



**Ecological Assessment
and
Preliminary Bat Roost Assessment**

22 Northcourt Avenue

**Reading
RG2 7HE**

**Annika Binet
November 2025**

AKB Ecology, 15 Lymington Bottom, Four Marks, GU34 5AA

Tel: 07528 956 486, ani@akbecology.co.uk

Project Details

Client	Kennet Property
Site location	22 Northcourt Avenue, Reading, RG2 7HE
Grid Reference	SU 72816 71685
Agent	
Report Title	22 Northcourt avenue ecological appraisal and preliminary roost assessment
Report and version number	AKB-25.26-71-EAPRA-v2
Survey Date	4 th November 2025
Surveyed By	Annika Binet MCIEEM BSc (Hons)

Author	Annika Binet MCIEEM BSc (Hons)
Reviewed/approved by	Laura Kahane MRSB MRes BSc (Hons)
This report remains valid for 18 months from date of issue.	
Survey data are valid for 12-24 months from the date the survey was undertaken.	

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

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

This is a technical report which does not represent legal advice. This report is intended to be submitted with a planning application for a development 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 works.

Executive Summary

- Kennet Property commissioned AKB Ecology to undertake an Ecological Appraisal including a Preliminary Bat Roost Assessment at 22 Northcourt Avenue, Reading, RG2 7HE at grid reference SU 72816 71685 to help inform the proposed development of the site.
- This report details the results of the survey, which was carried out on the 4th November 2025 by Annika Binet, Natural England licensed bat ecologist, to assess the site for the potential presence of any protected species or species of conservation concern and identify habitats of conservation importance.
- The site is approximately 796m² in size and consists of a residential property containing two dwelling units with associated individual patio and vegetated gardens, communal planting and hard standing access and parking areas.
- Proposals consist of a part single-storey, part two-storey rear extension, hip-to-gable roof alteration, and associated internal reconfiguration to the existing building to extend the two existing flats and provide accommodation comprising six bedrooms per flat. Each apartment will have an individual patio garden and allocated parking, with the rest of the plot used as communal gardens which will be maintained by a management company. The works will result in the loss of some existing vegetated garden and introduced shrub planting; all trees will be retained. The proposed plans include new tree and shrub planting.
- The site was considered to have some suitability for nesting birds, and may be accessed on occasion by mammals, common reptiles and amphibians. Whilst no further surveys are considered necessary precautionary working practices are recommended for these species.
- No evidence of the presence of bat roosts was identified during the survey, however moderate suitability for the presence of bat roosts was identified due to the presence of tile hangings on the northern dormer, a small section of tile hangings on the western elevation, as well as a low number of slightly lifted and cambered tiles on the main roof which provide potential access points and roost features for bats.
- As the building was considered to have moderate potential to support roosting bats during the active season further emergence surveys are required in order to confirm presence or increase confidence in the result of likely absence of bat roosts on site with a minimum of two surveys to be carried out in the active season of May to September.
- Should bats be found to be present with roosts likely to be impacted by the proposed works, sufficient surveys to characterise the roosts and determine likely impacts will be required in order to inform a Natural England licence to permit the works.

Contents

Project Details	1
Executive Summary.....	2
1. Introduction	4
2. Background	4
3. Surveyor Information	7
4. Methods	8
5. Constraints/Limitations.....	14
6. Results.....	15
7. Evaluation, Conclusions & Recommendations.....	27
8. Wildlife Enhancements.....	31
9. References	34
Appendix 1 – legal protection	36
Appendix 2 – Survey timetable.....	41
 FIGURE 1: SHOWING THE SITE LOCATION	5
FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY AND BUILDINGS SUBJECT TO SURVEY..	5
FIGURE 3: SHOWING THE EXISTING SITE PLAN.....	6
FIGURE 4: SHOWING THE PROPOSED SITE PLAN.....	7
FIGURE 5: SHOWING STATUTORY DESIGNATED SITES AND IRZs.....	16
FIGURE 6: SHOWING PRIORITY HABITATS IN PROXIMITY TO THE SITE.	16
FIGURE 7: SHOWING GRANTED EPS LICENCES AND GCN RECORDS WITHIN 2KM OF THE SITE.....	18
FIGURE 8: WATERBODIES WITHIN 500M OF THE SITE	18
FIGURE 9: RISK ZONE MAP WITH APPROXIMATE SITE LOCATION MARKED	19
FIGURE 10: HABITATS IDENTIFIED ON SITE.....	21
FIGURE 11: RAPID RISK ASSESSMENT OF THE SITE.....	28
 Table 1: Surveyor information.....	7
Table 2: Data search sources	8
Table 3: HSI score categorisation.....	9
Table 4: Bat roosting potential definitions for structures Bat Mitigation Guidelines 2023	12
Table 5: EPS licences within 2km of the site	17
Table 6: GCN Pond Survey records.....	17
Table 7: Weather conditions during field survey	19
Table 8: GLTA results.....	25
Table 9: Active season survey requirements based on suitability for bats	30
Table 10: Hibernation Season Survey requirements based on suitability for bats	31

1. Introduction

- 1.1 Kennet Property commissioned AKB Ecology to undertake an Ecological Appraisal including Preliminary Bat Roost Assessment at 22 Northcourt Avenue, Reading, RG2 7HE to help inform the proposed development of the site.
- 1.2 No surveys are known to have been carried out on site previously. An initial assessment was therefore required to ascertain whether bats or other protected species are present at the site and represent a constraint to the proposed development.
- 1.3 This survey comprised a preliminary bat roost assessment plus ecological walkover survey for all protected wildlife and species of conservation importance, including habitats, and was carried out by Annika Binet, a Natural England licensed bat ecologist on the 4th November 2025.
- 1.4 The bat surveys and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2023).
- 1.5 The purpose of this report is to detail the results of the bat assessment and walkover survey, give an assessment as to the presence or potential presence of any protected species, ecological issues and impacts that would be generated by the proposed developments, outline recommendations in relation to protected species and the proposed development of the site and identify recommendations for further surveys that may be necessary.

2. Background

- 2.1 The proposed development site is located at central grid reference SU 72816 71685. The site is located in a residential area of Reading close to the University of Reading campus. The surrounding landscape comprises residential properties with associated amenity gardens, amenity facilities and infrastructure in addition to commercial development. The semi-natural green space, including large lake and small woodlands, which form part of the University campus are located to the east of the site. Further green spaces are present within the surrounding area. See Figure 1.
- 2.2 The site is approximately 796m² in size and consists of a residential property containing two dwelling units with associated individual patio and vegetated gardens, communal planting and hard standing access and parking areas. See Figure 2.

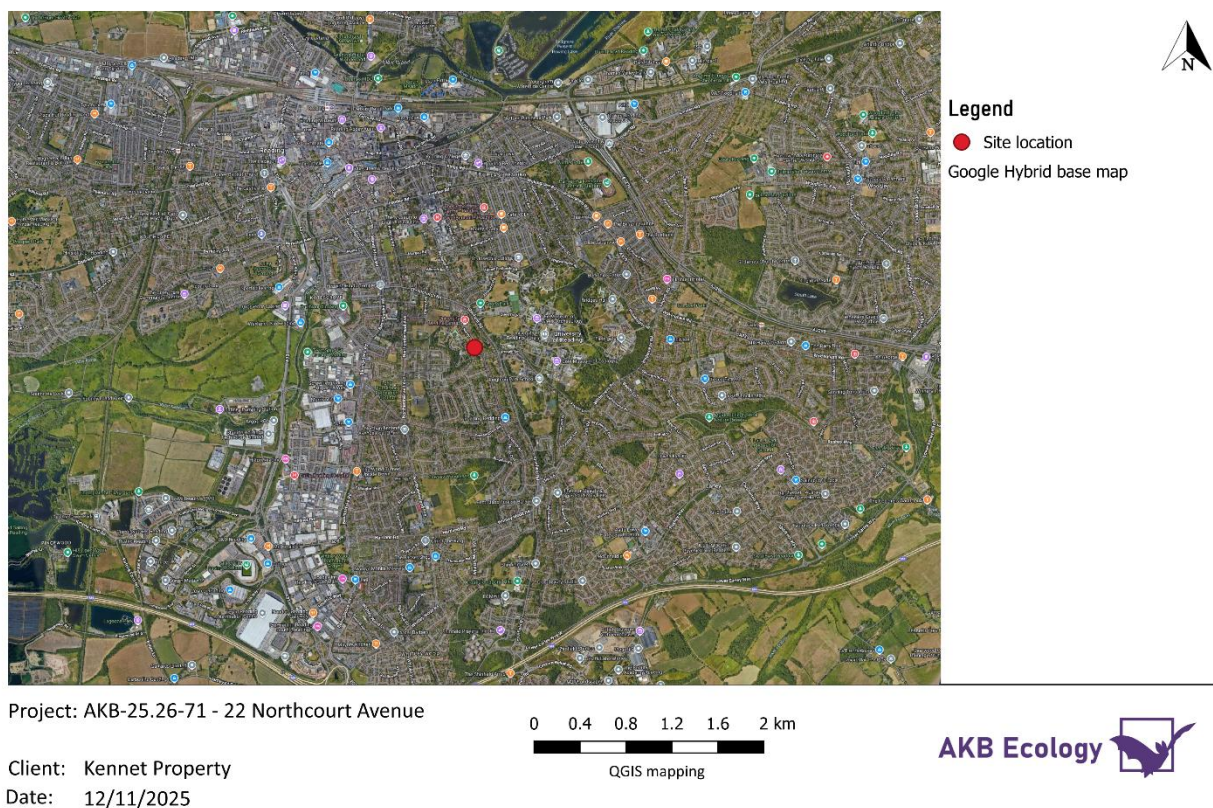


FIGURE 1: SHOWING THE SITE LOCATION



FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY AND BUILDINGS SUBJECT TO SURVEY

- 2.3 Proposals consist of a part single-storey, part two-storey rear extension, hip-to-gable roof alteration, and associated internal reconfiguration to the existing building to extend the two existing flats and provide accommodation comprising six bedrooms per flat. Each apartment will have an individual patio garden and allocated parking, with the rest of the plot used as communal gardens which will be maintained by a management company. The works will result in the loss of some existing vegetated garden and introduced shrub planting; all trees will be retained. The proposed plans include new tree and shrub planting. See Figure 3 and Figure 4.



FIGURE 3: SHOWING THE EXISTING SITE PLAN.



FIGURE 4: SHOWING THE PROPOSED SITE PLAN.

3. Surveyor Information

TABLE 1: SURVEYOR INFORMATION

Surveyor	Licences	Ecological Experience or qualification
Annika Binet	Class licence CL19 and CL20 (Bats): 2025-84332-CL19/20-BAT Class survey licence GCN: 2025-81015-SCI-CL08 Class licence CL29 (barn owls): accredited agent under Kate Sharma-Vicary 00288	Full member of the Chartered Institute of Ecology and Environmental Management BSc (Hons) Environmental Chemistry Certificate in Ecological Consultancy

4. Methods

Desk Study

TABLE 2: DATA SEARCH SOURCES

Data source	Information Obtained
Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra).	International or European level designated sites protected under the Conservation of Habitat and Species (Amendment)(EU Exit) Regulations 2019 or to the same level of protection through planning policy (the National Planning Policy Framework and Local Development Framework), within 2km of the site
MAGIC	Impact zones for statutory designated sites, such as Sites of Special Scientific Interest (SSSI), in which the site is located
MAGIC	Granted EPS licences and protected species records within 2km of the site
MAGIC and Google Earth/Google Maps	Location of waterbodies within 500m of the site boundary
Google Earth / Google Maps	To view current and historic aerial photographs to assess the ecological context of the site at a landscape scale

Protected Species Walkover

- 4.1 A daytime ecological walkover assessment was carried out on the 4th November 2025 to evaluate the site for its potential to support protected species in addition to other species of conservation importance that could be relevant in respect of planning policies.
- 4.2 During the survey an assessment is made of habitats present to determine whether they meet the criteria for Habitats of Principal Importance (HPI), observations of any invasive species, important plant communities, plant species of note, or other valuable ecological features are additionally recorded and detailed.
- 4.3 Assessment of habitats for protected species is made following the standard guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018). Field signs and incidental sightings are noted when encountered.
- 4.4 Details of the initial survey method for each species are given below.
- 4.5 **Badger** –Signs of badgers *Meles meles* including setts, foraging signs, runs, hairs and latrines are recorded if encountered during the survey. Where possible the area within 30m of the site is also searched for badger setts.

- 4.6 **Barn owl** – The buildings were subject to a full external and internal inspection for evidence of use by barn owl *Tyto Alba* including presence of live/dead owls, pellets, droppings, feathers, nest debris, nestling fluff and eggs or eggshells.
- 4.7 **Breeding Birds** – habitats were assessed for suitability for nesting and wintering birds on site including active and inactive nesting sites.
- 4.8 **Great Crested Newt** – Any ponds present within the site are subject to Habitat Suitability Index (HSI) to quantifiably assess whether a pond is suitable for GCN. The HSI for the great crested newt was developed by Oldham et al. (2000). It is numerical index, between 0 and 1 where 0 indicates unsuitable habitat and 1 represents optimal habitat. The HSI for the great crested newt incorporates ten suitability indices, all of which are factors thought to affect great crested newts.
- 4.9 The ten Suitability Indices are scored for a pond, in the field and from map work and are then converted to SI scores, on a scale from 0.01 to 1 (0.01 is used as the bottom end of the range instead of 0, because multiplying by 0 reduces all other SI scores to 0). The ten scores are then multiplied together, and the tenth root of this number is calculated $(X)^{1/10}$. The calculated HSI for a pond should score between 0 and 1 and these scores are then used to define pond suitability for GCN, see Table 3.

TABLE 3: HSI SCORE CATEGORISATION

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

- 4.10 **Hazel Dormice** – Suitability of the habitats for foraging and nesting hazel dormice *Muscardinus avellanarius* is assessed. The connectivity of habitats on site and the presence of dense scrub, native hedgerows and favoured berry and nut bearing species such as hawthorn, hazel and bramble were looked for in particular. If hazel nuts are present a brief search for nuts that have been chewed by hazel dormouse (i.e. displaying the characteristic smooth round hole) was conducted.
- 4.11 **Otter** – If suitable watercourses are present on site, evidence of otter *Lutra lutra* includes spraints, feeding remains are looked for and sightings are recorded.
- 4.12 **Reptiles** – suitability to support reptiles through the presence of features that provide suitable basking areas; such as south-facing slopes and walls, potential hibernation sites; such as banks, log piles and piles of rotting vegetation and opportunities for foraging; such as rough grassland and scrub.

- 4.13 All UK reptile species require sunny, undisturbed glades and/or slopes, usually in the vicinity of some thick cover (vegetation). Species specific requirements are as follows:

Common Lizard

- Open areas in which to bask, especially piles of rubble and wood in sunny areas.
- Ground cover of ivy is especially good for lizards for feeding and to avoid predators.
- Dense but short vegetation, open to the sun.
- Typically, small home range.

Slow Worm

- Recorded basking less frequently than other UK species. Thick ground vegetation preferred.
- Regularly found in habitats influenced by people, such as railway cuttings, allotments and gardens.
- Typically, small home range.

Grass Snake

- Highly aquatic and are strongly associated with riparian habitat.
- Compost heaps or dung piles often used as egg laying habitat.
- This species has a large home range.

Adder

- Light chalk or sandy soils are preferred.
- Undisturbed habitat with basking areas in addition to dense vegetation in which to shelter
- Most frequently recorded in heathlands, woodlands rides and chalk down land

Sand Lizard

- Areas of open sand dunes.
- Mature dry heath.
- Very restricted range within the UK

Smooth Snake

- Found almost exclusively in dry heathland, especially in mature stands of heather or gravely lowland heaths.
- Very restricted range within the UK

- 4.14 The most suitable conditions for reptile survey are intermittent or hazy sunshine with a relatively mild air temperature (10–20°C) and dry with little or no wind (Gent & Gibson, 1998).

- 4.15 Direct Observation Survey (DOS) of basking areas was carried out, this comprised a slow approach to any such features whilst carefully looking for reptiles, listening for rustles which may indicate a reptile retreating into vegetation, and stationary observation of features which may be utilised, particularly by lizard species.

- 4.16 Artificial Refugia Survey (ARS) was carried out, this comprised a survey of existing features such as carpet tiles, plastic and metal sheeting and roof tiles which were carefully lifted to identify whether any reptiles were present underneath.
- 4.17 **Water vole** – If suitable watercourses are present on site, evidence of water voles *Arvicola amphibious* is searched for including presence of faeces, latrines, feeding stations, burrows, footprints, runs or pathways.
- 4.18 **Other mammals** – any signs of occupancy by other mammals (e.g. Rabbit warrens) are recorded. Open areas of habitat, and boundary features are visually assessed for signs of mammal tracks, push throughs and latrines.
- 4.19 **Other Species of Principal Importance (SPI)** – the habitats present on site were assessed for the likelihood of presence for other species of regional and national importance.

Daytime Bat Assessment

- 4.20 A detailed bat building inspection and ground level tree inspection was undertaken on the 4th November by Annika Binet, a Natural England licensed bat ecologist.
- 4.21 A systematic internal inspection of the house was conducted using a high-powered torch to illuminate all areas thought to be suitable for roosting bats, gaps and crevices were noted and surveyed with a high-powered torch, endoscope and ladder as appropriate. Additionally, an external search around the perimeter of the building was conducted and any possible access points were noted and surveyed with a high-powered torch, endoscope and ladder as appropriate.
- 4.22 The suitability of the building for roosting bats was assessed through examination of structural features including the presence, size, complexity and level of natural light ingress into any roof voids and presence of potential access points into the building, such as soffit or barge board gaps, missing, slipped, lifted or cambered tiles or missing mortar.
- 4.23 The suitability of the site for roosting and foraging bats was also assessed by examining the surrounding habitat, including presence of linear habitat features such as water courses, mature hedgerows and tree lined lanes, in addition to potential foraging areas including semi-natural greenspace, parkland, heathland, woodland and waterbodies.
- 4.24 All surfaces and features of potential value to bats were examined for signs of bat presence, such as:
- bat droppings that are dry and do not putrefy, but can crumble away to dust;
 - staining of access points used by bats to enter the structure; and
 - feeding remains such as moth and butterfly wings.
- 4.25 Where bat droppings are found, and are accessible, these are collected using an Eppendorf tube and labelled with the site reference and date. Samples are sent for

DNA analysis to confirm species where appropriate. If multiple species are suspected samples from one building are collected into a single tube and multi-species analysis is requested to identify all species present.

- 4.26 Taking account of these architectural, habitat features and signs of presence, the building was then assigned a level of roost suitability based the criteria given in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Collins, 2023), shown in Table 4, and professional judgement. The primary objective of this exercise was to identify the need for further detailed bat survey later in the year, or alternatively to obtain sufficient information that would dismiss the need for further assessment.

TABLE 4: BAT ROOSTING POTENTIAL DEFINITIONS FOR STRUCTURES BAT MITIGATION GUIDELINES 2023

Potential suitability	Roosting habitats – structures only	Potential commuting/foraging habitats
None	No features on site likely to be used by roosting bats at any time of year	No suitable habitats/features on site likely to be used for foraging or commuting routes/flight lines at any time of year
Negligible	No obvious potential roosting features on site likely to be used by roosting bats; however, a very small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion	No obvious habitats/features on site likely to be used as foraging or commuting routes/flight lines however a very small element of uncertainty remains in order to account for non-standard behaviour
Low	Structures with one or more potential roost features (PRFs) which could be used by individual bats opportunistically at any time of year. However, these features do not provide sufficient space, shelter, protection, appropriate conditions and / or suitable surrounding habitat to be used regularly or by large numbers/unlikely to be of use as a maternity or hibernation roost.	Habitat present that could be used by small numbers of bats as flight paths (e.g. isolated habitats, isolated scrub or gappy hedgerows). Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree within a parkland, or small area of scrub
Moderate	A structure with one or more potential features/sites which could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support high conservation status roost types (e.g. maternity or hibernation)	Continuous habitats or habitats connected to the wider landscape (linked hedgerows, woodland or back garden trees) which could be used for foraging and/or commuting
High	A structure with one or more potential features/sites which are obviously suitable for larger numbers of bats to use on a regular basis and potentially for longer periods of time. The structures have potential to support high conservation roosts to be present (e.g. maternity or classic cool/stable hibernation sites).	Continuous and high-quality habitats well connected to the wider landscape (e.g. broadleaved woodland connected by hedgerows to other broadleaved woodland or parkland nearby) that is likely to be regularly used by bats for flight paths and/or foraging. The site is close/connected to known roosts.
<i>Notes:</i> If droppings are confirmed as bat or bat/s are seen during initial appraisal/s then it becomes a confirmed roost with further surveys needed to characterise the roost and confirm all species present.		

- 4.27 Ground level tree assessment was carried out for trees present within the survey area to look for the presence of Potential Roosting Features (PRF). Features which may be used by bats include, but are not limited to, splits and cracks in stems and branches, hazard beams, tear outs, woodpecker, rot holes, cankers, hollows, double-leaders forming compression forks or occlusions with could include cavities, gaps between overlapping branches, partially detached bark plates, partially detached ivy with stem diameter exceeding 50mm and bat, bird or dormouse boxes.
- 4.28 Where accessible features were subject to torchlight and/or endoscope survey to confirm type and extent of features and determine suitability for use by roosting bats. Where features were not accessible an assessment on likely suitability is made, or further survey recommended.
- 4.29 Trees with no PRFs are classified as holding negligible potential. Where Potential Roost Features (PRF) are present these can be categorised as PRF-I or PRF-M. PRF-I are only considered to be suitable for individual or low numbers of bats, either due to size or lack of suitable surrounding habitats. PRF-M are suitable for multiple bats and may therefore be used by a maternity colony. Natural England have determined that the difference between PRF-I and PRF-M cannot be determined from ground level assessment alone, therefore where features have not been subject to detailed inspection the terms 'likely PRF-I', likely 'PRF-M' are used, or alternatively trees are classified as 'Further Assessment Required' (FAR) where aerial inspection is required in order to provide sufficient information as to classify the level of suitability for use by bats.

Results Evaluation and Impact Assessment

- 4.30 The results of the desk study and field survey are evaluated, and consideration is made into how the proposed works may impact on habitats and species, both directly and indirectly, and the mitigation hierarchy is considered. Avoidance and mitigation of potential impacts routes through design and working methods are applied in the first instance, where these cannot satisfactorily prevent likely significant impacts compensation and enhancement measures are considered to ensure that there are no likely significant impacts to the favourable conservation status of species or habitats present.
- 4.31 Where sufficient information is not available from the preliminary survey and data search further detailed survey may be recommended to characterise habitats, or to identify presence and extent of use by protected species, or to determine likely absence of protected species. This information is then used to identify licencing and/or mitigation requirements.

5. Constraints/Limitations

- 5.1 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. Not all botanical species present can be observed during a single survey at any time of year, and the habitat descriptions do not encompass full floral species lists (only dominant native species present within each habitat type) which were observed at the time of survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year.
- 5.2 The protected/notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries, and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected/notable species group. Habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.
- 5.3 Bats can be difficult to locate in structures and trees, particularly in inaccessible areas and large buildings, therefore finding the exact roosting site can be difficult, especially male/single bat roosting sites. Many bat species roost between tiles and between linings where droppings become trapped and stay hidden from surveyors. It is not always possible to identify bat presence by examining features internally as droppings and other evidence can deteriorate rapidly with damp conditions and poor weather conditions may wash away droppings which were deposited on exposed surfaces.
- 5.4 MAGIC mapping does not currently contain full EPS licence or Survey class licence return records, and these records are not available through any other service therefore further licences or survey records may be present within the area and remain undetected during the data search.
- 5.5 Only around 75% of potential roosting areas within trees are visible from ground level.
- 5.6 Bats can have seasonal use of buildings and trees. As highly mobile species they may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. For this reason, bats may potentially be present but remain undetected, particularly during daytime assessment, or may colonise a site after survey has been carried out.
- 5.7 Whilst OS maps reliably show larger, permanent waterbodies, they often do not depict smaller features such as garden ponds or ephemeral pools, these are additionally not always visible on satellite images. As a result, there is potential that further breeding habitat for GCN (and other amphibians) may be present in the surrounding landscape but not recorded during the desk study.

- 5.8 The survey was carried out outside the primary bat active season therefore external evidence of the presence of bats, which may have been present at other times of year, was likely to have been destroyed by weathering. The survey was additionally carried out outside the primary grassland survey season.
- 5.9 No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological value has been made.

6. Results

Desk Study

Sites and Habitats

Statutory Designated Sites:

- 6.1 Maiden Eriegh Park Local Nature Reserve (LNR) is located approximately 1.8km to the south-east of the site. No other designated sites were identified within 2km. See Figure 5.

Impact Risk Zones

- 6.2 MAGIC identifies that the site falls within the SSSI Impact Risk Zones (IRZ) for Stanford End Will and River Lodden SSSI, which is located around 6.3km to the south of the site. See Figure 5.
- 6.3 The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.
- 6.4 Therefore, you do not need to consult Natural England on the likely impacts of development on terrestrial SSSIs and the SACs, SPAs or Ramsar sites that they underpin.

Priority Habitats

- 6.5 There are no priority habitats located within or immediately adjacent to the site. The closest priority habitat is an area of deciduous woodland around 128m to the south-west of the site. See Figure 6.

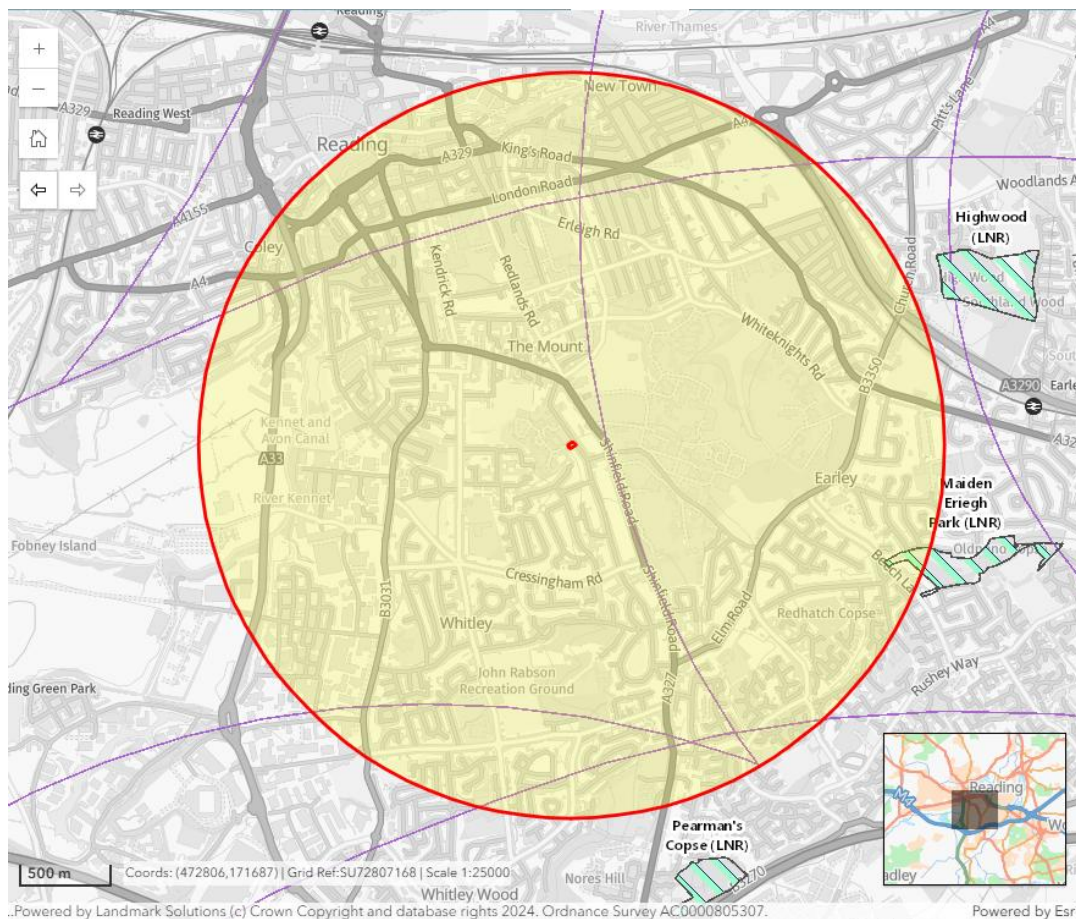


FIGURE 5: SHOWING STATUTORY DESIGNATED SITES AND IRZs

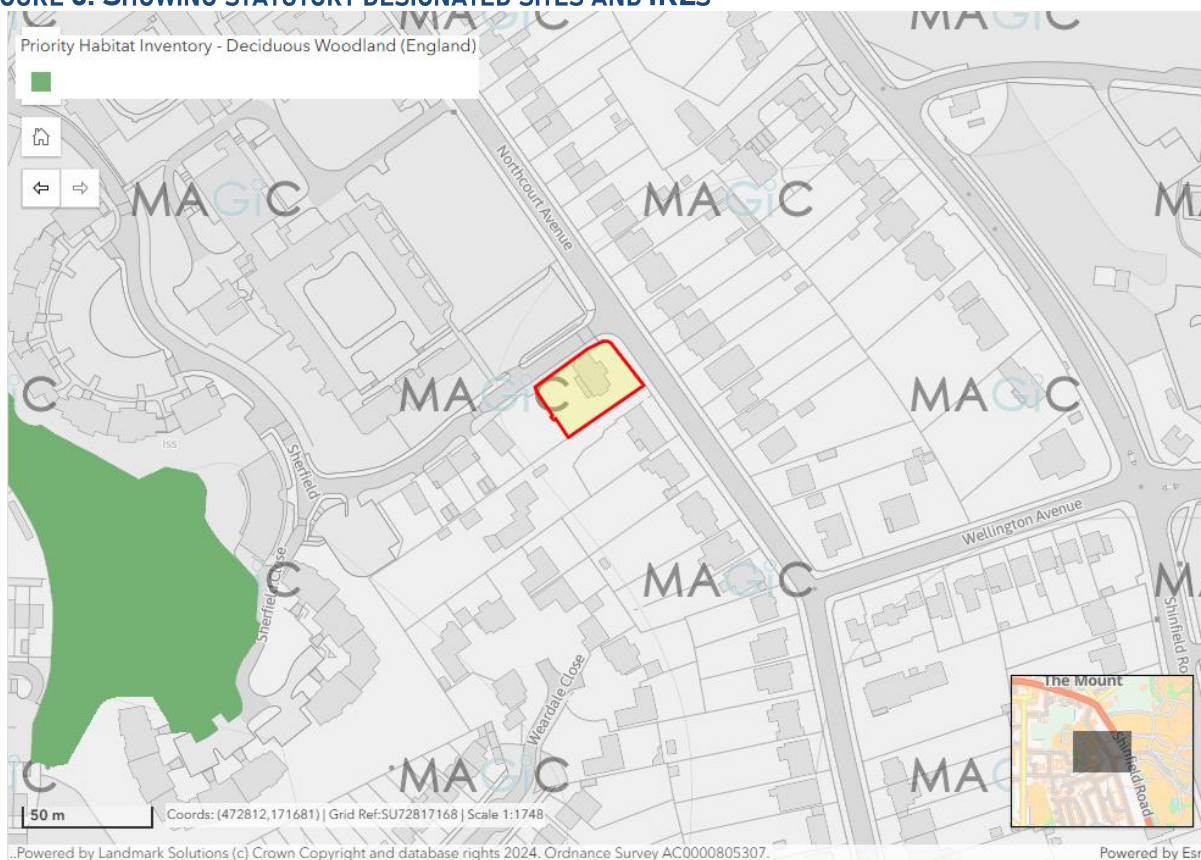


FIGURE 6: SHOWING PRIORITY HABITATS IN PROXIMITY TO THE SITE.

Granted EPS Licences and GCN records

6.6 There are granted EPS licences for bats and GCN within 2km of the site. These are detailed in Table 5 and shown in Figure 7.

TABLE 5: EPS LICENCES WITHIN 2KM OF THE SITE

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Impact on a breeding site	Damage of a breeding site	Damage of a resting place	Destruction of a breeding site	Destruction of a resting place
2016-22301-EPS-MIT	C-PIP	21/04/2016	20/04/2021	N	N	Y	N	Y
EPSM2012-4478	C-PIP;S-PIP	03/09/2012	30/09/2016	N			N	Y
EPSM2010-2126	C-PIP	02/09/2010	31/08/2012	N			N	Y
2019-44194-EPS-MIT	C-PIP S-PIP	01/02/2020	31/03/2020	N	N	N	N	Y
EPSM2010-2266	C-PIP;BLE	01/09/2010	28/02/2011	Y			Y	Y
EPSM2010-1708	Great Crested Newt	09/06/2010	12/06/2012	N			N	Y
2014-500-EPS-MIT	C-PIP S-PIP	29/04/2014	30/09/2016	N	N	N	N	N
2014-3941-EPS-MIT	C-PIP S-PIP	21/10/2014	30/11/2019	N	N	Y	N	Y
2014-3941-EPS-MIT-1	C-PIP S-PIP	17/12/2014	30/09/2019	N	N	Y	N	Y
2014-3941-EPS-MIT-2	C-PIP S-PIP	26/01/2015	30/09/2019	N	N	Y	N	Y

6.7 There is one GCN pond survey 2017-19 record within 2km of the site, which showed absence of GCN as detailed in Table 6 and shown in Figure 7.

TABLE 6: GCN POND SURVEY RECORDS

Year of survey	Habitat Suitability Index	Result of great crested newt egg survey	Result of great crested newt visual survey	GCN occurrence	eDNA PCR Score	Detection of Inhibition
2018	0.43	NA	NA	Absent	0	No

Waterbodies within 500m of the site boundary and GCN Risk Zones

6.8 The Ordnance Survey map available via MAGIC was reviewed for ponds within the accepted GCN dispersal distance of 500m that are not separated from the site by significant barriers to dispersal such as main roads. Two ponds were identified to the southwest and northwest of the site, with the closest pond around 200m from the site boundary. See Figure 8

6.9 A review of the GSN Risk Zones mapping produced by Nature Space Partnership for the GCN District Level Licencing scheme shows that the site is located on the edge of an area in which Amber and Green Risk Zones meet. See Figure 9.

6.10 Amber Risk Zones indicate that suitable habitat is present and great crested newts are likely to be present whilst green zones contain moderate habitat quality – GCN may be present.

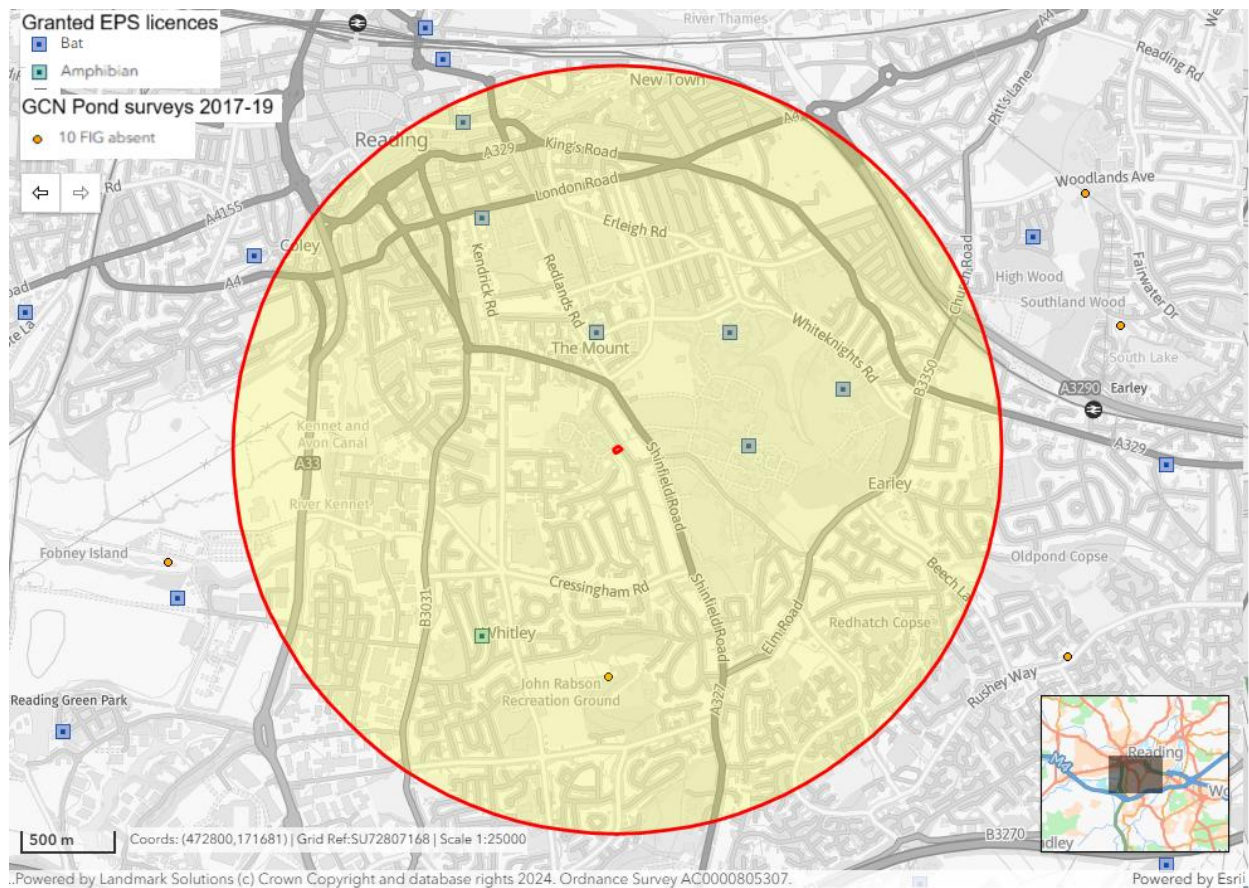


FIGURE 7: SHOWING GRANTED EPS LICENCES AND GCN RECORDS WITHIN 2KM OF THE SITE.

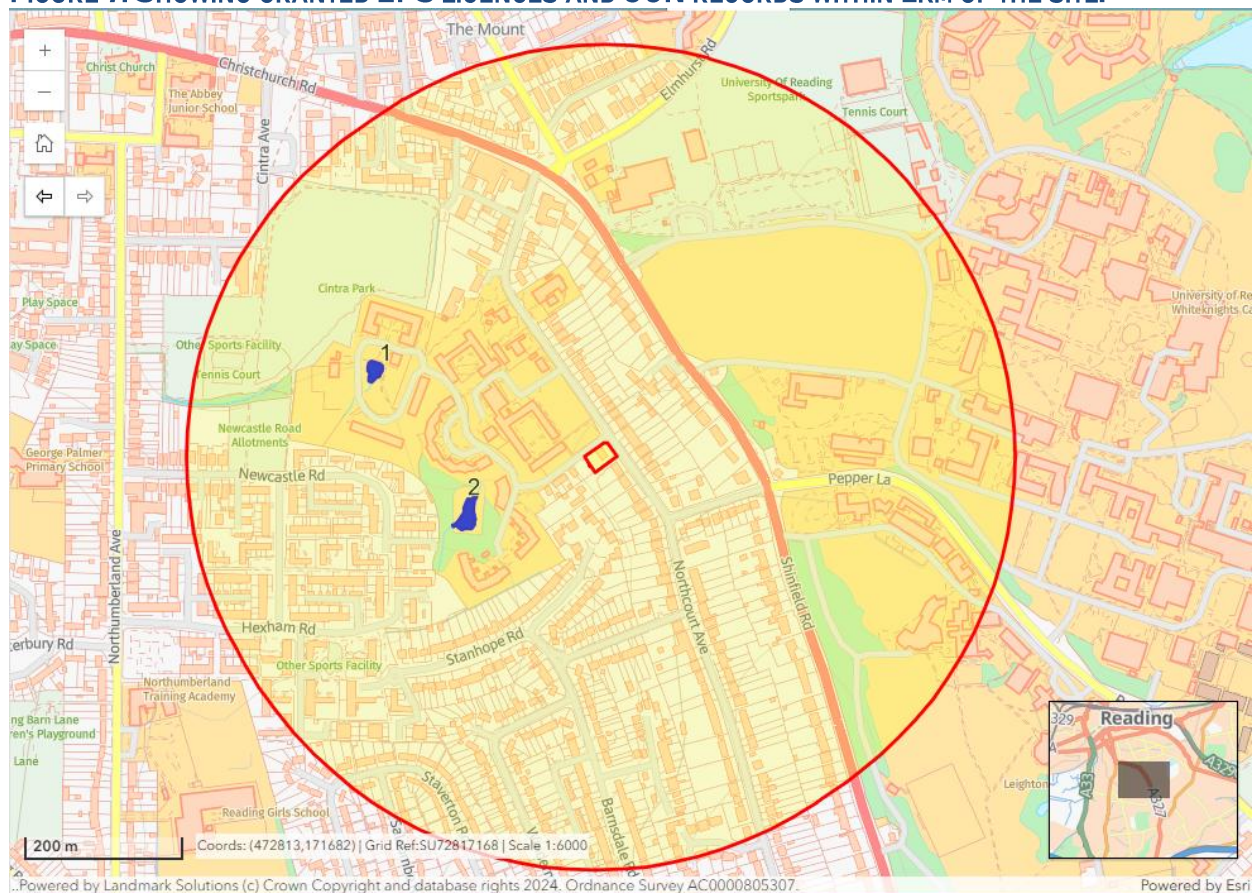


FIGURE 8: WATERBODIES WITHIN 500M OF THE SITE

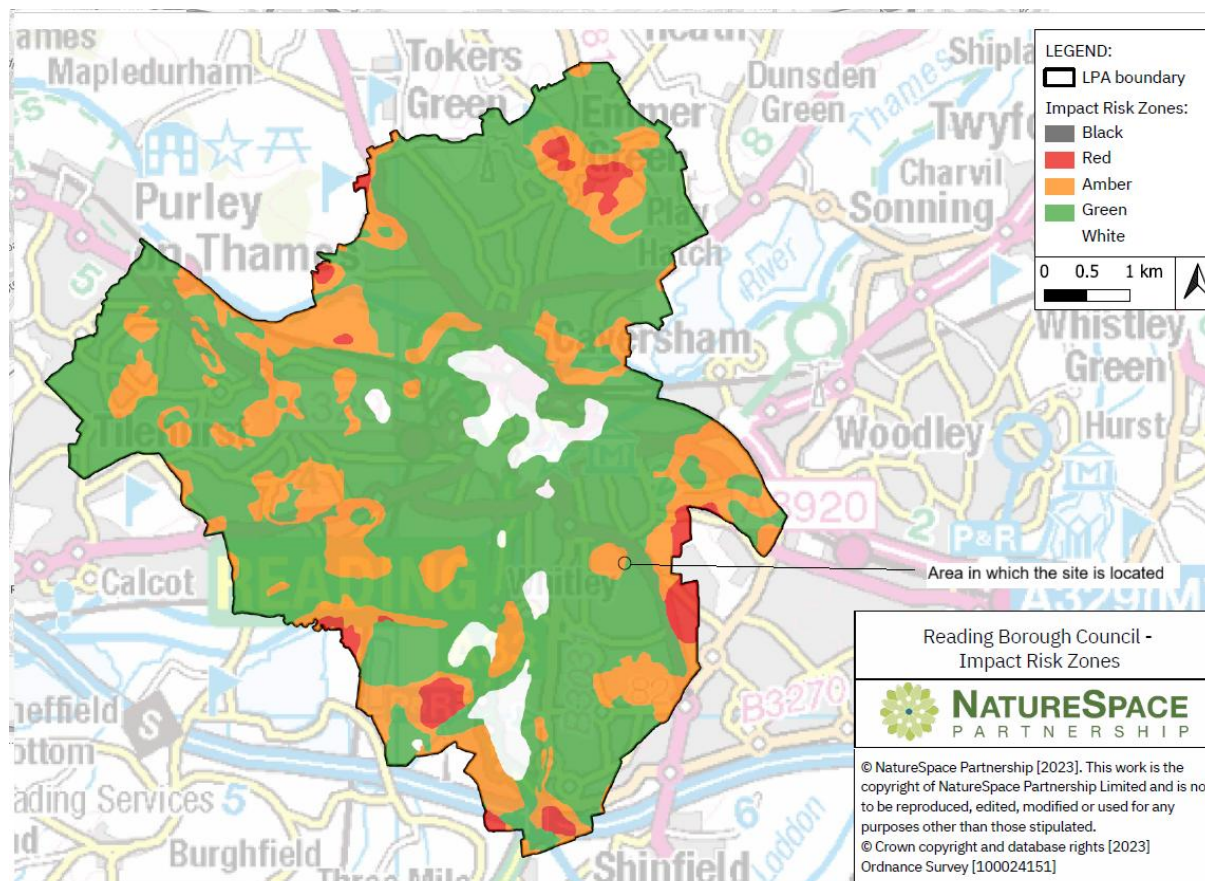


FIGURE 9: RISK ZONE MAP WITH APPROXIMATE SITE LOCATION MARKED

Field Survey

TABLE 7: WEATHER CONDITIONS DURING FIELD SURVEY

Survey Date	04/11/2025
Temperature start	14°C
Temperature finish	14°C
Wind speed (Beaufort Scale)	1
Cloud Cover (Oktas Scale)	3
Precipitation	0

On-site Habitats

- 6.11 The site is dominated by a large dwelling house situated within the middle of the plot, developed land: sealed surface is present partially surrounding the dwelling on the north-east, south-east and extending around the south-west of the building consisting of an access drive, parking and access path.
- 6.12 To the northern corner of the plot there is an area of modified grassland, dominated by perennial ryegrass, and small area of bare ground. Two trees are present in this area. An area of introduced planting, which additionally contains a small number of

individual small trees is located along the south-eastern side of the site. These areas are shared communally between the two dwellings within the residential property.

- 6.13 Two vegetated gardens, dominated by modified grassland, are present within the south-west of the site. Further trees are present within the south-west site boundary, and a short section of non-native hedgerow is present along the southern portion of the south-west boundary of the site.
- 6.14 The habitats present on site area shown in Figure 10 and Photograph 1 to Photograph 6.



PHOTOGRAPH 1– MODIFIED GRASSLAND, BARE GROUND AND TREES IN NORTH CORNER OF THE SITE



PHOTOGRAPH 2– TREE AND INTRODUCED SHRUBS IN EASTERN CORNER OF THE SITE



PHOTOGRAPH 3– DEVELOPED LAND; SEALED SURFACE AND ADJACENT INTRODUCED SHRUB IN SOUTH-EAST OF THE SITE



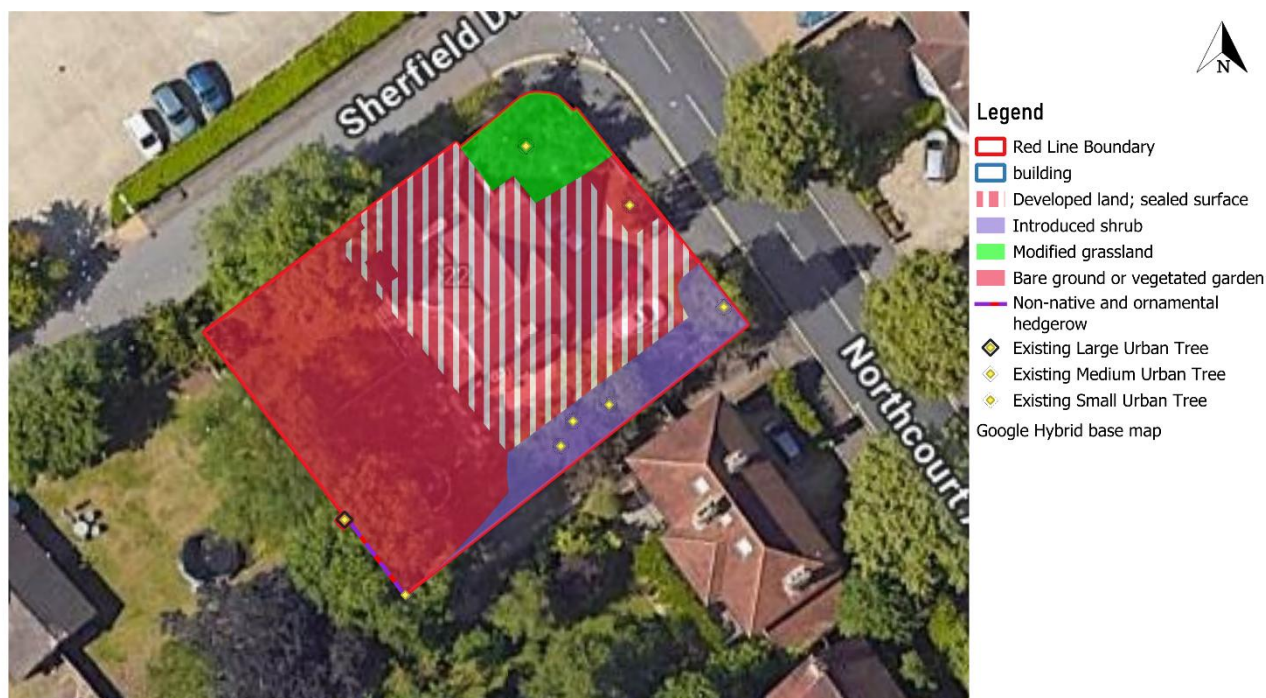
PHOTOGRAPH 4– DEVELOPED LAND, TREES AND NON-NATIVE HEDGE IN SOUTHERN PORTION OF THE SITE



PHOTOGRAPH 5– VEGETATED GARDENS WITHIN SOUTH-WEST OF THE SITE AND HARDSTANDING EXTENDING AROUND THE PROPERTY



PHOTOGRAPH 6– VEGETATED GARDENS AND DWELLING ON SITE



Project: AKB-25.26-71 - 22 Northcourt Avenue

Client: Kennet Property

Date: 12/11/2025

0 3.9 7.8 11.7 15.6 19.5 m
QGIS mapping

AKB Ecology

FIGURE 10: HABITATS IDENTIFIED ON SITE

Priority Habitats

6.15 No priority habitats were identified.

Plant species of note

6.16 No plant species of note were identified.

Invasive species

6.17 No invasive species of note were identified.

Badger

6.18 No badger setts were identified present on site. No evidence of badger activity such as latrines, tracks, guard hairs or snuffle holes were observed on or directly adjacent to the site, which would suggest that the site is otherwise used for foraging. It is considered unlikely that any badger setts are present within 30m of the site boundary as no evidence of badger activity was identified during the survey. The site is located in a residential area with solid board fencing and/or walls present around the majority of gardens in the area reducing the connectivity of habitat areas and restricting movement. Additionally, a busy road is present along the north-east boundary of the site.

Barn owl

6.19 A single dwelling is located within the site. Whilst an open terrace area is present on the south-west side of the building it lacks suitable perching, roosting or nesting platforms. The habitats on site are of low suitability for foraging with habitat for small mammals restricted to the south-east edge of the site. No evidence of the presence of barn owls was identified on site.

Breeding birds

6.20 The trees, planted boundaries, non-native hedge and building on site all have suitability or use by common garden bird species, the building additionally has some suitability for rarer species such as house sparrows.

Great Crested Newt (GCN)

6.21 The site is considered to have some potential to support terrestrial GCN within the planted boundaries. The grassland on site is maintained as a short sward and therefore has very low suitability for foraging and refuge.

6.22 No ponds were recorded within the site boundary therefore the site is considered to have negligible suitability for breeding GCN.

Hazel dormice

6.23 The site is considered to have negligible potential to support hazel dormice due to the lack of suitable habitat, connectivity and edible plant species.

Otter

6.24 No evidence of otters (spraint, footprints or feeding signs) were noted during the walkover survey. No suitable habitat for otters was present on site, and it is therefore considered to be of negligible suitability for this species.

Reptiles and common amphibians

6.25 Grassland on site is maintained as a short sward reducing suitability for reptiles and common amphibians. Whilst the introduced shrub along the south-east side of the site has some refuge and foraging opportunities it is very limited in area and connectivity.

Water vole

- 6.26 Negligible potential habitat for water voles was present on the site and, as such, no evidence was recorded.

Other Mammals

- 6.27 No evidence of other mammals was recorded within the site.

Other Species of Principal Importance

- 6.28 There is potential for the site to support SPI hedgehogs within the introduced shrub however connectivity between the site and further foraging and refuge areas is limited.

Daytime Bat Building Assessment

- 6.29 A two-storey brick-built dwelling is present on site. The building has a complex roof structure which includes a central flat roof with bitumen coating and pitched and hipped roofs supporting flat clay tiles. Single storey mono-pitched roofs are present over a single storey area on the south-east elevation and over an open terrace on the south-west elevation. A hipped roof dormer is present within the north-west catslide roof pitch which has flat clay vertical tile hangings on the cheeks and front. A small section of clay tile hangings is present above a window on the south-east elevation of the building.
- 6.30 The roofs and tile hangings are in good condition with no missing or slipped tiles noted and only a low number of broken tiles. The tiles largely lack a natural camber and are tight fitting, however a low number of slightly cambered, or lifted tiles were identified within the roof pitches and on the door. Additionally, the corner tiles on the dormer were noted to have slight gaps which could provide access to the batten spaces. The tile hangings above the window were noted to be handmade tiles which had a camber creating gaps into the batten space of this small area.
- 6.31 Internally a single large roof void is present over the entire property, with two small eaves voids also present within the catslide roof. The eaves voids are fully sealed internally with one in use for storage and the other containing a boiler. The main roof void is un-boarded at floor level with fibreglass insulation present between the ceiling joists. Wooden sarking is present lining all areas of the roof, where this is present on the central flat roof bitumen was noted to have dripped through the gaps into the roof void. The sarking was largely close fitting elsewhere, where small gaps were present a bitumen coated under-tile felt was visible between the sarking and roof tiles. Heavy cobwebbing was present at the ridges throughout the void as well as at the internal gable walls.
- 6.32 No evidence of the presence of bats was identified anywhere within the roof void, or externally around the building.



PHOTOGRAPH 7– SOUTH-WEST ELEVATION OF THE PROPERTY WITH SMALL AREA OF TILE HANGING ABOVE A WINDOW



PHOTOGRAPH 8– SOUTH-EAST ELEVATION



PHOTOGRAPH 9– NORTH-WEST ELEVATION



PHOTOGRAPH 10– NORTH-EAST ELEVATION



PHOTOGRAPH 11– CENTRAL FLAT ROOFED SECTION OF THE ROOF VOID



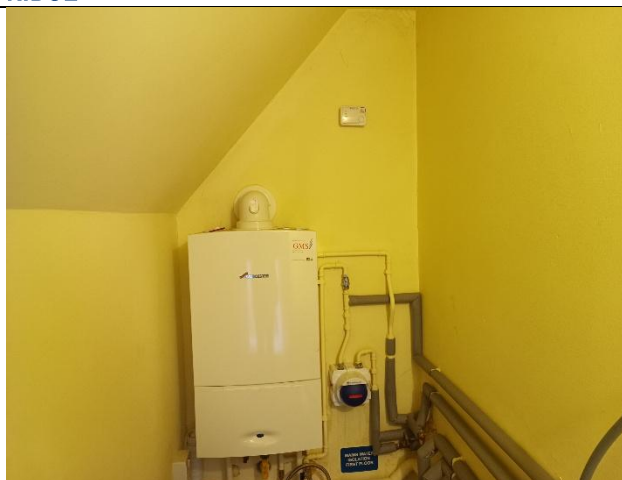
PHOTOGRAPH 12– ROOF VOID EXTENDING INTO PITCHED ROOFED AREAS



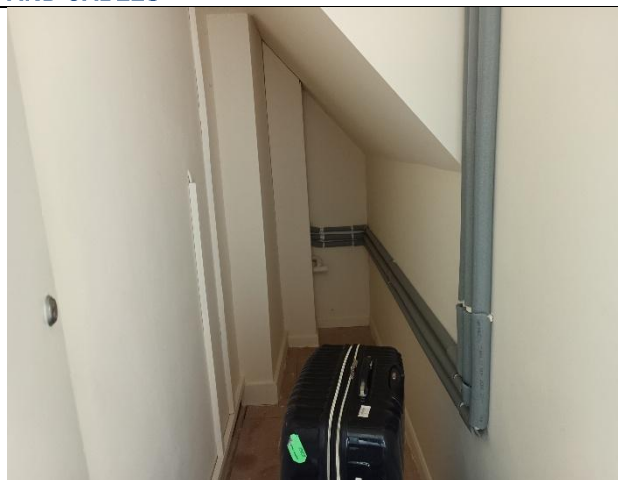
PHOTOGRAPH 13– HEAVY COBWEBBING AT THE RIDGE



PHOTOGRAPH 14– COBWEBBING AT THE RIDGE AND GABLES



PHOTOGRAPH 15– EAVES VOID CONTAINING BOILER



PHOTOGRAPH 16– EAVES STORAGE VOID

Ground Level Tree Assessment

6.33 Results of the survey findings detailed within Table 8. Tree numbers and species have been cross referenced with the arboricultural report for the site produced by Trevor Heaps Arboricultural Consultancy Ltd dated October 2025.

TABLE 8: GLTA RESULTS

Tree No.	Description	Photo	Classification of roost potential
1	Non-native purple leaved plum tree in north corner of the site. Very large stem up to approximately 1.5m which then splits to a high number of small stems – may have been pollarded or coppiced previously, but foliage prevented sufficient view to determine this. Ivy and other climbers growing on stems but not sufficient coverage to create or hide significant roost features		Negligible

2	Weeping silver birch tree adjacent to bin store and driveway next to north-east boundary. Semi-mature. No potential roost features identified.		None
3	Non-native Lawson cypress in north-east corner of the site. Some ivy cover on lower stem, but thin coverage. No visible roost features identified.		Negligible
4, 5 and 6	Holly tree, purple crab apple and purple-leaved plum tree within introduced shrub along the south-east boundary of the site. Young trees situated within dense planting adjacent to a wooden fence. No potential roost features identified present.		None
7	Mature ash tree in southern corner of the site. Double stem with dense ivy coverage preventing a good view of the stems or branches. Tight forks noted. No obvious signs of dieback.		FAR if proposed for removal
8	Mature acacia tree within south-west site boundary. Ivy cover on lower stem. No potential roost features visible.		Negligible

7. Evaluation, Conclusions & Recommendations

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

Priority Habitats

- 7.2 No priority habitats were recorded within the site therefore there are no constraints related to habitats.

Invasive species

- 7.3 No invasive species were recorded and therefore no further action is required.

Plant species of note

- 7.4 No plant species of note were recorded within the site therefore no further surveys are required.

Other valuable ecological features

- 7.5 Root Protection Areas (RPA) must be implemented in line with BS5837:2012 (2025 update) – 'Trees in relation to design, demolition and construction' from all retained trees and hedges. The RPA for an individual tree has a radius that is twelve times (fifteen times, or 5m beyond the crown spread, for category A and V trees) the tree's diameter at 1.3m above ground level for a single stemmed tree, and a minimum of a 2m RPA from all retained hedgerows.
- 7.6 The local authority should be contacted to check if any trees within the survey area have Tree Preservation Orders.

Habitat evaluation

- 7.7 The habitats on site are common and widespread. The grassland on site is species poor and considered to be of low biodiversity value. The trees introduced shrub and non-native hedge provide some habitat and foraging opportunities for a variety of species and are considered to be of low to moderate biodiversity value. Whilst the survey was carried out outside of the primary grassland survey period it is considered that due to the small size of the site, location and known management sufficient information has been obtained to confirm the classification of the habitat and no further botanical surveys are recommended.

Badger

- 7.8 The survey did not identify any evidence of badgers on the site, and it is considered unlikely that there is a sett present within 30m due to the area in which the site is located and the surrounding habitats. No further surveys for badgers are therefore considered necessary.
- 7.9 As badgers could potentially be present in the wider area and therefore may enter or cross the site on occasion, good building practice should be followed to prevent

animals from becoming trapped, such as covering trenches at night or providing a ramp to allow animals to escape.

Barn owl

- 7.10 The survey did not identify any evidence of barn owls on the site. The buildings had no access into the interior for barn owls and habitats within the site were not considered suitable for foraging. The site is therefore considered to hold negligible potential for this species.

Breeding birds

- 7.11 The building, trees and introduced shrub on site hold suitability for nesting birds therefore vegetation or tree removal must be undertaken outside the breeding bird period from March to August. Should any vegetation clearance be scheduled to take place between the beginning of March and the end of August, this must be immediately preceded by a survey to check for nesting birds. No vegetation can be cleared whilst a nest is occupied, regardless of species.
- 7.12 The building must be checked for nesting house sparrows and other bird species prior to any destructive works, no works can take place within 5m of an active nest, regardless of species. Sparrow terraces could either be incorporated within or mounted onto the walls of the extended dwelling to enhance nesting availability for this species post-development.

Great Crested Newt (GCN)

- 7.13 Based on the area of the site to be impacted and the location of the nearest water bodies to the site a Rapid Risk Assessment calculation carried out for the site identifies that if breeding GCN are present in ponds identified within 500m of the site and in the absence of mitigation there is no likely offence. See Figure 11.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.001
Individual great crested newts	No effect	0
Maximum:		0.01
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Guidance on risk assessment result categories

"Green: offence highly unlikely" indicates that the development activities are of such a type, scale and location that it is highly unlikely any offence would be committed should the development proceed. Therefore, no licence would be required. However, bearing in mind that this is a generic assessment, you should carefully examine your specific plans to ensure this is a sound conclusion, and take precautions (see **Non-licensed avoidance measures tool**) to avoid offences if appropriate. It is likely that any residual offences would have negligible impact on conservation status, and enforcement of such breaches is unlikely to be in the public interest.

FIGURE 11: RAPID RISK ASSESSMENT OF THE SITE

- 7.14 Due to the small area of habitat present on site and the distance from the nearest waterbody and the results of the rapid risk assessment the site is considered unlikely to be used by GCN and therefore no further surveys or mitigation for this species is required.

Hazel dormice

- 7.15 The site is considered unlikely to be used by hazel dormouse and therefore no further surveys for this species are required.

Otter

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

Reptiles

- 7.17 The site provides a small amount of habitat for reptiles such as describe e.g. Scrub and small areas of rough grassland; however, the areas are very small and are isolated from surrounding habitat by buildings, hard standing and walls.
- 7.18 Any areas of suitable vegetation should be gradually cut down and maintained as a short sward to discourage movement of reptiles into the site.

Water vole

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

Other Mammals

- 7.20 Site clearance work must be undertaken carefully (by hand if necessary) to avoid injury to any mammals which may be present on site. Good building practice must be followed to ensure that no mammals are injured during works or become trapped in excavations or stored materials.

Other Species of Principal Importance

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

Bats

- 7.22 Initial observations consider the local area suitable for common bat species. Residential gardens, parkland, woodland and water bodies with a network of connective tree and hedge lines in the area surrounding the site provides foraging and commuting habitat for a range of bat species. Buildings and trees within the local area additionally offer potential roosting opportunities.

- 7.23 The daytime assessment identified moderate potential for crevice dwelling bat species due to the presence of gaps between tiles creation potential access into the batten spaces of the roof and tile hangings.
- 7.24 Whilst *Pipistrellus* species bats, which are frequently recorded in building such as this, are known to utilise building roosts year-round the numbers found are typically small. They additionally typically remain within the batten spaces or cavity walls where they are rarely able to be seen. The property has a cold roof construction and these typically have high variation in temperatures due to solar gain and therefore the building was not considered to have suitably stable temperatures for significant hibernation use or for long-term torpor. Therefore, whilst the building may be utilised by low numbers of individual bats at any time of year the potential for hibernation is considered to be low.
- 7.25 The majority of trees on site were assessed as holding negligible or no potential for roosting bats and therefore no further surveys are required if these trees are proposed for removal. Tree 6, an ash tree present in the southern corner of the site was assessed as requiring further survey if any works are proposed due to the presence of dense ivy potentially hiding potential roost features.
- 7.26 Further active season survey requirements are based on the potential suitability of the site for roosting bats as defined in Table 4, with the number and timing of surveys as detailed in Tables 7.1 and 7.2 of the Good Practice Guidelines, and summarised in Table 9 of this report.
- 7.27 Further hibernation survey requirements for the buildings are based on the potential suitability of the site for hibernating bats, with the number and timing of surveys as detailed in section 5.3 of the Good Practice Guidelines and are summarised in Table 10 of this report.

TABLE 9: ACTIVE SEASON SURVEY REQUIREMENTS BASED ON SUITABILITY FOR BATS

Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M	Confirmed roost
One survey visit. One dusk emergence survey where daytime inspection cannot rule out presence (structures) May to August (inclusive) No further surveys required (trees)	Two separate dusk emergence survey visits May to September ^a with at least one of the surveys between May and August ^b	Three separate dusk emergence survey visits May to September ^a with at least one of the surveys between May and August ^b	Sufficient surveys to identify species and confirm all roost types present. Three dusk emergence surveys typically required May to September ^a with at least one of the surveys between May and August ^b

Notes:

- a. September surveys are both weather-and location-dependent. Conditions may become more suitable in these months particularly in more northerly latitudes. September surveys are likely to miss maternity roosts due to dispersal before this time but may pick up mating roosts.
- b. Multiple survey visits should be spread out to sample as much of the recommended season as possible. It is recommended that surveys are spaced a minimum of three weeks apart, preferably more. Survey timings should consider the prevailing weather conditions. Early May surveys may not be suitable. Optimum coverage includes the pre-parturition period (May and early June), post-parturition (June–August), and mating periods (August–September)

TABLE 10: HIBERNATION SEASON SURVEY REQUIREMENTS BASED ON SUITABILITY FOR BATS

Low potential for Hibernation	Moderate and high potential for hibernation	Confirmed hibernation roost
No further survey required	Close and systematic inspection of all cracks, crevices and voids for hibernating bats using torches, mirrors and endoscopes. Static detector deployment with associated temp/humidity logging to provide context. Surveys to be carried out four weeks apart during the months predicted to be the coolest (typically January and February)	Sufficient surveys to identify species and numbers present. Surveys to be carried out between November and March.

7.28 The building was considered to have low potential for hibernation, when combined with hibernation surveys being unlikely to provide meaningful data due to the types of features used by the species which could be present, it is considered that in line with section 6.2 of the Bat Mitigation Guidelines that hibernation surveys are not necessary in this instance, but works should be timed so as to avoid the peak hibernation period to minimise risk to any bats which may be present.

7.29 The building was considered to have moderate potential to support roosting bats within the batten spaces during the active season, therefore further emergence surveys are required in order to confirm presence or increase confidence in a result of likely absence of bat roosts on site with a minimum of two surveys to be carried out in the active season of May to September.

7.30 Should bats be found to be present with roosts likely to be impacted by the proposed works, sufficient surveys to characterise the roosts and determine likely impacts will be required in order to inform a Natural England licence to permit the works.

8. Wildlife Enhancements

- 8.1 Based on the location of the site and known information regarding presence of protected species the following wildlife enhancements are additionally recommended.

Bats and Birds

- 8.2 To enhance the site for bats and birds known to be present within the local area it is recommended that two bat boxes and two bird boxes are integrated into the development.
- 8.3 Ideally bat boxes would be woodcrete or similar hard-wearing material (rather than the less durable wooden boxes) and should be installed at least 3m above the ground (where safe installation is possible), sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west facing).
- 8.4 Example integrated bat boxes are shown below: Integrate Eco Bat Box (below left), Habibat Bat box - Plain for rendering (below centre) and a Schwegler 1WI Summer and Winter bat box (below right) or similar bat boxes.



- 8.5 Integrated bird boxes should comprise of swift bricks which are suitable for a range of species (below left), these should be installed at a minimum of 4m above the ground, north or east facing and with open flight access, or sparrow terraces (below centre) which should be installed in line with vegetation such as trees or hedge lines to allow the birds the use of jumping off points and be installed a minimum of 3m above the ground on a north or east elevation. Where suitable overhanging eaves are present house martin cups (below right) may also be suitable.



Hedgehogs

- 8.6 Where closed board fencing is to be installed, 'hedgehog highways' are recommended to be created through the base of the fence. Access holes will be 13cm by 13cm which is sufficient for hedgehogs to pass through but too small for the majority of pets.



Solitary bees

- 8.7 It is recommended that a minimum of one bee brick is integrated into the extended building to enhance the site for solitary bee species which are non-aggressive.
- 8.8 Suitable bee bricks include holes of varying sizes to encourage different species. Bricks should be installed in warm sunny spots on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants such as lavender and honeysuckle be planted nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.



9. References

Barn Owl Trust (2012) *Barn Owl Conservation Handbook*, Pelagic publishing, Exeter

Bat Conservation Trust (2014) *Artificial lighting and wildlife*. Interim Guidance: Recommendations to help minimise the impact artificial lighting. BCT, London

British Standard Institution (2013) *BS 42020:2013 Biodiversity. Code of practice for planning and development*, London, England

CIEEM (2021) *Good Practice Guidance for Habitats and Species*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2013) *Competencies for Species Survey guidance documents*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2018) *Professional Guidance Series: Guidance on metadata Standards: Reporting, sharing and archiving ecological data*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2018) *Technical Guidance Series. Guidelines for Preliminary Ecological Appraisal*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2022) *Code of Professional Conduct*. Chartered Institute of Ecology and Environmental Management, Winchester

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

Collins J. (ed) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd ed). Bat Conservation Trust, London

Department for Communities and Local Government (2021) *Technical Guidance to the National Planning Policy Framework*. Department of Communities and Local Government, London.

Department for Communities and Local Government (2021). *National Planning Policy Framework*. Department of Communities and Local Government, London.

JNCC (2010) *Handbook for Phase 1 habitat survey: A technique for environmental audit*. JNCC, Peterborough

JNCC (2004) *Bat workers manual (3rd edition)*. JNCC, Peterborough.

Mitchell-Jones A.J. (2004) *Bat mitigation guidelines*. English Nature, Peterborough

ODPM (2005) *Government circular: biodiversity and geological conservation – statutory obligations and their impact within the planning system*. The Stationary Office.

Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.

Rose F. (2006) *The Wild Flower Key*. Penguin Books Ltd.

Stace C.A. (2010) *New Flora of the British Isles (3rd edition)*. Cambridge University Press.

Surrey Bat Group (2009) *Criteria for Bat Surveys in the Planning Process*.
www.surreybats.org.uk/criteria.html.

UKHab Ltd (2023). *The UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

Appendix 1 – legal protection

General

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

Badger

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

Barn Owl

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

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

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

Bats

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

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

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

Furthermore, seven bat species (barbastelle, bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal

Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Breeding Birds

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

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

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

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

Amphibians

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

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

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

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

Hazel dormouse

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

- intentionally kill, injure or take (capture etc.);
- possess;

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

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

Otter

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

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

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

Reptiles

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

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

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

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

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

Water vole

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

- capture, kill or injure;
- damage, destroy or block access to a place of shelter;
- disturb whilst in a place of shelter or possessing, and
- sell any part of a water vole, dead or alive.

Other Mammals

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

Species and Habitats of Principal Importance

Section 41 of the *Natural Environment and Rural Communities (NERC) (2006)* requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list has 56 Habitats of Principal Importance and 943 species of principal importance listed and has been drawn up in consultation with Natural England.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under *Section 40* of the *Natural Environment and Rural Communities Act 2006*, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Invasive species

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

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

Ancient woodland

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

Sites of Special Scientific Interest (SSSI's)

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

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

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

Local Nature Reserves (LNRs)

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

Local Wildlife Sites (LWS)

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

Appendix 2 – Survey timetable

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