

26 New Lane Hill
Reading
Berkshire
RG30 4JP

Preliminary Ecological Appraisal (inc. Preliminary Bat Roost Assessment)

Report ref.: R3164_PEA_a

Report Quality Control Information	
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CONTENTS PAGE

1	EXECUTIVE SUMMARY	3
2	INTRODUCTION	4
2.1	Project Background	4
2.2	Site Location and Context.....	4
2.3	Report Objectives.....	4
3	LEGISLATIVE BACKGROUND	6
3.1	Relevant Legislation	6
3.2	European Protected Species Mitigation Licensing	6
4	PLANNING POLICY	8
4.1	National Planning Policy	8
4.2	Local Planning Policy	9
5	SURVEY METHODOLOGY	11
5.1	Desk Study.....	11
5.2	Field Survey	11
5.3	Report Validity	12
6	DESK STUDY FINDINGS	13
6.1	Designated Sites	13
6.2	Important Habitats	14
6.3	Protected Species and Notable Species	14
6.4	Historic and Current Land Use.....	16
6.5	Geology, Soils and Topography.....	16
7	HABITAT SURVEY	17
7.1	Overview	17
7.2	u1b5 Buildings.....	17
7.3	u1b Developed land - sealed surface.....	17
7.4	u1 828 Vegetated garden	18
7.5	u1 847 Introduced shrubs	19
8	BUILDING INSPECTION	22
8.1	Overview	22
8.2	External Survey	22
8.3	Internal Survey	24
9	DISCUSSION	28
9.1	Designated Sites	28
9.2	Onsite Habitats.....	28
9.3	Bats.....	29
9.4	Amphibians (Great Crested Newt)	30
9.5	Other Mammals.....	31
9.6	Reptiles	31
9.7	Birds.....	31
9.8	Invasive Non-native Species.....	32
10	RECOMMENDATIONS	33
10.1	Overview	33
10.2	Onsite Habitats.....	33
10.3	Bats.....	33
10.4	Reasonable Avoidance Measures (Amphibians, Reptiles and Small Mammals)	33
10.5	Nesting Birds.....	34
10.6	Biodiversity Enhancement Measures.....	34
11	REFERENCES & BIBLIOGRAPHY	35
	APPENDIX 1 – LEGISLATIVE BACKGROUND.....	36
	APPENDIX 2 – PROPOSED SITE PLAN.....	39
	APPENDIX 3 - POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS	40

1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was instructed by Chris Keen of The Keen Partnership, to undertake a Preliminary Ecological Appraisal (PEA), including a Preliminary Roost Assessment (PRA), at 26 New Lane Hill, in Reading, Berkshire. The survey was commissioned to accompany a full planning application to be submitted to Reading Borough Council seeking consent for the construction of two new residential dwellings, following the demolition of the existing bungalow and outbuildings.
- 1.1.2** The desk study (including a TVERC 1 kilometre data search) revealed that the application site is not statutorily or non-statutorily designated for its wildlife interest and has no protected/notable species records.
- 1.1.3** Meghan Porter-Smith and Lauren Hayward (qualifying member of CIEEM) carried out a site visit on the 2nd March 2026. The application site was an approximately 0.08ha residential dwelling with associated front and rear garden and detached outbuilding to the south-east of the main bungalow, in an urban setting surrounded by similar residential properties. The habitats observed were: u1b5 Buildings; u1b Developed land; sealed surface; u1 847 Introduced Shrubs; u1 828 Vegetated garden and Individual trees.
- 1.1.4** The PRA survey revealed no signs of bat activity or evidence of bats during the internal and external inspection of the bungalow, garage and outbuilding. Externally, there were limited suitable bat roosting features, confined to slightly lifted roof tiles beside the chimney on the front elevation of the bungalow, however upon close inspection these gaps were shown to be of limited extent. Therefore, the bungalow and detached outbuilding has been classified as negligible potential suitability for bats.
- 1.1.5** The following ecological enhancement recommendations have been made:
- Mandatory Biodiversity Net Gain;
 - Precautions for amphibians, nesting birds, reptiles and small mammals;
 - Limited lighting during construction and long term lighting restrictions for bats in the surrounding areas;
 - Wildlife-friendly, native landscaping including maintaining permeability between connecting gardens for hedgehogs; and
 - Integrated woodcrete bat and bird boxes on the new residential dwellings.
- 1.1.6** This report contains information regarding a mobile species (i.e. bats) so it will likely be valid for 12 months only (CIEEM 2019b).

2 INTRODUCTION

2.1 Project Background

- 2.1.1** John Wenman Ecological Consultancy LLP was instructed by Chris Keen of The Keen Partnership, to undertake a Preliminary Ecological Appraisal (PEA), including a Preliminary Roost Assessment (PRA), at 26 New Lane Hill, in Reading, Berkshire.
- 2.1.2** The survey was commissioned to accompany a full planning application to be submitted to Reading Borough Council seeking consent for the construction of two new residential dwellings, following the demolition of the existing bungalow and outbuildings - see proposed site plan in **Appendix 2**.

2.2 Site Location and Context

- 2.2.1** The site is approximately 0.08ha residential plot with an existing dwelling, outbuildings and associated front and rear gardens located on the northern side of New Lane Hill, in Reading, Berkshire (OS grid ref.: SU 67739 72365).
- 2.2.2** The site is in an urban setting surrounded by similar residential houses and their associated gardens. Calcot Park Golf Course, including a large area of open grassland, woodland parcels and a large pond, is situated approximately 50 metres to the south-west. The golf course also contains large areas of ancient woodland, Churchend Copse and Curtis's Wood, approximately 565 metres north west. An area of open grassland is present within the grounds of King's Academy Prospect, approximately 290 metres to the north-east and Prospect Park with an area of open grassland, scattered trees and a large pond, is situated approximately 760 metres to the north-east of the bungalow.

2.3 Report Objectives

- 2.3.1** The aim of this PEA is to understand the nature of the site and assess its ecological value. The key objectives are to:
- identify any likely ecological constraints associated with the planning proposals;
 - establish appropriate mitigation measures in accordance with the mitigation hierarchy (i.e. avoid > mitigate > compensate);
 - determine any additional surveys that may be required following on from this preliminary stage; and
 - recognise opportunities to deliver ecological enhancements in line with national and local planning policy.

- 2.3.2** The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or

potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed development activities.

3 LEGISLATIVE BACKGROUND

3.1 Relevant Legislation

3.1.1 The following legislation is considered relevant for the purpose of this Preliminary Ecological Appraisal (PEA):

- Wildlife and Countryside Act (W&CA) 1981 (as amended)
- Conservation of Habitats and Species Regulations ('Habitat') Regulations 2017
- Countryside and Rights of Way (CROW) Act 2000
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

3.1.2 These acts hold relevance to both protected and invasive species and the degree of protection varies depending on faunal/floral group or species. For example, some species of European importance receive full protection in England and Wales under the Habitat Regulations (e.g. bats), whereas others may only be afforded protection through national legislation such as the W&CA 1981 (as amended) (e.g. common lizard). For a detailed overview of species-specific legislation, please refer to **Appendix 1**.

3.2 European Protected Species Mitigation Licensing

3.2.1 The Government's statutory nature conservation advisory organisation, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (2)(e) – the derogation is for the purposes of '*preserving 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.*'
- (9)(a) – there is '*no satisfactory alternative*' to the derogation; and
- (9)(b) – '*the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*'

3.2.2 Local Planning Authorities (LPAs) have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations consider and determine whether these three tests are likely to be

satisfied by planning proposals affected EPS before granted planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

4 PLANNING POLICY

4.1 National Planning Policy

- 4.1.1** The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England.
- 4.1.2** The ODPM Circular 06/2005 provides guidance on the application of the law relating to planning and nature conservation in England, stating that *'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'*
- 4.1.3** The revised National Planning Policy Framework (NPPF), published in December 2024, sets out the Government's planning policies for England and how they should be applied. Section 15 of the NPPF sets out the approach local authorities should adopt to conserve and enhancing the natural environment when preparing planning policy and when considering planning applications. Paragraph 193 sets out the principles LPAs should apply when determining planning applications, as follows:

'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 improve biodiversity 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.'

- 4.1.4** In England, BNG became mandatory for major development from the 12th February 2024 and for minor development (small sites) from the 2nd April 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). In practice, planning permission in England is now subject to a condition to secure a minimum 10% net gain for biodiversity, unless the development is a type that is exempt from mandatory BNG requirements.

4.2 Local Planning Policy

- 4.2.1** The planning policy within the Reading Borough is defined by the policies within the Local Plan (adopted Nov 2019). The policy relevant to biodiversity and natural environment is as follows:

'EN12: BIODIVERSITY AND THE GREEN NETWORK

- a) The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises:*
- Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and*
 - Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links.*
- b) New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map. On all sites, development should not result in a net loss of biodiversity and geodiversity, and should provide a net gain for biodiversity wherever possible. Development should:*

- *Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and*
- *Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.*

In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats and should be provided prior to development.’

5 SURVEY METHODOLOGY

5.1 Desk Study

- 5.1.1** A desktop study was conducted by Lauren Hayward. The study utilised data from open access online resources to acquire information on the nature of the site and its surroundings and highlight any potential ecological features.
- 5.1.2** In accordance with the Guidelines for Preliminary Ecological Appraisal (2nd Edition) (CIEEM 2017), TVERC was commissioned to undertake a search of pre-existing records of protected and/or notable species and non-statutorily designated wildlife sites held by them within a 1km radius around a central point inside the site.
- 5.1.3** The DEFRA Data Services Platform was used to obtain geospatial datasets for designated sites (i.e. RAMSAR, SPA, SAC, SSSI) and important habitats (i.e. Priority Habitat Inventory, Ancient Woodland Inventory) to be analysed in QGIS. The Multi-Agency Geographical Information Centre (MAGIC) website was examined for granted European Protected Species (EPS) licence applications. These geospatial datasets and Google Earth satellite imagery were used to determine the extent and connectivity of habitats, how the site is linked to the surrounding landscape and whether the development could have wider scale impacts on biodiversity.
- 5.1.4** Historical OS maps and Google Earth satellite imagery were consulted to provide insight into historic and current land use; such information helps contextualise the continuity of habitats and determine the importance of existing ecological features on site.
- 5.1.5** The type of soil on site was inferred using geological information taken from the British Geological Survey and on-site interpretation.

5.2 Field Survey

Habitat Survey

- 5.2.1** A site walkover was undertaken on the 2nd March 2026 by Senior Ecologist Meghan Porter-Smith and Assistant Ecologist Lauren Hayward (Qualifying members of CIEEM). The site was surveyed using the UK Habitat Classification (UKHab) system (UKHab Ltd 2024) in accordance with the Guidelines for Preliminary Ecological Appraisal (2nd Edition) (CIEEM 2023). Particular attention was given to evidence of protected and priority species (NERC Act 2006 Section 41 species of principal importance) and the site's potential to support such species.

- 5.2.2** There were no significant survey constraints because full access was available to the site. The survey was subject to seasonal constraints because not all plant and animal species are visible throughout the year and therefore the report represents a snapshot of the site at the time of the survey only.

Building Inspection

- 5.2.3** A detailed inspection of the exterior and interior of the building was undertaken on the 2nd March 2026 by Meghan Porter-Smith - registered under Natural England Bat Survey Class Licence CL17 (Licence number: 2025-86253-CL17-BAT) and Assistant Ecologist Lauren Hayward in accordance with good practice guidelines (Collins 2024). The equipment used during the inspection comprised binoculars, a high-power (1 million candlepower) LED torch, a headtorch, ladder and PPE (facemask, gloves etc.). The inspection involved a systematic search of the exterior and interior of the structure during daylight hours to compile information on potential and actual bat access points; potential and actual bat roost sites; and any evidence of bat presence.
- 5.2.4** There were no significant survey limitations because PRAs can be carried out at any time of year under any weather conditions and the building was fully accessible.
- 5.2.5** It should be noted that it is not always possible to inspect all potential roost sites during a survey, particularly for bat species which typically roost in hidden crevices. Therefore, an absence of bat evidence found during a survey does not necessarily equate to evidence of bat absence in a building.

5.3 Report Validity

- 5.3.1** This report will likely be valid for up to 18 months; after which point a professional ecologist may need to review the report's validity (CIEEM 2019b).

6 DESK STUDY FINDINGS

6.1 Designated Sites

- 6.1.1** The desk study returned no internationally designated statutory site within a 5km radius of the application site and four nationally designated statutory site within a 2km radius. Four locally designated, non-statutory sites were identified within a 1km radius of the application site (see **Table 1a and 1b** below).

Table 1a. Statutorily designated sites within 2km of the site (Source: MAGIC).

Site name	Designation	Description	Distance from nearest site boundary (m)
Lousehill Copse	Local Nature Reserve (LNR)	~13.03 ha of ancient woodland, mainly consisting of mature oak and hazel. There also is an open meadow within the northern section of the site.	~897 NE
Blundells Copse	Local Nature Reserve (LNR)	~5.55 ha of ancient woodland including species such as alder, cherry, willow, hazel, ash and oak. The site contains a stream and is known to support a range of fauna such as bats, muntjac deer, frogs and hedgehogs.	~1103 NW
Round Copse	Local Nature Reserve (LNR)	~1.66 ha of dense woodland that supports a wide range of flora and fauna adjacent to McIlroy Park.	~1505 NE
McIlroy Park	Local Nature Reserve (LNR)	~11.98 ha of extensive natural parkland. Areas of grassland and semi-ancient woodland are present on site. There are also old chalk pits in the west woodland area.	~1666 NE

Table 1b. Non-statutorily designated sites within 1km of the site (Source: TVERC).

Site name	Designation	Description	Distance from nearest site boundary (m)
Prospect College	Local Wildlife Site (LWS)	~1.34 ha of unimproved grassland, woodland and scrub habitat.	~295 NE
Meadway Fringe	Local Wildlife Site (LWS)	~2.13 ha site including broad-leaved woodland, with ancient woodland indicators, and areas of unimproved, species rich neutral grassland.	~633 NE
Lousehill Copse	Local Wildlife Site (LWS)	~14.91ha consisting of three parcels of lowland mixed deciduous woodland, including areas of wet woodland and long established woodland. There is also an area of grassland and scattered shrub to the east of the woodland.	~1090 NE
Prospect Park	Local Wildlife Site (LWS)	~24.1 ha site includes the Rookery. The Rookery is an area of lowland mixed deciduous woodland dominated by oak and occasional ash, horse chestnut, beech, sycamore and common lime. Ancient woodland indicators have been identified during previous surveys. Prospect Park is a historic parkland consisting of mown amenity grassland with mature and veteran trees and an area of scrub woodland. There is also a section of grassland with a species composition typical of lowland meadow.	~1180 NE

6.2 Important Habitats

- 6.2.1 There are no irreplaceable habitats (e.g. Ancient Semi-natural Woodland) or priority habitats (Section 41 NERC Act 2006 habitats of principle importance) on site or mapped within 50m of the site.

6.3 Protected Species and Notable Species

- 6.3.1 The search from the TVERC database revealed a range of protected and notable species records starting from 1960. Only recent records defined as fewer than ten years old are included in this report (see **Tables 2a & 2b** below).

Table 2a. Recent protected and/or notable species records within the vicinity of the site (Source: TVERC).

Common name	Scientific name	No. of records	Most recent record	Nearest record (m)	Precision (m)	Status
Amphibians & Reptiles						
Great crested newt	<i>Triturus cristatus</i>	2	2022	~1080 SW	10	HabReg-2, WCA_5s94b/c NERC_s41
Smooth Newt	<i>Lissotriton vulgaris</i>	2	2022	~575 NE	1000	WCA_5s91k
Birds						
Brambling	<i>Fringilla montifringilla</i>	4	2017	~1850 NW	1000	WCA_1p1
Bullfinch	<i>Pyrrhula pyrrhula</i>	1	2020	2 km record		NERC_S41
Cetti's warbler	<i>Cettia cettia</i>	2	2020	2 km record		WCA_1p1
Cuckoo	<i>Cuculus canorus</i>	2	2016	~822 SW	1000	NERC_S41 BOCC_red
Dunnock	<i>Prunella modularis</i>	12	2017	~822 SW	1000	NERC_S41
Fieldfare	<i>Turdus pilaris</i>	8	2022	~449 SE	1000	WCA_1p1 BOCC_red
Goldeneye	<i>Bucephala clangula</i>	1	2023	2 km record		WCA_1p2 BOCC_red
Hawfinch	<i>Coccothraustes coccothraustes</i>	1	2019	~2210 SW	1000	NERC_S41 BOCC_red
Herring Gull	<i>Larus argentatus</i>	11	2018	~822 SW	1000	NERC_S41 BOCC_red
Hoopoe	<i>Upupa epops</i>	1	2022	~937 SE	100	WCA_1p1
House Sparrow	<i>Passer domesticus</i>	7	2022	~822 SW	1000	NERC_S41 BOCC_red
Kingfisher	<i>Alcedo atthis</i>	3	2022	~688 NE	1000	WCA_1p1
Lesser Redpoll	<i>Acanthis cabaret</i>	1	2016	~1390 SE	1000	NERC_S41
Little Gull	<i>Hydrocoloeus minutus</i>	1	2023	~2210 SW	1000	WCA_1p1
Little Ringed Plover	<i>Charadrius dubius</i>	1	2018	2 km record		WCA_1p1
Marsh Tit	<i>Poecile palustris</i>	1	2016	~449 SE	1000	NERC_S41 BOCC_red
Peregrine	<i>Falco peregrinus</i>	1	2016	~822 SW	1000	WCA_1p1
Red kite	<i>Milvus milvus</i>	67	2023	~449 SE	1000	WCA_1p1
Redwing	<i>Turdus iliacus</i>	26	2023	~449 SE	1000	WCA_1p1
Song Thrush	<i>Turdus philomelos</i>	8	2022	~449 SE	1000	NERC_S41
Spotted Flycatcher	<i>Muscicapa striata</i>	2	2017	~449 SE	1000	NERC_S41 BOCC_red
Starling	<i>Sturnus vulgaris</i>	26	2023	~822 SW	1000	NERC_S41 BOCC_red

Higher Plants						
English bluebell	<i>Hyacinthoides non-scripta</i>	2	2025	~633 NE	100	WCA_8
Invertebrates						
Stag beetle	<i>Lucanus cervus</i>	83	2023	~52 NW	100	NERC_S41
White-letter Hairstreak	<i>Satyrrium w-album</i>	1	2019	~124 SE	1	NERC_S41
Terrestrial Mammals (bats)						
Brown long-eared bat	<i>Plecotus auritus</i>	3	2020	~684 NE	1000	HabReg_2 WCA_5s94b/c NERC_s41
Barbastelle	<i>Barbastella barbastellus</i>	1	2021	~623 NW	10	HabReg_2 WCA_5s94b/c NERC_s41
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	21	2024	~514 SE	1	HabReg_2 WCA_5s94b/c
Daubenton's bat	<i>Myotis daubentonii</i>	1	2018	~684 NE	1000	HabReg_2 WCA_5s94b/c
Leisler's bat	<i>Nyctalus leisleri</i>	1	2020	~1770 SW	1000	HabReg_2 WCA_5s94b/c
Myotis bat species	<i>Myotis</i>	2	2020	~1770 SW	1000	HabReg_2 WCA_5s94b/c NERC_s41
Nathusius's Pipistrelle	<i>Pipistrellus nathusii</i>	1	2024	~691 NW	100	HabReg_2 WCA_5s94b/c
Noctule	<i>Nyctalus noctula</i>	11	2024	~691 NW	100	HabReg_2 WCA_5s94b/c NERC_s41
Serotine	<i>Eptesicus serotinus</i>	5	2020	~976NW	1000	HabReg_2 WCA_5s94b/c
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	17	2024	~691 NW	100	HabReg_2 WCA_5s94b/c NERC_s41
Terrestrial Mammals (excl. bats)						
Badger	<i>Meles meles</i>	48	2024	~449 SE	1000	PBA
Hedgehog	<i>Erinaceus europaeus</i>	21	2023	~390 SE	1	NERC_s41

Table 2b. Species status key.

Abbreviation	Legislation
BOCC_red	Birds of Conservation Concern Red list – Globally threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown substantial recovery.
HabReg_2	Schedule 2 of Conservation of Habitats and Species Regulations 2010 (European Protected Species animal) – It is an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2.
NERC_s41	Priority Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006.
PBA	Protection of Badgers Act 1992.
WCA_1p1	Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) – birds protected from disturbance at their nests, or their dependent young.
WCA_1p2	Schedule 1 Part 2 of the Wildlife and Countryside Act 1981 (as amended) – birds protected from disturbance at their nests, or their dependent young and the protection of birds which may be killed during the open season.
WCA_5s91k	Schedule 5 Section 9 Part 1 (taking) of the Wildlife and Countryside Act 1981 (as amended) – Animals which are protected from being intentionally killed or injured.
WCA_5s94b/c	Schedule 5 Section 9 Parts 4b/c of the Wildlife and Countryside Act 1981 (as amended) – Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection / Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed.
WCA_8	Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) – Plants and fungi that are protected from intentional picking, uprooting or destruction; selling, offering for sale, possessing or transporting for the purpose of sale; advertising for buying or selling.

- 6.3.2** European Protected Species (EPS) mitigation licences that have been granted inside a 2km radius of the application site in the last 10 years, are detailed in **Table 3** below.

Table 3. European Protected Species (EPS) licences granted within a 2km radius (Source: MAGIC).

Case Reference of Granted Licence	Species on the Licence	Licensable Period	Licensable Works	Distance (m)
2020-49490-EPS-MIT	Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	01/11/2020 to 30/11/2025	Destruction of resting place	~958 SE

- 6.3.3** The NatureSpace District Level Licensing impact risk map for Reading Borough Council shows the application site falling within a green zone, i.e. moderate habitat suitability where GCN may be present. One potential breeding ponds was identified on OS mapping within a 500m radius of the site, located within Calcot Park Golf Course approximately 460 metres to the north-west.

6.4 Historic and Current Land Use

- 6.4.1** Google Satellite imagery dating from 2003 shows the application site has not changed in recent years compared to present day.

6.5 Geology, Soils and Topography

- 6.5.1** The geology of the application site is slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils; habitats associated with such soils include seasonally wet pastures and woodlands.

7 HABITAT SURVEY

7.1 Overview

- 7.1.1** The application site is a residential dwelling, detached outbuilding and associated front and rear garden on a plot covering an area of approximately 0.08ha on the south-eastern end of New Lane Hill, in Reading. The site is in an urban setting surrounded by similar residential properties and Calcot Park Golf Course to the south-west.
- 7.1.2** The following UK Habitat Classification (UKHab) habitats were observed during the site walkover: u1b5 Buildings; u1b Developed land - sealed surface; u1 828 Vegetated garden; u1 847 Introduced shrubs; and Individual trees.
- 7.1.3** Secondary codes observed included: scattered trees (32), frequently mown (108), residential building (818), and introduced shrubs (847).
- 7.1.4** The UKHab habitats and secondary codes are described alongside photographs (see **Photographs 1-8**) and a survey plan (see **Figure 1**), as follows:

7.2 u1b5 Buildings

818 Residential building

- 7.2.1** The site comprised of a detached bungalow of brick walls and a hipped roof with a front gable and flat roofed garage on the south-eastern elevation of the bungalow (**Photographs 1 & 2**). The property had a detached pitched roof outbuilding to the south-east of the main bungalow (**Photograph 2**). Full details of the buildings are described in the Preliminary Roost Assessment below (**Section 8**).



Photograph 1. Front of property viewed from the south.



Photograph 2. Rear of property with paved area and rear of detached outbuilding as viewed from the north.

7.3 u1b Developed land - sealed surface

- 7.3.1** There was a paved driveway at the front of the bungalow, a paved pathway along the

south-western elevation of the house, to the front door (**Photograph 3**). There was a small, paved area to the rear of the garage and the back door on the south-eastern elevation of the bungalow (**Photograph 2**).



Photograph 3. Paved driveway and path along the south-western elevation to the front door of bungalow (front elevation).

7.4 u1 828 Vegetated garden

32 Scattered trees/ 108 frequently mown

- 7.4.1** The garden to the western side and rear of the bungalow comprised areas of mown grass lawn with a species composition typical of modified grassland, i.e. dominant grasses and occasionally distributed herbaceous species, such as perennial rye grass (*Lolium perenne*), red fescue (*Festuca rubra*), creeping buttercup (*Ranunculus repens*), creeping bent (*Agrostis stolonifera*), dandelion (*Taraxacum officinale* agg.), wild strawberry (*Fragaria vesca*), common mouse ear (*Cerastium fontanum*), dove's foot cranesbill (*Geranium molle*), common ragwort (*Jacobaea vulgaris*), common ivy (*Hedera helix*), lesser celandine (*Ficaria verna*), field woodrush (*Luzula campestris*), common daisy (*Bellis perennis*), wood avens (*Geum urbanum*), bramble (*Rubus fruticosus*), ribwort plantain (*Plantago lanceolata*), common speedwell (*Veronica arvensis*), and a parsley (*Anthriscus* sp.) (**Photographs 4 & 5**). The rear garden also contains two small scattered fruit (*Prunus* sp.) trees and a medium sized spruce (*Picea* sp.) tree on the north-eastern boundary (**Photograph 6**)



Photograph 4. Vegetated garden with scattered fruit trees to the rear of the site (u1 32 828 108).



Photograph 5. Vegetated garden and area of introduced shrubs to the west of the site (u1 828 108).



Photograph 6. Individual spruce tree on the north-eastern boundary (u1 32 828).

7.5 u1 847 Introduced shrubs

- 7.5.1 Located along the boundaries of the site were areas of introduced shrubs containing species such as: winter jasmine (*Jasminum nudiflorum*), dogwood (*Cornus sanguinea*), *Berberis* sp., lungwort (*Pulmonaria officinalis*), lilac (*Syringa vulgaris*), Pendulous sedge (*Carex pendula*), Camelia species, bramble (*Rubus fruticosus*), *Viburnum* species, *Pieris* species, *Choisya* species, ash saplings (*Fraxinus excelsior*), common ivy (*Hedera helix*), buddleia (*Buddleja davidii*), Himalayan cotoneaster (*Cotoneaster simonsii*), holly (*Ilex aquifolium*), winter heath (*Erica carnea*) and rose (*Rosa* sp.) (**Photographs 5 – 8**). Rock cotoneaster (*Cotoneaster horizontalis*) - an invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) – was located in the shrub beds on the southern boundary of the site (**Photograph 8**).



Photograph 7. Area of introduced shrub along south-eastern boundary of the site (828 847).



Photograph 8. Area of introduced shrubs along south-eastern boundary (828 847).



Figure 1. UKHab Survey Plan.

8 BUILDING INSPECTION

8.1 Overview

- 8.1.1 The findings from the external and internal inspections carried out for the detached bungalow, garage and detached outbuilding are described with photographs and annotated in a plan (see **Figure 2**), as follows:

8.2 External Survey

- 8.2.1 The detached bungalow was of brick and rendered brick construction with a hipped roof and front gable, that were covered with mostly flat, intact plain roof tiles, with the exception of a small section of slightly lifted roof tiles to the east of the chimney located on the front elevation of the bungalow (**Photographs 9 & 10; Target note 1**). However, upon close inspection with a high-powered LED torch and binoculars, the gaps beneath the lifted roof tiles were deemed to be of limited extent and therefore assigned negligible suitability. The ridge and hip mortar of the main bungalow were intact, and the lead flashing at the base of the chimney was flush to the plain roof tiles (**Photographs 10 - 12**).



Photograph 9. Intact plain roof tiles (front elevation).



Photograph 10. Slightly lifted roof tiles; lead flashing flush to the plain roof tiles (front elevation).



Photograph 11. Intact ridge mortar (south elevation).



Photograph 12. Intact hip mortar (south-eastern elevation).

- 8.2.2** The verge mortar on the front elevation gable end of the bungalow, was intact with a small amount of spray foam insulation visible on the south-eastern side of the verge (**Photographs 9 & 13**). The timber soffits and fascias were intact and tight to the rendered brickwork of the bungalow (**Photographs 13 & 14**). The front gable was covered with hanging tiles that were flat and tight to the timber soffit (**Photograph 15**).



Photograph 13. Intact verge mortar and timber fascia (front elevation).



Photograph 14. Intact timber fascia to rendered brickwork of bungalow (front elevation).



Photograph 15. Flat hanging tiled on gable end (front elevation).

- 8.2.3** The attached flat roofed garage on the south-eastern elevation of the bungalow had a corrugated metal roof that was tightly fitted to the brickwork and timber bargeboards (**Photograph 16**).



Photograph 16. Corrugated metal roof tight to brickwork and timber bargeboards of garage (rear elevation).

- 8.2.4** The detached outbuilding to the south-east of the bungalow was of rendered concrete panel construction with a corrugated asbestos pitched roof that was tightly fitted to the brickwork (**Photograph 17**). There was a small gap between the timber fascias and the rendered brickwork on the southern elevation, however the gap was closely inspected with a high-power LED torch and there was no evidence of roosting bats identified and the gap was seen to be of limited extent (**Photograph 18**).



Photograph 17. Corrugated roof tight to rendered brickwork of outbuilding (western elevation).



Photograph 18. Gap between the timber fascia and rendered brickwork of the outbuilding (front elevation).

- 8.2.5** No signs of bat presence were identified during the external inspection.

8.3 Internal Survey

- 8.3.1** There was one roof void which covered the footprint of the bungalow and was accessed through a hatch on the ground-floor. The hipped roof was of 'cut and pitch' construction with a ridge beam and rafters that were heavily cobwebbed, that can indicate a lack of recent bat activity by void-dwelling species (**Photograph 19**). The loft space had an approximate floor to ridge height of 1m with the roof lined with bituminous reinforced hessian roof felting. There was a large section of loose fitting bitumen felt on the western elevation, where the underside of the external roof tiles were visible (**Photograph 20; Target note 2**). Furthermore, there were small sections of the roof void where the bitumen felting was loosely fitted around the timber rafters (**Photograph 21**). There were three small covered water tanks that were on a raised platform to the north of the entrance hatch (**Photograph 22**).



Photograph 19. Roof void with mostly intact bitumen roof felting (roof void).



Photograph 20. Section of loose fitting bitumen felting where external roof tiles visible (roof void).



Photograph 21. Small sections of loose fitted bitumen felting (roof void).



Photograph 22. Three small covered water tanks on raised platform (roof void).

8.3.2 The floor was partially boarded centrally around the loft hatch , with a thick layer of fibreglass insulation present between the rafters and filled most of the eaves (**Photograph 23**). The rendered chimney was intact and tight to the timber rafters (**Photograph 24**). A small amount of daylight was visible around the timber rafters on the front gable end (**Photograph 25; Target note 3**). There were several inactive wasp nests and large amounts of rodent droppings scattered throughout the roof void, however there was no sign of bat activity or evidence of roosting bats observed throughout the roof void during the internal inspection (**Photograph 26**).



Photograph 23. Fibreglass between the joists and filling most of the eaves (roof void).



Photograph 24. Rendered chimney tightly fitted to timber rafters (roof void).



Photograph 25. Slight gaps over the timber rafters at the front gable end (roof void).



Photograph 26. Rodent droppings around loft hatch (roof void).

- 8.3.3** The attached garage had no roof void, with a large gap around the garage door on the southern elevation (**Photograph 27**). The detached outbuilding to the south-east of the site had no roof void and no potential roost features internally (Photograph 28).



Photograph 27. Open roofed garage with large gap around the garage door (internal view of garage).



Photograph 28. Open to the underside of the corrugated asbestos sheeting (internal view of outbuilding).

- 8.3.4** There was no sign of bat activity or evidence of roosting bats observed within the roof void, the garage or outbuilding.

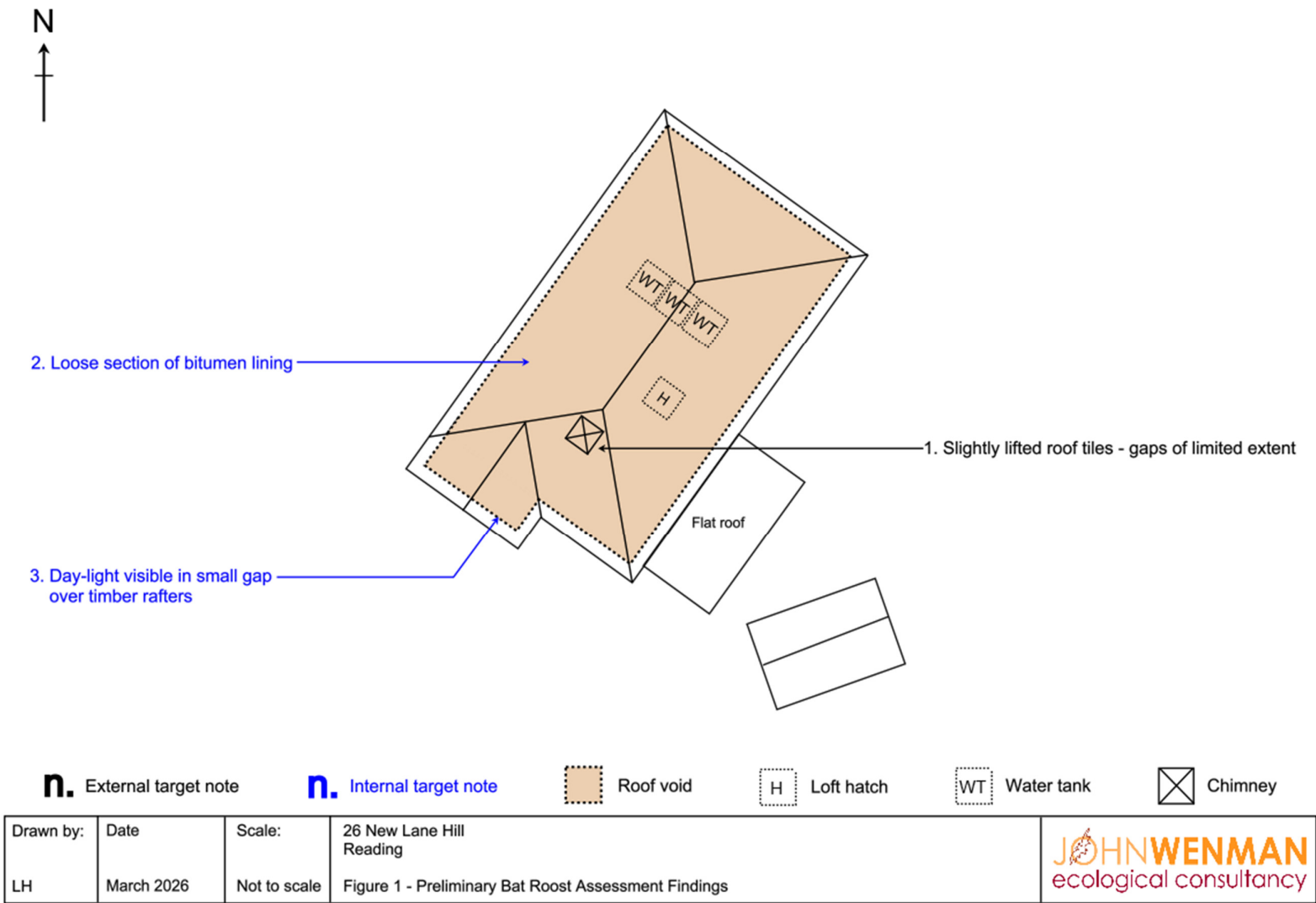


Figure 2. Building Inspection Plan.

9 DISCUSSION

9.1 Designated Sites

Evaluation of Baseline

- 9.1.1** The desk study revealed that the application site is not designated for its wildlife interest and therefore is not currently recognised as being of international, national or county level conservation significance. However, the application site falls within the Impact Risk Zone (IRZ) for Sulham and Tidmarsh Woods and Meadows SSSI, approximately 3680 metres to the north-west.
- 9.1.2** There are no internationally designated statutory sites within a 5km radius of the application site and four nationally designated statutory site within a 2km radius: the closest being Lousehill Copse LNR situated approximately 897 metres to the north east of the site.. Furthermore, four locally designated non-statutory sites were identified within a 1km radius of the application site, with the closest being Prospect College LWS situated approximately 295 metres to the north-east of the property.

Impact Assessment

- 9.1.3** The proposed development does not fall into any of the IRZ categories (i.e. infrastructure, minerals, oil and gas, air pollution, combustion, waste, compost or discharge) recognised by Natural England to have an adverse impact on the SSSI and therefore does not require consultation with Natural England. Therefore, considering the nature, scale and distance of the proposed development, no adverse impacts are anticipated on the designated sites.

9.2 Onsite Habitats

Evaluation of Baseline

- 9.2.1** The site is characterised by urban habitats – i.e. u1b5 Buildings; u1b Developed land - sealed surface; u1 828 Vegetated garden and u1 847 Introduced Shrubs – of low and very low distinctiveness with negligible ecological value. There is one medium-sized individual tree situated on the north-eastern boundary which is a medium distinctiveness habitat, but is unlikely to be ecologically significant beyond a site level of importance.
- 9.2.2** The habitats are widespread and commonly occurring throughout the UK and of negligible ecological value and of no ecological importance beyond the scale of the site.

Impact Assessment

- 9.2.1** The proposed development is subject to mandatory Biodiversity Net Gain (BNG) (see **Section 10.2**).
- 9.2.2** The proposals will not result in the direct loss of any habitats of ecological value beyond the scale of the site, and no habitats of principal importance for conservation ('Priority Habitats' as defined under Section 41 of the NERC Act 2006), with areas of hard standing, vegetated garden and introduced shrubs being the replaced with the new dwellings and associated gardens.

9.3 Bats*Evaluation of Baseline*

- 9.3.1** The roof void of the bungalow was heavily cobwebbed throughout, which suggests it is unlikely to have supported the internal flight typically exhibited by void-dwelling bat species, such as the locally recorded brown long-eared bat (*Plecotus auritus*). Moreover, in the absence of medium-sized bat droppings, those typically deposited by void-dwelling bats, it is considered highly unlikely that any void-dwelling bat species are presently roosting on site.
- 9.3.2** Externally, the bungalow and outbuilding, had few potential roost sites which were considered to provide conditions suitable for opportunistic use by small crevice-dwelling bat species, such as the locally recorded common pipistrelle (*P. pipistrellus*) and soprano pipistrelle (*P. pygmaeus*). These potential roost sites were confined to lifted roof tiles to the east of the chimney on the front elevation of the bungalow, which were proven to be of limited extent upon close inspection.
- 9.3.3** Overall, the bungalow and detached outbuilding onsite lacked potential roosting features, therefore are considered to be of negligible potential suitability for bats (see **Appendix 3** for potential suitability categories).
- 9.3.4** The vegetated garden and hard standing, that will be impacted by the proposals in isolation do not resemble high quality foraging habitat. However, the introduced shrubs along the boundaries and scattered trees in the rear and front garden offers some suitable commuting habitats linking to areas of open space in close vicinity to the site, including recreational grounds and woodland, forming part of a wider local network of habitat that is considered likely to be ecological important at the local level.

Impact Assessment

- 9.3.5** The risk of an adverse impact to bats locally is very low and the buildings and scattered tree onsite lacked any potential bat roosting features, therefore no potential bat roosting features or commuting habitats will be lost during the construction of the new dwellings.
- 9.3.6** The proposals may lead to changes in artificial lighting in the application site, that could result in an adverse impact on bat activity. Artificial lighting has been shown to alter the activity of nocturnal species and certain bat species have been found to be especially averse to lighting and actively avoid lit areas (ILP 2023). Therefore, the development should incorporate a sensitive lighting scheme to prevent impacts on bats utilising the onsite boundaries linking to nearby woodland patches and Calcot Park Golf Course as a resource for commuting and feeding - refer to recommendations in **Section 10.3**.

9.4 Amphibians (Great Crested Newt)*Evaluation of Baseline*

- 9.4.1** The desk study found no granted great crested newt (GCN) (*Triturus cristatus*) licences within a 2km radius of the application site, and there were two records of GCN that have been recorded within a 1km radius of application site within the last 10 years: the closest record being 1080 metres south-west of the site. Furthermore, the NatureSpace District Level Licensing Impact Risk Zone map for the Reading Borough Council shows the application site falls within a green zone – defined as land of moderate habitat suitability – great crested newts may be present.
- 9.4.2** There is no suitable amphibian breeding habitat on site (i.e. standing water), and only one potential breeding pond was identified on OS mapping within a 500m radius of the site, which is located within Calcot Park Golf Course approximately 460 metres to the north-west of the site. The terrestrial habitat was limited to introduced shrub beds and mown lawn, which is of limited value for GCN, so their presence on site is considered highly unlikely.

Impact Assessment

- 9.4.3** The likelihood of GCN and other notable amphibians being on site is quite low; however, simple reasonable avoidance measures should be taken to mitigate the small risk of harm to amphibians that could be present in the neighbouring habitats and opportunistically be present within the garden – refer to **Section 10.4**.

9.5 Other Mammals

Evaluation of Baseline

- 9.5.1** The desk study found no hazel dormouse (*Muscardinus avellanarius*) records or granted licences within a 1km radius of the application site. Furthermore, there is no suitable dormouse (*M. avellanarius*) habitat on or adjacent to the site, and therefore the presence of this species is not considered any further in this report.
- 9.5.2** There are 48 records of badgers within the last 10 years that have been sighted within a 1 km radius of the property, the closest record being approximately 449m to the south-east of the site. However, there are no signs of badger (*Meles meles*) presence on site and limited suitable habitat present onsite and in the vicinity. Therefore, the presence of badger on site is considered highly unlikely.
- 9.5.3** The desk study included 21 records of West European Hedgehog (*Erinaceus europaeus*) – a priority species (NERC Act 2006 Section 41 species of principle importance). The garden habitats within and in the vicinity to the application site may provide opportunities for the locally recorded European hedgehog to forage and take shelter. Therefore, it is likely that hedgehogs may occasionally utilise the site for foraging within their home range.

Impact Assessment

- 9.5.4** The absence of suitable habitat or evidence of badgers onsite suggests the risk of them being present on site is low and therefore no adverse effects are anticipated.
- 9.5.5** There is a low risk that hedgehogs could be found on site and simple precautions should be adopted during demolition and construction to avoid harming hedgehogs. Additionally, the proposed development should be designed to maintain ecological permeability for hedgehogs – refer to **Section 10.4**.

9.6 Reptiles

Evaluation of Baseline

- 9.6.1** The desk study revealed no records of reptile species –within the 1km search radius. The urban habitats onsite are of low suitability for reptiles and are highly unlikely to support an established reptile population. There is a low risk that reptiles could be present in the neighbouring habitats i.e. Calcot Park Golf Course or neighbouring gardens.

Impact Assessment

- 9.6.2** The proposed development, which will have an impact on habitats of low suitability for reptiles i.e. mown grassland and introduced shrubs onsite, so is unlikely to have any impact on reptile habitat. There is a low risk works could harm and/or kill reptiles, but these would be negligible if precautionary measures are taken during the construction – refer **Section 10.4**.

9.7 Birds

Evaluation of Baseline

- 9.7.1** The desk study data included protected and notable bird species record within the 1 km radius of the property. The garden habitat present opportunities for species, such as the house sparrow (*Passer domesticus*) and song thrush (*Turdus philomelos*) – both priority species (NERC Act 2006 Section 41 species of principal importance). The introduced shrubs around the boundaries of the site provide some foraging and nesting resources for common garden birds, however the habitat will not be vital to support significant local bird populations.

Impact Assessment

- 9.7.2** The proposals will result in the removal of scattered trees and shrubs. As such, timing precautions for the removal of any vegetation should be adhered to, to avoid damaging active bird nests - refer to **Section 10.5**.

9.8 Invasive Non-native Species

Evaluation of Baseline

- 9.8.1** A small patch of rockspray cotoneaster (*Cotoneaster horizontalis*) was identified within the introduced shrub bed located on the south-western boundary of the site. and Himalayan cotoneaster (*Cotoneaster simonsii*) was identified along the western boundary of the site. These are both invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Impact Assessment

- 9.8.2** If these species are to be removed from the site, the removal and disposal of these plants must be done appropriately to avoid the spread of invasive species; precautions during removal of the species will need to be adhered to – refer to **Section 10.2**.

10 RECOMMENDATIONS

10.1 Overview

- 10.1.1 This chapter provides the details regarding proposed avoidance, mitigation, compensation and enhancement measures; including measures to enable legislative compliance.

10.2 Onsite Habitats

- 10.2.1 The planning application is subject to a condition to secure a minimum 10% net gain for biodiversity (refer to the separate report; R3164_BNG_a). The Statutory Biodiversity Metric should be used to calculate the losses and gains in biodiversity unit value resulting from the proposals.
- 10.2.2 The removal of the invasive species i.e. rockspray cotoneaster (*Cotoneaster horizontalis*) on the south-western boundary and the Himalayan cotoneaster (*Cotoneaster simonsii*) on the western boundary of the site should be undertaken prior to any other site clearance, ensuring all remaining rhizomes are removed to prevent exasperating the spread of the plants. The plants and soil removed should be appropriately disposed of at a licensed landfill, as it will be identified as controlled waste.

10.3 Bats

- 10.3.1 During development, artificial lighting should be avoided or kept to a minimum and if security lighting is required, this should be controlled by passive infra-red motion sensors with no light spillage onto the woodland or main house.
- 10.3.2 In the long term, lighting should be avoided, but if external lighting is required, lighting with low or no UV content, e.g. warm white LED lamps (2700K), should be used in place of mercury and metal halides and luminaires or other directional light accessories should be used to ensure that light spillage onto the adjacent hedgerow habitats is avoided (ILP, 2023).

10.4 Reasonable Avoidance Measures (Amphibians, Reptiles and Small Mammals)

- 10.4.1 The following reasonable avoidance measures should be adopted to minimise the low risk of harming individual GCNs, reptiles and small mammals during the works.

Pre-commencement of construction activities

- The area of vegetated garden within the development site will be maintained as existing i.e. predominantly closely mown lawn prior to commencement of the

works to limit the likelihood of reptiles, amphibians and small mammals from being on site.

During construction activities

- Any stored building materials or waste, such as bricks or debris etc., that might offer shelter for amphibians, reptiles or hedgehogs will be kept raised off the ground on pallets or on existing hard standing, and efforts should be made to process and removed from site as soon as possible; and
- Excavation works will be avoided after dusk and any open excavations or trenches will be backfilled (after a check for amphibian/reptile presence) or left with escape ramps to prevent amphibians, reptiles and hedgehogs from becoming trapped.

10.4.2 In the unlikely event that GCN of other protected species are found during construction, works will stop immediately and a licensed ecologist will be called onto site to ensure the animal is not harmed and provide further advice on how to proceed; work will recommence only once further written advice has been received.

10.5 Nesting Birds

10.5.1 The removal of the any shrubs/trees, if necessary, should be completed outside of the peak bird nesting season (March to August) or alternatively, following an inspection by an ecologist confirming that there is no current nesting activity. If nesting birds are discovered before or during any work, work should stop immediately and should only continue once bird nesting has finished, i.e. young have fledged and left the nest

10.6 Biodiversity Enhancement Measures

10.6.1 The planning proposals provide opportunities for the enhancement of the site's biodiversity value. The inclusion of the following recommendations would be of ecological benefit and be in line with the national and local planning policy:

- Wildlife-friendly, native landscaping;
- Integrated woodcrete bat and bird boxes in the new dwellings;
- Hedgehog highway signs above 13x13cm gaps in any new fencing to connect the new gardens and allow permeability for wildlife across the site.

11 REFERENCES & BIBLIOGRAPHY

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APPENDIX 1 – LEGISLATIVE BACKGROUND

Amphibians

The seven native species of amphibian receive protection under the W&AC 1981 (as amended). The four widespread and common amphibians (common frog, toad, smooth newt and palmate newt) receive only limited protection – making their sale illegal.

The great crested newt (*Triturus cristatus*) receives full protection under the W&CA 1981 (as amended) and under the Habitat Regulations 2017. The combined legislation makes it illegal to:

- intentionally or recklessly kill, injure or take a great crested newt;
- possess or control any live or dead specimen or anything derived from a great crested newt;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- intentionally or recklessly disturb great crested newts; in particular, any disturbance which is likely to impair their ability to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating animals, to hibernate or migrate.

Great crested newts (*T. cristatus*) and common toads (*Bufo bufo*) are species of principal importance for the conservation of biodiversity in England ('UKBAP Priority Species') under Section 41 of the NERC Act 2006.

Badgers

Badgers are protected by the Protection of Badgers Act 1992. The Act makes activities such as development that would harm or disturb badgers or damage, obstruct or destroy their setts illegal. If badgers are to be affected by the proposed development, activities can be undertaken only under a licence issued by Natural England.

Bats

All bat species in Britain are fully protected by the W&CA 1981 (as amended) and by the Habitat Regulations 2019. In summary, the combined legislation makes it an offence to:

- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat;

- deliberately, intentionally or recklessly disturb bats; in particular, any disturbance which is likely to impair the ability of bats to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to significantly affect the local distribution or abundance of the species; and
- deliberately kill, injure or take any bat.

Birds

All wild birds are protected under the W&CA 1981 (as amended). The Act makes it an offence to kill, injure or take a wild bird or to damage or destroy the nest of a wild bird whilst in use or being built. Species listed on Schedule 1 of the Act, such as barn owls and kingfishers, are afforded additional protection against disturbance while nesting.

Hazel dormice

Hazel dormice receive full protection under the W&CA 1981 (as amended) and under the Habitat Regulations 2017. These make it illegal to:

- intentionally or recklessly kill, injure or take a dormouse;
- possess or control any live or dead specimen or anything derived from a dormouse;
- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a dormouse; and
- intentionally or recklessly disturb dormice; in particular, any disturbance which is likely to impair their ability to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating animals, to hibernate or migrate.

Invasive non-native plants

The W&CA 1981 (as amended) provides the primary controls on the release of non-native species into the wild in Great Britain. It is an offence under Section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. The species listed in the Act include Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*) and Himalayan balsam (*Impatiens glandulifera*).

Otters

Otters are fully protected by the W&CA 1981 (as amended) and by the Habitat

Regulations 2017. In summary, the combined legislation makes it an offence to:

- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by an otter;
- deliberately, intentionally or recklessly disturb otters; in particular, any disturbance which is likely to impair the ability of otters to survive, breed or reproduce or nurture their young; or to significantly affect the local distribution or abundance of the species; and
- deliberately kill, injure or take any bat.

Reptiles

The four widespread reptiles most likely to be encountered (adder, grass snake, slow worm and common lizard) are protected under the W&CA 1981 (as amended). The Act makes it an offence to intentionally kill, injure, possess or sell any of the species.

The aforementioned species are all listed as being of principal importance for the conservation of biodiversity in England ('UKBAP Priority Species') under Section 41 of the NERC Act 2006.

Water voles

Since April 2008, water voles have received full protection under Section 9 in Schedule 5 of the W&CA 1981 (as amended). This makes it an offence to intentionally kill, injure or take water voles or to possess or control live or dead water voles or derivatives. It is an offence to intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection or intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.

The water vole is listed as being of principal importance for the conservation of biodiversity in England ('UKBAP Priority Species') under Section 41 of the NERC Act 2006.

Wild mammals

Under the Wild Mammals (Protection) Act 1996 it is an offence to intentionally inflict unnecessary suffering, as specified by the Act, on any wild mammal.

APPENDIX 2 – PROPOSED SITE PLAN



APPENDIX 3 - POTENTIAL SUITABILITY CATEGORIES FOR ROOSTING BATS

The categories detailed in **Table 2** below are derived from the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*' (Collins 2023) and provide guidance for assessing the potential suitability of buildings (and other structures) for roosting bats. These categories are applied using professional judgement and irrespective of whether the presence of a bat roost has been confirmed during a survey, as additional bat roosts could be present which have not yet been discovered.

Table 2. Categories for potential suitability of buildings (and other structures) for roosting bats.

Potential Suitability	Category Justification
None	A building (or structure) that has no features likely to be used by any roosting bats at any time of the year (i.e. a complete absence of cracks, crevices or voids that could provide suitable shelter).
Negligible	A building (or structure) that has no obvious features likely to be used by roosting bats, but in this case a small element of uncertainty remains as bats will occasionally use small and apparently unsuitable features. This category may also be used where a bat could potentially roost due to one attribute, but it is considered unlikely due to another attribute (e.g. a feature that is subject to constant illumination from artificial lighting).
Low	A building (or structure) that has one or more potential roost sites suitable for opportunistic use by individual bats at any time of the year. However, these potential roost sites for bats do not provide sufficient space, shelter, protection, conditions and/or surrounding suitable habitat to be used regularly or by large numbers (i.e. unlikely to be suitable for a maternity colony and not a classic hibernation site).
Moderate	A building (or structure) that has one or more potential roost sites suitable for regular use by individual bats, or small non-breeding groups, due to sufficient space, shelter, protection, conditions and surrounding habitat. However, these potential roost sites for bats are unlikely to support a roost of high conservation status with regards to the type of roost only (i.e. maternity colonies and classic hibernation sites).
High	A building (or structure) that has one or more potential roost sites suitable for use by large numbers of bats more regularly and for longer periods of time due to sufficient space, shelter, protection, conditions and surrounding habitat. These potential roost sites for bats are capable of supporting high conservation status roosts (i.e. maternity colonies and classic hibernation sites).