Biodiversity Enhancement Strategy

Bridge House, Kersey

for

Mr and Mrs Green

2 November 2023

greenlight
environmental consultancy

Client
Mr & Mrs Green

Planning authority
Babergh District Council

Time limit of reliance

Please note that the reported surveys were conducted on the date(s) stated in the report and that it represents site conditions at the time of the visit. The findings and recommended mitigation are based on these conditions. If site conditions change materially after the site survey, the original report cannot be relied upon and will need to be updated. Ecological reports and surveys can typically be relied on for 18 to 24 months from the date of survey.

Surveys supporting European Protected Species Mitigation Licence applications must be within the current or most recent survey season for bats (May to September), or within two survey seasons for great crested newts (March to June).

Document	Biodiversity Enhancement Strategy
Version	1.0
Date	2 November 2023
Reference number	3370
Author	Daniel Howes B.Sc (Hons), Natural England licences (Great crested newt level 1 2023-11530-CL08-GCN)
Reviewer	Lucy Reed M.Sc, B.Sc (Hons), Natural England licences (Bat level 1 2019-43094-CLS-CLS, Great crested newt level 1 2020-44647-CLS-CLS, Barn owl level 1 2023-11281-CL29-OWL)

Signed disclosure

The information, data, advice and opinions provided in this report which I have provided is true and has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. I confirm that the opinions expressed are my true and professional bona fide opinions.

Nathan Duszynski, ACIEEM

Greenlight Environmental Consultancy Limited
Diss Business Hub
Hopper Way
Diss
Norfolk
IP22 4GT
www.greenlightco.co.uk

Table of Contents

1. INTRODUCTION

1.1. Greenlight Environmental Consultancy Ltd. has been commissioned to compile evidence to discharge a planning condition (Application Number: DC/23/01869, Babergh District Council, June 2023). The proposed development is located at Bridge House, The Street, Kersey, Suffolk, IP7 6DY (grid reference: TM 00060 44131).

1.2. Condition 5 states:

> *"*Prior to any works above slab level, a Biodiversity Enhancement Strategy for protected and Priority species shall be submitted to and approved in writing by the local planning authority, in line with the Nocturnal Bat Survey Report (Greenlight Environmental Consultancy Ltd, October 2022).
>
> The content of the Biodiversity Enhancement Strategy shall include the following:
>
> a) Purpose and conservation objectives for the proposed enhancement measures;
>
> b) detailed designs and product descriptions to achieve stated objectives;
>
> c) locations, orientations and heights of proposed enhancement measures by appropriate maps and plans (where applicable);
>
> d) persons responsible for implementing the enhancement measures; and
>
> e) details of initial aftercare and long-term maintenance (where applicable).
>
> The works shall be implemented in accordance with the approved details shall be retained in that manner thereafter.
>
> Reason: To enhance protected and Priority species & habitats and allow the LPA to discharge its duties under the NPPF 2021 and s40 of the NERC Act 2006 (Priority habitats & species).*"*

2. CONDITION 5 – BIODIVERSITY ENHANCEMENT STRATEGY

2.1. The purpose of this report is to provide detailed information on the construction, design and location of mitigation and enhancements.

2.2. The conservation objectives include:

i. Mitigation and compensation for potential impacts on protected and priority species/habitats.
ii. Maintaining the favourable conservation status of protected species.
iii. Providing a net gain in biodiversity, as is encouraged by the National Planning Policy Framework (NPPF, 2021).

Mitigation and enhancement measures

Bats

2.3. A soft roof strip and demolition of the walls will be undertaken by hand and with an awareness that bats may be present. If any bats are found, works will cease immediately, and a licenced bat worker contacted to advice on how to proceed.

2.4. As bats may forage and commute across the site, any external lighting will follow guidance from the Bat Conservation Trust and CIE 150:2003. Warm-white (long wavelength) lights with UV filters will be fitted as close to the ground as possible. Lighting units will be angled below 70° and equipped with movement sensors, baffles, hoods, louvres and horizontal cut off units at 90.

2.5. If proposed works change to incorporate further areas of the main house, further surveys may be required.

2.6. As enhancements for bats, the following will be installed:

i. One integrated bat box on the eastern aspect of the converted/extended building (Bat Block – Appendix A for examples, Appendix B for location).

2.7. Building Regulations state that the energy efficiency of buildings must be improved where possible and that contractors must assess the condensation risk within the roof space and make appropriate provisions in line with BS 5250:2011. This British Standard states that both High Resistance (bitumen type 1F) and Low Resistance (non-bitumen coated roofing membranes (NBCRM)) underlays are acceptable as long as appropriate ventilation is provided. As NBCRM are proven to entangle bats through regular contact, which also compromises the integrity of the membrane, the Bat Conservation Trust recommend only NBCRM that have passed the snagging propensity test (must be supplied/installed with the necessary certification) or traditional type 1F bitumen are used.

Birds

2.8. Any works affecting bird nesting habitat such as management of trees or buildings would ideally need to be conducted outside the main nesting season. If work is planned during the bird nesting season (between 1st March and 31st July), then a precautionary check of all habitats will be conducted by a qualified ecologist immediately prior to starting any work. If any nesting birds are found, an appropriate protection zone from the nest will be required and will be maintained until the young have fledged.

2.9. As enhancements, the following will be implemented:

i. One small bird box on a suitable tree on site (1B Schwegler Nest Box – Appendix A for examples, Appendix B for location).

Other animals

2.10. General mitigation to protect wildlife during the construction period are as follows:

i. Any excavations will have a rough sawn plank placed inside to act as a ramp to allow any animals that have fallen in to escape. The excavations will be checked each morning works are scheduled for, to remove any animals trapped.

ii. Lighting of the construction site at night will be minimised as far as practicable, to reduce the risk of possible disruption to nocturnal animals such as bats and badgers.

iii. Construction materials will be stored off the ground on pallets and waste materials in skips, to prevent providing shelter for animals and subsequent harm when materials are moved.

Responsible persons

2.11. The client is the developer and landowner of the site and it will be their responsibility to ensure the safeguarding of the mitigation, enhancements and any post-development management, maintenance and monitoring.

Aftercare and long-term maintenance

2.12. The model of bat and bird boxes have been selected for their design and material, which will ensure the boxes will be protected from weather and attacks from other animals.

2.13. If the bat and bird boxes experience any damage, they will need to be repaired or replaced.

2.14. Bird boxes will need to be cleaned at the end of each bird nesting season; the main nesting seasons lasts from March to August, so it is recommended boxes are cleaned in October to ensure all nests are unoccupied. However, swift boxes do not require cleaning.

3. BIBLIOGRAPHY

Baker, J., Beebee, T., Buckley, J. Gent, T., Orchard, D. (2011). Amphibian Habitat Management Handbook. Amphibian and Reptile Conservation: Bournemouth

Barn Owl Trust (2012). Barn Owl Conservation Handbook. Pelagic Publishing: Exeter.

Bright, P., Morris, P., Mitchell-Jones, T. (2006). The dormouse conservation handbook. English Nature

British Standard BS 42020:2013 Biodiversity - Code of Practice for planning and development.

British Standards Institution (2012). BS 5837:2012, Trees in relation to design, demolition and construction – Recommendations.

CIEEM (2017). Guidelines for Preliminary Ecological Appraisal.

Collins, J. (Ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn.). The Bat Conservation Trust, London.

Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn, R., Lock, L. Musgrove, A., Noble, D., Stroud, D., Richard, G. (2015). Birds of conservation concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. British Birds 108, 708-746.

Edgar, P., Foster, J., Baker, J. (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation: Bournemouth

English Nature (2001). Great Crested Newt Mitigation Guidelines. Peterborough.

Gent, A.H. and Gibson, S.D. eds. (1998). Herpetofauna Workers' Manual. Peterborough, Joint Nature Conservation Committee.

Griffiths, R.A., Raper, S.J., Brady, L.D. (1996). Evaluation of a standard method for surveying common frogs (Rana temporaria) and newts (Triturus cristatus, T. helveticus, and T. vulgaris). Joint Nature Conservation Committee Report No. 259.

International Commission on Illumination (2003). CIE 150:2003, Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations.

JNCC (2010). Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

Langton, T., Beckett, C., Foster, J. (2001). GCN Conservation handbook. Froglife.

McLean, I.F.G., JNCC (Drafted by) on behalf of the Inter-agency Translocations Working Group (2003). A Habitats Translocation Policy for Britain.

Oldham, R.S., Keeble, J., Swan, M.J.S., Jeffcote, M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10 (4), 143-155.

Pearce, G.E. (2011). Badger behaviour, conservation and rehabilitation. Pelagic Publishing: Exeter.

Reason, P.F., Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

Sewell, D., Griffiths, R.A., Beebee, T.J.C., Foster, J., Wilkinson, J.W. (2013). Survey protocols for the British herpetofauna. ARC, DICE University of Kent and University of Sussex.

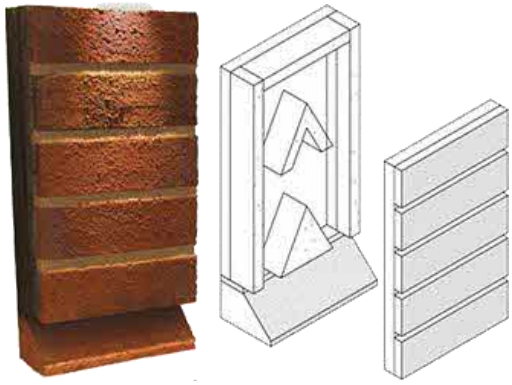
Stone, E.L. (2013). Bats and lighting: Overview of current evidence and mitigation. University of Bristol.

Strachan R., Moorhouse T.,Gelling, M. (2011). Water Vole Conservation Handbook Third Edition. University of Oxford: Abingdon

Appendix A
Examples of bat and bird boxes

(images sourced from www.nhbs.com, www.habibat.co.uk, www.manthorpe.co.uk, www.barnowltrust.org.uk and www.greenwoodsecohabitats.co.uk)

Integrated bat box
Habibat Bat Box



Integrated bat box
Bat Block

Recommendations for installing bat boxes:
(Sourced from Bat Conservation Trust www.bct.org)

Ideally, several boxes should be put up facing in different directions to provide a range of conditions.
Locate boxes:

- Where bats are known to feed close to hedges and treelines (some bats use a treeline or hedgerow for navigation, putting boxes near these features may help the bats find the box).
- On trees: boxes should be placed on the trunk of a mature tree, where there is a clear flight line/accessible entrance.
- On buildings: boxes should be placed as close to the eaves as possible.
- As high as possible (ideally, at least 3 to 4m above the ground, where safe installation is possible).
- In sunny places, sheltered from strong winds (usually between south-west and south-east).

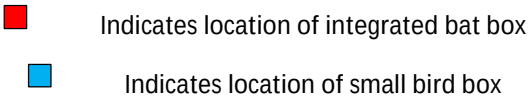
Make sure the boxes are secured.
Boxes can be installed on trees using adjustable ties to avoid damaging the trees. Otherwise, timber screw bolts or nails can be used. Aluminium alloy nails are less likely to damage saws and chipping machinery.
Bats need time to find and explore new homes, and it may be several months or even years before boxes have residents. Once bats find a place they want to live they can return over and over again. Droppings on the landing area, urine stains around the lower parts of the box and chittering noises from inside on warm afternoons and evenings are signs of occupation.

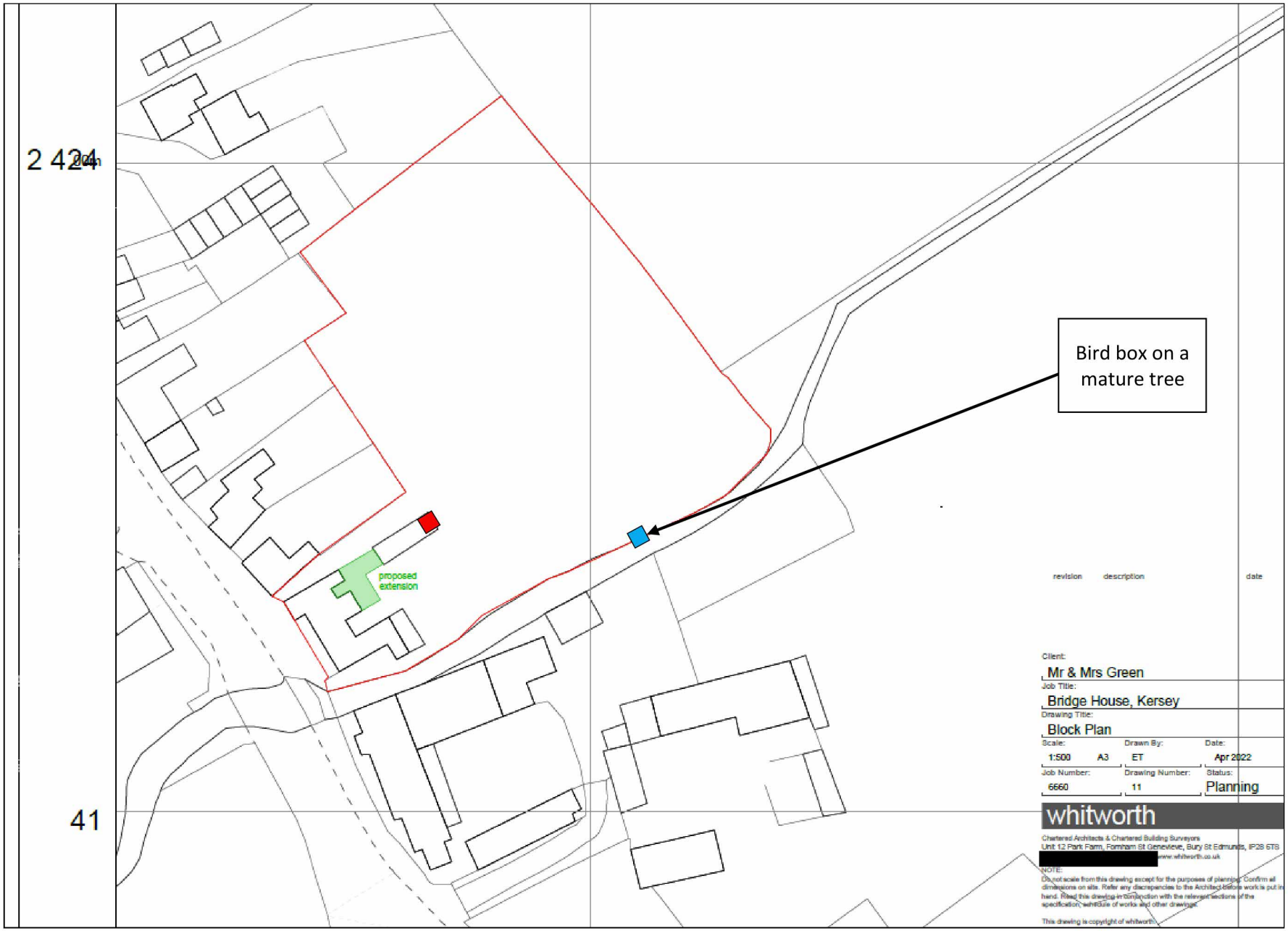
Small bird nesting box
1B Schwegler Nest Box

Small bird nesting box
2H Schwegler Robin Box

Recommendations for installing bird boxes: (Sourced from British Trust for Ornithology www.bto.org, Manthorpe www.manthorpe.co.uk and Barn Owl Trust www.barnowltrust.org.uk)
The highest priority when siting a nest box must be to provide a safe and comfortable environment in which birds can nest successfully. Tips for putting up a nest box: Boxes should be sited 1-3m from the ground, ideally on tree trunks but can be placed on the side of a shed or wall. Avoid areas where foliage obscures the entrance hole. Don't place boxes too close to another nest box of the same type, as this may promote aggressive behaviour between neighbours. Shelter your nest box from prevailing wind, rain and strong sunlight. The box should face between north and east, and angled vertically or slightly downwards to prevent rain entering. Make sure cats cannot get into the box. Keep nest box away from bird feeders. Use galvanized or stainless steel screws or nails. If fixing boxes to trees, galvanised wire can be used to tie the box to the trunk or hang it from a branch. Make sure to regularly inspect these fittings (every two or three years) to ensure the box remains securely attached.

Appendix B
Location of enhancement measures




2 424
41
Bird box on a mature tree
proposed extension
revision description date
Client:
Mr & Mrs Green
Job Title:
Bridge House, Kersey
Drawing Title:
Block Plan
Scale: 1:500 A3
Drawn By: ET
Date: Apr 2022
Job Number: 6660
Drawing Number: 11
Status: Planning
whitworth
Chartered Architects & Chartered Building Surveyors
Unit 12 Park Farm, Fornham St Genevieve, Bury St Edmunds, IP28 6TS
[redacted]
www.whitworth.co.uk
NOTE:
Do not scale from this drawing except for the purposes of planning. Confirm all dimensions on site. Refer any discrepancies to the Architect before work is put in hand. Read this drawing in conjunction with the relevant sections of the specification, schedule of works and other drawings.
This drawing is copyright of whitworth


Tile
Tile
Tile
Tile