



**Ecological Assessment
and
Preliminary Bat Roost Assessment**

87 Redhatch Drive

**Earley
Reading
RG6 5QN**

**Annika Binet
November 2025**

Project Details

Client	Kennet Property
Site location	87 Redhatch Drive, Reading, RG6 5QN
Grid Reference	SU 74325 70943
Agent	
Report Title	87 Redhatch Drive Ecological appraisal and preliminary roost assessment report
Report and version number	AKB-25.26-76-EAPRA-v1
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Surveyed By	Annika Binet MCIEEM BSc (Hons)

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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.

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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 Preliminary Bat Roost Assessment at 87 Redhatch Drive, Reading, RG6 5QN at grid reference SU 74325 70943 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 506m² in size and contains a residential property with associated garage, driveway, patio and gardens.
- The proposed plans are not yet finalised, but it is understood that they comprise of part single and part 2-storey rear extension and 1.5 storey side extension with internal alterations. The front driveway will also be extended to accommodate the two parking spaces.
- A preliminary roost assessment of the house and garage, including internal and external inspection, did not identify any evidence of the presence of bat roosts. The roof of the house was in good condition and appeared to have been replaced in the recent past. A few slightly lifted tiles were noted on the verge, but the lifts were insufficient to allow access by bats or birds into the batten space and no other potential roost features, or access points were identified. The house was therefore considered to have negligible suitability for use by roosting bats. The garage had a flat roof and was fully sealed with no potential access points or potential roost features identified and was therefore considered to have no suitability for use by roosting bats.
- No further surveys are considered necessary, good building practice must be followed and precautionary measures taken to prevent injury to any mammals, amphibians, reptiles or birds which may be present on site.
- Any additional lighting for the site should be designed in accordance with the Institute of Lighting Professionals Guidance note 8: '*Bats and Artificial lighting in the UK*' which can be downloaded for free from the ILP website.
- Enhancement opportunities are present on site, specific species recommendations, based on the site location and surrounding habitats, are recommended within section 8 of this report.

Contents

Project Details	1
Executive Summary	2
1. Introduction	4
2. Background	4
3. Surveyor Information	5
4. Methods	6
5. Constraints/Limitations	11
6. Results	13
6. Conclusions & Recommendations	22
7. Procedure to follow in the event a bat is found on site at unsupervised times.....	26
8. Wildlife Enhancements	26
9. References	29
Appendix 1 – legal protection.....	31
Appendix 2 – Survey timetable	36
 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 STATUTORY DESIGNATED SITES AND IRZs WITH 2KM BUFFER SHOWN AROUND THE SITE.	13
FIGURE 4: SHOWING GRANTED EPS LICENCES AND GCN RECORDS WITH 2KM BUFFER SHOWN AROUND THE SITE.	15
FIGURE 5: WATERBODIES WITHIN 500M OF THE SITE.....	16
FIGURE 6: RISK ZONE MAP WITH APPROXIMATE SITE LOCATION MARKED	16
FIGURE 7: SHOWING PRIORITY HABITATS IN PROXIMITY TO THE SITE.	17
FIGURE 8: ONSITE HABITATS	18
FIGURE 9: RAPID RISK ASSESSMENT OF THE SITE.....	24
 Table 1: Surveyor information	 6
Table 2: Data search sources	6
Table 3: HSI score categorisation	7
Table 4: Bat roosting potential definitions for structures Bat Mitigation Guidelines 2023	10
Table 5: EPS licences within 2km of the site	14
Table 6: GCN records	14
Table 7: Weather conditions during field survey	17

1. Introduction

- 1.1 Kennet Property commissioned AKB Ecology to undertake an Ecological Appraisal including Preliminary Bat Roost Assessment at 87 Redhatch Drive, Reading, RG6 5QN to help inform the proposed development of the site.
- 1.2 No surveys are known to have been carried out on site previously. 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 5th 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 74325 70943. The site is located in a residential part of Earley, Reading. The surrounding landscape comprises residential dwellings with associated gardens, infrastructure, commercial development and public amenity land. Small woodland blocks and open green spaces are additionally present within the surrounding area, in addition to large water bodies present to the north and east of the site in the wider landscape. See Figure 1.
- 2.2 The site is approximately 506m² and contains a residential property with associated garage, garden shed, driveway and amenity garden. See Figure 2.

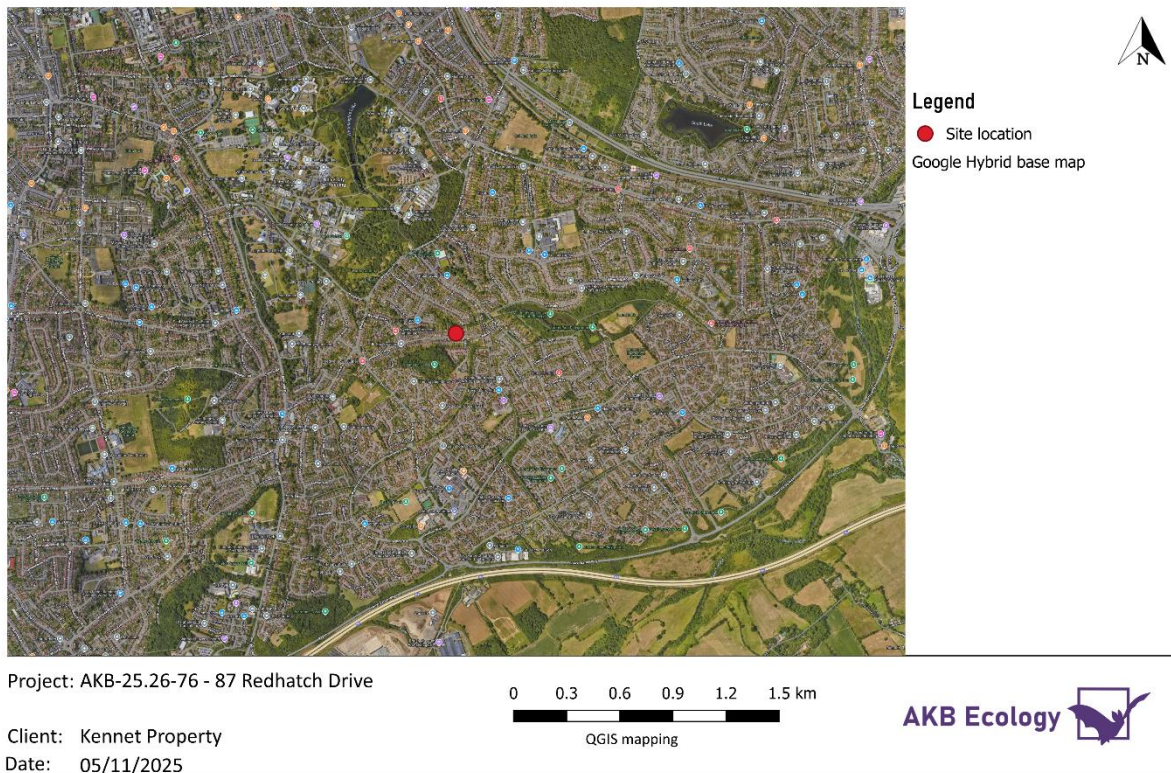


FIGURE 1: SHOWING THE SITE LOCATION



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

2.3 The proposed plans are not yet finalised, but it is understood that they comprise of part single and part 2-storey rear extension and 1.5 storey side extension with

internal alterations. The front driveway will also be extended to accommodate the two parking spaces.

3. Surveyor Information

TABLE 1: SURVEYOR INFORMATION

Surveyor	Licences	Ecological Experience or qualification
Annika Binet	Class licence CL19 and CL20 (Bats): 2018-38642-CLS-CLS and 2018-38643-CLS-CLS 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 5th 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 was undertaken on the 5th 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 buildings were 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	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

	surrounding habitat to be used regularly or by large numbers/unlikely to be of use as a maternity or hibernation roost.	
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.		

Results Evaluation and Impact Assessment

- 4.27 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.
- 4.28 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 MAGIC mapping does not currently contain full EPS licence records, and these records are not available through any other service therefore further licences may be present within the area and remain undetected during the data search.

- 5.2 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.
- 5.3 GCN Risk Zones maps are available to download in low resolution only, they only provide an illustrative overview of the potential risks to great crested newts in the regions indicated. For detailed information regarding risk zones for specific sites an information request can be made to the Nature Space Partnership.
- 5.4 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. It is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.
- 5.5 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.
- 5.6 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.
- 5.7 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.
- 5.8 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.
- 5.9 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 There are three Local Nature Reserves (LNR) located within 2km of the proposed site. The nearest statutory designated site is Maiden Eriegh Park (LNR) which is located approximately 200m to the east of the site at the closest point. See [FIGURE 3](#).

Impact Risk Zones

- 6.2 MAGIC identifies that the site falls within the SSSI Impact Risk Zones (IRZ) for the Lodge Wood & Sandford Mill SSSI which is located within 5km of the site. However, the IRZ indicates that the proposed development is unlikely to have a harmful effect on the SSSI. 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.

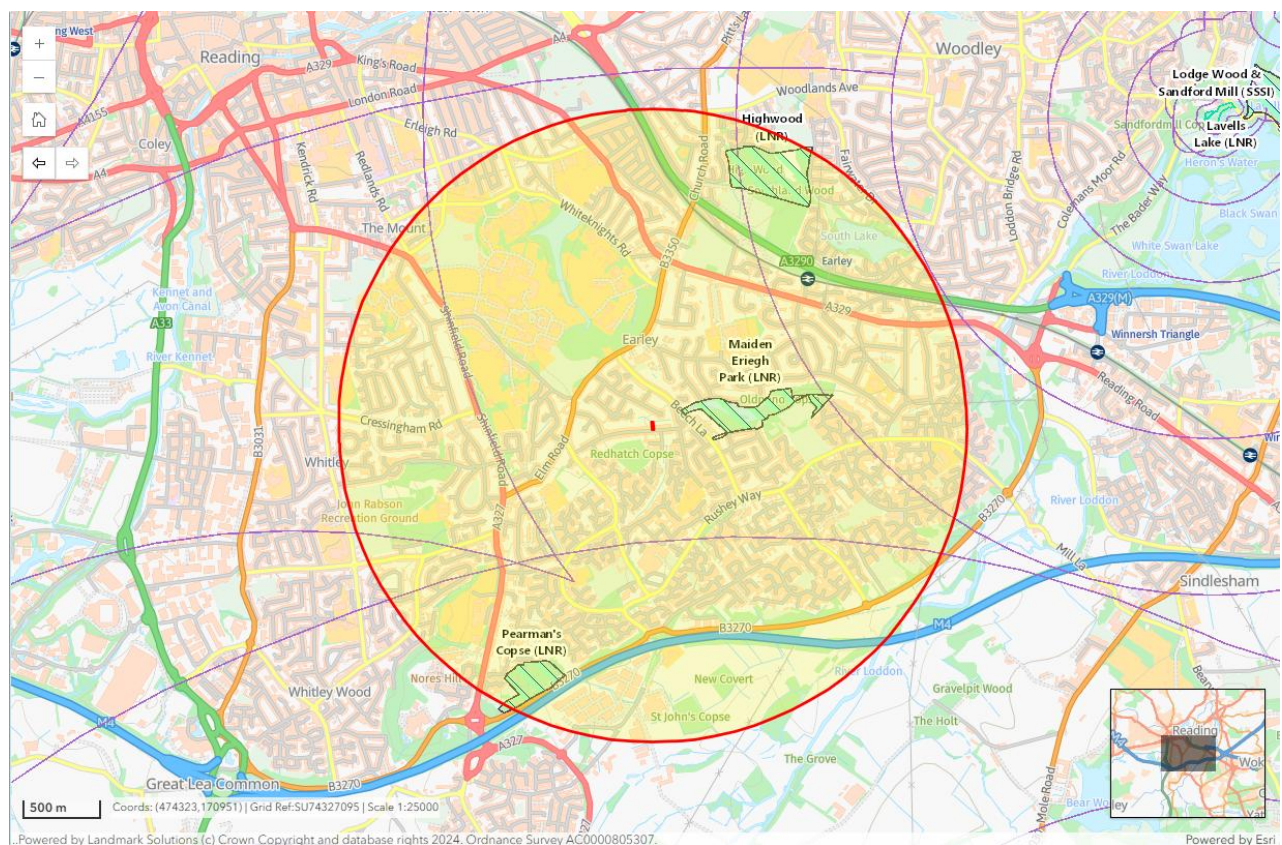


FIGURE 3: SHOWING STATUTORY DESIGNATED SITES AND IRZs WITH 2KM BUFFER SHOWN AROUND THE SITE.

Granted EPS Licences and GCN records

6.3 There are granted EPS licences for bats within 2km of the site. These are detailed in Table 5 and shown in Figure 4.

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
EPSM2012-4390	BLE	10/05/2012	30/09/2015	Y			Y	Y
EPSM2012-4478	C-PIP;S-PIP	03/09/2012	30/09/2016	N			N	Y
EPSM2011-3341	C-PIP;BLE	06/09/2011	30/09/2013	N			N	Y
EPSM2010-2126	C-PIP	02/09/2010	31/08/2012	N			N	Y
2020-49081-EPS-NSIP1	DAUB S-PIP	03/10/2020	01/11/2025	Y	Y	Y	N	N
EPSM2010-2266	C-PIP;BLE	01/09/2010	28/02/2011	Y			Y	Y
2014-500-EPS-MIT	C-PIP S-PIP	29/04/2014	30/09/2016	N	N	N	N	N
2014-441-EPS-MIT	C-PIP S-PIP	14/04/2014	30/09/2019	N	N	Y	N	Y

6.4 There are GCN Pond Survey 2017-2019 records within 2km of the site, these are detailed in Table 6 and shown in Figure 4. The surveys did not identify the presence of GCN. No GCN Class licence return data was identified on MAGIC within 2km of the site.

TABLE 6: GCN 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
2018	0.62	NA	NA	absent	0	No
2018	0.66	NA	NA	absent	0	No
2018	0.61	NA	NA	absent	0	No

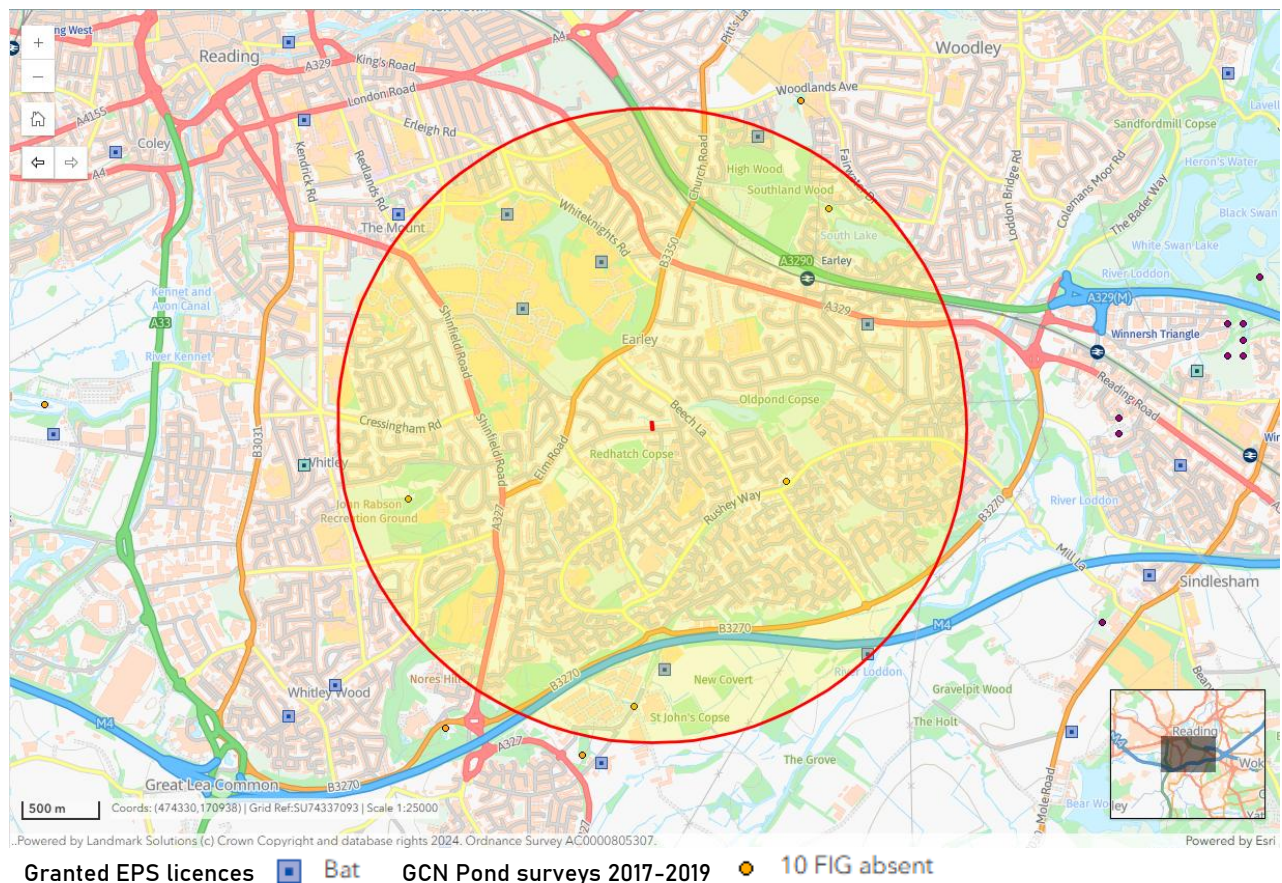


FIGURE 4: SHOWING GRANTED EPS LICENCES AND GCN RECORDS WITH 2KM BUFFER SHOWN AROUND THE SITE.

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

- 6.5 The Ordnance Survey map available via MAGIC was reviewed for ponds and other waterbodies within the accepted dispersal distance of 500m that are not separated from the site by significant barriers to dispersal such as main roads. Three waterbodies were found occurring in all directions, however two of these are located to the east of Beech Lane which is a relatively busy road thereby reducing connectivity to some extent. See Figure 5.
- 6.6 A review of the GSN Risk Zones mapping produced by Nature Space Partnership for the GCN District Level Licensing scheme shows that the site is located within an Amber Risk Zone. See Figure 6.
- 6.7 Amber Risk Zones indicate that suitable habitat is present and great crested newts are likely to be present.

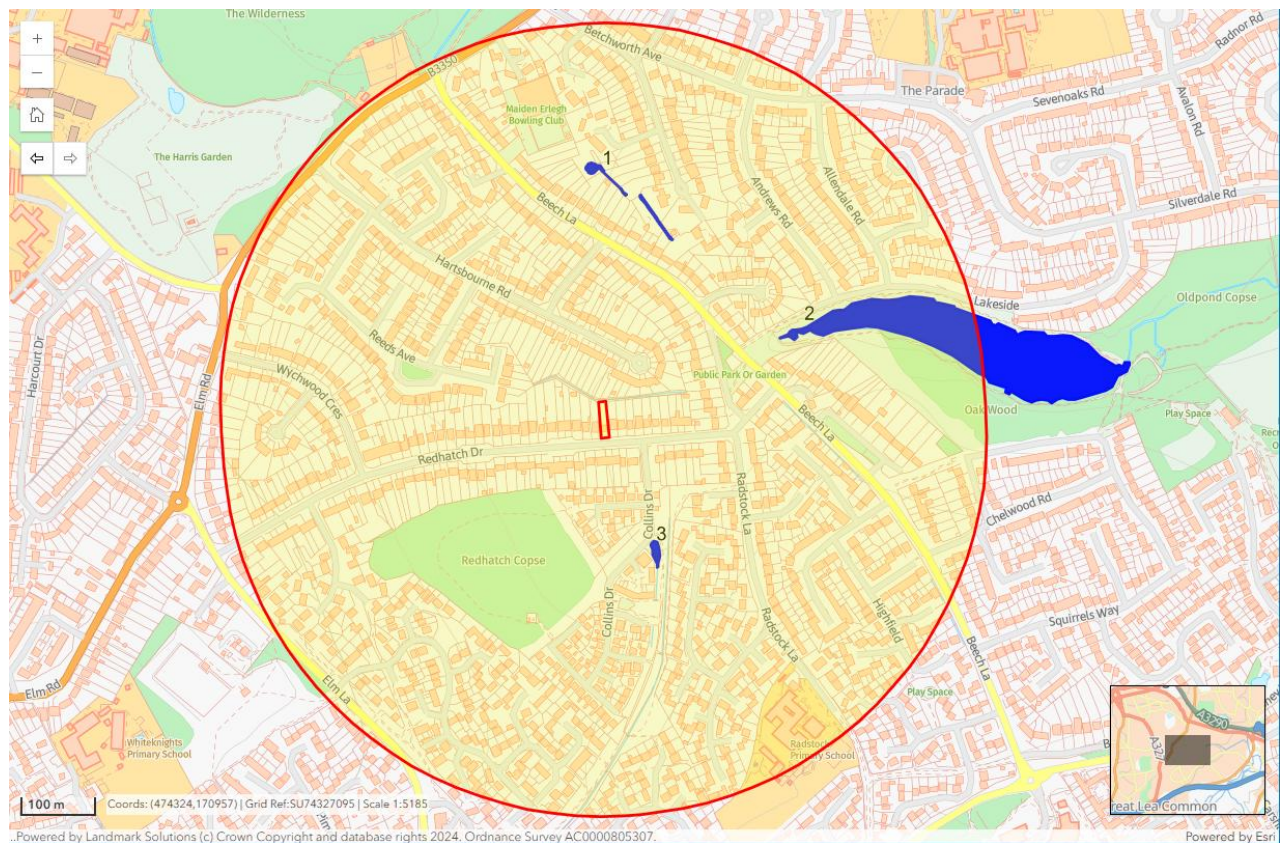


FIGURE 5: WATERBODIES WITHIN 500M OF THE SITE

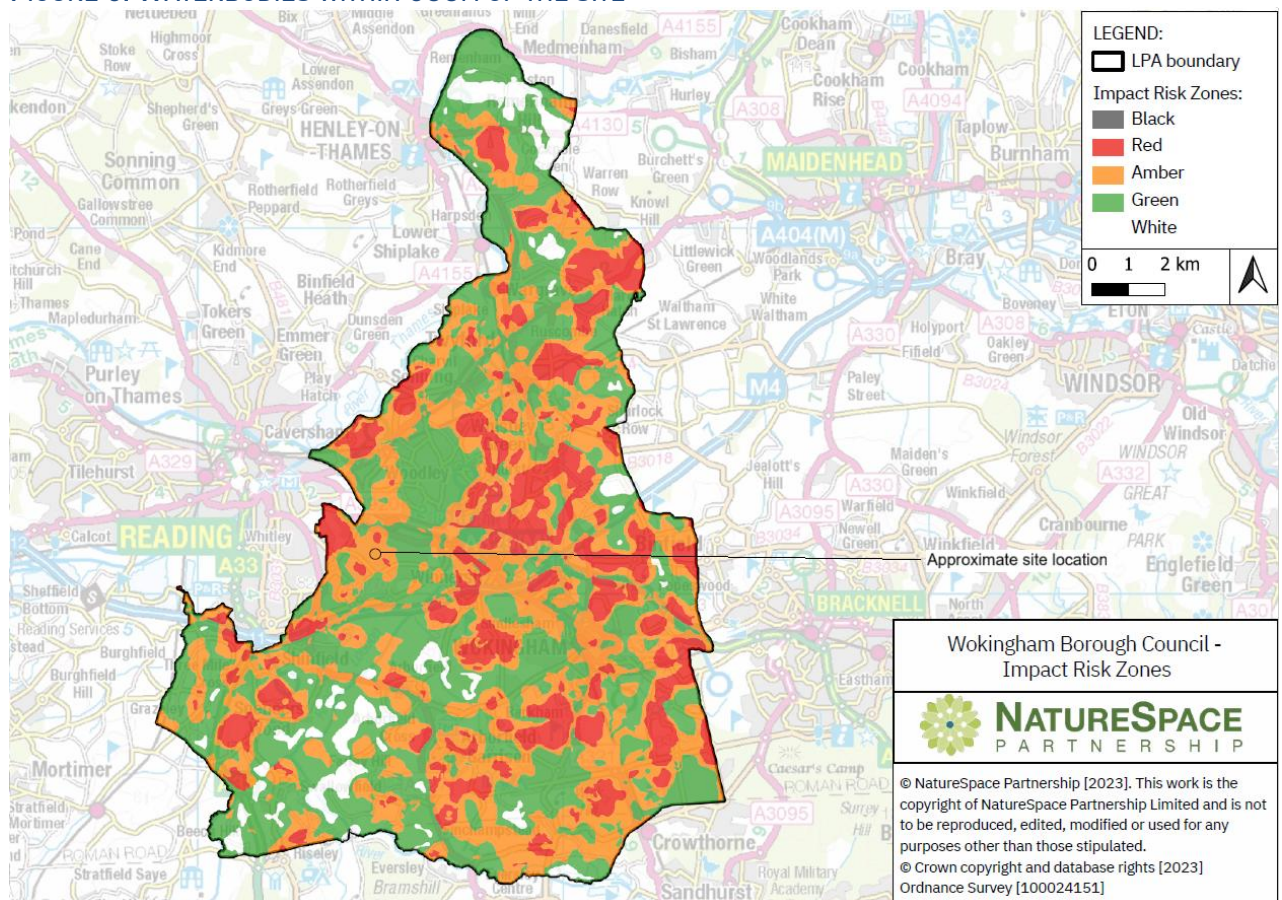


FIGURE 6: RISK ZONE MAP WITH APPROXIMATE SITE LOCATION MARKED

Habitats of Principal Importance

6.8 There are no HPI located within or immediately adjacent to the site. Deciduous woodland, ancient woodland and woodpasture and parkland are present within the wider surrounding area. See Figure 7.

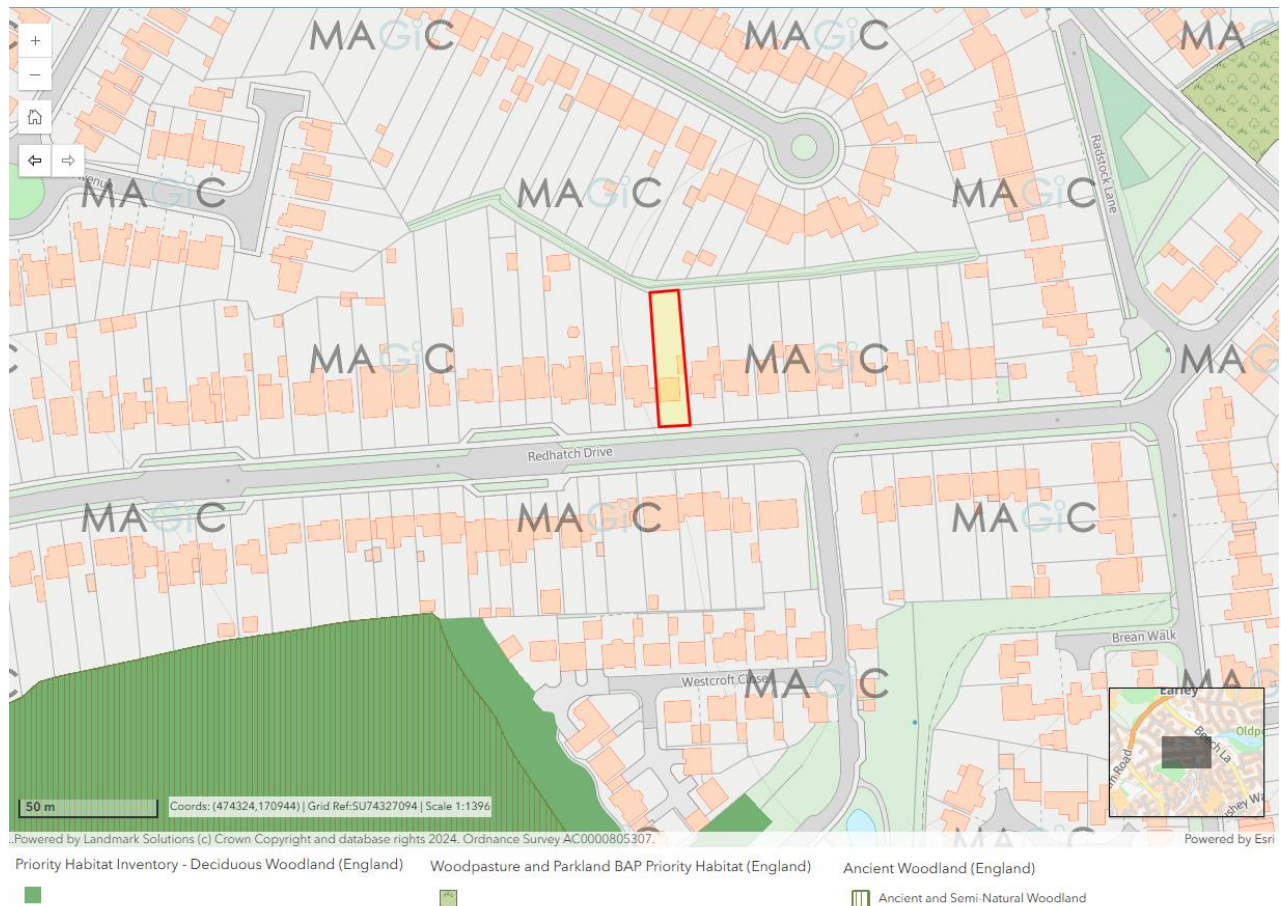


FIGURE 7: SHOWING PRIORITY HABITATS IN PROXIMITY TO THE SITE.

Field Survey

TABLE 7: WEATHER CONDITIONS DURING FIELD SURVEY

Survey Date	05/11/2025
Temperature start	16°C
Temperature finish	16°C
Wind speed (Beaufort Scale)	1
Cloud Cover (Oktas Scale)	7
Precipitation	0
Notes	Conditions were fine and dry

Habitat description

- 6.9 A patio is present immediately adjacent to the house and garage, with a paved path leading down the eastern edge of the garden to a further patio area at the northern end. The rest of the garden is dominated by modified grassland with amenity planting around the borders, with a rockery garden and shed also present in the north-east corner. Lapboard fencing is present on the eastern and western boundaries of the site, with a non-native species poor hedge along the northern boundary. Trees are present just outside the northern boundary. A small area of modified grassland and amenity planting is present at the front of the property, in addition to hard standing.

**FIGURE 8: ONSITE HABITATS**



Priority Habitats

6.10 No priority habitats were identified.

Plant species of note

6.11 No plant species of note were identified.

Invasive species

6.12 Rhododendron was identified on site; some species of Rhododendron are considered to be Schedule 9 non-native invasive plant species. Cherry laurel, which is a non-native invasive plant (but not listed on Schedule 9) was recorded.

Other valuable ecological features

6.13 Whilst the amenity planting was dominated by non-native species it did include flowering and fruit bearing species which could provide a food source for a range of common bird and invertebrate species.

Badger

6.14 No badger setts were identified present on site. No evidence of badger activity which would suggest that the site is otherwise used for foraging, such as latrines, tracks, guard hairs or snuffle holes were observed on or directly adjacent to the site. All fences and hedges were intact with no holes of a suitable size for badgers to use for access and no push throughs identified.

Barn owl

6.15 A dwelling house, garage and garden shed are present within the site. All buildings were well sealed and lacked fly in access suitable for use by barn owls. The habitats on site did not include those typically favoured by foraging barn owls and no evidence of the presence of owls was identified anywhere on site.

Breeding birds

- 6.16 Whilst the buildings lack suitable features for nesting birds the amenity planting on site does provide habitat suitable for common garden birds for foraging and nesting. An old nest was noted present within vegetation on the western side of the garden.

Great Crested Newt (GCN)

- 6.17 The site is considered to have some potential to support terrestrial GCN, as the planted borders and rockery provide some foraging and shelter opportunities. No ponds are present on site therefore the site is considered to have negligible suitability for breeding GCN.

Hazel dormice

- 6.18 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

- 6.19 No evidence of otters (spraint, footprints or feeding signs) were noted during the walkover survey. There was no suitable scrub habitat, fish or other features providing suitable habitat for otters.

Reptiles

- 6.20 The grassland and amenity planting on the site provides some suitable foraging habitat for slow worms which are found in a range of habitats including domestic gardens. The habitats on site were not considered suitable for any other reptile species

Water vole

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

Other Mammals

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

Other Species of Principal Importance

- 6.23 Due to the solid fencing the site has very restricted access for hedgehogs, whilst the site contains some foraging opportunities for house sparrows no nesting opportunities are present on site.

Daytime Bat Assessment

- 6.24 The dwelling house is a 1.5 storey brick-built dwelling with gabled roof supporting flat concrete tiles, plastic soffit boxes are present at the eaves and gables of the building.
- 6.25 The soffits are well sealed and tight fitting; narrow ventilation slots were noted to be present which are too small to be used as a potential access point for bats and birds. The roof was noted to be in good condition externally with no missing, slipped or broken tiles present. Slight lifting of tiles along the verge was noted, however the

lift was insufficient to create a gap suitable for bat or bird access. All mortar was present at the ridge.

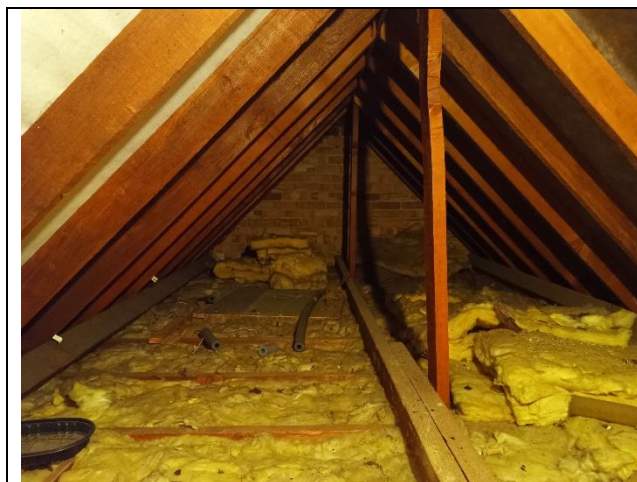
- 6.26 Internally an apex roof void is present in addition to eaves storage voids in the first-floor bedrooms. The roof is lined with a modern non-bitumen coated roofing membrane which was noted to be in good condition and looked to have been fitted within the recent past. Fibreglass insulation was present between the ceiling joists.
- 6.27 Heavy cobwebbing was noted at the gable ends and ridge of the apex void. The eaves voids were boarded at floor level and in active use for storage, cobwebbing was noted to be present at the gables and outside the areas which are accessed for storage. Natural light ingress was noted at the eaves where ventilation slots are present in the soffit boxes.
- 6.28 The garage is a flat roofed, brick-built structure located to the north-east of the house. Plastic fascia boards are present around the eaves which were noted to be tight fitting against the walls. A window in the door on the western elevation in addition to large window in the north elevation create bright internal conditions. The windows and doors were all tight fitting with no gaps suitable for access by bats or birds.
- 6.29 No evidence of the presence of bat roosts, or nesting birds, was identified internally or externally around either building.



PHOTOGRAPH 5– SOUTHERN ELEVATION OF THE HOUSE



PHOTOGRAPH 6– WELL SEALED SOFFITS AT THE EAVES



PHOTOGRAPH 7- APEX ROOF VOID



PHOTOGRAPH 8- HIGH LEVEL OF COBWEBBING AT THE GABLE AND RIDGE



PHOTOGRAPH 9- EAVES VOID



PHOTOGRAPH 10- GARAGE



PHOTOGRAPH 11- WELL SEALED FASCIA



PHOTOGRAPH 12- GARAGE INTERIOR

6. Conclusions & Recommendations

- 6.1 In line with Natural England's Standing Advice, where further survey for protected species is recommended these should be conducted prior to submitting a planning

application and appropriate mitigation measures be incorporated into the development design.

Habitat evaluation

- 6.2 The habitats on site are common and widespread and considered to be of low ecological value overall.

Habitats of Principal Importance

- 6.3 No HPI habitat was recorded within the site.

Invasive species

- 6.4 Care must be taken to prevent the spread of Rhododendron and cherry laurel to the surrounding area. Ideally, efforts should be made to remove these from the site.

Plant species of note

- 6.5 No plant species of note were identified and therefore no further survey is required.

Other valuable ecological features

- 6.6 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.
- 6.7 The local authority should be contacted to check if any trees adjacent to the property line have Tree Preservation Orders.

Badger

- 6.8 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. No further surveys for badgers are considered necessary.
- 6.9 As badgers could potentially be present in the wider area, 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

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

Breeding birds

- 6.12 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.

Great Crested Newt (GCN)

- 6.13 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. Whilst the site is located in an Amber zone for GCN the site is considered unlikely to be used by GCN and therefore no further surveys or mitigation for this species is required.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.01 - 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 9: RAPID RISK ASSESSMENT OF THE SITE

Hazel dormice

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

Otter

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

Reptiles

- 6.16 The site provides a small amount of habitat for slow worms within the lawns and planting beds; however, the areas are very small and are isolated from surrounding habitat by buildings, hard standing, fencing and walls and it is considered that the likelihood of the presence of significant populations of reptiles on the site is very low. No further surveys are therefore considered necessary as the results are unlikely to alter the proposed mitigation.
- 6.17 Any areas of suitable vegetation should be gradually cut down and maintained as a short sward to discourage movement of reptiles into the site.
- Vegetation must be gradually cut down prior to site clearance.

- During the active season (March to September) the site can then be cleared; the top 10cms or so of topsoil must be removed by a toothed excavator under the supervision on an ecologist.
- Log piles, rubble piles and compost heaps should be dismantled carefully (by hand if possible).
- Any animals caught should be relocated to a safe area of suitable habitat beyond the development boundary.

Water vole

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

Other Mammals

- 6.19 No evidence of other mammals was identified on site, however domestic cats are present in the area, and it is likely that small mammals are additionally present. Site clearance work must therefore be undertaken carefully, and 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

- 6.20 The site is not currently considered to hold significant suitability for any other species of principal importance. It is recommended that if new close board fencing is to be fitted it should be raised above ground level to allow hedgehogs to pass underneath, or alternatively hedgehog holes should be created in existing fencing. It is further recommended that some habitat areas should also be left un-landscaped to provide shelter and foraging opportunities and additional habitat for hedgehogs could be provided through relaxation of mowing and seeding with an appropriate wildflower meadow mix in some areas of the site.
- 6.21 Sparrow terraces could either be incorporated within or mounted onto the walls of the replacement dwelling to enhance nesting availability for this species post-development.

Bats

- 6.22 Initial observations consider the local area suitable for common bat species. Domestic gardens in the immediate surroundings, in addition to the woodland blocks, open green space, water bodies and parkland in the surrounding area provide foraging and commuting habitat for a range of common bat species. Buildings and trees within the local area additionally offer potential roosting opportunities.
- 6.23 The daytime assessment identified no potential for bats within the garage building due to an absence of potential access points and roosting features and negligible potential in the house due to very slight lifting in some tiles along the verge. No evidence of bats was identified anywhere on site. No further surveys for these species are required and there are no known constraints regarding these species and the proposed development. In the unlikely event that a bat is found on site during works the procedure detailed in section 7 of this report must be followed.

- 6.24 Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance to bats in the area.
- 6.25 Any additional lighting for the site should be designed in accordance with the Institute of Lighting Professionals Guidance note 8: '*Bats and Artificial lighting in the UK*' which can be downloaded for free from the ILP website.
- 6.26 Additional work lighting which may be required must be positioned to ensure that it shines onto the area of works with minimal spread into the wider area.

7. Procedure to follow in the event a bat is found on site at unsupervised times.

- 7.1 Bats are present within the vicinity of the site and may be found at any location on, in or around the buildings. Bats are protected species, and these procedures must be followed to avoid committing an offence.
- 7.2 If a bat is found at any location around the site DO NOT TOUCH unless necessary for the safety of the bat.
- 7.3 If the bat was uncovered in a roosting location carefully replace covering ensuring the bat is not crushed or harmed. If this is not possible cover the animal with a loose covering.
- 7.4 Stop all work at that area and the immediate vicinity. Work may continue at other areas around the site.
- 7.5 Call the AKB Ecology bat licensed project ecologist Annika Binet 07528 956486.

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 new 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 each new 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												
Birds	Wintering												
	Breeding												
Great crested newt	H S I												
	eDNA												
	Presence/absence & popn												
	Refugia												
Hazel dormouse	Tube												
	Nut search												
Otter	Field signs												
Reptiles	Refugia & search												
Water vole	Field signs												
Invertebrates	Presence & communities												
Vegetation	Phase 1 habitat & NVC												
	Optimal												
	Sub-optimal												
	Outside survey season												

