Preliminary Ecological Assessment

Tanglewood Equestrian,

Forest Grange,

Horsham

West Sussex,

RH13 6HX

NGR: TQ 21267 31830



22nd January 2025

Sylvatica Ecology Ltd

Company Registration Number: 07705793

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Limitations and Liabilities

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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 - 18 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.

Approved by	Signed	Contact
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1.0 SUMMARY

1.1 This report presents the findings of a Preliminary Ecological Assessment survey Tanglewood Equestrian, Forest Grange, Horsham, West Sussex, RH13 6HX NGR: TQ 21267 31830. A planning application is to be made for the conversion of the existing stable block to residential use.

1.2 The site was located within a rural location approximately 1km to the east of the eastern edge of Horsham. There were other properties centred around Forest Grange Manor, arable, pasture and woodland copses present in the wider area.

1.3 The development site is not subject to any statutory designations and the closest statutory designated sites is located approximately 600m away and given the small scale of the proposals it is unlikely to impact this protected site. The proposal does fall within the Sussex North Water Supply Zone and a water neutrality report is therefore required. The closest ancient woodland is approximately 0.12km away. Given the small scale of the proposals it is not anticipated that there will be any impacts to these sites or valuable habitat subject to best practice construction and pollution measures being adhered to during construction

1.4 The existing stable block which is proposed to be converted to residential accommodation was subject to a preliminary roost assessment. The stable block was assessed as having negligible roosting potential and no further surveys are required. No trees are proposed to be removed as part of the proposals. However, as the site and surroundings are likely to be used by foraging and commuting bats sensitive lighting plan is recommended.

1.5 There is one waterbody located within 250m of the proposed development. However, this waterbody is a known carp fishing lake and as such is highly unlikely to be used by great crested newts. Due to the limited habitat present on site which could be used by great crested newts and the small scale of the proposals it is unlikely that great crested newts will be impacted by the proposals even if they are present in the wider area. No additional surveys are required but precautionary working methods are recommended.

1.6 The habitats present on site had limited potential to support protected species and no further surveys are recommended. However, precautionary mitigation measures are recommended to ensure there are no negative impacts on protected species.

1.7 To help achieve biodiversity net gain additional planting of hedgerow (the length of which are yet to be determined) and improving the biodiversity value of the landscaping is recommended along with bat and bird boxes.

2.0 INTRODUCTION

2.1 This report presents the findings of a Preliminary Ecological Assessment (PEA) survey of Land at Land at Tanglewood Equestrian, Forest Grange, Horsham, West Sussex, RH13 6HX NGR: TQ 21267 31830. A planning application is to be made for the conversion of the existing L-shaped stable block on site to a residential dwelling.

2.2 ***Figure 1: Site Survey Location (Red Line Boundary)***



Site Location

2.3 The site was located within a rural location to the east of Horham within a small collection of properties, 1.0km to the east of the eastern edge of residential Horsham. The redline boundary includes the access road and driveway, the stables and the immediate hardstanding. In the wider area, there are residential properties set within mature grounds along with pasture and arable fields and large swathes of woodland.

Aim of this Study

2.4 The aim of this habitat survey was to assess the habitats present on and adjacent to the property 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. These findings should be used within the design phase of the proposals, to minimise the impacts for biodiversity, through careful design 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 A preliminary ecological survey walkover was carried out at the Site on the 11th December 2024. The habitats were assessed in accordance with 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: amphibians, bats, reptiles, mammals, and birds were included.

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.

3.4 An assessment of the potential of the property to support roosting and foraging bats was made and categorised according to ***Table 1*** (BCT 2023).

3.5 ***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-I	Building or tree with one of more potential roost features that could be used by individual bats opportunistically. However, there 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.e.* unlikely to be suitable for maternity or hibernation)	Habitat that could be used by small numbers of commuting bats for example, a fragmented hedgerow or un-vegetated stream, but isolated, i.e. 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 any bats	Negligible habitat features on site likely to be used by commuting or foraging bats

Designated Sites and Biological Records

3.6 A 2.0km radius biological records search was carried out using the National Biodiversity Network This checked for protected and notable species records within 2.0km of the application site.

3.7 Records of internationally designated statutory sites within 5.0km of the Site and nationally designated sites within 2.0km of the Site were searched for using the Multi-Agency Geographic Information for the Countryside website (MAGIC) http://www.magic.gov.uk.

3.8 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.

Habitat Mapping and Condition Assessment Methods

3.9 Each specific habitat was assessed according to the condition assessment characteristics on the Statutory Biodiversity Net Gain Metric 4.0 Technical Annex 1. This provides specific criteria for each habitat classification utilising the United Kingdom Habitat Classification System. The mapping was carried out using QGIS V 3 3.28.5-Firenze for Windows 11. Habitat areas and pond distances from site were calculated using this QGIS software. A check of historical maps is also made using Google Earth, which gives an indication of the age of the habitats present onsite and surrounding.

Qualification of Author

3.10 The survey work and reporting has been led by Nadine Clark BSc MSc MCIEEM. Nadine has been undertaking ecological survey work within the last 17 years on many different locations throughout the United Kingdom, for a variety of protected species, including bats (Class 2 2015-14593-CLS-CLS), reptiles, amphibians including great crested newt *Triturus cristatus* (Class 1 2016-20221-CLS-CLS) and terrestrial mammals including dormice *Muscardinus avellanarius* (Class 1 2023-20767-CLS-CLS) and birds.

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; a map detailing the locations of the habitats described can be found in Appendix A, habitat condition assessments in Appendix B, locations of water bodies close to the property in Appendix C and photographs of the property taken at the time of the survey can be found in Appendix E. A summary of the protected species and habitats legislation for England and Wales can be found in Appendix F.

Designated Sites

4.2 There were two nationally statutory designated sites within 2.0km of the site and no internationally protected statutory designated sites within 5km of the proposed development.

4.3 ***Table 2: Statutory Designated Sites***

Site Name	***Location***	***Nature Conservation Interest***
St. Leonard's Forest Site of Special Scientific Interest (SSSI)	0.66km to the south	This woodland site contains ancient woodland and the woodland is predominantly deciduous oak woodland with ghyll habitat. The site also supports purple emperor butterfly *Apatura iris* and a diverse range of bird species.
St. Leonard's Park Ponds SSSI	1.4km to the southwest	This SSSI contains ponds which support a range of dragonflies and damselflies. The ponds also support fen and marginal vegetation. Woodland is also present within the boundary.

4.4 The site falls within a SSSI impact zone which requires any new development that requires connection with a public water supply to have a HRA screening by the LPA in relation to groundwater abstraction as part of the Sussex North Water Supply Zone. A water neutrality report is therefore likely to be required to support the application.

4.5 There are large areas of ancient woodland within the wider area with the closest section located approximately 0.12km to the north of the proposed development boundary.

Biological Records Search

4.6 Within 2.0km of the proposed development there were records for two species of bat held by the NBN atlas database.

4.7 ***Table 3: Bat Records within 2.0km radius***

Latin Name	Common Name	Number of Records
Pipistrellus pipistrellus	Common pipistrelle	3
Pipistrellus pygmaeus	Soprano pipistrelle	4

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

Latin Name	Common Name	Number of Records
Anguis fragilis	Slow Worm	24
Natrix helvetica	Grass snake	12
Zootoca vivipara	Common Lizard	18
Vipera berus	Adder	13
Triturus cristatus	Great Crested Newt	1
Rana temporaria	Common Frog	9
Bufo bufo	Common Toad	6
Lissotriton vulgaris	Smooth Newt	4
Lissotriton helveticus	Palmate Newt	2

4.9 There were four reptile species present within the search radius, which were the slow worm, grass snake and common lizard and there were five species of amphibian present including common toad, common frog, great crested newt and smooth newt.

4.10 ***Table 4: Terrestrial and Riparian Mammal Records***

Latin Name	Common Name	Number of Records
Erinaceus europaeus	Hedgehog	43
[redacted]	[redacted]	[redacted]
Lutra lutra	Otter	1
Muscardinus avellanarius	Hazel dormouse	1

4.11 There were 43 records of hedgehog within the 2.0km historical search radius, [redacted] and one for hazel dormouse and otter.

Granted Mitigation Licences

4.12 ***Table 6: Natural England Mitigation Licences***

Licence Number	Distance and Direction	Species	Type	Date	NGR
EPSM2012-4231	1.8km to the west	Brown long-eared bat	Destruction of a Resting Place.	09/08/2012 to 31/12/2014	TQ19503191
EPSM2012-5076	1.9km to the northwest	Brown long-eared bat	Destruction of a Resting Place.	19/10/2012 to 30/06/2013	TQ19693299

4.13 There were two Natural England mitigation licence within the 2.0km search radius granted for bats. The bat species licenced for were both for brown long-eared bat *Plecotus auritus*.

Summary of Habitats Present on Site

4.14 The site survey area consisted of modified grassland and buildings and hardstanding.

Habitat Types

4.15 ***Modified Grassland (0.0141ha) –*** This habitat area comprised of grassland to the front and rear of the stable block. The grassland strip at the front of the stable block was very short sward with minimal herb species present. The grassland to the rear had a slightly longer sward and a wetter character with soft rush *Juncus effusus*. recorded in places.

4.16 ***Developed Land (buildings and hardstanding) (0.0915ha) –*** This habitat consisted entirely of the stable block building with concrete and hardcore/gravel around the stable and surrounding driveway.

5.0 POTENTIAL FOR PROTECTED SPECIES

Birds

5.1 Common bird species were seen around the site including robin *Erithacus rubecula* and blue tit *Cyanistes caeruleus*. The stables provided suitable nesting opportunities for common bird species. The nearby trees and vegetation just outside of the redline boundary also provided some suitable nest habitat.

Bats

5.2 There was one building present within the site, the stable block in the eastern section of the site (B1). This stable block was subject to a Preliminary Roost Assessment. The description of the building in terms of bat potential is provided below.

5.3 ***Building 1- Stable Block***

Building 1 consisted of a single storey stable block which was predominantly constructed of an L-shaped section with shiplap cladding walls and corrugated asbestos roofing. This stables included several loose boxes, a tack room and open fronted section. The shiplap cladding was generally in good condition and no gaps which created bat roosting crevices were noted on this section of the building.

5.4 There was also a rear addition on the southwestern corner of the building that was open fronted and consisted of open wooden walls with large gaps present between the slats and a metal corrugated sloping roof. However, this wall structure did not create any crevices and no features which could be used by roosting bats. The section of stable in the northeastern corner consisted of an open fronted stable with metal roof and shiplap cladding walls. There were no crevices or cracks that could be used by roosting bats noted.

5.5 No evidence of roosting bats was found in any part of the building during the internal and external inspection. This building complex was assessed as having **negligible potential** to support roosting bats in accordance with the survey guidance due to the lack of suitable features which could be used by roosting bats.

5.6 There were no trees present within the redline boundary but a number of mature trees present within vegetation present to the south of the redline boundary between the site and access road with species such as beech *Fagus sylvatica*, oak *Quercus robur*, silver birch *Betula pendula,* Scots pine *Pinus sylvestris* and holly *Ilex aquifolium*. These trees are to be retained and will not be directly impacted by the proposals as a result of the conversion which will result in a building footprint the same as currently present. However, a large mature beech was

present in the vegetation/treeline which had a large amount of dead wood present (T1, Figure in Appendix A). This tree was assessed as having PRF-M features but no works are planned to the tree. If this changes then additional surveys of the tree T1, would be required.

5.7 The mature trees and hedgerow provide habitat adjacent to the site for foraging and commuting bats and the site is interconnected with pasture, hedgerows and woodland in the wider landscape. This provides some suitable habitat, and the site can be considered as low value to foraging bats with the wider area providing at least moderate value for foraging bats.

Reptiles and Amphibians

5.8 There were records of reptile and amphibian within the 2.0km search radius. However, the habitats present on Site were of limited value consisting predominantly of short grassland forming the only small areas of natural habitat and the hardstanding and building and as such were not likely to be able to support a population of reptiles. Individual reptiles may access the site on occasion from the wider area if they are present. The site was considered to have a very low potential to support common individual reptiles.

5.9 There were records of great crested newt within the 2.0km search radius with records for the species located approximately 1.5km to the southwest. There was one pond present within 250m of the proposed development and this is White Vane Pond located approximately 230m to the south. This pond appears to be used as a carp fishing lake and as such is highly unlikely to support breeding great crested newts. This in combination with the small scale of the works which will impact the existing building and the lack of suitable habitat that could be used by amphibians makes the risk of impacting great crested newts of negligible risk.

Terrestrial and Riparian Mammals

[redacted]

5.11 Records of hedgehog were present within the 2.0km search area although the habitat present within the development site had limited foraging opportunities. The site had a low potential to support hedgehogs.

5.12 One record was held for dormice within the 2.0km search radius and appears to be from woodland approximately 1.0km to the west. The proposals will not impact any habitat which is suitable for dormice and as such the proposals have a neglible risk of impact to dormouse..

Invasive and Non Native Species

5.13 No invasive species were noted during the survey.

6.0 DISCUSSION AND RECOMMENDATIONS

Designated Sites and Habitats

6.1 There were two statutory designated sites present within 2.0km of the proposals although given the small scale of the proposals and the distance from these statutory sites there are no anticipated impacts. The site does fall within the Impact risk zone in relation to water neutrality due to the risk of increase abstraction of groundwater as it falls within the Sussex North Water Supply Zone and a report in relation to water neutrality will be required.

6.2 There is ancient woodland located approximately 120m to the north of the proposals at its closest point. It is not anticipated that the proposals will result in any direct impact to the woodland given that the proposals are for the conversion of an existing building. However, best practice pollution prevention measures should be followed during the construction process particularly dust suppression measures for example using damping down measures or screens. This will ensure there will be no negative impacts to nearby ancient woodland which is present in the wider area.

Birds

6.3 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 or demolition of the building 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 or the outbuildings 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.

Roosting Bats

6.5 The potential presence of bat roosts within a proposed development site has to be considered as all eighteen of the UK's bat species are protected under Section 9 of the Wildlife and Countryside Act (WCA) 1981 (as amended). The WCA states that '*a person is guilty of an offence if intentionally or recklessly they disturb [a bat] while it is occupying a structure or place which it uses for shelter or protection; or he obstructs access to any structure or place which [a bat] uses for shelter or protection'.*

6.6 Building B1, was not found to contain any suitable features which could be utilised by roosting bats. As this building was subject to a preliminary roost assessment and found to have negligible potential to support roosting bats, no additional bat surveys are required in relation to this development.

6.7 No trees were present within the redline boundary and no tree works are anticipated as a result of the proposals. A beech tree present offsite (Target note T31) had some potential to support roosting bats and if plans change, and works are proposed to the tree then it will be necessary to undertaken additional surveys. As no trees works are currently proposed then no additional bat surveys are recommended although sensitive lighting is recommended and discussed below.

Bats and Lighting

6.8 Bat species have been recorded within the 2.0km historical records search and the habitats present onsite and in the immediate surroundings can be considered as having low to moderate foraging habitat. Any lighting installed as a result of this development will conform to the specifications which are outlined within BCT Guidance Note (2023b). This will reduce any light pollution that could impact 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 that 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

6.8 Hedgehog have seen their number decline significantly over the last 13 years by around 66%. There were records for hedgehog within 2km. The habitats present on site were of limited value to hedgehogs but they may access the site [redacted] if they are present within the wider area.

6.9 During the construction phase any deep trenches or excavations should be covered overnight to ensure any animals including hedgehogs, do not become trapped. This measure would also be pertinent for all mammals, [redacted].

6.10 To enhance the site for wildlife including hedgehog post-development the planting of native trees, shrubs and hedgerows and the provision of gaps of at least 15cm by 15cm under any new fences or alternatively the use of hedgerows rather than fences will ensure this species continues to have access to the site and can use the site for foraging, commuting and shelter.

Dormice

6.11 It is considered highly unlikely that dormice are present within the redline boundary given the proposals will only impact the building and there is no suitable habitat present that could support the species even though the biological records indicate they are present in the wider area. No further surveys or mitigation measures are therefore recommended.

Great Crested Newt

6.12 The great crested newt receives full protection under the Wildlife and Countryside Act 1982 (as amended). This prohibits the intentional or reckless killing, injuring or taking (capture, *etc*); possession; intentional or accidental disturbance whilst occupying a 'place used for shelter or protection' and intentional or reckless destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or buy.

6.13 The habitats present on site were of very limited value for great crested newts as it predominantly consisted of short sward grassland providing no suitable cover and buildings and hardstanding. The proposals will only impact the existing building and there is no proposed loss of habitat and as such, it is not anticipated the proposals will impact this species and no additional surveys or mitigation is recommended.

Reptiles

6.14 The habitats present within the redline boundary were of limited value to reptiles as they provided limited cover for foraging or suitable refugia. It is not anticipated that the proposals will result in any impacts to reptiles and not mitigation is required. .

7.0 RECOMMENDATIONS FOR BIODIVERSITY ENHANCEMENT AND NET GAIN

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 Planting of native hedgerow in addition to the existing post and rail fencing to the north of the stable block would be beneficial in improving the ecological value of the site.

7.3 The hedgerow planting would, ideally, conform to the following criteria once the specific length of time for suitable management has passed (5 to 10 years):

- *Height and Width: Greater than 1.5m average height and width along entire length,*
- *Gap – Hedge Base: Gap between ground and base of canopy less than 0.5m for greater tan 90% of the length,*
- *Gap – Hedge Canopy: Gaps make up less than 10% of total length, and no canopy gaps of greater than 5m.*
- *Ground Level Vegetation: greater than 1m of undisturbed ground with perennial herbaceous vegetation for greater than 90% of the total length. These would be measured from the outer edge of the hedgerow and would be present on, at least, one side of the hedgerow,*
- *Nutrient Enrichment: Plant species indicative of nutrient enrichment comprise less than 20% of the area of undisturbed ground,*
- *Invasive Species: Greater than 90% of the hedgerow and undisturbed ground is free of invasive species and recently introduced species.*
- *Current Damage: Greater than 90% of the hedgerow or undisturbed ground is free of damage caused by human activities.*

7.4 As part of the scheme, it is recommended to install bird and bat boxes. These would provide an ecological enhancement by providing suitable roosting and nesting locations for these protected species. These bat and bird boxes could be installed on any retained mature trees immediately adjacent to the redline boundary or through the use of in-built boxes in the new

property. The location of the boxes should avoid high levels of sunlight during the summer months and be located away from windows and doors.

8.0 REFERENCES

BCT (2023a) Bat Survey Guidelines for Professional Ecologists – Good Practice Guidelines 4th Edition.

BCT & ILP, B. C. (2023a). Bats and artificial lighting in the UK: Guidance Note GN08/23. London: Institution of Lighting Professionals.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023) The UK Habitat Classification User Manual version 2.1 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.). JNNC, Peterborough.

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

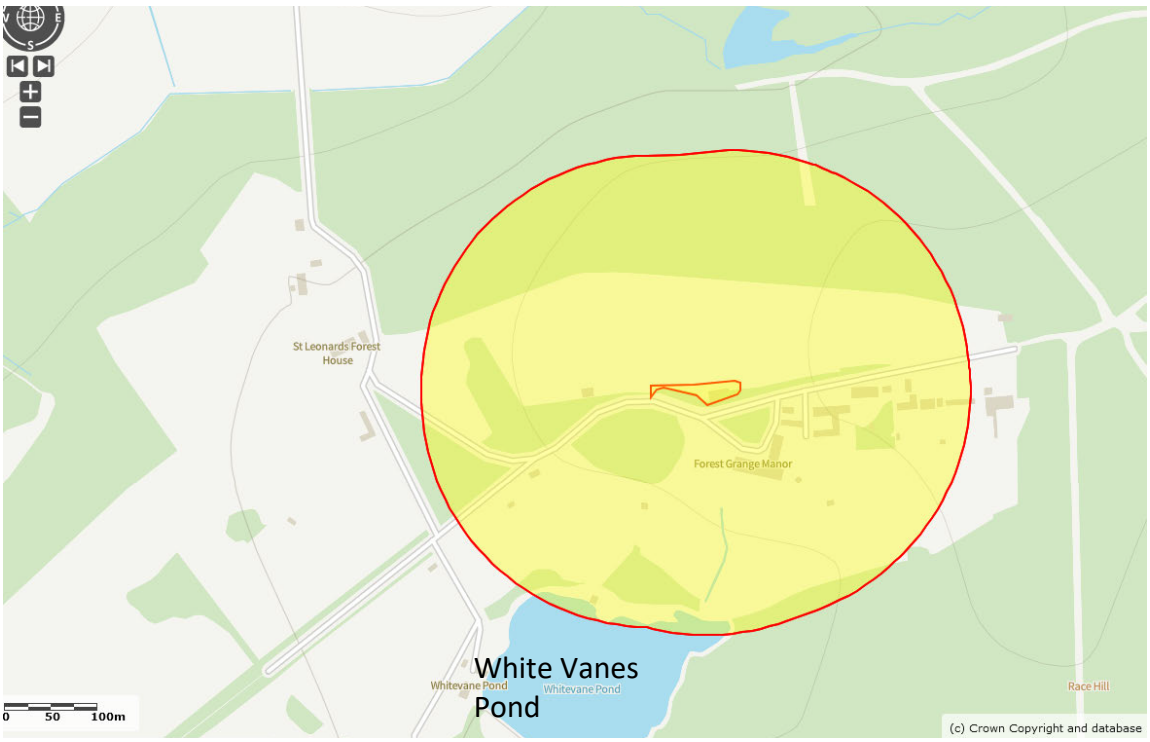
APPENDIX A: PRELIMINARY ECOLOGICAL WALKOVER SURVEY HABITAT MAP



APPENDIX B: HABITAT DISTINCTIVENESS AND CONDITION ASSESSMENT

Habitat Type	Total Habitat Area (ha) or length (km)		Distinctiveness	Score	Habitat Condition	Condition Assessment Scoring
Modified Grassland	0.0141ha		Low	2	Poor	1
	Species Present	Bent *Agrostis spp.*, Meadowgrass *Poa sp*, Soft rush *Juncus effusus*, daisy Bellis perennis				
Buildings and Hardstanding	0.0915ha		Very Low	0	N/A	0

APPENDIX C: LOCATION OF WATERBODIES WITHIN 250M (Magic Map, 2025)



APPENDIX D: PHOTOS OF THE SITE

Plate 1: Concrete hardstanding and stables looking west acress site.	***Plate 2: Modified grassland to rear of stable block.***
	
Plate 3: Tight fitting shiplap cladding present on the stable block.	***Plate 4: Open Fronted section of the stable block on southwestern corner of stable building.***
	
Plate 5: View looking south towards building b1 stable block with treeline in the background	***Plate 6: T1- Mature beech trees present just offsite.***
	

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 2017	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 2017	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.
Dormice European protected species	Conservation of Habitats and Species Regulations 2017	Deliberately[1] capture, injure or kill a dormouse; deliberate disturbance[2] of dormouse; or damage or destroy a breeding site or resting place used by a dormouse.	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)
	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.
[redacted]	[redacted]	[redacted]	Where required, licences for development activities involving disturbance or sett interference or closure are issued by Natural England (NE). Licences for activities involving watercourse

Species	Legislation (England & Wales)	Offences	Licensing procedures (England & Wales)
		[redacted]	maintenance, drainage works or flood defences are issued under a separate process. [redacted]
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'.

Site Designation	Legislation (England & Wales)	Protection	Guidance
Site of Special Scientific Interest (SSSI)	Wildlife and Countryside Act 1981 (as amended)	It is an offence to carry out or permit to be carried out any potentially damaging operation. SSSIs are given protection through policies in the Local Development Plan.	Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 before undertaking operations likely to damage a SSSI. S.28G places a duty on all public bodies to further the conservation and enhancement of SSSIs. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.
Locally Designated Sites	There is no statutory designation for these	Sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect these would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged.

Site Designation	Legislation (England & Wales)	Protection	Guidance
Special Area of Conservation (SAC) **Special Protection Area (SPA)** **Wetland of International Importance (Ramsar site)**	Conservation of Habitats and Species Regulations 2010 EC Directive on the conservation of natural habitats and of wild fauna and flora (92/42/EEC). EC Directive on the conservation of wild birds (79/409/EEC). Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention).	Planning controls are effected through Part 2 of the Conservation of Habitats and Species regulations 2010 (Reg 21) and Part 6 (Regs 61-67). The legislation for the Site of Special Scientific Interest which will underpin each designation also applies. These sites are given protection through policies in the Local Development Plan.	Formal Appropriate Assessment is required before undertaking, or giving consent, permission or other authorisation for a plan or project which is likely to have a significant effect on such a site. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) and the accompanying joint Circular (ODPM Circular 6/2005 & Defra Circular 01/2005) for England or Technical Advice Note 5 in Wales.
Site of Special Scientific Interest (SSSI)	Wildlife and Countryside Act 1981 (as amended)	It is an offence to carry out or permit to be carried out any potentially damaging operation. SSSIs are given protection through policies in the Local Development Plan.	Owners, occupiers, public bodies and statutory undertakers must give notice and obtain the appropriate consent under S.28 before undertaking operations likely to damage a SSSI. S.28G places a duty on all public bodies to further the conservation and enhancement of SSSIs. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.
Local Nature Reserve (LNR)	National Parks and Access to the Countryside Act 1949 S.21	LNRs are given protection through policies in the Local Development Plan.	LNRs are generally owned and managed by local authorities. Development proposals that would potentially affect a LNR would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged. Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.
Locally Designated Sites	There is no statutory designation for these	Sites are given protection through policies in the Local Development Plan.	Development proposals that would potentially affect these would need to provide a detailed justification for the work, an assessment of likely impacts, together with proposals for mitigation and restoration of habitats lost or damaged.