PRELIMINARY ECOLOGICAL APPRAISAL

Ref: 1526	Land at 90 Downs Road

EXECUTIVE SUMMARY

ECOassistance were commissioned to carry out a Preliminary Ecological Appraisal of Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13 9HQ.

This report has been produced to inform the project team of ecological considerations and where additional ecological survey work will be required to support a future planning application at the site.

The main findings of this Preliminary Ecological Appraisal are:-

- The site mostly contains modified grassland habitats of low ecological value. There is woodland habitat adjacent which overlaps the site boundary in places and there are minimal amounts of established shrub and scrub habitats present which are of intrinsically higher ecological value. These higher value habitats in and adjacent to the site should be retained and protected where possible;
- The site is within a SSSI impact risk zone and if approved the development could lead to additional human pressures on the nearby designated habitat;
- There are no potential breeding ponds for great crested newt within 250m of the site which is the normal search radius when compiling a Preliminary Ecological Appraisal report. The closest potential breeding pond is >1000m away;
- The grassland habitats within the site are unsuitable for reptiles. The woodland and scrub habitats to the west of the site have low potential to contain reptiles;
- The woodland adjacent to the west of the site is mostly devoid of any understorey and is therefore unsuitable for use by dormouse. A patch of scrub habitat located in the northwestern corner of the site has potential to contain dormouse due to having direct connectivity to woodland outside of the site;
- The hedges, trees, scrub and established shrubs within the site have potential to be used by nesting birds;
- Three trees within the woodland to the east of the site contain feature with potential to be used by low numbers of roosting bats on a short term or occasional basis;

- There is moderate potential commuting and foraging habitat for bats within the site. The surrounding woodland habitats have high potential to be used by commuting, foraging and roosting bats including those that are light averse;
- No mammal burrows were identified within the site but there is potential for mammals to be present within the wider area and to be present at the base of established habitats and/or to cross the site at night.

The key recommendations of this Preliminary Ecological Appraisal are that:

- A biodiversity net gain assessment to ensure the project meets the statutory requirement for biodiversity net gain through development will be required unless the site meets the exemption criteria;
- A levy to ensure any impacts on the nearby SSSI is likely to be payable. This will be used to mitigate the potential impacts on the SSSI associated with the development;
- An arboricultural impact assessment which can be used to design mitigation for harm of retained trees and woodland habitat is recommended;
- A reptile presence/likely absence survey is not required but adjacent woodland habitats should be avoided during works due to their low potential to contain reptiles;
- Any works which might directly impact potential bird nesting habitats should avoid the nesting bird season or be undertaken after a site survey has shown nesting birds to be absent from the affected areas;
- The small patch of scrub habitat in the northwest corner of the site should be retained and avoided during works otherwise further surveys/mitigation for hazel dormouse will be required;
- Any adverse impacts from additional artificial lighting on potential bat and dormouse habitats including the woodland adjacent to the west of the site and other surrounding woodland habitats should be mitigated in accordance with guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals (ILP, 2018); and
- The site should be safeguarded overnight against potential harm to hedgehog and other mammals during construction.

Enhancements to increase biodiversity at the site in line with national planning policy include:

- Native species hedgerow planting;
- A bat box;
- Wildflower enhanced grass seed areas; and
- Log and brash habitat piles.

Client Name:	Alder Homes Limited	
Date of Completion:	08/08/2025	
Doc. Version Control:	1.4	
	Name:	Role:
Report Author:	Edie Burns	Ecologist
Report Review:	Edward Clark	Principal Ecologist
Site Surveyor(s):	Edie Burns	Ecologist

DISCLAIMER

This report considers the instructions and requirements of the client and is not intended for and should not be relied upon by any third party.

In accordance with current good practice guidance, the results contained within this report can be relied on for decision-making purposes without the need to be updated for twelve-to-eighteen months providing there is no significant change in land use or land management in that time.

Interpretations and recommendations contained in this report represent the author's professional opinions. They are based on currently accepted industry practices and personal experience. This is a working document and must be updated if development proposals change, or new information become available.

CONTENTS

INTRODUCTION

THE SITE

ECOassistance were commissioned C/O Andrew Street on behalf of Alder Homes Limited (hereafter referred to in this report as: the client) to undertake a Preliminary Ecological Appraisal (PEA) of Land at 90 Downs Road, Istead Rise, Gravesend, Kent DA13 9HQ (hereafter the area shall be referred to as: the site).

The site is located in Gravesend; in the South East region of England. The site is within the Gravesham Borough Council Local Planning Authority (LPA). The grid reference for the approximate centre of the site is: TQ 63533 69282.

An overhead satellite image with indicative red line boundary of the site and its habitats shown within the context of those in the wider area is provided in Figure 1 below.

Figure 1: Overhead satellite image of the red line boundary (indicative) and the habitats of the surrounding area

A PEA has been commissioned to inform a planning application at the site. A description of the application includes:

Proposed dwelling

OBJECTIVES

1. The PEA survey and report details identified ecological constraints, opportunities and considerations associated with the impacts of the proposed scheme. The report details further ecological works that will need to be undertaken to inform potential ecological impacts.

The objectives of the PEA report are to:-

- Provide ecological baseline data for the application site including the likely presence of protected species and habitats;

- Assess the likely impacts of the proposed scheme on protected species and habitats within the application site and within the Zone of Influence (ZoI);
- Provide recommendations for ecological surveys that are required prior to submission of the planning application;
- Identify statutory and non-statutory sites located within the ZoI of the proposed scheme and compensation and/or enhancement measures that can be used to minimise impact.

PEA SURVEY METHODOLOGY

The PEA survey and report have been completed in accordance with guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017a).

PEA DESK SEARCH

During a desk-based search the Multi-Agency Geographic Information for the Countryside (MAGIC) governmental website which provides geographic information in map form was used to:

- Identify and locate waterbodies within 250m of the site boundaries;
- Search for records of protected species within 2km of the site including any granted European Protected Species Licenses (EPSL) for bats *Chiroptera spp.*, great crested newt *Triturus cristatus* and hazel dormouse *Muscardinus avellanarius*; and
- Search for local statutory and non-statutory land-based designations within 2km of the site.

An aerial map search using freely available resources was undertaken to assess habitat connectivity of the site to the wider area and identify habitats of value near to the site.

A search for previous planning applications including ecological survey work at the site was undertaken and included if deemed to be relevant.

PEA SITE SURVEY

The initial site visit was undertaken by ecologist Edie Burns. Edie has over seven years professional experience carrying out ecological surveys, including protected species surveys, PEA, Ecological Clerk of Works (EcoW), Ecological Impact Assessment (EcIA) and Building Research Establishment Environmental Assessment Method (BREEAM) assessments.

The site visit took place on 25/07/25 during fair weather conditions and lasted approximately 1 hour. During the survey visit all on-site habitats were recorded and assessed for their potential to support protected species. Where surrounding habitats were accessible these were also recorded and assessed.

The need for further protected species surveys has been determined based on the suitability of the habitat identified within the application site and ZoI. The expected impacts of the proposed development have been taken into consideration throughout the assessment.

All on site habitats have been classified and mapped using UK Habitat Classification (UKHab) version 2.

The survey equipment included binoculars, high powered clulite torches, an android tablet device for making notes and taking photos, survey mirrors, a magnification lens and survey sample tubes, a telescopic survey ladder and a 'Flir One pro' thermal imaging device and endoscope.

In line with current guidance, structures, trees, and commuting and foraging habitats were given a rating of either: 'negligible', 'low', 'moderate' or 'high' for their potential to be used by bats. This rating informs what further survey effort is required and is based on a combination of factors including the quality of potential roosting features (PRF) that are present, the value of the surrounding features connecting the site with the wider area and the habitat therein as well as the numbers of bats and species known in the area.

All ponds on site or immediately adjacent to the site if accessible have been assessed using the Habitat Suitability Index or HSI (Oldham et al., 2000) which is the standard method for determining whether habitat is suitable for great crested newt (GCN).

The parameters for the HSI are taken from the: Amphibian and Reptile Groups of the United Kingdom ARG UK Advice Note 5 which is an industry standard.

The calculation incorporates ten suitability indices, all of which are factors known to affect this species resulting in a score between 0 and 1. Pond HSI scores close to 0 indicate unsuitable habitat; scores close to 1 represent optimal habitat as shown in Table 1 below.

Table 1: HSI indices for pond suitability for GCN

HSI Score	Pond Suitability
< 0.5	Poor
0.5 - 0.59	Below Average
0.6 – 0.69	Average
0.7 – 0.79	Good
> 0.8	Excellent

The PEA survey considers the potential for protected and notable habitats and species including habitats and species of principle importance and those that are invasive and non-native. Target notes for areas within and adjacent to the site which have potential to contain these are listed beneath the PEA site habitat map.

CONSTRAINTS AND LIMITATIONS

The desk and field surveys are not comprehensive because species and habitat types especially ephemeral or migratory species may be present but under recorded or may be/have been missed entirely. A data search from the Local Ecological Records Centre (LERC) was not commissioned and is not likely to be required at this stage of the application; but will be required to support a EPSL application should one be needed at a later date.

Measurements taken from online mapping tools may not be exactly accurate, but this is the most proficient method available to the desktop surveyor. Measurements have been rounded-up or rounded-down to the nearest whole number for reporting.

Records of protected species are often submitted with six figure grid reference co-ordinates which is only accurate to within 100m.

RESULTS

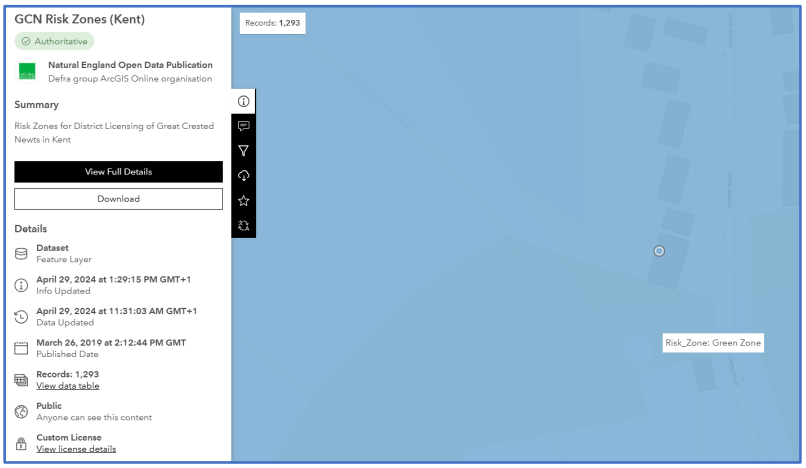
DESK SEARCH

WATERBODIES/GCN

There are no waterbodies within 250m of the site. The earest pond is c.1015m southeast of the site.

The site is within a green impact risk zone for GCN as indicated in Figure 3 below.

Figure 2: Site and surrounding area fall within a 'green' impact risk zone for GCN



STATUTORY DESIGNATED SITES

There are no Sites of Special Scientific Interest (SSSI) within 2km of the site.

The site is within a SSSI impact risk zone, and a site check carried out using geodata from MAGIC SSSI IRZ showed that further information is required due to the additional recreational pressures on protected habitats that the proposal could bring. A screenshot of the results of the MAGIC search is provided in Figure 4 below.

Figure 3: Screenshot of results of SSSI IRZ check for this site

Statutory Advice present

The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, there is potential for some types of development to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and those Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.

Natural England's statutory advice on these potential impacts is set out below:

Further information required - recreational pressure impacts to European Sites (habitats sites)

This development site is within the zone of influence (ZoI) for recreational pressure impacts to one or more European Sites (habitats sites).

Within this ZoI, proposals for any net increase in residential units will have a likely significant effect on the qualifying features of the European Site(s) (habitats site(s)) through increased recreational pressure when considered either alone or in combination with other plans and projects.

Your authority has measures in place to manage these potential impacts through a strategic solution which Natural England considers will be effective in preventing adverse impacts on the integrity of the site(s).

Notwithstanding this, Natural England advises that these measures should be formally checked and confirmed by your authority, as the competent authority, via an **appropriate assessment** in view of the Natural England Access to Evidence - Conservation Objectives for European Sites and in accordance with the Conservation of Habitats & Species Regulations 2017 (as amended).

Providing the appropriate assessment concludes that the measures can be secured, it is likely that Natural England will be satisfied that there will be no adverse effect on the integrity of the European Site(s) (habitats site(s)) in relation to recreational disturbance.

Where the proposal includes bespoke mitigation that falls outside of the strategic solution, Natural England should be consulted.

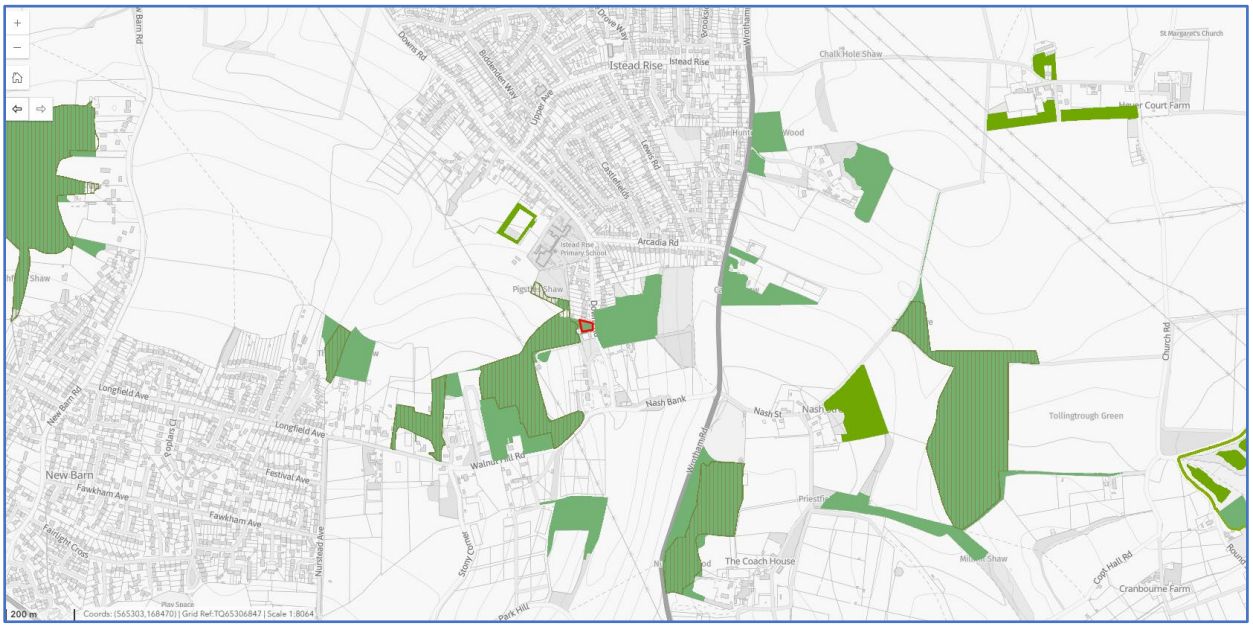
Reserved Matters applications, and in some cases the discharge/removal/variation of conditions, where the permission was granted prior to the introduction of the strategic approach, should also be subject to the requirements of the Conservation of Habitats & Species Regulations 2017 (as amended) and our advice above applies.

NON STATUTORY DESIGNATED SITES

The nearest woodland parcel shown on O/S maps is broadleaved woodland which is present within the site as shown in Figure 5 below. The extent of the woodland depicted on O/S maps does not entirely correlate with the amount that is present within the site

There are relatively large woodland parcels surrounding the site and present within the wider area.

Figure 4: Woodland parcels surrounding the site



The Walnut Wood Ancient & Semi Natural Woodland (ASNW) is located to the west of the site.

It is assumed that the proposed development will be mostly restricted to the grassland areas in the east of the site. Providing no more trees are to be removed, the existing woodland that is present to the west of the site provides a natural buffer measuring c.22.5m between the site and the edge of the ASNW. This is above the minimum buffer zone of 15m that is required between new developments and ASNW.

Figure 5: Natural screening/buffer between the likely development area and nearby ASNW

PROTECTED SPECIES RECORDS

There is one EPSL record for bats within 2km of the site. The record is located c.1476m west-northwest of the site and is for the destruction of a resting place for brown long eared bat *Plecotus auritus*.

SITE SURVEY

The site comprises a vegetated area of land which sits adjacent to residential properties. The site is dominated by modified grassland which appears to be regularly managed through mowing.

Adjacent to the site's western boundary is woodland made up almost entirely of European hornbeam (*Carpinus betulus*) trees.

The habitats that are present within the site and in adjacent areas (where accessible) are detailed in Figure 6 below. The target notes for features of ecological significance or signs of protected species that were encountered during the site survey visit are described beneath the figure in Table 2.

Figure 6: Habitat Map with target notes

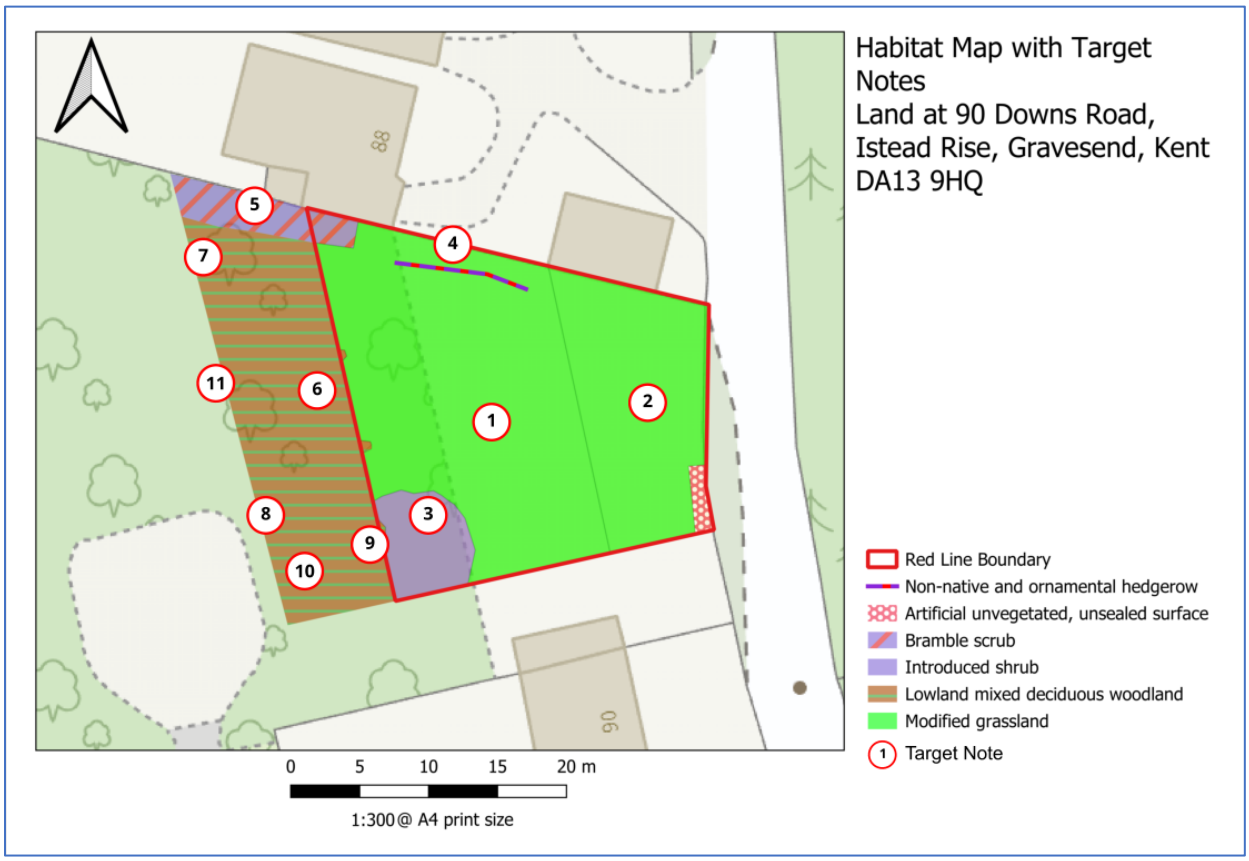
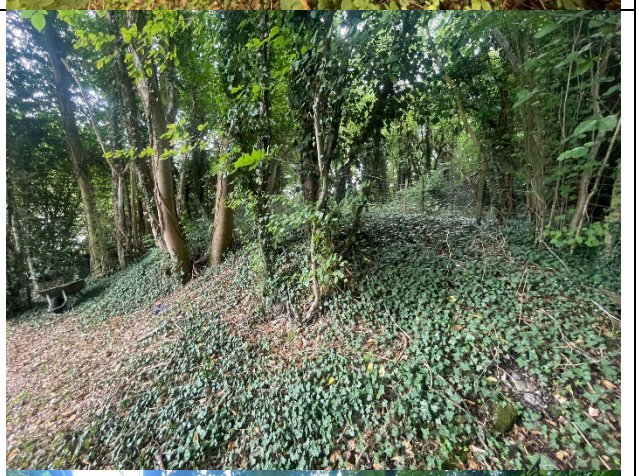
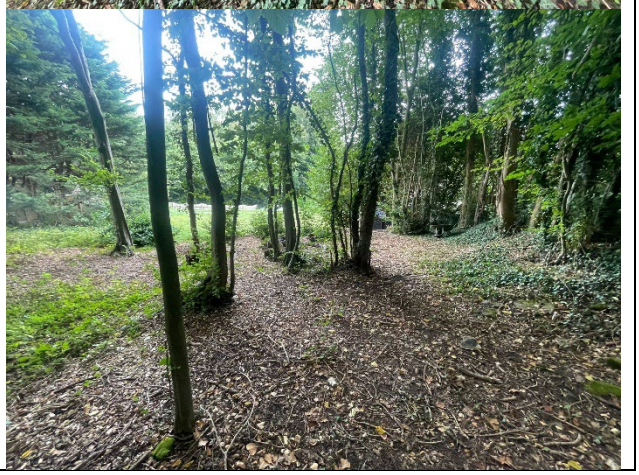


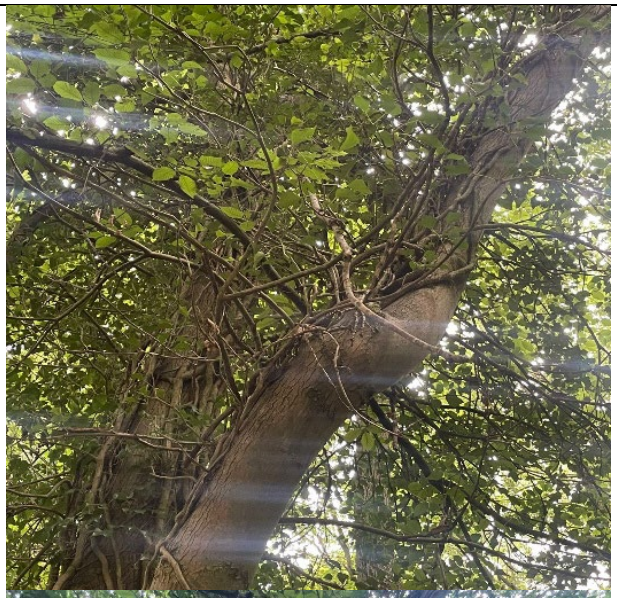
Table 2: PEA survey target notes

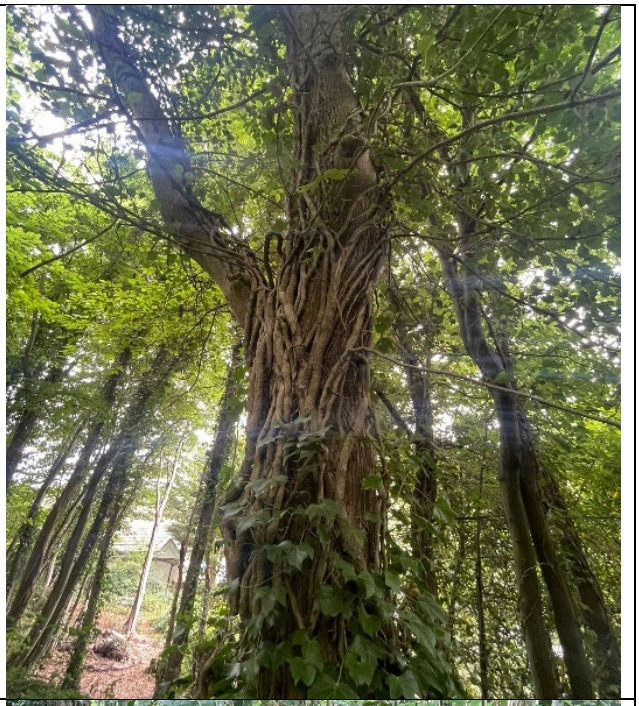
Target Note	Description	Image
1	Modified grassland makes up most of the site. The grassland that is present can be subdivided into two parts based on the species that are present within the sward. The eastern side of the modified grassland is slightly sloped and appears to be less regularly managed than the western side. The eastern side has a longer sward height of around 15cm and is dominated by perennial ryegrass (Lollium perenne) and common selfheal (*Prunella vulgaris*). Around 15 other species of herbaceous plants and grasses were recorded at an 'Occasional' to 'Rare' frequency (on the DAFOR scale) in the eastern side of the modified grassland. Species include Yorkshire fog (*Holcus lanatus*), clustered dock (*Rumex conglomeratus*),	

	ribwort plantain (*Plantago lanceolata*), and dandelion (*Taraxum* sp.). Approximately five species per m2 are present.	
2	The western side of the modified grassland appears to be regularly managed, with a shorter sward height of c.5cm. This area is dominated by creeping cinquefoil (*Potentilla reptans*), creeping buttercup (*Ranunculus repens*) and common selfheal. Approximately four species per m2 are present.	
3	A large cherry laurel (*Prunus laurocerasus)* shrub is present at the southwest edge of the modified grassland. All trees and hedgerow habitats offer suitable conditions for nesting birds. Some hedgerow bases offer potential protection and safety for reptiles, amphibians and small mammals.	
4	A short section of non-native *Cypress sp*. hedgerow is present in the north of the site. The *Cypress* trunks were inspected for PRF for bats, and it was concluded that none are present. Cypress trees are rarely used by roosting bats in the UK because of a relative lack of PRF. The dense branching around the trunks also creates an unsuitable entrance flight path even if PRF were to be present. All trees and hedgerow habitats offer suitable conditions for nesting birds. Some hedgerow bases offer potential protection and safety for reptiles, amphibians and small mammals.	

5	A large patch of bramble (*Rubus fruticosus* agg.) scrub is present in the northwest corner of the site and this extends into the adjacent woodland habitat. Bramble scrub can provide sheltering and foraging habitat for birds, reptiles, amphibians, invertebrates and mammals.	
6	Immediately adjacent to the site's western boundary there is deciduous woodland. The ground in this area is partially sloped and features limited scrub understorey and/or ground flora which is likely attributable to regular management. All of the trees in the woodland are European hornbeam. There are some smaller shrubs present including native species such as field maple (A*cer campestre*), hazel (*Corylus avellana*), holly (*Ilex aquifolium*) and ash (*Fraxinus excelsior*). The ground layer contains ivy (*Hedera helix*) and Dog's mercury (*Mercurialis perennis).* All of the trees and shrubs on site have potential to support nesting birds.	 

7	Three of the hornbeam trees were found to contain PRF for bats. The tree at TN7 (pictured) contains a small and hollow crevice in the main stem which has potential to support low numbers or individual bats only and does not contain any field signs indicating the presence of roosting bats. The tree at TN7 is categorised as PRF-I for bats.	

8	A medium sized hornbeam tree has some thick ivy cover on much of the trunk and higher up in the branches. The ivy may obscure PRF so that they are not visible form the ground. The tree at TN8 is PRF-I for bats.	 

9	The tree at TN9 is one of the larger hornbeam specimens within the woodland adjacent to the site. This tree also has thick ivy stems and coverage and so PRF may be present beneath the stems but not visible from the ground. The stems are also thick enough that they might offer short term roosting opportunities. The tree at T9 is PRF-I for bats.	
10	A large tree stump is present in the south of the woodland habitat adjacent to the site. The stump is covered in ivy and offers some good standing deadwood habitat for invertebrates.	

11	The woodland's western boundary is demarcated by a post and wire fence. The woodland within the site is adjacent and continuous with woodland beyond the site boundary.	

SURROUNDING HABITATS

The woodland habitat which overlaps the site's western boundary in places is linked to the wider area through connected trees and hedgerows outside of the site. The canopies of the European hornbeam trees in the adjacent woodland are continuous with the canopy of the ASNW to the west of the site.

The remaining surrounding habitat is rural and includes residential properties, agricultural buildings, agricultural fields, woodland and hedgerows.

OTHER MAMMALS

No mammal burrows or pathways were identified within the site.

Field signs were absent throughout the site for badger and hedgehog. Field signs for badger would be conspicuous and so badger setts are likely absent from the site.

The open nature of the site, including open style boundary fencing and adjacent woodland means that there is high potential for mammals to cross or venture onto the site at night and so some mitigation measures to ensure animals do not become trapped in open excavations during the construction phase are required.

HABITATS

A site is predominantly modified grassland which is of low ecological value. Despite being of low value, if development/construction is approved, any associated losses of vegetated habitat will need to be offset.

A Biodiversity Net Gain (BNG) assessment will be required to enable the application to demonstrate +10% BNG through development (to meet the statutory requirement) unless the application meets the criteria for exemption.

The site is within a SSSI impact risk zone and the application if approved is likely to bring additional pressures to the nearby SSSI. The potential for negative impacts on the SSSI through development must be mitigated and so an additional levy, which pays towards marshalling and/or protection of the SSSI, is likely to be payable as part of the application (as determined by the LPA and/or NE).

Immediately to the west of the site there is native, deciduous woodland (single species) and some scrub habitat. These are of higher ecological value than the grassland habitat to the east. Beyond the woodland habitat to the west of the site there is direct connectivity with ASNW.

ASNW is considered to be an irreplaceable habitat and any application within 15m of ASNW should be refused according to standing guidance. The existing woodland to the west of the site provides more than the requisite 15m buffer zone from potential visual and noise disturbances associated with the proposed works and so is unlikely to be a reason for refusal. Any potential impacts to the ASNW in both the short and long term should be avoided or mitigated.

Impacts to the retained trees within and to the west of the site should be avoided. An Arboricultural Impact Assessment is recommended to inform safe methods for working around retained trees.

INVERTEBRATES

The vegetated habitats within the site all have potential to support invertebrates. The woodland and scrub habitats to the west of the site are of higher value to invertebrates than the modified grassland to the east. Standing dead wood or trees with rot holes within the woodland provide suitable habitat for nationally scarce species such as stag beetle *Lucanus cervus*.

The woodland is likely to be retained and so the development is unlikely to have a significant impact on the local biodiversity of invertebrate populations and/or important invertebrate assemblages because the modified grassland habitats to be impacted are not rare or scarce. If trees or dead wood habitats are to be removed for any reason these should be retained within the site and piled within the woodland away from potential future impacts to ensure there is no net loss of invertebrate habitat provision.

Habitat enhancement measures should be implemented to improve the habitat for invertebrates within the site. Where possible grassland areas post development should be enhanced by using wildflower seed mixes of native varieties to increase opportunities for pollinators. Log and brash habitat piles can

also be created in the habitats in the site margins to increase foraging and sheltering opportunities for invertebrates.

Native species hedgerow planting should be incorporated into the landscaping design to demarcate boundary features where needed rather than relying on fencing which will further increase foraging and sheltering opportunities for invertebrates.

GREAT CRESTED NEWT

The site is within a green impact risk zone for GCN. Green impact risk zones contain sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species.

The desk search found that there were no potential breeding pond for GCN within 250m of the site. The nearest pond is over 1000m to the southeast of the site and the next closest pond is more than 1200m to the northwest of the site.

GCN require a network of ponds to support a metapopulation in order to survive. An absence of ponds within a minimum 2000m diameter means that GCN are highly unlikely to be present within the site.

No further action required.

REPTILES

The short grassland habitat within the site has negligible suitability for reptiles.

The adjacent woodland habitat has low potential to contain adder *Vipera berus* due to its connectivity with further wooded habitat in the wider area but as the ground level habitats within the woodland on site are subject to regular disturbance this seems unlikely.

It is recommended that woodland habitats should be avoided during works. This will reduce the potential for impacts to adder from low to negligible.

If impacts to the woodland cannot be avoided, a mitigation plan to include site supervision or further survey work may be required depending on the level of impact.

DORMOUSE

There is woodland immediately adjacent to the site and this has direct connectivity with ASNW to the west.

The woodland immediately adjacent to the site is largely unsuitable for dormouse because it lacks the understorey which provides foraging, commuting and nesting habitats for dormouse. There is however, high potential for dormouse to be present within the surrounding ASNW.

The bramble scrub which extends from the northwest corner of the site into the adjacent woodland is the only suitable habitat within the site which has potential to be used by dormouse due to its connectivity with the ASNW.

It is recommended that the scrub along the northern site boundary within the woodland is retained for its general biodiversity value and because it has potential to be used by dormouse. If impacts to the scrub habitat are unavoidable, any works should be conducted under the supervision of a suitably qualified dormouse ecologist and follow a Precautionary Working Method Statement (PWMS) to ensure potential for impacts are reduced to negligible.

Mitigation measures in accordance with those presented in the 'bats' section below should be followed to ensure there are no indirect or inadvertent impacts from increased artificial lighting on potential dormouse habitats in and adjacent to the site.

BIRDS

All nesting birds are afforded legal protection by the Wildlife and Countryside Act 1981 (as amended). In addition, species listed on Schedule 1 of the Act are afforded protection from disturbance whilst nesting. Some species are listed as Species of Principal Importance under NERC Act 2006 and may be on the RSPB's Bird of Conservation Concern list.

There is potential for birds to nest in all of the trees, shrubs and scrub within the site.

It is recommended that any works to impact potential habitats are undertaken outside of the nesting bird season (which runs from the end of February through to the end of August) to ensure there is no potential for harm to nesting birds during works. Alternatively works which will impact these habitats must be preceded by a nesting bird survey; or carried out under ecological supervision.

If nesting birds are found, nests must remain in-situ until the birds have fledged. This can take up to six weeks.

BATS

All UK bat species are afforded legal protection by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Some species are listed as Species of Principal Importance under the NERC Act 2006.

TREES

Three of the trees within the adjacent woodland habitat located to the west of the site were found to contain PRF suitable for low numbers of roosting bats and have been assessed as PRF-I in accordance with the bat survey guidelines.

All three PRF-i trees are a significant distance from the areas where development/construction is likely to take place and/or are protected from potential impacts associated with construction by woodland and established shrub habitats.

The potential for impact to bat roosts is negligible.

SURROUNDING HABITATS

The woodland and woodland edge habitats in and adjacent to the site have at least moderate suitability to be used by commuting and foraging bats due to the presence of some moderate value habitat for invertebrates (including trees and scrub) within the site and the high potential habitats of the ASNW to the west of the site and the deciduous woodland across the road to the east of the site. Due to the rural nature of the site and the high potential habitats near to the site there is potential for light averse species to be present.

It is recommended that the presence of commuting light averse species be assumed to remove the need for further bat activity surveys which can be costly and time consuming as they should be spread out over the course of most of the year.

Avoidance and mitigation measures in accordance with guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals (ILP, 2018) should therefore be incorporated into the site design to ensure there is no impact on bat habitats. These are as follows:

1. Boundary vegetation should not be illuminated so that dark flight corridors for bats are retained;
2. Directional lighting should be used to avoid unwanted spill into surrounding habitats;
3. Any external lighting should be operated with motion sensors where possible;
4. Metal halide and fluorescent sources should not be used;
5. A warm white spectrum of lamp should be used. Blue light should not be used;
6. Internal luminaires that are in close proximity to windows should be recessed, where possible, to reduce external glare and light spill and/or low emissivity glass should be used in the windows if possible.

ENHANCEMENTS

It is recommended that some simple enhancements could provide new roosting and foraging habitats for local bat species and improve the site for bats in line with National Planning Policy.

At least one multi-purpose bat boxes is recommended to be installed within the woodland habitat away from development to create additional roosting provision through development. A log and brash habitat pile for invertebrates can also be created near the site boundary away from likely disturbance to improve foraging opportunities.

Bat boxes should be of the woodcrete type to ensure longevity and erected in a sheltered location[1] at between 3-4m height. Care must be taken to provide an unobstructed flight path to the entrances of bat boxes. Examples of suitable bat boxes are provided in the appendix.

OTHER MAMMALS

All wild mammals are afforded legal protection under the Wild Mammal (Protection) Act 1996 (as amended).

Hedgehog are protected in the UK under the Wildlife and Countryside Act, 1981. They are a Priority Species under the UK Post-2010 Biodiversity Framework and are on the IUCN Red List for British Mammals which means they are vulnerable to extinction.

Badger are protected in the UK under the Wildlife and Countryside Act, 1981 and receive additional protection under the Protection of Badgers Act 1992.

Despite there being no field signs to indicate the presence of mammals there is potential for small mammals such as hedgehog to be present at the edge of woodland habitats and at the base of hedges/in woodland in the wider surrounding area. The proximity to woodland also means that there is potential for larger mammals such as fox and badger to be present within the surrounding woodland and to commute towards and across the site for foraging.

Mitigation measures to avoid risk of harm and unnecessary suffering to hedgehog and other mammals which have potential to cross the site at night include:

- During construction all excavations for foundations or services including trenches, holes and open pipes to be covered at the end of each night. If excavations cannot be covered, wooden planks (a scaffold board for example) must be left within the excavation (at a maximum angle of 45^{o}) to allow for mammals to climb out if they become trapped;
- Excavations and open pipes must be checked at the beginning and end of each working day by the site manager or equivalent to check for mammals. Any trapped mammals should be allowed to escape, or carefully moved into suitable boundary habitat away from construction works.

[1] For all types of boxes, Collins et al. (2020) found that the box height most frequently occupied was 4m (2020). A height of at least 3 metres is recommended.

REFERENCES

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

BCT & ILP (2018). Bats and artificial lighting in the UK: Bats and the Built Environment series. Guidance Note 08/18. Bat Conservation Trust, London and the Institution of /lighting Professionals, Warwickshire.

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

Buglife. Good planning practice for invertebrates: surveys

H.M.S.O. (2017) Conservation of Habitats Species Regulations.

(1981) Wildlife and Countryside Act 1981. H.M.S.O., London.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus). Herpetological Journal 10(4), 143-155.

Bat Workers Manual, JNCC, Peterborough. Joint Nature Conservation Committee (2016). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.

National Planning Policy Framework. H.M.S.O., London. Rose, F (2006)

https://magic.defra.gov.uk/MagicMap.aspx

https://records.nbnatlas.org/

APPENDIX 1

Review of Protected Species UK Legislation and Policy

The level of protection afforded to protected species varies dependent on the associated legislation. A full list of protected species and their specific legal protection is provided within the Schedules and/or Sections of the associated legislation. Case law may further clarify the nature of the legal protection afforded to species.

The legal protection afforded to protected species overrides all planning decisions. European Protected Species (EPS) - and the Conservation of Habitats and Species Regulations 2010 (as amended)

European Protected Species (EPS) are afforded the highest level of protection through the Conservation of Habitats and Species Regulations 2017. EPS are also afforded legal protection by parts of the Wildlife and Countryside Act 1981 (as amended).

In general, any person and/or activity that:

- Damages or destroys a breeding or resting place of an EPS. (This is sometimes referred to as the strict liability or absolute offence);

Deliberately captures, injures or kills an EPS (including their eggs);

Deliberately disturbs an EPS, and in particular disturbance likely to impair animals' ability to survive, breed or nurture young, their ability to hibernate and migrate and disturbance likely to have a significant effect on local distribution and abundance;

intentionally or recklessly disturbs an EPS while occupying a structure or place used for shelter and/or protection (Wildlife and Countryside Act 198)1 (as amended); and

Intentionally or recklessly obstructs access to any structure or place that an EPS uses for shelter or protection (Wildlife and Countryside Act 1981) (as amended). may be guilty of an offence.

The legislation applies to bat roosts even when they are not occupied.

Actions affecting multiple animals can be construed as separate offences and therefore penalties can be applied per animal impacted.

Under certain circumstances licences can be granted by the Statutory Nature Conservation Organisation (Natural England in England) to permit actions that would otherwise be unlawful.

There are some very specific defences associated with the Conservation of Habitats and Species Regulations 2017. However, these are unlikely to apply to construction related projects. The Sections of the Regulations provide further details of these defences.

The Wildlife and Countryside Act (1981) includes defence for those aspects of the legislation that apply to an EPS. These defences are unlikely to apply to construction related projects and do not apply to

those acts included in the Conservation of Habitats and Species Regulations 2017 (as amended). The Schedules of the Act provide further details of defences.

Local authorities have obligations under sections 40 and 41 of the Natural Environment and Rural Communities Act (NERC) 2006 to have regard to the purpose of conserving biodiversity in carrying out their duties. The majority of EPS are listed on Section 41 the NERC Act.

The Natural Environment and Rural Communities Act 2006 (as amended)

Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act (2006) requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers, including local and regional authorities, in implementing their duty under Section 40 of the act to have regard to the conservation of biodiversity in England when carrying out their normal functions. S41 lists 56 habitats and 943 species of principal importance. Section 42 of the NERC Act relates to Wales.

Wildlife and Countryside Act 1981 (as amended)

The level of protection afforded to species listed on the Wildlife and Countryside Act 1981 (as amended) varies considerably.

'Fully protected species', such as bats, are afforded the highest level of protection. Any person who intentionally kills, injures, or takes 'fully protected species', or who intentionally or recklessly damages or destroys a structure or place used for shelter and/or protection, disturbs the animal whilst occupying a structure and/or place used for shelter and protection, or obstructs access to any structure and/or place used for shelter or protection is likely to have committed an offence.

The National Planning Policy Framework

Planning policy requires new developments to take into consideration our local and national wildlife. With the objective to maintain or increase the viability of the site for wildlife. The existing proposals are considered to determine whether Habitat enhancements are offered and whether they are adequate to meet the policy requirements. Again, national, regional, county and borough policies are considered.

The National Planning Policy Framework states that the planning system should contribute to and enhance the natural and local environment by minimizing impacts on biodiversity and delivering net gains in biodiversity where possible.

Ecological habitat enhancements measures need to be over and above any mitigation measures.


Small Red
215 x 215 mm