



**Land at The Five Horseshoes, White Hill,
Remenham Hill, Berkshire RG9 3EP**

**Preliminary Ecological Appraisal
& Biodiversity Net Gain Assessment**

February 2025

***on behalf of* Five Horseshoes LLP**

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1 Introduction

1.1 Site Description & Context

The Land at The Five Horseshoes, referred to as the 'site' in this report, is located to the northern side of the A4130 (White Hill), within the village of Remenham Hill in Berkshire RG9 3EP. The approximate Ordnance Survey grid reference for the site is SU 7796 8282. Remenham Hill is located within Wokingham Borough, approximately 1.7km to the east of Henley-on-Thames.

The site comprises of two buildings: the former Five Horseshoes public house and a coach house, as well as areas of hardstanding. The Five Horseshoes is believed to originally date from the mid1800s, and is a two and three-storey, detached building of brick and flint construction, with a hip-and-valley roof of blue slate. The original section of the building fronts onto the road to the south, while there is a two-storey, flat-roofed extension which extends north from the original section's north-western corner. The coach house is a detached building located approximately 6m to the north of the Five Horseshoes. The coach house is arranged over two storeys, with a pitched roof of blue slate tiles; there is no loft space.

The site is set approximately 7m back from the road to the south. A tarmac carpark extends to the north of the Five Horseshoes, vehicular access to which is provided by a tarmac driveway which runs to the immediate east of the Five Horseshoes. Neighbouring residential properties are present to the immediate east and west, and on the far side of the road to the south, while open countryside extends from the property's northern boundary.

The site is located close to the north-western edge of the village of Remenham Hill, with the bulk of built development along the A4130 to the east. The surrounding landscape is dominated by a combination of modified grassland, cropland and fairly frequent pockets of deciduous woodland, including a copse located approximately 100m to the north-west. There is also a pond located approximately 100m to the north-west that may provide good foraging habitat for bats.

Land to the south, between the A4130 and the northern bank of the River Thames comprises Park Place Estate, a Grade II* listed park and garden which contains a 19th Century country house surrounded by 18th and 19th Century gardens and landscaped parkland. Local landscape features of particular ecological note include Remenham Wood, a Local Wildlife Site containing ancient and semi-natural woodland, located approximately 475m to the west, and the River Thames, which flows within 1.5km of the site to the west. Both of these are considered to contribute to a landscape mosaic that has the potential to support strong local bat populations.

1.2 Proposed Works

The proposals seek to demolish the coach house and replace it with a new residential dwelling of the same scale and proportions on the western side of the site. Some of the existing hardstanding will be removed and replaced with a porous tarmac parking area with space for five cars to park and turn. The majority of the existing vegetated garden will be retained as the garden of this new dwelling.

The Five Horseshoes be converted into a dwelling and a garden will be created to the north. The existing tarmacked driveway to the east of the Five Horseshoes will be retained as vehicular access to the two dwellings.

1.3 Aims of Study

The aims of this study are to survey the buildings for bats and/or evidence of bats, and other protected species including nesting birds. The study assesses the overall potential of the buildings to support roosting bats and other protected species, such as nesting birds. The report discusses the potential impacts of the proposed works on bats, other protected species and their habitats.

The report makes recommendations for appropriate mitigation, compensation and enhancement measures and the potential impacts are assessed in accordance with the legal protection afforded to bats under The Conservation of Habitats & Species Regulations 2017.

A further aim of this study is to assess and quantify the biodiversity value of the site and to assess and calculate the impacts of the proposed development on the site's biodiversity value, given as a net loss, no net change or gain in biodiversity units, in line with the National Planning Policy Framework (NPPF) and Environment Act 2021.

This report aims to:

- Establish the total number of baseline biodiversity units for the site prior to the development taking place;
- Establish the total number of biodiversity units which will be created, retained and/or enhanced under landscape and ecological mitigation proposals for the site of; and
- Determine whether the proposed development scheme will result in a net loss, no net loss or a net gain for biodiversity (Biodiversity Net Gain Assessment).

1.4 Bat Ecology

Bats are the only mammals to have developed the ability of true flight. At present, over 1,100 species of bat are recognised worldwide, making bats the second largest mammal group after rodents. As well as flight, bats have evolved a system of navigation and orientation using echolocation which has allowed many species to become nocturnal. There are 18 species of bat that occur within the British Isles, of which 17 are known to breed here. More species occur in the south and west of the country, with species numbers declining towards the north and into Scotland.

All bat species in the UK are nocturnal and feed exclusively on insects (they are insectivorous) which they catch in flight during their night-time activity, using echolocation to locate and home-in on their prey. Bats will roost during the daytime and seek out dark, enclosed and undisturbed places in which to do so, often using a variety of roosting sites within their home range. Different roost sites are used for different purposes (such as mating, giving birth and hibernation) and at different periods of a bat's life cycle.

During the summer, female bats will gather together in a maternity or breeding roost. In the UK, this starts to occur towards the end of May and the females will seek out a warm and undisturbed site in which to give birth. Because maternity roosts require a particular set of environmental attributes (such as location, temperature, orientation and size), breeding bats tend to return to roost and breed in the same locations year after year. Given that bats live a relatively long time (anywhere from 10-20 years), and only give birth to one pup a year, maternity colonies are crucial to the reproduction and survival of the local population and can be very sensitive to environmental change.

Relatively little is known about hibernation roosts, as tracking and locating hibernating bats is very difficult. However, many species (particularly those within the genera *Myotis* and *Rhinolophus*) have been found within underground sites such as caves, mines and cellars, where the temperature remains constant and low throughout the winter allowing the bats to remain in a state of torpor. The spring and autumn are periods of transition and bats can use a number of different locations on a temporary basis, often moving between roosts as environmental conditions change and temperatures fluctuate. In the autumn, bats will mate, and it has been shown that male and female bats will gather at particular locations (such as a building, cave or tree) to meet, socialise and copulate.

Bats choose to roost in a number of different locations, depending on the species, their activity pattern and the period of their lifecycle. Certain species, such as the pipistrelles, favour crevices and small cavities for roosting and will use features such as cracks, crevices and small rot holes in the boughs and trunks of trees and within certain features of buildings such as boxed eaves, gaps under roof tiles, hanging tiles and soffit boards. Other species favour large, uncluttered roof spaces and

lofts within buildings where they can hang up on the underside of the roof and use the interior space for flying prior to emergence. Hollow trees, cellars, caves, barns, churches and cavity walls can also all be used for roosting, given suitable access. Certain species, such as the noctule, favour roosting sites within trees whilst others tend to favour buildings. Roost sites may be used by only a very small number of bats, such as solitary males, or may offer shelter to tens or hundreds of bats within maternity and hibernation roost sites.

The suitability of roosting sites is also highly influenced by the location or context of a tree, building or cave. Roost sites are most often favoured when they are within close proximity to foraging habitats and where those habitats are connected to one another within the landscape by features such as hedgerows, woodlands, rivers or sunken lanes along which bats disperse and ‘commute’ from place to place. Suitable foraging habitats are any places where insect prey is diverse and abundant such as woodlands, ponds, lakes, rivers, scrub, hedgerows and unimproved grassland or pasture. Thus, the ecological context of a site is very important for determining if bats may be present within a roost and the potential for a roost to be present tends to be much higher within rural or village locations.

1.5 Biodiversity Statement

1.5.1 Exemptions

The proposals are not exempt from the Biodiversity Net Gain (BNG) condition. The proposals will therefore need to deliver at least +10% Biodiversity Net Gain.

1.5.2 Pre-development Biodiversity Value of On-site Habitats

The pre-development biodiversity value of the site is 0.3 Habitat Units.

Watercourse & Hedgerow Units are not applicable to this site.

1.5.3 Date the On-site Pre-development Biodiversity Value was Calculated

3rd February 2025.

1.5.4 Version of the Biodiversity Metric

Statutory Biodiversity Metric 1.0.3 (Appendix 7).

1.5.5 Version of the Biodiversity Metric Publication Date

23rd July 2024.

1.5.6 Supporting Documentation

- I. Biodiversity Metric calculation – provided in Excel format as Appendix 7 to this report. Results as follows:

- **+ 0.09 Habitat Units, +29.66% increase**

- II. Onsite irreplaceable habitats – not applicable

- III. Onsite habitats existing on the date of the application for planning permission

Table 1. UKHab habitats existing on the date of the application for planning permission.

Primary Code	Secondary Codes	Description
u1b5	-	Urban; Developed land; sealed surface (buildings)
u1b6	-	Urban; Developed land; sealed surface (other developed land)
u1	828	Urban; Vegetated garden
u1	828, 32	Urban; Individual tree (urban tree)

Primary Code	Secondary Codes	Description

1.5.7 Loss of On-site Habitats

There has been no loss of on-site habitats prior to the submission of the planning application.

Does the pre-development biodiversity value and date used above factor in the loss of any onsite habitat because of activities carried out before the submission of this application? – not applicable.

1.5.8 Irreplaceable Habitats

There are no irreplaceable habitats within the site.

2 Methodology

2.1 Desk Study

The Thames Valley Environmental Records Centre (TVERC) was contacted in January 2025 to collate records that it holds for protected/notable species and non-statutory sites of nature conservation importance within a 1km radius of the site.

The Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk) website was searched for information regarding internationally protected sites (e.g. Special Areas of Conservation) within 5km of the site and statutory sites of nature conservation importance (e.g. Sites of Special Scientific Interest) within a 1km radius of the site. Other Internet resources interrogated as part of the desk study include:

- Bing Maps - www.bing.com/maps
- Google Earth - www.earth.google.co.uk
- Google maps - www.google.co.uk/maps

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 was also consulted to gather information pertaining to priority habitats and species for conservation action at the national and local level.

Aerial photography interpretation is used to place the site into an ecological context and to provide information on the nature of the habitats beyond the site boundary. The information gathered is used to provide a baseline to the habitat assessment.

2.2 Initial Bat Survey & Preliminary Roost Assessment

An initial bat survey and preliminary roost assessment (PRA) were undertaken on the 21st January 2025 by Claire Herlihy MSc (Hons) and Jan-Piet Stuursma on behalf of Windrush Ecology Ltd. Mr Stuursma holds a licence to survey for bats in all counties of England (Natural England Bat Survey Licence No. WLM-A34 Level 2: 2018-37063-CLS-CLS).

A detailed internal and external survey of the buildings was undertaken using a 1 million candle-power torch and close-focusing binoculars in order to look for bats and/or evidence of bats and to assess the potential of the buildings to support roosting bats. The buildings were inspected for evidence of bats including, bat droppings, urine stains, feeding remains (such as moth wings) and characteristic fur staining around access points.

‘Clean’ gaps and crevices within the structure of the buildings were looked for as this can indicate where bats may have gained access to the interior spaces and the fabric of the walls.

The bat survey was undertaken according to best practice guidelines published by the Bat Conservation Trust (Collins, 2023).

The study also takes into account the structure and ecological context of the buildings, including the following factors which may increase the likelihood of roosting bats being present:

- Age of the building (pre-20th Century or early 20th Century construction)
- Nature of construction; traditional brick, stone or timber construction
- Large and complicated roof void with unobstructed flying spaces
- Large (>20 cm) roof timbers with mortice/tenon joints, cracks and holes
- Entrances and gaps for bats to fly and crawl through
- Poorly maintained fabric providing ready access points for bats into roofs, walls; but at the same time not being too draughty and cool.
- Roof warmed by the sun, south-facing roofs in particular
- Weatherboarding and/or hanging tiles with gaps
- Undisturbed roof voids
- Buildings and built structures in proximity to each other providing a variety of roosting opportunities throughout the year
- Buildings or built structures close to good foraging habitat, in particular mature trees, parkland, woodland or wetland, especially in a rural setting.

The following criteria are used for as guidelines for assessing the potential suitability of buildings for bats (Collins, 2023):

Table 2. Criteria for the assessment of buildings for roosting bats (Collins, 2023).

Potential Suitability	Description of Roosting Habitats in Structures
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after the presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitats. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.
^a Negligible is defined as ‘so small or unimportant as to be not worth considering, insignificant’. This category may be used where there are places that a bat could roost or forage (due to one attribute), but it is unlikely that they actually would (due to another attribute).	
^b For example, in terms of temperature, humidity, height above ground level, light levels or level of disturbance.	

Potential Suitability	Description of Roosting Habitats in Structures
°	Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i> , 2016 and Jansen <i>et al.</i> , 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected as Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

Confirmed presence of roosting bats is where evidence indicates that a building or other structure is used by bats, this includes:

- bats seen roosting or observed flying from a roost or freely in the habitat;
- droppings, carcasses, feeding remains etc. found and/or;
- bats heard 'chattering' inside a roost on a warm day or at dusk.

Where the possibility that bats are present cannot be eliminated or evidence of bats is found during the building inspection survey, then further surveys (such as winter hibernation, presence/absence and/or roost characterisation) are likely to be necessary if impacts on the roosting habitat (or the bats using it) are predicted.

In addition to the bat survey, the buildings were checked for evidence of nesting birds including old birds' nests, bird droppings, feathers and eggs.

2.3 UKHab Habitat Survey

A UKHab Habitat Survey was undertaken on 21st January 2025 by Claire Herlihy MSc (*Hons*) and Jan-Piet Stuursma on behalf of Windrush Ecology Ltd. to determine the type and overall status of habitats within the site.

A walkover of the site was conducted, and a description of the habitats present was prepared using standard UKHab methodology. The field survey technique used is detailed in the UK Habitat Classification User Manual (Butcher, Carey, Edmonds, Norton, & Treweek, UK Habitat Classification Manual Version 1.1, 2020).

The MAGIC website and Google Earth Pro satellite imagery were also used to determine whether there are known or possible locations for rare and/or habitats of high nature conservation importance.

Field survey maps were prepared in QGIS and printed off for use in the field. Survey sheets were printed at a scale relevant to the scope and extent of the survey. They are between 1:10,000 and 1:200 scale.

The UKHab system comprises a five-level Primary Habitat Hierarchy and a list of Secondary Codes, the latter is divided into Essential codes and Additional Codes. It is mandatory that each recorded habitat parcel (which can be a point, line or polygon using geospatial vector data terminology) is allocated a single Primary Habitat Code and to record the presence of all Essential Secondary Code features associated with that habitat parcel. Additional Secondary Codes can also be associated with habitat parcels, where it is relevant to the whole parcel. The UKHab system recommends that up to six Secondary Codes can be allocated to a single habitat parcel.

The UKHab system includes all habitat types identified in the UK, irrespective of scale and geographic range, including all habitats listed under Section 41 of the NERC Act 2006 and all Habitats Directive Annex 1 habitats recorded in the UK. Where possible, synonyms for UKHAB habitats in other major habitat classifications are provided in the definitions.

The UK Habitat Classification Version 2.0 has been used (UKHab Ltd, 2023), with the use of Level 3 to 5 Primary Habitats and Secondary Codes. Primary Habitats and Secondary Codes follow the UKHab. Definitions listed in the aforementioned document. The Secondary Codes selected are appropriate to the site and habitats recorded.

An assessment was made of the site's potential to support protected and notable species (such as species listed under Section 41 of the NERC Act 2006) as well as invasive species (listed on Schedule 9 of the Wildlife & Countryside Act 1981).

Summarised UKHab Metadata

In line with the UKHab User Manual Table 2 details the Survey Metadata associated with the UKHab survey.

Table 3. Survey Metadata associated with the UKHab survey.

Metadata Heading	Site Information
Scope and purpose of the survey	Baseline habitat survey to inform BNG Assessment
Area surveyed	0.15ha
Edition of UKHab used	Version 2.0
The Level of UKHab Primary Hierarchy used	Levels 3 to 5
Additional attributes recorded	Habitat condition and habitat management information where relevant
Map projection and units	Ordnance Survey National Grid reference system (OSGB)
Year of survey	2025
Organisation and individual undertaking the survey	Windrush Ecology Ltd, Claire Herlihy MSc (Hons) and Jan-Piet Stuursma on behalf of Windrush Ecology Ltd.
References for any existing datasets that have been used	Thames Valley Environmental Records Centre data search and the MAGIC website

2.4 Habitat Condition Assessment

A Habitat Condition Assessment was also undertaken on 23rd January 2025 by Claire Herlihy MSc (Hons).

2.5 Biodiversity Net Gain Assessment

A Biodiversity Net Gain Assessment was conducted, using the Statutory Biodiversity Metric published by Natural England (July, 2024), to calculate the impact of the proposed development on biodiversity. The calculation also ascertains whether the proposals achieve a net gain, a net loss or no net loss in biodiversity, calculated as biodiversity units and percentage biodiversity units.

To effectively assess the impacts of the proposals the habitats within the site were classified according to the habitat types given in the UKHab classification system (Butcher *et al.*, 2020). Habitats were assessed for their condition and strategic significance according to the criteria given within the Statutory Biodiversity Metric User Guide and Technical Supplement (Natural England Joint Publication, 2023) through onsite visits and the interrogation of internet resources including MAGIC (www.magic.gov.uk) and Google Earth (www.earth.google.co.uk).

The areas of given habitats in both their current state and the proposed development were mapped using on site data, satellite imagery and QGIS software, with the resulting areas inputted into the Statutory Biodiversity Metric alongside strategic significance classifiers.

A site visit was undertaken by a suitably qualified ecologist to determine the habitats present on site, their location, size, condition and connectivity. This survey was conducted by Claire Herlihy BSc (Hons) and Jan-Piet Stuursma on behalf of Windrush Ecology Ltd. on 21st January 2025.

The principles of biodiversity net gain as set out in the Biodiversity Net Gain Good Practice Guidelines (CIEEM, IEMA & CIRIA, 2019) have been considered throughout this process as listed below:

- **Principle 1.** Apply the Mitigation Hierarchy
- **Principle 2.** Avoid losing biodiversity that cannot be offset by gains elsewhere
- **Principle 3.** Be inclusive and equitable
- **Principle 4.** Address risks
- **Principle 5.** Make a measurable Net Gain contribution
- **Principle 6.** Achieve the best outcomes for biodiversity
- **Principle 7.** Be additional
- **Principle 8.** Create a Net Gain legacy
- **Principle 9.** Optimise sustainability
- **Principle 10.** Be transparent

2.6 Evaluation Methodology

The evaluation of habitats follows the geographic frame of reference presented within the *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* version 1.1 (CIEEM, 2018).

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines recognise that ecological evaluation is a 'complex and subjective process' but provides key considerations to apply when 'applying professional judgement to assign values to ecological features and resources. These include consideration of geographic frame of reference; site designations and features; biodiversity value; large populations or important assemblages of species; potential or supporting value; social value and economic value.

Focusing on assessments of biodiversity value, there are various characteristics that can be used to identify ecological resources or features that are likely to be important in terms of biodiversity. These include:

- Rare or uncommon species in the local, national or international context;
- Endemic or locally distinct sub-populations of a species;
- Species on the edge of their distribution;
- Notably large populations of animals or concentration of animals considered uncommon or threatened in a wider context;
- Species, rich assemblages of plants or animals;
- Ecosystems and their component parts, which provide the habitats required by the above species, populations and/or assemblages;
- Plant communities (and associated animals) considered typical of valued natural/semi-natural vegetation types; and
- Habitat diversity, connectivity and/or synergistic associations.

In this report, habitats are assigned to a value relating to their geographic frame of reference, using the following scale:

- International

- UK
- National (England)
- Regional (South East)
- County (Berkshire)
- District (Wokingham)
- Local or parish (Remenham)
- Immediate zone of influence of the site (Site)
- Negligible

Regarding protected and notable species, an assessment of habitat suitability and potential presence of species has been undertaken given the results of the desk study and field surveys.

Characterising and Quantifying Effects and Assessing Significance

The guidelines state that ecological effects should be characterised in terms of ecosystem structure and function and reference should be made to: positive or negative effects; extent; magnitude; duration; reversibility; timing and frequency; and cumulative effects. The guidelines provide a list of 'key aspects of ecosystems to consider when predicting effects'.

Following the characterisation of effects, an assessment of the ecological significance of an effect is made. Prior to the publication of the guidelines in 2006, ecological significance was defined using a matrix in which ecological value and magnitude of effect were combined to determine different grades of significance; usually high, medium or low. The guidance now advises that assigning levels of significance in this way obstructs a clear understanding of the EcIA process and can result in an assessment that lacks rigour.

The guidelines promote a more transparent approach in which a beneficial or adverse effect is determined to be significant or not, in ecological terms, in relation to the integrity of the defined site or ecosystem(s) and/or the conservation status of habitats or species within a given geographical area, which relates to the level at which it has been valued. The decision about whether an effect is significant or not, is independent of the value of the ecological feature; the value of any feature that will be significantly affected is then used to determine the implications, in terms of legislation, policy and or development control.

3 Results & Evaluation

3.1 Desk Study

3.1.1 Statutory Sites

There are no internationally designated sites of nature conservation importance, such as Special Areas of Conservation (SAC), within a 5km radius of the site.

There are no nationally designated sites of nature conservation importance, such as Sites of Special Scientific Interest (SSSI), within a 1km radius of the site. However, the site is located within the impact risk zone of both Temple Island Meadows SSSI and Rodbed Wood SSSI, which are located approximately 1.6km and 2.3km from the site respectively.

Temple Island Meadows SSSI

Temple Island Meadows SSSI is an area of slightly improved wet meadows next to the river Thames. These meadows are regularly flooded and are one of the few remaining wetland habitats in Buckinghamshire. This area is one of the most species rich meadows along the river Thames, supporting the nationally rare summer snowflake *Leucojum aestivum*, marsh fly *Dicheptophora findlandica* and rare club-tailed dragonfly *Gomphus vulgatissimus*.

Rodbed Wood SSSI

Rodbed Wood SSSI is an area of wet woodland which contains plentiful fallen and standing deadwood with cracks which provide potential roosting locations for bats. The predominant tree species is alder *Alnus glutinosa* with a good range of size and age.

3.1.2 Non-statutory Sites

Whilst the site itself does not fall into any area of nature protection, there are two types of non-statutory sites of nature conservation importance within 1km of the site: Berkshire Local Wildlife Sites and The Chilterns Escarpment Biodiversity Opportunity Area (BOA) (Figure 1).

Berkshire Local Wildlife Sites

Eight Berkshire Local Wildlife Sites (LWS) fall within a 1km radius of the site. These LWSs cover a range of important habitats listed below:

- Semi-natural woodland
- Parkland
- Chalk grassland
- Lakes and ponds
- Ancient woodland (specifically lowland beech and yew woodland)
- Rich calcareous grassland

The Park Place School LWS has chalk tunnels which are a bat hibernaculum with four species having been recorded. The ponds here also support great crested newts *Triturus cristatus*.

Chilterns Escarpment Biodiversity Opportunity Area

Biodiversity Opportunity Areas are used to indicate substantial opportunities to make positive changes for biodiversity. The Chilterns Escarpment BOA includes habitats of chalk grassland, woodland and fen.

Five Horseshoes, Remenham, Berkshire Designated Sites Map

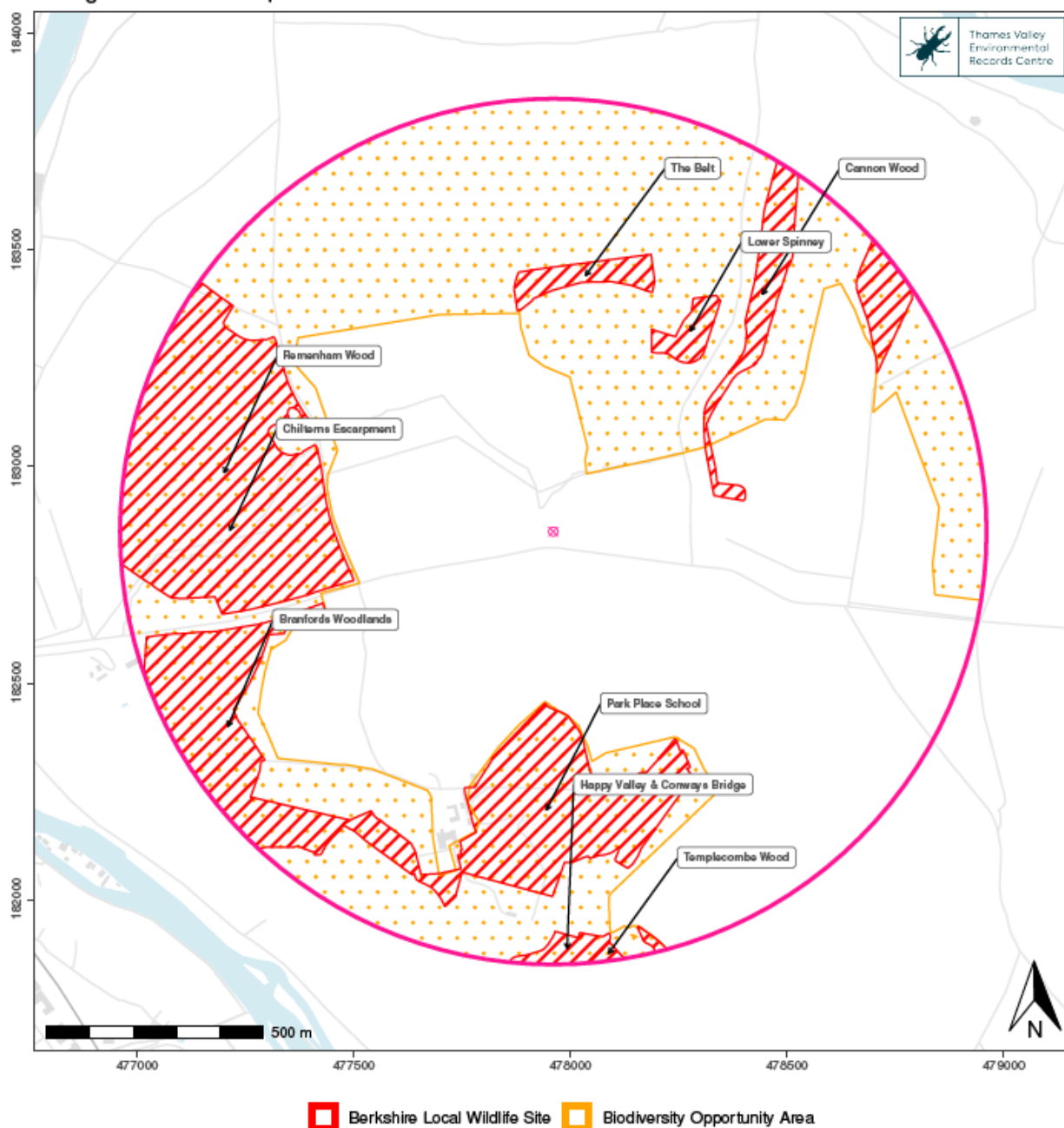


Figure 1. Non-statutory sites of nature conservation importance within a 1km radius of the site.

3.1.3 Species Records

The following sections discuss species records that are considered to be relevant, or potentially relevant to the site, given the nature of the habitats that are present within the site and the immediate surrounding area.

Amphibians

Ten great crested newt *Triturus cristatus* records are present within the 1km search radius around the site, with the most recent record from 20th May 2014.

There are records of three other amphibian species: common frog *Rana temporaria*, common toad *Bufo bufo*, and smooth newt *Lissotriton vulgaris*, with the most recent record from 2021.

Birds

The majority of records held by the records centre are of bird species, including species which nest in buildings and records of garden birds. Records of building-nesting birds include house martin *Delichon urbicum*, house sparrow *Passer domesticus*, and swift *Apus apus*. The latest records for all of these species are from 2021.

Garden bird species recorded include mistle thrush *Turdus viscivorus*, song thrush *Turdus philomelos*, rook *Corvus Frugilegus* and woodpigeon *Columba palumbus*. All most recently recorded in 2021. Since the site is comprised of two buildings and an area of vegetated garden these species are most relevant for these habitat types.

Plants

There are records of woodland and wetland plant species within the 1km search radius including bluebell *Hyacinthoides non-scripta*, field scabious *Knautia arvensis* and lesser spearwort *Ranunculus flammula*. The most recent record of these plants was recorded in 2020.

Bats

A large number of bat species were recorded between 2000 and 2023. All bat species recorded are listed below. The area around the site contains particularly good habitat for bats as there are areas of woodland which provide roosting and foraging habitats, and the river Thames is located approximately 1.5km to the west of the site.

- Brown long-eared bat *Plecotus auritus*
- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Nathusius's pipistrelle *Pipistrellus nathusii*
- Daubenton's bat *Myotis daubentonii*
- Natterer's bat *Myotis nattereri*
- Bechstein's bat *Myotis bechsteinii*
- Greater horseshoe bat *Rhinolophus ferrumequinum*
- Noctule *Nyctalus noctula*
- Serotine *Eptesicus serotinus*
- Barbastelle *Barbastella barbastellus*

Of particular interest are the records of brown long-eared bats which favour large, uncluttered roof spaces and lofts within buildings for roosting where they can hang up on the underside of the roof and use the interior space for flying prior to emergence. Also of notes are the pipistrelle records as they will roost within certain features of buildings such as boxed eaves, gaps under roof tiles, hanging tiles and soffit boards. A number of rare bats species were recorded including Bechstein's bat, barbastelle and greater horseshoe bats.

Other Mammals.

3.2 Habitats

Photographs of the site are presented in Appendix 1. Appendix 2 illustrates the location of the site. A Baseline UKHab Habitat Map of the site can be found in Appendix 3.

There are no irreplaceable habitats within the site. There are no habitats of 'principal importance' within the site.

The UKHab codes for the habitats within the site are presented within Table 4.

3.2.1 Developed Land; Sealed Surface (Buildings)

The Five Horseshoes

The Five Horseshoes is a former public house that is believed to date from the mid-late 19th Century. It is a detached structure comprising an original three-storey main section and a two-storey extension to the rear. The main section occupies a rectangular footprint that is orientated along a roughly east to west axis. It is arranged over three floors, however as a result of being built on a slope only the upper two floors are above the ground level at the southern aspect. The extension is located at the main section's north-west corner and is arranged over two-storeys, with a flat roof.

The walls of the main section are constructed of brick and flint and contain numerous timber-framed windows in the northern, eastern and southern aspects. The walls are in a generally very good state of repair, being free from any cracks or gaps within the brick/flint work. The wooden framing to the windows is also found to be in a good state of repair, being free from perceivable rot damage or warping. The eaves at the roofline on all sides are boxed with timber barge and soffit boards. The boxing is tight-fitting with no gaps observed that could provide potential bat access points or function as self-contained bat roost locations.

The main section's roof is of a hip-and-valley design, with a southern ridge that runs east-west, in parallel with the front aspect, keying into which are three north-south ridges. The roof surface is comprised of blue slates and is in a very good state of repair with slates sitting flush against one another.

The two-storey extension at the rear of the building is of brick construction with a painted external render at the upper level. Both the brick work and render are free from features suitable for roosting bats. Likewise, the timber bargeboards at the roofline sit tight against the walls behind and do not create gaps that could be exploited by roosting bats. The extension has a flat roof, with a covering of bitumen and mineral felt, over wooden boarding. No potential bat roost features were noted in association with the flat roof.

There is a single loft void within the building, with this extending over the entire footprint of the main section. This void is quite low, with an average floor-ridge height of 1.25m and is unused, being free from stored items aside from a large water tank. The timber roof frame is visible within the void, comprising rafters, a single ridge board and regular collar tie beams. A modern breathable membrane is present on the underside of the roof surface, indicating that the building has been re-roofed at some point in the past. In some locations this breathable membrane has been laid over retained wooden sarking. Fibreglass insulation has been laid on the floor throughout. In the absence of artificial light, there is almost no light spill into the loft void; locations where light spills into an enclosed void can indicate potential bat access points. Cobwebs were observed in sections of the loft space indicating the likely absence of bats.

The Coach House

The coach house is a detached structure arranged over two-storeys with a rectangular footprint and is oriented along a north-south axis. The walls are painted brick with multiple windows on each elevation including two skylights in the roof. There is no loft void and the whole of the roof space is occupied by a room.

The brick work is free from features suitable for roosting bats. Similarly, the timber boards at the roofline fit closely to the walls behind without creating gaps which could be exploited by roosting bats. The coach house roof is pitched with closely fitted slates, and in good repair. No potential bat roost features were noted in association with the coach house.

Both buildings are assessed as having 'negligible' potential to offer shelter to roosting bats (Collins, 2023). This is due to the absence of obvious potential roost features which may be likely to be used by roosting bats, and the lack of a roof space within the coach house.

Bats will choose to roost within different locations within the summer and winter periods favouring dark, enclosed, humid and cool locations for hibernation such as caves and cellars. These locations must maintain a constant low temperature (2-8°C), but temperatures must also not go below freezing. In addition, bats favour places that retain relatively high humidity during the winter period. Both buildings are considered to be unsuitable for hibernating bats, with the loft void in the five horseshoes house unlikely to maintain the constant low temperatures that are required by over-wintering bats.

Buildings are considered to be of negligible inherent ecological value.

3.2.2 Developed Land; Sealed Surface (Other Developed Land)

Other developed land is present in the form of tarmacked hard-standing which provides access and car parking areas. These include areas of former car park that now have a sparse covering of moss.

Other developed land is considered to be of negligible ecological value.

3.2.3 Vegetated Garden

Aside from the developed land; sealed surface the only other habitat type present at this site is a vegetated garden within the northern area of the site. The garden includes an individual tree, shrubs and grass. The tree present is an oak tree *Quercus robur* which is partially covered by ivy and has good vegetation coverage beneath its canopy. The shrub species present include lilac *Syringa vulgaris*, bramble *Rubus fruticosus*, and forsythia *Forsythia suspensa*.

The vegetated garden is considered to be of ecological value at the site level only.

3.2.4 Individual Tree (Urban Tree)

As previously mentioned, there is one tree within the vegetated garden. This is taken as an urban tree due to its present within the garden.

The individual tree is considered to be of ecological value at the site level only.

Table 4. UKHab habitat codes for the site; habitat baseline.

Primary Code	Secondary Codes	Description
u1b5	-	Urban; Developed land; sealed surface (buildings)
u1b6	-	Urban; Developed land; sealed surface (other developed land)
u1	828	Urban; Vegetated garden
u1	828, 32	Urban; Individual tree (urban tree)

3.3 Species

3.3.1 Amphibians

There are no standing water bodies within the site that amphibians could use for breeding, shelter or protection. The garden does not provide any significant habitat for amphibians whilst on land. The lawn is closely-mown and provides no shelter or protection to amphibians. Buildings and hard-standing are not suitable habitats for amphibians (see Figure 2).

The nearest pond, as shown on Ordnance Survey maps, is located approximately 100m to the north-west of the site. However, it is considered that amphibians will not be moving from this pond to the site, due to the unsuitability of the site as terrestrial habitat.

Great crested newts, and other amphibians, are considered to be absent from the site.



Figure 2. Developed land; sealed surface (with moss) and vegetated garden.

3.3.2 Birds

No evidence of nesting birds was noted in association with the buildings.

Garden trees and shrubs offer potential nesting habitat to breeding birds. The garden lawn is not suitable for ground-nesting species, neither are areas of hard-standing.

3.3.3 Plants

No rare or uncommon plant species are present within the site.

3.3.4 Bats

No bats or evidence of bats, including bat droppings, were found within the loft space of The Five Horseshoes or elsewhere within the buildings.

No evidence of bats was observed in association with the external fabric of the two buildings, and there are no external potential roost features.

Roosting bats are considered to be absent from the site.

The vegetated garden is considered to provide potential, albeit limited, foraging habitat to bat species and several rarer species have been recorded from the wider local area. The one tree that is within the site exhibits no potential bat roost features (the tree is to be retained).

3.3.5 Badgers

There are no badger setts within the garden and no evidence of badgers was noted during the surveys.

3.3.6 Other Species

The garden is not considered to offer habitat to other protected or notable species, including reptiles.

4 Discussion

4.1 Relevant Legislative & Policy Guidance

4.1.1 The Natural Environment & Rural Communities Act 2006

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on the Secretary of State to publish, review and revise lists of living organisms and types of habitats in England that are of principal importance for the purpose of conserving English biodiversity.

It also requires the Secretary of State to take, and promote the taking of, steps to further the conservation of the listed organisms and habitats. This is important in the context of planning

decisions as the National Planning Policy Framework affords planning policy protection to the habitats of species listed by virtue of Section 41.

There are no habitats listed within Section 41 of the NERC Act 2006 that are relevant to the site.

Species listed within Section 41 of the NERC Act 2006 that are relevant to the site, or considered to be potentially relevant, include:

- Brown long-eared bat (vegetated garden provides potential foraging opportunities)
- Soprano pipistrelle (vegetated garden provides potential foraging opportunities)

4.1.2 National Planning Policy Framework (NPPF)

The National Planning Policy Framework was revised on 12th December 2024 and sets out the government's planning policies for England and how these are expected to be applied.

The NPPF states (in Paragraph 187) that planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

Paragraph 188

Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Paragraph 192

To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*

Paragraph 193

When determining planning applications, local planning authorities should apply the following principles:

- a) If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists; and*
- d) Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

Paragraph 194

The following should be given the same protection as habitats sites:

- a) Potential Special Protection Areas and possible Special Areas of Conservation;*
- b) Listed or proposed Ramsar sites; and*
- c) Sites identified, or required, as compensatory measures for adverse effects on a habitats site, (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.*

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitat's site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

4.1.3 Environment Act 2021

On 15th October 2019, the government introduced a new Bill to Parliament; The Environment Bill. This Bill was given Royal Assent on 9 November 2021 thereby passing the Environment Act 2021. This legislation will help ensure that England maintains and improves its environmental protection. The Act details a legal requirement for all developments to ensure that a minimum of +10% net gain in biodiversity is delivered.

The proposals are not exempt from the delivery of +10% Biodiversity Net Gain (BNG).

4.1.4 Protection of Bats

As with many animal species within the UK, declines in the abundance and distribution of many bat species have been documented through recent decades. The reasons for these declines are various and complex but it is considered that the major factors are changes in land use and agriculture, the loss of woodlands and hedgerows and the loss of suitable roosting sites.

Bats are particularly sensitive to human activity due to the fact that they roost within buildings, trees and underground structures such as mines, and the availability of suitable roost sites is considered to be a key factor in the conservation of bats within the UK. As a consequence, all species of bat and their roost sites are protected under the Wildlife and Countryside Act 1981 (as amended by the

Countryside and Rights of Way Act 2000) and under The Conservation of Habitats and Species Regulations 2017. Taken together, these make it an offence to:

- (a) Deliberately capture or intentionally take a bat
- (b) Deliberately or intentionally kill or injure a bat
- (c) To be in possession or control of any live or dead wild bat or any part of, or anything derived from a wild bat
- (d) Damage or destroy a breeding site or resting place of such an animal or intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection
- (e) Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection
- (f) Deliberately disturb any bat, in particular any disturbance which is likely
 - to impair their ability;
 - (i) to survive, breed, reproduce or to rear or nurture their young; or
 - (ii) in the case of hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong

A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.

Although the law provides strict protection to bats, it also allows this protection to be set aside (derogation) under The Conservation of Habitats and Species Regulations 2017 through the issuing of licences. Where a lawful operation is required to be carried out, but which is likely to result in one of the above offences, a licence may be obtained from Natural England (the statutory body in England with responsibility for nature conservation) to allow the operation to proceed. However, in accordance with the requirements of The Conservation of Habitats and Species Regulations 2017, a licence can only be issued where the following requirements are satisfied:

- The proposal is necessary 'to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- 'There is no satisfactory alternative';
- The proposals 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'.

4.1.5 Protection of Nesting Birds

Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between March and August inclusive.

4.2 Potential Impacts

4.2.1 Site of Nature Conservation Importance

There are no foreseeable impacts on sites of nature conservation importance as a result of the proposals.

The proposals do not fall under 'Operations Requiring Natural England's Consent' within the impact risk zone of Temple Island Meadows or Rodbed Wood SSSIs.

The site is not ecologically connected to the SSSI and supports no plant species that are indicative of woodland or meadow habitats.

There are no foreseeable impacts on Local Wildlife Sites due to the distance of the Local Wildlife Sites from the site, and the nature of the proposals, which will have no foreseeable direct or indirect impacts on any areas or habitats beyond the site boundary.

4.2.2 Habitats

The proposals will affect developed land; sealed surface (buildings & other developed land); habitats that are considered to be of negligible ecological value. A small area of the vegetated garden will be affected by the proposals, but this will not result in any foreseeable significant adverse impact, due to the very low ecological value of this habitat. The individual tree will be retained within the proposals, and new vegetated garden will be created.

There are no impacts on habitats of 'principal importance'.

There are no impacts on irreplaceable habitats.

There are no impacts on hedgerows or watercourses.

The Biodiversity Net Gain Assessment predicts an uplift of **+ 0.09 Habitat Units, +29.66% increase.**

4.2.3 Species

Bats

The Five Horseshoes House and coach house are assessed as having 'negligible' potential (Collins, 2023) to offer shelter to roosting bats.

No bats or evidence of bats were observed within the loft void of The Five Horseshoes, indicating no current or recent use of this internal space by roosting bats. There is no evidence to indicate the presence of a higher conservation significance roost such as a maternity colony. The coach house has no loft void and is not considered to be suitable for bats.

There is no evidence to indicate that the two buildings within the site are being used as a place of shelter/protection by roosting bats. Proposed works to the buildings are unlikely to result in any significant impacts on bats or the places that they use for breeding, shelter and/or protection (roosts) and no specific compensation measures are considered necessary (Mitchell-Jones 2004).

Since no significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2017, a European Protected Species (bat) licence will not be required for the proposed works to proceed. Since there are no predicted impacts on bats or their habitats, it is not necessary to consider the 'three tests' of The Conservation of Habitats and Species Regulations 2017 in this instance.

Birds

There are no foreseeable impacts on nesting birds as a result of the proposed works to the buildings.

The garden tree is to be retained.

Removal of shrubs, or other woody vegetation, within the bird breeding period has the potential to result in the damage or destruction of active birds' nests.

Other Species

There are no foreseeable impacts on other species, including reptiles, amphibians and badgers.

5 Biodiversity Net Gain Assessment

5.1 Habitat Status Before Development

The existing habitats are presented in Table 5 below (please refer to Section 3 for a full description of habitats). The site comprises two existing buildings with an adjacent area of vegetated garden. There are no other habitat types within the site.

Table 5. UKHab baseline habitats.

Habitat UKHab	Total Area (ha)
Urban; Developed land; sealed surface (buildings & other developed land)	0.1088
Urban; Vegetated garden	0.0421
Individual tree (urban tree)	0.0163 (medium)

5.1.1 Habitat Condition Assessment

Habitat condition was assessed according to the criteria given within the Statutory Biodiversity Metric User Guide and Habitat Condition Assessment Sheets. The summary condition assessments for the habitats within the baseline can be found in Table 6.

The details of the habitat condition assessment can be found within the Habitat Condition Assessment Sheets in Appendix 6 of this report (separate Excel spreadsheet).

Table 6. UKHab habitats and condition assessment before development.

UKHab	Condition	Rationale
Developed land; sealed surface	N/A	Not applicable.
Vegetated garden	N/A	Not applicable.
Individual tree	Good	Native, mature tree – passes all 6 criteria

5.1.2 Habitat Strategic Significance

The site is not located within an area of habitat strategic significance.

5.2 Habitat Status After Development

The proposed development will retain and create areas of vegetated garden. The coach house will be dismantled, moved and converted into a dwelling. The Five Horseshoes will be retained and converted into a dwelling. Much of the existing 'other developed' land will be removed, and new porous tarmac will be used to create access and car parking. Some of the existing tarmac will be retained as access.

The individual tree will be retained, and its target condition of 'good' will be achieved by passing all of the following criteria:

- The tree is a native species;
- The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion);
- The tree is mature;
- There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.;

- Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.;
- More than 20% of the tree canopy area is oversailing vegetation beneath.;

Please refer to Appendix 4 which contains a UKHab habitat plan of the proposed habitats showing all of these elements and to Appendix 5 for a plan which depicts areas of habitat that will be lost and retained.

Table 7. UKHab habitats retained, enhanced and created and target condition assessment after development.

On-Site Habitat Retention, Enhancement & Creation		
Habitat	Area (ha)	Target Condition
Developed land; sealed surface (retained)	0.0628	N/A
Vegetated garden (retained)	0.0421	N/A
Vegetated garden (created)	0.046	N/A
Individual tree (retained)	0.0163	Good

5.3 Biodiversity Metric Calculation Summary

The result of the Statutory Metric calculation is:

Total net unit change in habitats: **+0.09 Habitat Units**

Total net % change in habitats: **+29.66% Habitat Units**

The Trading Rules are satisfied.

Please refer to Appendix 7 (separate document) for full details of the Metric calculation.

6 Recommendations

6.1 Further Surveys

No further (Phase 2) surveys are considered necessary.

6.2 Habitats

6.2.1 Individual Tree

As discussed above the individual tree present on the site will maintain it's good condition by achieving the criteria set out in section 5.2. The tree should be protected in accordance with British Standard 5387:2012, with regard to trees and development.

6.3 Species

6.3.1 Bats

As previously discussed, no further surveys are recommended for the proposed works to proceed. However, it is recommended that the following precautionary approach is followed.

Timing

There are no constraints with regard to the timing of works and bats.

Careful Work Practices

Works should proceed in a careful and controlled manner. Contractors should be briefed with regard to the fact that individual bats can often exploit very small crevices as roost sites (such as gaps under roof and ridge tiles) and that bats can move between roost sites on a regular basis.

In the unlikely event that bats or significant evidence of bats (for example large accumulations of fresh bat droppings) are encountered, works should stop immediately, and advice sought from a qualified ecologist and/or Natural England.

Erection of a Bat Box (Enhancement)

Although it is not necessary from a legal perspective, consideration should be given to the provision of new roosting opportunities within the site as a form of biodiversity enhancement.

It is recommended that at least one bat box is erected on a suitable retained garden tree within the site. These could be traditional wooden boxes, or ideally longer-lasting woodcrete boxes (such as a Schwegler box). On trees, it is recommended that the bat box is erected at least 4m above ground level, on a mature tree with a clear trunk.

6.3.2 Birds

Given the limited nesting opportunities offered by the buildings, it is considered unlikely that birds will adopt the buildings for nesting prior to the commencement of works. Nonetheless, vigilance for the presence of active bird nests should be maintained in the lead up to and during works. Should an active bird nest be identified, work would need to be delayed in the vicinity of the nest to avoid disturbance until the young have fledged. This would ensure compliance with the legal protection afforded to nesting birds under the Wildlife and Countryside Act 1981.

Any removal of garden shrubs, or other woody vegetation, should be undertaken outside the bird breeding period, avoiding March to August, inclusive.

Creation of Nesting Opportunities (Enhancement)

The erection of at least one bird nesting box is recommended in order to provide suitable nest sites for species within the local area, as nest boxes can be excellent substitutes for the nesting potential of trees.

Over 60 species are known to adopt nest boxes including blue tits, great tits, starlings, robins and sparrows. The location and nature of the nest box depends on the species it is designed for; boxes for tits, sparrows or starlings should be fixed two to four metres up a tree or a wall; open-fronted boxes for robins and wrens need to be low down, below 2m, and well-hidden in vegetation. Unless there are trees or buildings which shade the box during the day, boxes should be faced between north and east, thus avoiding strong sunlight and the wettest winds.

Recommended integrated boxes are:

- • Bird Brick Houses Swift Box or Sparrow Box
- • Manthorpe Swift Brick
- • Schwegler Brick Box Type 24

Other recommended boxes are:

- • 1B Schwegler Nest Box
- • 2H Schwegler Robin Box

The erection of bird boxes would be seen as an ecological enhancement.

7 References

Altringham, J., 2003. *British Bats*. Harper Collins.

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

Joint Nature Conservation Committee, 2012. *Bat Worker's Manual*. Joint Nature Conservation Committee, Peterborough, UK.

Mitchell-Jones, A., 2004. *Bat Mitigation Guidelines*. English Nature.

8 Appendix 1. Photographs



Photograph 1. The Five Horseshoes, viewed from the south-west.



Photograph 2. Northern elevation of the building.



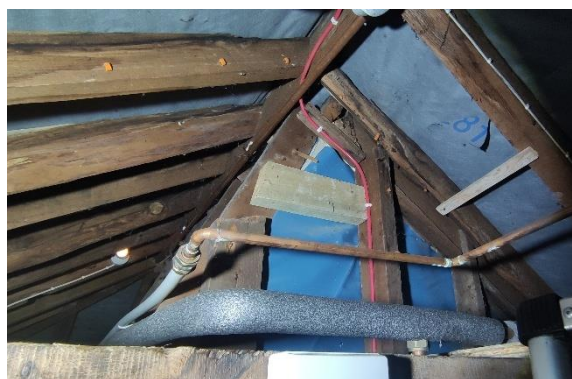
Photograph 3. Rear, two-storey extension.



Photograph 4. Example of tight-fitting boxed eaves.



Photograph 5. Area of loft void above eastern section of roof. Obstructed by water tank.



Photograph 6. Synthetic breathable membrane on underside of roof. And view of water tank.



Photograph 7. Western elevation of the coach house.



Photograph 8. Northern elevation of the coach house.

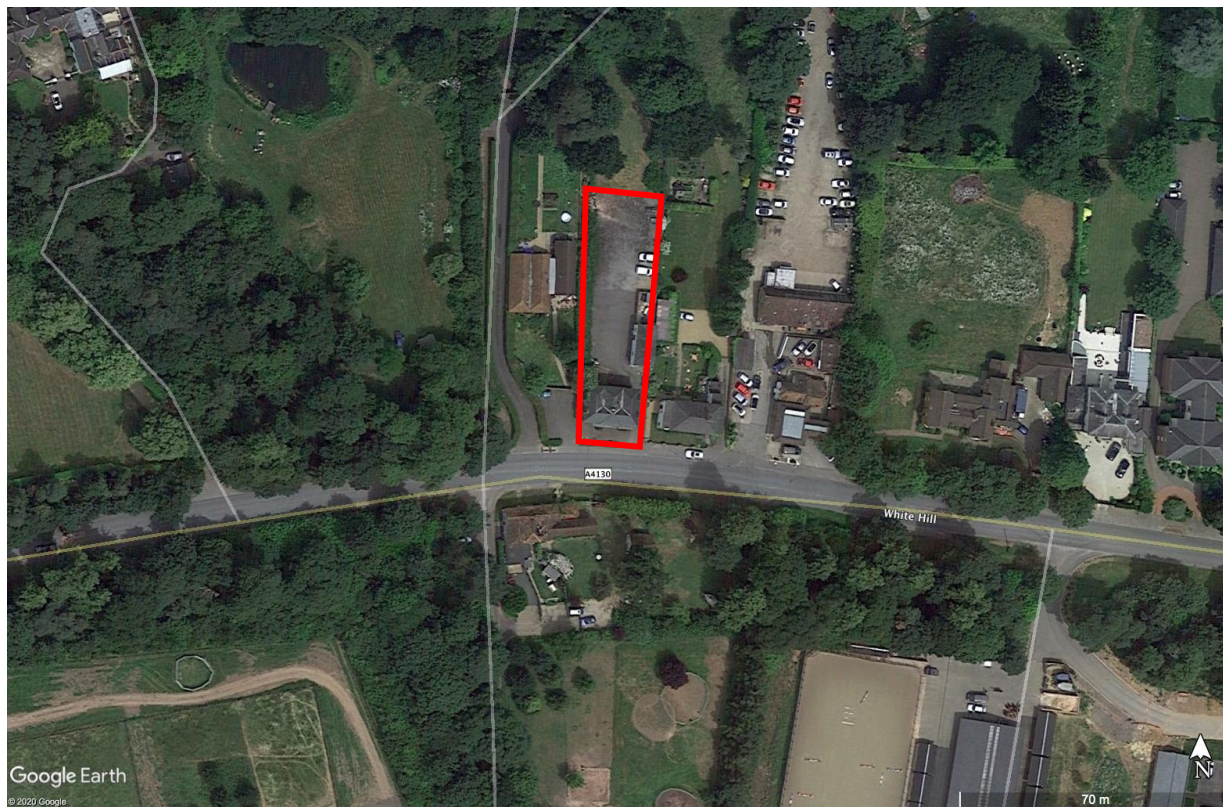


Photograph 9. View of vegetated garden from northern end of the site.

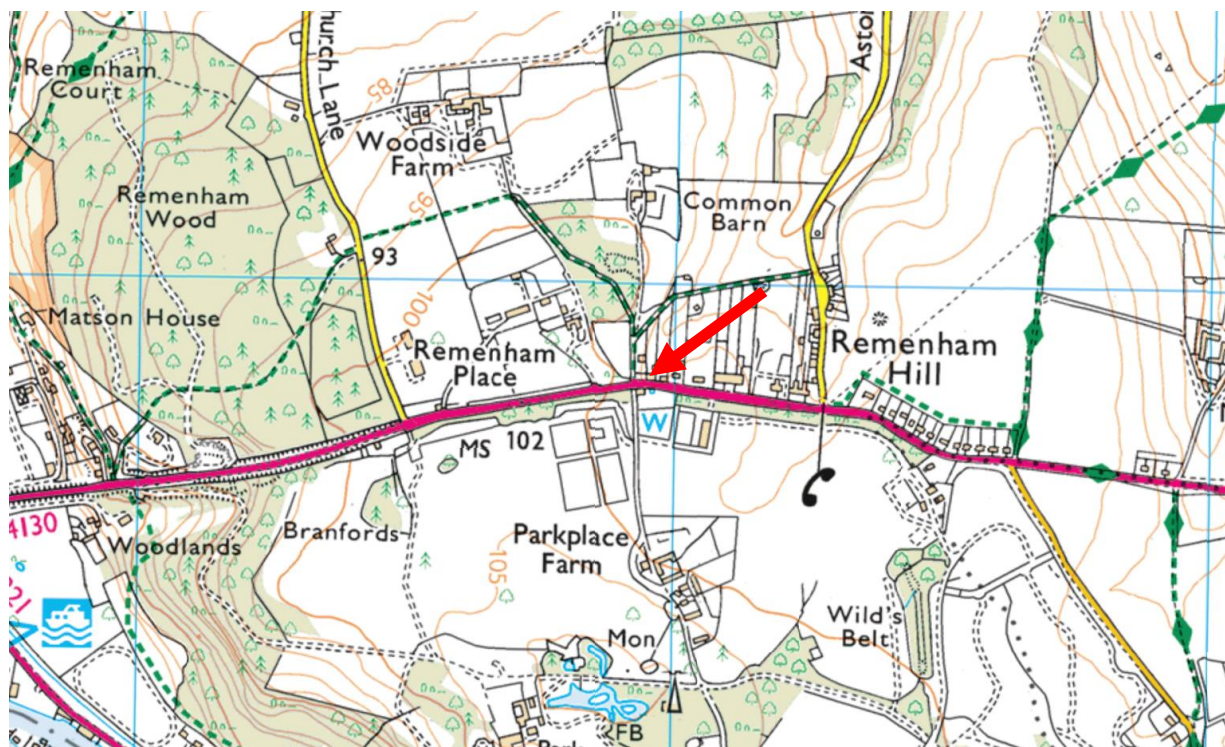


Photograph 10. Room within the roof of the coach house.

9 Appendix 2. Site Location Plans



An aerial photograph showing the location of Five Horseshoes, Remenham Hill (outlined in red). Source: Google Earth Pro



An Ordnance Survey map showing the location of the site (indicated by the red arrow) within the wider local area. Source: www.bing.com/mapspreview

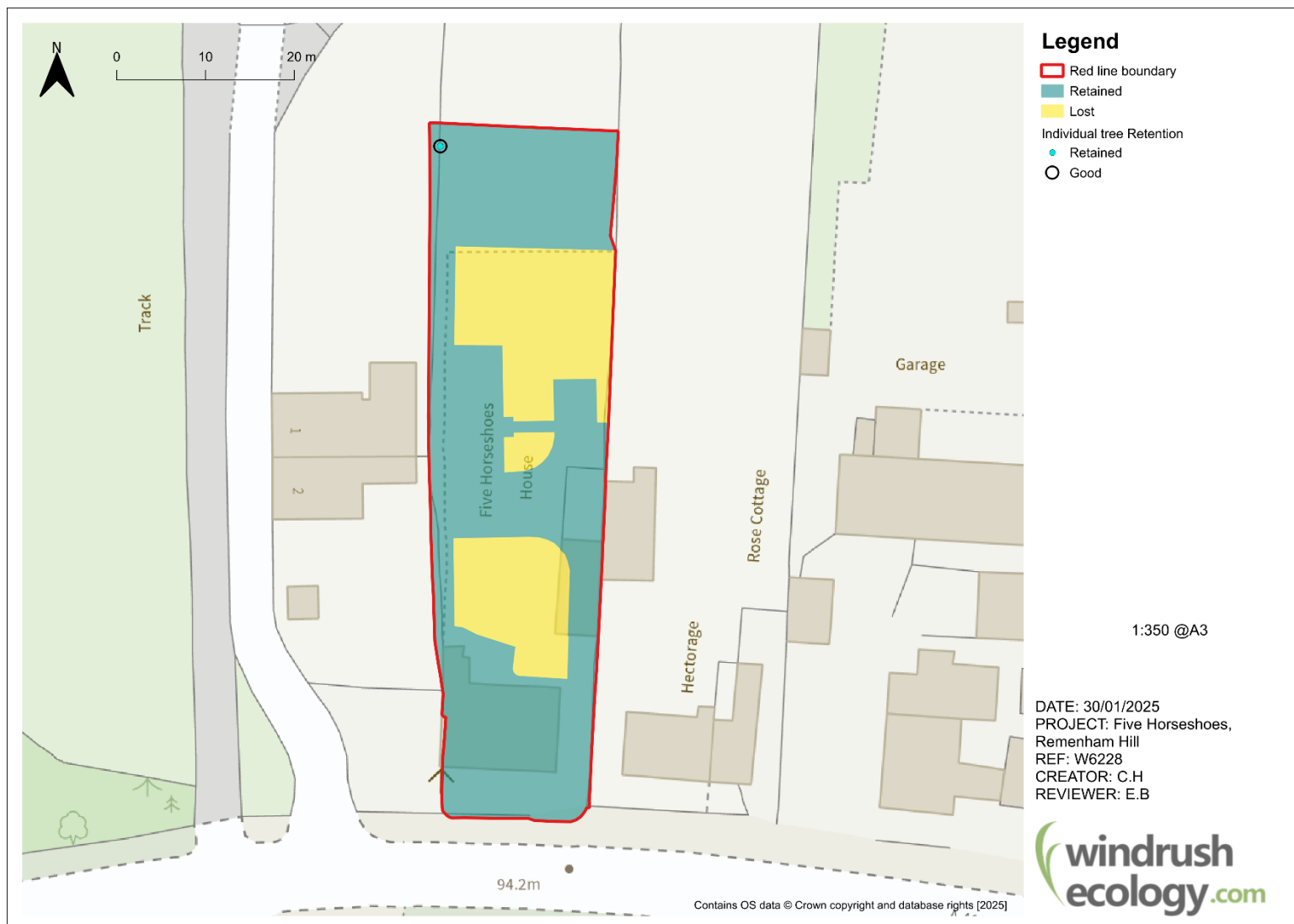
10 Appendix 3. Baseline UKHab Habitat Plan



11 Appendix 4. Proposed Habitat Plan



12 Appendix 5. Habitat Change Plan



13 Appendix 6. Habitat Condition Assessment Sheets

Please refer to separate Excel Spreadsheet.

14 Appendix 7. Statutory Biodiversity Metric

Please refer to separate Excel Spreadsheet.