AEWC Ltd

Animal Ecology & Wildlife Consultants

Extended Phase 1 Habitat Survey

Land to the East of Tilletts Lane

Warnham
Horsham
West Sussex

Natalie Arscott

23-246
November 2024

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Contents

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Summary

- AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an extended Phase 1 habitat survey at Land to the east of Tilletts Lane, Warnham, Horsham, West Sussex at central grid reference TQ 15533 34010 to help inform the proposed development of the site.

- This report details the results of the survey, which was carried out on the 10th April 2024 by qualified ecologist Natalie Arscott, to record and map the habitats present, assess the site for the potential presence of any protected species or species of conservation concern, and identify habitats of conservation importance.

- Additional information regarding the present and historical ecological interest of the site and within a 2km radius was provided by Sussex Biodiversity Record Centre. This helps to inform the likelihood of protected species occurring within the site boundary.

- The site is approximately 3.55ha in size, with the main development area comprising two fields, the western of which is arable with the eastern field being grassland. The site boundary also encompasses Tilletts Lane to the west, the field corner where Tilletts Lane meets Knob Hill (formerly Threestile Road), a footpath adjoining to Knob Hill to the east, and a footpath adjoining to Caryll Place to the south. There are several hedgerows and trees across the site.

- The habitats onsite are common and widespread. Much of the site area is of low ecological value, with little vegetation cover and heavily modified by human activities. However, bramble scrub in the field margins provides dense vegetation cover which may be of value to wildlife. The native hedgerows, native hedgerows with trees, and lines of trees provide good habitat connectivity across the landscape and offer habitat for a range of wildlife. Most of the native hedgerows are priority habitat. The individual trees also have biodiversity value.

- **Further surveys will be required for bats, great crested newts, hazel dormice, and reptiles, to determine their presence or likely absence and, where present, how they use the site and how they may be impacted by development**.

- **Other measures to avoid ecological impacts include avoiding the spread of invasive plant species, the retention and protection of native hedgerows with appropriate compensation where this is not possible, a pre-works site check for badgers, covering trenches at night, minimising and controlling lighting, vegetation removal outside of the breeding bird period, a precautionary method statement regarding great crested newts for improvement works to the footpaths and roads, careful site clearance to avoid harm to small mammals, and consideration for SPI including hedgehogs, stag beetles, skylarks, and common toads in clearance works and development design**.

This report has been prepared by AEWC Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

1.1 AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake an extended Phase 1 habitat survey at the Land to the east of Tilletts Lane, Warnham, Horsham, West Sussex to help inform the proposed development of the site.

1.2 This survey comprised a desktop study of biological records within the vicinity of the site, an ecological walkover survey to record and map the habitats present and an assessment for protected wildlife and species of conservation importance, including habitats, and was carried out by a qualified ecologist Natalie Arscott on the 10th April 2024.

1.3 This report presents the results of the following:

- Desktop Biodiversity Report
- UK Habs Habitat Survey
- Protected Species Walkover Survey

1.4 In addition, the report outlines any recommendations/further surveys that may be necessary. This will ensure that any protected species are not detrimentally impacted by the proposed development works on site, that there is no loss of ecological viability and that the favourable conservation status of the species in the local area are not affected.

2 Background

2.1 The proposed development site is located at Land to the east of Tilletts Lane, Warnham, Horsham, West Sussex at central grid reference TQ 15533 34010.

2.2 The site is located in the village of Warnham, northwest of Horsham and west of the A24. The surrounding landscape includes a diverse mix of habitats, such as ancient and semi-natural woodlands, traditional meadows, grasslands, native hedgerows, and arable and pastoral agricultural lands. Wetlands, ponds, and water bodies, particularly within Warnham Local Nature Reserve, are also present. To the south is residential development. See Figure 1.

2.3 The site covers approximately 3.55 hectares, with the main development area comprising two fields, the western of which is arable with the eastern field being grassland. The site boundary also encompasses Tilletts Lane to the west, the field corner where Tilletts Lane meets Knob Hill (formerly Threestile Road), a footpath adjoining to Knob Hill to the east, and a footpath adjoining to Caryll Place to the south. There are several hedgerows and trees across the site. See Figure 2.

2.4 The proposed development plan involves the construction of approximately 60 dwellings, with associated public greenspace, parking, access roads, and footpaths. The majority of the habitat area on the main part of the site will be affected by these proposals. The footpaths and Tilletts Lane are to be subject to improvement works. See Figure 3 for draft plans.

FIGURE 1: SHOWING THE SITE LOCATION

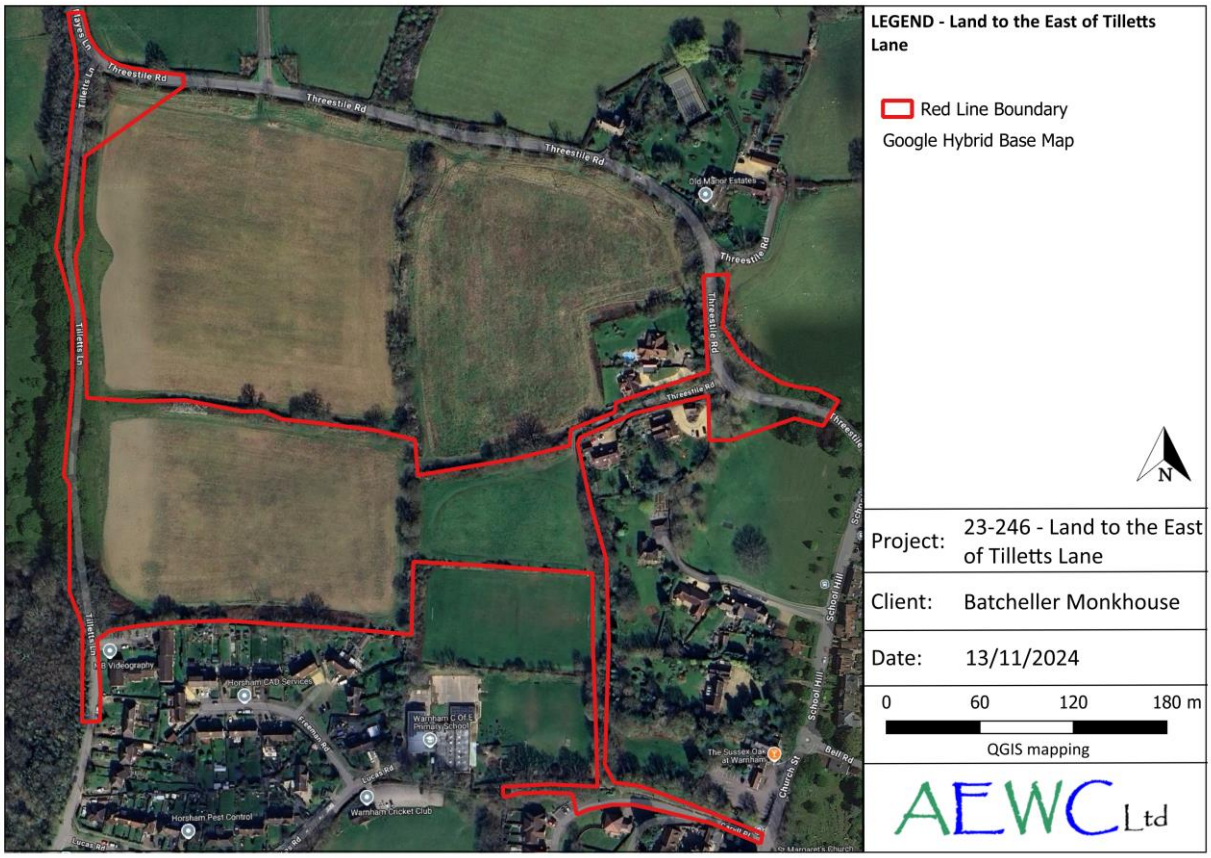

FIGURE 2 : AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY

FIGURE 3: PROPOSED PLANS

3 Methods

Desk Study

3.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra) was consulted to obtain information about any international or European level designated nature conservation sites within 2km of the site boundary, afforded protection either directly by the Conservation of Habitat and Species (Amendment)(EU Exit) Regulations 2019 or to the same level of protection through planning policy (the National Planning Policy Framework and Local Development Framework). Information regarding statutory designated sites, such as Sites of Special Scientific Interest (SSSI) within a 2km radius of the site, were also obtained from MAGIC.

3.2 Aerial photos of the site (Google Earth, 2024) were examined to determine habitats surrounding the site and hence species likely to be present in order to make appropriate recommendations in the wider landscape context.

3.3 Records of protected and notable species and non-statutory designated sites within 2km of the site were requested from the local biological records centre (Sussex Biodiversity Record Centre).

3.4 Records were screened for relevance and age with only those from the last 10 years and of species that could occur on site considered further.

3.5 A search for waterbodies within 500m of the site boundary was undertaken using MAGIC mapping in order to assess their connectivity to the site.

UK Habs Habitat Survey

3.6 A daytime ecological walkover assessment was carried out on the 10th April 2024 to record and map the habitats present, evaluate the site for its potential to support protected species in addition to other species of conservation importance that could be relevant in respect of planning policies.

3.7 The survey involved a UK Habitat Classification System Survey which was carried out based on the standard methodology produced by UKHab Ltd (2023) and included searches for signs of protected species, as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2017). This involves the following elements:

- Habitat mapping using a set of standard colour codes to indicate habitat types on a UK Habitat Classification Map.
- Description of features of ecological or nature conservation interest in notes relating to numbered locations on the UK Habitat Classification Map, called Target Notes (for habitat and features of possible interest).
- A plant species list with subjective estimates of the relative abundance of species in selected habitat parcels.

3.8 Plant nomenclature in this report follows Stace (2010) for native and naturalised species of vascular plant. Nomenclature for mosses and liverworts follow the Checklist for British and Irish Bryophytes 2009. Plant names in the text are given with

the English name first, followed by the Latin name. Latin names for all species are given just once and not repeated.

Protected Species Walkover

3.9 An assessment was made of habitat suitability in and around the site for those protected species that occur in the region. Obvious signs and incidental sightings of protected species are noted when encountered, but walkover surveys do not usually confirm species presence or absence.

3.10 Taking into consideration the geographical region and habitat type, species that could be encountered are:

- badger;
- bats;
- breeding birds;
- great crested newt;
- hazel dormice;
- otter;
- reptiles;
- water vole;
- other mammals; and
- other Species of Principal Importance (SPI) (e.g. hedgehog, stag beetle etc).

3.11 In addition, observations of any invasive species, important plant communities, plant species of note, Habitats of Principal Importance (HPI) or other valuable ecological features will be recorded and detailed.

3.12 Details of the initial survey method for each species are given below.

3.13 **Badger** – an initial assessment was carried out to identify areas that might be used by badgers (*Meles meles*). Signs of badgers including setts, incidental foraging signs, runs, hairs and latrines are recorded if encountered during the survey. Where possible the area within 30m of the site is also searched for badger setts.

3.14 **Bats** – The site and the surrounding area was assessed for the suitability of the habitat to support foraging and commuting bats. There are no buildings on the site. Trees were not assessed for roosting potential as part of this survey since it was unknown which, if any, of the trees are to be removed.

3.15 **Breeding Birds** - habitats were assessed for their suitability for nesting birds. This would centre on birds that favour hedgerows, agricultural fields, scrub, and trees.

3.16 **Great Crested Newt** - initial surveys centre on identifying suitable habitat within the site. If breeding ponds are present within the locality then great crested newt (*Triturus cristatus*) could potentially be using the terrestrial habitat on the site. Maps are used to identify any ponds (that are not isolated by unsuitable habitat or physical barriers) within 500 metres of the site. A Habitat Suitability Index (HSI) is used to quantifiably assess whether a pond is suitable, this is undertaken for any onsite ponds during the walkover survey.

3.17 **Hazel Dormice** – scrub and areas of dense vegetation are assessed for their suitability for foraging and nesting hazel dormice (*Muscardinus avellanarius*). Favoured berry and nut bearing species such as hawthorn, hazel and bramble were looked for in particular. Additionally, the connectivity of this habitat and to suitable habitat beyond the site is also assessed. If hazel nuts are present a brief search for nuts that have been chewed by hazel dormouse (i.e. displaying the characteristic smooth round hole) was conducted.

3.18 **Otter** - initial surveys aim to assess the site for watercourses suitable for otters (*Lutra lutra*). If suitable watercourses are present on site, evidence of otter is searched for. Signs of otter includes spraints, feeding remains and sightings are recorded if encountered during the survey.

3.19 **Reptiles** - the site was assessed for habitat suitable for reptiles, such as long grassland and areas of scrub, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes and walls), hibernation sites (e.g. banks, log piles and piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).

3.20 **Water vole** - initial survey aims to assess the site for watercourses that may be suitable for water voles *(Arvicola amphibious*). If suitable watercourses are present on site, evidence of water voles is searched for. Signs of water voles includes faeces, latrines, feeding stations, burrows, footprints, runs or pathways and sightings which are recorded if encountered during the survey.

3.21 **Other mammals** – any signs of occupancy by other mammals (e.g. rabbit warrens) are recorded.

3.22 **Other Species of Principal Importance (SPI)** – the habitats present on site were assessed for the likelihood of presence for species of regional and national importance.

3.23 **Invasive species** - Any invasive plant or animal species identified during the site walkover are recorded.

3.24 **Plant species of note** – Any plant species of conservation concern found on the site are recorded.

3.25 **Habitats of Principal Importance** - Habitats of Principal Importance within or adjacent to the site (such as arable field margins, traditional orchards, ponds, rivers, wet woodlands) are recorded.

3.26 **Other valuable ecological features -** Other ecological features e.g. ancient woodland, veteran trees, bird feeding stations etc, habitat enhancements etc. within or adjacent to the site are recorded.

4 Constraints/Limitations

4.1 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

4.2 Some protected species records are confidential and therefore not included within the data search results provided by the records centre. Absence of records does not automatically correspond to absence of species within the impact zone of the development.

4.3 The survey was carried out early in the growing season and therefore some plant species may not have been visible above ground or readily identifiable.

5 Results

Desk Study

Sites and Habitats

Statutory Designated Sites

5.1 There is one statutory site within 2km of the proposed development site. This is Warnham Local Nature Reserve (LNR), located 1.3km to the southeast at its closest point. The A24 dual carriageway reduces habitat connectivity between the LNR and the site.

Non-statutory Designated Sites

5.2 There are two non-statutory sites located within 2km of the proposed site. These are Benland Wood Local Wildlife Site (LWS), located 460m to the west, and Warnham Mill Pond LWS, located 1.3km to the southeast.

Habitats of Principal Importance

5.3 Habitats data available via MAGIC was reviewed for the presence of Habitats of Principal Importance (HPI). There are no HPI mapped within the site. Deciduous woodland priority habitat is adjacent to the west of Tilletts Lane at the southwest corner of the site.

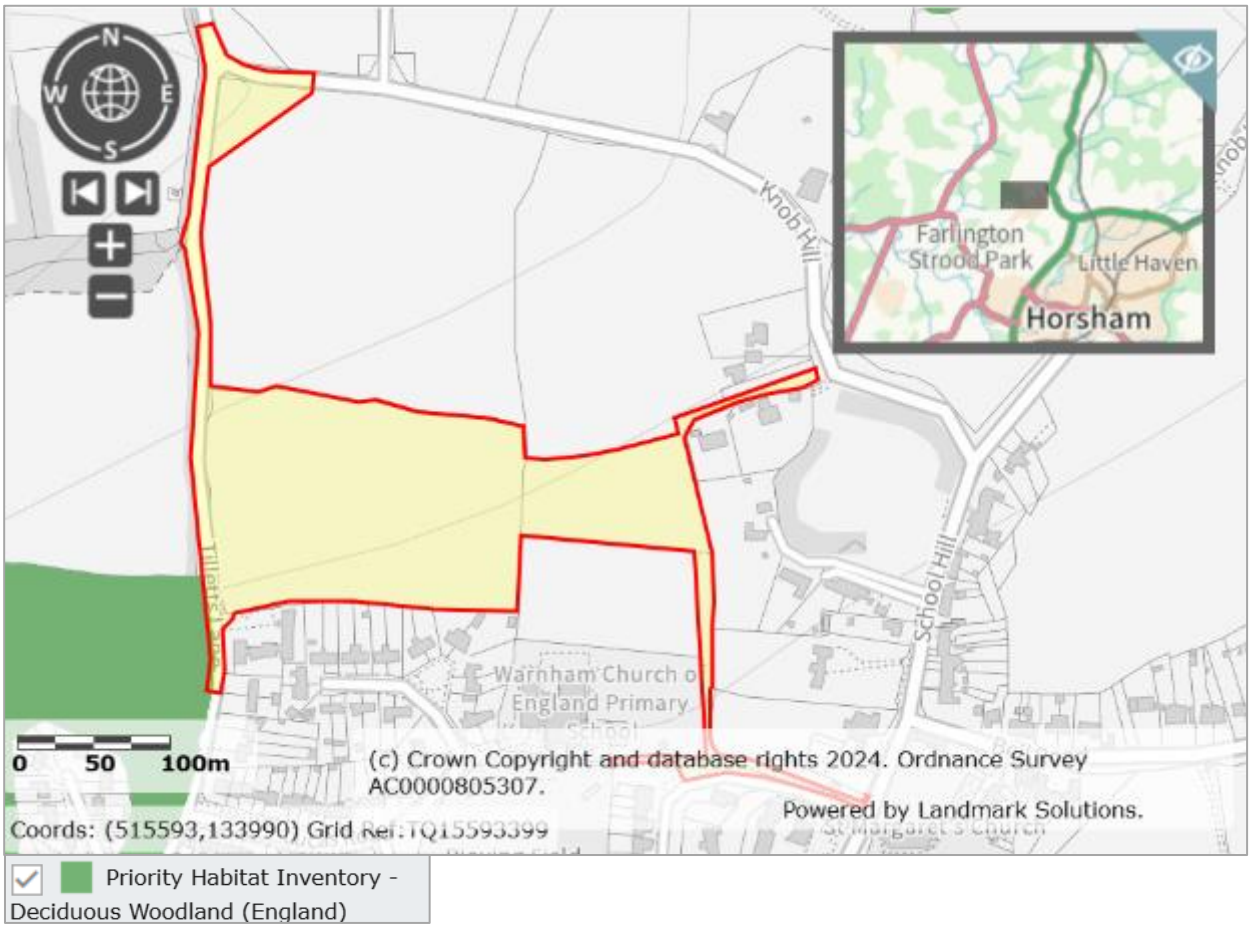

FIGURE 4: HABITATS OF PRINCIPAL IMPORTANCE ON AND ADJACENT TO THE SITE

Waterbodies within 500m of the site boundary

5.4 The Ordnance Survey map available via MAGIC was reviewed for ponds within the accepted dispersal distance of 500m that are not separated from the site by significant barriers to dispersal such as main roads. Eleven ponds were found occurring in all directions (see Figure 5): These are listed below:

- Pond 1: ~480m northwest
- Pond 2: ~425m northwest
- Pond 3: ~230m northwest
- Pond 4: ~250m north
- Pond 5: ~375m north
- Pond 6: ~385m northeast
- Pond 7: ~330m west
- Pond 8: ~300m west
- Pond 9: ~135m west
- Pond 10: ~485m west
- Pond 11: ~145m southeast

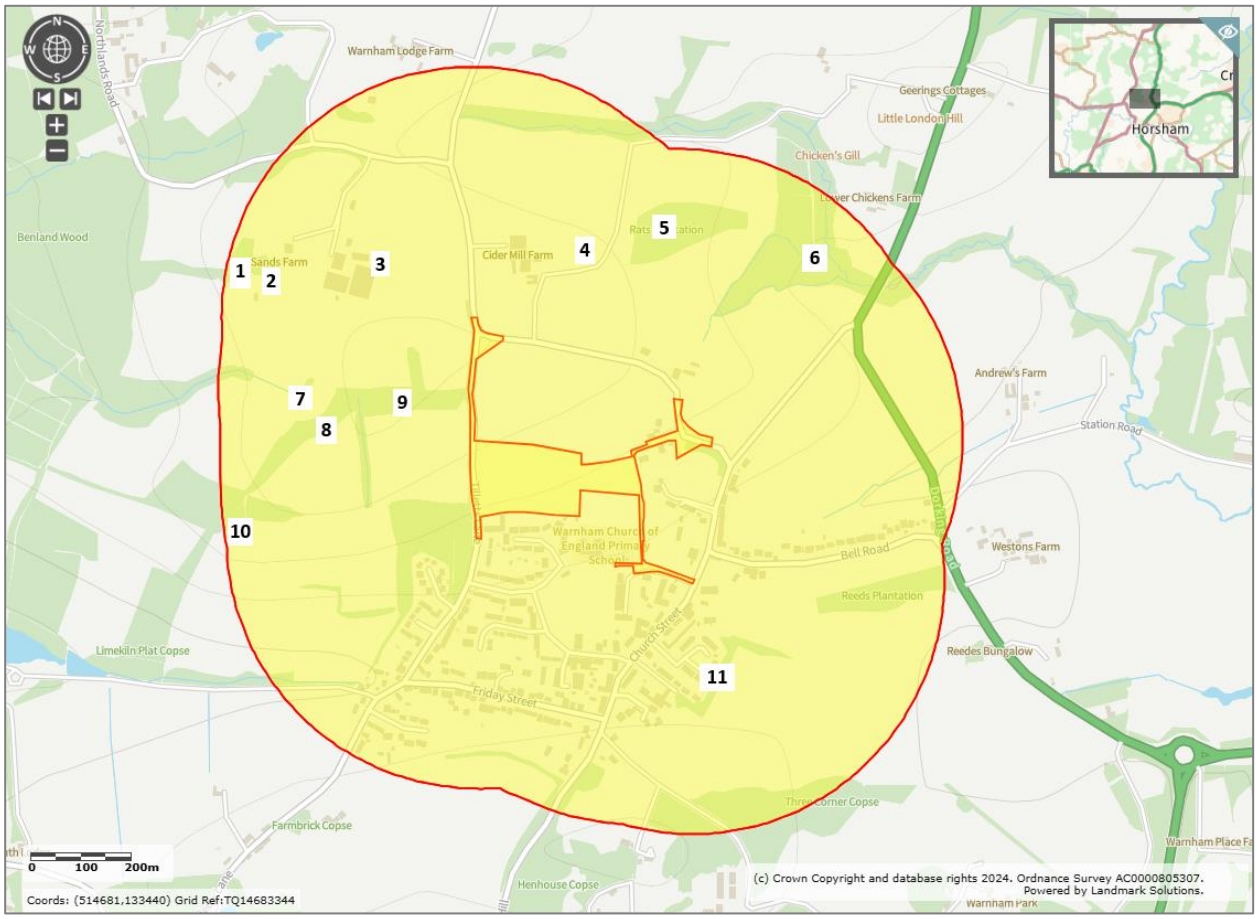

FIGURE 5: WATERBODIES WITHIN 500M

Protected Species

Badger

5.5 No records of badger within 2km on the site were returned. Badger records are kept confidentially and not provided by this Local Records Centre.

Bats

5.6 55 records of bats from at least seven species were recorded within 2km of the site in the past 10 years, including serotine (*Eptesicus serotinus*), noctule bat (*Nyctalus noctula*), whiskered bat (*Myotis mystacinus*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Nathusius's pipistrelle (*Pipistrellus nathusii*), and brown long-eared bat (*Plecotus auritus*).

Birds

5.7 Over 1200 records of 51 notable bird species including lapwing (*Vanellus vanellus*), corn bunting (*Emberiza calandra*), skylark (*Alauda arvensis*), yellowhammer (*Emberiza citrinella*), nightingale (*Luscinia megarhynchos*), spotted flycatcher (*Muscicapa striata*), hawfinch (*Coccothraustes coccothraustes*), ring ouzel (*Turdus torquatus*), cuckoo (*Cuculus canorus*), and snipe (*Gallinago gallinago*) were recorded within the previous 10 years.

Great crested newt

5.8 Twelve records of great crested newts were made within 2km of the site in the past 10 years, the most recent of which was in 2018, located 1.64km to the southeast. The closest record is approximately 760m to the southwest.

Hazel dormice

5.9 No records of hazel dormouse were found within 2km of the site.

Otter

5.10 No records of otter were found within 2km of the site.

Reptiles

5.11 Ten records of reptiles from three species were recorded within the previous 10 years, including grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*), and slow worm (*Anguis fragilis*).

Water vole

5.12 No records of water vole were found within 2km of the site.

Other Mammals

5.13 16 records of European rabbit (*Oryctolagus cuniculus*) were recorded within the previous 10 years.

Other Species of Principal Importance (SPI)

5.14 Records of the West European hedgehog (*Erinaceus europaeus*), harvest mouse (*Micromys minutus*), polecat (*Mustela putorius*), common toad (*Bufo bufo*), pool frog (*Pelophylax lessonae*), stag beetle (*Lucanus cervus*), and 44 Lepidoptera species of principal importance were recorded within the last 10 years.

Field Survey

Habitats and Plants

5.15 UK Habs Habitat maps are included in Figures 6 – 10. The habitats present on the site are described below.

Bramble scrub

5.16 A belt of dense bramble (*Rubus fructicosus* agg.) scrub, up to 25m wide in places, is present in the field margins along the southern and western boundaries of the western field that makes up the main development area. A similar belt of bramble scrub is present in the field margin where the site boundary cuts across the field corner at the Tilletts Lane/Knob Hill junction.

5.17 In the eastern part of the site, narrower belts of lower-level bramble scrub are present on the verge on the eastern side of Knob Hill and adjacent to the north of the footpath that connects Knob Hill to the main development area.

	
Photograph 1 – belt of bramble scrub in the field margins.	**Photograph 2 –** belt of bramble scrub in the field margins.

Developed land; sealed surface

5.18 There are no areas of developed land; sealed surface within the main development area. However, the site boundary encompasses sections of Tilletts Lane, Knob Hill, and Caryll Place, as well as surfaced footpaths leading off these, which comprise hardstanding.

	
Photograph 3 – Tilletts Lane.	**Photograph 4 –** sealed surface footpath in the south of the site.

Modified grassland

5.19 Within the field margins of the arable (western) field in the main development area and corner of the arable field adjacent to the Tilletts Lane/Knob Hill junction is modified grassland. Much of this is subject to scrub encroachment and paths have been worn through the grassland due to heavy usage by walkers. Species within the field margins include perennial rye-grass (*Lolium perenne*), false oat-grass (*Arrhenatherum elatius*), cock's-foot (*Dactylis glomerata*), creeping thistle (*Cirsium arvense*), greater plantain (*Plantago lanceolata*), common nettle (*Urtica dioica*), dock (*Rumex* sp.), bramble, buckthorn (*Rhamnus* sp.) creeping buttercup (*Ranunculus repens*), dandelion (*Taraxacum* sp.), white clover (*Trifolium repens*), red dead-nettle (*Lamium purpureum*), cow parsley (*Anthriscus sylvestris*), and hard rush (*Junus inflexus*). There were typically less than 6 species present per m^2.

5.20 The eastern field in the main development area comprises entirely modified grassland. This is regularly cut to a short sward length and is also frequented by walkers, with a worn path around the edge. Meadow foxtail (*Alopecurus pratensis*) is the dominant species, with occasional perennial rye-grass, dandelion, hogweed (*Heracleum sphondylium*), creeping buttercup, meadow buttercup (*Ranunculus acris*), dock, cleavers (*Galium aparine*), cow parsley, lady's smock (*Cardamine pratensis*), bush vetch (*Vicia sepium*), creeping thistle, and common daisy (*Bellis perennis*). There were typically 5 – 7 species present per m^2.

5.21 Smaller areas of modified grassland are present across the remainder of the site. There are grass verges at the road edges in unshaded areas. The site boundary includes the corner of the village green adjacent to Knob Hill, which is regularly mown and managed for amenity purposes. Short mown amenity grassland is also present adjacent to Caryll Place and either side of the track leading off Knob Hill in the east of the site. The footpath connecting Knob Hill to Caryll Place includes sections of modified grassland, however these have been subject to heavy trampling and therefore grass cover is sparse. Species assemblage was characteristic of high nutrient habitats and there were typically less than 6 species present per m^2 in all modified grassland areas discussed above.

Photograph 5 – modified grassland in the arable field margins.

Photograph 6 – modified grassland across the eastern field of the main development area.

Photograph 7 – modified grassland adjacent to the track leading off Knob Hill.

Photograph 8 – modified grassland adjacent to Caryll Place.

Non-cereal crops

5.22 The western field of the main development area is predominantly cropland and the site boundary also cuts across the cropland within the field to the north. At the time of the survey, oilseed rape (*Brassica napus*) was being grown in both fields.

	
Photograph 9 – oilseed rape in the western field of the main development area.	**Photograph 10 –** oilseed rape in the northern field, the corner of which the site boundary cuts across.

Ruderal/Ephemeral

5.23 Ruderal vegetation is present in the verges adjacent to Tilletts Lane. Common nettle is typically dominant, with occasional bramble, cow parsley, dog's mercury (*Mercurialis perennis*), English bluebell (*Hyacinthoides non-scripta*), sedge (*Carex* sp.), dock, and dandelion.

	
Photograph 11 – ruderal vegetation adjacent to Tilletts Lane.	**Photograph 12 –** ruderal vegetation adjacent to Tilletts Lane.

Bare ground

5.24 Much of the footpath connecting Caryll Place to Knob Hill in the east of the site comprises bare ground from heavy use by walkers. Adjacent to Tilletts Lane in the west of the site there are also areas of bare ground that are used for car parking.

	
Photograph 13 – bare ground on the footpath.	**Photograph 14 –** bare ground adjacent to Tilletts Lane.

Non-native and ornamental hedgerow

5.25 There are two short sections of non-native, ornamental hedgerow in the eastern part of the site, both bordering the footpath leading off Knob Hill. To the north of the footpath is a hedge comprising predominantly cherry laurel (*Prunus laurocerasus*) with occasional Chinese privet (*Ligustrum sinense*) and hazel (*Corylus avellana*). To the south of the footpath is a hedge comprising entirely box honeysuckle (*Lonicera nitida*).

	
Photograph 15 – hedge of predominantly cherry laurel.	**Photograph 16 –** hedge of honeysuckle.

Ecologically valuable line of trees

5.26 Two lines of trees are present in the eastern parts of the site. In the northeast of the site, there is a line of trees along the verge adjacent to Knob Hill. These mostly comprise immature sycamore (*Acer pseudoplatanus*) with occasional English oak (*Quercus robur*). In the southeast of the site, a line of trees borders the south of a section of the footpath off Caryll Place. These comprise English oak, field maple (*Acer campestre*), holly (*Ilex aquifolium*), elder (*Sambucas nigra*), sycamore, and hawthorn (*Crataegus monogyna*).

	
Photograph 17 – line of trees in the northeast of the site.	**Photograph 18 –** line of trees in the southeast of the site.

Native hedgerow & native hedgerow with trees

5.27 Native hedgerows with mature trees line the northern, eastern, and western boundaries of both fields within the main development area. The native hedgerow with trees on the eastern boundary of the eastern field extends further south adjacent to the footpath before coming to an end at Caryll Place. The native hedgerow with trees on the western boundary of the western field extends further north along the length of Tilletts Lane. This mostly falls just outside of the site boundary except for at the Tilletts Lane/Knob Hill junction. Hedgerow species include blackthorn (*Prunus spinosa*), hawthorn, hornbeam (*Carpinus betulus*), and hazel. Tree species include English oak, hornbeam, field maple, and holly. There are no sections of hedgerow with more than four native woody species per 30m length, therefore the hedgerows do not qualify as 'species-rich'. All native hedgerows with trees on the site are considered to qualify as native hedgerow priority habitat. None of the hedgerows definitively meet any of the criteria of an 'important hedgerow' under the 1997 UK Hedgerow Regulations. Historic aerial imagery shows these hedgerows as being present in 2001 (the earliest available year of aerial imagery with sufficient clarity to see hedgerows on the site), as such the hedgerows may be over 30 years old, and they provide good wildlife habitat and connectivity. As such, it is possible that they are important hedgerows.

5.28 There are also two native hedgerows without trees on the site. Along the southern boundary of the eastern field of the main development area is a newly planted hedgerow. This is undeveloped and lacks hedgerow structure, instead comprising a line of woody shrubs with gaps. Species include English oak, hawthorn, blackthorn, bramble, and dog rose (*Rosa canina*). Due to its early stage of development, this hedgerow is not considered to qualify as native hedgerow priority habitat. In the south of the site, a hedge comprising hazel and hawthorn runs between Caryll Place and the adjacent footpath to the north. This is maintained at a height of approximately 1 metre and is regularly managed for ornamental value. This hedgerow is considered to qualify as native hedgerow priority habitat. Neither hedgerow is regarded as an important hedgerow under the 1997 UK Hedgerow Regulations.

Photograph 19 – hedgerow with trees separating the two main fields.

Photograph 20 – hedgerow with trees bordering Tilletts Lane.

Photograph 21 – undeveloped hedgerow on the boundary of the eastern field.

Photograph 22 – managed hedgerow adjacent to Caryll Place.

Individual trees

5.29 There are a cluster of individual trees in the northeast of the site, where the footpath joins Knob Hill and on the corner of the village green. These include small, medium, and large-sized trees. Species include ash (*Fraxinus excelsior*), English oak, blackthorn, sycamore, and white poplar (*Populus alba*).

Photograph 23 – individual trees.

Photograph 24 – individual trees.

FIGURE 6: UK HABS HABITAT MAP (WHOLE SITE)

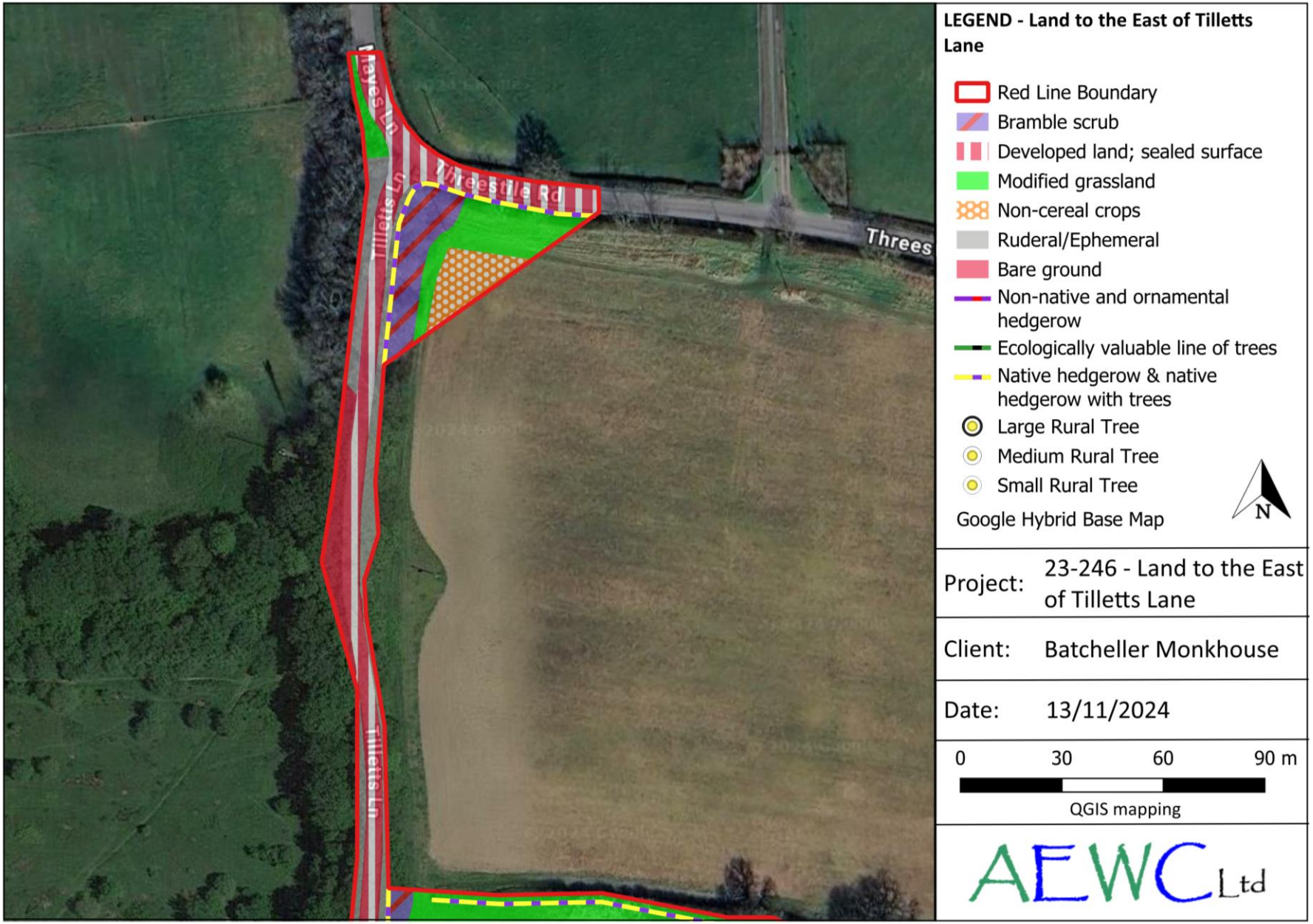

FIGURE 7: UK HABS HABITAT MAP (ZOOM 1 - NORTHWEST)

FIGURE 8: UK HABS HABITAT MAP (ZOOM 2 – MID-WEST)

FIGURE 9: UK HABS HABITAT MAP (ZOOM 3 – MID-EAST)

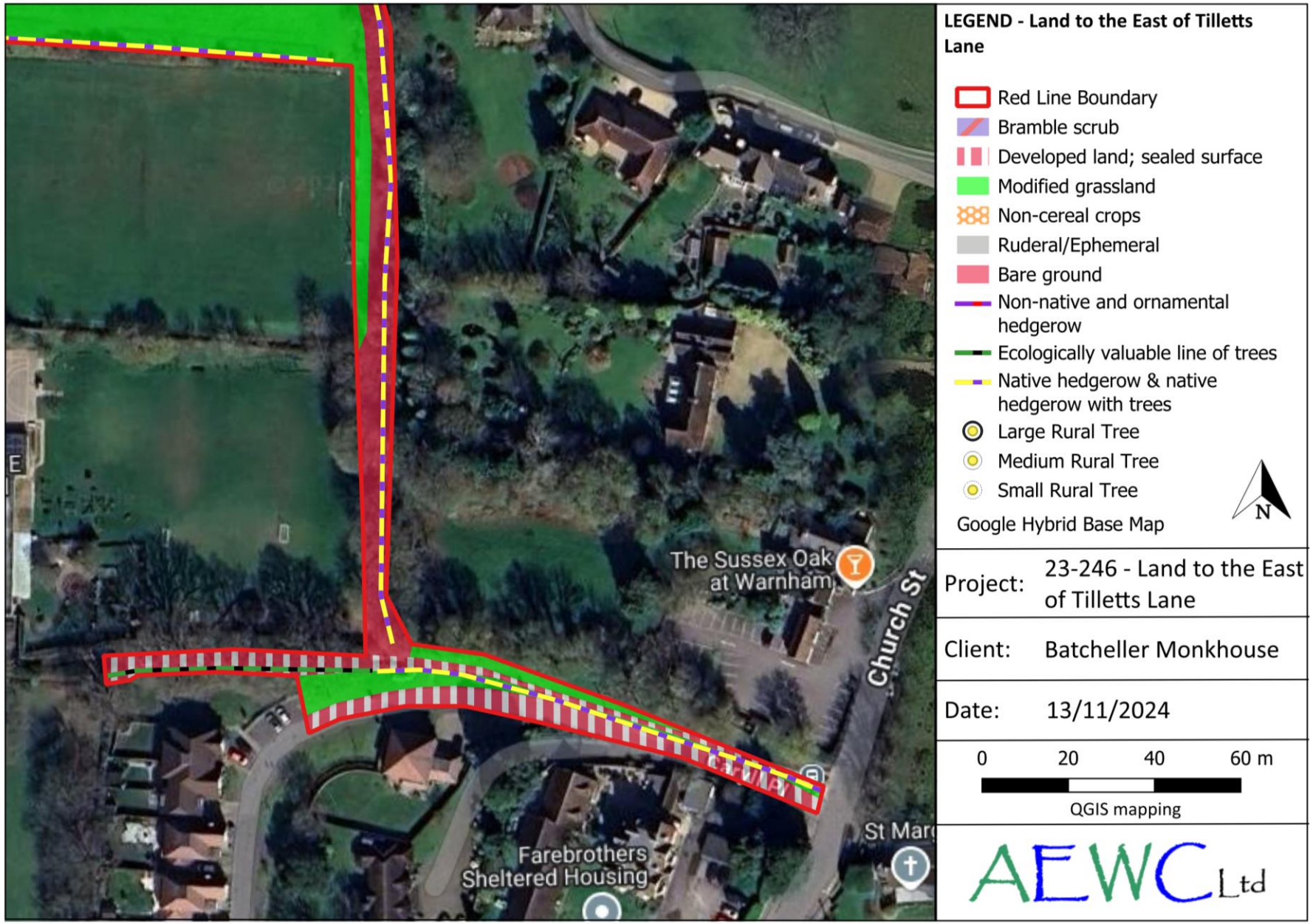

FIGURE 10: UK HABS HABITAT MAP (ZOOM 4 - SOUTHEAST)

Habitat evaluation

5.30 The habitats onsite are common and widespread. The developed land; sealed surface, modified grassland, non-cereal crops, ruderal/ephemeral, bare ground, and non-native and ornamental hedgerows are of low ecological value, offering little vegetation cover and being modified by human activities. Bramble scrub provides dense vegetation cover which may be of value to wildlife. The native hedgerows, native hedgerows with trees, and lines of trees provide good habitat connectivity across the landscape and offer habitat for a range of wildlife. Most of the native hedgerows are priority habitat. The individual trees also have biodiversity value.

Plant species of note

5.31 No plant species of note were identified.

Invasive species

5.30 No invasive species that are listed on Schedule 9 of the Wildlife and Countryside Act were recorded. However, cherry laurel was present in one of the non-native hedgerows in the east of the site. This species can have invasive tendencies.

Protected species and species of conservation concern

Badger

5.31 No badger setts were identified present on site. No evidence of badger activity such as latrines, tracks, guard hairs or snuffle holes were observed on or directly adjacent to the site, which would suggest that the site is otherwise used for foraging. It is considered unlikely that any badger setts are present within 30m of the site boundary as no evidence of badger activity was identified during the survey. There is however suitable habitat on-site for sett building and foraging.

Bats

5.32 There are several mature trees onsite which may offer roosting potential. However, the trees were not individually assessed for potential roosting features as part of this survey, since it was unknown which, if any, trees would be removed.

5.33 The central field areas are of low value for bats, however the hedgerows with trees and wide scrub belts at the field boundaries provide good foraging and commuting habitat, since they offer sheltered linear features for bats to move through the landscape.

Breeding birds

5.34 There is habitat suitable for a range of breeding birds within the hedgerows and trees and the bramble scrub across the site. The arable field could also be utilised by ground-nesting birds such as skylark, although it is smaller than the typical preferred field size for ground-nesting birds, with tall boundary features which can act as a deterrent.

Great Crested Newt (GCN)

5.35 The site is considered to have potential to support terrestrial GCN within the edge habitats. The hedgerows, bramble scrub, and grassland at the field edges and adjacent to roads and footpaths provide suitable sheltered habitat for GCN to commute, forage, and shelter. The central field areas are unlikely to be used by GCN due to the lack of dense vegetation cover.

5.36 No ponds were recorded within the site boundary; therefore, the site is unsuitable for breeding GCN.

Hazel dormice

5.37 The mature native hedgerows and bramble scrub associated with the fields in the main development area are considered to have suitability to support hazel dormouse as they offer foraging and nesting opportunities and are well connected to a network of hedgerows in the wider landscape, with woodland also present adjacent to the southwest. The lines of trees and native hedgerows in the northeast and southeast of the site, associated with footpaths and road, have limited connectivity to other suitable habitat and are therefore unlikely to be used by dormice. None of the other habitats on-site are suitable for dormice.

5.38 No hazel nuts were available to check for those that may have been chewed by hazel dormouse.

Otter

5.39 No watercourses were identified in sufficiently close proximity for otters to utilise the site. The site therefore has negligible potential to support otters.

Reptiles

5.40 The field margins, where there is hedgerow, bramble scrub, and grassland, provide suitable foraging, commuting and sheltering habitat for common reptiles such as slow worms, common lizards and grass snakes. The central field areas are unlikely to be used by reptiles due to the lack of dense vegetation cover.

Water vole

5.41 No watercourses were identified in sufficiently close proximity for water voles to utilise the site. The site therefore has negligible potential to support water voles.

Other Mammals

5.42 No evidence of other mammals was recorded within the site. However, the field margins would be suitable for rabbit warrens and other burrowing small mammals.

Other Species of Principal Importance

5.43 There is potential for the site to support SPI such as hedgehog, stag beetle, skylark, and common toad. Hedgehogs may utilise boundary hedgerows and could forage, commute, and shelter within the site. Stag beetles may utilise deadwood in any of the mature trees on the field boundaries to breed. Skylarks could nest in the arable field onsite, although this is sub-optimal in size for this species. Common toads are habitat generalists and could use any areas of denser vegetation on the site. Habitat suitability for other SPI, such as other invertebrates, is low.

6 Conclusions & Recommendations

6.1 In line with Natural England's Standing Advice, where further survey for protected species is recommended these should be conducted prior to submitting a planning application and appropriate mitigation measures be incorporated into the development design.

Invasive species

6.1 **Care should be taken to prevent the spread of cherry laurel**. Ideally efforts should be made to remove these from the site.

Plant species of note

6.2 No plant species of note were identified, therefore no further action is required.

Habitats of Principal Importance

6.3 **All native hedgerows on-site, except for along the southern boundary of the eastern field, are HPI and should be retained and protected with suitable buffers as far as possible. Any unavoidable losses will require compensation**.

Badger

6.2 The survey did not identify any evidence of badgers on the site, and it is considered unlikely that there is a sett present within 30m. No further surveys for badgers are considered necessary.

6.3 Since the site covers a large area and the habitat is suitable for sett-building, and badgers can create new setts at any time, **it is recommended that a site check for badgers immediately prior to the start of works is carried out**. This should include off-site areas within 30m of the site where possible. Should any setts be identified, further survey work and mitigation, potentially including licensing, may be required.

6.4 **As badgers could potentially be present within the wider area, good building practice should be followed such as covering trenches at night or providing a ramp to prevent animals becoming trapped**.

Bats

6.5 There are a high number of trees across the site, and these have not been assessed for roosting potential as part of this survey. **Should any trees be proposed for removal or pruning, such as for the new access roads, a Ground Level Tree Assessment will be required for these in the first instance to assess whether there are any potential roosting features and whether further surveys are required**.

6.6 The native hedgerows and trees across the site may be used by foraging and commuting bats to navigate the landscape. Based on draft plans, two significant lengths of hedgerow will require removal to create access roads. These are on the hedgerow at the western boundary with Tilletts Lane and the hedgerow separating the two fields in the main development area. Removal of hedgerow adjacent to the east of Tilletts Lane is unlikely to affect habitat connectivity for bats, since a continuous belt of mature trees along the west side of Tilletts Lane will be retained. However, removal of a length of hedgerow between the two main fields will interrupt habitat connectivity here and may impact on bat movements for some species.

6.7 **Due to the potential reduction in habitat connectivity at the hedgerow separating the two main fields, a static detector survey should be carried out to assess how the hedgerow is used by bats. This will involve installing a static bat detector monthly between April and October during suitable weather conditions**.

6.8 Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance across the site. **External artificial lighting should be kept to the minimum necessary, and preferably on a motion sensor to reduce lighting time. Boundary hedgerows and trees must not be illuminated**.

Breeding birds

6.9 **Scrub, hedgerow or tree removal should be undertaken outside the breeding bird period from March to August. If suitable crop or vegetation for ground-nesting birds such as skylark is present within the arable field, this should also be cleared outside the breeding bird period. Should any vegetation clearance be scheduled to take place between the beginning of March and the end of August, this must be immediately preceded by a survey to check for nesting birds, carried out by a suitably qualified ecologist**. No vegetation can be cleared whilst a nest is occupied, regardless of species.

6.10 **It is recommended that buffers are implemented between retained hedgerows and the development, to prevent disturbance to birds that likely utilise this habitat**.

Great Crested Newt (GCN)

6.11 To assess potential impacts on GCN, the site has been separated into the main development area and the footpath and road parts where improvement works are proposed.

Main Development Area

6.12 The main development area comprises the two fields where housing and associated works are proposed. There is a single pond within 250m of the main development area, this being pond 9 as per Figure 5, located 180m to the northwest of the main development area. All other ponds are over 250m from this part of the site. There is 1.5ha of potentially suitable terrestrial habitat for GCN in this part of the site, this comprising the entirety of the main development area except for the cropland area. Based on this information, a Rapid Risk Assessment calculation has been carried out for the main part of the site, see Figure 11.

Component	**Likely effect** (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	**Notional offence probability score**
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)	1 - 5 ha lost or damaged	0.4
Land >250m from any breeding pond(s)	1 - 5 ha lost or damaged	0.04
Individual great crested newts	No effect	0
	Maximum:	0.4
Rapid risk assessment result:	**AMBER: OFFENCE LIKELY**	

FIGURE 11: RAPID RISK ASSESSMENT OF THE MAIN DEVELOPMENT AREA

6.13 The Rapid Risk Assessment shows that an offence is likely if GCN breeding ponds are present within 250m of the main development area, but unlikely if all breeding ponds are over 250m from the main development area.

6.14 One pond (pond 9) is present within 250m of the main development area. **Further survey for GCN will be required for this pond. It is recommended that an initial HSI of this pond is carried out, followed by an eDNA survey, between mid-April and late June. Alternatively, conventional presence / absence surveys could be conducted between mid-March and mid-June.** If presence of GCN is confirmed, a District Licence, or further population surveys (to give a total of six surveys per pond) and a mitigation licence from Natural England, may be required for works to proceed.

Footpaths and Roads

6.15 The remainder of the site is to be subject to improvement works to existing footpaths and roads. Detailed plans are not yet available; however, it is expected that impacts will mostly be to areas with no or little vegetation cover and very low suitability for GCN. However, hedgerows and dense vegetation are adjacent to some of these areas and, in the absence of detailed plans, impacts to these habitats cannot be ruled out.

6.16 There are no ponds within 100m of the site. Ponds 3, 4 and 9 (as per Figure 5) are within 250m of the northwest part of the site and pond 11 is within 250m of the southeast part of the site. All other ponds are greater than 250m from the site. Collectively, there is less than 0.5ha of potentially suitable terrestrial habitat for GCN associated with the footpath and road parts of the site. Based on this information, a Rapid Risk Assessment calculation has been carried out for these parts of the site, see Figure 12.

Component	**Likely effect** **(select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)**	**Notional offence probability score**
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.1
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
	Maximum:	0.1
Rapid risk assessment result:	**GREEN: OFFENCE HIGHLY UNLIKELY**	

FIGURE 12: RAPID RISK ASSESSMENT OF THE FOOTPATH AND ROAD SECTIONS

6.17 Based on the results of the Rapid Risk Assessment, an offence is highly unlikely to result from improvement works to the footpath and road parts of the site, even if the closest ponds are GCN breeding ponds. Therefore, no further surveys are required.

6.18 Due to the presence of suitable terrestrial habitat and records of GCN within 2km of the site, **a precautionary method statement regarding GCN must be produced and followed for the improvement works, to mitigate risks to individual GCN that may use the habitats.** This must be produced prior to the start of works and will include, but not be limited to:

- Provision of a toolbox talk by a suitably licenced ecologist prior to the start of works.
- Removal of potential refuge features such as log piles to be removed by hand under direct supervision of a licenced ecologist.
- Vegetation removal must be done sensitively and checked for GCN immediately beforehand by an ecologist.

Hazel dormice

6.19 The native hedgerows and bramble scrub on-site provide suitable habitat for hazel dormice. There will be removal of sections of hedgerow to facilitate access roads and bramble scrub may be cut back. **Further survey is therefore required. A tube survey will be required, which involves placing tubes in suitable habitat on site and checking them monthly between April and November. If presence of hazel dormouse is confirmed, a licence from Natural England may be required for works to proceed**.

Otter

6.20 The site is considered unlikely to be used by otter and therefore no further surveys for this species are required.

Reptiles

6.21 **A reptile presence survey will need to be undertaken within the main development area to assess whether reptiles are using the site. This will involve placing several refugia mats (usually roofing felt or corrugated tin) in suitable locations on the site and checking them for basking reptiles on at least seven occasions in suitable weather conditions. These surveys can be conducted between March and September / October and will ascertain reptile presence and population size and thus inform the level of mitigation required**.

Water vole

6.22 The site is considered unlikely to be used by water vole and therefore no further surveys for this species are required.

Other Mammals

6.23 **Site clearance work should be undertaken carefully (by hand if necessary) to avoid crushing any small mammals present within their burrows**.

Other Species of Principal Importance

6.24 **The west European hedgehog is an SPI, therefore it is recommended that any dense vegetation, such as scrub and hedgerow, should be cleared sensitively by destructive search with a qualified ecologist present on site. If close board fencing is to be fitted it should be raised above ground level to allow hedgehogs to pass underneath, some habitat areas should also be left un-landscaped to provide shelter and foraging opportunities**. Good building practice recommended for badgers above will ensure that any hedgehogs traversing through the site are not trapped during the works. Additional habitat for hedgehogs could be provided through relaxation of mowing and seeding with an appropriate wildflower meadow mix in some areas of the site.

6.25 **Any deadwood features in mature trees should be retained where they do not pose a health and safety risk, to provide habitat for stag beetles and other saproxylic invertebrates**. It is recommended that log piles and/or stacks are incorporated into the habitat enhancements on-site to provide additional habitat for these species.

6.26 **If the arable field contains crop or vegetation of suitability for nesting skylarks, this should not be cleared during the breeding bird period unless a survey is carried out immediately prior by a suitably qualified ecologist**.

6.27 Common toads will be protected through measures adopted to mitigate risk to GCN and reptiles.

Other valuable ecological features

6.28 **The native hedgerows with trees may be important hedgerows under the 1997 Regulations. The local authority's permission will be required for removal**.

Impact Assessment

6.29 Impacts to bats, GCN, hazel dormice, and reptiles cannot be determined until further surveys have been completed. Specific mitigation may be required.

6.30 Overall, it is considered that there are no likely significant impacts to the other fauna or flora populations within the local area from the proposed works provided the recommendations above are adhered to.

Appendix 1 – Survey Timetable

Species	Survey	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Badger	Bait marking & sett search												
Bats	Roost assessments												
	Ground level tree assess												
	Emergence and activity												
	Hibernation												
	Trapping												
Birds	Wintering												
	Breeding												
Great crested newt	HSI												
	eDNA												
	Presence/absence & popn												
	Refugia												
Hazel dormouse	Tube												
	Nut search												
Otter	Field signs												
Reptiles	Refugia & search												
Water vole	Field signs												
Invertebrates	Presence & communities												
Vegetation	Phase 1 habitat & NVC												

Optimal

Sub-optimal

Outside survey season

Appendix 2 – Legal Protection

General

This section briefly describes the legal protection afforded to protected species and habitats. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation but summarises the salient points.

Badger

Badgers are protected under the *Protection of Badgers Act 1992*. Under this legislation it is an offence to kill or injure a badger, to damage, destroy or block access to a badger sett, or to disturb a badger in its sett. The Act also states the conditions for the protection of badger's licence requirements.

Barn Owl

Barn owls are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981 (as amended)* which makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- take, damage or destroy the nest while that nest is in use or being built;
- take or destroy the egg;
- disturb them while they are in, on, or near a nest containing eggs or young, or to disturb their dependent young;
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

The penalty for an offence involving a barn owl, its nest, or egg, includes a fine of up to £5,000, or up to six months imprisonment, or both, per bird, nest or egg.

Bats

All species of bats are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

A roost is defined as 'any structure or place which a bat uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

Furthermore, seven bat species (barbastelle, bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Breeding Birds

All species of wild bird are protected under Section 1 of the *Wildlife and Countryside Act 1981 (as amended)*. Protection was extended by the *Countryside and Rights of Way (CRoW) Act 2000*. Under the above legislation, it is an offence to intentionally:

- kill, injure or take any wild bird;
- 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.

Certain species are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981 (as amended)* and receive protection under *Sections 1(4)* and *1(5)*. There are special penalties where the offences listed above are committed for any *Schedule 1* species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or
- disturb the dependant young of any such bird.

Amphibians

Natterjack toad, northern pool frog and great crested newt are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Palmate newts and smooth newts are also afforded protection against sale only under Schedule 5 of the *Wildlife and Countryside Act 1981 (as amended)*.

Natterjack toad, common toad, great crested newt and northern pool frog are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Hazel dormouse

Hazel dormouse is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Hazel dormouse is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Otter

Otter is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

Otter is also a Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Reptiles

Common lizard (*Lacerta vivipara*), grass snake (*Natrix natrix*), slow worm (*Anguis fragilis*), and adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the *Countryside and Rights of Way (CRoW) Act 2000*. Under the legislation, it is an offence to:

- intentionally or deliberately kill or injure any individual of these species; or
- sell or attempt to sell any part of these species either alive or dead.

Smooth snake *(Coronella austriaca)* and sand lizard *(Lacerta agilis)* are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

All UK reptile species are Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Water vole

Water vole *(Arvicola amphibious*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)*, which affords them protection under *Section 9*, as amended. This makes it an offence to:

- capture, kill or injure;
- damage, destroy or block access to a place of shelter;
- disturb whilst in a place of shelter or possessing, and

- sell any part of a water vole, dead or alive.

Other Mammals
All mammals receive some protection under the *Wild Mammals (Protection) Act 1996*, which makes it an offence to crush or asphyxiate an animal (e.g. within its burrow).

Species and Habitats of Principal Importance
Section 41 of the *Natural Environment and Rural Communities (NERC) (2006)* requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list has 56 Habitats of Principal Importance and 943 species of principal importance listed and has been drawn up in consultation with Natural England.
The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under *Section 40* of the *Natural Environment and Rural Communities Act 2006*, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Invasive species
It is an offence to plant, or otherwise cause to grow in the wild non-native plant species listed under *Schedule 9* of the *Wildlife and Countryside Act 1981 (as amended)*, for which *Section 14* of the Act applies. These include, but are not limited to:

- Himalayan balsam
- Cotoneaster sp.
- Japanese knotweed
- Giant hogweed.

Ancient woodland
The *National Planning Policy Framework (2012)* states that '*Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss'*. In addition, Natural England's standing advice for ancient woodland states that *an appropriate buffer zone of semi-natural habitat* [be in place] *between the development and the ancient woodland (depending on the scale and impact of development), a minimum buffer should be at least 15 metres to avoid root damage and at least 50m for pollution or trampling"*. Ancient woodlands, and ancient and veteran trees, may also be protected by Tree Preservation Orders.

Sites of Special Scientific Interest (SSSI's)
SSSI's are areas notified under the *Wildlife and Countryside Act 1981, as amended*, as being of special interest for nature conservation. They are the finest sites for wildlife and natural features supporting many characteristic, rare and endangered species, habitats and natural features. LPAs have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI.

National Site Network: Special Protection Areas (SPA), Special Areas of Conservation (SAC) & RAMSAR sites.

Development proposals which will adversely affect these sites are not permitted (except where there are no alternative solutions and the proposal is necessary for imperative reasons of overriding public interest). If a development could possibly impact on a SPA or SAC, the applicant will need to submit an assessment of potential impacts and their significance with their planning application for the local authority to make an 'Appropriate Assessment'.

Local Nature Reserves (LNRs)

These are a statutory designation made by local authorities. LNRs may be given protection against damaging operations and development on and around them via the local plan.

Local Wildlife Sites (LWS)

This is a non-statutory designation for sites identified at a county level. They typically form a network of sites that are recognised of being of conservation importance locally and are often included in Local Authority development plans.

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