Nocturnal Bat Survey Report

Newtown Meadow, Worlingwoth

for

Victoria & Julian Uff

22 May 2023

greenlight
environmental consultancy

Client
Victoria & Julian Uff

Planning authority
Mid Suffolk 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	Nocturnal Bat Survey Report
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Reference number	3134
Author	Nathan Duszynski M.Sc, B.Sc (Hons), ACIEEM, Natural England licences (Bat level 2 2017-31943-CLS-CLS, Great crested newt level 1 2016-24303-CLS-CLS), Barn owl level 1 2023-11104-CL29-OWL)
Reviewer	Etienne Swarts B.Compt (Hons), F.Deg.Sc, ACIEEM, Natural England licences (Bat level 2 2015-16555-CLS-CLS, Great crested newt level 2 2015-19185-CLS-CLS, Dormouse level 1 2022-10406-CL10A-DOR)

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.

Etienne Swarts, ACIEEM

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SUMMARY

- Greenlight Environmental Consultancy Ltd. has been commissioned to carry out protected species surveys for bats, relating to a proposed development at Newtown Meadow, Fingal Street, Worlingworth, Suffolk, IP13 7HR (grid reference: TM 21540 68976).
- This report provides the results of the bat survey and any potential effects of the proposed development on such species.
- The ecology report is required in support of a planning application for the conversion of the existing building to a residential dwelling.
- The survey and assessment were completed by independent qualified and experienced ecologists with Natural England survey licences for the relevant protected species, and in accordance with the latest survey guidelines.
- The findings of the assessment are that there are no significant ecological constraints that would prevent the proposed works.
- **Under the proposed plans, no further surveys/licences are required to inform an ecological impact assessment or mitigation strategy.**
- If the following mitigation and enhancements are incorporated into the proposed layout, there will be a net gain for biodiversity, as is encouraged by the National Planning Policy Framework.

Protected habitats/species	Status	Potential effect	Recommended mitigation and enhancements
Bats	Nocturnal bat surveys confirmed the **likely absence** of roosting bats within building one. **Low** value commuting and foraging habitat on site.	Potential light disturbance of commuting and foraging habitats on site.	*Mitigation* Soft roof/wall strip undertaken by hand. In the highly unlikely event that any bats are found, work will cease immediately and licenced ecologist contacted. Any lighting schemes will comply with Bat Conservation Trust and CIE 150:2003 guidance. *Enhancement* Installation of one integrated and one standalone bat box installed on converted building and tree respectively.

1. METHODOLOGY

1.1. A physical inspection of all the buildings on site were conducted and reported in the Preliminary Ecological Appraisal Report issued by Greenlight Environmental Consultancy Ltd. (2023).

1.2. One nocturnal bat survey (comprised of a dusk emergence survey) was conducted within the optimal surveying season for bats and in suitable weather conditions (Table 1). The interim guidance note (Bat Conservation Trust, 2022) states dusk surveys supported by night vision aids ("NVAs") are favoured over dawn surveys, as they can provide clarity on exact emergence points and bat counts.

1.3. Two independent, qualified and experienced surveyors were used per survey: Nathan Duszynski (Natural England bat licence level 2 2017-31943-CLS-CLS) and Emma Laurie. The surveyors were stationed as shown in Figure 1.

1.4. The dusk surveys started approximately 15 minutes before sunset and finished approximately 1.5 hours after sunset.

1.5. Bat calls were recorded using an Anabat Walkabout bat recorders. Call data was analysed using Analook Insight software.

1.6. Two Canon XA60 infrared cameras were used as survey aids to assist in detecting emerging bats. Each camera was equipped with four infrared torches/floodlights. Screenshots from each camera from the darkest point of the survey are provided in Photos 1-2, to illustrate the field of view and visibility.

1.7. All survey methods were carried out in accordance with the most up to date good practice guidance (Collins, 2016; Bat Conservation Trust, 2022).

2. SITE CONTEXT

Location

2.1. The site is situated to the northwest of the village of Worlingworth, Suffolk, with the A140 located approximately 9.8km west and the closest town of Framlingham 7.9km southeast.

2.2. The survey area is enclosed by grassland and agriculture/horticulture to the north and west, residential dwellings to the east and horse paddocks to the south. The wider surroundings are comprised of a mixture of residential dwellings and agricultural buildings, small blocks of woodland and arable fields lined with mature trees and hedgerows.

3. DESCRIPTION OF THE DEVELOPMENT

3.1. The proposals are for the conversion of the existing building onsite to create a single residential dwelling. Please refer to Appendix D for the exisiting plans.

4. FIELD STUDY

Nocturnal bat surveys

4.1. The survey conditions, start/end times and sunset/sunrise times are indicated in Table 1 below:

Visit	Date	Conditons	Start	End	Start of survey	End of survey	Sunset/ sunrise
1	17/05/23	Temp Cloud cover Wind Precipitation	11°C 25% 4 mph None	8°C 25% 3 mph None	20:31	22:18	20:46

Table 1, nocturnal bat survey information.

First nocturnal bat survey (dusk) – 17th May 2023

4.2. No bats were observed emerging from the building during the survey.

4.3. The first bat recorded was a common pipistrelle *Pipistrellus pipistrellus* at 21:47 commuting across the site from north to south. This is consistent with the typical emergence time of this species, indicating a roost within the immediate vicinity and potentially within a building offsite to the north or east based on the location of flight.

4.4. A low level of commuting activity was recorded and observed by common pipistrelles *Pipistrellus pipistrellus* and soprano pipistrelles *Pipistrellus pygmaeus*.

Photo 1, screenshot from infrared camera on the southeast corner. 17th May 2023.

Photo 2, screenshot from infrared camera on the northwest corner. 17th May 2023.

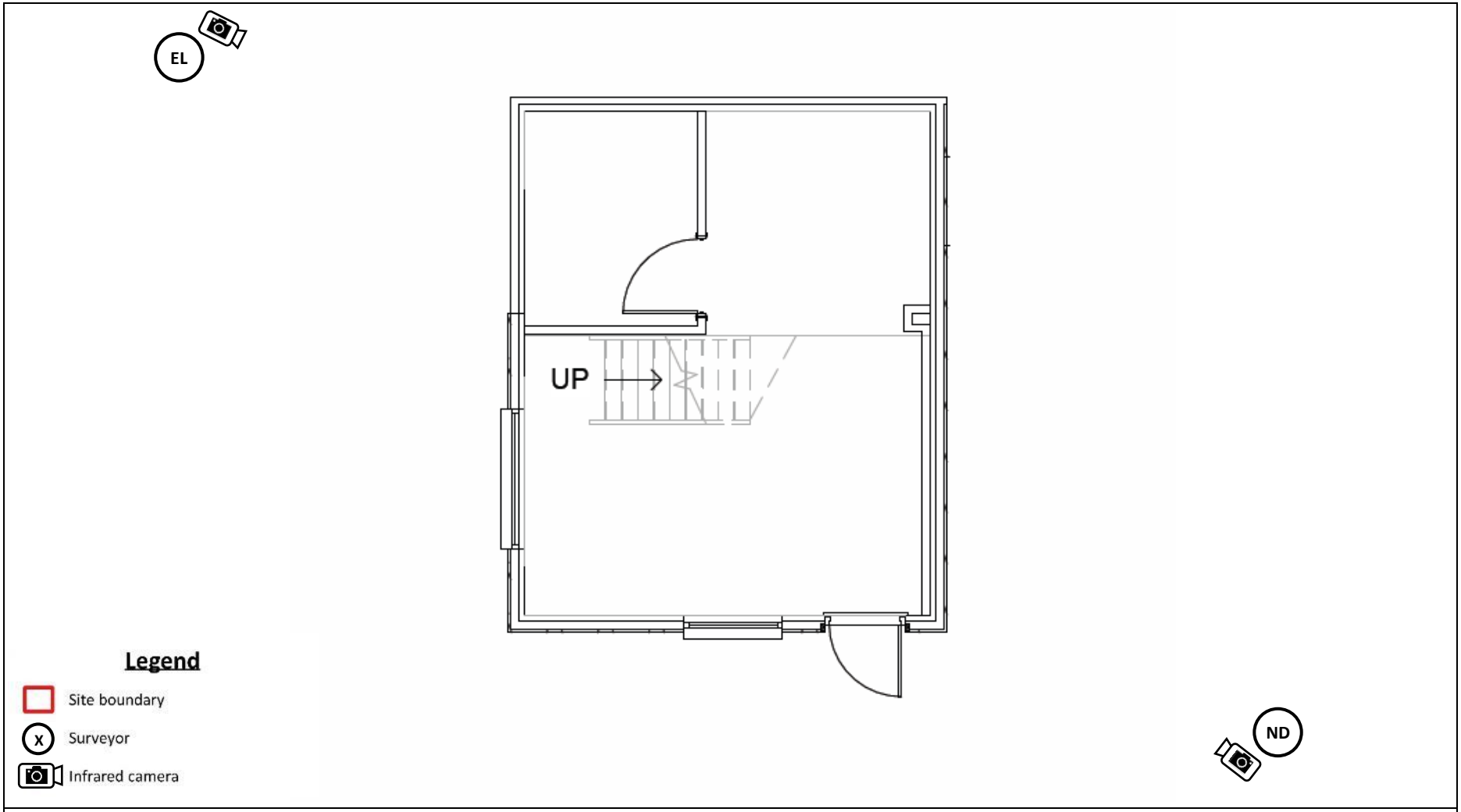

Figure 1
Survey results on 17th May 2023.
Image © Modece Architects Limited, date accessed 19/05/23

5. DISCUSSION AND CONCLUSIONS

5.1. The nocturnal bat survey, comprised of a dusk emergence survey, was conducted within the optimal surveying season for bats.

5.2. The survey confirmed the likely absence of bats roosting within the structure, with no bats observed emerging/entering the building during the survey.

5.3. Proposed works involve the conversion of the building into a residential dwelling. Although we do not predict any direct impacts on bats, as a precautionary measure, the following mitigation measures will be implemented:

i. A soft roof strip and demolition of the walls will be undertaken by hand. In the highly unlikely event that any bats are found, works will cease immediately, and a licenced bat worker contacted to advice on how to proceed.

ii. Any lighting schemes will follow guidance from Bat Conservation Trust and CIE 150:2003. Warm-white (long wavelength) lights with UV filters will be fitted at 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°.

5.4. As enhancements for bats, we recommend the installation of:

i. One integrated bat box to be installed on the converted building (Bat Block – Appendix C).

ii. One standalone bat box to be installed on a suitably mature tree (Greenwood's Ecohabitats three crevice bat box – Appendix C).

5.5. After the above precautionary measures and enhancements, we consider that the favourable conservation status of the local bat population will be maintained and that a European Protected Species ("EPS") mitigation licence will not be required by Natural England.

6. BIBLIOGRAPHY

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Collins, J. (Ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.).* The Bat Conservation Trust, London.

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

Appendix A
Legislation

European Protected Species

National Planning Policy - National Planning Policy Framework (NPPF)

Section 15 of the National Planning Policy Framework 2021 (NPPF): Conserving and enhancing the natural environment states that 'planning policies and decisions should contribute to and enhance the natural and local environment by … minimising impacts on and providing net gains for biodiversity.'

Office of The Deputy Prime Minister ("ODPM") Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the planning system.

Paragraph 98 of Circular 06/2005 states that 'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

Implications of legislation and policies

Without this ecological assessment, the potential developer would be unable to demonstrate due diligence in his responsibilities. Furthermore, the local planning authority would not have been provided with sufficient information for a planning decision to be made. This could result in non-determination or refusal of the application.

With legal responsibilities and planning implications, it is essential that any ecological assessment of a potential development site, including the area of this report, must determine the possible presence or absence of any protected species as part of any planning development consideration.

Where mitigation or compensation measures are required to ensure that no significant impacts will result on biodiversity from the development, the proposed measures may be secured through planning conditions or by EPS Mitigation Licences from Natural England.

Bats

All bat species in Britain are protected under the Wildlife and Countryside Act 1981 through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2. On 30th November 2017, these Regulations, together with subsequent amendments, were consolidated into the Conservation of Habitats and Species Regulations 2017.

European protected animal species ("EPS") and their breeding sites or resting places are protected under Regulation 42. It is an offence for anyone to deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs. It is an offence to damage or destroy a breeding or resting place of such an animal. It is also an offence to have in one's possession or control, any live or dead European protected species.

The threshold above which a person will commit the offence of deliberately disturbing a wild animal of a European protected species has been raised. A person will commit an offence only if he deliberately disturbs

such animals in a way as to be likely significantly to affect (a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or (b) the local distribution of abundance of that species. The existing offences under the Wildlife and Countryside Act (1981) as amended which cover obstruction of places used for shelter or protection (for example, a bat roost), disturbance and sale still apply to European protected species.

This legislation provides defences so that necessary operations may be carried out in places used by bats, provided the appropriate Statutory Nature Conservation Organisation (in England this is Natural England) is notified and allowed a reasonable time to advise on whether the proposed operation should be carried out and, if so, the approach to be used. The UK is a signatory to the Agreement on the Conservation of Bats in Europe, set up under the Bonn Convention. The Fundamental Obligations of Article III of this Agreement require the protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats.

Natural England Licensing - EPS Mitigation Licensing

Licences can be obtained from the Wildlife Management and Licensing Service at Natural England to allow certain activities that would otherwise constitute an offence, for the purposes of development (e.g. destruction of a bat roost, loss of great crested newt aquatic and terrestrial habitat, etc).

Appendix B
Native species suitable for planting and sowing

Plants should be obtained from specialist nurseries and preferably be of local genetic stock.
Key: (f) – fruit and berry species; (e) – evergreen species; (se) semi-evergreen species; (d) – deciduous species

Trees	
Alder (d)	*Alnus glutinosa*
Apples (f; d)	*Malus spp.* (local varieties)
Ash (d)	*Fraxinus excelsior*
Beech (d)	*Fagus sylvatica*
Bird cherry (f; d)	*Prunus padus*
Elder (f; d)	*Sambucus nigra*
Elm (d)	*Ulmus procera*
Field maple (d)	*Acer campestre*
Pedunculate oak (d)	*Quercus robur*
Rowan (f; d)	*Sorbus aucuparia*
Pears (f; d)	*Pyrus spp.*
Silver birch (d)	*Betula pendula*
Small-leaved lime (d)	*Tilia cordata*
White willow (d)	*Salix alba*
Wild cherry (f; d)	*Prunus avium*
Walnut (d)	*Juglans regia*

Shrubs	
Blackthorn (f; d)	*Prunus spinosa*
Buckthorn (f; d)	*Rhamnus catharticus*
Crab apple (f; d)	*Malus sylvestris*
Dog rose (f; d)	*Rosa canina*
Dogwood (f; d)	*Cornus sanguinea*
Field maple (d)	*Acer campestre*
Guelder-rose (f; d)	*Viburnum opulus*
Hawthorn (f; d)	*Crataegus monogyna*
Hazel (d)	*Corylus avellana*
Holly (e)	*Ilex aquifolium*
Honeysuckle (f; d)	*Lonicera periclymemum*
Spindle (f; d)	*Euonymus europaeus*
Wild privet (f; se)	*Ligustrum vulgare*
Yew (f; e)	*Taxus baccata*

Flowering plants	
Bird's-foot trefoil	*Lotus corniculatus*
Black knapweed	*Centaurea nigra*
Common cat's-ear	*Hypochoeris radicata*
Common sorrel	*Rumex acetosa*
Common vetch	*Vicia sativa*
Cowslip	*Primula veris*
Field scabious	*Knautia arvense*
Foxglove	*Digitalis purpurea*
Lady's bedstraw	*Galium verum*
Meadow buttercup	*Ranunculus acris*
Meadow vetchling	*Lathyrus pratensis*
Oxeye daisy	*Leucanthemum vulgare*
Primrose	*Primula vulgaris*
Red clover	*Trifolium pratense*
Selfheal	*Prunella vulgaris*
Sweet violet	*Viola odorata*
Wild daffodil	*Narcissus pseudonarcissus*
Yarrow	*Achillea millefolium*

Grasses	
Common bent	*Agrostis capillaris*
Crested dog's-tail	*Cynosurus cristatus*
Meadow fescue	*Festuca pratensis*
Red fescue	*Festuca rubra*
Rough meadow-grass	*Poa trivialis*
Small timothy	*Phleum bertolonii*
Smooth meadow-grass	*Poa pratensis*
Sweet vernal-grass	*Anthoxanthum odoratum*
Yellow oat-grass	*Trisetum flavescens*

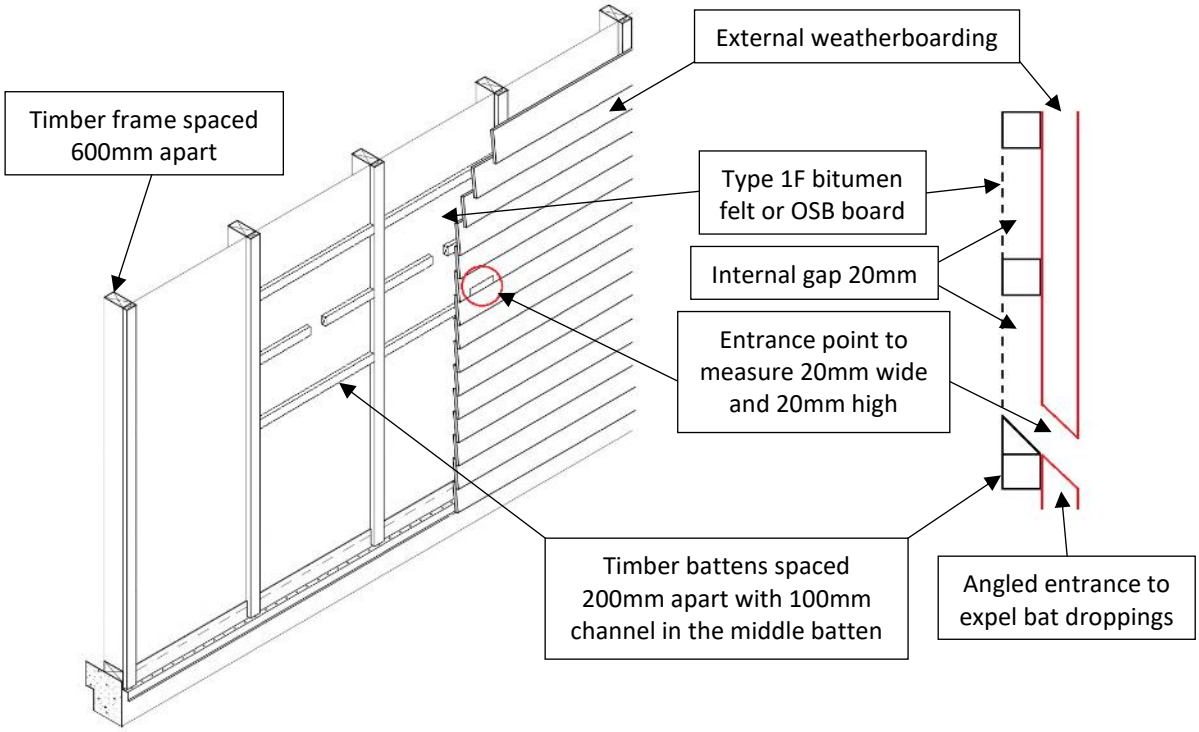
Flowering Lawn Mixture – EL1 Emorsgate Seeds
https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/flowering-lawn-mixture/

Wildflower Meadow Mixture – EM3 Emorsgate Seeds
https://wildseed.co.uk/product/mixtures/complete-mixtures/general-purpose-meadow-mixtures/special-general-purpose-meadow-mixture/

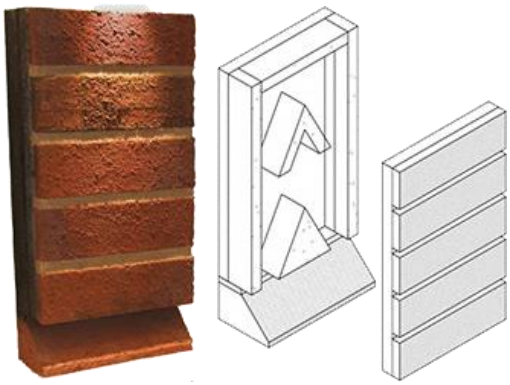
Appendix C
Examples of bat boxes

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

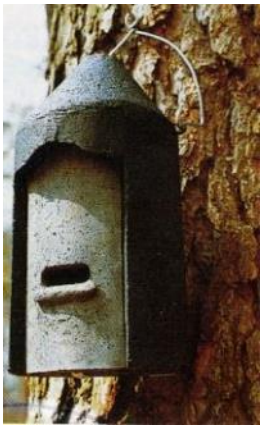
Integrated weatherboard roost



Integrated bat box
Habibat Bat Box



Integrated bat box
Bat Block

Standalone bat box 2F Schwegler Bat Box (General purpose)	**Standalone bat box** Greenwood's Ecohabitats three crevice bat box
	

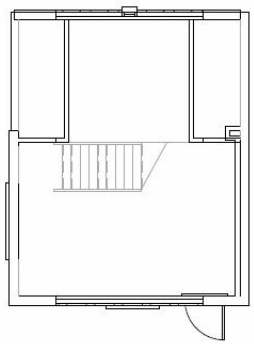
Recommendations for installing bat boxes:
(Sourced from Bat Conservation Trust www.bct.org)

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

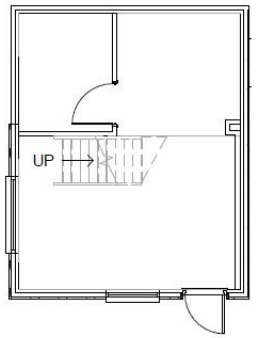
- Where bats are known to feed close to hedges and treelines (some bats use a treeline or hedgerow for navigation, putting boxes near these features may help the bats find the box).
- On trees: boxes should be placed on the trunk of a mature tree, where there is a clear flight line/accessible entrance.
- 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.

Appendix D
Existing plans

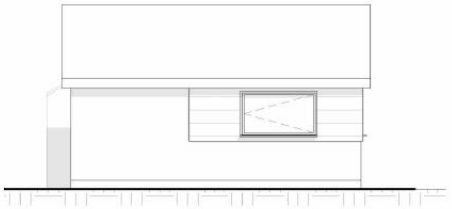


6 **First Floor Plan - Existing**
1 : 100

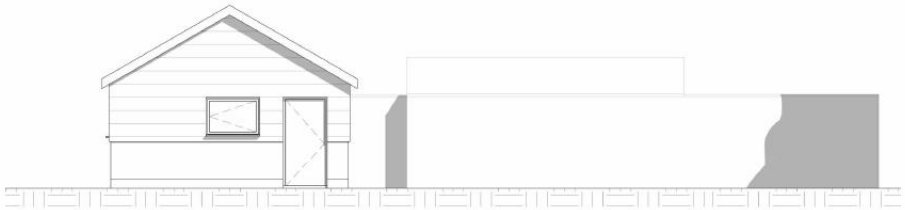


1 **Ground Floor Plan - Existing**
1 : 100

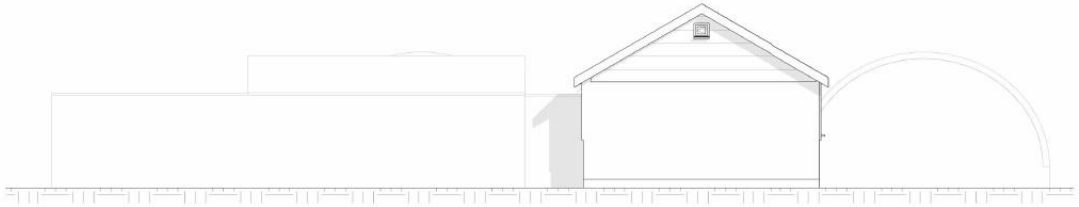
2 **East Elevation Existing**
1 : 100



4 **West Elevation Existing**
1 : 100



5 **South Elevation Existing**
1 : 100



3 **North Elevation Existing**
1 : 100

1 : 100
0 5 10 m

Rev	Date	Description

Client: *Victoria Uff*
Project: *Newtown Meadow*
Job: *2312*
Status:
Date Printed: 19/05/2023 16:09:26
Drawn By: *VB* Checked By: *MB*

Drawing Title: *100* Drawing Title: *Existing - GF Plan and Elevations*
Revision: Scale @ A3: *1 : 100*

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