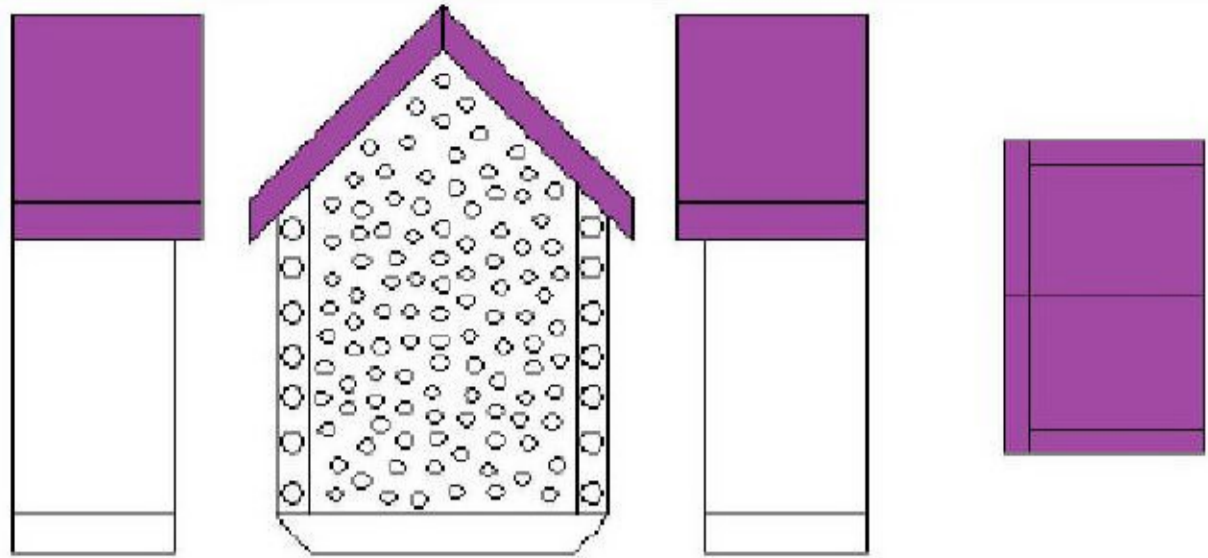
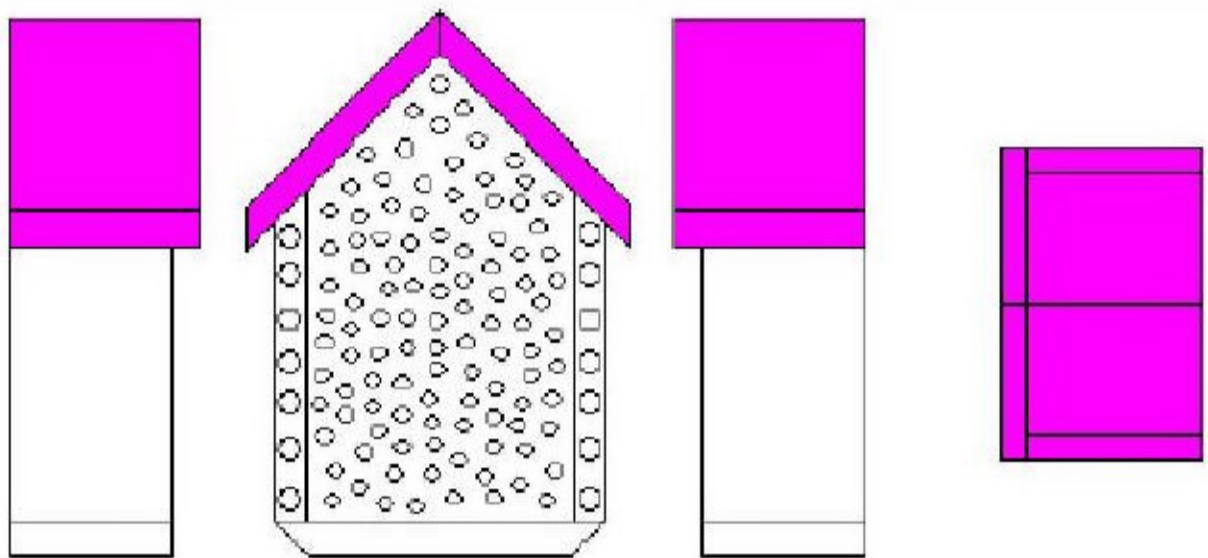
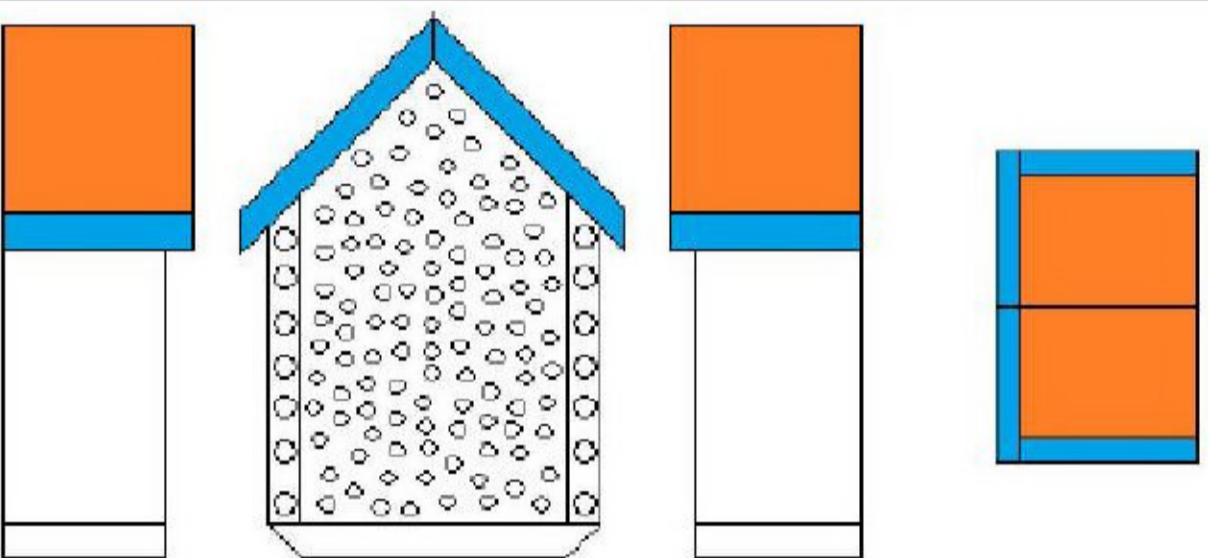
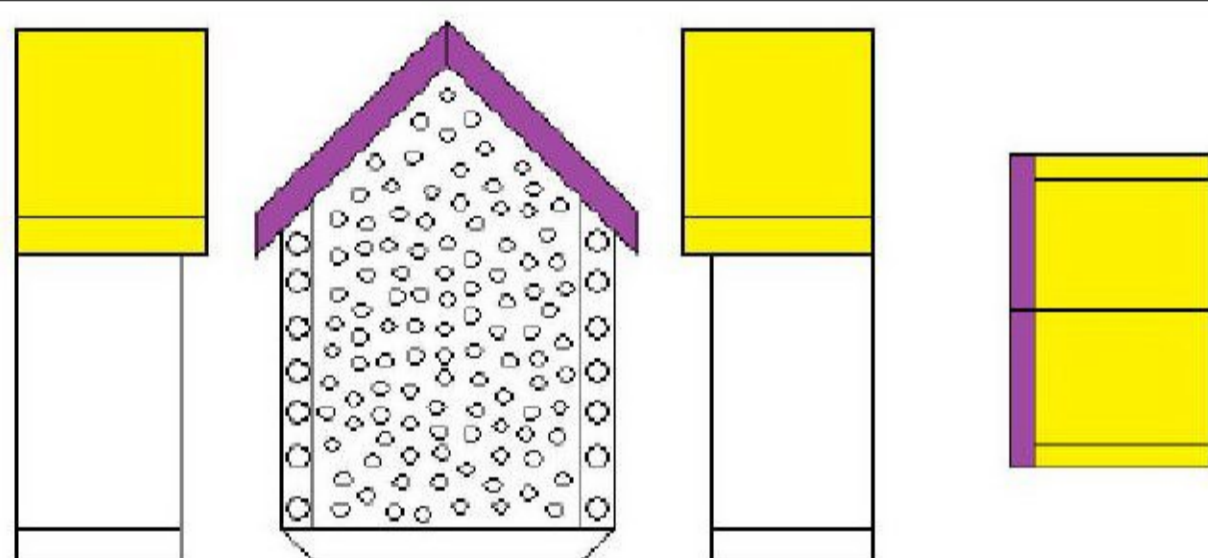
### Bee Hotels

Boxes (Approximately 23cm tall).

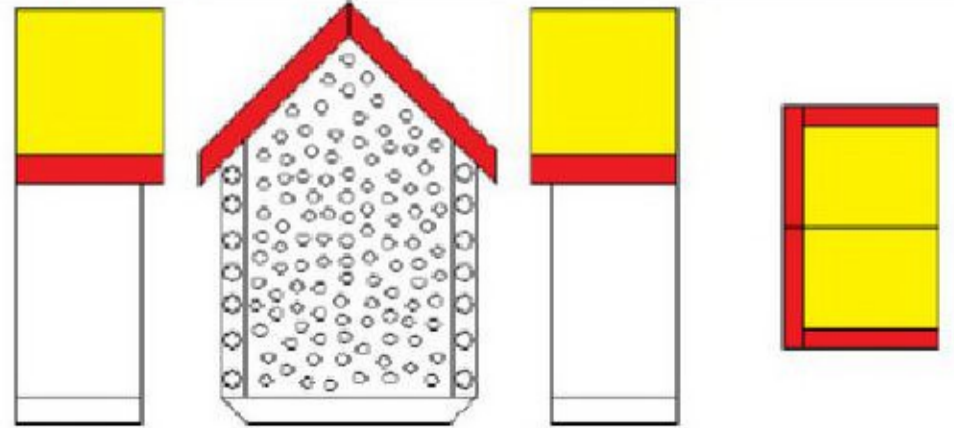
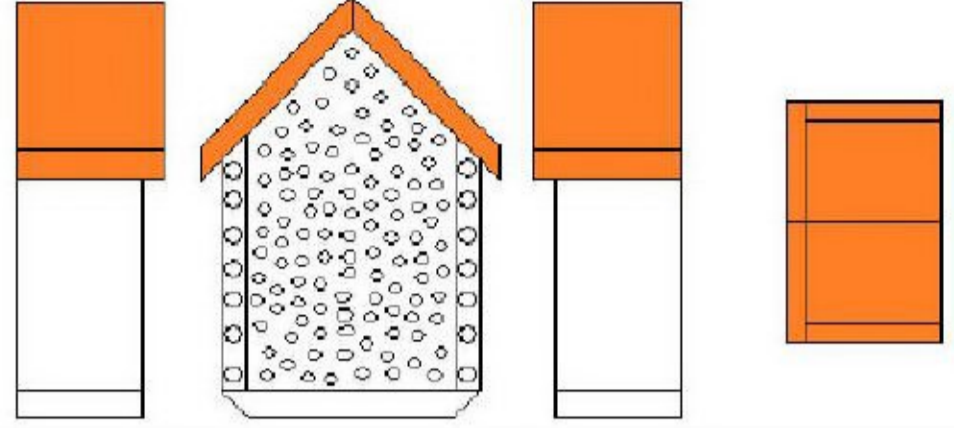
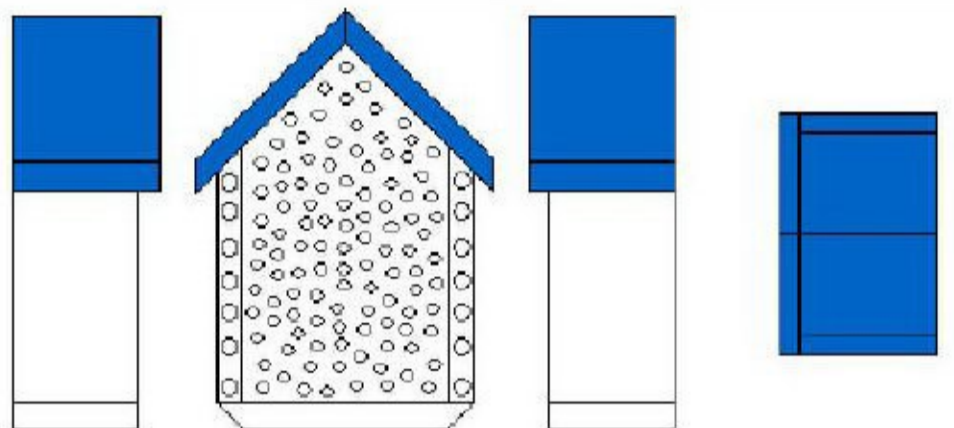
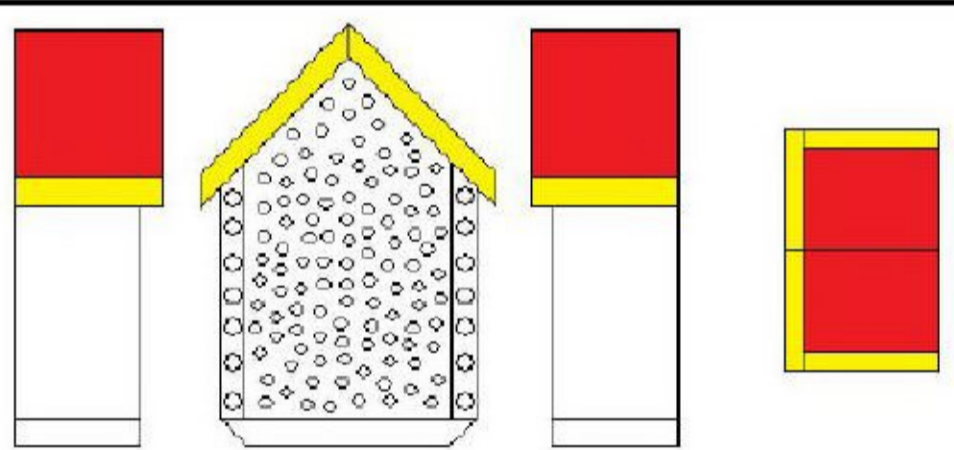


	Left	Front	Right	Roof	No
1.					1
2.					4
3.					1

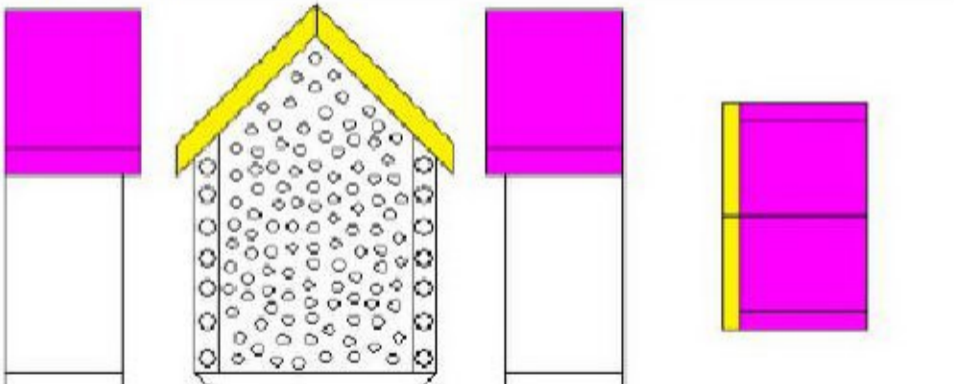
Boxes (Approximately 23cm tall).

<p><b>4.</b></p>		<p><b>2</b></p>
<p><b>5.</b></p>		<p><b>2.</b></p>
<p><b>6.</b></p>		<p><b>2</b></p>
<p><b>7.</b></p>		<p><b>1</b></p>

Large Boxes (Approximately 23cm tall).

8.		1
9.		1
10.		2.
11.		1

Large Boxes (Approximately 23cm tall).

12.		1
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Bee Hotel from Colin Morris – email - [REDACTED]

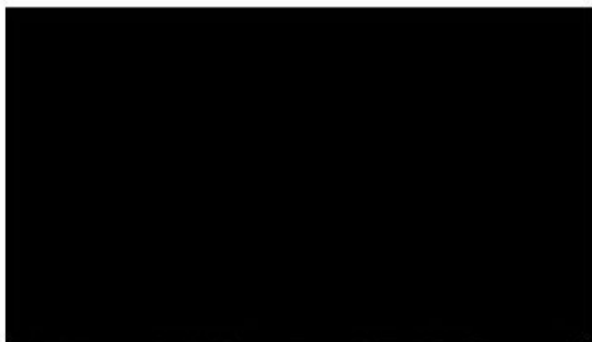


**David Leach BSc (Hons) CBiol. MSB MCIEEM.** David is a professional ecologist with over forty years' research and fieldwork experience in many aspects of ecology and for the past twelve years in environmental consultancy work.

David is an experienced bat surveyor with competency in activity surveys, bat roost assessments, daytime surveys for bat field signs, assessments of trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required.

David also has experience in surveying for birds, reptiles, amphibians, Barn Owls and Badgers and also carries out extended Phase 1 habitat surveys, BREEAM and Code for Sustainable Homes assessments.

David holds Natural England and Natural Resources Wales licenses to disturb bats for the purposes of science and education or conservation and is a **Registered Consultant for the Bat Low Impact Class Licence**. David has been involved in over 135 Protected Species Licenses to permit development works affecting bats and also closing down badger setts.

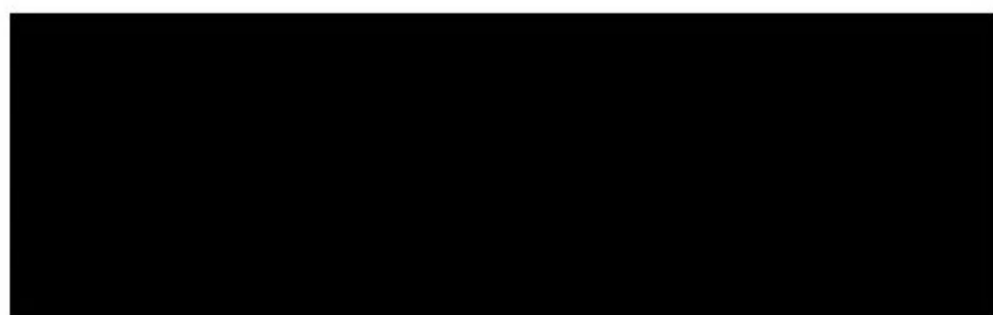


David Leach BSc. (Hons), C.Biol., M.S.B., M.C.I.E.E.M.

*Disclaimer.*

*All reasonable effort has been made to provide accurate information at the time of the survey. However weather conditions and the timing of surveys can affect the results. Some species or signs of that species will only be visible at certain times of the year e.g. the nesting season for birds is usually between March and September. The absence of certain species or signs of use at the time of a survey does not mean that they are not present at other times of the year and does not imply that a species might not use the site at some time in the future.*

Mobile:



E-mail: