

Update Preliminary Ecological Walkover Survey

Brookside Stables

Dagbrook Lane

Henfield, West Sussex

BN5 9SH

NGR: TQ 21240 14896



11th May 2026

Sylvatica Ecology Ltd

Company Registration Number: 07705793

<https://se-planning.com>

LIMITATIONS AND LIABILITIES	3
1.0 SUMMARY	4
<i>Aim of this Report</i>	5
3.0 METHODOLOGY	6
<i>Ecological Survey</i>	6
<i>Designated Sites and Biological Records</i>	6
<i>Habitat Mapping and Pond Distance Calculation Methods</i>	8
<i>Qualification of Author</i>	8
4.0 RESULTS	9
<i>Designated Sites</i>	9
<i>Species Records from the National Biodiversity Network</i>	9
<i>Bats</i>	9
<i>Amphibians and Reptiles</i>	10
<i>Summary of Habitats Present on Site</i>	11
<i>Habitats Present on Site within the Survey Boundary</i>	11
<i>Invasive Species</i>	12
5.0 POTENTIAL FOR PROTECTED SPECIES	13
<i>Breeding Birds</i>	13
<i>Bats</i>	13
<i>Terrestrial and Riparian Mammals</i>	13
<i>Reptile and Amphibian</i>	13
6.0 DISCUSSION AND RECOMMENDATIONS	15
<i>Designated Sites and Habitats</i>	15
<i>Breeding Birds</i>	15
<i>Bats</i>	16
<i>Terrestrial Mammals (including Dormice)</i>	16
7.0 ECOLOGICAL COMPENSATION AND ENHANCEMENT	19
8.0 REFERENCES	21

APPENDIX A: PRELIMINARY ECOLOGICAL WALKOVER SURVEY HABITAT MAP	22
APPENDIX B: PONDS WITHIN 500M	23
APPENDIX C: PRIORITY HABITATS	24
APPENDIX D: PHOTOS OF THE SITE	25
APPENDIX E: PROTECTED SPECIES AND DESIGNATED SITE LEGISLATION SUMMARY (ENGLAND AND WALES)	27

Tables and Figures

Figure 1: Site Survey Location

Table 1: Bat Roost and Foraging Potential of Buildings and Trees (BCT 2023)

Table 2: Bat Species Records

Table 3: Terrestrial and Riparian Mammal Records

Table 4: Reptile and Amphibian Records

Table 5: Granted Bat Mitigation Licence Applications within 2.0km

Table 6: Great Crested Newt Impact Risk Calculator (from Natural England)

Table 7: List of Recommended Plant Species for Native Tree and Shrub Planting

Table 8: List of Recommended Plant Species for Native Herbaceous Species Planting

LIMITATIONS AND LIABILITIES

Sylvatica Ecology Ltd retains the copyright of this report and its contents are for the sole use of the client (s). Copy of this document may only be undertaken in relation to the development works on Brookside Stables, Dagbrook Lane, Henfield, West Sussex, BN5 9SH, centred on NGR: TQ 21240 14896. and only once all outstanding fees pertaining to ecological works and consultation have been paid. Reproduction of the whole, or any part of the document, without written consent from Sylvatica Ecology Ltd is forbidden. It is not permitted to share this report or any part of this report on any social media platform.

It should be borne in mind that the behaviour of animals can be unpredictable and may not conform to standard patterns recorded in scientific literature. Therefore, this report cannot predict with absolute certainty that animal species will occur in apparently suitable locations or habitats, or that they will not occur in locations or habitats that appear unsuitable.

In order to minimise the likelihood of adverse effects on protected animal species over time, it is accepted good practice, in accordance with Natural England (NE) (formerly English Nature) guidance for ecological surveys to be repeated should works be deferred for over 12 months from the date of initial survey.

It is the duty of the landowner, developer and operations managers to act responsibly and to comply with current environmental legislation if protected species are suspected or found prior to, or during works.

The recommendations and information contained within this report are based on the information provided on the development works prior to the surveys being carried out. Should the development proposals change then the findings and recommendations contained within would potentially require revision.

The findings within this report do not constitute legal advice. Should this be required, then a suitably qualified professional practitioner should be contacted.

Author	Signed	Contact
Richard Law BSc (Hons) MRes CEnv MCIEEM FLS		info@se-planning.com

1.0 SUMMARY

- 1.1 This report presents the findings of a Preliminary Ecological Assessment (PEA) of Brookside Stables, Dagbrook Lane, Henfield, West Sussex, BN5 9SH (NGR TQ 21240 14896). The site comprises a working stable unit of 0.1136 ha. Walkover surveys were undertaken on 14 June 2024 and 8 May 2026, in accordance with BS 42020 and CIEEM Guidelines for Baseline Ecological Assessment, with habitats classified under the UK Habitat Classification System.
- 1.2 No statutory designated sites lie within 5.0 km (international) or 2.0 km (national) of the site. Deciduous woodland, floodplain grazing marsh, recent tree planting and orchard occur within 500 m.
- 1.3 The site supports a small area of mixed scrub (blackthorn, elder, nettle and bramble) behind the stables; modified grassland used for horse and sheep grazing; three buildings, comprising an open-faced barn, the main stable block and a static caravan unit; and an area of hardstanding used for parking and access. A native species-rich hedgerow with trees, dominated by hawthorn, blackthorn and bramble with mature oak standards and ivy through the lower structure, bounds the site. No invasive non-native plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 were recorded.
- 1.4 Biological records within the 2.0 km search radius include all three common reptile species, great crested newt, hedgehog, badger, brown hare, harvest mouse, otter, and eight bat species including the locally rare western barbastelle. Three EPS Mitigation Licences were returned (two for great crested newt, one for pipistrelles); no records or licences relating to hazel dormouse were returned.
- 1.5 The buildings offer negligible bat roost potential; the surrounding landscape offers moderate-value bat foraging habitat. A small house sparrow colony was confirmed in the apex of the western aspect of the main stable block (Building 2). Eleven common bird species were recorded on or adjacent to the site. The Natural England great crested newt rapid risk assessment returned a Green result (offence highly unlikely), reflecting the small site area and 252 m distance to the nearest pond; great crested newt is not considered a constraint. Longer, unmanaged grassland margins offer potential to support common reptile species, principally slow worm and common lizard. The boundary hedgerow offers habitat features suitable for hazel dormouse, but the site is small, isolated from broadleaved woodland and lacks the wider connectivity needed to support a viable population; hazel dormouse is therefore not considered a significant constraint, although a precautionary approach is adopted below. Badger is not considered a constraint; hedgehog may be present and should be safeguarded during the works.
- 1.6 The principal recommendations of this assessment are that:
- *The boundary hedgerow is retained in full, with protective fencing installed prior to works and a minimum 5.0 m buffer maintained, within which no storage, plant, refuelling, welfare or lighting is permitted;*
 - *Vegetation clearance is undertaken outside the bird breeding season (1 March – 31 August inclusive) and, where reasonably practicable, outside the hazel dormouse peak breeding period (late May – end August), or, where unavoidable, preceded by a pre-clearance check by a suitably qualified ecologist within 24 hours of works, with a 10 m exclusion zone around any active bird nest;*
 - *Any unavoidable clearance of mixed scrub at the rear of the stables is undertaken by hand, under the supervision of an ecologist holding a Natural England dormouse class licence, with a pre-clearance hand search and a two-stage graded cut directed away from the retained hedgerow;*
 - *The house sparrow colony location is mitigated by temporary nesting provision during construction and permanent replacement integral or external nesting on the new buildings at a minimum of 3.5 m above ground;*
 - *External lighting complies with the BCT/ILP (2023) Guidance Note 08/23 (warm white < 2700 K, no UV, downward direction with no upward tilt, short-timer motion sensors, minimised column heights), with no spill onto the retained hedgerow;*
 - *Excavations are fitted with a mammal ladder to prevent the entrapment of hedgehog and other small mammals; and*
 - *A reptile presence/likely absence survey (seven visits, April – June and September – October) is undertaken in advance of any clearance affecting longer grassland; and*
 - *Ecological enhancements include native tree, shrub and herbaceous planting to deliver a measurable net gain in biodiversity, with hazel forming a meaningful proportion ($\geq 20\%$) of any new woody planting alongside hawthorn, blackthorn, dog rose and field maple, designed to strengthen the connectivity of the existing hedgerow network.*

2.0 INTRODUCTION

2.1 This report presents the findings of a Preliminary Ecological Assessment (PEA) at Brookside Stables, Dagbrook Lane, Henfield, West Sussex, BN5 9SH, centred on NGR: TQ 21240 14896.

2.2 **Figure 1: Site Survey Location**



Aim of this Report

2.3 The aim of this habitat survey was to assess the habitats present on and adjacent to the survey area and to evaluate the potential for protected species to be present. Recommendations on any further survey requirements, actions to preserve the habitats present and enhancements have been made as a result of the findings of this habitat survey.

2.4 These findings should be used within the planning phase of the proposals to minimise the impacts for biodiversity through careful planning to avoid negative effects where possible. The survey findings then enable a prediction of the potential impacts of any ecological receptors present to be made in each specific case.

3.0 METHODOLOGY

Ecological Survey

- 3.1 An initial preliminary ecological survey walkover was carried out at the Site on the 14th June 2024 with an update survey carried out on the 8th May 2026. The habitats were assessed in accordance to BS 42020 Biodiversity – Code of Practice for Planning and Development and broadly followed the ‘Extended Phase 1’ methodology as set out in the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Baseline Ecological Assessment and the Handbook for Phase 1 Habitat Survey. This method of survey provides information on the habitats in the survey area and assesses the potential for legally protected species to occur on or adjacent to the Site. The habitats were classified according to the UK Habitat Classification system (Butcher *et al.* 2023).
- 3.2 Any faunal species identified during the survey were noted. Any evidence for the presence of, or potential for, protected species was also noted. In particular, species that were considered included were amphibians, bats, reptiles, mammals and breeding birds.
- 3.3 A search was carried out for evidence of the presence of invasive plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 which are subject to strict legal control. The list of invasive plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is extensive and these plants are found in a range of different habitats.

Designated Sites and Biological Records

- 3.4 Records of internationally designated statutory sites within 5.0km of the Site and nationally designated statutory sites within 2.0km were searched for using the Multi-Agency Geographic Information for the Countryside website (MAGIC) <http://www.magic.gov.uk>.
- 3.5 MAGIC was also searched for previously granted Natural England licence applications, which may give an indication of the presence of protected species in the local area. A search of species records within 2km was also made from the National Biodiversity Network.
- 3.6 An assessment of the potential of the property to support roosting and foraging bats was made and categorised according to Table 1 below (BCT 2023a). Only features that had potential for bats have been highlighted. If there is no category given or reference made to the feature, then assume this is of negligible potential.

Table 1: Bat Roost and Foraging Potential of Buildings and Trees (BCT 2023a)

Category	Roosting Habitat	Commuting and Foraging Habitat
Known Roost	Evidence of bat present (e.g.) droppings, live or dead bats and/ or desk study results.	N/A
High (PRF-M)	Building or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitats.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate (PRF-M)	Building or tree with one or more potential roosting features that could be used by several bats due to their size, shelter, protection, conditions and surrounding habitats, but unlikely to support a roost of high conservation concern.	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low (PRF-L)	Building or tree with one of more potential roost features that could be used by individual bats opportunistically. However, there	Habitat that could be used by small numbers of commuting bats for example, a fragmented hedgerow or un-vegetated stream, but isolated, i.e.

	potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats. (<i>i.e.</i> unlikely to be suitable for maternity or hibernation).	not very well connected to the surrounding landscape by other habitat.
		Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible	Building or tree with no potential to support bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

Habitat Mapping and Pond Distance Calculation Methods

- 3.8 The mapping was carried out using QGIS V 3.22.14-Bailowieza for MasOS 14.1. Habitat areas and waterbody distances from site were calculated using this QGIS software.

Qualification of Author

- 3.9 The survey work and reporting has been led by Richard Law BSc MRes CEnv MCIEEM FLS. Richard has been undertaking ecological survey work within the last 18 years on a number of differing locations throughout the United Kingdom for a variety of protected species, including bats (Class 2 2015-12576-CLS-CLS), reptiles, amphibians including great crested newt (*Triturus cristatus*) (Class 1 2016-20290-CLS-CLS) and terrestrial mammals including dormice (*Muscardinus avellanarius*) (Class 1 2015-13188-CLS-CLS) and birds including barn owl (*Tyto alba*) licence (CL29/00236). Richard is also qualified in track and sign and trailing *via* an international system of assessment (www.trackercertification.com).

4.0 RESULTS

- 4.1 This section describes the habitats identified during the habitat survey. All the plant species names follow the nomenclature of Stace 1997.

Designated Sites

- 4.2 There were not any statutory internationally designed sites within 5.0km and statutory nationally designated sites within 2.0km of the site.

Species Records from the National Biodiversity Network

Bats

- 4.3 **Table 2: Bat Species Records**

Common Name	Latin Name	Records
<i>Plecotus auritus</i>	Brown Long Eared Bat	2
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	25
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	18
<i>Myotis nattereri</i>	Natterer's Bat	6
<i>Eptesicus serotinus</i>	Serotine	5
<i>Barbastella barbastellus</i>	Western Barbastelle	4
<i>Nyctalus noctula</i>	Noctule	2
<i>Myotis daubentonii</i>	Daubenton's Bat	1

- 4.4 There nine species of bat present within the 2.0km biological records search. Common pipistrelle and soprano pipistrelle were the most abundantly recorded bats, with fewer numbers of Natterer's bat and Daubenton's bat. Noctule and serotine were also present, as was the brown long eared bat. The nationally rare barbastelle was also present, with four records.

4.5 **Table 3: Terrestrial and Riparian Mammal Records**

Latin Name	Common Name	Number of Records
<i>Erinaceus europaeus</i>	Hedgehog	66
<i>Lepus europeus</i>	Brown Hare	3
<i>Micromys minutus</i>	Harvest Mouse	2
<i>Meles meles</i>	Badger	46
<i>Lutra lutra</i>	Otter	1

4.6 There were records of hedgehog within the 2.0km search radius, and a relatively high number of badger records within the search radius. There were brown hare and harvest mouse records, but fewer in number. There was one record of the otter, which is a European protected species.

Amphibians and Reptiles

4.7 **Table 4: Reptile and Amphibian Records**

Latin Name	Common Name	Number of Records
<i>Anguis fragilis</i>	Slow Worm	72
<i>Zootoca vivipara</i>	Common Lizard	15
<i>Natrix helvetica</i>	Grass Snake	36
<i>Lissotriton helveticus</i>	Palmate Newt	65
<i>Triturus cristatus</i>	Great Crested Newt	20
<i>Bufo bufo</i>	Common Toad	73
<i>Rana temporaria</i>	Common Frog	146
<i>Lissotriton vulgaris</i>	Smooth Newt	20

4.8 There were three species of reptile within the 2.0km search radius, all of which had relatively high numbers of records. There were also relatively high number of records of amphibians, including 20 records of the great crested newt.

Granted Mitigation Licences

4.9 **Table 5: Granted Bat Mitigation Licence Applications within 2.0km**

Licence Number	Distance and Direction	Species	Type	Date	NGR
EPSM2009-1258	0.8km south	Great Crested Newt	Damage and Destruction of a Resting Place and Breeding Site	30/04/2010 to 29/04/2012	TQ 2161 1427
2015-17216-EPS-MIT	1.8km northwest	Great Crested Newt	Damage and Destruction of a Resting Place	01/01/2016 to 01/08/2019	TQ 2041 11620
2017-29484-EPS-MIT	1.2km northeast	Common Pipistrelle and Soprano Pipistrelle	Destruction of a Resting Place	26/05/2017 to 30/09/2017	TQ 2239 1569

- 4.10 Three records were returned from the Natural England EPS Mitigation Licence register within the 2.0 km search radius. Two of these relate to great crested newt, located 0.8 km to the south (EPSM2009-1258, 2010–2012, covering damage and destruction of a resting place and breeding site) and 1.8 km to the north-west (2015-17216-EPS-MIT, 2016–2019, covering damage and destruction of a resting place). The third record relates to common and soprano pipistrelle 1.2 km to the north-east (2017-29484-EPS-MIT, 2017, covering destruction of a resting place). No EPS Mitigation Licences relating to hazel dormouse, or to any other European protected species, were returned within the search radius.

Summary of Habitats Present on Site

- 4.11 This site comprised a working stable unit with associated buildings for storage and animal shelter. There was an area of bare ground and hardstanding that was used for access and parking. There was a small section of mixed scrub and modified grassland used for grazing pasture. The site survey area was 0.1136ha in size.

Habitats Present on Site within the Survey Boundary

- 4.12 **Mixed Scrub:** There was a small section of scrub present on site behind the stables (B1) which was predominantly blackthorn (*Prunus spinosa*) with small sections of elder (*Sambucus nigra*), nettle (*Urtica dioica*) and bramble (*Rubus fruticosus*).

- 4.13 **Modified Grassland:** This habitat area comprised of horse/ sheep grazing pasture that appeared regularly grazed on a rotational basis. The majority of the habitat area comprised of grass dominated with low amounts of herb species. Species noted included Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*), false oat grass (*Arrhenatherum elatius*), meadow buttercup (*Ranunculus acris*), dandelion (*Taraxacum officinale*), germander speedwell (*Veronica chamaedrys*), cats-ear (*Hypochaeris radicata*), daisy (*Bellis perennis*), white clover (*Trifolium repens*), common mouse-ear (*Cerastium fontanum*), yarrow (*Achillea millefolium*), ribwort plantain (*Plantago lanceolata*) and creeping buttercup (*Ranunculus repens*). Part of this habitat, close to the buildings comprised of a longer sward, with some bramble encroachment from the scrub.
- 4.14 **Buildings:** There were three buildings present on site. Building 1 comprised of a large open faced barn, which was constructed out of corrugated sheeting, with corrugated sheeting for a roof. The supporting rafters were constructed out of concrete and the barn was open to the north.
- 4.15 Building 2 was the main stables. The walls comprised of a mixture of corrugated metal and concrete blocks. Metal sheeting also comprised the roof. This sheeting was all singled layered and didn't present any cavities. Internally, the building was divided into stable sections was in used to house horses and to store materials.
- 4.16 Building 3 comprised of static caravan units, but these were not any ecological interest on this temporary structure.
- 4.17 **Urban Development Land Sealed Surface:** This area comprised of bare ground and hardstanding that was used for access, storage and parking.
- 4.18 **Native Species Rich Hedgerow with Tres:** The hedgerow comprised a well-developed, intact linear feature with a dense shrub layer dominated by hawthorn *Crataegus monogyna*, blackthorn and bramble with ivy *Hedera helix* climbing throughout the lower structure and several mature standard trees, principally oak *Quercus robur*, emerging through the canopy. The shrub layer is approximately 2.0–3.0 m tall, structurally complex and continuous along its length, with no significant gaps visible in either view. The base supports a tussocky grass and herb margin of perennial vegetation and is unmanaged, with no evidence of cultivation, herbicide damage or non-native invasive species.

Invasive Species

- 4.19 No evidence of invasive species was observed within the site boundary.

5.0 POTENTIAL FOR PROTECTED SPECIES

Breeding Birds

- 5.1 The survey was conducted at a time when birds are active in the breeding season. The following species were observed within the vegetation within the site boundary and within close proximity to the site. These species were: robin *Erithacus rubecula*, blue tit *Cyanistes caeruleus*, great tit *Parus major*, wren *Troglodytes troglodytes*, blackbird *Turdus merula*, dunnoek *Prunella modularis*, chaffinch *Fringilla coelebs*, song thrush *Turdus philomelos*, goldfinch *Carduelis carduelis* and long-tailed tit *Aegithalos caudatus* and house sparrow *Passer domesiticus*.
- 5.2 A house sparrow colony was observed in Building 2, with nests present within the western aspect at the apex of the roof and on the supporting beams. No evidence of swift *Apus apus* or swallow *Hirundo rustica* nesting was observed and no evidence of barn owl *Tyto alba* or other owl or raptor species was observed within these buildings.

Bats

- 5.3 The buildings present on site did not exhibit any features that could potentially support roosting bats. Therefore, all the buildings, can be considered as ***negligible*** potential to support roosting bats.
- 5.4 The surrounding landscape comprised of open field with some hedgerow margins and deciduous trees. This could potentially provide foraging habitat, notably, as a result, of invertebrate assemblages associated within animal droppings. This surrounding landscape can be considered as provide a moderate value bat foraging habitat.

Terrestrial and Riparian Mammals

- 5.5 There was not any evidence of terrestrial or riparian mammals present within the site boundary or within a 30m zone around the site. There was not any connectivity to this location from any large areas of woodland that could enable dormice to be present. Hedgehog could be present in the ornamental planting. There was not any habitat that could support riparian mammals within the immediate surroundings of the site survey area.

Reptile and Amphibian

- 5.6 The site comprised of a large area of hard standing, building and scrub. There was modified grassland which was grazing pasture around the immediate surroundings of the stable buildings. Some of this grassland had become longer and unmanaged. This grassland had

potential to support reptile species, potentially common lizard *Zootoca vivipara* and slow worm *Anguis fragilis*.

5.7 There were 12 ponds within the surrounding landscape, and some drainage ditches to the west of the site. Ponds 8 to 11 were beyond 500m, but there were eight ponds within this 500m radius. The most proximal pond was Pond 1, which was 252m away from the site.

5.8 The great crested newt risk assessment calculator, with the assumption that the most proximal pond could potentially support a breeding population of great crested newt, with the size of the site being 0.1136ha in size. The risk assessment category is given as Green: Offence Highly Unlikely. Therefore, great crested newt are not considered as a potential constraint.

5.9 **Table 6: Great Crested Newt Impact Risk Calculator (from Natural England)**

<i>Component</i>	<i>Likely Effect</i>	<i>Notional Offence Probability Score</i>
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.1 – 0.5ha lost or damaged	0.1
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
Maximum:		0.1
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

6.0 DISCUSSION AND RECOMMENDATIONS

Designated Sites and Habitats

- 6.1 The site was not within 5.0km of internationally designated sites or 2.0km within nationally statutory designated site. The habitats on site are not considered to be ecological valuable.
- 6.2 There were blocks of deciduous woodland and floodplain grazing grassland within 500m of the application site. There were also areas of recent tree planting and orchard habitat.

Breeding Birds

- 6.3 Throughout the survey area, there was potential for breeding birds to be present within the vegetation and buildings. Breeding birds are protected, making it an offence to intentionally (or recklessly) kill, injure or take any wild bird, and to take, damage or destroy the nest of any wild bird while that nest is in use or being built, or take or destroy an egg of any wild bird. As a result, any vegetation clearance should avoid the breeding season (March to August inclusive). Nests are protected throughout the year, not just within the specified nesting season.
- 6.4 If this were not possible, a suitably experienced ecologist would be required to check areas of vegetation, immediately prior to works being carried out (within 24hrs). If birds were found to be breeding at this time in these locations, clearance works would not be permitted to proceed until the young had fledged the nest and at least a 10m works exclusion zone be placed around the nest. If any vegetation is cleared outside of the bird nesting season, then all resultant brash should be removed from site to ensure that it does not provide suitable nesting habitat.
- 6.6 A house sparrow colony was identified in Building 2. Any works that would impact this location would require that this takes place outside of the bird nesting season, as detailed above. Furthermore, suitable mitigation and compensation for the loss of this colony location would be required. This would take the form of the installation of a suitable sparrow nesting location within any new building constructed. A temporary colony would be required during the works period, to ensure that these birds have a nesting location available prior to the construction of the new buildings. This would be installed on an adjacent tree. If a tree is not available, a suitable nesting box would be installed on a supporting pole dug in into the ground. The height of this pole would be a minimum of 4m above ground. Any replacement house sparrow nesting location would be installed at a minimum of 3.5 above ground, to replicate the height of the location lost.

Bats

6.7 To account for the foraging activity of bat species within the local area any lighting installed at the property will conform to the specifications which are outlined within BCT Guidance Note (2018). This will reduce any light pollution would have on nocturnal activity of fauna, namely bat species, some of which are extremely sensitive to light pollution. Light spill into adjacent habitats will be reduced and avoided by the following:

- All luminaries will lack UV elements; metal halide and fluorescent sources will be avoided,
- A warm white light spectrum on external lighting will be adopted (<2700kelvin) to reduce the blue light component,
- LED luminaries will be used where a sharp cut off is required to avoid light spill into adjacent habitat,
- External luminaries will feature wavelengths higher than 550nm to avoid the component of light most disturbing to bats,
- Column heights of external lighting will be limited,
- Luminaries will be mounted on the horizontal plane, with no upwards tilt,
- Security lighting will be set on motion sensors and on short timers (<1min.)

Terrestrial Mammals (including Dormice)

6.8 The presence of badger is not considered a constraint at this location. Hedgehog could potentially be present and found during the works. These can be moved out of harms way and placed in a sheltered location, if found. To ensure that mammals don't become trapped in any excavation over-night, a suitable 'mammal ladder' would be installed. This would simply comprise a plank of wood at a shallow angle, which would enable anything to escape should it fall into an excavation.

6.9 The hazel dormouse is afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and is listed as a European Protected Species (EPS) under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The species is also a Species of Principal Importance for the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

6.10 In combination, this protection makes it an offence to:

- *deliberately capture, injure or kill a hazel dormouse;*

- *deliberately disturb a hazel dormouse, in particular in a way that impairs its ability to survive, breed or rear young, or to hibernate;*
- *damage or destroy a breeding site or resting place of a hazel dormouse; or*
- *possess, control, transport, sell or exchange a live or dead hazel dormouse, or any part or derivative thereof.*

6.11 Where these offences cannot reasonably be avoided, a Mitigation Licence must be obtained from Natural England under Regulation 55 of the Habitats Regulations prior to the commencement of any works that may affect the species. Where the area of suitable habitat to be affected is limited in extent and the residual risk to the species can be reduced to a level at which an offence is no longer reasonably likely, reasonable avoidance measures (RAMs) implemented through a Method of Works may be the proportionate response and a Mitigation Licence is not required.

6.12 Hazel dormouse uses a range of well-connected woody habitats, principally species-rich hedgerows, the shrub layer of broadleaved woodland and woodland edge, dense scrub and the bases of coppice stools. The species is dependent on the structural diversity of these habitats and on their connectivity to the wider landscape; small, isolated parcels of suitable habitat are generally of lower value, and habitat fragmented from the wider woodland network is unlikely to support a viable population.

6.13 In light of the above, the following avoidance and mitigation measures are recommended where works could affect hazel dormouse habitat:

- *Retention of the existing native hedgerows, scrub and woodland edge in full, with protective fencing (Heras-type panels or equivalent) installed prior to the commencement of works to define and protect the limits of the working area. A minimum buffer of 10.0 m is recommended between the development footprint and any retained deciduous woodland, and a minimum buffer of 5.0 m between the development footprint and any retained hedgerow or scrub. No storage of materials, parking of plant, refuelling, washing-out of concrete, welfare facilities or lighting is permitted within the buffer zones at any time.*
- *Strict control of external lighting during construction and in perpetuity, in accordance with the Bat Conservation Trust and Institution of Lighting Professionals (2023) Guidance Note 08/23, to prevent light spill onto retained hedgerows, scrub and woodland.*
- *Where the loss of any area of dormouse-suitable habitat (scrub, hedgerow or woodland edge) is unavoidable, advice must be sought from a suitably qualified ecologist before any clearance takes place. Where the area of loss is small, a*

non-licensed Method of Works incorporating a pre-clearance hand search and a two-stage graded cut, undertaken under the supervision of an ecologist holding a Natural England dormouse class licence, is the proportionate response. Where the area of loss is more extensive, full presence/likely absence surveys following the Dormouse Conservation Handbook (Bright et al. 2006) and an application for an EPS Mitigation Licence from Natural England will be required prior to any vegetation removal.

- *Vegetation clearance should be programmed to avoid the peak breeding and lactation period (late May to end August inclusive) where reasonably practicable. Clearance during the hibernation period (mid-November to mid-March) must be combined with a careful, supervised lift of the ground vegetation and leaf litter to avoid the destruction of ground-level hibernation nests.*
- *New planting of native trees and hedgerow associated with the development should include a meaningful proportion of hazel *Corylus avellana* (typically at least 20 % of the woody component), together with hawthorn blackthorn, dog rose and field maple, and should be designed to maintain or improve the connectivity of the existing hedgerow, scrub and woodland network in the wider landscape.*

- 6.14 In the event that a hazel dormouse, a dormouse nest, or any other confirmed sign of the species (including characteristically gnawed hazel nuts) is encountered at any stage of the works, all activity in the immediate vicinity must stop, the feature must be left in situ and the ecologist must be contacted before works recommence. If, in the ecologist's professional judgement, an offence cannot be avoided, all works affecting potential dormouse habitat must cease pending application for, and grant of, a Natural England EPS Mitigation Licence.

Reptiles

- 6.15 All reptile species are protected under the Wildlife and Countryside Act 1981 (as amended), which make it an offence to deliberately or recklessly kill, injure or trade these animals. The common reptile species covered by this Act are slow worm, grass snake, common lizard and adder. Other, rarer, native reptile species are offered greater levels of protection, but these are generally found in habitats that were not present within the Site or local surroundings.
- 6.16 For reptiles, the presence/ likely absence surveys consist of seven surveys on the Site which involve placing, on the ground in suitable locations, roof felt and corrugated metal sheets. The size of these would be either 50cm by 50cm or 100cm by 50cm. Specific coverage would be required to give a statistical confidence to any result that would give a likely absence and to

one that gives an indication of species present and likely population level. Surveys would have to be carried out within suitable weather conditions at a suitable time of year, normally April to June, avoiding July and August. September and October normally have suitable weather conditions for reptile surveys but November to early March is normally outside of optimum conditions.

- 6.17 If reptile are present, then a method of works would be implemented in addition to, potentially, a trapping and translocation exercise carried out with alternative habitat provided as the translocation site. The specifics of any method of works and/ or the length of this trapping and translocation would depend on the species, specific location and numbers present, if found.

7.0 ECOLOGICAL COMPENSATION AND ENHANCEMENT

- 7.1 Development plans should maximise opportunities for enhancement, in order to achieve a net increase in biodiversity. The measures outlined below provide the means to achieve this enhancement.
- 7.2 Tree and shrub planting of native species would provide an ecological enhancement. Herbaceous species could also be planted into newly landscape areas, providing a valuable nectar source for invertebrate species.

7.3 **Table 7: List of Recommended Plant Species for Native Tree and Shrub Planting**

Species Name	Common Name
<i>Carpinus betula</i>	Hornbeam
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Prunus avium</i>	Bird cherry
<i>Quercus robur</i>	Oak
<i>Sambucus nigra</i>	Elder
<i>Sorbus aucuparia</i>	Rowan

7.4 **Table 8: List of Recommended Plant Species for Native Herbaceous Species Planting**

Species Name	Common Name
--------------	-------------

<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Digitalis purpurea</i>	Foxglove
<i>Field forget-me-not</i>	<i>Myosotis arvensis</i>
<i>Lavandula angustifolia</i>	English lavender
<i>Leucanthemum vulgare</i>	Oxeye daisy
<i>Origanum vulgare</i>	Wild marjoram
<i>Potentilla erecta</i>	Tormentil
<i>Primula veris</i>	Cowslip
<i>Silene dioica</i>	Red campion
<i>Silene latifolia</i>	White campion
<i>Silene noctiflora</i>	Night-flowering catchfly
<i>Succisa pratensis</i>	Devil's-bit scabious

8.0 REFERENCES

BCT (2023a) Bat Survey Guidelines for Professional Ecologists – Good Practice Guidelines.

BCT (2023b) Guidance Note 08/18. Bats and Artificial Lighting in the UK – Bats and the Built Environment Series.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023) The UK Habitat Classification User Manual version 1.1 at <https://ukhab.org/>

JNCC (2016) Handbook for Phase 1 Habitat Survey: A technique for environmental audit. Joint Nature Conservation Committee, Peterborough.

Mitchell-Jones, A.J. & McLeish, A.P. (Eds) (2004). Bat Workers' Manual (3rd Ed.). JNCC, Peterborough.

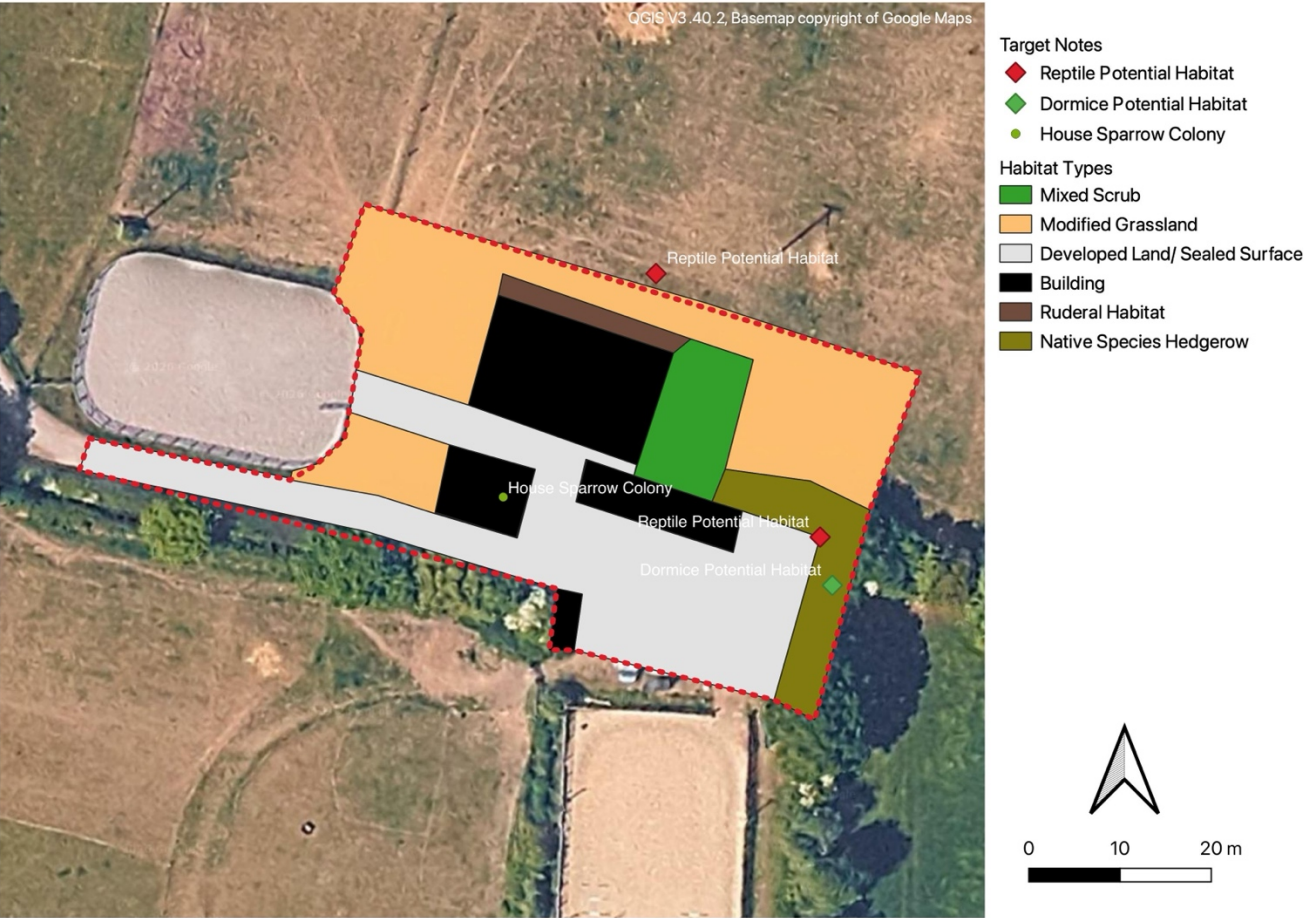
Natural England (2023) The Biodiversity Metric 4.0 Technical Annex 1: Condition Assessment Sheets and Methodology

Stace C. (1997) New Flora of the British Isles (2nd edition). Cambridge University Press.

The Conservation of Habitats and Species Regulations 2017.

Wildlife and Countryside Act (1981) The Stationary Office, Norwich

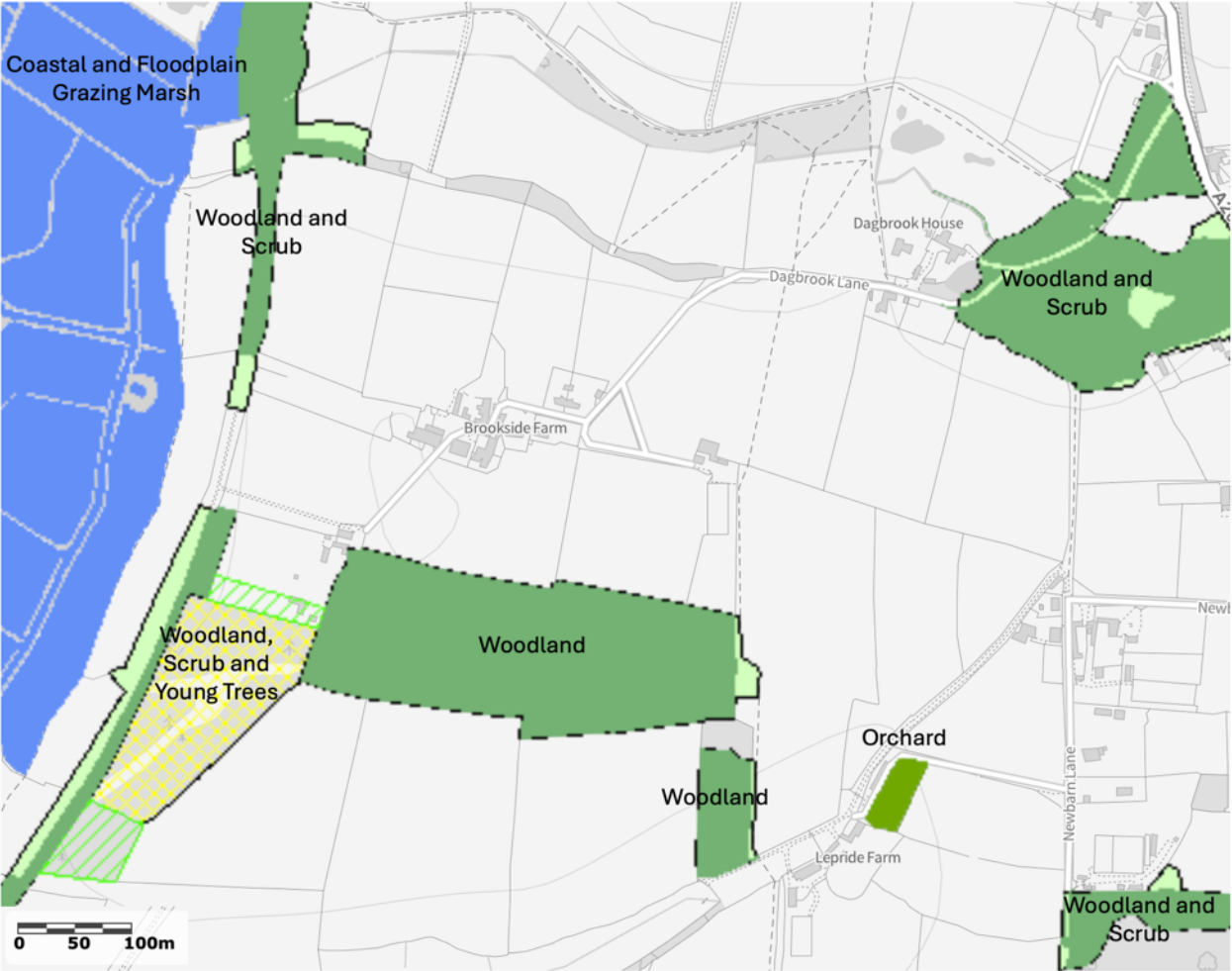
APPENDIX A: PRELIMINARY ECOLOGICAL WALKOVER SURVEY HABITAT MAP



APPENDIX B: PONDS WITHIN 500M



APPENDIX C: PRIORITY HABITATS



APPENDIX D: PHOTOS OF THE SITE

Plate 1: Western Face of Barn



Plate 2: Access Track and Adjacent Hedgerow



Plate 3: Adjacent Sandschool



Plate 4: Grazed Grassland and Stables



Plate 5: Grazed Grassland



Plate 6: Barn with House Sparrow Colony



Plate 7: Internal View of Stables



Plate 8: Internal View of Stables



Plate 9: Hard Standing Area



Plate 10: Stables and Static Caravan



Plate 11: Hard Standing Area and BA rn



Plate 12: Eastern End of Site



APPENDIX E: PROTECTED SPECIES AND DESIGNATED SITE LEGISLATION SUMMARY (ENGLAND AND WALES)

Species	Legislation (England & Wales)	Offences	Licensing procedures (England & Wales)
Bats European protected species	Conservation of Habitats and Species Regulations 2019	Deliberately ¹ capture, injure or kill a bat; deliberate disturbance ² of bats; or damage or destroy a breeding site or resting place used by a bat. [The protection of bat roosts is considered to apply regardless of whether bats are present.]	A Natural England (NE) licence in respect of development is required in England. European Protected Species: Mitigation Licensing- How to get a licence (NE 2010) Bat Mitigation Guidelines (English Nature 2004) Bat Workers Manual (JNCC 2004) BCT Survey Guidelines (2016)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.	Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.
Great Crested Newt European protected species	Conservation of Habitats and Species Regulations 2019	Deliberately ¹ capture, injure or kill a great crested newt; deliberate disturbance ² of a great crested newt; deliberately take or destroy its eggs; or damage or destroy a breeding site or resting place used by a great crested newt.	Licences issued for development by Natural England. European Protected Species: Mitigation Licensing- How to get a licence (NE 2010) Great Crested Newt Mitigation Guidelines (English Nature 2001)
	Wildlife and Countryside Act 1981 (as amended) S.9	Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a great crested newt in such a place.	Licences issued for science (survey), education and conservation by Natural England.
Badger	Protection of Badgers Act 1992	Wilfully kill, injure or take a badger; or intentionally or recklessly damage, destroy or obstruct access to a badger sett or disturb a badger in its sett. [It is not illegal to carry out disturbance activities in the vicinity of setts that are not occupied.]	Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England (NE). Licences for activities involving watercourse maintenance, drainage works or flood defences are issued under a separate process. Licences are normally not granted from December to June inclusive because cubs may be present within setts. Badgers & Development (NE 2007)

Species	Legislation (England & Wales)	Offences	Licensing procedures (England & Wales)
Birds	Wildlife and Countryside Act 1981 (as amended) S.1	Intentionally kill, injure or take any wild bird; intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built; intentionally take or destroy the nest or eggs of any wild bird. [Special penalties are liable for these offences involving birds on Schedule 1 (e.g. most birds of prey, kingfisher, barn owl, black redstart, and little ringed plover).] Intentionally or recklessly disturb a Schedule 1 species while it is building a nest or is in, on or near a nest containing eggs or young; intentionally or recklessly disturb dependent young of such a species.	No licences are available to disturb any birds in regard to development. Licences are available in certain circumstances to damage or destroy nests, but these only apply to the list of licensable activities in the Act and do not cover development. General licences are available in respect of 'pest species' but only for certain very specific purposes e.g. public health, public safety, air safety.
Adder Common lizard Grass snake Slow worm	Wildlife and Countryside Act 1981 S.9(1) (part); S.9(5)	Intentionally kill or injure any common reptile species.	No licence is required in England. However, an assessment for the potential of a site to support reptiles should be undertaken prior to any development works which have potential to affect these animals.
Rabbits, foxes and other wild mammals	Wild Mammals (Protection) Act 1996	Intentionally inflict unnecessary suffering to any wild mammal.	Natural England provides guidance in relation to rabbits (TIN003, Rabbits- management options for preventing damage, July 2007) and foxes (which are also protected under the Wildlife and Countryside Act 1981 from live baits and decoys, see TAN43 April 2005 and TAN08 April 2005) as well as other wild mammals; see Natural England's website for the list of 'Regulatory Guidance, Best Practice and Information'.