

Preliminary Ecological Assessment

Land at Girders Bridge

Gay Street Lane

North Heath

Horsham

West Sussex

RH20 2HW

NGR: TQ 06909 21521



23rd March 2025

Sylvatica Ecology Ltd

Company Registration Number: 07705793

<https://se-planning.com>

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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.

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1.0 SUMMARY

- 1.1 This report presents the findings of a Preliminary Ecological Assessment (PEA) survey of land at Girders Bridge, Gay Street Lane, North Heath, Horsham, West Sussex, RH20 2HW, NGR: TQ 06909 21521. A planning application is to be made to develop this location into a multi-pitch traveller site. The site survey area was approximately 0.85ha in size and the site survey was conducted on the 7th March 2025.
- 1.2 The site comprised of a mixture of scrub habitat, which was slowly encroaching into the whole of the site, with areas of ruderal habitat and modified grassland. There was a line of trees to the west and a unit of deciduous woodland. There was a track leading into the site from the access road to the south, which was well used and significantly eroded.
- 1.3 There were two internationally statutory designated sites within the 5km search area and no national statutory designed sites within the 2.0km search radius. There were the Arun Valle SAC and Ramsar Site. Designated for the presence of wetland habitats, wintering birds and for the presence of ramshorn snail and the Mens SAC which was designated for Atlantic beech forests and for the presence of barbastelle bats.
- 1.4 There was not any officially designated priority habitat immediately adjacent to the site, but there was an area of deciduous woodland to the immediate northwest. There were other priority habitats within 500m of the site, which were wood pasture & parkland, ancient semi-natural woodland, deciduous woodland and good quality semi-improved grassland.
- 1.5 To ensure that the adjacent habitats are maintained in good condition and are not impacted by any development works, it is recommended that a Construction Environmental Management Plan (CEMP) be drafted prior to the start of the works. This document would then be distributed to all site operatives to ensure that the working practices do not affect the surrounding habitats.
- 1.6 Recommendation has been made within this report regarding the following potential ecological constraints:
- *Dormice potential with the hedgerow and woodland – avoidance of works within these areas is recommended,*
 - *Potential presence of reptile species within the site survey area,*
 - *Bat roosting potential of the oak trees along the western edge of the site,*
 - *Amber risk of offence regarding great crested newt. Habitat suitability index (HSI) survey and environmental DNA survey of ponds recommended,*
 - *Avoid vegetation clearance during the nesting bird season,*
 - *Recommendation has been made to avoid excessive light spill into the adjacent high value bat foraging and commuting habitats.*

2.0 INTRODUCTION

2.1 This report presents the findings of a Preliminary Ecological Assessment (PEA) survey of land at Girders Bridge, Gay Street Lane, North Heath, Horsham, West Sussex, RH20 2HW, NGR: TQ 06909 21521. A planning application is to be made to develop this location into a multi-pitch traveller site. The site survey area was approximately 0.85ha in size.

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



Site Location

2.3 The parcel of land was located just north of Gay Steet Lane, off the A29 (Staine Street). To the immediate south of the main area of land, was an already occupied section of land utilised as accommodation, storage and vehicle parking. There were other areas of private residential accommodation in the wider surroundings, with associate private gardens and mature deciduous trees present. The main land use within the surrounding landscape comprised of agricultural land, notably pasture. These fields were sectioned using barbed wire fencing and hedgerows which provided a degree of connectivity to the survey area. There were also mature deciduous trees present along the hedge lines within the surrounding area.

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 7th March 2025. 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 building/ site 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 2023)**

| 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 | Building 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. | <p>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.</p> <p>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.</p> <p>Site is close to and connected to known roosts.</p> |
| Moderate/ PRF-M | Building 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. | <p>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.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p> |
| Low | Building with one of more potential roost features that could be used by individual bats opportunistically. | Habitat that could be used by small numbers of commuting bats for example, a fragmented hedgerow or |

| | | |
|------------|--|--|
| | <p>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>i.e.</i> unlikely to be suitable for maternity or hibernation)</p> | <p>un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat.</p> <p>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.</p> |
| Negligible | <p>Building or tree with no potential to support any bats</p> | <p>Negligible habitat features on site likely to be used by commuting or foraging bats</p> |

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 the 5.0km of the Site and nationally designated statutory 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 Pond Distance Calculation Methods

- 3.9 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

- 3.10 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 many different locations throughout the United Kingdom, for a variety of protected species, including bats (Class 2 2015-12576), reptiles, amphibians including great crested newt (Class 1 2016-20290) and terrestrial mammals including dormice (Class 1 2015-13188) and birds including barn owl 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 results of the records searches and of the habitats identified during the walkover survey. All the plant species names follow the nomenclature of Stace 1997.

Statutory Designated Sites and Priority Habitats

4.2 **Table 2: Statutory Designated Sites**

| <i>Site Name</i> | <i>Location</i> | <i>Nature Conservation Interest</i> |
|---|-----------------|---|
| The Mens Special Area of Conservation (SAC) | 4.5km west | <p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrub layer (<i>Quercion robori-petraeae</i> or <i>Illici-Fagenion</i>) <p>The Mens is an extensive area of mature beech <i>Fagus sylvatica</i> woodland rich in lichens, bryophytes, fungi and saproxylic invertebrates, and is one of the largest tracts of Atlantic acidophilous beech forests in the south-eastern part of the habitat's UK range. It is developing a near-natural high forest structure, in response to only limited silvicultural intervention over the 20th century, combined with the effects of natural events such as the 1987 great storm</p> <p>Annex II species present as a qualifying feature, but not a primary reason for site selection</p> <ul style="list-style-type: none"> 1308 Barbastelle <i>Barbastella barbastellus</i> |
| Arun Valley SAC and Ramsar | 3.5km south | <p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> Inland water bodies (Standing water, Running water) (2%) Bogs, Marshes, Water fringed vegetation, Fens (2%) Humid grassland, Mesophile grassland (95%) |

- Broad-leaved deciduous woodland (1%)

Annex II species that are a primary reason for selection of this site

- 4056 Ramshorn snail *Anisus vorticulus*

Anisus vorticulus occurs across a range of sites in southern and eastern England. The Arun valley is one of the three main population centres for this species in the UK. This proposed site includes two of its core sites in the wash lands of the Arun floodplain (Pulborough Brooks and Amberley Wild Brooks SSSIs)

- 4.3 There were two internationally statutory designated sites within the 5km search area and no national statutory designed sites within the 2.0km search radius. There were the Arun Valle SAC and Ramsar Site. Designated for the presence of wetland habitats, wintering birds and for the presence of ramshorn snail and the Mens SAC which was designated for Atlantic beech forests and for the presence of barbastelle bats.
- 4.4 There was not any officially designated priority habitat immediately adjacent to the site, but there was an area of deciduous woodland to the immediate northwest. There were other priority habitats within 500m of the site, which were wood pasture & parkland, ancient semi-natural woodland, deciduous woodland and good quality semi-improved grassland.

Biological Records Search

4.5 **Table 3: Bat Species Records**

| Latin Name | Common Name | Number of Records |
|----------------------------------|----------------------|-------------------|
| <i>Pipistrellus pygmaeus</i> | Soprano Pipistrelle | 2 |
| <i>Pipistrellus pipistrellus</i> | Common Pipistrelle | 2 |
| <i>Eptesicus serotinus</i> | Serotine | 2 |
| <i>Plecotus auritus</i> | Brown Long Eared Bat | 3 |
| <i>Myotis nattereri</i> | Natterer's Bat | 1 |
| <i>Nyctalus noctula</i> | Noctule | 1 |

4.6 There were six species of bat within the 2.0km historical records search. The numbers of individual records were relatively low for each recorded bat species.

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

| Latin Name | Common Name | Number of Records |
|---------------------------|--------------------|-------------------|
| <i>Anguis fragilis</i> | Slow Worm | 4 |
| <i>Zootoca vivipara</i> | Common Lizard | 1 |
| <i>Natrix helvetica</i> | Grass Snake | 40 |
| <i>Triturus cristatus</i> | Great Crested Newt | 2 |
| <i>Rana temporaria</i> | Common Frog | 1 |

4.8 There were two amphibian species and three reptile species within the 2.0km search area. These were the common frog and great crested newt, which is a European protected species and the slow worm, the common lizard and grass snake, which had a relatively high number of records (40).

4.9 **Table 5: Terrestrial and Riparian Mammal Records**

| Latin Name | Common Name | Number of Records |
|---------------------------------|-------------|-------------------|
| <i>Erinaceus europaeus</i> | Hedgehog | 5 |
| <i>Muscardinus avellanarius</i> | Dormouse | 1 |
| <i>Meles meles</i> | Badger | 1 |

4.10 Hedgehog were present within the 2.0km search radius, with a single record for dormouse, which is a European protected species and a single record for badger.

Granted Mitigation Licences

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

| Licence Number | Distance and Direction | Species | Type | Date | NGR |
|------------------------|------------------------|----------------|-----------------------------------|--------------------------------|--------------|
| 2018-34018- EPS-MIT | 1.3km southeast | Natterer's Bat | Destruction of a Resting Place | 23/04/2018 to 31/07/2018 | TQ 0830 2141 |

4.12 There was a single granted Natural England mitigation licence within the 2.0km search area. This was for the destruction of a resting place for the Natterer's bat.

Summary of Habitats Present on Site

4.13 The site comprised of a mixture of scrub habitat, which was slowly encroaching into the whole of the site, with areas of ruderal habitat and modified grassland. There was a line of trees to the west and a unit of deciduous woodland. There was a track leading into the site from the access road to the south, which was well used and significantly eroded.

Habitat Types

4.14 **Lowland Deciduous Woodland (W1F)** – Throughout the length of the survey area were areas of deciduous tree growth. The species within this habitat comprised mainly of pedunculate oak *Quercus robur* and ash *Fraxinus excelsior*. This habitat had a shrub layer of elder *Sambucus nigra*, hawthorn *Crataegus monogyna*, hazel *Corylus avellana* and bramble *Rubus fruticosus*. Ground flora consisted of stands of false oat grass *Arrhenatherum elatius* and Yorkshire fog

Holcus lanatus around the periphery of this habitat area. Otherwise, the ground flora was restricted by the density of the scrub layer, notably the bramble, with thin stands of ivy *Hedera helix* growing on some of the trees.

- 4.15 **Modified Grassland** – This habitat had not been grazed or managed for at least an estimate of five years, and had, therefore, grown tussocky and thick in places. This habitat exhibited the characteristic of modified grassland, with very limited broad leaved plants observed. There was minimal bare ground or evidence of forb diversity, suggesting a low structural and botanical diversity. This condition is typical of grassland on moist, compacted, or nutrient-enriched soils where a competitive dominant species has taken hold. The grassland species present were Perennial ryegrass *Lolium perenne*, cock's-foot *Dactylis glomerata*, false oat-grass *Arrhenatherum elatius*, red fescue *Festuca rubra*, common nettle *Urtica dioica*, creeping buttercup *Ranunculus repens*, dandelion *Taraxacum* agg., ribwort plantain *Plantago lanceolata*, white dead-nettle *Lamium album*. Some of the wetter areas of this habitat had soft rush *Juncus effusus* present. Five 1m by 1m quadrats recorded an average of 4.3 species per m².
- 4.16 **Mixed Scrub**: This habitat was beginning to encroach into the site, becoming dominant throughout. Species present were grey willow *Salix cinerea*, blackthorn and hawthorn along with species such as hogweed *Heracleum sphondylium*, ivy, and wood avens *Geum urbanum*.
- 4.17 **Ruderal Habitat** - This habitat structure is common where management has been reduced or delayed, allowing for a build-up of litter and dominant species, which can suppress diversity if unmanaged. Scrub and ruderal species were present. These were bramble *Rubus fruticosus*, rosebay willow herb *Chamaenerion angustifolium*, nettle *Urtica dioica*, field bindweed *Convolvulus arvensis* and hogweed *Heracleum sphondylium*.
- 4.18 **Individual Trees** – There were a number of medium sized native trees present within the site. These were oak and ash trees.
- 4.19 **Bare Ground** – An access track from the road to the main site area comprised of a heavily eroded and muddy track. There was not any plant species that were present within this habitat area.
- 4.20 **Invasive Species** - There was a line of cotoneaster *Cotoneaster* sp. along the edge of the access track on the eastern edge. This was approximately 30m in length.

5.0 POTENTIAL FOR PROTECTED SPECIES

Birds

5.1 The time of year the survey was carried out was outside of the main bird breeding season during late winter. There were birds that were observed within the immediate vicinity of the site survey area, crow *Corvus corone*, magpie *Pica pica*, blue tit *Cyanistes caeruleus*, robin *Erithacus rubecula*, wren *Troglodytes troglodytes*, thrush *Turdus philomelos*, blackbird *Turdus merula*, and great tit *Parus major*.

Bats

5.2 There were not any buildings present within the site survey area that could potentially be impacted by the proposed works.

5.3 The treeline along the western boundary had a number of mature oak trees, which exhibited a number of features, including cracks, splits, tear outs, woodpecker holes, hazard beams etc. These trees were just outside of the proposed works area, but all of these trees presented potential to support roosting bats. The category of roosting potential, at this stage, is unknown.

Reptiles and Amphibians

5.4 The habitats present on site comprised of scrub and tussocky grassland. These areas could potentially provide habitat for reptile species, with the edge of the scrub providing sheltered basking locations and the tussocky grassland providing potential foraging areas.

5.5 There were 12 ponds within a 500m radius of the site, with the closest being 95m to the southeast. The site survey area was 0.85ha in area. The risk assessment calculation tool presents a result of Amber: Offence Likely, regarding great crested newt.

5.6 **Table 7: 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) | 0.5 – 1.0ha lost of damaged | 0.3 |

| | | |
|--------------------------------------|-----------------------|-----|
| Land >250m from any breeding pond(s) | No effect | 0 |
| Individual great crested newts | No effect | 0 |
| | Maximum: | 0.3 |
| Rapid risk assessment result: | AMBER: OFFENCE LIKELY | |

Terrestrial and Riparian Mammals

- 5.7 Specific location records of badger are always confidential. While potential badger foraging habitat was present within the survey area, no badger setts were found within the locations that were likely to have the pitches installed or within a 30m zone around these.
- 5.8 Records of hedgehog were present within the 2.0km search area and there was hedgehog habitat present within the deciduous woodland.
- 5.9 The treelines, mixed scrub and deciduous woodland habitat could offer potential habitat for dormice. These areas could potentially be impacted by the proposed development works, notably the scrub habitat.

6.0 DISCUSSION AND RECOMMENDATIONS

Designated Sites and Habitats

- 6.1 The two designed sites were of sufficient distance away from the proposed development site that any residential development works at this location would not likely be considered to impact the integrity of these sites. The habitats present on site are not likely to support the features noted in both SAC sites. Recommendation for the protection of flightlines for the barbastelle bat can be found in the section regarding bats and lighting.
- 6.2 To ensure that the adjacent habitats are maintained in good condition and are not impacted by any development works, it is recommended that a Construction Environmental Management Plan (CEMP) be drafted prior to the start of the works. This document would then be distributed to all site operatives to ensure that the working practices do not affect the surrounding habitats.

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 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.

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 There were not any buildings present within the site survey area, but there were a number of pedunculate oak trees, notably along the western boundary, following the treeline and deciduous woodland habitat that had features, such as cracks and splits that bats could potentially roost within. If any of these trees are to be affected by the proposed development works, then further assessment of these trees for the potential presence of bats is recommended. This would take the form of an initially ground level tree assessment (GLTA) and then, if required, further assessment/ surveys to ascertain the presence/ likely absence of bats. These trees are not currently to be impacted by the proposed works, as no felling of trees along the western boundary is proposed. Should this change, then the above recommendations should be followed.

Bats and Lighting

- 6.7 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 high value foraging habitat. There are commuting routes and flightlines along boundary hedges, with the Mens SCA being 4.5km to the west. This is notable for the presence of barbastelle bat, therefore, any

external lighting of commuting routes (hedgerow and treelines) and adjacent habitat should be avoided. Any lighting installed, as a result, of this development will conform to the specifications which are outlined within BCT Guidance Note (2023). 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 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 and Riparian Mammals

- 6.8 Hedgehog have seen their number decline significantly over the last 13 years by around 66%. There were records for hedgehog within 2.0km. The hedgerow may provide suitable refuge for hedgehogs and the habitat had some potential to support foraging hedgehogs if they are present in the local area.
- 6.9 During any 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, including badger.
- 6.10 To enhance the site for hedgehog post-development the planting of native trees and hedgerows and the provision of gaps of at least 15cm by 15cm under any installed 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 The potential presence of dormice within the proposed development site has to be considered as dormice are protected under 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 dormouse] while it is occupying a place which it uses for shelter or protection; or he obstructs access to any place which [a dormouse] uses for shelter or protection’.

6.12 Dormice are also protected under the Conservation of Habitats and Species Regulations 2019. Dormice are listed as European protected species under which it is an offence if;

- *a person deliberately captures, injures or kills any wild animal of a European protected species;*
- *deliberately disturbs wild animals of any such species;*
- *damages or destroys a breeding site or resting place of such an animal.*

6.13 Disturbances of animals include in particular any disturbance which is likely to impair their ability to;

- *survive, breed or reproduce, or to rear or nurture their young;*

6.14 Scrub habitat may require a dormouse survey in England because it can provide essential foraging, nesting, and dispersal opportunities for hazel dormice (*Muscardinus avellanarius*), a species protected under both national and European legislation. Dormice are known to inhabit a variety of habitats beyond mature woodland, particularly where scrub is well-developed and connected to other suitable habitats such as hedgerows or broadleaved woodland. Dense, species-rich scrub with a mix of food plants—such as bramble, honeysuckle, and hazel—offers vital resources throughout the active season. Additionally, scrub can serve as a crucial ecological corridor, allowing dormice to move through fragmented landscapes. Because of its potential to support dormouse populations, especially in areas with known records nearby or strong habitat connectivity, any proposed development or land management affecting scrub should be assessed through appropriate dormouse surveys to ensure legal compliance and inform necessary mitigation

6.15 Nest tube surveys are a standard and widely accepted method for detecting the presence of hazel dormice (*Muscardinus avellanarius*) in England. The technique involves installing artificial nesting tubes made of plastic or wood across suitable habitats such as hedgerows, scrub, and woodland. Typically, at least 50 tubes are deployed per hectare, spaced approximately 20 metres apart and positioned horizontally in vegetation around 1.5 to 2 metres above ground. These tubes are left in place for a minimum of six months, with regular checks carried out between May and October—the period when dormice are active. The findings are assessed using a scoring system outlined in the Natural England Dormouse Survey Protocol and Decision Tree (2012), which helps determine the likelihood of dormouse

presence. Since dormice are a legally protected species, surveys must be conducted by, or under the supervision of, a licensed ecologist.

Great Crested Newt

- 6.16 The great crested newt receives full protection under the Wildlife and Countryside Act 1981 (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.
- 6.17 The presence of ponds within the immediate landscape surrounding the site and the presence of great crested newt within the 2.0km search area mean that it is recommended that the presence/ likely absence of great crested newt is established. The terrestrial habitats that have been identified as having a potential Amber Risk of Offence regarding great crested newt, therefore, it is recommended to ascertain the presence/ likely absence of great crested newt within the pond within close proximity by carrying out a Habitat Suitability Index survey. If potential for this species is found, then an Environmental DNA (eDNA) survey is recommended. This will give an indication of the presence of great crested newt within this pond. EDNA surveys have to be carried out between mid-April to June.
- 6.18 If great crested newt are found to be present in these ponds, then further survey would be required, which would take the form of 6 visits on each pond in the evening/ early morning. If great crested newt are found to be present and impact on this species cannot be avoided, then a mitigation licence from Natural England is required. If great crested newt are present, then as part of the mitigation licence, a trapping and translocation exercise would be required, over a period of between 30 to 90 days, depending on the population present.
- 6.19 An alternative option would be to register the site under the District Licencing scheme through NatureSpace, if this species are found to be present.

Reptiles

- 6.20 There were areas of habitat present within the site survey area that had the potential to support reptile species. 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 (*Natrix helvetica*), common lizard (*Zootoca vivipara*) 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.

6.21 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.

6.22 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.

Invasive Species

6.23 Several cotoneaster species are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in England and Wales.

- *These include: Cotoneaster horizontalis, C. integrifolius, C. simonsii, C. bullatus, and C. rehderi.*

6.24 It is an offence under Section 14(2) of the Act to:

- *Cause these species to grow in the wild.*
- *Plant or otherwise cause them to spread outside of their current containment.*

6.25 If invasive Cotoneaster species are present on a development site:

- *You must prevent their spread into the wild during site work.*
- *Control or remove them as part of site clearance or ecological mitigation measures.*
- *The Environment Agency and Natural England may require you to submit an invasive species management plan as part of planning permission or environmental assessments.*

6.26 Plant waste from invasive species must be treated as controlled waste under the Environmental Protection Act 1990.

- *Dispose of at a licensed landfill or by burning (with permission).*
- *Do not move infested soil or green waste offsite unless it is properly contained and permitted.*

7.0 RECOMMENDATIONS FOR BIODIVERSITY 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. Additional measures may be required as a result, of the further survey findings, which could potentially form part of species mitigation.

7.2 As part of the scheme, it is recommended to install bird and bat boxes around the site periphery. These would provide an ecological enhancement by providing suitable roosting and nesting locations for these protected species. Two bird boxes and two bat boxes could be installed. These would all be installed at a minimum of 3m height, on a southwestern or southeastern aspect within a tree.

7.3 Tree and shrub planting of native species would provide and contribute to the improvement of the scrub habitat present replacing some of the less ecologically viable habitat currently present within the site. Native herbaceous and grassland species could also be planted into newly landscape areas, providing a valuable nectar source for invertebrate species. These would enable an improved score on the habitat condition assessment criteria to be achieved.

7.4 **Table 8: 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 |

Sorbus aucuparia

Rowan

7.5 **Table 9: 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>Myosotis arvensis</i> | Field forget-me-not |
| <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 4th Edition.

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 2.1 at <https://ukhab.org/>

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

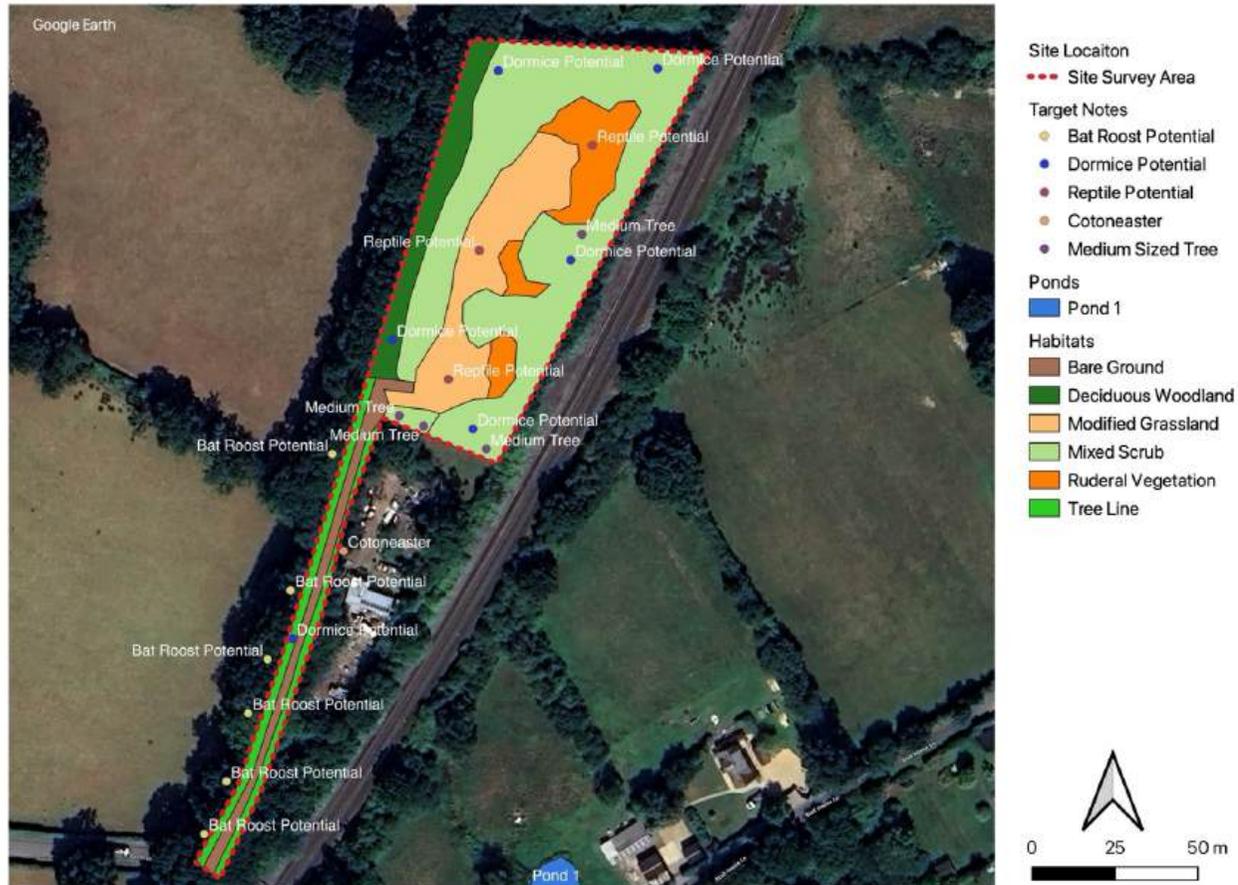
Mitchell-Jones, A.J. & McLeish, A.P. (Eds) (2004). Bat Workers' Manual (3rd Ed.). JNCC, Peterborough.

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

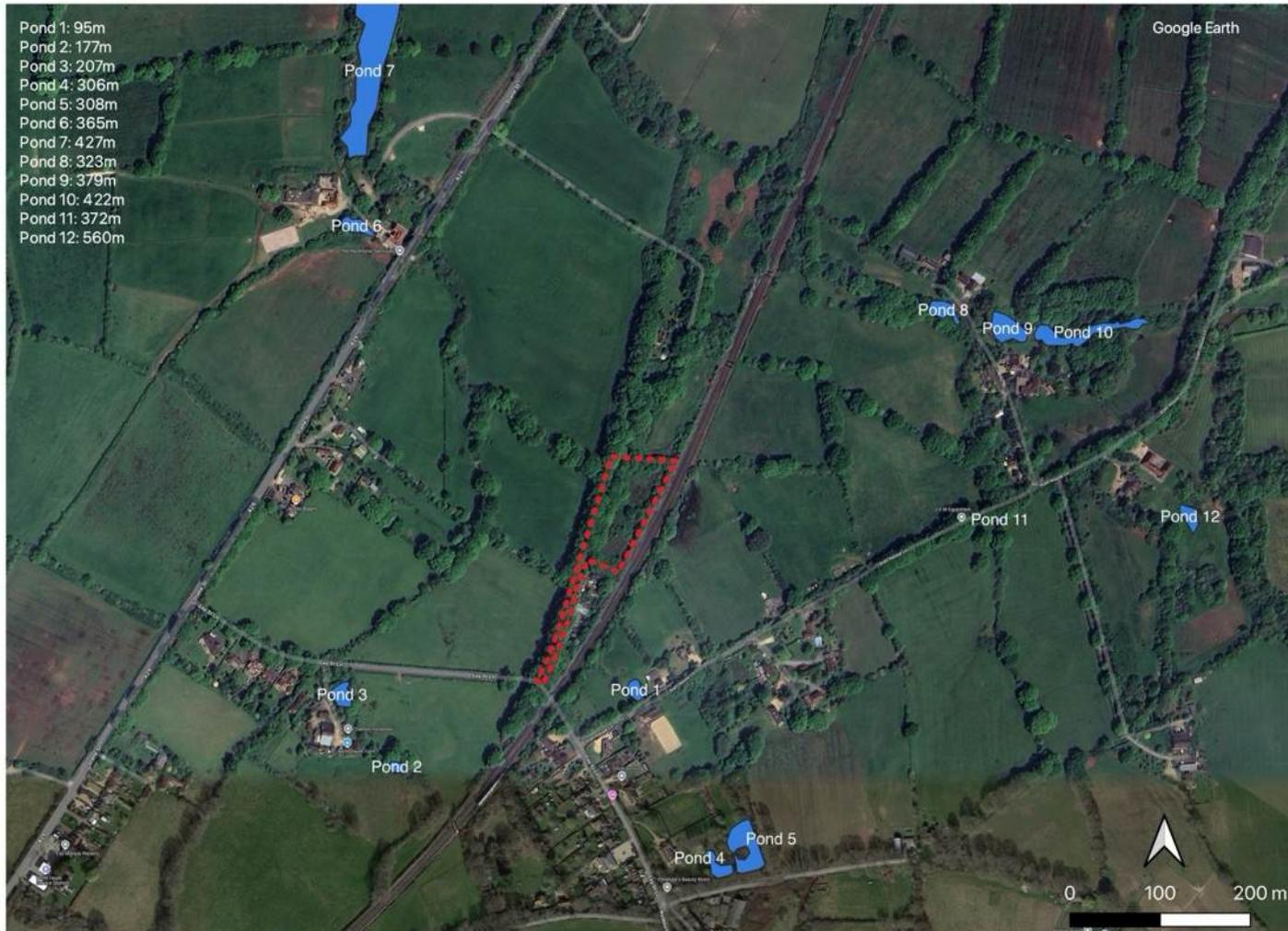
The Conservation of Habitats and Species Regulations 2017.

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

APPENDIX A: PRELIMINARY ECOLOGICAL WALKOVER SURVEY HABITAT MAP



APPENDIX B: PONDS WITHIN 500M



APPENDIX C: CONDITION ASSESSMENT OF HABITATS

| Habitat | Area/ Length/ Number | Criteria Failed | Criteria Failed Rules | Condition |
|---------------------------|-------------------------|-----------------|--|------------------------|
| <i>Ruderal Habitat</i> | <i>0.0842ha</i> | <i>None</i> | <i>N/A</i> | <i>Good</i> |
| <i>Deciduous Trees</i> | <i>4 medium trees</i> | <i>None</i> | <i>N/A</i> | <i>Good</i> |
| <i>Mixed Scrub</i> | <i>0.3675ha</i> | <i>B</i> | Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present. | <i>Moderate</i> |
| | | <i>E</i> | There are clearings, glades or rides present within the scrub, providing sheltered edges. | |
| <i>Bare Ground</i> | <i>0.0571ha</i> | <i>All</i> | <i>All criteria failed. No vegetation growth or ecological value.</i> | <i>Poor</i> |
| <i>Deciduous Woodland</i> | <i>0.0803ha</i> | <i>C</i> | Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, and other invasive species ³ <10% cover. | <i>Good (36 score)</i> |
| | | <i>I</i> | Recognisable woodland NVC plant community ¹⁰ at ground layer present. | |
| | | <i>M</i> | Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground ¹⁴ . | |
| <i>Modified Grassland</i> | <i>0.1407ha</i> | <i>A</i> | The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ | <i>Poor</i> |

Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.

Treeline

0.295km

D

There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice².

Moderate

APPENDIX D: PHOTOS OF THE SITE

Plate 1: Access Track and Treeline

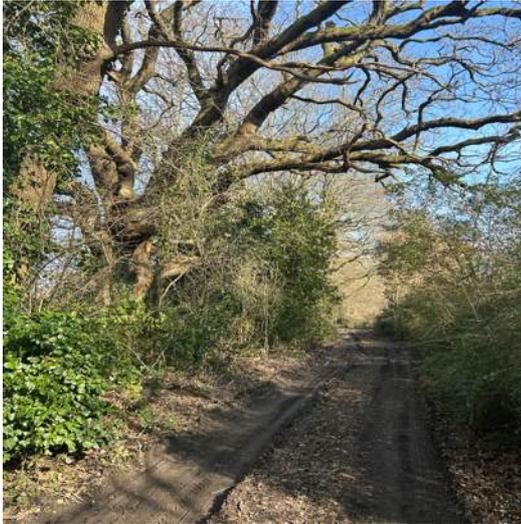


Plate 2: Ivy Covered Trees



Plate 3: Tree with Bat Roost Potential Features



Plate 4: Invasive Cotoneaster



Plate 5: Treeline with Scrub



Plate 6: Opening into Deciduous Woodland



Plate 7: Bramble Scrub



Plate 8: Ruderal Habitat



Plate 9: Modified Grassland Transitioning into a Tussocky Sward



Plate 10: Medium Sized Tree



Plate 11: Wetter Ground Area



Plate 12: Thicker Bramble and Ruderal



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

| Species | Legislation (England & Wales) | Offences | Licensing procedures (England & Wales) |
|---|--|--|--|
| <p>Bats European protected species</p> | <p>Conservation of Habitats and Species Regulations 2017</p> | <p>Deliberately¹ capture, injure or kill a bat; deliberate disturbance² 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.]</p> | <p>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)</p> |
| | <p>Wildlife and Countryside Act 1981 (as amended) S.9</p> | <p>Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.</p> | <p>Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.</p> |
| <p>Great Crested Newt European protected species</p> | <p>Conservation of Habitats and Species Regulations 2017</p> | <p>Deliberately¹ capture, injure or kill a great crested newt; deliberate disturbance² 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.</p> | <p>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)</p> |
| | <p>Wildlife and Countryside Act 1981 (as amended) S.9</p> | <p>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.</p> | <p>Licences issued for science (survey), education and conservation by Natural England.</p> |
| <p>Dormice European protected species</p> | <p>Conservation of Habitats and Species Regulations 2017</p> | <p>Deliberately¹ capture, injure or kill a dormouse; deliberate disturbance² of dormouse; or damage or destroy a breeding site or resting place used by a dormouse.</p> | <p>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)</p> |
| | <p>Wildlife and Countryside Act 1981 (as amended) S.9</p> | <p>Intentionally or recklessly obstruct access to any structure or place used for shelter or protection or disturb a bat in such a place.</p> | <p>Licence from NE is required for surveys (scientific purposes) that would involve disturbance of bats or entering a known or suspected roost site.</p> |

| Species | Legislation (England & Wales) | Offences | Licensing procedures (England & Wales) |
|--|---|---|--|
| 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) |
| 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 |
|--|---|---|--|
| <p>Special Area of Conservation (SAC)</p> <p>Special Protection Area (SPA)</p> <p>Wetland of International Importance (Ramsar site)</p> | <p>Conservation of Habitats and Species Regulations 2010</p> <p>EC Directive on the conservation of natural habitats and of wild fauna and flora (92/42/EEC).</p> <p>EC Directive on the conservation of wild birds (79/409/EEC).</p> <p>Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (the Ramsar Convention).</p> | <p>Planning controls are effected through Part 2 of the Conservation of Habitats and Species regulations 2010 (Reg 21) and Part 6 (Regs 61-67).</p> <p>The legislation for the Site of Special Scientific Interest which will underpin each designation also applies.</p> <p>These sites are given protection through policies in the Local Development Plan.</p> | <p>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.</p> <p>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.</p> |
| <p>Site of Special Scientific Interest (SSSI)</p> | <p>Wildlife and Countryside Act 1981 (as amended)</p> | <p>It is an offence to carry out or permit to be carried out any potentially damaging operation.</p> <p>SSSIs are given protection through policies in the Local Development Plan.</p> | <p>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.</p> <p>S.28G places a duty on all public bodies to further the conservation and enhancement of SSSIs.</p> <p>Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.</p> |
| <p>Local Nature Reserve (LNR)</p> | <p>National Parks and Access to the Countryside Act 1949 S.21</p> | <p>LNRs are given protection through policies in the Local Development Plan.</p> | <p>LNRs are generally owned and managed by local authorities.</p> <p>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.</p> <p>Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM 2005) for England or Technical Advice Note 5 in Wales.</p> |
| <p>Locally Designated Sites</p> | <p>There is no statutory designation for these</p> | <p>Sites are given protection through policies in the Local Development Plan.</p> | <p>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.</p> |