



Preliminary Ecological Appraisal

Land at West Hoathly Road

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LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species may be recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

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

1.0 Introduction

Background

1.1 The Ecology Partnership was commissioned by Devine Homes to undertake a preliminary ecological appraisal (PEA) of land at West Hoathly Road, East Grinstead, RH19 4RQ, hereafter referred to as 'the site'.

1.2 The key objectives of a PEA (CIEEM 2017) are to:

- Identify the likely ecological constraints associated with a project;
- Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (CIEEM 2016; BSI 2013, Clause 5.2);
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
- Identify the opportunities offered by a project to deliver ecological enhancement.

1.3 This report comprises the:

- Legislative and planning context (Section 1);
- Assessment methodologies (Section 2);
- Results (Section 3);
- Implications for development (Section 4);
- Recommendation for ecological enhancement (Section 5)
- An impact assessment (Section 6); and
- Conclusions (Section 7).

Site Context and Status

1.4 The site is located east of West Hoathly Road in the town of East Grinstead, East Sussex (TQ 39244 36695). The site covers approximately 1.9ha and comprises woodland, sheep-grazed grassland and boundary hedgerows and treelines. The southern boundary is adjacent to further deciduous woodland. The surrounding area consists of grazed fields to the east and a playing field to the north.

1.5 The site red line application boundary is shown in Figure 1 below.

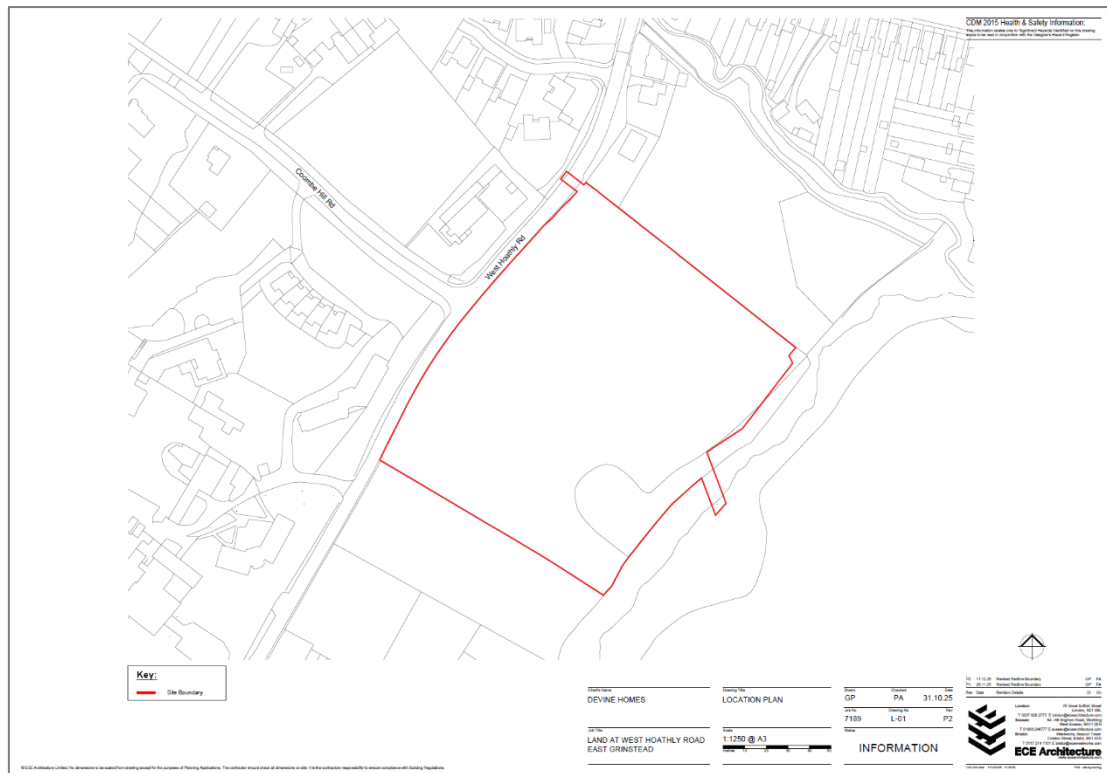


Figure 1: Approximate location of the red line boundary

Description of the Proposed Development

- 1.6 The erection of 44 new homes with access from West Hoathly Road, vehicle and cycle parking, landscaping, drainage, and associated infrastructure and highway works.

Planning Policies

- 1.7 The outline application was assessed against policy guidance provided by the National Planning Policy Framework (2024), as well as relevant planning policies from the Mid Sussex District Plan (adopted March 2018). These policies included the following which are considered relevant to ecology, biodiversity and nature conservation:

- Policy DP12: Protection and Enhancement of Countryside
- Policy DP17: Ashdown Forest SPA and SAC
- Policy DP18: Settings of the South Downs National Park
- Policy DP37: Trees, Woodland and Hedgerows
- Policy DP38: Biodiversity

- 1.2 The Environment Bill received Royal Assent on 9th November 2021 and is now enacted as the Environment Act 2021. Part 6 (Nature and Biodiversity) and Schedule 14 of the Environment Act 2021 insert a new section 90A and Schedule 7A into the Town and

Country Planning Act 1990 (TCPA), which contain the provisions requiring mandatory biodiversity net gain for development granted planning permission pursuant to the TCPA. These provisions require developments to provide a biodiversity value post-development that exceeds the predevelopment biodiversity value of the onsite habitats by at least 10%. This was adopted in February 2024 although there are a number of exemptions which may mean that biodiversity net gain is not required. These are listed under government guidance and are as follows:

- Development below a de minimis threshold;
- Householder applications;
- Small scale self-build and custom housebuilding;
- HS2; and
- Biodiversity net gain sites.

1.3 The site has therefore been surveyed to assess its ecological value and to ensure compliance with national and local plan policies and other relevant nature conservation legislation including the Wildlife and Countryside Act 1981, Natural Environment and Rural Communities Act 2006, and the Conservation of Habitats and Species (EU Exit) Regulations 2019.

1.4 The report has been produced with reference to current guidelines for PEA (CIEEM 2017) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.

2.0 Methodology

Desktop Study

2.1 A desktop study was completed using an internet-based mapping service (www.magic.gov.uk) for statutory designated sites and an internet-based aerial mapping service (maps.google.co.uk) was used to understand the habitats present in and around the site, including identifying habitat linkages and features (ponds, woodlands etc.) within the wider landscape.

Preliminary Ecological Appraisal

2.2 An extended preliminary ecological appraisal was undertaken on 1st September 2025 by principal ecologist Matt Pendry BSc (Hons) MCIEEM.

- 2.3 The surveyors identified the habitats present following the standard UK Habitat classification system (UKHab). The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map (JNCC 2010). In addition, the dominant plant species in each habitat were recorded. The potential of the site to support protected species was also assessed.

Habitat Condition Assessments

- 2.4 The habitats were each assessed using the 'condition assessments' as provided in the Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology February 2024. For example, all grassland habitats were reviewed in terms of species composition per m² and as a whole (across the whole of the field network).

Protected Species Assessments

- 2.5 Any evidence of additional protected species was recorded. Standard methods of search and measures of presence, or likely presence based on habitat suitability were used for bats in trees (Collins 2016), breeding birds (BTO 2020), hazel dormice *Muscardinus avellanarius* (Bright *et al.* 2006), great crested newts (ARG 2010), reptiles (Froglife 2015), badgers *Meles meles* (Creswell *et al.* 1990) and water voles *Arvicola amphibius* (Strachan *et al.* 2011).

Limitations

- 2.6 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. The site was visited over the period of one site visit, as such seasonal variations cannot be observed and potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of potential nature conservation value of the site and does not include a definitive plant species list.
- 2.7 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on the suitability of the habitat and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group. The assessment is only valid for the time when the survey was carried out. Additional surveys may be recommended if, on the basis of

this assessment it is considered reasonably likely that protected species may be present.

3.0 Results

Desktop Study

- 3.1 The desktop study revealed two internationally designated sites were present within 15km of the site (Figure 2). Ashdown Forest SPA and SAC is located c.3.1km south east of the site boundary. These sites are designated for their mosaic of wet and dry heathland, supporting nationally important numbers of Annex I bird species, including nightjar and Dartford warblers and Annex II species Great Crested Newt.

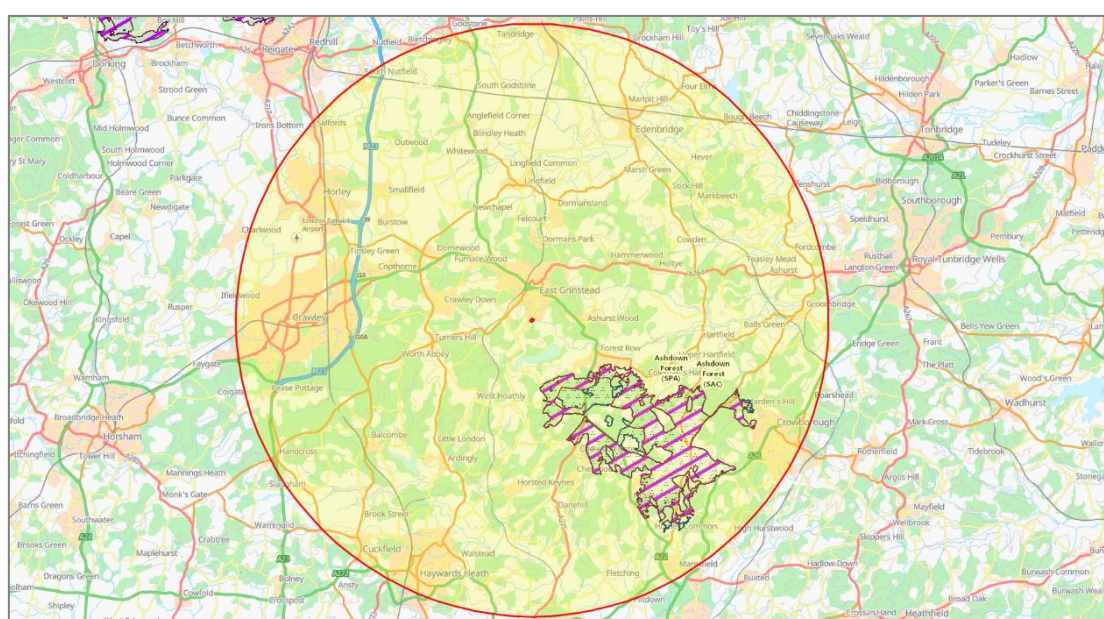


Figure 2: Internationally designated sites within 15km of the site boundary.

- 3.2 Two nationally designated sites are located within 2km of the site boundary (Figure 3).
- Weir Wood Reservoir (SSSI) is located c.1.4km south east and is designated for its rich community of breeding, wintering and passage birds; and
 - Weir Wood Reservoir (LNR) is located c.1.9km south of the site boundary.
- 3.3 Although the impact risk zone for the SSSI extends onto the site, the proposed residential development does not fall within the categories of development- such as waste discharges, mineral, oil or gas extraction- that are considered likely to adversely affect the SSSI.

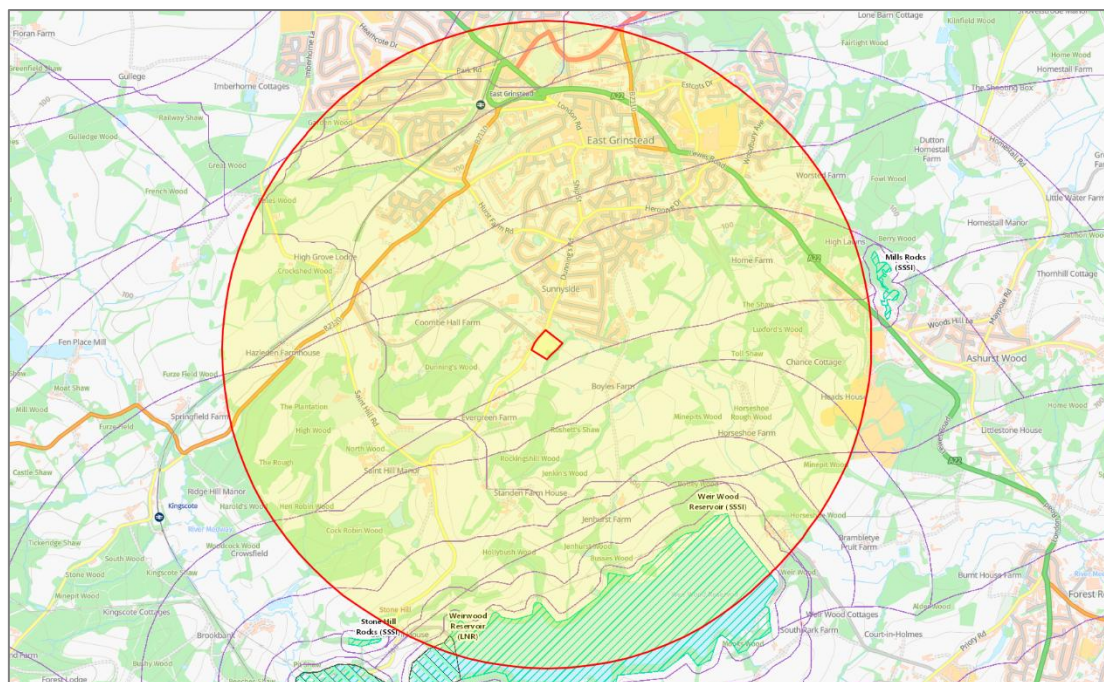


Figure 3: Nationally designated sites within 2km, purple lines indicate impact risk zones.

- 3.4 There is one non statutory site within 2km of the site boundary. Worth Way Local Wildlife Site (LWS) is located c.1.5km north west of the site boundary. The site is designated for its ancient woodland corridor along a former railway line, as well as acid grassland, ponds and a swamp.
- 3.5 The site is surrounded by a number of priority habitats (Figure 4), the closest of each type are:
- Deciduous woodland, partially on site
 - Ancient and semi-natural woodland, partially on site;
 - Traditional orchards, located c.920m north west;
 - Woodpasture and parkland, located c.1km north west
 - Lowland meadows, located c.1km south; and
 - Ancient replanted woodland, located c.1.7km north west of the site boundary.

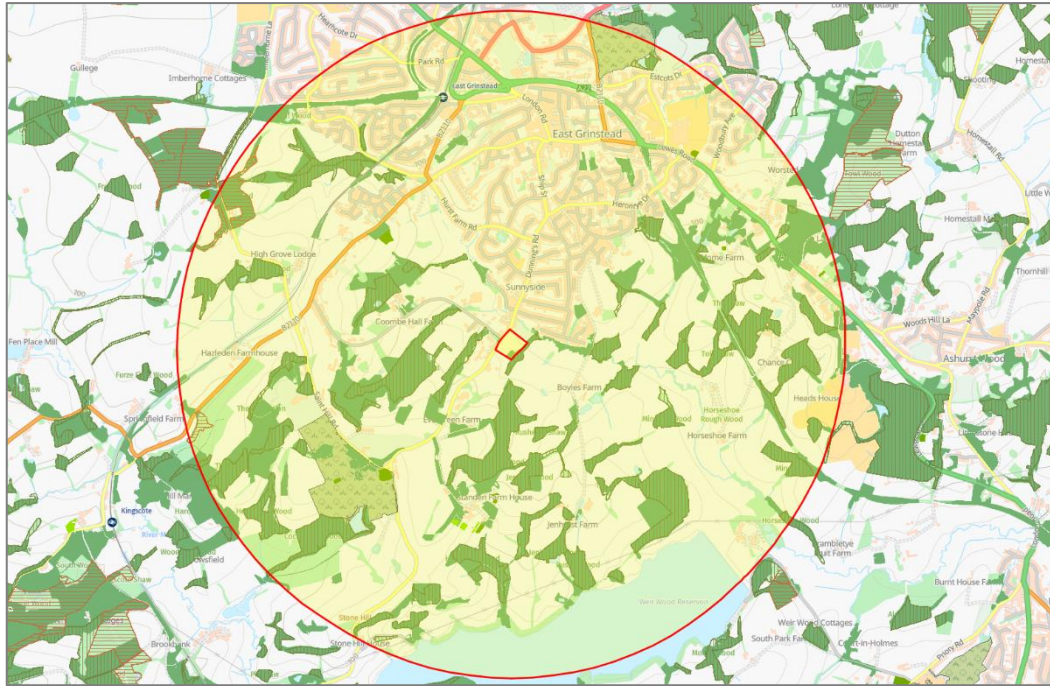


Figure 4: Priority habitats within 2km of the site boundary: deciduous woodland (green), ancient and semi-natural woodland (vertical hatching), traditional orchards (dull green), woodpasture and parkland (green with symbols), lowland meadows (lime green) and ancient replanted woodland (horizontal hatching).

3.6 OS mapping and historical surveys found no ponds on site, but six within 250m of the site (Figure 5).

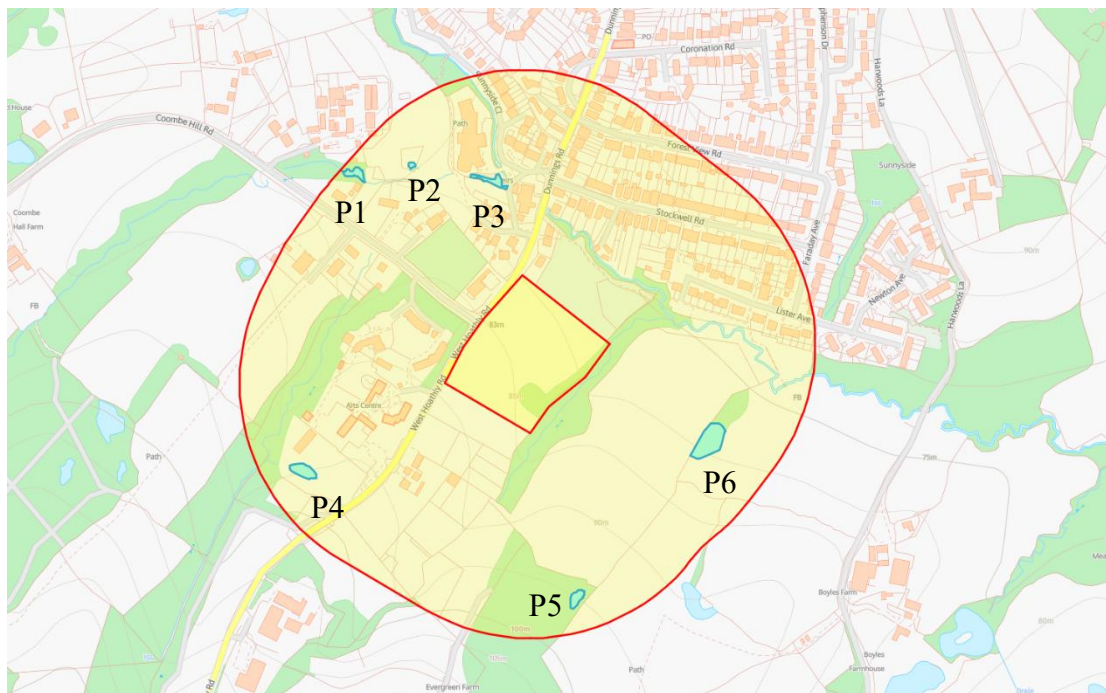


Figure 5: Ponds within 250m of the site

- 3.7 Four European Protected Species (EPS) licenses have been granted within 2km of the site and are shown in Table 1 and Figure 6 below. Additionally, three class survey licence returns were identified within 2km of the site boundary, the closest of which is located c.1.1km northwest of the site boundary and confirmed GCN presence in 2014. Four further GCN pond surveys were located within 2km of the site boundary, two of which were inconclusive and two showed GCN absence.

Table 1: Granted EPS licences within 2km of the site.

Species	License type	Dates of license	Distance
Common pipistrelle	Destruction of a breeding place	01/09/2015-30/04/2016	c.1km north east
Common pipistrelle, soprano pipistrelle and brown long-eared	Destruction of a resting place	01/09/2010-31/08/2012	c.1.2km south west
Common pipistrelle	Destruction of a resting place	16/10/2017-30/10/2022	c.1.2 north
Common pipistrelle	Destruction of a resting place	01/11/2020-28/02/2026	c.1.8km north

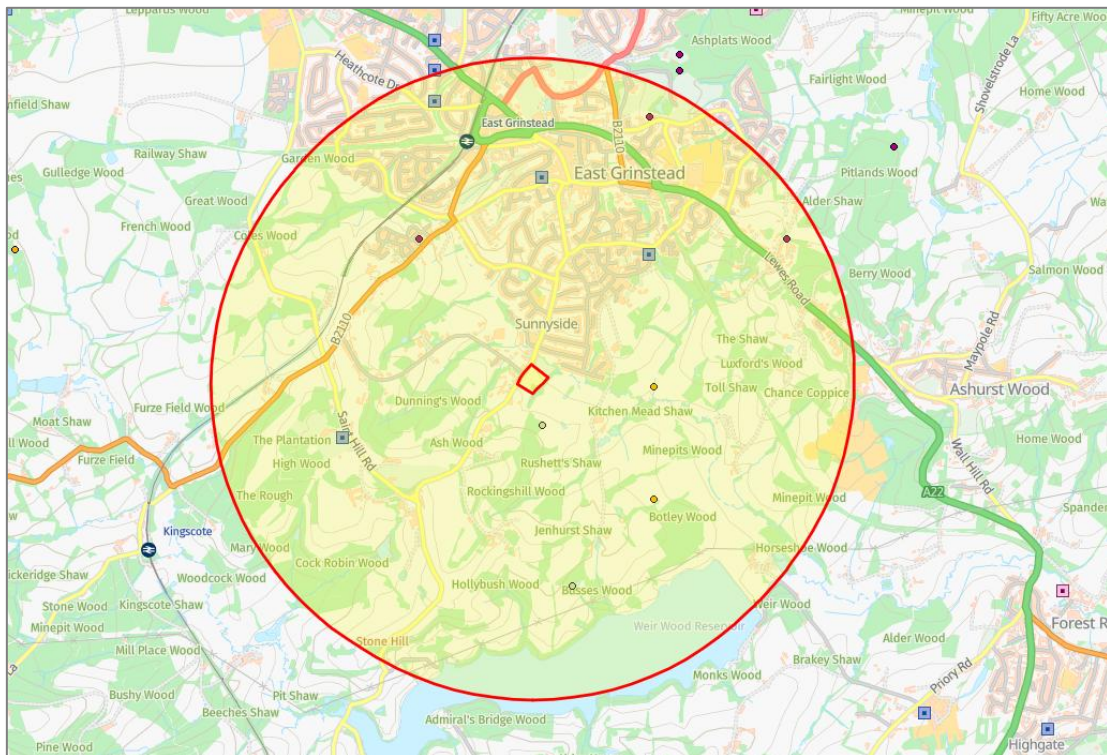


Figure 6: EPS licenses and GCN pond surveys granted within 2km of the site: bat EPS licence (blue square), GCN survey licence return (purple dot), GCN pond survey inconclusive (grey dot) and GCN pond survey absent (orange dot).

- 3.8 A 2km records search was requested from Sussex Biodiversity Record Centre (SxBRC). The records closest to site, recorded within the last 10 years and relevant to the habitats on site have been included in Table 2 overleaf.

Table 2: Biological Records from SxBRC within 2km of the site in the past 10 years

Species	Status	Closest record
Reptiles		
Adder <i>Vipera berus</i>	NERC S41; Wildlife and Countryside Act 1981 as amended) Schedule 5 s9.1	Within 2km (28/03/2020)
Grass snake <i>Natrix helvetica</i>	NERC S41; Wildlife and Countryside Act 1981 as amended) Schedule 5 s9.1	c.1km south (02/07/2024)
Slow worm <i>Anguis gragilis</i>	NERC S41; Wildlife and Countryside Act 1981 as amended) Schedule 5 s9.1	c.740m north east (31/07/2019)
Amphibians		
Common Toad <i>Bufo bufo</i>	NERC S41	c.450m north east (12/09/2022)
Great crested newt <i>Triturus cristatus</i>	NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c; Habitat Regulations Schedule 2; Habitats Directive Annex 4	c.830m west (30/10/2023)
Mammals (exc bats)		
Hedgehog <i>Erinaceus europaeus</i>	NERC S41	c.1.2km north (June 2017)
Brown hare <i>Lepus europaeus</i>	NERC S41	c.1.8km west (05/05/2016)
Hazel dormouse <i>Muscardinus avellanarius</i>	NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c; Habitat Regulations Schedule 2; Habitats Directive Annex 4	c.1km south (12/08/2024)
Red squirrel <i>Sciurus vulgaris</i>	NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4a/b/c;	c.590m northwest (27/08/2024)
Bats		
Common pipistrelle <i>Pipistrellus pipistrellus</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.750m north east (23/05/2019)
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.750m north east (23/05/2019)
Brown long eared <i>Plecotus auritus</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.750m north east (02/07/2019)
Myotis spp. <i>Myotis spp.</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.1km south (12/05/2021)
Noctule bat <i>Nyctalus noctula</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.1km south (05/08/2021)

Leisler's bat <i>Nyctalus leisleri</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.1.6km north east (24/08/2023)
Daubenton's bat <i>Myotis daubentonii</i>	Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 5 S9.4b/c	c.1.8km south (22/03/2016)
Birds		
White-tailed Eagle <i>Haliaeetus albicilla</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (02/04/2024)
Red Kite <i>Milvus milvus</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (25/11/2024)
Osprey <i>Pandion haliaetus</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (07/07/2024)
Scaup <i>Aythya marila</i>	NERC S41; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (08/01/2024)
Nightjar <i>Caprimulgus europaeus</i>	Birds Directive Annex 1; NERC S41	Within 2km (24/05/2020)
Little ringed plover <i>Charadrius dubius</i>	Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (25/07/2024)
Lapwing <i>Vanellus vanellus</i>	NERC S41	Within 2km (21/06/2024)
Black tern <i>Chlidonias niger</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (08/09/2024)
Little gull <i>Hydrocoloeus minutus</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (18/07/2024)
Herring gull <i>Larus argentatus</i>	NERC S41	Within 2km (20/08/2024)
Kingfisher <i>Alcedo atthis</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (25/11/2024)
Cuckoo <i>Cuculus canorus</i>	NERC S41	Within 2km (12/05/2024)
Merlin <i>Falco columbarius</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (14/12/2022)
Hobby <i>Falco subbuteo</i>	Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (25/08/2024)
Skylark <i>Alauda arvensis</i>	NERC S41	Within 2km (12/05/2024)
Woodlark <i>Lullula arborea</i>	NERC S41; Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (22/04/2023)
Cetti's warbler <i>Cettia cetti</i>	Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (26/08/2024)
Yellowhammer <i>Emberiza citrinella</i>	NERC S41	Within 2km (20/04/2024)
Reed bunting <i>Emberiza schoeniclus</i>	NERC S41	Within 2km (30/04/2024)
Hawfinch <i>Coccothraustes coccothraustes</i>	NERC S41	Within 2km (07/10/2024)

Crossbill <i>Loxia curvirostra</i>	Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (31/03/2021)
Bullfinch <i>Pyrrhula pyrrhula</i>	NERC S41	Within 2km (17/04/2024)
Grasshopper warbler <i>Locustella naevia</i>	NERC S41	Within 2km (23/07/2021)
Yellow wagtail <i>Motacilla flava</i>	NERC S41	Within 2km (13/05/2022)
Spotted flycatcher <i>Muscicapa striata</i>	NERC S41	Within 2km (07/08/2023)
Marsh tit <i>Poecile palustris</i>	NERC S41	Within 2km (25/11/2024)
House sparrow <i>Passer domesticus</i>	NERC S41	Within 2km (29/05/2023)
Dunnock <i>Prunella modularis</i>	NERC S41	Within 2km (25/11/2024)
Firecrest <i>Regulus ignicapilla</i>	Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (28/04/2023)
Starling <i>Sturnus vulgaris</i>	NERC S41	Within 2km (18/05/2024)
Song thrush <i>Turdus philomeles</i>	NERC S41	Within 2km (24/07/2024)
Ring Ouzel <i>Turdus torquatus</i>	NERC S41	Within 2km (16/04/2024)
Lesser Spotted Woodpecker <i>Dryobates minor</i>	NERC S41	Within 2km (17/11/2024)
Slavonian grebe <i>Podiceps auritus</i>	Birds Directive Annex 1; Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (09/12/2024)
Barn owl <i>Tyto alba</i>	Wildlife and Countryside Act 1981 (as amended) Schedule 1 Part 1	Within 2km (15/12/2024)

- 3.9 Additionally, records of 11 invertebrate species protected by the NERC act (2006) are located within 2km of the site.

Habitat survey

- 3.10 The site consisted of modified grassland, bordered with hedgerow and tree lines, with a woodland parcel in the south. Descriptions of each habitat are provided below, with a full species list included in Annex 3.

Modified grassland

- 3.11 The grassland in the centre of the site was grazed by sheep to a short sward. The grassland was co-dominated by Yorkshire fog and common bent, with abundant crested dog's-tail, and occasional sweet vernal grass, red fescue, common sorrel, cock's-foot, perennial rye-grass, bracken and timothy grass. Rare occurrences include

meadow buttercup, common knapweed, creeping cinquefoil, compact rush, common selfheal and hairy sedge. Quadrats of the grassland recorded a mean species richness of 4.1. Due to the poor-species-richness and low percentage cover of broad-leaved herbs and sedges, it did not meet the minimum required for 'other neutral grassland'.

Lowland mixed deciduous woodland

- 3.12 A woodland parcel was present in the southeast of the site, sloping down to a small woodland stream. Species present included abundant hazel; frequent alder, pedunculate oak and pendulous sedge; and occasional ash, bramble, dog's mercury, false-brome, hawthorn, herb Robert, male fern, wood avens, wood dock, wood horsetail, wood melick and wood sedge.

Species-rich native hedgerow

- 3.13 A species-rich native hedgerow was located along north-western site boundary, adjacent to West Hoathly Road, comprised. This was dominated by bramble, with frequent blackthorn and field maple, and occasional hazel, holly and pedunculate oak. Rare species present included garden privet, goat willow, silver birch and yew.

Line of trees

Northeastern boundary

- 3.14 The northeastern line of trees contained abundant bramble and blackthorn, with frequent field maple, holly and pedunculate oak. Hazel was present occasionally, with rare garden privet, silver birch and yew. This tree line extends offsite.

Southern boundary

- 3.15 The southern boundary line of trees contained abundant bramble, common ivy and hybrid black-poplar. Also present was frequent blackthorn, hawthorn and pedunculate oak, occasional field maple and hazel, and rare ash.

Stream

- 3.16 A stream runs south to north, through the woodland largely offsite but adjacent to a small section of the eastern boundary.

Protected Species***Bats***

- 3.17 No trees at risk from the development presented any potential roosting features (PRF) for bats.
- 3.18 The woodland in the south of the site, as well as the boundary hedgerow and tree lines all provide foraging/ commuting opportunities for bats. Additionally, the ancient woodland boundary to the southeast of the site may provide a greater number of foraging opportunities, as well as offering connectivity between the site and a wider network of hedgerows and woodland in the surrounding area.

Dormouse

- 3.19 The site contains suitable woodland, hedgerow and treeline habitat for dormice and provides connectivity to further suitable habitat in the wider area.
- 3.20 Records of dormice are present within 2km of the site, the closest of which being 1km south in 2024.
- 3.21 Given the high suitability of the habitats on site for dormice as well as known presence in the area, it is considered possible that a dormice population may have established on site.

Great crested newt

- 3.22 No ponds are present on site, however six are present within 250m of the site, including several without any significant dispersal barriers.
- 3.23 Several of these ponds have been surveyed as part of previous applications. Pond 1 was subject to an eDNA survey in 2022 by The Ecology Partnership, which was negative for GCN. Pond 5 was surveyed in 2019 for a different application and the result was inconclusive; however, the HSI (Habitat Suitability Index) score was 'poor'.
- 3.24 The site contains hedgerows and deciduous woodland, and borders ancient woodland, which is considered suitable terrestrial habitat.
- 3.25 Biological records of GCN are present within 2km of the site, with the closest being located c.830m west of the site boundary in 2023.

- 3.26 According to the NatureSpace Impact Risk Zones, the site falls within a 'red' zone (Figure 7), which is described as "highly suitable habitat- the most important areas for great crested newts". As such, it is considered the potential for the site to support GCN in their terrestrial stage cannot be ruled out at this stage.

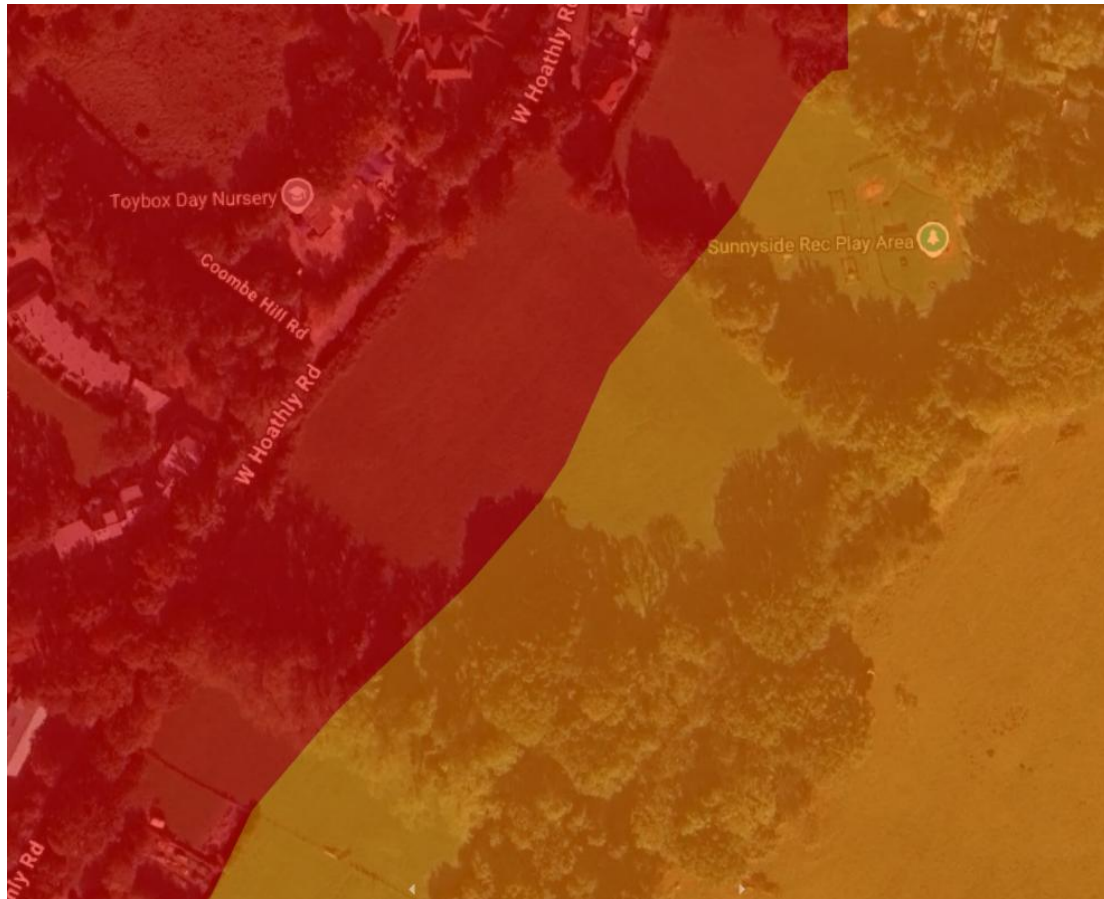


Figure 7: Nature Space impact risk zones, showing the site falling in a red zone.

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Reptiles

- 3.29 The site is dominated by short sward sheep-grazed grassland, which is generally considered to be unsuitable for reptiles. The suitable reptile habitat is limited to the boundaries of the grassland along the hedgerow and woodland edge habitats. Overall, the site is considered to have limited suitability for reptiles.

Breeding birds

- 3.30 Woodland in the south of the site and hedgerows and trees along the other boundaries provide suitable nesting habitat for breeding birds. It is considered likely that breeding birds may utilise these features for nesting.
- 3.31 Biological records indicate the presence of several notable priority species, including birds associated with heathland such as woodlark, skylark and nightjars. The site does not support heathland habitat and is therefore unlikely to support these species.

Otters/ water voles

- 3.32 The off-site stream running within close proximity to the south-eastern site boundary was heavily shaded by woodland and supported no marginal vegetation. No evidence of otters or water voles, such as burrows or droppings, were identified during the survey. Additionally, no biological records for the species are present within 2km of the site. As such, the site was not considered likely to support water voles or otters.

Other Species

- 3.33 Given the rural surroundings of the site, hedgehogs are considered likely to be present on site.

4.0 Discussion

- 4.1 The following paragraphs consider the effects of the development on designated sites, priority habitats and protected and priority species. Where the desk study and habitat survey provide sufficient evidence for an assessment of effects on any of these groups to be taken through planning, these are detailed below, the need for additional surveys and when and how these should be completed are summarised, if required.

Effects on designated sites

- 4.2 The site does not lie within or adjacent to any statutory sites. However, Ashdown Forest (SAC and SPA) is located c.3.1km south east of the site, which is within the 7km zone of influence. Developments within this zone “need to mitigate potential impacts of development to ensure the effects of any increase in visitors to Ashdown Forest are addressed” This this involves payments towards both: Suitable Alternative Natural Greenspace (SANG) and Strategic Access Management and Monitoring (SAMM). This would adhere to Policy DP17: Ashdown Forest. At this distance though, there are no direct impacts anticipated in terms of habitat loss, or indeed the isolation or fragmentation

of habitats. Furthermore, the distances involved remove impacts resulting from changes to lighting, water run off and impacts resulting from construction on the Ashdown Forest habitats.

- 4.3 Two nationally designated statutory sites are located within 2km of the site; Weir Wood Reservoir (SSSI) is located c.1.4km southeast and is designated for its rich community of breeding, wintering and passage birds. Although the impact risk zone for this designation extends onto the site, the proposed residential development does not fall within the categories of development- such as waste discharges, mineral, oil or gas extraction, or residential schemes exceeding 100 units- that are considered likely to adversely affect the integrity of the SSSI. As the development lies outside the listed developments, no impacts on the integrity of the SSSI is considered likely.
- 4.4 Weir Wood Reservoir (LNR) is located c.1.9km south; given the distance between the sites, and the relatively small scale of the development, it is considered that development would not directly or indirectly impact this designation.
- 4.5 There is one non statutory site within 2km of the site boundary. Worth Way Local Wildlife Site (LWS) is located c.1.5km north west of the site boundary. Owing to the distance from the site, and relatively small scale of development, no impacts as a result of the development are anticipated.

Effects on Priority Habitats

- 4.6 The National Planning Policy Framework (NPPF) (2024) is the key government policy document relating to planning decisions affecting ancient woodland. The importance of ancient woodlands as an irreplaceable habitat is set out in paragraph 193 c) of the NPPF, which states: *'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists'*.
- 4.7 Whilst ancient woodland is not protected under statute, there is a presumption that ancient woodland should be maintained where possible. Benefits of development affecting ancient woodland must be significant in terms of social or economic drivers and mitigation measures and/or compensation must be provided to reduce where possible significant impacts.

-
- 4.8 Woodlands are considered to be ancient or semi natural even if they have been disturbed. The soil and the seed bank is considered to be of primary importance rather than the maturity or otherwise of the trees.
- 4.9 On 26 January 2024, the Government introduced a new duty requiring local planning authorities to consult the Secretary of State regarding developments that impact ancient woodland.
- 4.10 This Direction is made under the Town and Country Planning (Development Management Procedure) (England) Order 2015 (Statutory Instrument 2015 No 595). It requires local planning authorities in England to consult the Secretary of State before granting planning permission for certain types of development including planning applications which would “*result in the loss or deterioration of ancient woodland, where the local planning authority considers that potential adverse impacts cannot be mitigated*”. This means that from 26 January 2024, no English planning application for development which adversely impacts ancient woodland can be granted without first being referred to the SOS.
- 4.11 Impacts relating to ancient woodland which will require consideration are listed on the gov.uk (2022) and are reviewed in terms of both direct effects and indirect effects as a result of development practises.
- 4.12 Direct effects of development can cause the loss or deterioration of ancient woodland or ancient and veteran trees by:
- damaging or destroying all or part of them (including their soils, ground flora or fungi)
 - damaging roots and understorey (all the vegetation under the taller trees)
 - damaging or compacting soil
 - damaging functional habitat connections, such as open habitats between the trees in wood pasture and parkland
 - increasing levels of air and light pollution, noise and vibration
 - changing the water table or drainage
 - damaging archaeological features or heritage assets

- changing the woodland ecosystem by removing the woodland edge or thinning trees - causing greater wind damage and soil loss

4.21 Indirect effects of development can also cause the loss or deterioration of ancient woodland, ancient and veteran trees by:

- breaking up or destroying working connections between woodlands, or ancient trees or veteran trees - affecting protected species, such as bats or wood-decay insects
- reducing the amount of semi-natural habitats next to ancient woodland that provide important dispersal and feeding habitat for woodland species
- reducing the resilience of the woodland or trees and making them more vulnerable to change
- increasing the amount of dust, light, water, air and soil pollution
- increasing disturbance to wildlife, such as noise from additional people and traffic
- increasing damage to habitat, for example trampling of plants and erosion of soil by people accessing the woodland or tree root protection areas
- increasing damaging activities like fly-tipping and the impact of domestic pets
- increasing the risk of damage to people and property by falling branches or trees requiring tree management that could cause habitat deterioration
- changing the landscape character of the area

4.13 Ancient woodland is located adjacent to the southeastern site boundary with a small section of the red line overlapping with the ancient woodland boundary and as such, the 15m buffer zone extends onto site. Current proposals indicate that the development footprint falls entirely outside of this buffer zone (Figure 8).

4.14 The woodland is currently fenced off from the field and will continue to be fenced off, thereby ensuring no recreational pressure on this woodland associated with the development.



Figure 8: Ancient woodland (yellow hatching) and 15m buffer zone (black hatching) and watercourse 10m riparian zone (blue line)

- 4.15 In terms of other impacts, the most significant is the fragmentation of landscape linkages and therefore the reduction of the movement of species across the landscape, as well as the potential impacts this would have on ancient woodland habitats, notably pollinators and seed dispersal agents.
- 4.16 The development retains the ancient woodland which extends to the rear of the site, retains the associated deciduous woodland and tree lines, ensuring that the development is located in the poor habitats of sheep grazed grassland. As such, there is no isolation or fragmentation of the ancient woodland resulting from the development.
- 4.17 Proposals involve the boring of a hole underneath the ancient woodland for overflow drainage from the SuDS basin into the stream during high rainfall events. This work is not anticipated to impact the vegetation or ecological functionality of the woodland due to it all occurring underground beneath the main root systems of the trees. Impacts to the roots of woodland trees are expected to be minimal due to the small size of the

borehole. This will also prevent excessive surface water runoff from the development through the woodland, which could otherwise have increased erosion. Outside of the core development area the water will drain naturally as it currently does.

- 4.18 With regards to lighting, dark corridors are recommended, and lighting plans can be subject to condition. The retention of dark corridors around the edges of the site ensure that bats, and other species, can continue to move across the landscape.
- 4.19 The implementation of standard and proven construction measures through a Construction Environmental Management Plan (CEMP), will ensure that there is no potential for significant adverse effects on the ancient woodland as a result of pollution during construction.
- 4.20 With the measures that have been developed, including buffer zones and fencing, it is considered that the ancient woodland will not be impacted, directly or indirectly, by the proposed development and the development will not involve any habitat loss, fragmentation, or isolation of ancient woodland.
- 4.21 A parcel of lowland mixed deciduous woodland, a priority habitat, is present in the south-east of the site. This is entirely retained within the proposals. The development should occur outside of the root protection areas (RPAs) of these trees and this should be protected from construction-related damages through the use of heras fencing and appropriate signage. Should these measures be followed, no impacts on this priority habitat are anticipated as a result of development.
- 4.22 The species-rich native hedgerow along the northwestern site boundary is also a priority habitat. Two small sections of this hedgerow are scheduled for removal to facilitate site access. The remainder the hedgerow will be retained in the proposals. The loss of hedgerow should be offset with new native hedgerow planting on site, with a 10% uplift in length in line with BNG principles.
- 4.23 Owing to the scale of the development and distances from other priority habitats, no further impacts are anticipated on any priority habitats.

Effect on other habitats

- 4.24 The boundary treelines provide a potentially important wildlife corridor, allowing animals to safely traverse the site. As such, these features are considered to be of local

value, and its function should be protected and maintained as part of any plan for the site as much as is reasonably possible.

- 4.25 The modified grassland onsite was in poor condition and is a common and widespread habitat. As such the loss of this habitat is likely to contribute to site-level impacts only. However, the loss of any grassland habitat will have to be compensated in line with biodiversity net gain calculations.

Protected Species

Bats

Bat foraging and commuting potential

- 4.26 The woodland edge and boundary hedgerow/ tree lines on site provide suitable habitat for commuting/foraging bats, with connectivity to a larger network of woodland and hedgerows in the surrounding area.
- 4.27 Overall, the site is considered to have potential to support foraging/ commuting bats. In order to inform a mitigation strategy, update surveys will be required. This involves three Nighttime Bat Walkover (NBW) surveys, one per season (spring- April/ May, Summer- June/ July/ August, and Autumn- September/ October), as well as monthly automated/ static bat detector surveys for at least five consecutive nights per month from April to October.
- 4.28 However, recommendations which design out potential conflict with foraging and commuting bats, through the retention of linear features, woodland and the use of dark corridors, would be considered in line with the mitigation hierarchy, where potential key routes, here the ancient woodland, are suitably protected and buffered from any development.

Dormice

- 4.29 The woodland and boundary hedgerow/ tree lines on site are considered to have good suitability to support dormice, with connectivity to a wider network of hedgerows and woodland in the surrounding area. As such, further surveys are recommended to confirm if dormice are present on site and inform sufficient mitigation.

- 4.30 As per the latest Dormouse Mitigation Guidelines (Wells *et al.*, 2025), the woodland and boundary hedgerow/ tree lines all support 'high' species diversity and 'high' structural complexity. As such, the site is considered to be of '**excellent**' suitability for dormice. The guidance suggests that for 'excellent' dormice habitat, a survey effort of 50 nest tubes checked at monthly intervals for including at least three consecutive months from July to November is sufficient to reach the accepted 97% probability of detecting dormice. The results of these surveys will inform a suitable mitigation strategy, if required.

Great crested newts

- 4.31 No ponds are present on site and, as such, GCN are unlikely to be present during their aquatic/ breeding phase. NatureSpace Impact Risk modelling suggests that GCN could be present on site in their terrestrial phase (Figure 7). However, due to the short-sward and sheep grazed nature of the grassland on site, this habitat is largely unsuitable for newts.
- 4.32 The proposed works will retain all woodland habitat and the majority of the hedgerows, with the only loss of habitat being the central grassland and a 9m and 2m section of the hedgerow in the north-west of the site. GCN tend to remain in close proximity to their breeding pond and whilst a maximum routine migratory range has been estimated as approximately 250m from a breeding pond (Franklin, 1993; Oldham and Nicholson, 1986; Jehle, 2000), one study by Robert Jehle, (2000) demonstrated a 'terrestrial zone' of 63m, within which 95% of summer refuges were located. A further study (Jehle, R & Arntzen, JW. 2000) showed that after the breeding season 64% of newts were recorded within 20m of the pond edge.
- 4.33 Research has also found that newts can travel varying distances. Movement and activity of newts from ponds depends on the surrounding habitat. If local refuges and food are abundant in habitats close to the pond, then newts are likely to remain in this area exploiting such resources. In terms of the off-site ponds, it is considered likely that any GCNs that might be present would utilise the woodland and scrub immediately surrounding them as opposed to the grassland present on site, which is well beyond 100m of any of the ponds and located on the opposite side of a road from P1-4.

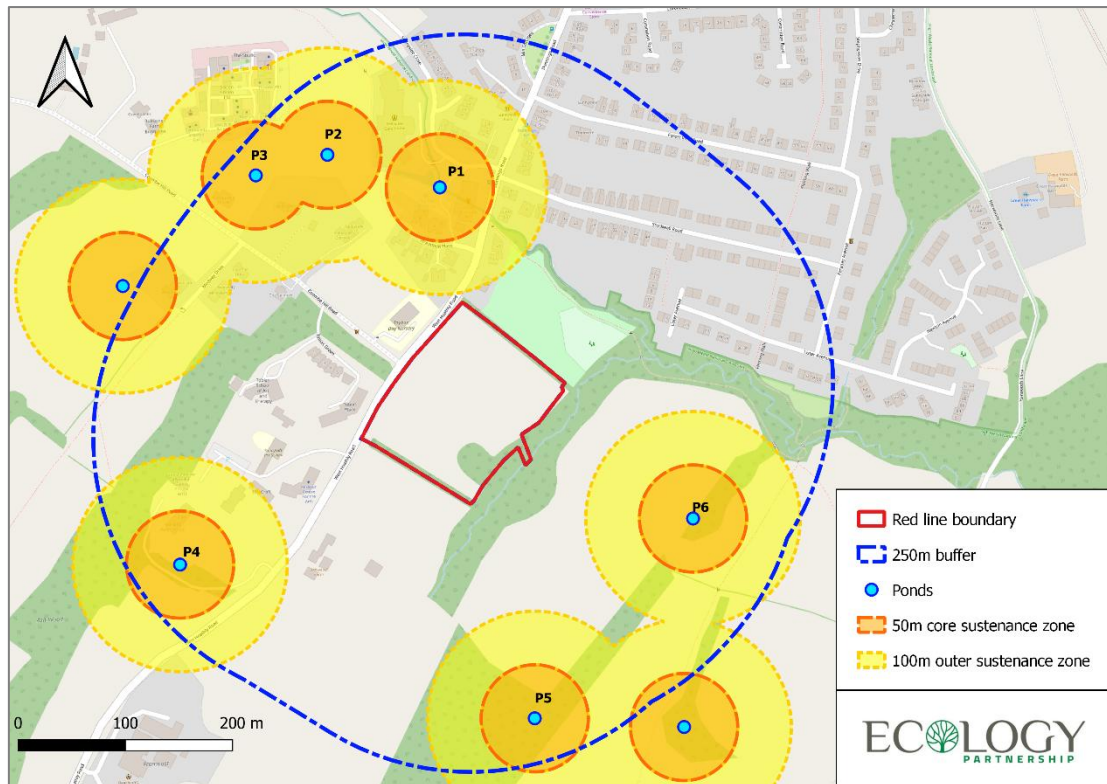


Figure 9. 50m and 100m buffers around ponds within 250m of the site.

4.34 In addition to this, English Nature (now Natural England) published findings of a research report into the efficiency of capture techniques and the value of different habitats for great crested newts, which stated that *'The most comprehensive mitigation, in relation to avoiding disturbance, killing or injury is appropriate within 50m of a breeding pond. It will also almost always be necessary to actively capture newts 50-100m away. However, at distances greater than 100m, there should be careful consideration as to whether attempts to capture newts are necessary or the most effective option to avoid incidental mortality. At distances greater than 200-250m, capture operations will hardly ever be appropriate.'* This report also identified clear correlations between the number of newts captured and certain habitats where four habitats (woodland, arable land, post-industrial habitats and hedgerows) were found regularly to predict the number of newts captured. It can therefore be surmised that greater densities of great crested newts will be found within or in close proximity to areas of favourable terrestrial habitat such as woodland and boundary features, such as hedgerows. Aerial photographs show that all ponds in the surrounding area are located within or in close proximity to areas of suitable terrestrial habitat, such as hedgerows, tree-lines, scrub and/or woodland. (See Figure 9 above).

- 4.35 Taking this into consideration, it is considered that no further surveys are necessary so long as Reasonable Avoidance Measures (RAMS) are carried out when undertaking ground works on site. Currently, the habitats which are to be impacted upon by the proposals are sub-optimal for GCNs in their terrestrial phase and no impacts upon meta-population dynamics are predicted.

Reasonable Avoidance Measures

- 4.36 Employing RAMs during construction will involve working practices to avoid killing and injuring individual newts and other animals. This method statement describes the required precautionary actions prior and during development works, which will minimise the risk of an offence being committed under Regulation 41 of the Conservation of Habitats and Species Regulations 2010.
- 4.37 The clearance of the grassland on site should be undertaken using the following measures:
- Continue to graze and once sheep are removed, continue to manage the grass to a short sward on a monthly basis leading up to and throughout the works, ensuring sward height does not exceed 100mm.
 - At the start of the main works, any areas of vegetation with a longer sward and the section of hedgerow to be removed, should be cut down to a short height, using sensitive methods. Two cuts would take place, the first down to 150mm, and then another down to 5mm. The second cut should take place outside of the main hibernation months of November to early March. However, the initial hedgerow cut could be undertaken during this winter period to avoid impacts on nesting birds.
 - The initial cut should take place in one direction, aiming to move from the north of the site to the retained buffer area along the south-eastern and south-western edge of the field. These areas will be enhanced with more suitable habitat for GCN, ensuring that there is continual provision of habitat. Once the initial cut has been completed, the arising should be left for several days to allow individual GCN to move. The arisings should be then raked and collected. Finally, once the arisings have been removed, a final cut should be conducted and the arisings removed. This process should take a week.

- A destructive search should then be undertaken, using a toothed bucket excavator to carefully scrape the top layer of soil. This should be done under the supervision of a suitably qualified ecologist.
- Any log/brush/soil piles are to be removed sensitively and by hand, not using any heavy machinery. This is especially important if works must be carried out during the winter, when GCN (and other animals) are likely to be hibernating within such structures.
- Construction and demolition materials, as well as skips and pallets, should be stored on hardstanding where possible and furthermore, should be elevated off the ground. This so that no features are created that GCN could potentially use as refuge habitat.
- Where trenches and holes are dug, these should not be left open overnight. GCN (and small mammals as previously mentioned) may get trapped in vertical-sided trenches. Therefore, where there is a risk of this occurring, the holes should be refilled, or planks of wood should be placed so that any trapped animals may use these to escape.
- In the unlikely event a GCN is found during the above process. All works must cease and an application for a mitigation licence from Natural England may be required before works can continue.

4.38 It is considered that, should the above measures be implemented, then the favourable conservation status of the species on site can be maintained. The retention and protection of the woodland, as well as the creation of new scrub, tussocky grassland and hibernacula will provide enhanced habitat for the species on site.

Reptiles

4.39 The majority of the site was considered sub-optimal reptiles, with the dominance of relatively short sward grassland which is grazed for much of the year. This would not provide sufficient cover for reptiles from predators. However, the boundary habitats offered some potential to support low populations of reptiles. It is understood that a small area of the northwestern hedgerow is proposed to be removed to facilitate access to the site as part of the development.

4.40 Given the limited area of boundary habitat proposed for clearance, a reptile survey is not required. However, it is recommended that the site continue to be grazed, and if needed, cut to a short sward height throughout the period leading up to the works to

prevent tussocky grassland developing and encouraging reptiles away from the edges of the site. In addition, the clearance of the hedgerow and any taller areas of grassland should be done using reasonable avoidance measures as outlined above for GCN. Any reptiles uncovered during this process should be carefully captured and moved by hand by the Ecological Clerk of Works (ECoW).

Nesting Birds

- 4.41 Nesting birds may be present within the woodland on site as well as the hedgerow and trees along the boundaries. While woodland and treeline habitats are retained in the development, any hedgerow clearance work should be undertaken outside of the breeding bird season (March-August) or immediately after a nesting bird check by a suitably qualified ecologist. If active nests are identified, works in the vicinity of the nest must cease until the birds have fledged the nest.

Other Species

- 4.44 Owing to a lack of habitat suitability, biological records or evidence of presence, the adjacent stream is not considered likely to support otters and water voles.
- 4.45 The site has potential to support hedgehog. Whilst receiving no specific legal protection, they are protected from certain forms of harm under the wild mammals

(Protection) Act 1996. There is a risk that without mitigation, vegetation clearance on site may result in mutilation or crushing of hedgehog nesting in brash piles. As such, it is recommended that areas of dense vegetation needing clearance are cut in two stages, the first to 300mm, then then the second to ground level after the area has been searched for hedgehog. If any are found, they will be safely moved to a suitable brash pile outside the clearance area.

5.0 Ecological Enhancements

- 5.1 Species-specific ecological enhancements (for bats, and dormice) will be detailed upon completion of their respective surveys. However, some general enhancements that will benefit a variety of wildlife are outlined below.
- 5.2 Open communal grassland areas across the site can be planted and managed in a way that promotes botanical diversity and encourages native grasses and wildflowers. This could include planting a flowering mix, such as [Emorsgate EL1](#), and cutting less frequently during the summer months to allow the flowers to bloom and drop seed. This will encourage pollinators to the site as well as their predators such as birds and bats. Grassland on the edges of the site could be planted with a more diverse mix of native wildflowers adapted for clayey soils, such as [Emorsgate EM4](#), and managed with one to two cuts a year, to create a tall and diverse sward, rich in wildflowers.
- 5.3 Native tree planting, including the use of fruit trees where appropriate, should be designed into the scheme in order to provide food and nectar resources for a variety of wildlife.
- 5.4 Bird boxes can be hung on mature trees within the site. The boxes should be hung facing south east, a minimum of 3m off the ground, but preferably higher with potential presence of predation by domestic pets. Vivara Pro Seville 32mm WoodStone Nest Boxes and Vivara Pro Barcelona WoodStone Open Nest Boxes (Figure 10) are recommended and are suitable for a range of smaller bird species including tree sparrows, wrens and robins.



Figure 10: Vivara Pro WoodStone Nest Boxes

- 5.5 To encourage invertebrates and bees, Bee Bricks (Figure 11) can be incorporated into the buildings. The Bee Brick can be used in place of a standard brick or block in construction to create a habitat for solitary bees. Bee Bricks need to be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. No cleaning or management of the Bee Bricks is required.



Figure 11: Bee bricks to be incorporated into the development.

- 5.6 In order to allow hedgehogs to move freely throughout the site, new garden fencing should include 13x13cm holes at the base. It is recommended that signage, such as that shown in Figure 12 from hedgehogstreet.org, is erected in order to prevent the holes from being accidentally covered up.



Figure 12: Hedgehog highway hole and signage.

6.0 Impact Assessment

- 6.1 This section of the report forms an Ecological Impact Assessment (EcIA) and is designed to quantify and evaluate the potential impacts of the development on habitats and species present on site or within the local area.
- 6.2 The approach to this assessment accords with guidance presented within the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM 2018). In essence, an EcIA assesses the activities associated with a proposed scheme that are likely to generate changes within the identified zone of influences, on identified ecological features and receptors. The proposals are subsequently reviewed and mitigation and compensation measures are outlined which help to reduce negative impacts.
- 6.3 Table 4 below summarises the impacts and required mitigation for each receptor as previously detailed in the discussion.
- 6.4 There are no other active applications for new housing developments in the local vicinity of the site, and therefore no cumulative impacts are anticipated.

Table 4: Assessment of effects from the proposal after mitigation and compensation.

Feature	Scale of Importance	Mitigation/Compensation Required	Residual Effect
Ashdown Forest SAC/SPA	International	Payment of SANGs and SAMM tariffs to mitigate impacts associated with recreational pressure.	Not significant
Nationally designated sites	National	None	Not significant
Non statutory designated sites	District	None	Not significant
ASNW and Priority Habitats (Native hedgerow, Lowland mixed deciduous woodland))	District (ANSW) Local (Hedgerow/ woodland)	Loss of hedgerow to be compensated through planting of greater length of higher value species-rich native hedgerow. Priority woodland to be protected throughout development and 15m ASNW buffer protected and enhanced.	Not significant
Bats (commuting and foraging)	To be determined	To be determined	To be determined
Reptiles and GCN	Up to local	Retention and protection of woodland and edge habitats, other than small hedgerow loss for access. Use of reasonable avoidance measures during works	Not significant
Nesting Birds	Up to local	Retention and protection of trees and hedgerows other than small hedgerow loss for access. Mitigating direct harm to nests with a check by a suitably qualified ecologist before work to the hedge/shrubs commences. Mitigation/Enhancement in the form of the installation of bird boxes.	Not significant
Dormice	To be determined	To be determined	To be determined

7.0 Conclusions

- 7.1 The site comprises sheep-grazed modified grassland, bordered by a hedgerow and mature tree lines, and woodland to the south, which is partially designated as Ancient Semi-Natural Woodland (ASNW).
- 7.2 The site is not located within or adjacent to any statutory designated sites. It is, however, within the 7km ZOI for Ashdown Forest SAC and SPA, whereby SANG and SAMM contributions are required to mitigate against the increase in recreational pressure. No impacts on any other statutory sites are anticipated as a result of developing the site.
- 7.3 Due to the relatively small scale of the development and significant distances from other designations, no impacts on any non-statutory sites are anticipated.
- 7.4 Priority woodland habitat is present in the south of the site and is proposed to be retained. Measures should be taken to protect these woodland trees and their RPAs, including heras fencing and signage.
- 7.5 The southeastern site boundary is adjacent to and falls partially within ASNW, the current development footprint falls outside the 15m buffer zone, apart from an underground pipe for drainage. This pipe will be sensitive moled under the main root zone of the trees within the ASNW, ensuring no negative impact on this habitat. This 15m buffer should continue to be retained and enhanced post development.
- 7.6 The site contains woodland edge, hedgerows and treelines that may support foraging and commuting bats. Bat activity surveys are recommended to understand the levels of bat activity on site and inform any mitigation.
- 7.7 The woodland, hedgerow and tree lines on site were considered suitable to support dormouse. Surveys are recommended to determine current presence or absence and inform mitigation.
- 7.8 Six water bodies are located within 250m of the site however none are recorded within 100m and all appear to have sufficient optimal terrestrial habitat for great crested newts (GCN) surrounding them. The habitat on site is largely sub-optimal for GCN, comprising short sheep-grazed grassland, with more optimal habitat such as

woodland and hedgerow retained post development with the exception of a small section of hedgerow for access. As such, GCN are unlikely to be impacted by the works, however, as a precaution, Reasonable avoidance measures have been outlined to avoid harm to GCN during the small area of hedgerow clearance. The site should continue to be grazed or regularly cut short leading up to works commencing, with a destructive search supervised by an Ecological Clerk of Works (ECoW).

7.9 The heavily grazed grassland was considered sub-optimal for reptiles, with the hedgerow and woodland edge habitats having limited suitability for reptiles. Reasonable avoidance measures have been outlined to avoid harm to reptiles during the small area of hedgerow clearance. The site should continue to be grazed or regularly cut short leading up to works commencing.

7.10 The woodland, hedgerow and tree lines on site have the potential to be used by birds as nesting habitat during the breeding season. While woodland and tree lines are retained, hedgerow clearance should be carried out outside of the breeding season (March- September inclusive) or following a check from a suitably qualified ecologist.

█ [REDACTED]
[REDACTED]
[REDACTED]

7.12 The site is considered not to be constrained by otters and water voles due to a lack of suitable habitat, furthermore no trees affected by the works presented features of value to roosting bats. As such, no further surveys work is recommended for these species.

7.13 A number of general site enhancements are also recommended; these include the use of wildflower grassland, native trees and shrubs and installation of bird nest boxes and hedgehog highways.

8.0 References

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Internet resources:

Google Maps: www.google.co.uk/maps

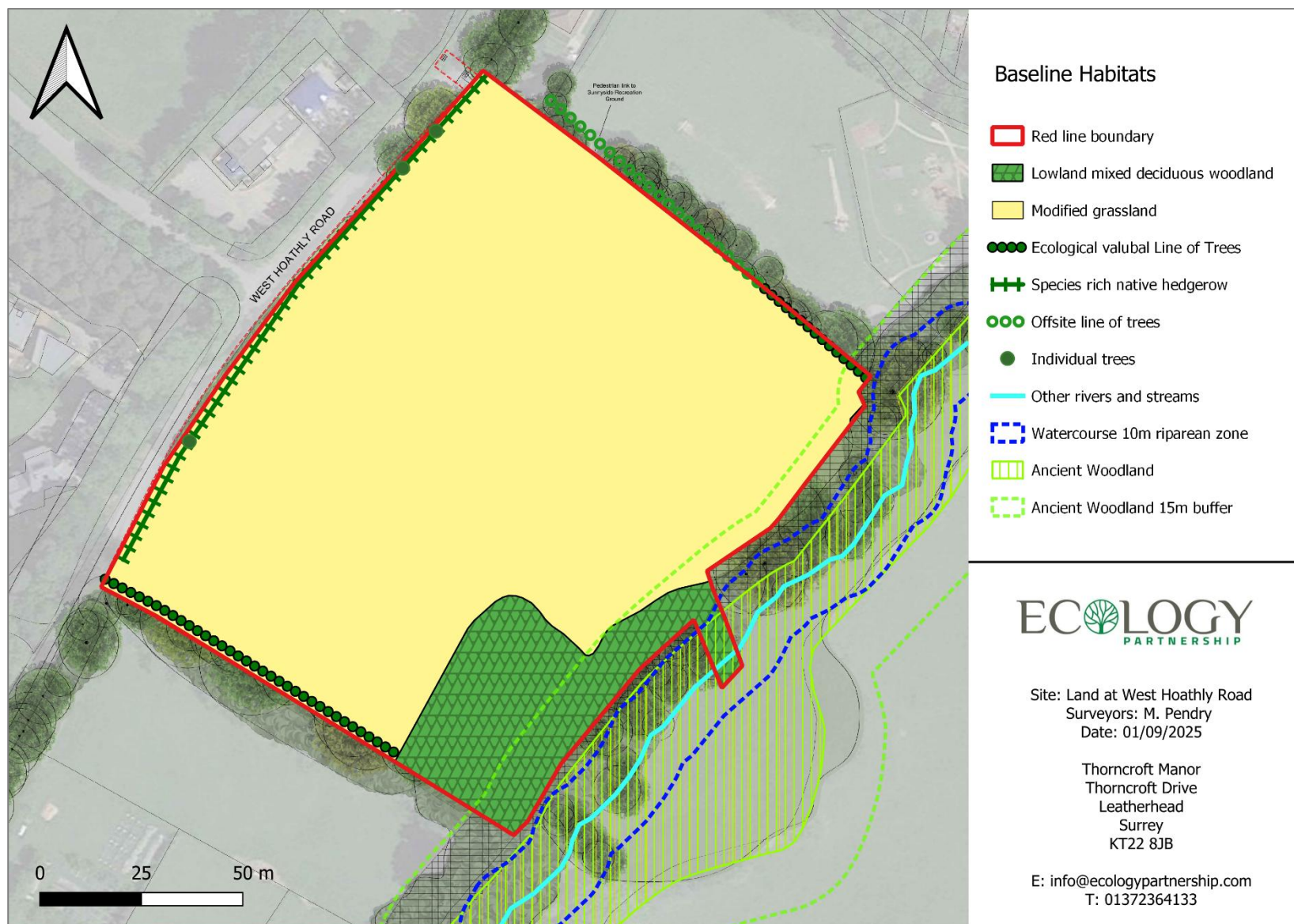
Magic Interactive Map: www.magic.gov.uk

Appendix 1: Photos

Photograph 1: Grassland and northwestern hedgerow.	
Photograph 2: Southern lowland mixed deciduous woodland.	
Photograph 3: Southern lowland mixed deciduous woodland.	

Photograph 4: Grassland and Northeastern on tree line (left) and woodland (right)	
Photograph 5: Grassland and south-western treeline	
Photograph 6: Grassland and southern deciduous woodland	

Appendix 2: Habitat Map



Appendix 3: Species List

Common name	Latin name	Quadrat							DAFOR score
		1	2	3	4	5	6	7	
Modified grassland									
Yorkshire Fog	<i>Holcus lanatus</i>	✓	✓		✓	✓	✓	✓	D
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>							✓	O
Red Fescue	<i>Festuca rubra</i>						✓		O
Common Sorrel	<i>Rumex acetosa</i>		✓						O
Cocksfoot	<i>Dactylis glomerata</i>	✓		✓					O
Perennial Rye Grass	<i>Lolium perenne</i>					✓	✓		O
Meadow Buttercup	<i>Ranunculus acris</i>								R
Common knapweed	<i>Centaurea nigra</i>								R
Creeping cinquefoil	<i>Potentilla reptans</i>								R
Bracken	<i>Pteridium sp.</i>								O
Common bent	<i>Agrostis capillaris</i>	✓	✓	✓	✓	✓	✓	✓	D
Crested dogs tail	<i>Cynosurus cristatus</i>		✓	✓	✓	✓	✓		A
Compact rush	<i>Juncus conglomeratus</i>			✓					R
Common selfheal	<i>Prunella vulgaris</i>						✓		R
Hairy sedge	<i>Carex lasiocarpa</i>							✓	R
Timothy	<i>Phleum pratense</i>							✓	O
Species richness:		3	4	4	3	4	6	5	
Mean species richness:		4.1							

Common name	Latin name	DAFOR score
Northeastern line of trees		
Blackthorn	<i>Prunus spinosa</i>	A
Bramble	<i>Rubus sp.</i>	A
Field Maple	<i>Acer campestre</i>	F
Garden Privet	<i>Ligustrum ovalifolium</i>	R
Hazel	<i>Corylus avellana</i>	O
Holly	<i>Ilex aquifolium</i>	F
Pedunculate Oak	<i>Quercus robur</i>	F
Silver Birch	<i>Betula pendula</i>	R
Yew	<i>Taxus baccata</i>	R
Northwestern species-rich native hedgerow		
Blackthorn	<i>Prunus spinosa</i>	F
Bramble	<i>Rubus sp.</i>	D
Field Maple	<i>Acer campestre</i>	F
Garden Privet	<i>Ligustrum ovalifolium</i>	R
Goat willow	<i>Salix caprea</i>	R
Hazel	<i>Corylus avellana</i>	O
Holly	<i>Ilex aquifolium</i>	O
Pedunculate Oak	<i>Quercus robur</i>	O
Silver Birch	<i>Betula pendula</i>	R
Yew	<i>Taxus baccata</i>	R

Southern line of trees		
Ash	<i>Fraxinus excelsior</i>	R
Blackthorn	<i>Prunus spinosa</i>	F
Bramble	<i>Rubus sp.</i>	A
Common Ivy	<i>Hedera helix</i>	A
Field Maple	<i>Acer campestre</i>	O
Hawthorn	<i>Crataegus monogyna</i>	F
Hazel	<i>Corylus avellana</i>	O
Hybrid Black-poplar	<i>Populus x canadensis</i>	A
Pedunculate Oak	<i>Quercus robur</i>	F
Woodland		
Alder	<i>Alnus glutinosa</i>	F
Ash	<i>Fraxinus excelsior</i>	O
Bramble	<i>Rubus sp.</i>	O
Broad Buckler-fern	<i>Dryopteris dilatata</i>	R
Common Dog-violet	<i>Viola riviniana</i>	R
Common Ivy	<i>Hedera helix</i>	F
Crab Apple	<i>Malus sylvestris</i>	R
Dog's Mercury	<i>Mercurialis perennis</i>	O
False-brome	<i>Brachypodium sylvaticum</i>	O
Field Maple	<i>Acer campestre</i>	R
Hart's-tongue	<i>Phyllitis scolopendrium</i>	R
Hawthorn	<i>Crataegus monogyna</i>	O
Hazel	<i>Corylus avellana</i>	A
Hedge Woundwort	<i>Stachys sylvatica</i>	R
Herb-Robert	<i>Geranium robertianum</i>	O
Holly	<i>Ilex aquifolium</i>	R
Male-fern	<i>Dryopteris filix-mas</i>	O
Pedunculate Oak	<i>Quercus robur</i>	F
Pendulous Sedge	<i>Carex pendula</i>	F
Wood Avens	<i>Geum urbanum</i>	O
Wood Dock	<i>Rumex sanguineus</i>	O
Wood Horsetail	<i>Equisetum sylvaticum</i>	O
Wood Melick	<i>Melica uniflora</i>	O
Wood-sedge	<i>Carex sylvatica</i>	O

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