



# **Preliminary Ecological Appraisal**

Report prepared for: Mr Danny Chivers

30 Kent End,  
Ashton Keynes,  
Swindon,  
Wiltshire  
SN6 6PU

**January 2026**

## **Cotswold Environmental Ltd**

Office Address: Wateredge, Fostons Ash, The Camp, Stroud, Gloucestershire GL6 7ER

T: [REDACTED]

E: [info@cotswoldenvironmental.co.uk](mailto:info@cotswoldenvironmental.co.uk)

W: [www.cotswoldenvironmental.co.uk](http://www.cotswoldenvironmental.co.uk)

This report has been prepared by Cotswold Environmental Ltd exclusively as a Preliminary Ecological Appraisal. Cotswold Environmental Ltd accept no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Methods used to prepare this report, including those carried out in the field followed The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

|                  |                              |
|------------------|------------------------------|
| Report Author:   | Tom Charlton MSc MCIEEM MRSB |
| Report Reviewer: | David Nixon MSc MCIEEM MRSB  |
| Document Number: | CE001666                     |

## CONTENTS

|   |                                       |    |
|---|---------------------------------------|----|
| 1 | INTRODUCTION .....                    | 4  |
| 2 | METHODOLOGY .....                     | 5  |
| 3 | RESULTS .....                         | 8  |
| 4 | DISCUSSION & RECOMMENDATIONS .....    | 15 |
|   | APPENDIX A: PLANTS RECORDED .....     | 20 |
|   | APPENDIX B: LEGISLATION SUMMARY ..... | 21 |
|   | APPENDIX C: MAPS & SITE PLANS .....   | 24 |
|   | APPENDIX D: SITE IMAGES .....         | 27 |

## TABLES

|                                                                                |    |
|--------------------------------------------------------------------------------|----|
| Table 1: Guidelines summary for assessing potential bat roost suitability..... | 6  |
| Table 2: Site Designations.....                                                | 9  |
| Table 3: Granted EPSLs within 2km of survey site.....                          | 10 |
| Table 4: Weather conditions during PEA.....                                    | 11 |
| Table 5: Indicative Plant list recorded on site.....                           | 20 |

## SITE PLANS & MAPS

|                              |    |
|------------------------------|----|
| Figure 1: Location Map ..... | 25 |
| Figure 2: Habitat Map .....  | 26 |

# 1 INTRODUCTION

- 1.1 This report provides the results of a Preliminary Ecological Appraisal undertaken on 30 Kent End, Ashton Keynes, Swindon, SN6 6PU (central Ordnance Survey (OS) Reference SU 05172 94203). Development proposals are described as the construction of a new detached residential dwelling within an existing garden.
- 1.2 The findings included in this report are based on a survey undertaken during December 2025 by Cotswold Environmental Ltd. The purpose of the survey was to undertake an appraisal of the site for its potential ecological value to notable and protected wildlife, and to look for evidence of such species. The survey results provide information to determine the likely ecological impact the proposed development will have on wildlife species, and to inform the level of further survey effort and mitigation required to comply with relevant nature conservation policies and legislation. The evaluation and findings in this report can be used by Wiltshire Council in their view of a planning application. Survey results detailed within this report should be considered valid for a period of 18 months from the survey date.
- 1.3 The site location is shown within the appendices, Figure 1, and survey boundary in Figure 2.
- 1.4 All survey and assessment work was completed in accordance with official assessment guidelines<sup>1</sup> and largely followed that recommended by the Chartered Institute for Ecology and Environmental Management (CIEEM)<sup>2</sup> and follows the British Standard Code of Practice<sup>3</sup>.

## Survey Objectives

- To determine suitability for protected species
- Ascertain evidence of protected species
- Determine potential ecological impacts the proposed development will have on protected species.
- Inform the level of further survey effort that is required.

---

<sup>1</sup> Collins J (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4<sup>th</sup> edn. Bat Conservation Trust, London.

<sup>2</sup> CIEEM (2017) Guidelines for Ecological Report Writing. CIEEM, Winchester.

<sup>3</sup> British Standards Institution (2013) BS 42020:2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.

## 2 METHODOLOGY

### Desk Study

- 2.1 A records search was undertaken using freely available desktop resources such as the Multi-Agency Geographic Information for the Countryside<sup>4</sup> (MAGIC) website. MAGIC was used to search for records of designated sites, habitats and granted European Protected Species Licences (EPSLs) within a 2km radius. Google Earth<sup>5</sup> was also used to study the nearby landscape.

### Field Survey

- 2.2 Ecological consultant Tom Charlton MSc MCIEEM MRSB (Natural England Class Level 2 Bat Survey licence, Class Level 1 Great Crested Newt Survey licence, Barn Owl Survey licence) carried out a field visit on Tuesday 16<sup>th</sup> December 2025.
- 2.3 The field visit involved a walkover using visual encounter survey techniques. The dominant vegetation structure was assessed, allowing habitats on site to be valued for their ecological importance to protected wildlife. Habitats were classified using the UK Habitat Classification Version 2.0 (UKHab V2)<sup>6</sup>, which provides a standardised framework for describing habitat types in the UK.
- 2.4 Binoculars were also used to scan for features likely to support protected species. All protected species were considered during the assessment and all wildlife species were recorded. The work was completed largely following methodologies set out by the Chartered Institute for Ecology and Environmental Management (CIEEM) and British Standard Code of Practice.

### Species

- 2.5 All protected species were considered during the survey. Only those considered likely to utilise the site are mentioned in this report.

### *Bats*

- 2.6 Survey effort was completed in line with official assessment guidelines<sup>7</sup> and largely followed that recommended by the Chartered Institute for Ecology and Environmental Management (CIEEM)<sup>8</sup> and British Standard Code of Practice<sup>9</sup>. The assessment followed the standard methodology. The site was

---

<sup>4</sup> Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2025]. Ordnance Survey 100022861. Available at: <http://www.magic.gov.uk/>

<sup>5</sup> [https://www.google.co.uk/intl/en\\_uk/earth/](https://www.google.co.uk/intl/en_uk/earth/)

<sup>6</sup> UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at: <https://ukhab.org/>

<sup>7</sup> Collins J (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4<sup>th</sup> edn. Bat Conservation Trust, London.

<sup>8</sup> CIEEM (2017) Guidelines for Ecological Report Writing. CIEEM, Winchester.

<sup>9</sup> British Standards Institution (2013) BS 42020:2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.

searched using visual encounter survey techniques. Potential bat movement corridors and movement barriers were assessed and noted. During the site visit, where possible, all suitable areas were examined for evidence of bats.

2.7 Trees deemed suitable for use by roosting bats were identified at species level, their specific features were photographed, and a GPS recording was mapped. Notable bat roosting features may include:

- Rot holes
- Woodpecker holes
- Horizontal and/or vertical cankers in the stems of branches
- Knot holes
- Scar crevices
- Loose/flaking bark
- Covering of dense ivy
- Bat boxes
- Any other features deemed suitable for roosting bats

**Table 1: Guidelines summary for assessing potential bat roost suitability**

| Suitability     | Description of building, tree or structure                                                                                                                                                                                                                                                             |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| None            | The building, tree, or structure has no features with the potential to support roosting bats and is entirely unsuitable. This includes structures that are fully sealed, modern, well-lit, and/or in exposed locations with no access points, no internal voids, and high levels of human disturbance. |
| Negligible      | The building or tree has minimal features (e.g. small gaps or cracks), but these are assessed as highly unlikely to be used by bats due to their condition, location, or lack of access to suitable internal voids.                                                                                    |
| Low             | A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, potential roost sites not suitable for larger numbers or regular use (i.e. maternity or hibernation).                                                                     |
| Moderate        | A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.                                                                                                                                                    |
| High            | A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.                                                                                                           |
| Confirmed roost | Evidence of bats or use by bats found.                                                                                                                                                                                                                                                                 |

### *Badger*

- 2.8 All habitats within the site boundary were inspected for badger *Meles meles* activity. Whilst on site, the search included evidence of:

- Scratching posts
- Faeces
- Latrines
- Guard-hairs
- Paw prints
- Trackways

### *European Hedgehog*

- 2.9 The site was assessed for its suitability to support European hedgehog *Erinaceus europaeus*, a UK Biodiversity Action Plan species and Species of Principal Importance under Section 41 of the NERC Act 2006. Features such as hedgerows, scrub, dense vegetation, log piles, and gaps under fencing were checked for signs of hedgehog activity, including droppings, tracks, or nests. Habitat connectivity with surrounding green spaces was also considered to assess the site's value for hedgehog movement.

### *Reptiles and Amphibians*

- 2.10 Habitats were assessed for their potential to support reptiles and amphibians, including great crested newt *Triturus cristatus* (GCN). Waterbodies typical of those utilised for breeding and foraging activity, and terrestrial refugia suited to sheltering and basking such as waste heaps and plastic/metal/timber sheeting were noted if present (see limitations). In addition, any dense vegetation including tall ruderal and scrub that is connected to hedgerows and linear tree features was inspected during the assessment.

### *Nesting Birds*

- 2.11 The survey also included an internal and external inspection of the surveyed buildings for evidence of common nesting birds as well as notable and protected species. Inside the buildings, artificial light was used to search for birds, dead birds, dead chicks, nesting material and eggs.
- 2.12 All accessible elements of the surveyed buildings containing nesting potential were checked to see if the development would have any adverse effects on nesting birds. The active nests of all wild birds are protected under the Wildlife & Countryside Act 1981 (as amended). An active nest is one that is being built, containing eggs or chicks, or on which fledged chicks are still dependent. Birds within Schedule 1, such as barn owl *Tyto alba*, are also protected from disturbance during the nesting period.
- 2.13 The presence of notable and protected bird species and any signs indicative of their past and present use was taken into consideration during the inspection of the buildings. Likely perches and nesting

locations were checked, and all ledges and cavities were examined for nesting debris where accessible.

#### Limitations

- 2.14 The absence of evidence for a particular species does not confirm its absence from the site. Wildlife, including protected species, can be elusive or transient, and may use habitats or structures intermittently, meaning they can go undetected during a single visit.
- 2.15 Evidence of bat activity, such as droppings or feeding remains, can degrade quickly due to weathering or be removed by wind or rain, particularly around external building features. Therefore, the absence of such signs should not be taken as confirmation that bats are not present.
- 2.16 Biological records were not obtained. Given the modest scale and scope of the proposed development and overall low value of site habitats, the lack of data from the Local Environmental Records Centre (LERC) is not considered likely to materially affect the conclusions drawn in this report.

## 3 RESULTS

### **Desk Study**

#### Designated sites

- 3.1 The site is located at the edge of the Cotswold Water Park Site of Special Scientific Interest (SSSI), and two additional statutory designated sites occur within a 2 km radius. In addition, one non-statutory designated site occurs within the same radius; these are shown in Table 2 below.
- 3.2 The site lies within the Zone of Influence of the North Meadow and Clattinger Farm Special Area of Conservation, which is located approximately 3.5 km to the west of the site and is designated for its internationally important lowland hay meadow habitat and associated species. Two Zones of Influence are defined for this SAC based on visitor catchment distances, comprising an inner zone extending up to 4.2 km from the SAC boundary and an outer zone extending from 4.2 km to 9.4 km<sup>10</sup>; the application site falls within the inner zone. Developments within these Zones of Influence may have the potential to increase recreational pressure on the SAC and therefore require consideration under the Habitats Regulations in accordance with the prevailing mitigation strategy. No other internationally designated sites are present within 10 km of the site, and no Special Areas of Conservation designated for bat populations occur within this distance.

---

<sup>10</sup> Gallagher, M; Hobson, D; Jones, R; Price, S; Squirrel, N (2023) 'North Meadow and Clattinger Farm Special Area of Conservation Interim Recreation Mitigation Strategy 2023 – 2028'. Cotswold District Council, Natural England, Swindon Borough Council, Wiltshire Council

**Table 2: Site Designations within a 2 km radius**

| Site Name             | Designation      | Distance | Direction  | Relevant Information                                                                                                                                                          |
|-----------------------|------------------|----------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cotswold Water Park   | SSSI             | 120 m    | North      | A large, man-made lake system. Known for its nationally important bird populations, rare plants and diverse wetland habitats.                                                 |
| Pike Corner           | SSSI             | 1.5 km   | South-west | A protected 15.2 h area of unimproved, traditionally grazed meadows, known for its rich biodiversity.                                                                         |
| Upper Waterhay Meadow | SSSI             | 1.7 km   | South-east | A 2.8 h site, lying on the Thames floodplain. The site is known for the snakeshead fritillary, which occurs in its less common white form.                                    |
| Great Western         | Community Forest | 500 m    | South      | One of England's pioneering community forest projects, established in 1994 around Swindon and the Thames Valley, connecting woodlands and green space across 39,000 hectares. |

SSSI = Site of Special Scientific Interest, SAC = Special Area of Conservation

#### Granted European Protected Species Licences (EPSL) and GCN survey records within a 2km radius

- 3.3 According to the Magic website, three EPS licences have been granted for bats within a 2 km radius of the site. In addition, four great crested newt (GCN) pond surveys have been conducted in the same radius. These are shown below in Table 3:

**Table 3: Granted EPSLs and GCN survey records within 2km of survey site**

| Species                 | Distance | Direction  | Year Granted |
|-------------------------|----------|------------|--------------|
| C-pip, S-pip            | 750 m    | East       | 2018         |
| C-pip, S-pip, BLE, Daub | 1 km     | East       | 2012         |
| C-pip, BLE, S-pip       | 1.5 km   | North-east | 2013         |
| GCN survey - present    | 930 m    | South-west | 2017         |
| GCN survey - present    | 1 km     | West       | 2016         |
| GCN survey - present    | 980 m    | West       | 2016         |
| GCN survey - negative   | 1.2 km   | West       | 2018         |

S.pip = *Pipistrellus pygmaeus*, Daub = *Myotis daubentonii*, BLE = *Plecotus auritus*, C-PIP = *Pipistrellus pipistrellus*, GCN = *Triturus cristatus*

### Surrounding Habitats

- 3.4 The site is situated on the outer fringes of Ashton Keynes village, within an area characterised by residential development, including domestic gardens with scattered mature trees and areas of open recreational space, located primarily to the north, south, and west. The wider landscape is strongly influenced by the Cotswold Water Park, which surrounds the site and comprises an extensive mosaic of open waterbodies, grassland, and associated habitats. Consultation of the MAGIC database indicates several small blocks of deciduous woodland are present within a 2 km radius, including an area of Traditional Orchard located approximately 940 m to the north-west. Other notable habitats in the surrounding landscape include two parcels of Good Quality Semi-Improved Grassland, the nearest of which lies approximately 1.1 km to the south, and a substantial area of Coastal and Floodplain Grazing Marsh located around 200 m to the south. No further notable habitats were identified within the study area, and no priority habitats are present on-site or within the immediate vicinity of the survey site.

### Local waterbodies

- 3.5 Consultation of the MAGIC database indicates that the site is surrounded by the Cotswold Water Park SSSI, with two recreational lakes associated within this designated site being located within a 250 m radius. The closest lake, known as Lake 69, lies approximately 130 m to the north-east.
- 3.6 A watercourse associated with the River Thames is located adjacent to the north-eastern boundary, and additionally extends through a series of residential garden plots occurring adjacent to the site. Within the survey plot, the channel is narrow, with a steep and shallow bank profile and limited marginal vegetation. The section flowing adjacent to the site is managed and largely clear of

vegetation, though beyond this the waterbody becomes densely vegetated as it continues through adjoining residential gardens.

- 3.7 Within the wider residential setting of Ashton Keynes, a network of artificial drains and minor watercourses is also present, notably to the south and east of the site, with several drains hydrologically connected to the River Thames catchment. The nearest of these drainage features is a drain located approximately 60 m to the north of the site.

## Field Survey

- 3.8 Weather conditions during the daytime assessment are shown in the below table. Temperatures were recorded onsite using an Elitech RC-51 Temperature Logger.

**Table 4: Weather conditions during Preliminary Ecological Appraisal**

| Date       | Start | Finish | Temp °C | Wind   | Cloud % | Rain | Notes |
|------------|-------|--------|---------|--------|---------|------|-------|
| 16/12/2025 | 10:30 | 11:45  | 7       | 8 km/h | 80      | Dry  | N/A   |

### Onsite Habitats

- 3.9 The survey area comprises a small, well-defined parcel of residential land associated with an existing dwelling. The site is characterised by a mosaic of developed and managed habitats typical of domestic curtilage, including timber outbuildings, hardstanding, a gravelled parking area, and a well-managed garden. The survey area is defined by post-and-wire fence forming the north-western boundary. No priority habitats are present within the survey area, and no ponds occur on-site or will be affected by the proposed works.
- 3.10 The individual habitat types recorded at the site are described under the sub-headings below, using the UK Habitat Classification (UKHab) framework, with the location and extent of each illustrated in the Habitat Map in Figure 2.

#### *u1b – Developed land, sealed surface*

- 3.11 Three small, detached timber structures are present within the application site, comprising a summer house and two sheds, all of which are located within the garden and utilised for storage. The summer house is proposed to be relocated as part of the development proposals, while the two sheds are to be removed.
- 3.12 In addition to the above timber outbuildings, three green houses are present at the north-western boundary of the garden.

#### *u1~828 - Vegetated Garden*

- 3.13 The area comprises a short-sward amenity lawn forming part of a well-managed domestic garden. The sward is regularly maintained at a height of less than 10 cm and is dominated by perennial rye grass *Lolium perenne* and Yorkshire fog *Holcus lanatus*. The grassland supports a low-diversity assemblage of common forbs typical of managed garden lawns, including common daisy *Bellis perennis*, creeping buttercup *Ranunculus repens*, rough hawkbit *Leontodon hispidus*, dandelion *Taraxacum officinale* agg., and smooth cat's-ear *Hypochaeris glabra*. Managed ornamental planting and shrubs are present throughout the garden and along boundaries, including white spruce *Picea glauca*, pampas grass *Cortaderia selloana*, guelder rose *Viburnum opulus*, and evergreen spindle *Euonymus japonicus*. Composting piles are located at the garden's north-western extent.

#### *Individual tree - Urban tree*

- 3.14 A total of seven small individual trees are present within the application boundary, comprising a mix of native and non-native species. These include a small fig *Ficus carica*, apple *Malus domestica*, pear *Pyrus communis*, two cherry trees *Prunus* sp., a tamarisk *Tamarix* sp., and a cherry laurel *Prunus laurocerasus*. All trees have a diameter at breast height of less than 30 cm. Under the current proposals, the two small fruit trees (fig and apple) are proposed for removal, with all remaining trees to be retained.

#### *Notable Flora*

- 3.15 No notable plant species were identified during the survey and no Schedule 8 or Schedule 9 plant species listed under the Wildlife and Countryside Act 1981 (as amended) were recorded on site (see limitations). It is, however, noteworthy that buddleia *Buddleja davidii* was recorded in the northern corner of the site, planted for ornamental purposes; while not listed on Schedule 9, this species is recognised as invasive and can colonise disturbed or unmanaged ground. An indicative plant species list is provided in Table 5: Plant Species Recorded Onsite. Site habitats are shown in Fig. 2: Site Map.

## **Species**

#### *Bats*

- 3.16 The three timber sheds were found to be of negligible suitability for roosting bats. All doors and access points were secure at the time of survey, with no suitable access points to the interior identified. The structures lack enclosed roof voids, and no features with potential to support roosting bats, such as raised or slipped roofing sheets, cavities, soffit boxes, or weathered fascia boards, were recorded.
- 3.17 All trees within the survey boundary were assessed from ground level for their potential to support roosting bats. The trees present are generally young to semi-mature and in good condition, and none were found to support features with potential to accommodate roosting bats. On this basis, all trees are considered to have negligible suitability for roosting bats.

- 3.18 The site supports individual trees and ornamental shrubs, which may provide a limited level of localised foraging habitat for bats. The River Thames, which forms the north-eastern boundary of the site, represents a higher-value linear feature for bat foraging and commuting within the local landscape. Additional suitable foraging and commuting habitat is also present within the wider surrounding area, including mature woodland blocks beyond the site boundary.

#### *Badger*

- 3.19 The site is predominantly composed of short, managed grassland forming part of garden, with limited foraging value for badgers and no suitability for sett building. No signs of badger activity, such as setts, latrines, snuffle holes, or tracks, were observed within the site or its immediate surroundings during the field survey.

#### *European Hedgehog*

- 3.20 The managed grassland across the site is of low suitability for European hedgehog, offering limited foraging and sheltering opportunities. Nonetheless, marginal features including introduced shrubs forming part of the vegetated garden may provide limited opportunities for commuting, sheltering, or foraging. A hedgehog shelter is additionally located at the north-western boundary, below a laurel shrub.
- 3.21 No tracks, droppings, or other field signs indicating hedgehog presence were identified during the assessment.

#### *Otter and Water Vole*

- 3.22 A watercourse is present immediately beyond the rear boundary of the garden and was considered as part of the site walkover for its potential to support otter and water vole. The channel was identified as forming part of the River Thames catchment and continues through a series of residential gardens to the north and south-west of the site, resulting in a modified and discontinuous riparian corridor. Beyond the extent of the surveyed garden plot, the waterbody was densely vegetated as it continued through adjacent residential gardens.
- 3.23 No evidence of otter was recorded within the accessible sections adjacent to the site. Specifically, no spraints, footprints, feeding remains, slides, holts or couches were identified along the banks. The channel within the survey plot is narrow with a shallow, steep bank profile and limited features suitable for resting or shelter within the visible sections.
- 3.24 No evidence of water vole was recorded. Within the surveyed garden plot, marginal and bankside vegetation is sparse and limited in extent, with managed garden vegetation extending to the bank top. The bank profile offers limited opportunity for burrow excavation. No burrows, latrines, feeding remains or footprints attributable to water vole were observed within the accessible sections adjacent to the site.

### *Nesting Birds*

- 3.25 Several small timber bird nest boxes are installed within the garden, including on garden sheds and within trees. Beyond these features, the garden is well maintained and characterised by managed vegetation, offering few opportunities for nesting birds. No active nests or evidence of nesting activity were identified at the time of survey.

### *Reptiles and Amphibians*

- 3.26 No ponds or other standing waterbodies are present within the survey area, and no aquatic habitats within the application site will be directly affected by the proposed works. Therefore, no suitable breeding habitat for great crested newt *Triturus cristatus* is present within the application site.
- 3.27 Two lakes associated with the Cotswold Water Park are located within 250 m of the site, with the closest occurring approximately 130 m to the north-east; however, these are off-site features and comprise large, managed recreational waterbodies. As such, they are not considered to represent optimal breeding habitat for amphibians, nor do they provide effective breeding or dispersal habitat linking into the application site beyond common and widespread species.
- 3.28 A watercourse forming part of the River Thames catchment is present immediately adjacent to the north-eastern boundary of the site and forms part of the wider hydrological context of the area. At the time of survey, flow within this channel was slow; however, the watercourse is managed and largely clear of aquatic and marginal vegetation within the section adjacent to the site, with a narrow channel and limited in-channel structure. On this basis, the adjacent watercourse is not considered suitable to support breeding great crested newts due to its flowing nature, limited aquatic vegetation, and managed condition.
- 3.29 Further to the above, while grass snake *Natrix helvetica* may utilise aquatic features within the wider landscape for foraging, commuting and refuge, the highly managed nature of the application site, together with limited habitat connectivity, restricts the likelihood of regular use of the site by this species.
- 3.30 Onsite terrestrial habitats are characteristic of domestic curtilage and comprise a well-managed amenity lawn maintained at a short sward height. Regular management results in very limited structural diversity at ground level. Only small-scale features, such as boundary shrubs and the bases of timber outbuildings, provide limited potential to support low numbers of common reptile or amphibian species. The composting piles are isolated by surrounding short-mown grassland and are contained within brick structures, further limiting their suitability as refugia due to restricted access. Furthermore, they lie beyond the zone of impact and are to be retained.

## 4 DISCUSSION & RECOMMENDATIONS

### Habitats

- 4.1 The application site comprises a small, well-managed residential garden located on the edge of Ashton Keynes, supporting habitats typical of domestic curtilage and of low ecological value, dominated by short-sward amenity grassland and limited ornamental planting. No Priority Habitats are present within the application boundary, and no ponds or other standing waterbodies occur on site. Notwithstanding this, a Priority Habitat comprising a channel waterbody associated with the River Thames occurs immediately adjacent to the site's north-eastern boundary. While no direct impacts to this feature are proposed, its proximity to the development means that appropriate pollution prevention and site management measures will be required during construction. Accordingly, a Construction Environmental Management Plan (CEMP) should be prepared and implemented to ensure the adjacent watercourse is suitably protected, including measures to control surface water runoff, prevent contamination, and clearly define working areas.
- 4.2 Statutory designated sites, including the Cotswold Water Park Site of Special Scientific Interest, are present within the wider landscape. The application site lies within the Zone of Influence of the North Meadow and Clattinger Farm Special Area of Conservation, as defined within the North Meadow and Clattinger Farm Interim Recreation Mitigation Strategy (2023-2028). Residential development within this Zone has the potential to increase recreational pressure on the SAC and therefore requires consideration under the Conservation of Habitats and Species Regulations 2017 (as amended).
- 4.3 The proposal comprises a single self-build residential dwelling located within an established residential area on the edge of Ashton Keynes. The site supports habitats of low ecological value typical of domestic curtilage and does not form part of, or contribute functionally to, the qualifying features or ecological integrity of the SAC. There is no direct ecological connectivity between the application site and the SAC, and the development will not result in the loss or degradation of habitats relevant to the SAC's conservation objectives.
- 4.4 Having regard to the small scale and nature of the proposal, its location within an existing settlement, and the absence of any functional linkage between the application site and the qualifying features of the SAC, it is considered that the development is unlikely to result in a likely significant effect on the SAC, either alone or in combination with other plans and projects.
- 4.5 On this basis, it is anticipated that the proposal can be screened as having no likely significant effect under the Habitats Regulations, subject to confirmation by the competent authority. Any requirement for mitigation or financial contribution will be determined by the Local Planning Authority in accordance with the prevailing mitigation strategy.

- 4.6 Regarding site level, habitats present are considered to be of low ecological importance and are likely to support only low numbers of common and adaptable species typical of managed garden environments. While individual trees, shrubs, and boundary vegetation provide some localised ecological value, particularly in terms of structural diversity and limited foraging opportunities, these features do not represent habitats of conservation concern. The loss of two small fruit trees is not anticipated to result in significant effects on local biodiversity or ecological connectivity, given the availability of more extensive and higher-quality habitat in the surrounding landscape.

## Species

### Bats

- 4.7 EPSLs have been granted for four nationally common bat species within the surrounding environment, indicating the wider habitats have suitability to support roosting, foraging and commuting activity for bats of various species. However, the site itself is considered to be of negligible suitability for roosting bats, with all outbuildings buildings and trees lacking features capable of supporting bat roosts. As such, no impacts to roosting bats are anticipated as a result of the proposals, and no further bat survey work is required.
- 4.8 The site offers only a limited level of foraging value for bats, with higher-value foraging and commuting habitat present immediately adjacent to the site along the River Thames and within the wider landscape. Subject to the implementation of sensitive external lighting design to avoid light spill onto boundary vegetation and the adjacent watercourse, the development is not expected to result in adverse effects on bats, such as loss or fragmentation of commuting or foraging habitats.
- 4.9 Notwithstanding the above, all contractors must remain vigilant during works. In the unlikely event that a bat is discovered, all works in the immediate area should cease immediately and the appointed ecologist contacted for further advice. Works must not lawfully continue until appropriate guidance has been provided, and bats must not be handled under any circumstances. Should bats be identified, consultation with Natural England would be required, and further surveys and mitigation may be necessary. It is likely that a European Protected Species Licence (EPSL) would be required prior to works recommencing.
- 4.10 To minimise potential impacts on foraging and commuting bats, it is recommended that any new external lighting be designed in accordance with best practice guidance, to prevent excessive light spill onto boundary vegetation and adjacent habitat features:

### *Nocturnal lighting measures*

- 4.11 The insensitive use of external lighting within the proposed development could have a negative impact upon bats using the site for foraging and commuting activity.

4.12 As suitable bat habitat occurs within the nearby surrounding environment, low-level lighting measures should be implemented to avoid indirect disturbance to bats and other nocturnal animal species that may exploit local habitats. Measures must be taken to ensure nocturnal animals are safeguarded from inappropriate use of light and noise throughout the hours of night during the construction period, as well as to protect important commuting corridors for bats. Any external lighting installed as part of the development must be used in accordance with Guidance Note 08/23: Bats and Artificial Lighting<sup>11</sup>.

4.13 Sensitive lighting strategy measures during the construction period are as follows:

- Works must not be carried out after dusk and must not commence until after dawn.
- Generators and machinery that emit significant noise levels must not be left to run after dusk.
- LED lighting sources must be used, which generally have a narrower and more directional beam.
- Light spill must be controlled and if lighting is required at night, hooded shields must be fitted to prevent spill onto nearby habitats that are likely to support wildlife, including nearby trees and hedgerows.
- Lighting must not be directed towards any bat or bird compensation features.

4.14 In addition to the above, when selecting appropriate external lighting, the following specifications should be taken into consideration:

- Any external lighting incorporated into the proposed development should be LED luminaires due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats<sup>12</sup>.
- All luminaires should lack UV elements when manufactured. Metal halide and fluorescent sources should not be used<sup>13</sup>

#### Badger

4.15 The application site is of low suitability for badger, comprising predominantly managed garden habitats with limited foraging value and no potential for sett construction. No evidence of badger activity was recorded during the survey. On this basis, no direct or indirect impacts to badgers are anticipated, and no further survey work is required.

#### European Hedgehog

4.16 The application site is of low suitability for European hedgehog due to the predominance of short-mown amenity grassland and the limited extent of suitable sheltering and foraging habitat. Although

---

<sup>11</sup> <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

<sup>12</sup> Stone, E.L. (2013) *Bats and lighting: Overview of current evidence and mitigation*

<sup>13</sup> Bat Conservation Trust & Institute of Lighting Professionals (ILP) 2023. *Guidance Note 08/23: Bats and artificial lighting in the UK. Bats and the Built Environment Series.*

introduced shrubs provide some marginal habitat value, these features are small in scale and isolated within an otherwise intensively managed garden environment.

- 4.17 A hedgehog shelter is present at the north-western boundary of the site, located beneath a laurel shrub. While no field signs of hedgehog activity were recorded during the survey, the presence of this feature indicates a low potential for occasional use by individual hedgehogs on a transient basis. The proposed development is not anticipated to directly impact this shelter.

#### Otter and Water Vole

- 4.18 A watercourse associated with the River Thames lies immediately beyond the north-eastern boundary of the site and was assessed for its potential to support otter and water vole. Within the surveyed garden plot, the channel is narrow, constrained, and heavily modified, with sparse marginal vegetation and limited suitability for resting, sheltering, or burrow excavation.
- 4.19 No evidence of otter or water vole was recorded within accessible sections adjacent to the site, and the habitats present within the application boundary do not provide suitable terrestrial habitat for either species. Given the modified nature of the watercourse within the survey extent and the absence of field evidence, the proposed development is not anticipated to result in direct or indirect impacts to otter or water vole.
- 4.20 No further specific survey work in relation to these species is considered necessary. However, to ensure the adjacent watercourse is suitably protected during construction, a Construction CEMP should be prepared and implemented. This should include appropriate pollution prevention measures, controls on surface water runoff, and clear demarcation of working areas to prevent accidental encroachment or contamination of the watercourse.

#### Nesting Birds

- 4.21 Vegetation within the site, including shrubs and small trees, provides limited opportunities for nesting by common bird species. In addition, several small timber bird nest boxes are installed within the garden, including on garden sheds and within trees, which provide supplementary nesting opportunities for common, adaptable species associated with residential environments. No active nests or evidence of nesting activity were recorded at the time of survey.
- 4.22 The proposed development is not anticipated to result in significant adverse effects on nesting birds. Where practicable, vegetation clearance and removal of structures supporting bird boxes should be undertaken outside the main bird nesting season (February to August inclusive). Where this cannot be achieved, a pre-works nesting bird check must be undertaken by a suitably qualified ecologist. If an active nest is identified at any time, works in the vicinity will cease and appropriate protection measures implemented until the nest is no longer in use.

#### Reptiles and Amphibians

- 4.23 The application site is of low suitability for reptiles and amphibians, comprising predominantly intensively managed domestic garden habitats with very limited structural diversity. No ponds or other standing waterbodies are present within the site, and therefore no suitable breeding habitat for great crested newt, as well as other, common species is present within the application boundary.
- 4.24 A watercourse forming part of the River Thames catchment lies immediately adjacent to the north-eastern boundary of the site and was assessed for its potential to support amphibians. Within the surveyed extent adjacent to the site, the channel is managed, flowing, and largely clear of aquatic and marginal vegetation, with limited in-channel structure. On this basis, the watercourse is considered unlikely to support breeding amphibians, and notably no impacts to this watercourse are anticipated providing that pollution prevention measures, to be details in a robust CEMP, are adhered to.
- 4.25 Two lakes associated with the Cotswold Water Park are located within 250 m of the site and form part of the wider aquatic landscape. While these waterbodies may have the potential to support amphibians, they are large, managed recreational features and are physically separated from the application site by residential development and managed habitats. As such, they are not considered to provide effective breeding or dispersal linkage to the application site.
- 4.26 Terrestrial habitats within the application boundary are intensively managed and structurally simple, offering only limited suitability for reptiles or amphibians. While common and widespread species may occasionally utilise the site on a transient basis, the absence of suitable refugia and the highly managed nature of the habitats restrict the likelihood of regular or sustained use. On this basis, the proposed development is not anticipated to result in significant adverse effects on reptiles or amphibians, and no further specific survey work in relation to these species is considered necessary.

## **Biodiversity Enhancement**

- 4.27 As a self-build application, the scheme is exempt from mandatory Biodiversity Net Gain. However, the NPPF (2024) outlines obligations of Local Planning Authorities to promote Biodiversity Net Gain where possible.

### Bats

- 4.28 An option to increase biodiversity relating to bats on site would be to incorporate integrated bat roosting features within the fabric of the proposed new dwelling. One or more integrated bat tubes or bat bricks (such as Ibstock Enclosed Bat Boxes, Schwegler 2FR bat tubes, or similar) will be installed within external walls of the new dwelling. For correct installation, the following requirements apply:
- Integrated bat features must be positioned at a minimum height of 4 m above ground level.
  - Integrated bat features must not face a northerly direction.
  - A clear and unobstructed flight path to the roost entrance must be maintained at all times.
  - Integrated bat features must be installed away from areas subject to artificial lighting.

### Nesting Birds

4.29 Ways to enhance the site value with regards to bird nesting would be to incorporate integrated bird nesting features within the proposed new dwelling. At least one integrated swift brick will be installed following the below requirements:

- Swift bricks must be positioned at a minimum height of 5 m above ground level.
- They will be installed away from areas of frequent disturbance, such as above doorways.
- The placement of swift bricks must allow for a clear and unobstructed flight path to the entrance.
- Swift bricks must not be installed on elevations subject to artificial lighting.
- Avoid installation in a south-westerly facing direction in order to offer protection from prevailing winds and rain.

## APPENDIX A: PLANTS RECORDED<sup>14</sup>

Table 5: Indicative plant list recorded on site

| Scientific Name                | Common Name            | DAFOR* |
|--------------------------------|------------------------|--------|
| <b><i>Vegetated Garden</i></b> |                        |        |
| <i>Lolium perenne</i>          | Perennial ryegrass     | D      |
| <i>Holcus lanatus</i>          | Yorkshire fog          | O      |
| <i>Hypochaeris glabra</i>      | Smooth cat's-ear       | O      |
| <i>Plantago lanceolata</i>     | Ribwort plantain       | O      |
| <i>Taraxacum sp.</i>           | Dandelion              | F      |
| <i>Ranunculus repens</i>       | Creeping buttercup     | F      |
| <i>Bellis perennis</i>         | Common daisy           | F      |
| <i>Trifolium repens</i>        | White clover           | F      |
| <i>Leontodon hispidus</i>      | Rough hawkbit          | R      |
| <i>Geranium molle</i>          | Dove's-foot cranesbill | O      |
| <i>Picea glauca</i>            | White spruce           | R      |
| <i>Cortaderia selloana</i>     | Pampas grass           | R      |
| <i>Viburnum opulus</i>         | Guelder rose           | R      |
| <i>Euonymus japonicus</i>      | Evergreen spindle      | R      |
| <i>Buddleja davidii</i>        | Buddleia               | R      |
| <i>Ficus carica</i>            | Fig                    | n/a    |
| <i>Malus domestica</i>         | Apple                  | n/a    |

<sup>14</sup> Plant names according to Rose F, O'Reilly C (2006) The Wild Flower Key, Revised Edition. Penguin Books, London.

|                            |               |     |
|----------------------------|---------------|-----|
| <i>Pyrus communis</i>      | Pear          | n/a |
| <i>Prunus avium</i>        | Cherry        | n/a |
| <i>Tamarix sp</i>          | Tamarisk      | n/a |
| <i>Prunus laurocerasus</i> | Cherry Laurel | n/a |

\*D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

## APPENDIX B: LEGISLATION SUMMARY

### Habitats Directive

Species listed in the Habitats Directive 1992 (transposed into UK law through the Conservation of Habitats and Species Regulations 2010 and subsequently 2017 as amended) for which it is illegal to deliberately capture, kill or disturb any individual, or deliberately damage or destroy a breeding site or resting site. In 2007 and 2009, the Habitats Regulations were amended to define illegal disturbance as that which would affect the ability of a significant group of animals of a European Protected Species to survive, breed or to rear or nurture their young, or to hibernate or migrate, or to affect the local distribution or abundance of the species.

### Natural Environment and Rural Communities (NERC) Act 2006

The act to makes provision about bodies concerned with the natural environment and rural communities; to make provision in connection with wildlife, Sites of Special Scientific Interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes.

### Countryside and Rights of Way (CRoW) Act 2000

The CRoW applies to England and Wales only, enforcing a statutory policy for biodiversity conservation. The UK Biodiversity Action Plan (BAP) provides the framework for fulfilling the UK's responsibilities towards the Convention on Biological Diversity. The CRoW Act is compliant with the provisions of the European Convention on Human Rights, requiring consultation where the rights of the individual may be affected by these measures.

### The Conservation of Habitats & Species Regulations 2017 (the Habitat Regulations) (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations came into force on 30th November

2017 and extend to England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters). In Scotland, the Habitats Directive is transposed through a combination of the Habitats Regulations 2010 (in relation to reserved matters) and the and the Conservation (Natural Habitats &c.) Regulations 1994. The Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) transpose the Habitats Directive in relation to Northern Ireland.

### **Bats**

In England and Wales, bats and their roosts are protected under the Conservation of Species and Habitats Regulations 2017 (as amended) and the Wildlife & Countryside Act 1981 (as amended). Taken together, this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not
- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being 'any structure or place that is used for shelter or protection' and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

### **Reptiles**

All native British species of reptile (of which there are six) are listed in Schedule Five of the Wildlife and Countryside Act (1981) (as amended) and as such are protected from deliberate killing, injury or trade. Therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without an appropriate licence.

### **Great Crested Newts**

Great crested newts and their habitats receive protection under The Conservation of Habitats and Species Regulations 2017 (as amended). This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under such legislation it is an offence to:

- Intentionally or recklessly kill, injure or capture 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 a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

\*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.

### **Badger**

Badger is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6 of the Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to Badgers and Badger setts and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

### **Birds**

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

## APPENDIX C: MAPS & SITE PLANS

Page left intentionally blank



Figure 1: Location Map



Figure 2: Habitat Map

## APPENDIX D: SITE IMAGES



**Photo 1: A general view of garden habitats, and two individual trees designated for removal.**



**Photo 2: Individual trees to be retained.**



**Photo 3: Short-managed amenity lawn dominating the plot.**



**Photo 4: Timber outbuildings**



**Photo 5: Buddleia shrub at northern corner of plot.**



**Photo 6: Greenhouses located at north-eastern extent.**



**Photo 7: Ornamental shrubs at south-western extent of garden.**



**Photo 8: Waterbody located adjacent to north-eastern boundary of garden.**



**Photo 9: Densely vegetated section of waterbody occurring adjacent to the survey site.**