



# Preliminary Ecological Appraisal

---

Land at Birchwood Gardens, Hedge  
End

Ecosupport Ltd  
K4 Keppel,  
Daedalus Park,  
Lee-on-the-Solent  
PO13 9FX

[info@ecosupport.co.uk](mailto:info@ecosupport.co.uk)

VAT: 228 4314 18



|                      |                                              |
|----------------------|----------------------------------------------|
| Report               | Preliminary Ecological Appraisal             |
| Site Name            | Land at Birchwood Gardens, Hedge End         |
| Author(s)            | Dean Swensson & Laura Hardy BSc (Hons) AMRSB |
| Checked for Issue by | Darrelle Moffat BES (Hons) PGCert ACIEEM     |
| Client               | Home House Living Limited                    |
| Date of Issue        | 22 <sup>nd</sup> December 2025               |
| Status               | Final                                        |

## Table of Contents

|                                                                                                    |           |
|----------------------------------------------------------------------------------------------------|-----------|
| <b>EXECUTIVE SUMMARY .....</b>                                                                     | <b>4</b>  |
| <b>1.0 INTRODUCTION .....</b>                                                                      | <b>5</b>  |
| 1.1 BRIEF .....                                                                                    | 5         |
| 1.2 SITE DESCRIPTION & LOCATION .....                                                              | 5         |
| 1.3 PROPOSED DEVELOPMENT.....                                                                      | 6         |
| <b>2.0 RELEVANT LEGISLATION AND POLICY .....</b>                                                   | <b>7</b>  |
| 2.1 LEGISLATION .....                                                                              | 7         |
| 2.1.1 <i>The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019</i> ..... | 7         |
| 2.1.2 <i>The Wildlife and Countryside Act (1981) (as amended)</i> .....                            | 7         |
| 2.1.3 <i>The Countryside and Rights of Way Act (2000)</i> .....                                    | 7         |
| 2.1.4 <i>Natural Environment and Rural Communities Act (2006)</i> .....                            | 8         |
| 2.1.5 <i>Protection of Badgers Act</i> .....                                                       | 8         |
| 2.1.6 <i>The Environment Act (2021)</i> .....                                                      | 8         |
| 2.2 POLICY .....                                                                                   | 9         |
| 2.2.1 <i>National Planning Policy Framework (NPPF)</i> .....                                       | 9         |
| 2.2.2 <i>Local: Eastleigh Borough Council</i> .....                                                | 10        |
| <b>3.0 METHODOLOGY .....</b>                                                                       | <b>13</b> |
| 3.1 FIELD SURVEY .....                                                                             | 13        |
| 3.1.1 <i>Habitats</i> .....                                                                        | 13        |
| 3.1.2 <i>Bats</i> .....                                                                            | 13        |
| 3.1.2.1 Preliminary tree roost assessment.....                                                     | 13        |
| 3.1.3 <i>Badger</i> .....                                                                          | 13        |
| 3.1.4 <i>Reptiles</i> .....                                                                        | 14        |
| 3.2 DESKTOP STUDY.....                                                                             | 14        |
| 3.2.1 <i>Data request</i> .....                                                                    | 14        |
| 3.2.2 <i>Waterbodies</i> .....                                                                     | 14        |
| 3.3 ASSESSMENT METHODOLOGY.....                                                                    | 14        |
| 3.4 LIMITATIONS .....                                                                              | 14        |
| <b>4.0 ECOLOGICAL BASELINE .....</b>                                                               | <b>15</b> |
| 4.1 WATERBODIES.....                                                                               | 15        |
| 4.2 HABITATS .....                                                                                 | 15        |
| 4.3 BATS.....                                                                                      | 16        |
| 4.4 REPTILES.....                                                                                  | 17        |
| 4.5 NESTING BIRDS.....                                                                             | 17        |
| 4.6 BADGERS .....                                                                                  | 17        |
| <b>5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION .....</b>                                | <b>18</b> |
| 5.1 INTRODUCTION.....                                                                              | 18        |
| 5.2 SITE PREPARATION AND CONSTRUCTION .....                                                        | 18        |
| 5.2.1 <i>Impacts to habitats</i> .....                                                             | 18        |
| 5.2.2 <i>Impacts to wildlife</i> .....                                                             | 18        |
| 5.3 SITE OPERATION .....                                                                           | 18        |

|                                                |           |
|------------------------------------------------|-----------|
| <b>6.0 MITIGATION &amp; COMPENSATION .....</b> | <b>19</b> |
| 6.1 INTRODUCTION .....                         | 19        |
| 6.2 SPECIES FEATURES .....                     | 19        |
| 6.3 HEDGEHOGS .....                            | 19        |
| 6.4 BIODIVERSITY NET GAIN .....                | 19        |
| <b>7.0 REFERENCES .....</b>                    | <b>20</b> |

## **Executive Summary**

Ecosupport Ltd was instructed by Home House Living Ltd to carry out a Preliminary Ecological Appraisal (PEA) of land at Birchwood Gardens, Hedge End to identify any potentially important ecological features that may be affected by the proposed development. As part of this assessment, the following surveys were undertaken:

- Desktop survey inclusive of MAGIC and Google Aerial Photography
- Extended phase I habitat survey (March 2022)
- Update preliminary ecological appraisal (August 2025)

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Mature Oak tree
- Potential for Hedgehogs

### **Mature tree**

It is understood that the singular tree will be retained. The tree was surveyed from the ground for potential bat features.

### **Hedgehogs**

Although no signs of hedgehog were identified during the survey, all urban gardens that allow access provide some present and future foraging and sheltering resources for this species.

### **Ecological Enhancement & Biodiversity Gain**

The planning application will include one Swift brick and one bat brick to be integrated into the building (if this is not possible with the construction schedule alternative boxes will be recommended to be installed on the retained mature trees). In addition, the development will include hedgehog fence gaps to allow free movement of this species into the garden area of the new housing plot. A Biodiversity net gain (BNG) assessment will be completed for this development to ensure a net gain for habitats is obtained.

## 1.0 INTRODUCTION

### 1.1 Brief

Ecosupport Ltd was commissioned by Home House Living Ltd to conduct a Preliminary Ecological Appraisal (PEA) of a plot of land at Birchwood Gardens, Hedge End. The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed development. The objectives of the survey were as follows:

- Assess the ecological value of the site
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as appropriate.
- Make recommendations for site ecological enhancements as per planning policy.

NB If the development does not take place within 18 months of this report then the findings of this survey will no longer be considered valid and should be repeated <sup>1</sup>.

### 1.2 Site Description & Location

The site comprises of an isolated piece of land at Birchwood Gardens which includes one mature Oak tree (*Quercus robur*), a managed lawn area, and a private garden. The site is demarcated by wooden fencing. The site is located off Birchwood Gardens, Hedge End (OS grid reference SU 445446). The site is bounded by residential housing and associated road network neighbouring formal gardens. See **Image 1**.

---

<sup>1</sup> <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

**Image 1.** Location of Land at Birchwood Gardens.



### 1.3 Proposed Development

It is understood the proposals will entail the construction of a single detached housing plot.

## 2.0 RELEVANT LEGISLATION AND POLICY

### 2.1 Legislation

#### 2.1.1 *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*

The Conservation of Habitats and Species Regulations 2017 transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

The Conservation of Habitats and Species Regulations 2019 (EU Exit) makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

#### 2.1.2 *The Wildlife and Countryside Act (1981) (as amended)*

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 part II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrots Feather (*Myriophyllum aquaticum*).

#### 2.1.3 *The Countryside and Rights of Way Act (2000)*

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

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

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework*.

#### 2.1.5 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a sett and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

#### 2.1.6 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

## 2.2 Policy

### 2.2.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) (2024) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and minimising impacts on and providing net gains for biodiversity including by incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and land should be allocated with the least environmental or amenity value and take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure for the enhancement of natural capital at a catchment or landscape scale.

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

The NPPF states 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 SSSI, 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 SSSIs;
- 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;

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.

Potential SPAs and possible SACs, listed or proposed Ramsar sites and sites required as compensatory measures for the previous should be given the same protection as habitats sites.

#### **2.2.2 Local: Eastleigh Borough Council**

The Eastleigh Borough Local Plan 2016 – 2036 has a number of policies relating to ecology with the relevant ones listed below;

##### ***'General Approach***

*1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:*

*a. protect, conserve and enhance all:*

*i. international, national and local nature conservation designations;*

*and*

*ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character; and facilitate their adaptation to climate change wherever possible;*

*b. assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);*

*c. seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and*

*d. contribute to major elements of the PfsH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).*

##### ***International Designations***

*2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant effects or*

*uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.*

*3. The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:*

*a. implementing:*

*i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and*

*ii. the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;*

*b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;*

*c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and*

*d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.*

#### **National and Local Designations**

*4. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:*

*a. there are no alternative solutions;*

*b. the adverse effects are unavoidable;*

*c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*

*d. there is an overall biodiversity net gain; and*

*e. if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.*

#### **Priority habitats, protected and priority species and the local ecological network**

*5. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority*

*habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:*

- a. there are no alternative solutions;*
- b. the adverse effects are unavoidable;*
- c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
- d. there is an overall biodiversity net gain; and*
- e. if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.*

#### ***Irreplaceable habitats***

*6. Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.*

#### ***Buffers***

*7. Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.*

#### ***Surveys***

*8. Development will not be permitted unless it can be demonstrated that:*

- a. there have been thorough habitat and species surveys;*
- b. the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and*
- c. the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.'*

## 3.0 METHODOLOGY

### 3.1 Field Survey

#### 3.1.1 Habitats

The field survey which forms the basis of the findings of the following sections of this report was carried out by Dean Swensson of Ecosupport (20 years professional ecological consultancy experience, Natural England bat and GCN survey licence holder) on the 25th March 2022. An update preliminary ecological appraisal was carried out by Laura Hardy on the 29th August 2025.

The Phase 1 Habitat survey (JNCC, 2010) methodology was adopted which is a method of classifying and mapping wildlife habitats in Great Britain. It was originally intended to provide “...*relatively rapidly, a record of semi-natural vegetation and wildlife habitat over large areas of the countryside*”. The standard Phase I Habitat survey methodology has been ‘extended’ in this report to include the following:

- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition;
- Identification of Priority Habitats under Section 41 of the NERC Act;
- Evidence of, or potential for, the presence of certain species/groups

During the updated walkover, habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Statutory Biodiversity Metric calculation. Where appropriate primary habitat codes were used although for some habitat types, the use of secondary habitat codes was necessary as well.

#### 3.1.2 Bats

##### 3.1.2.1 Preliminary tree roost assessment

An assessment was made of the suitability of trees on site to provide potential bat roosting features. This was carried out from the ground using 8x42 Swarovski binoculars and a torch where necessary. Features may include fissures, cracks, woodpecker holes and damaged limbs. This followed BCT (Collins (ed) 2023) best practice survey guidelines searching for any PRFs / evidence of bat occupation.

#### 3.1.3 Badger

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site’s boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

#### **3.1.4 Reptiles**

The site was assessed for the presence of habitats suitable for reptiles. Areas used by reptiles may include mixed structured grassland along with scrub or potentially areas of matted and differing low vegetation. Furthermore, a general observational search was carried out to detect basking reptiles.

### **3.2 Desktop Study**

#### **3.2.1 Data request**

Given the size of the site and the limited habitats and ecological features present, a data request has not been requested by Hampshire Biodiversity Information Centre (HBIC).

#### **3.2.2 Waterbodies**

Any ponds located within 250 m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

### **3.3 Assessment Methodology**

The methodology for the assessment of the likely ecological effects of the proposed development is based on IEEM's Guidelines for Ecological Assessment in the UK (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the CIEEM guidelines provide a useful framework for assessing ecological impacts at any level. Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, National and local biodiversity policy and cultural and/or social significance.

### **3.4 Limitations**

There were not considered to be any limitations on the survey findings.

## 4.0 ECOLOGICAL BASELINE

### 4.1 Waterbodies

Due to the limited extent of the site, isolation from structured natural and semi natural habitats and the urbanised location of Birchwood Gardens a reduced circumference search was carried out for any freshwater water bodies. Water bodies such as suitable ponds or ditches were searched for using Ordnance Survey mapping and online resources. No water bodies were identified that were considered suitable for amphibian presence or likely necessitated further survey.

### 4.2 Habitats

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2010). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise of:

- Modified grassland (g4) with bare ground (510)
- Artificial unvegetated; unsealed surface (u1c)
- Built area and gardens (u1) – vegetated garden (828) and buildings (u1b5)

The dominant habitat on site is modified grassland lawn, which is patchy and degraded in part with bare ground (secondary code 510) present. There is a mature Oak (*Quercus robur*) present within the site. It was noted that where vegetation was present the lawn supported very few common herbs, ribwort plantain (*Plantago lanceolata*) and black medick (*Medicago lupulina*) being dominant in the sparsely vegetated areas. It was noted that there was no depth of structure to the grassland. See **Image 1**.

**Image 1.** Sparsely vegetated lawn and bare ground.



One section of the site was being used as a private vegetated garden (828). In this area there was a small section of gravel in a corner and two small sheds with a small section of paving slab. See **Image 2**.

**Image 2.** Gravel corner (left), sheds and hard standing paving slabs (right)



#### 4.3 Bats

The site is very limited for foraging and commuting bats, in particular due to its urban location with little vegetation. A thorough search was conducted from the ground of the mature oak tree. No potential bat roosting features were identified and it is considered of **negligible potential** to support roosting bats. See **Image 3**.

**Image 3.** Mature Oak tree.



#### 4.4 Reptiles

The grassland on site is considered unsuitable for reptile species. The structure of the grassland is poor in respect of its diversity and heterogeneity. Few forbs are present and significant areas of the lawn are bare without vegetation. Even within the vegetated areas there are no opportunities for reptiles to shelter. The site is considered likely **unsuitable** for reptile populations.

#### 4.5 Nesting Birds

No active or old bird nests were identified during the survey with very few opportunities for nesting birds available other than the large oak tree. The site is considered to be of **Low** potential for breeding and nesting. The oak tree does provide foraging opportunities for many bird species.

#### 4.6 Badgers

During the initial Phase I survey and update walkover, no evidence of Badger (*Meles meles*) was noted on the site however it was considered to be of **Low** quality for foraging. It is nearly surrounded by closeboard fencing and therefore not highly connected to the wider area and therefore considered unlikely Badgers would be using the site regularly.

There is potential within the site for Hedgehogs (*Erinaceus europaeus*), which may commonly be found within garden areas and may utilise the site in combination with surrounding gardens.

## 5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

### 5.1 Introduction

The CIEEM guidelines (CIEEM, 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

### 5.2 Site Preparation and Construction

#### 5.2.1 Impacts to habitats

The development will include the removal of the species poor lawn while all trees will remain. There is not considered to be any significant impacts to valuable habitats, therefore an ***adverse impact is unlikely***.

#### 5.2.2 Impacts to wildlife

It is not considered that the site shows any potential as a viable habitat for protected reptile species. No signs of mammal holes or excavations were noted during the survey and therefore an ***adverse impact is considered unlikely***.

It is possible that European Hedgehogs may use the site for foraging purposes and therefore there could be if the site became restricted and un-accessible in the future foraging resources may be reduced. Therefore, an ***adverse impact is possible***.

It is understood that due to tree protection zones there will unlikely be any deep excavation works that may allow foraging animals such as hedgehog or badger to become entrapped.

### 5.3 Site Operation

In site operation, the proposed development may result in a minor increase in lighting to the area. However, given the limited habitat on site currently this is unlikely to have a significant impact.

## 6.0 MITIGATION & COMPENSATION

### 6.1 Introduction

The below sections outline a number of ecological enhancement provisions that are appropriate and proportionate to the proposed scheme.

### 6.2 Species Features

To enhance the site for birds and bats, two bricks will be integrated into the new build dwelling. This will include one bat brick, such as those provided by Ibstock and one Swift brick such as the Ibstock Eco Home for Swifts (**Image 4**).

**Image 4.** Ibstock eco home for swifts that will be incorporated into the newly built dwellings



### 6.3 Hedgehogs

Any proposed fencing will require gaps to be placed at the bottom of the fencing large enough to allow hedgehogs to resume access and exiting to and from the site. The gaps should be located at the ground and of a diameter no less than 13 x 13 cm.

### 6.4 Biodiversity Net Gain

A Biodiversity Net Gain assessment will be carried out to ensure the site results in a net gain for habitats.

## 7.0 REFERENCES

CIEEM. (2018). Guidelines for Ecological Assessment in the United Kingdom. Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6.

Department for Levelling Up, Housing and Communities (2023) 'National Planning Policy Framework' (NPPF)

Eastleigh Borough Council (2022). *Eastleigh Borough Local Plan (2016-2036)*. Adopted April 2022. Accessed at: <https://www.eastleigh.gov.uk/media/11806/to-be-published-final-local-plan-april-2022-v4.pdf>

JNCC and Defra (on behalf of the Four Countries' Biodiversity Group) (2012). UK Post-2010 Biodiversity Framework.

UKHab Ltd. (2023). UK Habitat Classification – Habitat Definitions Version 2.0