AKB Ecology

Preliminary Ecological Appraisal

Land to the East side of Lodge Road

Lodge Road
Hurst
Reading
RG10 0SG

February 2025
Annika Binet

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

Tel: 07528 956 486, akb-ecology@outlook.com

Project Details

Client	Forays Homes
Site location	Land off Lodge Road, Hurst, RG10 0SG
Grid Reference	SU 79279 73580
Agent	Luke Cleary
Report Title	24-041-PEA – Land off Lodge Road Preliminary Ecological Appraisal Report
Report and version number	24-041-PEA-v1
Survey Date	20/01/2025
Surveyed By	Annika Binet MCIEEM BSc (Hons)

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

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

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

This is a technical report which does not represent legal advice. This report is intended to be submitted with a planning application for a development it is the duty of care of the landowner / developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to works.

Executive Summary

- AKB Ecology were commissioned by Forays Homes to undertake a Preliminary Ecological Appraisal (PEA) at Land off Lodge Road, Hurst, RG10 0SG at central grid reference SU 79279 73580 to help inform the proposed development of the site.

- The site is approximately 0.85ha in size and contains modified grassland, blackthorn scrub, a small block of woodland and ecologically valuable tree lines.

- The proposed development includes construction of 4 detached dwellings within the plot with associated gardens.

- This report details the results of the survey, which was carried out on the 20th January 2025 by Annika Binet qualified ecologist, to record and map the habitats present, assess the site for the potential presence of any protected species or species of conservation concern and identify habitats of conservation importance.

- Additional information regarding the present and historical ecological interest of the site and within a 2km radius was provided by the Thames Valley Environmental Records Centre. This helps to inform the likelihood of protected species occurring within the site boundary.

- Further surveys are required for GCN in addition to a further grassland survey, in order to identify whether the works will have any likely significant impacts on these species and habitats.

- Precautionary working methods are required for nesting birds, reptiles, common amphibians, [redacted] and other mammals in addition to a bat friendly lighting strategy. Overall, it is considered that there are no likely significant impacts to populations for these species within the local area from the proposed works provided the recommendations within this report are adhered to.

- BNG calculations will be required for the site, with a 10% gain for habitats, hedgerows and waterbodies required. The ditch is located between the survey site and adjacent proposed development site. The proposals for the adjacent site had been rejected by planning at the time of reporting, however, should the application be approved following appeal, or resubmission, collaboration on enhancement and management of the ditch may be required to ensure that proposals do not conflict.

- Species specific enhancements, including but not limited to, installation of bird and bat boxes integrated into the dwelling, should additionally be designed for the site.

Contents

1 Introduction

1.1 AKB Ecology were commissioned by Forays Homes to undertake a Preliminary Ecological Appraisal at Land off Lodge Road, Hurst, RG10 0SG to help inform the proposed development of the site.

1.2 This survey comprised a desktop study of biological records within the vicinity of the site, an ecological walkover survey to record and map the habitats present and an assessment for protected wildlife and species of conservation importance, including habitats, and was carried out by Annika Binet, a qualified ecologist, on the 20th January 2025.

1.3 This report presents the results of the following:

- Desktop Biodiversity Report
- UK Habs Habitat Survey
- Protected Species Walkover Survey

1.4 In addition, the report outlines any recommendations/further surveys that may be necessary. This will ensure that any protected species are not detrimentally impacted by the proposed development works on site, that there is no loss of ecological viability and that the favourable conservation status of the species in the local area are not affected.

2 Background

2.1 The proposed development site is located at Land off Lodge Road, Hurst, RG10 0SG at central grid reference SU 79279 73580. The site is located between the city of Reading and village of Hurst in Berkshire. The surrounding landscape comprises residential development interspersed with agricultural land. The River Lodden and a series of lakes associated with the river are located to the west of the site, to the east of Reading. See Figure 1.

2.2 The site is approximately 0.85ha and largely comprises an agricultural field which was previously used for grazing pasture but has not been in active use for a number of years, with current management of the grassland through cutting and rotovating with a tractor. See Figure 2.

FIGURE 1: SHOWING THE SITE LOCATION

FIGURE 2 : AERIAL VIEW OF THE SITE SHOWING THE SITE BOUNDARY

2.3 The proposed development plan involves construction of detached dwellings with associated gardens, plans are not yet finalised, however feasibility studies have been carried out based on a 4-unit scheme. This will involve the removal of modified grassland in addition to removal of a number of trees within the central section of the site. The development will include retention of existing scrub and tree line along the western edge with additional planting in this area to create a buffer between the site and adjacent road. The majority of the habitat area on site is unlikely to be negatively affected by these proposals.

2.4 Plans for the site may change, however this report has been done, and impacts assessed based on the Indicative scheme shown in Figure 3 of this report.

FIGURE 3 : PROPOSED PLANS

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	Full member of the Chartered Institute of Ecology and Environmental Management

	Class licence CL08 (GCN): 2019-40004-CLS-CLS Class licence CL29 (barn owl): accredited agent under 00288	BSc (Hons) Environmental Chemistry Certificate in Ecological Consultancy

4 Methods

Desk Study

4.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website provided by the Department for Environment, Food and Rural Affairs (Defra) was consulted to obtain information about any international or European level designated nature conservation sites within 2km of the site boundary, afforded protection either directly by 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). Information regarding statutory designated sites, such as Sites of Special Scientific Interest (SSSI) within a 2km radius of the site, were also obtained from MAGIC.

4.2 Aerial photos of the site (Google Earth, 2025) were examined to determine habitats surrounding the site and species likely to be present in order to make appropriate recommendations in the wider landscape context.

4.3 MAGIC was also used to assess the presence of Priority Habitats surrounding the site and obtain records of granted EPS licences within 2km of the site, to infer species likely to be present and better assess in-combination impacts of the proposed works.

4.4 Records of protected and notable species and non-statutory designated sites within 2km of the site were requested from the local biological records centre (Thames Valley Environmental Records Centre). Information on the presence of non-statutory designated sites within 2km of the site, were also obtained from the local biological records centre (Thames Valley Environmental Records Centre). All records since 2020 were requested and reviewed.

4.5 A search for waterbodies within 500m of the site boundary was undertaken using MAGIC mapping in order to assess their connectivity to the site.

4.6 A review of documents on the planning portal was additionally undertaken due to the known presence of a large development application on an adjacent site.

UK Habs Habitat Survey

4.7 A daytime ecological walkover assessment was carried out on the 20th January 2025 to record and map the habitats present, 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.

4.8 The survey involved a UK Habitat Classification System Survey which was carried out based on the standard methodology produced by UKHab Ltd (2023) and included searches for signs of protected species, as described in the Guidelines for Preliminary Ecological Assessment (CIEEM, 2017). This involves the following elements:

- Habitat mapping using a set of standard colour codes to indicate habitat types on a UK Habitat Classification Map.
- Description of features of ecological or nature conservation interest in notes relating to numbered locations on the UK Habitat Classification Map, called Target Notes (for habitat and features of possible interest).

4.9 In addition, observations of any invasive species, important plant communities, plant species of note, Habitats of Principal Importance (HPI) or other valuable ecological features will be recorded and detailed.

4.10 Details of the initial survey method for each are given below.

4.11 Invasive species - Any invasive plant or animal species identified during the site walkover are recorded.

4.12 Plant species of note – Any plant species of conservation concern found on the site are recorded.

4.13 Habitats of Principal Importance - Habitats of Principal Importance within or adjacent to the site (such as arable field margins, traditional orchards, ponds, rivers, wet woodlands) are recorded.

4.14 Other valuable ecological features - Other ecological features e.g. ancient woodland, veteran trees, bird feeding stations etc, habitat enhancements etc. within or adjacent to the site are recorded.

Protected Species Walkover

4.15 An assessment was made of habitat suitability in and around the site for those protected species that occur in the region. Obvious signs and incidental sightings of protected species are noted when encountered, but walkover surveys do not usually confirm species presence or absence.

4.16 Species that could be encountered are:

[redacted]

- barn owl;
- bats;
- breeding birds;
- great crested newt;
- hazel dormice;
- otter;
- reptiles;
- water vole;
- other mammals; and
- other Species of Principal Importance (SPI) (e.g. hedgehog, stag beetle etc);

4.17 Summaries of the initial survey method for each are given below.

4.18 [redacted]

4.19 Barn owl – The buildings were subject to a full external and internal inspection for evidence of use by barn owl *Tyto alba*, namely live/dead owls, pellets, droppings, feathers, nest debris, nestling fluff and eggs or eggshells.

4.20 Bats – The site was assessed for bat roosting potential and the surrounding area was assessed for the suitability of the habitat to support bats. Any buildings were examined and assessed for evidence of bats, such as rub marks, staining or droppings or for features that have good potential to be used by bats, such as loft voids, raised tiles, hanging tiles, gaps in soffits and lead flashing cracks, crevices and mortise joints. Trees were assessed for their potential to be used by bats such as woodpecker holes, splits, cracks and crevices or loose bark plates which can be used as roost features by bats. Such features are noted and examined by using equipment such as a high-powered torch and binoculars, in order to determine their suitability for bats.

4.21 Breeding Birds - habitats were assessed for their suitability for nesting birds. This would centre on birds that favour hedgerows, areas of longer grassland, scrub, trees as well as buildings.

4.22 Great Crested Newt - initial surveys centre on identifying suitable habitat within and surrounding the site. Maps are used to identify any ponds (that are not isolated by unsuitable habitat or physical barriers) within 500 metres of the site. A Habitat Suitability Index (HSI) is used to quantifiably assess whether a pond is suitable, this is undertaken for any onsite ponds during the walkover survey. If breeding ponds are present within the locality, then great crested newt *Triturus cristatus* could potentially be using the terrestrial habitat on the site.

4.23 Hazel Dormice – scrub and areas of dense vegetation are assessed for their suitability for foraging and nesting hazel dormice *Muscardinus avellanarius*. Favoured berry and nut bearing species such as hawthorn, hazel and bramble were looked for in particular. Additionally, the connectivity of this habitat and to suitable habitat beyond the site is also assessed. 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) is conducted where practicable.

4.24 Otter - initial surveys aim to assess the site for watercourses suitable for otters *Lutra lutra*. Maps are used to identify any waterbodies (that are not isolated by unsuitable habitat or physical barriers) within 500 metres of the site. If suitable watercourses are present on site, evidence of otter is searched for. Signs of otter includes spraints, feeding remains and sightings are recorded if encountered during the survey.

4.25 Reptiles - the site is assessed for habitat suitable for reptiles, such as long grassland and areas of scrub, with particular attention paid to those features that provide suitable basking areas (e.g. south-facing slopes and walls), hibernation sites (e.g. banks, log piles and piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).

4.26 Water vole - initial survey aims to assess the site for watercourses that may be suitable for water voles *Arvicola amphibious*. Maps are used to identify any waterbodies (that are not isolated by unsuitable habitat or physical barriers) within 100 metres of the site. If suitable watercourses are present on site, evidence of water voles is searched for. Signs of water voles includes faeces, latrines, feeding stations, burrows, footprints, runs or pathways and sightings which are recorded if encountered during the survey.

4.27 Other mammals – any signs of occupancy by other mammals (e.g. Rabbit warrens) are recorded.

4.28 Other Species of Principal Importance (SPI) – the habitats present on site were assessed for the likelihood of presence for species of regional and national importance.

5 Constraints/Limitations

5.1 An initial site assessment such as this is only able to act as a snapshot to record any flora or fauna that is present at the time of the survey. 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.

5.2 Some protected species records are confidential and therefore not included within the data search results provided by the records centre. Absence of records does not automatically correspond to absence of species within the impact zone of the development.

5.3 It should be noted that not all botanical species present can be observed during a single survey at any time of year, and that 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.

5.4 The survey was carried out outside the primary grassland survey season therefore the number of identifiable species present was limited. A precautionary approach the grassland classification has been made. Detailed grassland survey and condition assessment will be required within the peak growing season in order to confirm the classification and condition.

6 Results and Evaluation

Desk Study

Sites and Habitats

Statutory Designated Sites:

6.1 There are statutory designated sites located within 2km of the proposed site. The nearest statutory designated site is Lodge Wood and Sandford Mill SSSI located approximately 600m to the west of the site. See Figure 5.

6.2 The site is located within the Impact Risk Zone for this SSSI, this site is designated for the presence of wet woodland in favourable condition and the presence of a population of an RDB plant - *Leucojum aestivum*, Summer Snowflake. See FIGURE 4. Due to the nature of the works and habitats between the proposed development site and SSSI there is considered that there will be no likely significant direct impacts to the site from the proposed development, however minor indirect impacts could occur from pollution and windblown debris if works are not carried out according to good building practice.

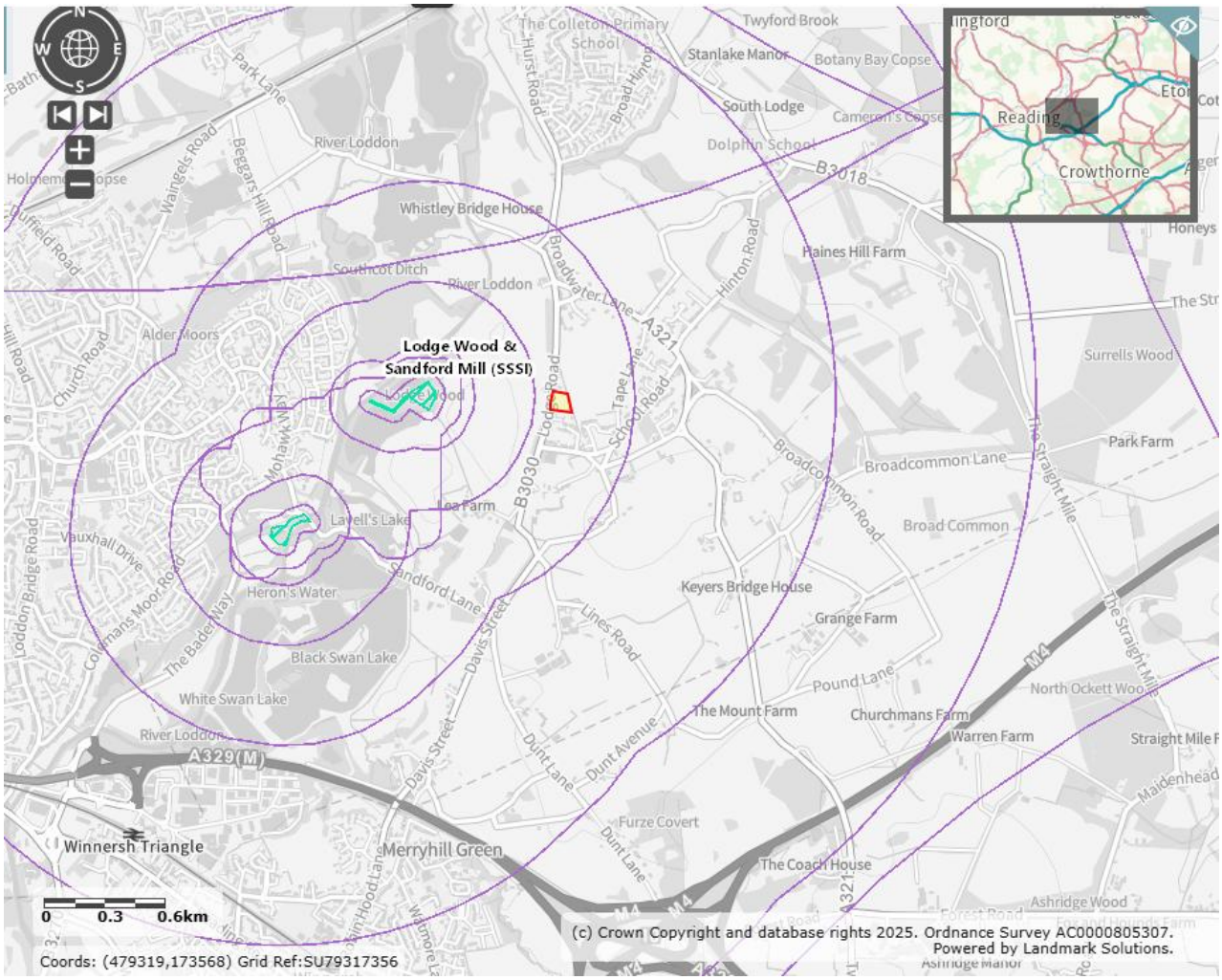

FIGURE 4: SHOWING CLOSEST SSSI IMPACT RISK ZONE

Non-statutory Designated Sites

Local Wildlife Sites (LWS).

6.3 There are non-statutory sites located within 2km of the proposed site. The nearest non-statutory designated sites are Land Adjacent to Vine Cottage, Hurst Proposed Local Wildlife site which is located 350m to the south-east of the site and Lea Farm Berkshire Local Wildlife Site located just under 600m to the west of the site.

Granted EPS Licences and GCN records

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

TABLE 2: EPS LICENCES WITHIN 2KM OF THE SITE

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Impact on a breeding site	Damage of a breeding site	Damage of a resting place	Destruction of a breeding site	Destruction of a resting place
2016-25277-EPS-MIT	S-PIP	14/09/2016	13/09/2021	Y	N	N	Y	N
EPSM2012-4899	C-PIP;BLE	04/10/2012	01/10/2014	N			N	Y
2019-43858-EPS-MIT	S-PIP	01/02/2020	28/02/2025	N	N	N	N	Y

2016-25277-EPS-MIT-1	S-PIP	15/06/2017	13/09/2026	Y	N	N	Y	N
2016-27109-EPS-MIT-1	BLE C-PIP S-PIP	24/05/2017	12/01/2022	N	N	N	N	Y
2017-32001-EPS-MIT	C-PIP	01/01/2018	30/04/2018	N	N	N	N	Y
2016-27109-EPS-MIT	BLE C-PIP S-PIP	17/01/2017	17/01/2017	N	N	N	N	Y
2014-649-EPS-MIT	C-PIP S-PIP	02/05/2014	31/10/2014	N	N	N	N	Y

6.5 A MAGIC search identified GCN licence return records within 2km of the site. These are detailed in Table 3 and shown in Figure 5.

TABLE 3: GCN RECORDS

GCN Present	Survey Date	OS Grid Ref
Y	23/04/2016	SU782719
Y	22/04/2017	SU782719
Y	09/05/2015	SU782719
Y	26/04/2014	SU782719
Y	09/05/2015	SU782719

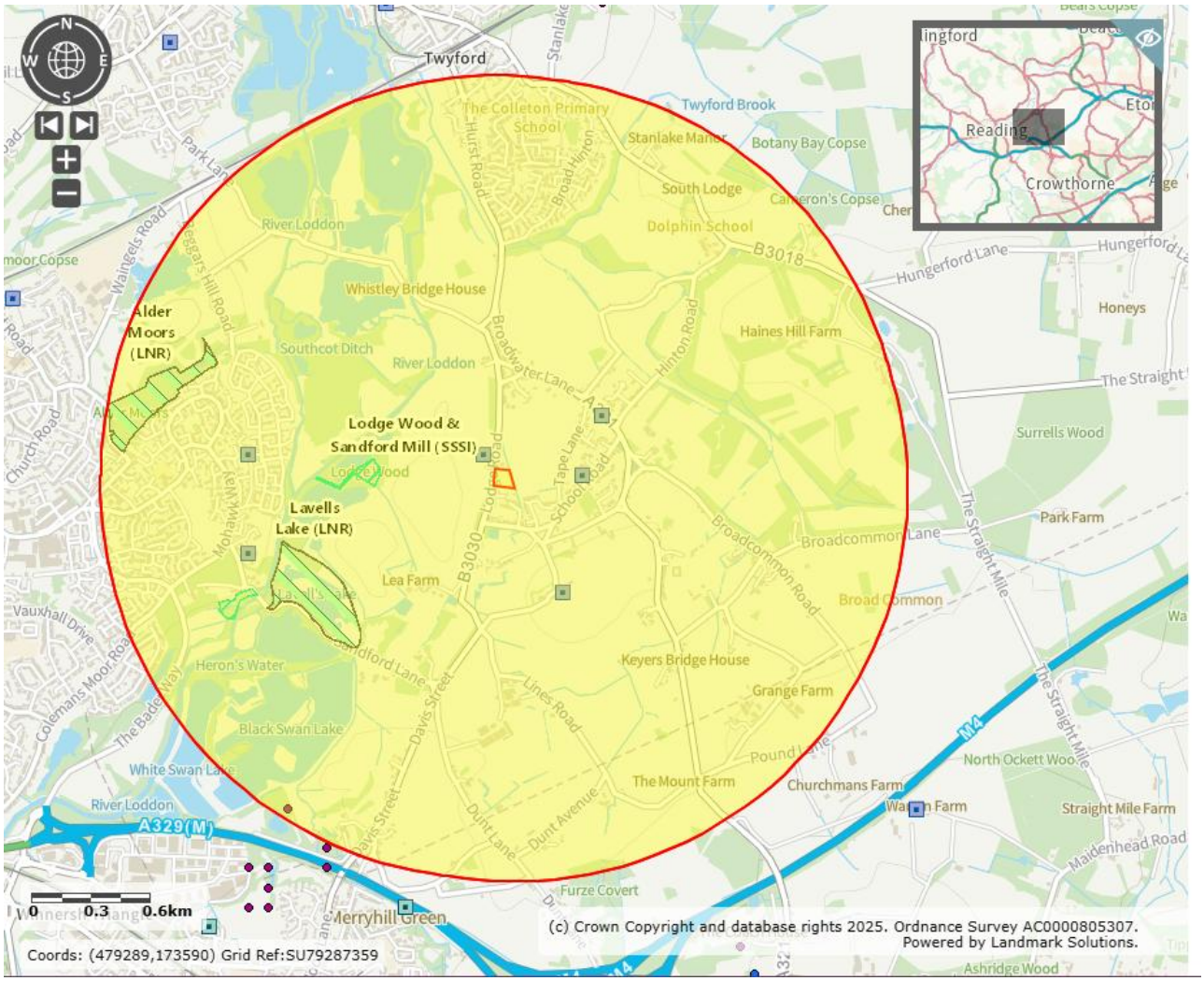

FIGURE 5: SHOWING STATUTORY DESIGNATED SITES, GRANTED EPS LICENCES AND GCN RECORDS WITHIN 2KM OF THE SITE.

Habitats of Principal Importance

6.6 There are no HPI located within or immediately adjacent to the site. Deciduous woodland and Woodpasture and Parkland are present within the wider surrounding area See Figure 6.

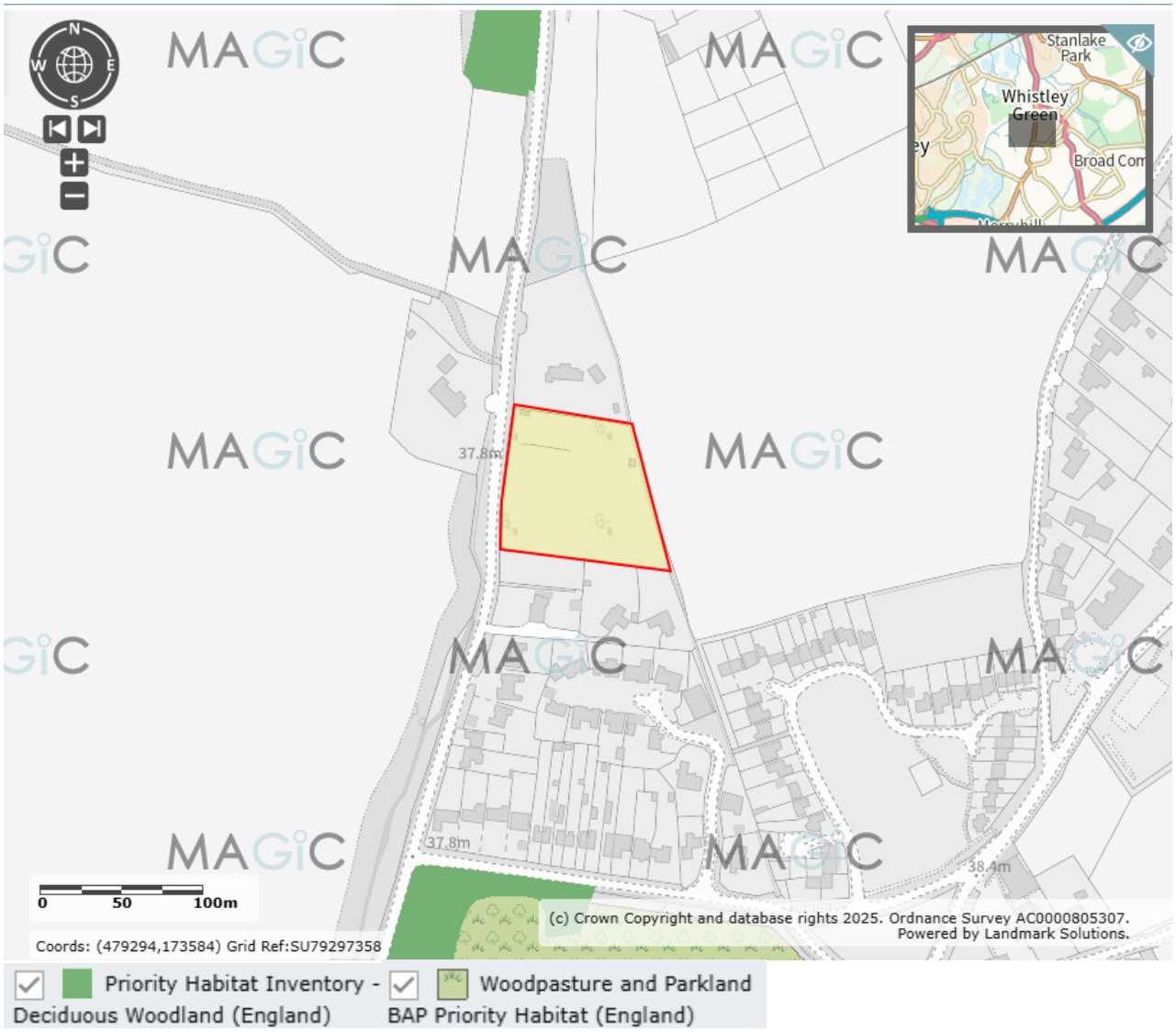

FIGURE 6: SHOWING PRIORITY HABITATS IN PROXIMITY TO THE SITE.

Waterbodies within 500m of the site boundary

6.7 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.

6.8 Three ponds and 3 waterways were found occurring in all directions. See Figure 7.

6.9 A Modular River Physical (MoRPh) survey was carried out for the ditch to the east of the site (2w) by Tyler Grange ecologists in June 2024which identified the ditch to be in 'Poor' condition.

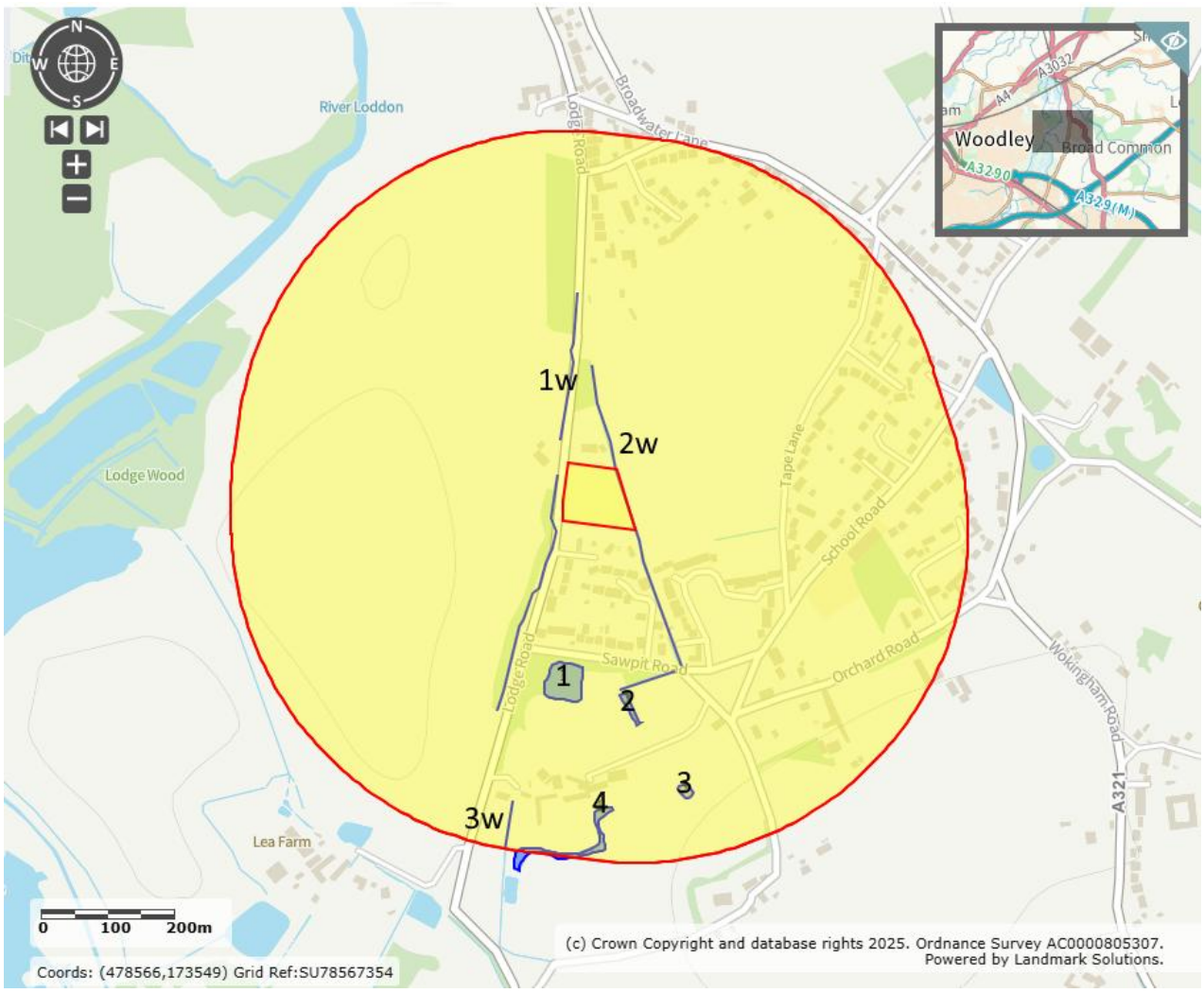

FIGURE 7: WATERBODIES WITHIN 500M

Protected Species

[redacted]

Barn owl

6.12 A high number of barn owl records were included within the data search, predominantly within the Lea Farm Berkshire Local Wildlife Site where barn owls have been recorded regularly.

Bats

6.13 Ten bat species have been recorded within 2km of the site, these are serotine *Eptesicus serotinus*, noctule *Nyctalus noctula*, Leisler's bat *Nyctalus leislerii*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus,* Nathusius' pipistrelle *Pipistrellus nathusii,* barbastelle *Barbastella barbastellus*, Natterer's bat *Myotis nattereri*, Daubenton's bat *Myotis daubentoni,* and brown long-eared bat *Plecotus auritus*, in addition to *Nyctalus* species *Pipistrellus* species, *Myotis* species and *Plecotus* species where records have been classified to genus level only.

6.14 Bat activity surveys were carried out for the adjacent development site during 2022 and in June 2024. A combination of static detector surveys and walked transects were carried out which identified the presence of serotine, noctule, common pipistrelle, soprano pipistrelle, barbastelle, *Nyctalus* species *Pipistrellus* species, *Myotis* species and *Plecotus* species (noted within the EcIA report to be brown long-eared due to the site being outside the known range of grey long-eared bats.)

Birds

6.15 25,456 bird records were included within the data search, with 13,174 records of 125 species within the last 10 years. The majority of records are from Lea Farm Berkshire Local Wildlife Site and include a range of birds largely associated with the wetland habitats associated with this site. 1800 of the records since 2015 are for 27 Species of Principal Importance – bittern *Botaurus stellaris,* black-tailed godwit *Limosa limosa*, Brent goose *Branta bernicla*, bullfinch *Pyrrhula pyrrhula*, common scoter *Melanitta nigra*, cuckoo *Cuculus canorus,* curlew *Numenius Arquata*, dunnock *Prunella modularis,* hawfinch *Coccothraustes coccothraustes,* herring gull *Larus argentatus*, house sparrow *Passer domesticus,* lapwing *Vanellus Vanellus,* lesser redpoll *Acanthis cabaret,* lesser spotted woodpecker *Dryobates minor*, linnet *Linaria cannabina*, marsh tit *Poecile palustris*, reed bunting *Emberiza schoeniclus*, ring ouzel *Turdus torquatus*, scaup *Aythya marila*, skylark *Alauda arvensis*, song thrush *Turdus philomelos*, spotted flycatcher *Muscicapa striata*, starling *Sturnus vulgaris,* tree pipit *Anthus trivialis,* wood warbler *Phylloscopus sibilatrix,* yellow wagtail Motacilla flava and yellowhammer *Emberiza citrinella*

Great crested newt

6.16 A high number of GCN records were included within the data search, the majority were from a site 2km to the south-west of the proposed development location, a number of records were also noted to be within 500m of the proposed development, to the east of the site, with 2 records from 2002 and 2004 respectively both located approximately 350m to the east of the site. No records were identified within 250m of the site.

6.17 A review of the Ecological Impact Assessment conducted for a proposed development site in June 2024 to the immediate east of the site subject to survey

identified that eDNA survey has been carried out previously for two ponds just outside the 500m to the east of the site, which returned positive records for GCN. Ponds 1 and 2 to the south of the site were not surveyed due to access restrictions and the ditch located between the two sites and to the west of the site (1w and 2w on FIGURE 7,) in addition to connected ditches to the east of the site were not subject to survey as they was identified to be dry during the survey season and therefore considered to be unsuitable for GCN. Ponds 2 and 4 and waterbody 3 were not subject to survey due to falling outside the 500m buffer for that development, however these all lie within the same ownership boundary as ponds 1 and 2 and therefore would have had the same access restrictions.

Hazel dormice

6.18 No records of hazel dormice were found within 2km on the site.

Otter

6.19 A single otter record was identified within the records search, with one individual recorded on the River Lodden in 2010.

Reptiles and common amphibians

6.20 Common frog *Rana temporaria,* common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *Lissotriton helveticus,* common lizard *Zootoca vivipara,* grass snake *Natrix helvetica* and slow worm *Anguis fragilis* records were returned within the data search results.

6.21 Reptile surveys were carried out for the adjacent development site between May and July 2024 which confirmed the presence of an individual juvenile grass snake.

Water vole

6.22 30 records of water vole were noted within the records search, with the most recent record from 2012 for 4 burrows identified 1.8km to the south-east of the site, no records were identified within 1km of the site.

Other Mammals

6.23 Records of western European hedgehog *Erinaceus europaeus* were recorded with the most recent record from 2020.

Other Species of Principal Importance (SPI)

6.24 In addition to SPI detailed within the above sections a range of SPI invertebrates were included within the data search results – a beetle *Agonum scitulum*, stag beetle *Lucanus cervus*, small heath butterfly *Coenonympha pamphilus*, beaded chestnut moth *Agrochola lychnidis,* blood veined moth *Timandra comae*, buff ermine *Spilosoma lutea*, cinnabar moth *Tyria jacobaeae*, dot moth *Melanchra persicariae*, ghost moth *Hepialus humuli*, grey dagger *Acronicta psi*, minor shoulder-knot *Brachylomia viminalis*, mottled rustic *Caradrina Morpheus*, rustic *Hoplodrina blanda*, sallow *Cirrhia icteritia,* shoulder thorn *Ennomos erosaria,* shoulder-striped

wainscott *Leucania comma,* small emerald *Hemistola chrysoprasaria,* small square-spot *Diarsia rubi,* white ermine *Spilosoma lubricipeda* and picture winged fly *Dorycera graminum.*

Field Survey

Habitats and Plants

6.25 A Habitat map produced using the BNG QGIS package which is based on UK Habs Classifications and list of target notes are included in Figure 8 and Table 4 respectively. The habitats present on the site are described below.

Scattered Broad-leaved Trees, Lines of trees and woodland

6.26 Scattered broadleaved trees are present within the site, with tree lines present on the eastern and western boundaries, in addition to a small line of young trees just inside the northern boundary of the site.

6.27 A mature black walnut *Julgans nigra* is present within the north of the site which was planted by the site owner. Scattered trees elsewhere in the site are predominately self-seeded young black walnut trees, likely from squirrel caches, in addition to some oak *Quercus robur*, blackthorn *Prunus spinosa* and hawthorn *Crataegus monogyna*.

6.28 A broadleaved woodland copse is present within the south-east of the site, with the majority of trees being young ash *Fraxinus excelsior* trees which appear to have self-seeded and have been subject to little management. There was not identifiable understorey to the woodland area, with species present being consistent with the main body of the site.

6.29 The treelines on the site boundaries comprise frequently occurring oak, hawthorn and hazel *Corylus avellana* with occasional, silver birch *Betula pendula* and ash, Bramble *Rubus fruticosus* occurs in the understory. The tree line at the northern end of the site consists of young walnut and sycamore *Acer pseudoplatanus* trees.

6.30 A large dead oak tree is present within the neighbouring plot to the east of the site, which overhangs into the site. The tree contains numerous features suitable for bats and other faunal species.

PHOTOGRAPH 1– INDIVIDUAL TREE WITHIN GRASSLAND

PHOTOGRAPH 2– ECOLOGICAL VALUABLE LINE OF TREES ASSOCIATED WITHIN DITCH ON EASTERN BOUNDARY

PHOTOGRAPH 3– INDIVIDUAL TREES WITHIN GRASSLAND

PHOTOGRAPH 4– ECOLOGICAL VALUABLE LINE OF TREES ON WESTERN BOUNDARY

PHOTOGRAPH 5– LINE OF SMALL TREES WITHIN NORTH-EAST OF SITE

PHOTOGRAPH 6– OTHER BROADLEAVED WOODLAND WITHIN SOUTH-EAST OF SITE

PHOTOGRAPH 7– LARGE DEAD OAK JUST OUTSIDE EASTERN SITE BOUNDARY

Ditch

6.31 A ditch runs along the eastern boundary of the site, connecting to further ditches to the east and extending north and south beyond the site boundaries. The ditch was noted to be in poor condition during a MoRPh assessment by Tyler Grange in June 2024 with major encroachment into the riparian zone by baseline habitats noted.

6.32 The baseline habitats encroach into the riparian zone for the ditch, and very little aquatic or marginal vegetation was recorded during the survey in January 2024, though some small areas containing water mint were identified within the approximate centre of the site boundary. Some sections of the ditch are heavily shaded by the adjacent tree line.

6.33 The banks are very shallow, with damage by livestock recorded on the eastern bank. The water in the ditch was shallow, with a maximum depth of approximately 25cm at the northern end, reducing down to 1cm at the southern end at the time of the survey, mosquito larvae were noted to be present. Oil was noted on the surface of the water at the northern end of the site.

PHOTOGRAPH 8– EASTERN BOUNDARY DITCH AS VIEWED FROM SOUTHERN BOUNDARY

PHOTOGRAPH 9– EASTERN BOUNDARY DITCH AS VIEWED FROM CENTRE OF BOUNDARY

PHOTOGRAPH 10– AQUATIC VEGETATION WITHIN THE CENTRAL SECTION OF THE DITCH

PHOTOGRAPH 11– ABSENCE OF VEGETATION WITHIN SECTIONS OF THE DITCH

Modified grassland

6.34 Grassland is present throughout the centre of the site site and between areas of scrub. The grassland had an even, short sward length at the time of the survey. The site owner confirmed that the grassland is typically cut a few times a year during the growing season and generally maintained as a relatively short sward and is considered to be a best fit for modified grassland based on historic management through grazing and current management through mowing.

6.35 The south-east of the site was noted to be slightly lower than the rest of the site, a neighbour – spoken to during the survey, provided evidence in the form of a

photograph, that this area floods during high rainfall periods, likely due to blockages within the ditch.

6.36 The grassland is dominated by perennial ryegrass *Lolium perene* with some red fescue *Festuca rubra* and Yorkshire fog *Holcus lanatus* also present, some areas of the grassland contained a range of herb species with plantain *Plantago lanceolata*, yarrow *Achillea millefolium*, herb Robert *Geranium robertianum*, creeping buttercup *Ranunculus repens,* white clover *Trifolium repens*, common daisy *Bellis perennis,* ragwort, germander speedwell *Veronica chamaedrys,* mouse ear chickweed *Cerastium fontanum,* and dead nettle noted *Lamium* species, mouse ear hawkweed *Pilosella officinarum* was additionally recorded within the northern portion of the site, but not within the south of the site. this is a dry grassland species typically only found in short sward, dry grasslands, it is also an indicator species of calcareous grassland. Ground ivy *Glechoma hederacea* was recorded close to the boundaries of the site, particularly around the tree line in the north-west and woodland in the south-east of the site.

PHOTOGRAPH 12– NORTHERN PORTION OF THE SITE WITH DAMAGE TO GRASSLAND

PHOTOGRAPH 13– GRASSLAND FORMING THE MAIN BODY OF THE SITE

Blackthorn scrub

6.37 Blackthorn, scrub is present on the north, east and western site boundaries, some bramble *Rubus fruticosus* and oak and elder saplings *Sambucus nigra* are present within the scrub. These areas were noted to contain mammal tracks through them, with rabbit warrens identified within the western scrub, they additionally offer good nesting potential for several bird species. Bamboo Bambusa species was noted within the adjacent site bordering an area of scrub on the northern boundary, however this does not appear to have made ingresses into the survey site currently.

PHOTOGRAPH 14– BLACKTHORN SCRUB PATCHES ON NORTHERN BOUNDARY OF THE SITE

PHOTOGRAPH 15– SCRUB ON EASTERN BOUNDARY

PHOTOGRAPH 16– SCRUB ON WESTERN BOUNDARY

PHOTOGRAPH 17– CLEAR AREAS WITHIN THE SCRUB ON THE WESTERN BOUNDARY

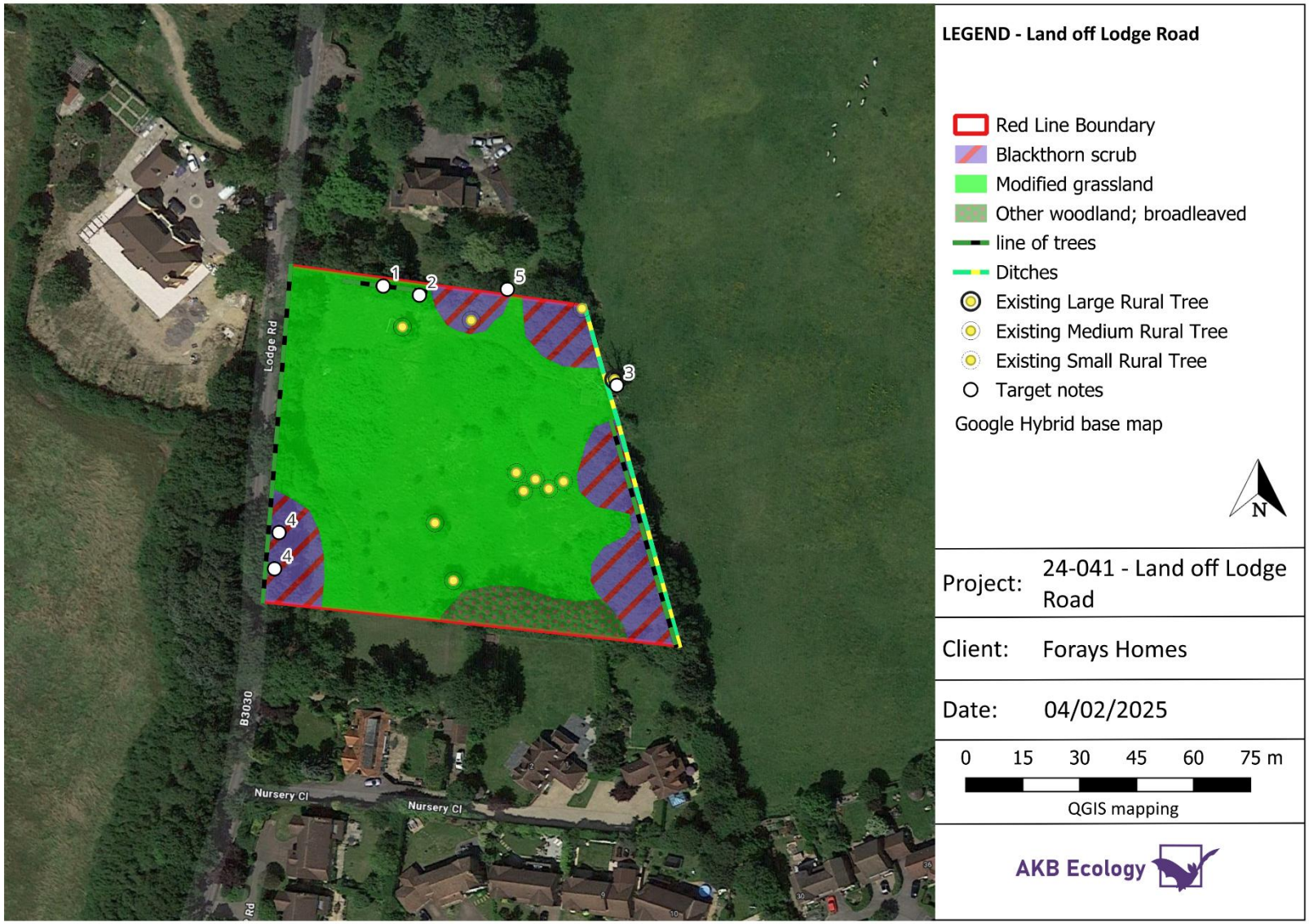

FIGURE 8: UK HABS HABITAT MAP

TABLE 4 – TARGET NOTES FROM

FIGURE 8 FIGURE 8 UK HABS HABITAT PLAN

Target Note	Description
1	Roil and debris pile
2	Rubble pile
3	Large dead oak tree – high potential for roosting bats
4	Rabbit warren
5	Bamboo in adjacent plot

Priority Habitats

6.38 The lines of trees on the eastern and western boundaries are considered to fit within the UK BAP Priority Habitats criteria for hedgerows, which are defined as *"any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide (Bickmore, 2002). Any bank, wall, ditch or tree within 2m of the centre of the hedgerow is*

considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow." These tree lines contain at least one woody UK native species and therefore are considered to be priority habitats.

Plant species of note

6.39 No plant species of note were identified.

Invasive species

5.30 Bamboo, which is a non-native invasive plants (but not listed on Schedule 9) was recorded to be present adjacent to the northern boundary of the site.

Other valuable ecological features

5.31 Turf and rubble piles were noted to be present close to the northern boundary of the site which may provide suitable habitat for reptiles and terrestrial phase amphibians.

Habitat evaluation

6.40 The majority of the site contains common and widespread habitats of low ecological value. The tree lines on the east and west boundaries of the site are considered to be of high ecological value, with the scrub of moderate ecological value. The woodland in the south of the site is a small parcel of evenly aged trees lacking in typical woodland understorey and without ecological niches, therefore this was considered to be of moderate ecological value.

Protected species and species of conservation concern

[redacted]

Barn owl

5.33 A single building is present on site, this is an open fronted tractor barn constructed of metal walls and flat metal roof. The building has no tie beams or platforms suitable for perching, roosting or nesting by barn owls. No evidence of the presence of barn owls was identified within the building.

Bats

5.34 A single building is present on site, this is an open fronted tractor barn constructed of metal walls and flat metal roof. The building lacked suitable roosting features for bats.

5.35 The trees within the site were found to offer negligible potential to support bats due to a lack of potential roosting features. Trees within the east and west boundary tree lines were noted to contain some roosting opportunities such as woodpecker holes, however a full ground level tree assessment was not carried out for these trees. A large dead oak tree was additionally noted to be present adjacent to the eastern site boundary, lifted bark was present in addition to splits and cracks which provide suitable roosting opportunities for a range of bat species, including Pipistrellus, Plecotus and Myotis species, in addition to barbastelle which were recorded during activity surveys carried out on the adjacent site.

5.36 The tree lines and ditch along the site boundaries and the woodland and scrub within the site provide good foraging and commuting habitat for a range of bat species and provide connectivity between potential roosting locations and further foraging areas within the surrounding area.

Breeding birds

5.37 There is habitat suitable for breeding birds on the site within the trees, treelines, woodland and scrub. Evidence of historic nesting activity was noted present within the scrub on the western site boundary.

Great Crested Newt (GCN)

5.38 The site is considered to have some potential to support terrestrial GCN. Whilst the grassland is considered to be of low suitability due to the short, even sward lacking in suitable foraging and refuge opportunities, the scrub and tree lines are considered to have high suitability for both foraging and refuge. Rubble and turf piles present within the north of the site additionally provide suitability for hibernating amphibians.

5.39 No ponds were recorded within the site boundary. A ditch is located along the eastern boundary of the site. The ditch is considered to be of below average suitability for GCN given an HSI score of 0.55, see Table 5, but may not be used for breeding due to drying out during the breeding season.

TABLE 5 – HSI CALCULATIONS

Pond ref	1
SI[1] - Location	1
SI[2] - Pond area	0.8
SI[3] - Pond drying	0.1
SI[4] - Water quality	0.33
SI[5] - Shade	1
SI[6] - Fowl	1
SI[7] - Fish	1
SI[8] - Ponds	1
SI[9] - Terr'l habitat	0.33
SI[10] - Macrophytes	0.3
HSI Score	0.55
HSI Category	Below average

5.40 Whilst early in the season the survey was carried out after the first reports by Amphibian and Reptile Conservation (ARC) and local Amphibian and Reptile Groups of breeding amphibians in the Southeast, an egg search was therefore carried out within areas of the ditch containing suitable vegetation. No eggs were identified during the survey.

Hazel dormice

5.41 The boundary tree lines and the dense scrub on site is considered to have suitability to support hazel dormouse as they offer foraging opportunities and is well connected to adjacent suitable habitat.

5.42 No hazel nuts were available to check for those that may have been chewed by hazel dormouse.

Otter

5.43 No evidence of otters (spraint, footprints or feeding signs) were noted during the walkover survey. The ditch on site is considered to be of low suitability for this species due to low water levels and lack of fish.

Reptiles

5.44 The grassland on site was noted to be of a short sward at the time of the survey, however due to the presence of scrub and tree lines it is considered that the site does provide some suitable foraging habitat for common reptiles such as slow worms, common lizards and grass snakes. An individual juvenile grass snake was recorded within the adjacent site, which contains similar habitats.

Water vole

5.45 Negligible potential habitat for water voles was present on the site and, as such, no evidence was recorded. The ditch, whilst wet at the time of the survey, did not contain flowing water with the majority of the ditch devoid of hydrophilic vegetation, it was additionally noted within the Tyler Grange report for the adjacent site that the ditch was dry in June 2024, this combined with the low water levels in January 2025 are considered indicative that the ditch is predominantly dry and water very rarely flows through the site. The banks of the ditch were very shallow and a walkover of the length of the ditch adjacent to the site boundary, in addition to 50m to the north and south of the site did not identify any water vole field signs, or potential burrows.

Other Mammals

5.46 Rabbit warrens were noted within the site, in addition to mammal tracks running through the scrub on site and across the grassland.

Other Species of Principal Importance

5.47 There is potential for the site to support SPI such as hedgehog and common toad within the scrub and tree lines on the site, the turf and rubble piles to the north of the site provide further foraging opportunities and potential refuge areas. The dead oak close to the eastern site boundary additionally provides suitability for stag beetle.

7 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.

Habitats of Principal Importance

6.2 The tree lines on the east and west site boundaries are considered to fit the criteria for HPI hedgerows and therefore must be retained.

Invasive species

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

6.4 Care should be taken to prevent the spread of bamboo, which is present adjacent to the northern site boundary, into the site.

Plant species of note

6.5 No plant species of note were identified therefore no further action is required.

Other valuable ecological features

6.6 The local authority should be contacted to check if any trees within the survey area have Tree Preservation Orders.

6.7 The grassland on site was noted to contain a single indicator of chalk grassland and was additionally noted to contain a variety of forb species. The survey was undertaken outside of the primary grassland survey species and therefore further species may not have been present at the time of the survey, whilst priority grassland habitats aren't recorded to be present in the surrounding area it is considered that further grassland survey, within the peak growing season is required in order to confirm the habitat classification and inform the condition assessment for the Biodiversity Net Gain calculations which will be required for the site.

Barn owl

6.12 The survey did not identify any evidence of barn owls on the site.

6.13 Whilst the building permits access into the interior for owls, they entirely lack any areas suitable for perching, roosting or nesting barn owls and are considered to have negligible potential to support this species.

Bats

6.14 Trees on site were found to have negligible potential for bats, therefore no further surveys for bats will be required if any of the trees are to be removed.

6.15 Trees on the site boundaries were identified to have suitability for roosting bats, in addition to suitability or foraging and commuting use by bats. These trees are proposed for retention with the proposed dwellings situated well outside of the root protection zones therefore there are considered to be no likely impacts on the trees from the development and further survey for bats is required at this time.

6.16 The building on site was considered to have negligible potential to support roosting bats and, as such, there are no known constraints regarding these species and the proposed development.

6.17 Activity surveys have been carried out for the adjacent site, including transects with part of the route adjacent to the eastern site boundary. These surveys, in addition to ecological data search results have provided information related to species and activity levels within the area and confirmed use of the tree lines for foraging and commuting bats.

6.18 The features holding highest suitability are proposed for retention, with the proposed dwellings well away from the features, therefore further surveys for bats are not considered necessary, however lighting can have notable negative impacts on commuting bats, particularly light adverse species such as long-eared bats and barbastelle, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance to these species therefore lighting must not be positioned so as to shine on suitable commuting and foraging features. Additional post-development external lighting should be avoided or kept to the minimum necessary, consisting of down lighters only and preferably on motion sensors to reduce lighting time. No lighting should be positioned so as to shine directly on any trees on site or on the site boundaries.

Breeding birds

6.19 Vegetation or tree removal should 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)

6.20 The grassland on site is considered to have very low suitability for GCN, high suitability habitats are currently proposed for retention around the boundaries of the site with no direct impacts to the ditch and immediately surrounding habitat. The ditch is considered to be sub-optimal for use by GCN and is unlikely to be used for breeding due to reported drying over the breeding period, however GCN are known to be present within ponds in the surrounding area to the east and south-west of the

site. Where newt populations are present, they will frequently move between sites with individuals having been recorded moving large distances therefore increase the likelihood of use of this waterbody.

6.21 The area of the ditch identified to have suitable vegetation for newt egg laying is located approximately 50m from the proposed built area of the site. If newts are breeding in this area and in the absence of mitigation the rapid risk assessment shows a result of 'offence likely whether or not suitable precautionary measures are used to mitigate against impacts on individual newts. See FIGURE 9.

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)	0.1 - 0.5 ha lost or damaged	0.5
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	Minor disturbance of newts	0.5
	Maximum:	0.5
Rapid risk assessment result:	**AMBER: OFFENCE LIKELY**	

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)	0.1 - 0.5 ha lost or damaged	0.5
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
	Maximum:	0.5
Rapid risk assessment result:	**AMBER: OFFENCE LIKELY**	

"Amber: offence likely" indicates that the development activities are of such a type, scale and location that an offence is likely. In this case, the best option is to redesign the development (location, layout, methods, duration or timing; see **Non-licensed avoidance measures tool**) so that the effects are minimised. You can do this and then re-run the risk assessment to test whether the result changes, or preferably run your own detailed site-specific assessment. Bear in mind that this generic risk assessment will over- or under-estimate some risks because it cannot take into account site-specific details, as mentioned in caveats above. In particular, the exact location of the development in relation to resting places, dispersal areas and barriers should be critically examined. Once you have amended the scheme you will need to decide if a licence is required; this should be done if on balance you believe an offence is reasonably likely.

FIGURE 9: RAPID RISK ASSESSMENT OF THE SITE IF THE DITCH IS ASSUMED TO BE A BREEDING SITE

6.22 If the ditch is considered to not be a breeding site, all other confirmed and potential breeding sites are located over 250m from the site. Based on the area of the site to be impacted, and the location of these 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 should individual newts be disturbed by the works the RRA results in conclusion of offence likely (FIGURE 10) where suitable mitigation is implemented to prevent impacts on individual newts the result reduces to Offence highly unlikely (FIGURE 11).

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability 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)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	Minor disturbance of newts	0.5
	Maximum:	0.5
Rapid risk assessment result:	AMBER: OFFENCE LIKELY	

FIGURE 10: RAPID RISK ASSESSMENT OF THE SITE EXCLUDING THE DITCH AS A POTENTIAL BREEDING SITE, IMPACT ON INDIVIDUAL NEWTS

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)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
	Maximum:	0.005
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Guidance on risk assessment result categories

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

FIGURE 11: RAPID RISK ASSESSMENT OF THE SITE EXCLUDING THE DITCH AS A POTENTIAL BREEDING SITE

6.23 The HSI calculation for the ditch showed that it is below average suitability for GCN, with the likelihood of use increasing due to the presence of a known population within the surrounding area with connective habitats present. The Rapid Risk assessment shows that an offence is likely if GCN are present within the ditch adjacent to the eastern boundary of the site, therefore further survey for GCN is required.

6.24 The ditch should then be subject to four presence / absence surveys survey between mid-March and mid-June (or a single eDNA survey mid-April to late June). If presence of GCN is confirmed, further population surveys (to give a total of six surveys) and a licence from Natural England may be required for works to proceed.

Hazel dormice

6.25 Whilst the tree lines and scrub on site hold some suitability for hazel dormice, these areas are proposed for retention under the proposals, additionally no dormouse records were identified within 2km of the site. The impact areas of the site are considered unlikely to be used by hazel dormouse and therefore no further surveys for this species are required.

Otter

6.26 The site is considered unlikely to be used by otter, the ditch on the eastern boundary lacks suitable prey species and is therefore considered unsuitable for foraging, the river in which otter have been recorded previously is located over 500m to the west of the site which is outside of the typically range for holts to be located, the lack of suitable habitat present to the east of the site further reduces the likelihood that otters would cross the site and therefore no further surveys for this species are considered necessary.

Reptiles

6.27 The site provides habitat for reptiles such as scrub, refuge piles, trees lines, woodland and the ditch. The grassland also holds some suitability and may have high suitability during peak growing season when the sward is longer. As the majority of habitat on site will be retained under the current proposals it is considered that further surveys are not necessary as they are unlikely to alter the proposed mitigation as suitable habitat and connectivity will be retained on site throughout and following works and precautionary mitigation can ensure no likely significant impacts on reptiles, if present.

6.28 A reptile method statement will be required for the site, detailing the precautionary approach to site clearance that must be adopted and followed, this will include but not be limited to the following measures:

- 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

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

Other Mammals

6.30 Site clearance work should be undertaken carefully (by hand if necessary) to avoid crushing rabbits within their burrows.

Other Species of Principal Importance

6.31 Suitable habitat for west European hedgehog and common toad is present on site, therefore it is recommended that any vegetation, should be cleared sensitively, in line with the reptile mitigation strategy for the site which will additional ensure no likely significant impacts to hedgehogs and toads if present. If close board fencing is to be fitted it should be raised above ground level to allow hedgehogs and toads to pass underneath, some habitat areas should also be left un-landscaped to provide shelter and foraging opportunities. Good building practice recommended [redacted] above will ensure that any animals traversing through the site are not trapped during the works. Additional habitat for hedgehogs could be provided through relaxation of

mowing and seeding with an appropriate wildflower meadow mix in some areas of the site.

6.32 The dead tree located outside the eastern site boundary is additionally considered to be suitable for stag beetles but is not proposed for impacts from these works therefore no further surveys or mitigation are required for this species.

Impact Assessment and recommendations

6.33 Further surveys are required for GCN in addition to a further grassland survey, in order to identify whether the works will have any likely significant impacts on these species and habitats.

6.34 Precautionary working methods are required for nesting birds, reptiles, common amphibians, [redacted] and other mammals in addition to a bat friendly lighting strategy. Overall, it is considered that there are no likely significant impacts to populations for these species within the local area from the proposed works provided the recommendations within this report are adhered to.

6.35 BNG calculations will be required for the site, with a 10% gain for habitats, hedgerows and waterbodies required. The ditch is located between the survey site and adjacent proposed development site. The proposals for the adjacent site had been rejected by planning at the time of reporting, however, should the application be approved following appeal, or resubmission, collaboration on enhancement and management of the ditch may be required to ensure that proposals do not conflict.

6.36 Species specific enhancements, including but not limited to, installation of bird and bat boxes integrated into the dwelling, should additionally be designed for the site.

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
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

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