



**Robson Ecology Ltd.**

Tel: 01787 248407 / 07443 620934

Email: [Odette@RobsonEcology.co.uk](mailto:Odette@RobsonEcology.co.uk)



---

---

# **Amphibian Method Statement and Biodiversity Enhancement Strategy**

**for**

**The Cottage, Upper Green,  
Felsham, Suffolk, IP30 0PL**

<b>Survey Commissioned by:</b>	Joe Naughton
<b>Project Number:</b>	REP23033
<b>Report issued:</b>	12 <sup>th</sup> February 2024
<b>Project Ecologist:</b>	Odette Robson BSc (Hons) PhD MCIEEM

<b>Project number:</b>	<b>Title:</b>	<b>Revision:</b>	<b>Issued:</b>
REP23033	Amphibian Method Statement and Biodiversity Enhancement Strategy for The Cottage, Upper Green, Felsham, IP30 0PL	<b>Final</b>	12 <sup>th</sup> February 2024

**Disclaimer**

*The findings detailed in this report are based on evidence from thorough review of existing documents, where every effort has been taken to provide an accurate assessment of the site. No liability can be assumed for omissions or changes since the surveys were undertaken.*

*This report was instructed by Joe Naughton, and following the brief agreed. Robson Ecology has made every effort to meet the client's brief.*

*Neither Robson Ecology, nor any associated company, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use of the report. We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above. This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.*

*Information supplied by the Client or any other parties and used in this report is assumed to be correct and Robson Ecology accepts no responsibility for inaccuracies in the data supplied.*

*This report must not be submitted to the Local Planning Authority until payment has been received in full.*

*The report may need to be updated (at the discretion of the Local Planning Authority) if site conditions change, or if not submitted to the LPA within 12 months or implemented within 18 months of the report issue date.*

**© Robson Ecology 2024** (Copyright of this report remains with Robson Ecology: Content must not be reproduced, in whole or part, without written consent)

## 1 Summary

<b>Site:</b>	The Cottage, Upper Green, Felsham, IP30 0PL
<b>Grid Reference</b>	TL 94531 57090
<b>Planning reference</b>	Ref. DC/23/02346 (Mid Suffolk District Council)
<b>Commissioned by:</b>	Joe Naughton
<b>Surveys/reports used to inform the AMS and BES</b>	Robson Ecology (2023) Bat Roost and Emergence Survey, Pond Assessment, and Bat Mitigation Strategy. 13 <sup>th</sup> October 2023. REP23033.
<b>Lighting</b>	No lighting directed towards sensitive habitats (mature trees; garden boundary vegetation; bird and bat boxes on Cottage and trees).
<b>Requirements before starting on site and Precautionary Working Methods during site/construction works</b>	<ul style="list-style-type: none"> <li>- Ecological supervision during site/ground clearance.</li> <li>- Protection of exclusion zone (mature tree/scrub) with temporary barrier fence.</li> <li>- Good-practice construction precautions will be implemented (including providing escape routes from any trenches or deep footings; safe storage of materials).</li> <li>- Protection of retained trees/hedges close to the construction/working zone to avoid root compaction or damage from construction vehicles/activities.</li> <li>- A nesting bird survey to be carried out if scrub clearance or works to the Cottage are carried out within the breeding season (March to August inclusive).</li> </ul>
<b>Timing Considerations</b>	<p>Any vegetation removal (trees, scrub/bushes) or start of work on the Cottage will be carried out outside the nesting bird season or preceded by a nesting bird survey.</p> <p>Ground clearance will be carried out when amphibians are in breeding ponds (February to July), and under ecological supervision.</p>
<b>Biodiversity Enhancement</b>	Bird Box: targeting spotted flycatcher/song thrush. These high conservation priority species are likely to be present in the area and use boxes of the types specified.
	Bat Box and roost features: Targeting species recorded during surveys.
	Hedgehog house and gaps under fences.
	Native hedge-planting at garden boundary
	Hibernacula/log-pile refuge.

## Contents

1	Summary .....	3
2	Introduction .....	5
2.1	Background.....	5
2.2	Planning Conditions .....	5
3	Construction Management, Precautions and Working Methods .....	6
3.1	Non-Licensed Method Statement for Great Crested Newts.....	6
3.1.1	Habitat Management (Pre-start).....	6
3.1.2	Habitat Protection Fencing (Pre-start).....	6
3.1.3	Supervised Destructive Search for Great Crested Newts.....	6
3.2	Good Practice Precautions for Wildlife During Construction.....	7
3.3	Additional Precautions (Bats).....	7
3.3.1	Sensitive Lighting.....	7
3.3.2	Roofing Membrane .....	8
3.4	Timing of Works, Precautions, and Enhancement Implementation.....	8
3.5	Ongoing Monitoring and Maintenance - Post-completion .....	10
3.6	Responsible persons and lines of communication.....	11
3.7	Site Induction/Monitoring.....	12
4	Biodiversity Enhancement Strategy.....	13
4.1	Bat Box.....	13
4.2	Open-fronted Bird Box .....	13
4.3	Hibernaculum - Habitat Piles.....	13
4.4	Hedgehog Links.....	13
4.5	Native Hedge-Planting .....	14
5	References .....	14
	Appendix A: Protection Features	
	Appendix B: Biodiversity Enhancement Plan	
	Appendix C: Habitat Box Specifications	
	Appendix D: Record of Induction.	

## 2 Introduction

### 2.1 Background

The report is required to discharge Conditions relating to a planning application at The Cottage, Upper Green, Felsham, IP30 0PL (Mid Suffolk District Council, Ref. DC/23/02346). A Householder planning application was approved on 1<sup>st</sup> December 2023 for:

*Internal and external alterations, renovations and form new dormer window as per Schedule of Works.*

This document presents the Amphibian Method Statement, and a Biodiversity Enhancement Strategy (BES), as required to discharge Conditions relating to ecology.

This document is to be read in conjunction with:

- Robson Ecology (2023) Bat Roost and Emergence Survey, Pond Assessment, and Bat Mitigation Strategy. 13th October 2023. REP23033.

No development shall take place (including ground works and vegetation clearance) until the AMS and BES has been approved by the Local Planning Authority and their consultees. This shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by Mid Suffolk District Council.

### 2.2 Planning Conditions

The following conditions which relate to ecology have been requested for The Cottage as part of the planning consent and as detailed in the decision notice (01/12/23; Ref. DC/23/02346).

#### **Condition 4: Biodiversity Enhancement Layout**

*Prior to works above slab level, a Biodiversity Enhancement Layout, providing the finalised details and locations of the enhancement measures contained within the Bat Roost and Emergence Survey, Pond Assessment, and Bat Mitigation Strategy (Robson Ecology Ltd., Oct. 2023 shall be submitted to and approved in writing by the local planning authority. It shall include:*

- a) detailed designs of each recommended enhancement measure;*
- b) locations of proposed enhancement measures by appropriate maps and plans;*
- c) persons responsible for implementing the enhancement measures;*
- d) details of initial aftercare and long-term maintenance (where relevant).*

#### **Condition 5: Great Crested Newt Precautionary Method Statement**

*Prior to commencement, a Non-Licensed Great Crested Newt Precautionary Method Statement shall be submitted to and approved in writing by the local planning authority. This will contain precautionary mitigation measures and/or works to reduce potential impacts to Great Crested Newt during the construction phase. The measures and/works shall be carried out strictly in accordance with the approved details and shall be retained in that manner thereafter.*

### **3 Construction Management, Precautions and Working Methods**

#### **3.1 Non-Licensed Method Statement for Great Crested Newts**

##### **3.1.1 Habitat Management (Pre-start)**

Amenity grass/lawn areas will be kept short (<5cm sward height) prior to groundworks/site clearance to avoid creating refuges/habitat that may attract great crested newts or reptiles into the clearance zone.

##### **3.1.2 Habitat Protection Fencing (Pre-start)**

Retained hedges and trees within 5m of the groundworks zone will be protected during the works with protective barrier fencing: This will protect wildlife and avoid tree-root compaction. Appendix A shows the indicative location of protective fencing around the construction zone which will contain the disturbance/impact to the construction area, away from sensitive habitats.

- There will be strictly no contractor access, storage of materials, site compound, vehicular access, parking, or other incidental entry into the exclusion zone at any time:
- Contractors and vehicles will not be allowed to access the exclusion zone without ecological supervision and/or written agreement of extent/methods of works.
- Warning signs stating '*Protection Zone – Keep Out*' will be fixed at regular intervals along the exclusion fence.
- All site workers must be made aware that the area beyond the fence is a strict exclusion zone, with no access for any purpose. The location of the exclusion zone will be covered within the site-induction process which all site contractors will undergo, and sign when completed (Appendix D).

##### **3.1.3 Supervised Destructive Search for Great Crested Newts.**

- Before ground clearance, all refuge features (rubble/wood piles, tiles/slabs, debris etc) within the clearance/working zone (see Appendix A) will be checked by an ecologist licenced to handle great crested newts, then sensitively removed (or dismantled/made unsuitable for amphibians) under supervision and precautionary working practices. This will be done during the active newt season (February to November inclusive), and preferably when newts are in the ponds (April to June inclusive).
- Any reptiles or amphibians found will be relocated to the tree-lined garden boundary habitat, and allowed to disperse naturally. If great crested newts are found, site works will stop while the ecologist evaluates the situation to determine whether a European Protected Species licence would be needed to proceed. Great crested newts must only be handled by a Natural England licensed ecologist.

## 3.2 Good Practice Precautions for Wildlife During Construction

- All trenches/deep footings will be fully covered overnight, or a secured plank/scaffold board will be placed in such that any wildlife falling in can climb out safely. Alternatively, one end of the trench will be sloped or stepped to enable animals to escape.
- Storage: Construction materials will be kept off the ground on pallets to prevent small animals seeking refuge beneath them.
- Waste Management: Waste and debris will be removed from site immediately, or placed in skips, to avoid forming refuge opportunities for small animals.
- Dust: Contractors will ensure that all loose materials are covered or damped down by a suitable water device; ensure that all cutting/breaking is appropriately damped down; and ensure the site is appropriately screened to prevent dust nuisance to the adjacent garden areas.
- Temporary pools of water must not be allowed to form during the construction phase.
- All caustic materials (e.g., cement,) must be mixed on boards or tarpaulin and removed at night or locked in a sealed site-cabin/building.
- Works to be conducted in daylight hours only - when newts are less likely to be moving/active.
- Any heavy machinery should be stored on hard-standing.
- A single route for contractors should be used from the road to the construction zone.
- If a great crested newt is found during unsupervised works, and despite the avoidance and precautionary measures, work must stop immediately pending advice from the Project Ecologist on how to proceed. An assessment will be made to determine whether the work can proceed without committing an offence. Contact details of the Project Ecologist must be present on site at all times and NE will be contacted for advice if necessary.

## 3.3 Additional Precautions (Bats)

### 3.3.1 Sensitive Lighting

Lighting at the site will be minimized to encourage nocturnal animals to use the site, both during the construction phase, and on completion.

- LED luminaires will be used where possible (No UV elements: Metal halide, fluorescent sources will not be used).
- Only luminaires with an upward light ratio of 0% and with good optical control will be used (See ILP 2011).
- Any external security lighting will be set on motion-sensors sensitive to large moving objects only, and short (<1 minute) timers.
- All external lighting will be kept to the minimal feasible level and be directed downward: Baffles, hoods or louvres will be used to reduce light spill and direct it only to where needed.

- Lighting will be appropriately directed to avoid illuminating the boundary hedges and trees, and mitigation/enhancement habitat boxes (on the Cottage and trees).
- There will be no task lighting adjacent to, or directed towards, any mature trees during the construction phase of the development.
- Building works will not be carried out at night, or within half an hour of dawn or dusk.

### 3.3.2 Roofing Membrane

Only F1-Type Bitumen/hessian felt, (or a ‘bat-safe’ membrane approved by Natural England) must be used in areas of the Cottage (wall and roof-lining) which could be accessed by bats. Most modern breathable membranes have been shown to be harmful to bats, though there are a small number of products which have passed the snagging propensity test and NE will allow use of these in roost buildings **if approved at the licensing stage**.

### 3.4 Timing of Works, Precautions, and Enhancement Implementation

A summary of sensitive works, and timing to avoid harm to biodiversity, is listed in Table 3.1. This includes the times during construction when a suitably qualified ecologist will be present on site to oversee works. Any deviations to the programme of works, construction materials or methods must be discussed with the Project Ecologist prior to implementation – to ensure that there will be no impact to wildlife.

**Table 3.1:** Key ecological survey and implementation dates (ecological supervision and/or advice may be required for items highlighted in green)

Activity	Implementation Date	Action Required/Constraint	Responsible Persons
Bat Licence Application	February/March 2024	<b>Registered Consultant (RC)</b> to apply for licence and confirm to project team when approval from Natural England has been received.	Registered Consultant / Project Ecologist
<b>Licensable work</b> Exclusion devices fitted.	April 2024	To be completed by beginning of May. RC to advise when weather is suitable. Full scaffolding must be provided.	Registered Consultant
<b>Licensable work</b> Removal of roost features	Five days after exclusions fitted (April/May 2024)	Removal of roost features <b>under supervision of RC. To be completed by mid-May</b>	Registered Consultant
Sensitive Habitat protection fence (Exclusion Zone).	Prior to any work starting, or vehicular access, the site will be fenced to protect the sensitive garden habitats.	Protective fencing (Heras or barrier mesh – as appropriate) to separate the construction/groundwork zone from the sensitive garden habitats. The fence to remain <i>in situ</i> for the duration of construction activity, as shown in Appendix A.	Site Manager.



Nesting Bird Survey.	March to August inclusive: Any tree-works, scrub removal, or works to the Cottage within the nesting season: Survey for active nests within three days of start of works.	If active nests are recorded, there will be a delay to works in that part of the site (and an appropriate exclusion zone – as advised by the ecologist) until all young birds have fledged and left the nest area.	Suitably experienced ecologist
Hibernaculum/ Habitat Pile creation	At the start of the project (before ground-clearance)	Location – see Appendix A. Constructed using native hardwood logs/brush, and rubble.	Project Ecologist
Precautionary destructive-search of potential great crested newt refuge locations	Before start of groundworks/clearance.	Pre-start hand-search of potential herptile refuges, and supervision of works in areas where protected species could be encountered (supervised removal of vegetation, stones, wood piles, tiles, and debris).	Suitably experienced ecologist
Site Induction	Prior to any new contractors starting on the site	Registered Consultant on the BMCL licence will provide a toolbox talk immediately before works to the barn start. A site induction/ecology briefing for all site workers involved in the project, prior to start of works. Induction record (Appendix D) to be signed to provide written record.	Project Ecologist Site Manager Project Manager
Bird box	At the start of the project (tree box).	Location – see Appendix B and note details on optimal height, location and orientation in Section 4.2.	Site Manager (following advice from Project Ecologist)
Bat box	At the start of the project (tree box). At appropriate stage of the build-program (roost features at gable end)	Location – see Appendix B. Optimal height, location and orientation – see Section 4.1.	Site Manager (following advice from Project Ecologist)
Lighting	During construction and operational phases.	Lighting will not be directed at the enhancement/habitat boxes, or garden habitats/trees during the operational or construction phases.	Site Manager
Long-term maintenance and monitoring	Post Completion	Table 3.2 - Habitat boxes, trees/hedges.	Project Manager

### 3.5 Ongoing Monitoring and Maintenance - Post-completion

Annual monitoring and maintenance is necessary to ensure that conservation aims and objectives are being met and identify any contingencies and/or remedial actions to achieve the fully functioning biodiversity objectives of the scheme.

**Table 3.2:** Monitoring during and post-construction

Feature	Action Required	Frequency	Responsible Persons
Bird box	<p>Check for presence and damage – replace if damaged/missing.</p> <p>Clean out bird box once a year (November to February).</p> <p><b>The box must be checked at least annually by a competent person to ensure that the fittings are safe, and the box securely fixed to the tree. Adjust methods of securing the box to the tree if deemed not secure.</b></p>	Annual – during and post construction	<p><i>During works:</i> Site Manager.</p> <p><i>On completion:</i> Homeowners</p>
Bat box/features	<p>Check for presence and damage – replace if damaged/missing. Remove branches obscuring entrance. Maintenance/cleaning is not required for bat boxes.</p> <p>Only a bat-licensed ecologist can legally open/move a bat box.</p> <p><b>All boxes must be checked at least annually by a competent person to ensure that the fittings are safe, and the boxes securely fixed to the tree/building. Adjust methods of securing the box to the tree if deemed not secure.</b></p>	Annual – during and post construction	<p><i>During works:</i> Site Manager.</p> <p><i>On completion:</i> Homeowner</p>
Hedge planting	<p>Replacement of any failed planting.</p> <p>Water in hot/dry months and remove encroaching vegetation by hand.</p>	Spring and Autumn - as needed. Summer	<p><i>During works:</i> Landscape</p> <p><i>On completion:</i> Homeowner</p>
Tree/ and hedge management	<p>Manage trees and hedgerows in line with good arboricultural practice. Management of hedges will be on a rotational cutting programme: A third of the hedge will be cut each winter in rotation so that each section is cut once every 3 years (to maximize fruit for wintering birds).</p>	<b>October to February</b> (outside the nesting bird season) – on 3-year rotation	<p><i>During works:</i> Landscape</p> <p><i>On completion:</i> Homeowner</p>

### 3.6 Responsible persons and lines of communication.

If, at any time during the works which are not supervised by the Project Ecologist, the presence of protected species is suspected or identified, works will stop immediately and the Project Ecologist, or Natural England, contacted for advice on how to proceed. Table 3.3, details contact information for the key persons involved with the project.

**Table 3.3:** Responsible persons - contact details.

	<b>Project Manager</b>	<b>Project Ecologist</b>	<b>Site Manager</b>
<b>Name:</b>	<b>Joe Naughton</b>	<b>Odette Robson</b> Robson Ecology Ltd.	<b>TBC</b>
<b>Contact details:</b>	<a href="mailto:naughtonjoen@aol.com">naughtonjoen@aol.com</a>	M: <b>07443 620934</b> <a href="mailto:odette@robsonecology.co.uk">odette@robsonecology.co.uk</a>	M: TBC Email: TBC
<b>Responsibilities:</b>	Overall project decisions. Obtaining advice from Project Ecologist on any changes to programme, design or project that could impact the legal obligations of contractors and/or developer, with regards wildlife legislation (disturbance to protected species). Maintenance and management of site during construction and post-completion.	Responsible for advising on ecological issues, particularly in relation to protection of key wildlife habitats and monitoring, during and post construction. Bat Mitigation Class Licence for works impacting the Cottage / bat roost.	Responsible for induction of all site workers and sub-contractors; keeping the project on schedule and notifying LPA/Ecologist of any changes to programme timings, materials or working methods. Compliance with all documentation and checking integrity of exclusion zones and fencing.

### 3.7 Site Induction/Monitoring

All contractors (demolition, construction, landscapers) and site staff will receive an induction/toolbox talk from the Project Ecologist (or be fully briefed by the Site Manager during the formal site induction process) prior to works starting. A copy of all relevant documents will be available at all times at the Site, along with contact details for the Project Ecologist (Table 3.3).

The induction of all site workers will include information on sensitive habitats/species, including:

- The legally protected status of herptiles, bats, and nesting birds;
- Areas of the site where protected species may be present;
- Sensitive habitat exclusion zone (no access at any time without confirmation from the Project Ecologist);
- Working methods in sensitive areas;
- Timing of any sensitive works with potential to impact bats, birds and amphibians;
- Programme of works and importance of maintaining the schedule.
- All works will stop immediately if active bird nests, or signs of newts, bats, reptiles, or other protected species, are found during works at any time: Site Manager and Project Ecologist will be consulted for advice on how to proceed.

A written record of this will be kept, confirming that site staff have received induction relating to wildlife and biodiversity; All present will sign to confirm attendance at the toolbox talk and/or induction (Appendix D), confirming that they are aware of the potential presence of protected species, the implications of disturbance, and how to deal with a situation if protected species are encountered during works or if pollution incidents occur.

## **4 Biodiversity Enhancement Strategy**

The addition of ecological enhancements listed below will enhance the value of the site for bats, birds, hedgehogs, invertebrates, herptiles and other wildlife, as encouraged through the National Planning Policy Framework (MHCLG 2021), and to help achieve net gain for biodiversity.

### **4.1 Bat Box**

A Schwegler 2F woodcrete bat box will be erected within a mature boundary tree. This will be 3m to 5m above ground level. The bat box will face south-east or south-west and be sited out of reach of cats. There must be unobstructed flight access enabling entry/exit for bats, but with suitable flight-lines in close proximity. The access hole is at the base so that the box is self-cleaning and does not require any maintenance.

The bat box should be left in perpetuity, checked annually for safety, and only opened or moved by individuals licenced by Natural England to survey and handle bats.

### **4.2 Open-fronted Bird Box**

A bird box, targeting local priority species has been specified; Spotted flycatcher and song thrush. These species are likely to be present in the area and use boxes of the type specified: The Schwegler 2H open-fronted nest box, or other box to approved BTO-standards, will be installed in a retained boundary tree/shrub, or on the garden boundary fence toward the rear of the garden.

The nest box will be to BTO/RSPB specification, and of woodcrete in preference to wood construction: This material is durable, has good thermal properties and lasts longer than wooden alternatives.

Location of bird-box on the site is shown on the Biodiversity Enhancement Plan (Appendix B), and specification in Appendix C. The box will face east, north-east or south-east, away from the prevailing wind direction and not directly south-facing. A height of 2-4m above ground is usually appropriate, and cats must not be able to access the box.

### **4.3 Hibernaculum - Habitat Piles.**

A hibernaculum will be created by filling a hole (0.5m x 1m in extent and up to 50cm deep) with rubble and wood from native hardwood species to provide reptile and amphibian refuge and hibernation opportunities. This will be topped with 50cm of brash and logs. The location is shown in Appendix B - close to the rear boundary of the garden, which will be minimally disturbed on completion of works.

Hardwood logs and/or rubble/bricks can be saved during site clearance phase to provide site-won recycled material for the creation of hibernaculum.

### **4.4 Hedgehog Links**

Hedgehog links will be created within any new or existing barrier fencing (such as panels, rabbit-netting, or close-board on the garden boundary), to enable small mammals to move to adjacent habitats (adjacent gardens and amenity land). These will be small gaps (13cm x 13cm) at ground level, along each fence line or at approximately 15m intervals.

A predator proof hedgehog house could be installed as shown on Appendix B, to provide refuge shelter and hibernation opportunities free from predators.

## 4.5 Native Hedge-Planting

New hedge-planting will strengthen the boundary as a wildlife corridor. The following native fruit and berry bearing species should be used (ratio in brackets):

Hawthorn *Crataegus monogyna* (50%), Field Maple *Acer campestre* (20%), Hazel *Corylus avellana* (20%), Dog Rose *Rosa canina* (2%), Guelder Rose *Viburnum opulus* (3%), Spindle *Euonymus europaeus* (3%), Oak *Quercus robur* (2%).

Bare rooted hedgerow tree whips will be planted in two staggered rows, with each whip 50cm apart. Existing vegetation in the planting area will be removed by hand prior to hedge planting (no chemical use). Planting will then be in accordance with British Standard BS8545: 2014 – *Trees: from Nursery to Independence in the Landscape*.

Management of hedge (once established) should include rotational cutting and allowing growth to four or more meters in height (where safe to do so, depending on visibility splay).

As well as enhancing ecological connectivity around the site, this would also provide foraging and refuge opportunities for birds, small mammals and other wildlife.

## 5 References

Bat Conservation Trust. (2009). Bats and lighting in the UK- bats and the built environment series [www.bats.org.uk](http://www.bats.org.uk)

Conservation of Habitats and Species Regulations 2017 (as amended). HMSO, London.

ILP (2018). Institute of Lighting Professionals. Bats and artificial lighting in the UK Bats and the Built Environment series. Guidance Note 08/18.

IPE (2011) Institution of Lighting Engineers Guidance Notes for the Reduction of Obstructive Light

MHCLG (2021). National Planning Policy Framework. Available to download online from the Government website <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). The Status of Our Bird Populations: The Fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and Second IUCN Red List Assessment of Extinction Risk for Great Britain. *British Birds* 114: 723-747.

Robson Ecology (2023) Bat Roost and Emergence Survey, Pond Assessment, and Bat Mitigation Strategy. 13th October 2023. REP23033.

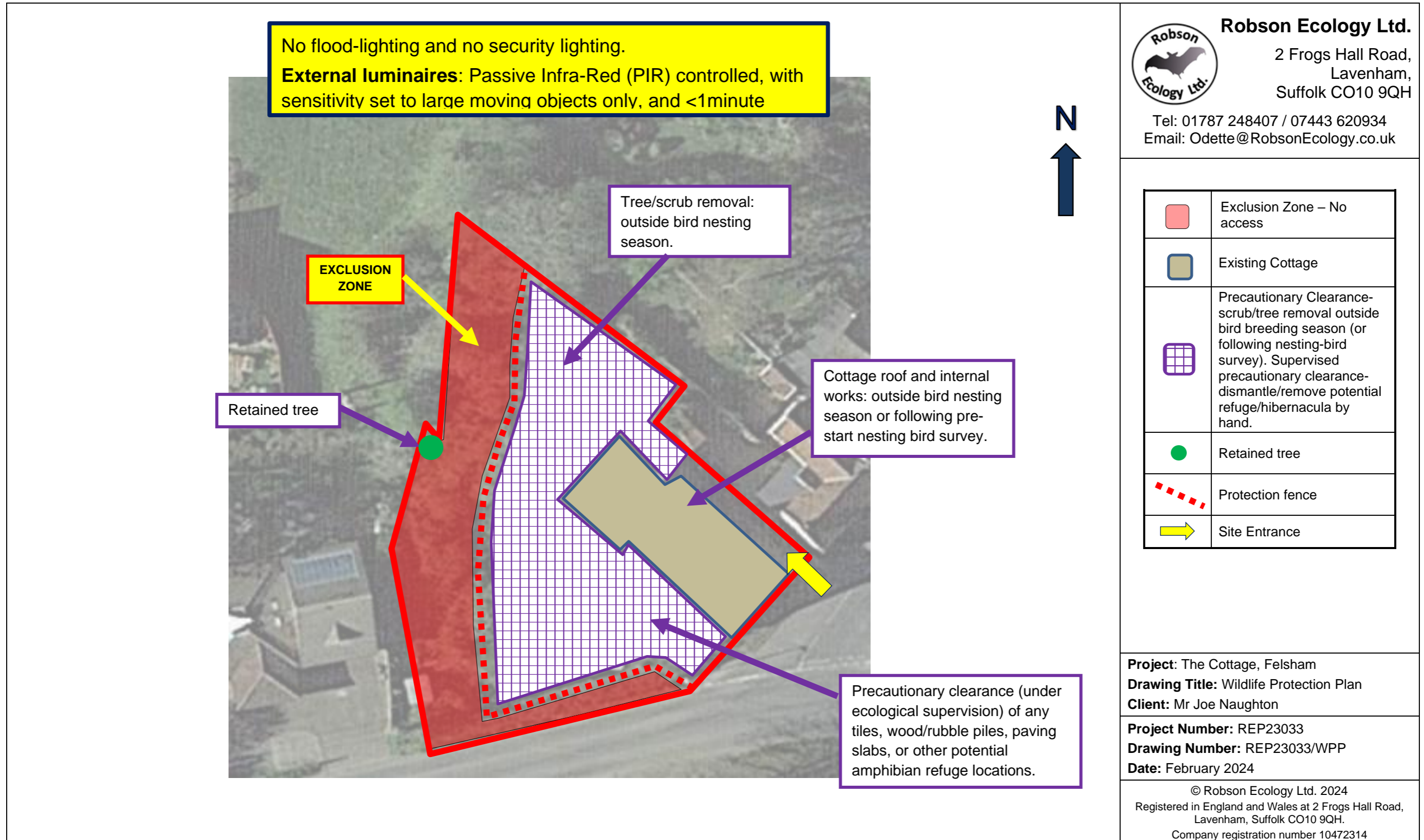
Stone, E.L., Jones, G., Harris, S. (2012). Conserving energy at a cost to biodiversity? Impacts of LED lighting on bats. *Glob. Change Biol.* 18, 2458–2465.

UK BAP from URL <http://jncc.defra.gov.uk/page-5717>

Wildlife and Countryside Act (1981). HMSO, London.



# Appendix A: Wildlife Protection Measures



# Appendix B: Biodiversity Enhancement Plan

**Robson Ecology Ltd.**  
 2 Frogs Hall Road,  
 Lavenham,  
 Suffolk CO10 9QH  
 Tel: 01787 248407 / 07443 620934  
 Email: Odette@RobsonEcology.co.uk








	Site boundary (indicative)
	Cottage
	Integrated roost features at gable end
	Schwegler 2F bat box
	Schwegler 2H Open-fronted bird box
	Hedgehog House
	Hibernaculum
	Existing tree (indicative)
	Native hedge

No flood-lighting and no security lighting.  
**External luminaires:**  
 Passive Infra-Red (PIR) controlled, with sensitivity set to large moving objects only, and <1minute timers.

South-east-facing elevation



## Appendix C: Habitat Box Specification

Habitat Box	Specification (or similar and approved)	Suggested Suppliers (suggestions only - other suppliers are available)
 	<p><b>Schwegler 2F Bat Box</b></p> <p>Multi-purpose bat box for pipistrelles – tree-mounted. Manufactured from long-lasting Woodcrete, a blend of wood, concrete and clay which will not rot, leak, crack or warp, and will last for at least 20 - 25 years.</p>	<p><a href="https://www.nhbs.com/2f-schwegler-bat-box-general-purpose">https://www.nhbs.com/2f-schwegler-bat-box-general-purpose</a></p> <p><a href="https://www.arkwildlife.co.uk/product/schwegler-2f-bat-box/">https://www.arkwildlife.co.uk/product/schwegler-2f-bat-box/</a></p> <p><a href="https://gardenature.co.uk/product/2f-standard-bat-box">https://gardenature.co.uk/product/2f-standard-bat-box</a></p>
  	<p><b>Open-fronted Bird Box</b></p> <p><b>For example, the Schwegler 2H</b> Designed to be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be removed for cleaning.</p> <p>2-4m high.</p>	<p><a href="https://www.arkwildlife.co.uk/product/schwegler-2h-open-nest-box/">https://www.arkwildlife.co.uk/product/schwegler-2h-open-nest-box/</a></p>
 	<p><b>Predator Proof Hedgehog House &amp; Hibernation Shelter</b></p> <ul style="list-style-type: none"> <li>• Height 260mm x Width 400mm x Depth 340mm</li> </ul> <p>Weight (delivery box included) 3kg</p>	<p><a href="https://homeandroost.co.uk/product/predator-proof-hedgehog-house-hibernation-shelter">https://homeandroost.co.uk/product/predator-proof-hedgehog-house-hibernation-shelter</a></p>



### Hibernaculum/Log pile

A hibernaculum will be created by filling a hole (0.5m x 1m in extent and up to 50cm deep) with rubble and wood from native hardwood species to provide amphibian refuge and hibernation opportunities. This will be topped with 50cm of brash and logs.

### Soffit Bat Box (rake/argeboard design)



#### Important dimensions:

- Internal roosting chamber: 20mm wide
- Roosting chamber up to 50cm in length
- Slot (where soffit attaches to building wall) – 12mm wide and 100mm long.
- Gap between box side and baffles (limiting light and draughts) – minimum 40mm.

**Integrated roost feature** under barge boards at gable end.

# Appendix D: Record of Attendance at Ecology Briefing

---

## **Record of Attendance at Ecology Induction Briefing:**

Wildlife legislation/Protected Species briefing at The Cottage, Felsham.

NAME:	COMPANY and POSITION:	Date:	Signed:

Ecology issues: Any questions or concerns relating to wildlife/ecology, please call Project Ecologist for advice on how to proceed:

**Odette Robson** (Licensed by Natural England to survey and handle bats under Class Licence CLS001262, bats (Level 2).

**07443 620934**

**[odette@robsonecology.co.uk](mailto:odette@robsonecology.co.uk)**