



Preliminary Ecological Appraisal Ecological Impact Review

Land South of Burleigh Lane

The Ecology Partnership, Thorncroft Manor, Thorncroft Drive, Leatherhead, Surrey KT22 8JB

T +44 (0) 1372 364133 **E** info@ecologypartnership.com **W** ecologypartnership.com

Contents

1.0 INTRODUCTION..... 4

 BACKGROUND4

 SITE CONTEXT AND STATUS4

 PROPOSED DEVELOPMENT5

 PLANNING POLICIES.....5

2.0 METHODOLOGY..... 6

 DESKTOP STUDY6

 PRELIMINARY ECOLOGICAL APPRAISAL.....7

 PROTECTED SPECIES ASSESSMENTS7

 LIMITATIONS.....7

3.0 RESULTS..... 8

 DESKTOP STUDY8

 ADJACENT SITE13

 HABITAT SURVEY15

 PROTECTED SPECIES.....16

ROOSTING BATS16

FORAGING AND COMMUTING BATS16

 [REDACTED].....16

GREAT CRESTED NEWTS17

DORMICE.....18

REPTILES.....18

NESTING BIRDS.....19

OTHER SPECIES.....19

4.0 DISCUSSION..... 19

 EFFECTS ON DESIGNATED SITES.....19

 EFFECTS ON PRIORITY HABITATS20

 PROTECTED SPECIES.....21

5.0 BIODIVERSITY NET GAIN 25

6.0 IMPACT ASSESSMENT 26

7.0 CONCLUSIONS..... 27

8.0 REFERENCES 29

APPENDIX 1: HABITAT MAP 31

APPENDIX 2: PHOTOS 32


APPENDIX 3: SPECIES LIST 35

APPENDIX 4: BIOLOGICAL RECORDS..... 37

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  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 DMH Stallard to undertake a Preliminary Ecological Appraisal (PEA) and ecological assessment of the land south of Burleigh Lane, Crawley Down, RH10 4LF, 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);
- An impact assessment (Section 5); and
- Conclusions (Section 6).

Site Context and Status

1.4 The site is located to the south of Crawley Down (TQ 35134 37154). The site covers approximately 1.7ha and consists of a grassland field, bordered by woodland. The immediate surroundings of the site consist of Burleigh Lane to the north and agricultural fields/ woodland to the east, south and west.

1.5 The aerial photography overleaf (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.



Figure 1: Approximate location of the red line boundary.

Proposed Development

- 1.6 It is understood that the current proposals for the site involve the designation of 8 new self-build residential plots, with associated access, parking and gardens.

Planning Policies

- 1.7 The site was surveyed to assess its ecological value and to ensure the proposals were compliant with relevant planning policy and legislation. Policy guidance is provided by the National Planning Policy Framework (NPPF 2024) as well as policies from the Mid Sussex District Council.

- *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*

- 1.8 The Environment Bill (Environment Act 2021) 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.

1.9 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; Wildlife and Countryside Act 1981, Natural Environment and Rural Communities Act 2006, and the Conservation of Habitats and Species (EU Exit) Regulations 2019.

1.10 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 search 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 survey area including identifying habitat linkages and features (ponds, woodlands etc.) within the wider landscape. Records were requested from Sussex Biodiversity Record Centre (SxBRC) for protected species, non-statutory sites and invasive species within 2km of the site boundary.

Preliminary Ecological Appraisal

- 2.2 An extended preliminary ecological appraisal was undertaken on 7th August 2025 by Chris Jennings BSc (Hons) MSc MCIEEM and Daniel Whitlock BSc (Hons). The surveyor identified the habitats present, following the standard 'UK Hab' auditing method. 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 for the site to support protected species was also assessed.

Protected Species Assessments

- 2.3 Any evidence of protected species was recorded. Standard methods of search and measures of presence or likely absence based on habitat suitability were used for bats in trees and buildings (Collins 2016), breeding birds¹, dormouse (Bright *et al.* 2006), great crested newt (ARG 2010), reptiles (Froglife 2015), badgers (Creswell *et al.* 1990) and water vole (Strachan *et al.* 2011).

Limitations

- 2.4 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.
- 2.5 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.

¹<https://www.bto.org/our-science/projects/birdatlas/methods/breeding-evidence>

3.0 Results

Desktop Study

- 3.1 There is one internationally designated site located within 15km of the site boundary. Ashdown Forest (SAC & SPA) is located c.5.9km south east of the site boundary (Figure 2).

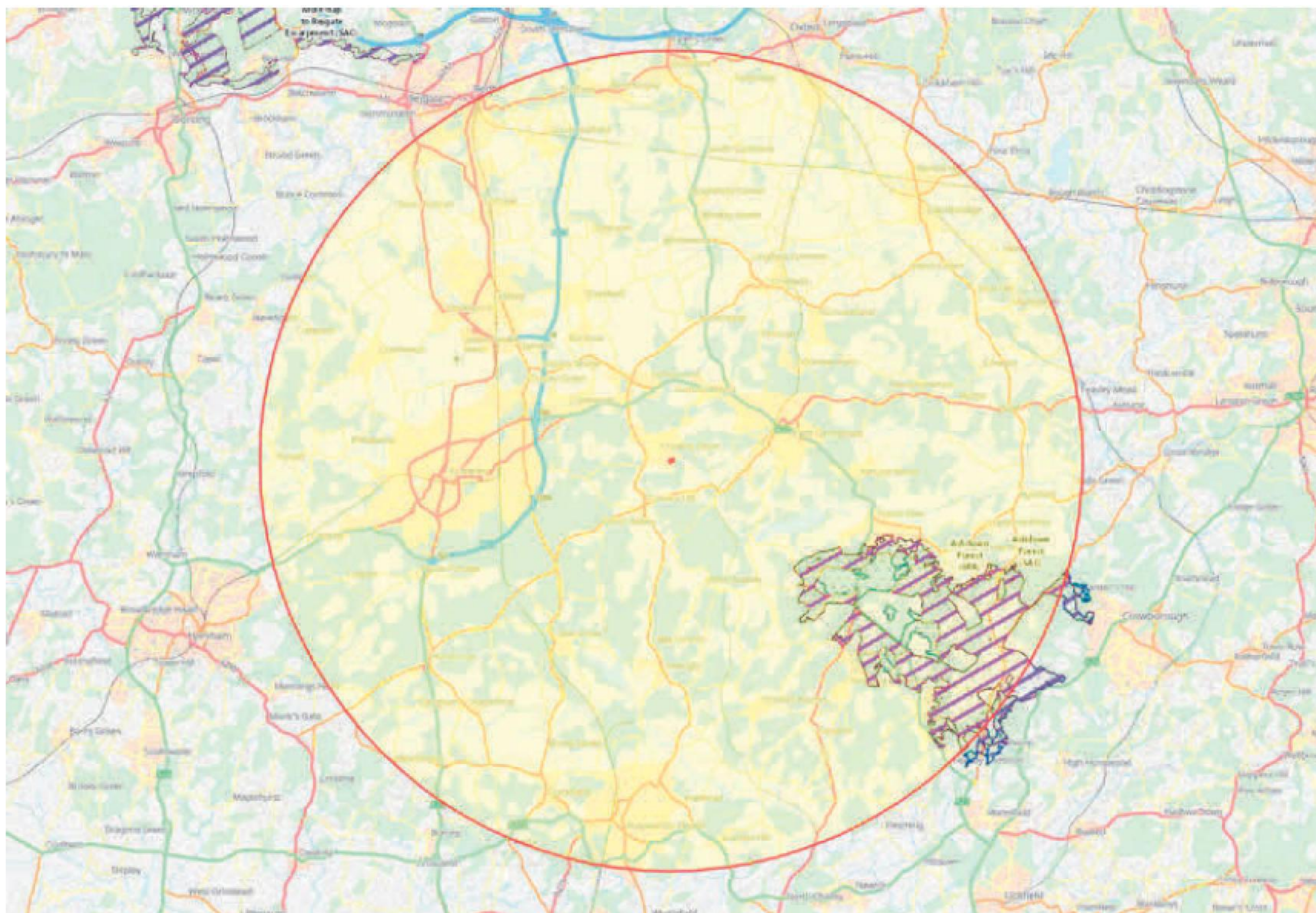


Figure 2: Internationally designated sites within 15km of the site boundary.

- 3.2 There are no national statutory designated sites within 2km of the site. The closest statutory designated site is Turner's Hill (SSSI) located c.2.1km south-west of the site boundary.
- 3.3 While the site does fall within an impact risk zone for several SSSIs (Figure 3), only large infrastructure projects such as aviation proposals, waste management or combustion related project are required to contact Natural England regarding impacts to the SSSI.

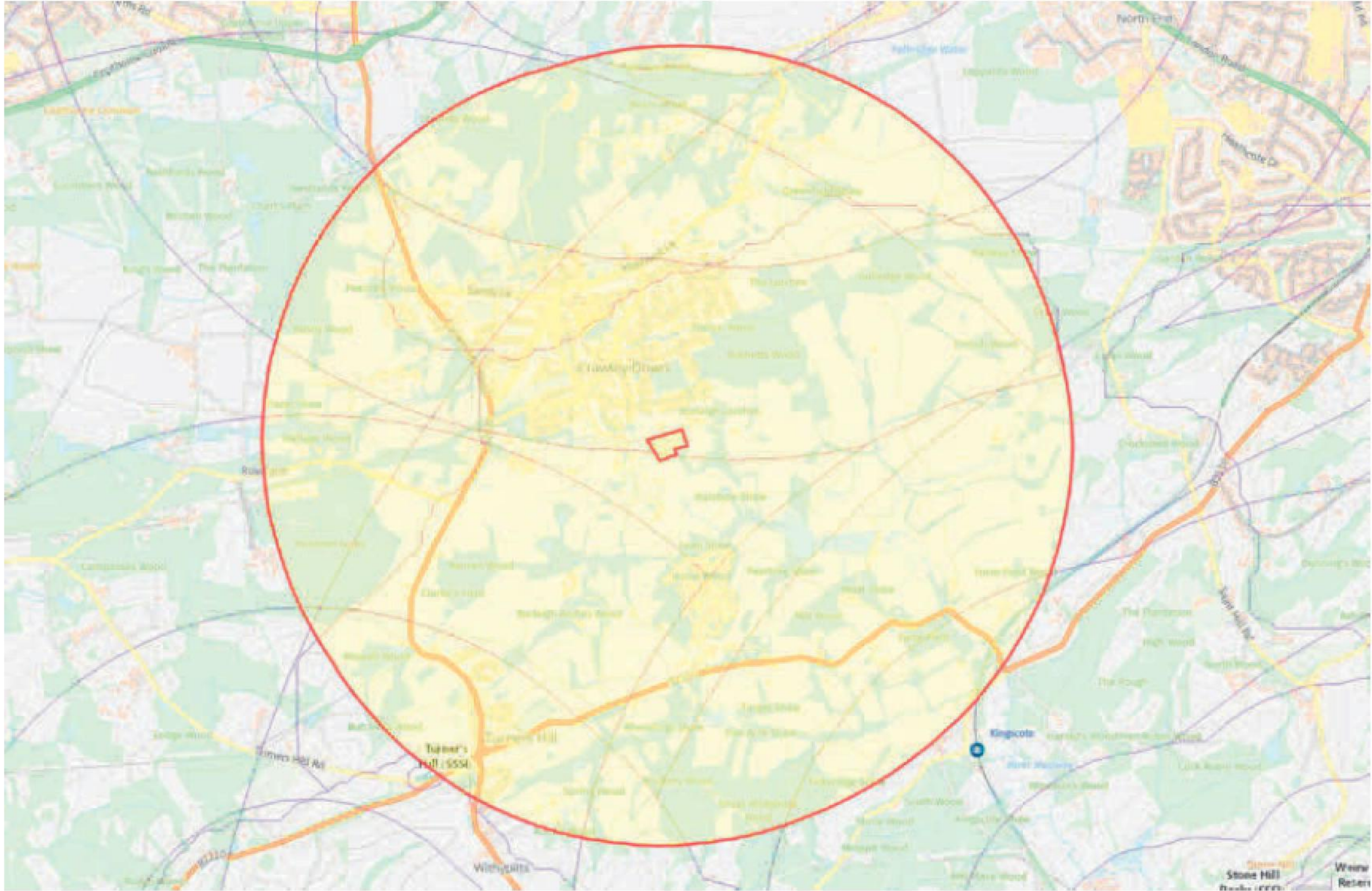


Figure 3: Closest statutory designated sites to the site boundary, purple lines indicate SSSI impact risk zones.

3.4 There are two non-statutory designated sites within 2km of the site boundary. These are both Local Wildlife Sites (LWS) and are listed below:

- Worth Way located c.480m north east; and
- Lobbs Wood & Furnace Pond located c.1.4km northwest of the site boundary.

3.5 There are also several units of priority habitat within 2km of the site (Figure 4), the closest of each type include:

- Deciduous woodland adjacent to the southern site boundary;
- Traditional orchard, c.110m west;
- Ancient and semi-natural woodland, c.120m south-east;
- Woodpasture and parkland, c.240m west; and
- Ancient replanted woodland, c.1.4km north east of the site boundary.

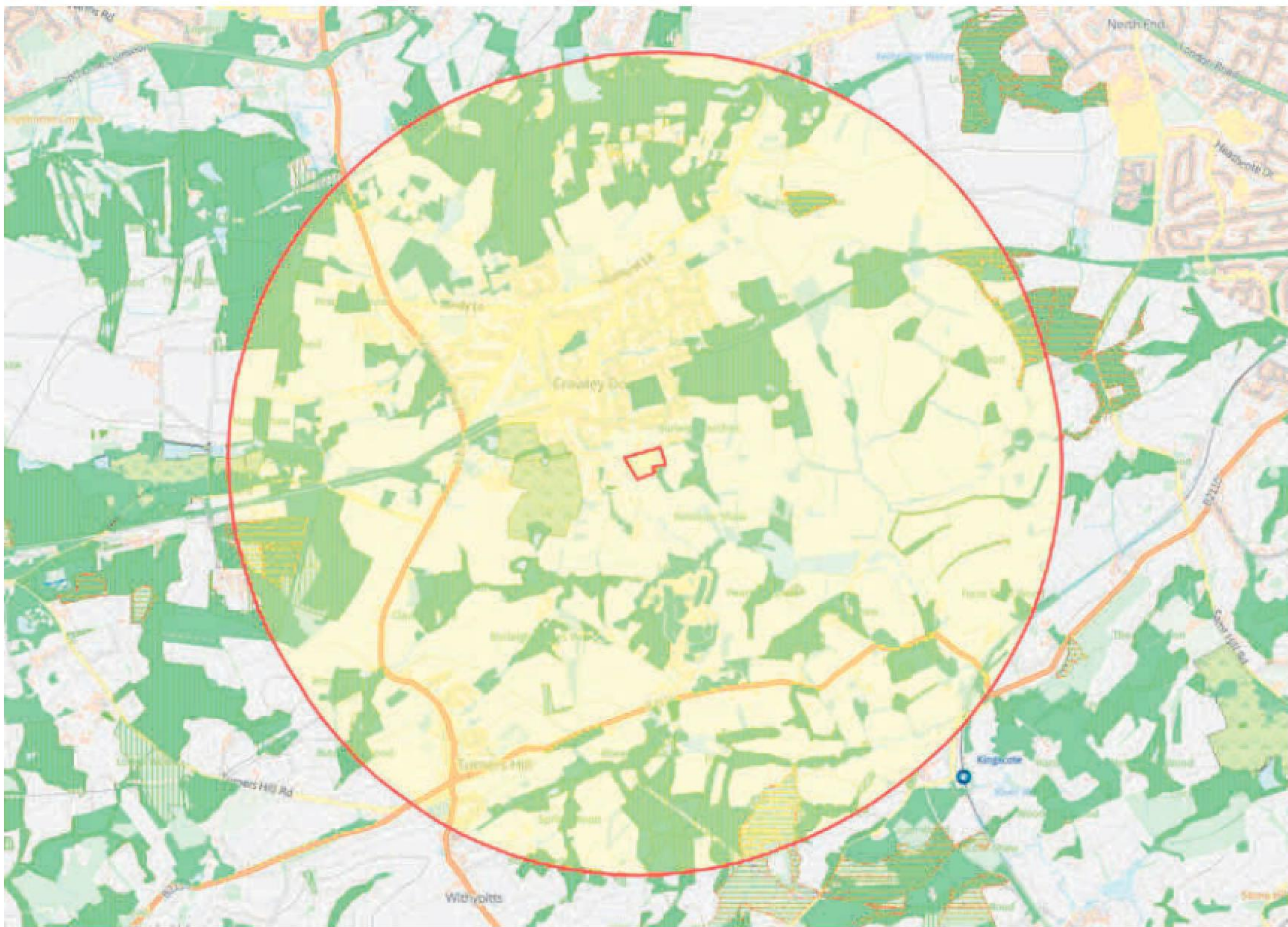


Figure 4: Priority habitat within 2km of the site including deciduous woodland (dark green), traditional orchards (lime green), ancient and semi natural woodland (green vertical hatching), woodpasture and parkland (green with symbols) and ancient replanted woodland (brown horizontal hatching).

3.6 The desktop study revealed five European Protected Species (EPS) licences granted within 2km of the site boundary (Figure 5) (Table 1).

Table 1: EPSM licences granted within 2km of the site boundary

Species	Location	Action	Date of license	Reference
Great crested newt	c.220m north	Destruction of a resting place	21/08/2020-31/12/2030	2020-44432-EPS-MIT-1
Brown long-eared bat	c.180m east	Destruction of resting place and damage to breeding place	25/10/2017-31/10/2027	2017-31276-EPS-MIT
Brown long-eared and common pipistrelle	c.770m north	Destruction of a resting place	16/09/2014-01/10/2016	2014-3084-EPS-MIT
Great crested newt	c.610m west	Destruction of a resting place	06/08/2012-31/10/2015	EPSM2011-3224
Great crested newt	c.1.1km north west	Destruction of a resting place	29/09/2017-31/12/2029	2017-30804-EPS-MIT
Brown long-eared and common pipistrelle	c.1.2km north west	Destruction of a breeding place	24/04/2012-01/04/2014	EPSM2012-4307

- 3.7 Four GCN class survey licence returns were present within 2km of the site, with the closest being located c.200m north east of the site and confirming GCN presence (Figure 5).

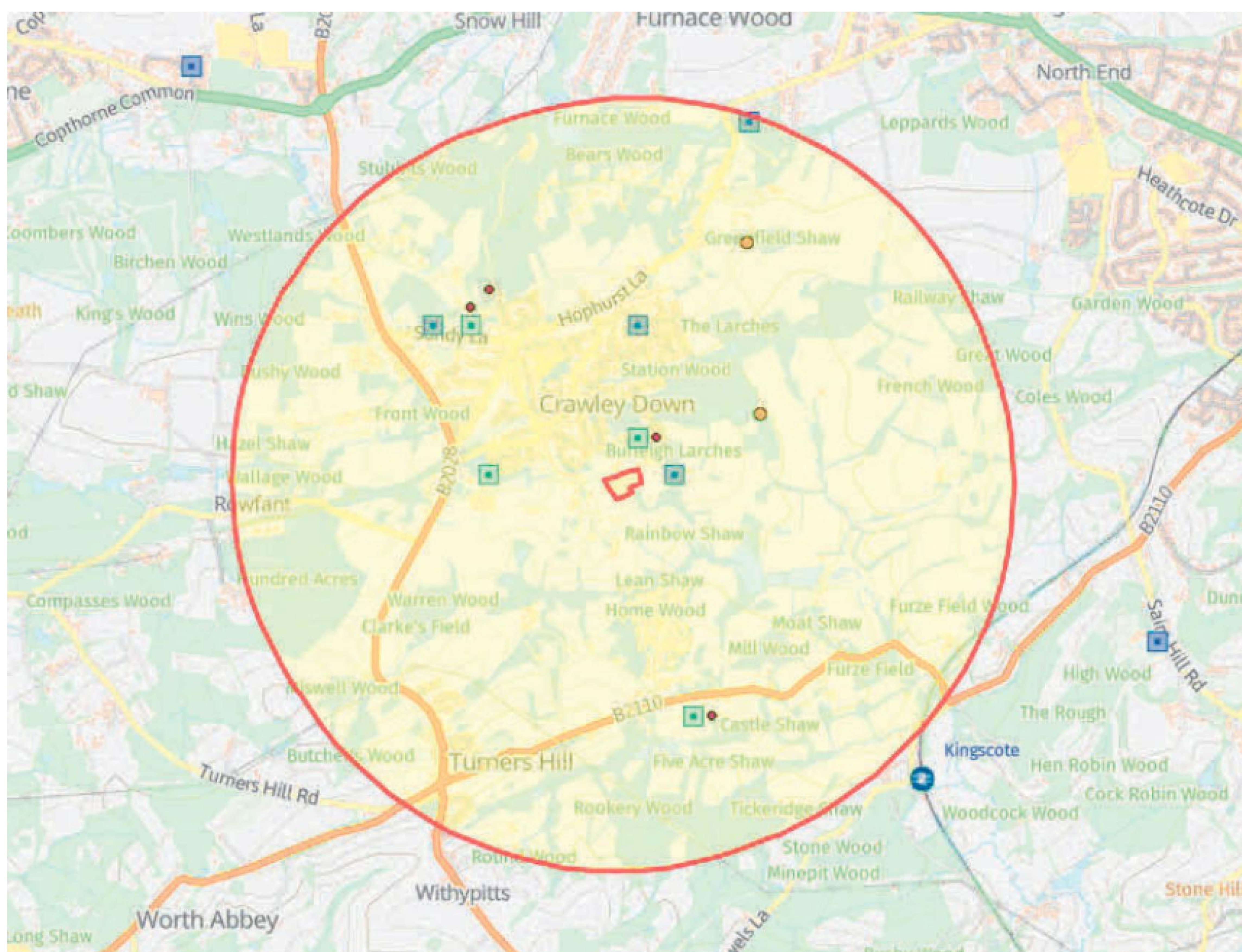


Figure 5: Location of bat EPS licences (blue squares) GCN EPS licences (green squares), GCN licence returns (purple dots) and absent GCN pond surveys (orange dots) within 2km of the site boundary.

- 3.8 OS maps and aerial imagery indicate there are no ponds on site, however, ten ponds were identified within 250m of the site (Figure 6).
- 3.9 A search on the planning portal revealed two additional ornamental garden ponds in the rear garden of an adjacent property which were not present on the online MAGIC software. These have been marked on the map as P11 and P12.

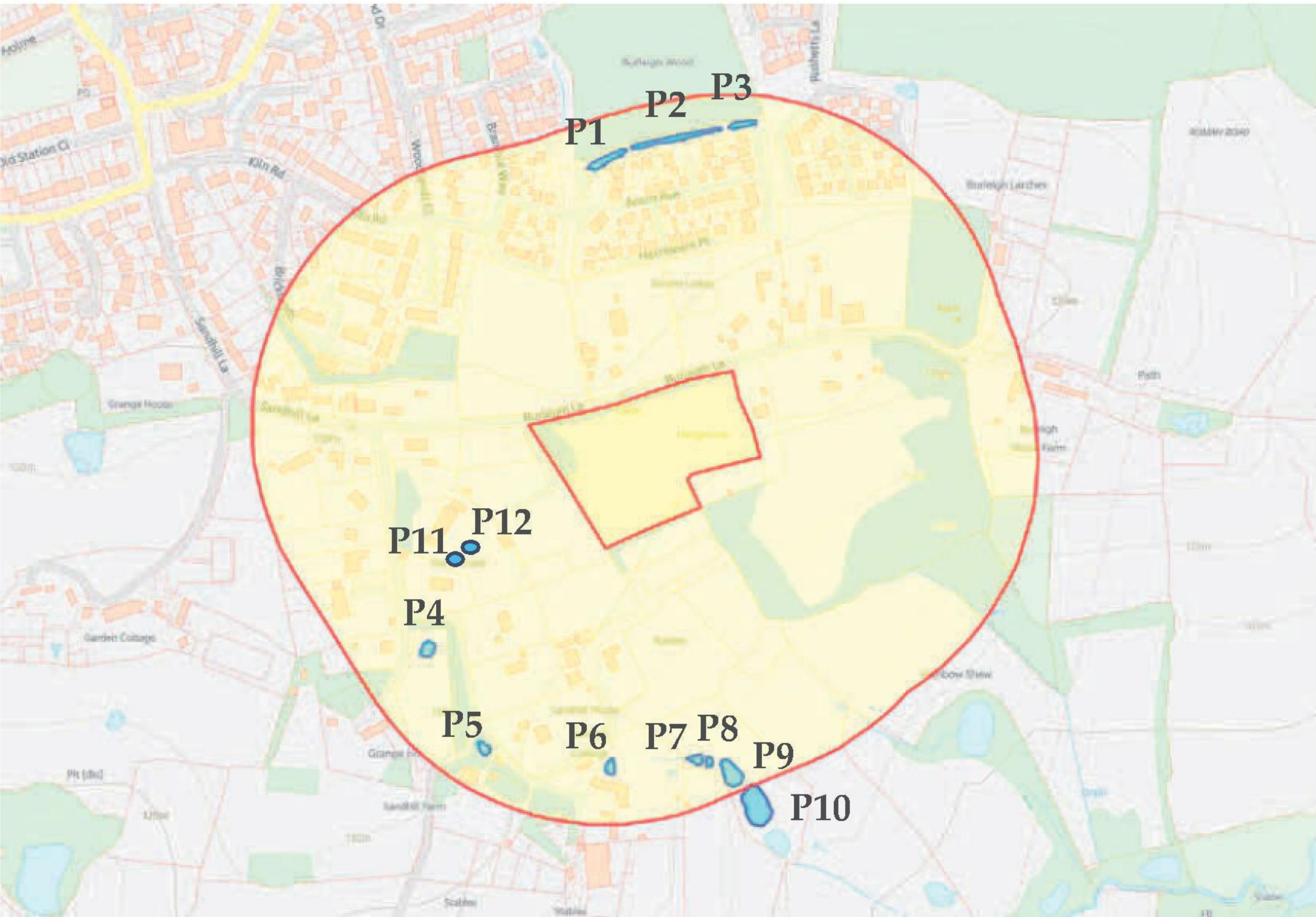


Figure 6: Ponds located within 250m of the site boundary.

3.10 A 2km radius data search was requested from Sussex Biodiversity Records Centre (SxBRC). Notable protected species from this search are outlined below (Table 2). Only records from within the last ten years and those closest to site have been included.

Table 2: Notable species recorded within 2km of the site in the last 10 years.

Species	Status	Closest record in last 10 years
Common toad <i>Bufo bufo</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.5a; NERC S41	c.250m north east (10/11/2020)
Great crested newt <i>Triturus cristatus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5, s9.4b/c; Habitats Directive Annex 4; Habitat Regulations Schedule 2; NERC S41	c.170m north (07/05/2019)
Hedgehog <i>Erinaceus europaeus</i>	NERC S41	c.700m north (30/05/2018)
Grass snake <i>Natrix helvetica</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.5a; NERC S41	c.250m north east (10/11/2020)
Noctule <i>Nyctalus noctula</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.4b/c; Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41	c.250m north east (31/07/2019)
Common pipistrelle <i>Pipistrellus pipistrellus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.4b/c; Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41	c.250m north east (31/07/2019)
Soprano pipistrelle	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.4b/c; Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41	c.250m north east (31/07/2019)

<i>Pipistrellus pygmaeus</i>		
Brown long-eared bat <i>Plecotus auritus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.4b/c; Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41	c.980m north (28/06/2017)
Myotis sp. <i>Myotis sp.</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5 s9.4b/c; Habitats Directive Annex 4; Habitats Directive Schedule 2; NERC S41	c.250m north east (31/07/2019)
Red kite <i>Milvus milvus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt 1; Birds Directive A1	Within 2km (26/04/2022)
Lapwing <i>Vanellus vanellus</i>	NERC S41	Within 2km (24/05/2021)
Curlew <i>Numenius arquata</i>	NERC S41	Within 2km (09/07/2023)
Turtle dove <i>Streptopelia turtur</i>	NERC S41	Within 2km (01/06/2021)
Kingfisher <i>Alcedo atthis</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt 1; Birds Directive A1	Within 2km (19/08/2023)
Hobby <i>Falco subbuteo</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt 1	Within 2km (21/07/2017)
Skylark <i>Alauda arvensis</i>	NERC S41	Within 2km (09/07/2023)
Woodlark <i>Lullula arborea</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt 1; Birds Directive A1; NERC S41	Within 2km (12/03/2022)
Yellowhammer <i>Emberiza citrinella</i>	NERC S41	Within 2km (23/04/2023)
Linnet <i>Linaria cannabina</i>	NERC S41	Within 2km (30/06/2018)
Bullfinch <i>Pyrrhula pyrrhula</i>	NERC S41	Within 2km (28/04/2023)
Yellow wagtail <i>Motacilla flava</i>	NERC S41	Within 2km (19/05/2018)
Spotted flycatcher <i>Muscicapa striata</i>	NERC S41	Within 2km (30/06/2018)
Marsh tit <i>Poecile palustris</i>	NERC S41	Within 2km (18/06/2023)
House sparrow <i>Passer domesticus</i>	NERC S41	Within 2km (12/04/2023)
Dunnock <i>Prunella modularis</i>	NERC S41	Within 2km (21/05/2023)
Firecrest <i>Regulus ignicapilla</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt 1	Within 2km (28/04/2023)
Starling <i>Sturnus vulgaris</i>	NERC S41	Within 2km (03/05/2020)
Song thrush <i>Turdus philomelos</i>	NERC S41	Within 2km (21/05/2023)
Barn owl <i>Tyta alba</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1 Pt 1	Within 2km (29/02/2016)

Adjacent Site

3.11 The surveys supporting land to the north of the site were conducted in 2023 by Urban Edge. The location of the site is shown in figure 7 below. The results of their surveys

are summarised below and these provide additional information on the status of protected species in the local area.



Figure 7: Location of the Urban Edge survey site, which is directly north of this survey site

3.12 The following protected species surveys are summarised:

- GCN surveys identified two ponds (P21 and P22) which were positive for eDNA. Ponds P2, P4, P5 and P7 were negative for GCN eDNA. No access was granted to P1, P3 was dry at the time of survey and no pond was present at the location of P6. No GCN were recorded under reptile refugia during the reptile survey. The locations of the ponds are shown in Figure 8 below.
- Bat surveys identified that a total of eight species were recorded interactive with the site. 91.34% were from pipistrelle bats, of which 87.55% being common pipistrelles. Other species recorded included soprano and Nathusius pipistrelle, myotis sp, brown long eared bats, noctule, serotine and Leislars.
- No evidence of dormice were recorded during the survey period.
- Reptile surveys identified the presence of a single grass snake present within the site boundary.

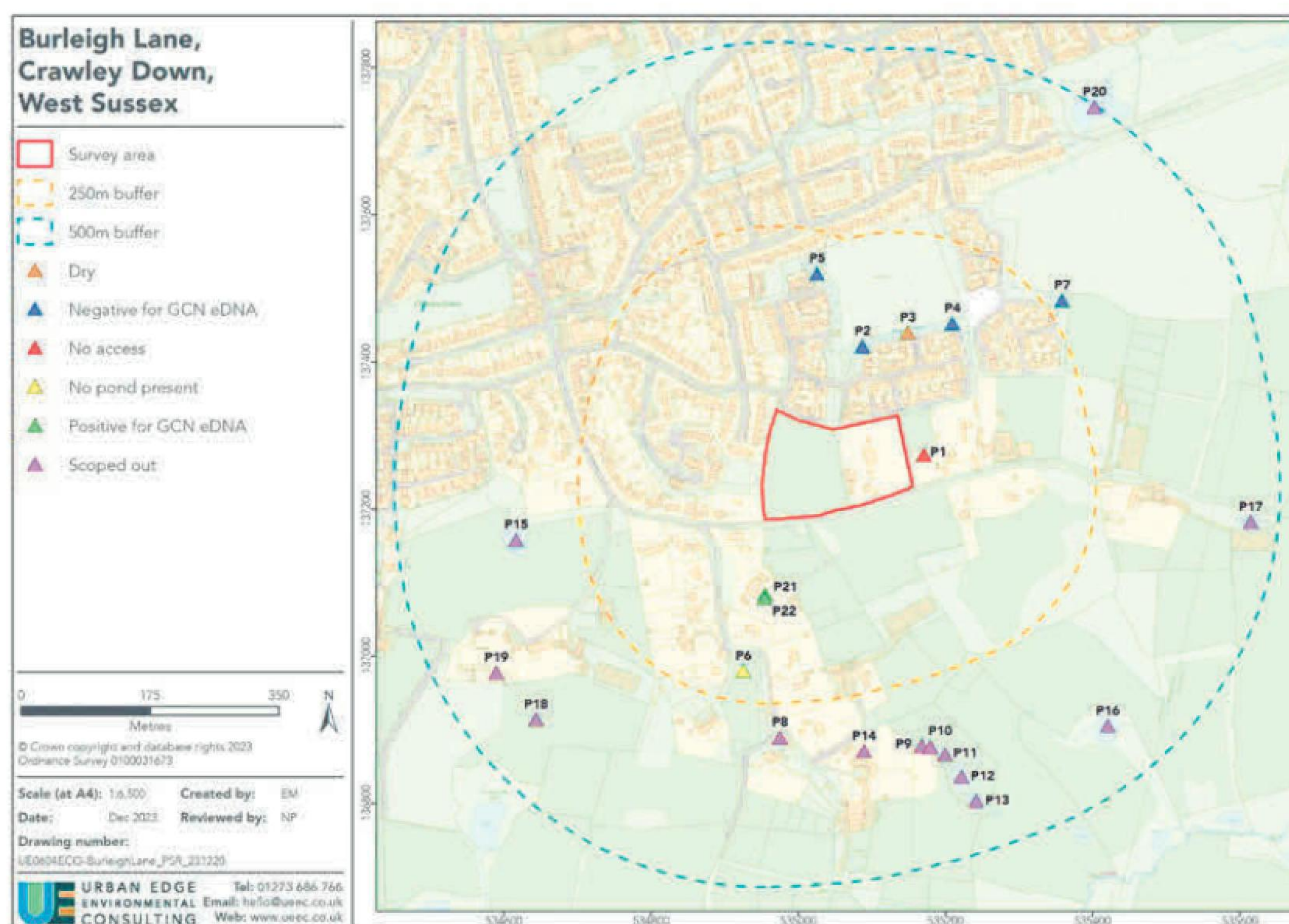


Figure 8: Location of ponds surveyed by Urban Edge

Habitat Survey

- 3.13 The site largely comprised of managed neutral grassland bordered by woodland. Broad habitat types identified within the site boundary are detailed below. Only species of note have been listed within this section.
- 3.14 The habitat map is presented in **Appendix 1**, site photos in **Appendix 2** and a full species list in **Appendix 3**.

Other Neutral Grassland

- 3.15 The majority of the site comprised of other neutral grassland which is regularly mown to a short sward height. This habitat contained abundant common bent and Yorkshire fog, with frequent white clover. Occasional species included creeping buttercup, sweet vernal grass, ragwort, common sorrel, creeping thistle, common bird's foot trefoil, meadow buttercup and cock's foot. Transects identified an average species richness of 8.8 species/m².

Other Lowland Mixed Deciduous Woodland

- 3.16 The site was bordered by other lowland mixed deciduous woodland, which included abundant holly and hazel, with frequent pedunculate oak, blackthorn, bramble,

common ivy and hedge woundwort. Occasional species included hornbeam, male fern, hawthorn, cherry, elder, sycamore and goat willow. These were largely young and semi-mature however some mature specimens were also present.

Dry ditch

- 3.17 A dry ditch was present along the northern and western site boundaries which, at the time of survey, contained no flowing water or aquatic vegetation.

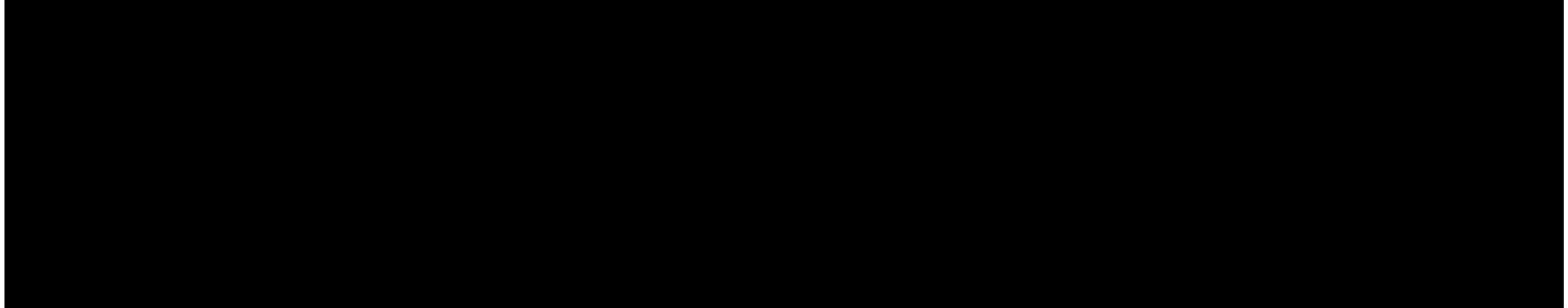
Protected Species

Roosting Bats

- 3.18 Two trees on site were considered to support Potential Roosting Features for individual bats (PRF-Is). Locations are shown in Appendix 1. One tree in the north of the site had a vertical gap on the trunk around eye level on its south facing feature. This appeared to lead into a small cavity within the limb. While no direct evidence of bat presence was identified, the use of an endoscope confirmed a suitable crevice to support a roosting bat. The location of this feature is shown in Appendix 1 as Target Note 1.
- 3.19 The other was an oak tree along the southern boundary which was mature and covered in dense ivy, potentially covering roosting features. The location of this feature is shown in Appendix 1 as Target Note 2.
- 3.20 The remainder of the trees within the woodland were considered to be unsuitable for roosting bats due to a lack of potential roosting features such as rot holes, broken limbs, complex growth forms and veteran features.

Foraging and Commuting Bats

- 3.21 The site was dominated short sward grassland which provides limited foraging opportunities for bats. The boundary woodland could provide good foraging habitat and commuting opportunities for bats to and from suitable roosting sites in the surrounding area. As such, it is considered the site has some potential for foraging and commuting bats, largely limited to the southern boundary habitats.



Great Crested Newts

- 3.24 No ponds are present on site, though 12 are present within 250m of the site boundary, including several without any significant dispersal barriers.
- 3.25 Previous surveys for an adjacent site north of Burleigh Lane (Urban Edge Environmental Consulting, 2023) surveyed several ponds in the surrounding area for GCN eDNA and two ponds (P11 and P12 as labelled in this report) returned positive for GCN eDNA. There are no significant dispersal barriers between these ponds and the site.
- 3.26 The grassland on site was found to have very limited potential to support GCN in their terrestrial phase due to it being heavily managed and short sward. The boundary woodland however supported some ground level scrub and deadwood, which may act as suitable GCN refugia.
- 3.27 The site falls within the NatureSpace Partnership red risk zone, which represents “highly suitable habitat” (Figure 7).

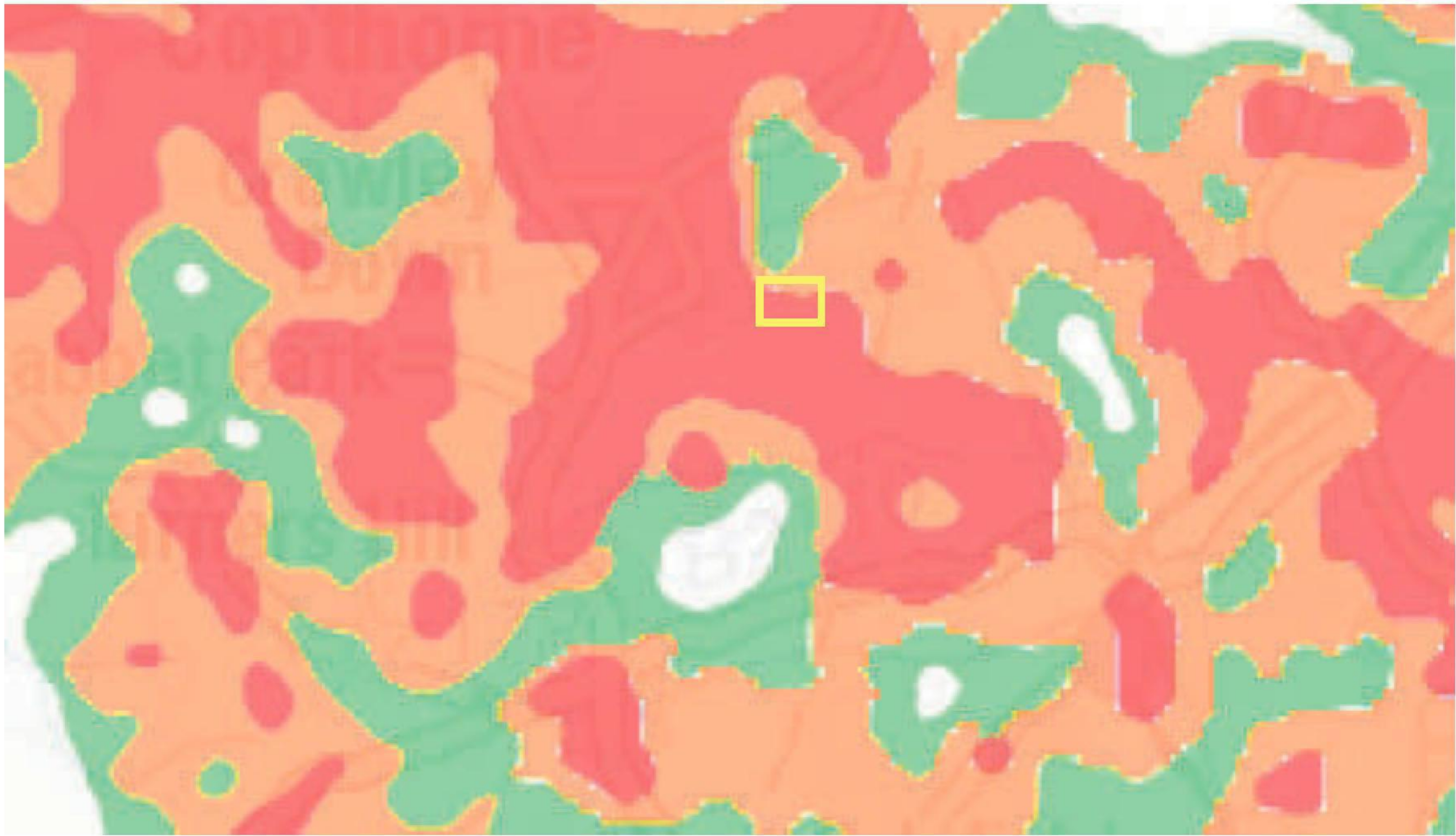


Figure 7: NatureSpace Partnership Impact Risk Zones, yellow rectangle represents approximate site location.

Dormice

- 3.28 The site mostly comprises short-sward grassland, which is considered unsuitable dormice habitat. The woodland which bordered the site offered some potential to support dormice, owing to its native species composition (including hazel), connected canopy throughout and further connectivity to a wider network of woodland and hedgerows in the surrounding area.

Reptiles

- 3.29 The majority of the site was considered unsuitable for reptile species due to the lack of long sward vegetation for foraging and refuge habitat. Additionally, there are low numbers of records of reptile species within the surrounding area in the last 10 years, with only two grass snake records. However, the boundary woodland edge habitat may be suitable to support reptiles as it offers both basking space and refuge areas. Additionally, two small areas of unmown grass/ bracken are present within the grassland, one of which containing deadwood, which also may support reptiles. As such, it is considered possible that some reptile species may be present in the south of the site, albeit in low numbers.

Nesting Birds

- 3.30 The woodland around the site boundaries were considered to have potential to support nesting birds. The grassland habitats were not considered to be suitable for ground nesting birds due to the management of the sward height of the grassland.

Other Species

- 3.31 Due to a lack of suitable habitat, the site was not considered suitable for other protected species, such as water voles and otters.
- 3.32 The boundary woodland habitat is considered to be suitable for hedgehogs.

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 fall within or adjacent to any statutory sites. The nearest internationally designated site, Ashdown Forest (SAC & SPA), is located c.5.9km south east. This designation has a 7km Zone of Influence (ZOI) whereby all developments resulting in a net increase in dwellings will need to contribute to an appropriate level of mitigation against the impacts of increased recreational pressure. This is usually in the form of providing a Suitable Alternative Natural Greenspace (SANG), either on the development site itself or through a financial contribution to a strategic SANG elsewhere, and a separate financial contribution towards a Strategic Access Management and Monitoring (SAMM) Strategy. As the site falls within this ZOI, SANG and SAMM contributions will be required proportionate to the scale of the development.
- 4.3 Aside from the impacts of recreational pressure increases (to be mitigated through SAMM/ SANG contributions), owing to the small scale of the development and considerable distance, no other impacts on the integrity of this designated site are considered likely.

- 4.4 There are no statutory sites located within 2km of the site boundary. It is considered that due to the size of the development and the distance from all designated sites, that no impacts, direct or otherwise, would be predicted on national statutory designations as a result of the proposals (aside from previously mentioned recreational pressure impacts to Ashdown Forest).
- 4.5 There are two non-statutory sites located within the wider landscape. The nearest of these is Worth Way (LWS), located c.480m north east of the site. Considering the distance between the proposed development site and the LWS, it is considered that no impacts, direct or otherwise, would be predicted.

Effects on Priority Habitats

- 4.6 The lowland mixed deciduous woodland which borders the site is a priority habitat. Approximately 190m² of this woodland will be lost to facilitate road and pedestrian access into the site. As such, it is recommended that additional scrub planting is incorporated into the design of the development to compensate for this loss.
- 4.7 It is recommended that this priority woodland is fenced off from the development and not included as part of new garden habitats to ensure it is retained and protected. The scheme has been designed to keep the retained woodland outside private residence, with a maintenance strip around the edges of the site. Furthermore, due to the low density of the scheme, impacts resulting from development, such as light level changes and recreational impacts, are considered to be minimal.
- 4.8 A number of areas of priority habitat are located within the local landscape. The on site deciduous woodland extends further offsite to the south, though this woodland parcel is entirely retained within the proposals. Due to the nature of the development, and the lack of related habitats to be lost, no impacts on any other areas of priority habitat are expected as a result of the proposed development on site.

Effects on on-site habitats

- 4.9 The neutral grassland on site is common, widespread, and of relatively low biodiversity value in its current highly managed state. As such, it is considered that the loss or removal of this habitat would result in site level impacts only. However, the loss of this habitat will require compensation in the form of habitat creation/enhancement to support biodiversity net gain. Alternatively off setting, the purchase

of biodiversity credits, is an alternative. The habitat with the most ecological value on site is the woodland of which the majority is being retained.

Protected Species

Roosting Bats

4.10 Two trees on site were considered to support PRF-Is, a hornbeam in the north of the site and an oak in the south. While it cannot be confirmed if these features contain roosting bats, they are both planned to be retained as part of the development and therefore no further survey will be necessary.

4.11 However, as a precaution, advice from an arboriculturist should be followed to protect the tree during construction and the area should not receive any additional illumination from artificial lighting as part of the development.

Foraging and Commuting Bats

4.12 The grassland on site is considered to offer limited value for commuting and foraging bats due to it being regularly mown to a short sward. The boundary woodland offers potential to support foraging and commuting bats and has good connectivity to a wider network of hedgerows, woodland and potential roosts in the surrounding area. It is understood this habitat will be mostly unaffected by the works on site other than two small sections along the northern boundary to facilitate access.

4.13 This boundary woodland should not be illuminated with additional street lighting as to create a dark corridor suitable for bats foraging and commuting along the feature. All bat species are nocturnal, resting in dark conditions in the day and emerging at night to feed. Bats are known to be affected by light levels, which can affect both their roosting and foraging behaviour. This needs to be considered with a sympathetic lighting scheme for the development. Recommendations include:

- Installing lighting only if there is a significant need;
- Using sodium lamps instead of mercury or metal halide lamps where glass glazing is preferred due to its UV filtration characteristics;
- Directing lighting to where it is needed and avoiding light spillage;
- Using baffled lighting where light is directed towards the ground and

- Avoid putting lighting near trees suitable for roosting bats, woodland, trees or hedgerows and angling light away from these linear features which are used by commuting and foraging bats.

4.14 According to Bat Conservation Trust guidelines it is important that proportionality is employed when recommending further survey work for bat species on a proposed development site. As stated within section 2.2.19 of the latest survey guidelines (2023), the following points need to be considered with regard to planning bat surveys:

- Likelihood of bats being present;
- Type of proposed activities;
- Scale of proposed activities;
- Size, nature and complexity of the site;
- Species concerned;
- Number of individuals.

4.15 Overall, the site is considered to have moderate potential to support foraging/commuting bats. In order to inform a mitigation strategy, further surveys are recommended. This involves three Nighttime Bat Walkover (NBW) surveys as well as monthly automated/ static bat detector surveys for at least five consecutive nights per month. The results of this work is provided in a separate report. No barbastelle or other rare bat species were recorded during the survey period, with activity dominated by common and widespread

4.16 It must be noted that no species such as barbastelle or Bechstein's bats were recorded on the site to the north in 2023 (Urban Edge), with the dominant species recorded being common pipistrelle. The proposed development is of limited impact, due to the low numbers of self builds proposed, and it is considered unlikely that significant impacts would be predicted, notably, if the woodland edges are all to be retained within the scheme.

4.17 The 2025 surveys conducted by the Ecology Partnership and the surveys from Urban Edge on the site to the north, suggest that the local area supports reasonable numbers of bats, but no rare or highly light sensitive species. The low density of the scheme, and the retention of the woodland, ensures that bats can move across the site and into the wider landscape. No impacts are predicted on the bat use of the site.

4.18

4.19

Reptiles

- 4.20 The grassland which dominated the site was not considered optimal to support reptiles due to it being regularly mown to a short sward. However, the woodland edge habitat around the site boundaries and several patches of tall grass/ bracken throughout the site are considered suitable to support reptiles and grass snake are known to be present to the north of the site (Urban Edge 2023). As such, it is recommended that further surveys be carried out to determine presence/ likely absence of reptiles and inform sufficient mitigation. This involves the placement of artificial refugia (roofing felt squares) throughout the suitable habitat and seven checks in optimal weather conditions.
- 4.21 The results of the 2025 surveys are found in a separate report. As the surveys did not identify any species of reptile using the site, no species specific mitigation was recommended. However, sensitive clearance and enhancements have been included in the report.

Nesting Birds

- 4.22 The boundary woodland on site had some potential to support nesting bird species. It is understood this feature will be mostly retained during development. It is recommended that any vegetation with potential to support nesting birds should be removed outside of the breeding bird season (March-September inclusive) 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.

Great Crested Newt (GCN)

- 4.23 The site itself contained no ponds and therefore is not considered likely to support GCN within their aquatic/ breeding phase. However, 12 ponds are present within 250m of the site, including two which previously have tested positive for GCN eDNA approximately 120m west of the site boundary. Additionally, the boundary woodland is considered to offer suitable terrestrial GCN habitat in the form of scrub understorey and deadwood refugia. Due to the proximity to a confirmed GCN pond, with no significant dispersal barriers, the site is likely to contain GCN and a licence will be need to be obtained prior to development.
- 4.24 It is recommended that the project apply for district licencing for great crested newts through the West Sussex Nature Space scheme. This would not require further survey work; however, a financial contribution would be agreed to provide targeted enhancement and management for the species within the county. This approach works on a worst-case scenario approach. The applicant should ensure that the relevant certificate and the required financial contributions are agreed prior to the start of works.

Dormice

- 4.25 The short sward grassland which dominates the site is considered unsuitable for dormice. The boundary woodland, however, may provide suitable foraging and commuting habitat to areas of woodland and hedgerow in the surrounding area. The tree canopy, when in full leaf, provides connectivity to tree lines north of Burleigh Lane and connected hedgerow and areas of woodland to the south. Therefore, it is possible that dormice may use the woodland on site as a foraging and commuting feature. No dormice were identified to the north of the site (Urban Edge 2023),

however, due to the high connectivity to the south of the site as well as the wider landscape, the potential for dormice can not be ruled out.

4.26 As such, further dormouse surveys are recommended to determine presence or absence and inform sufficient mitigation. This will involve the installation of 50 dormice nest tubes at regular intervals throughout the suitable habitat on site, with monthly checks during the optimal season.

4.27 A species specific report for dormice has been provided. No dormice were located during the survey period, and alongside the work by Urban Edge to the north, it appears that dormice might be locally absent.

4.28 The retention of the east, south and western woodland will help to ensure potential commuting routes for dormouse are maintained across the site post development.

Other species

4.23 The site has potential to support hedgehog and their presence on site cannot be ruled out. As such, it is recommended that best practice guidelines be followed throughout any proposed development to ensure no individuals are harmed. This includes a pre-clearance check of any scrub habitat and the translocation of any hedgehogs found to safe, retained habitat.

4.24 No potential for any other species, such as otters or water voles was identified within the site boundary. It is considered that if protected species are recorded during works, then all works must cease, and advice should be sought from a qualified ecologist.

5.0 Biodiversity Net Gain

5.1 A number of enhancements can be incorporated within the development scheme to help reduce potential ecological impacts and provide net gains to biodiversity in line with policy requirements and the Environmental Act 2021.

5.2 Planning policy also encourages developments to improve biodiversity, therefore some recommended ecological enhancements to be considered are included below. The development will also have to give due regard to Policy DP38- Biodiversity. This requires proposals to *“take opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity,*

including...incorporating biodiversity features within developments” and “unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures”.

5.3 A BNG report is provided separately. This includes a review of the baseline habitats and the proposed development.

6.0 Impact Assessment

6.1 This section of the report forms an EcIA (Ecological Impact Assessment) 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 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 3 summarises the impacts and required mitigation for each receptor as previously detailed in the discussion.

Table 3: Assessment of effects from the proposal after mitigation and compensation

Feature	Scale of Importance	Mitigation/Compensation Required	Residual Effect
Internationally Designated Statutory sites	International	SANG/ SAMM contributions to mitigate against increased recreational pressure to Ashdown Forest.	Not significant
National Statutory Designated Sites	National	None required – sufficient distance from site. No related habitat to be lost.	Not significant
Non-Statutory Sites	County	None required – sufficient distance from site. No related habitat to be lost.	Not significant
Priority habitats	Site	Loss of 190m ² of deciduous woodland to be lost. Recommendations for compensation planting and off setting have been made	Not significant

Bat (roosting)	Up to local	Two PRF-I trees identified, to be retained and protected from the development and sensitive lighting scheme to be implemented.	Not significant
Bats (commuting and foraging)	Up to local	Suitable foraging/commuting habitat on site to be mostly retained as part of the development. Bat activity surveys completed. Sensitive lighting measures to be implemented.	Not significant
Breeding birds	Site	Mitigating direct harm to nests by removal of any suitable nesting habitat outside of nesting bird season or after a check by a suitably qualified ecologist.	Not significant
GCN	Site	District license/ EPSM licence required to offset potential minor impacts associated with limited loss of terrestrial habitat on site.	Not significant
Reptiles	Site	Reptile presence/ likely absence surveys completed. No reptiles.	Not significant
Dormice	Up to local	Dormouse nest tube surveys completed. No dormice.	Not significant

7.0 Conclusions

7.1 The site does not lie within or adjacent to any designated sites. A number of statutory sites and non-statutory sites are located within the surrounding area, including Ashdown Forest, located c.5.9km south east. As the site falls within the 7km ZOI for this designation, SANG/ SAMM contributions will be required to mitigate against increases in recreational pressure. Other than this, no residual negative impacts are anticipated due to the small-scale nature of the development, the distances between the site and all designated sites, and the lack of any related habitat to be lost.

7.2 Lowland mixed deciduous woodland, a priority habitat, is present on site and two areas are proposed for removal to facilitate site access. On-site scrub planting is recommended to help offset this loss.

7.3 The majority of the site is comprised of other neutral grassland, regularly mown to a short sward, which is not considered to be ecologically significant. The loss of this habitat will result in site level impacts only.

- 7.4 Two PRF-I trees were identified on site, however these trees are proposed to be retained as part of the development, so further surveys are not required. However as a precaution, sufficient tree protection should be implemented during construction and there should be no increase in illumination from artificial light in the immediate area.
- 7.5 The boundary woodland was considered suitable to support foraging and commuting bats and further bat activity surveys have been conducted. Common and widespread species were recorded during the survey period. A sensitive lighting strategy has been outlined including dark corridors around the site boundaries.
- 7.6 No evidence of badgers was identified on site. Sensitive working practices have been recommended to ensure that no individuals are harmed throughout development.
- 7.7 The boundary woodland has the potential to support dormice. As such, dormice nesting tube surveys have been recommended to inform sufficient mitigation. These surveys concluded likely absence of dormice.
- 7.8 The boundary woodland edge habitat and small areas of tall grass/ bracken throughout have the potential to support reptiles. As such, reptile presence/ likely absence surveys have been recommended to inform sufficient mitigation. These surveys concluded likely absence of reptiles.
- 7.9 The site contained no ponds, though 12 are present within 250m of the site, including two with confirmed GCN presence approximately 120m west and an existing EPSM licence 200m north. As such, the site is presumed likely to support GCN in their terrestrial phase and a District Licence or Natural England EPSM licence will be required prior to development.
- 7.10 Any clearance of suitable nesting bird habitat, including scattered trees and underlying scrub and hedgerows, should be undertaken outside nesting bird season after a nesting bird check by a qualified ecologist.
- 7.11 A pre-clearance check of any scrub being removed should be undertaken in order to prevent harm to hedgehogs who may be present on site.

8.0 References

ARG., (2010) *UK Advice Note 5: Great crested newt habitat suitability index*. Amphibian and Reptile Groups of the United Kingdom.

Bright, P., Morris, P. & Mitchell-Jones, T., (2006)., *The Dormouse Conservation Handbook*. 2nd edition. English Nature.

CIEEM., (2017)., *Guidelines for Preliminary Ecological Appraisal, 2nd Edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM., (2018)., *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

Chapman, C., & Tyldesley, D. (2016). *Small-scale effects: How the scale of effects has been considered in respect of plans and projects affecting European sites-a review of authoritative decisions*. Natural England Commissioned Reports, (205).

Collins, J. (ed.)., (2023)., *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). Bat Conservation Trust, London.

Creswell, P., Harris, S. & Jeffies, D.J. (1990)., *The history, distribution status and habitat requirements of the badger in Britain*. Nature Conservancy Council, Peterborough.

English Nature., (2004)., *Reptiles: guidelines for developers*. English Nature, Peterborough.

Froglife., (2015)., *Surveying for Reptiles*. Froglife, Peterborough.

Joint Nature Conservation Committee., (2010)., *Handbook for Phase 1 habitat survey – a techniques for environmental audit*. JNCC, Peterborough.

Institution of Lighting Professionals., (ILP – 2018)., *Guidance Note 08/18 – Bats and artificial lighting in the UK*. ILP, Rugby.

Langton, T.E.S., Beckett, C.L. & Foster, J.P. (2001)., *Great Crested Newt Handbook*. Froglife, Halesworth.

Mitchell-Jones, A.J. (2004)., *Bat Mitigation Guidelines*. English Nature, Peterborough.

Natural England., (2011)., *Badgers and Development: A guide to best practice and licensing*. Natural England, Bristol.

Neal, E. & Cheeseman, C. (1996)., *Badgers*. T & A D Poyser Ltd. London.

Stone, E.L., Jones, G., Harris, S. (2009)., Street lighting disturbs commuting bats. *Current Biology*, **19**: 1123-1127.

Urban Edge Environmental Consulting (2023). *Land at Burleigh Lane, Crawley Down, West Sussex: Protected Species Report*.

Wilson, G.J., Harris, S. & McLaren, G. (1997)., *Changes in British badger population, 1988-1997*. People's Trust for Endangered Species, London.

Internet resources:

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



Magic Interactive Map: www.magic.gov.uk

Mid Sussex District Council: www.midsussex.gov.uk

Appendix 1: Habitat Map



Appendix 2: Photos

<p>Photograph 1: Other neutral grassland</p>	
<p>Photograph 2: Boundary lowland mixed deciduous woodland</p>	
<p>Photograph 3: Boundary lowland mixed deciduous woodland</p>	