



# ecosupport

## Preliminary Ecological Appraisal

Cockpit Barn, Knowle  
Lane, Fair Oak

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**Client:**  
Alderbury Homes Ltd

31st May 2023



|                            |                                                                                                                |
|----------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Report</b>              | Preliminary Ecological Appraisal                                                                               |
| <b>Site Name</b>           | Cockpit Barn, Knowle Lane, Fair Oak                                                                            |
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| <b>Client</b>              | Alderbury Homes Ltd                                                                                            |
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**Executive Summary**

Ecosupport Ltd was commissioned by Alderbury Homes Ltd to conduct a Preliminary Ecological Appraisal (PEA) of land associated with Cockpit Barn, Knowle Lane, Fair Oak (here after referred to as 'the site'). The purpose of this survey was to assess any ecological impacts that may arise as a result of the proposed development. As part of this assessment, the following surveys were undertaken:

- Data request submitted to the Hampshire Biodiversity information centre (HBIC)  
Extended phase I habitat survey
- Preliminary roost assessment
- Biodiversity Net Gain (BNG) Assessment

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:

- High potential for breeding and nesting birds
- Moderate potential for Hedgehogs
- Low potential for foraging and commuting Badgers
- Low potential for roosting bats within the chicken barn.
- Low potential for Dormice
- Limited potential for reptiles
- Moderate potential for hedgehogs

In the absence of any mitigation measures, the proposed development is anticipated to result in, *certain adverse impacts* (significance level to be determined following updated phase II survey work where considered appropriate. In addition to this, measures are outlined within **section 6.0** of this document to mitigate where impacts have been identified.

## 1.0 INTRODUCTION

### 1.1 Brief

Ecosupport Ltd was commissioned by Alderbury Homes Ltd to conduct a Preliminary Ecological Appraisal (PEA) of land associated with Cockpit Barn, Knowle Lane, Fair Oak (here after referred to as 'the site'). 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:

- Identify and classify any priority habitats;
- 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 necessary;
- Make recommendations for any necessary ecological avoidance and mitigation where possible at PEA stage.

NB: If the works do not take place within 18 months of this report<sup>11</sup> then the findings of this survey will no longer be considered valid and may require updating.

### 1.2 Site Description & Location

The site comprises of Cockpit Barn (a former chicken shed) and associated land located off Knowle Lane, Fair Oak, SO50 7PH (centered on OS grid reference SU4989617638) (**Fig 1**). The site is bound by Knowle Lane to the east, woodland directly adjacent to the site to the west and fields to the north and south of the site. The wider landscape consists of a network of fields and interconnecting hedgerows.

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

**Figure 1.** Aerial image of the site with approximate redline boundary.



### 1.3 Proposed Development

It is understood that the current development plans will involve the demolition of the chicken shed and the construction of 6 dwellings with associated gardens (**Fig 2**).

**Figure 2.** View of the proposed plans (as supplied by Deacon Design).



## 2.0 RELEVANT LEGISLATION AND POLICY

### 2.1 Legislation

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

This instrument 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.

This 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.

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 Parrot's 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 set 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.

## 2.2 Policy

#### 2.2.1 National

Section 15 of the National Planning Policy Framework (NPPF, 2021) 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural environment. They should do this by protecting and enhancing sites of biodiversity and minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks.

The plan states to protect and enhance biodiversity plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks. This includes the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them. Plans should identify the protection and recovery of priority species and opportunities for securing measurable net gains for biodiversity.

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

- if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the

benefits of the development in the location proposed clearly outweigh both its likely impact;

- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- 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.

### *2.2.2 Local Eastleigh Borough Council Local Plan Review (2001 – 2011)*

The draft Eastleigh Borough Local Plan 2011-2029 is currently being developed and will form part of the Development Plan when adopted. However, the Local Plan Review (2001 – 2011) remains relevant to this report.

The borough of Eastleigh contains areas of international, European, national and local conservation interest. Development in the borough could have effects on these and other sites beyond its boundaries as recognised in the Local Plan's Habitats Regulations Assessment. Areas of particular sensitivity outside but within reach of the borough include other parts of the Solent coastline and the New Forest.

The Borough Council has produced a Biodiversity Supplementary Planning Document which explains the nature conservation interest and site designations in the borough and the ways in which the Council will protect and enhance them. The Council has also produced a Biodiversity Action Plan (BAP) (2012) which defines Priority Biodiversity Areas and Priority Biodiversity Links.

The saved policies of Chapter 1: The Countryside (CO) and Chapter 2: Nature Conservation (NC) state that the retention and where appropriate enhancement of the Borough's ecological diversity is an important objective, therefore the Council aims to identify, protect and enhance areas of nature conservation importance and promote and enhance biodiversity as an important component of sustainable development. Protection of species and habitats covered by law and those recognised as important within the Borough will be upheld, particularly when considering Planning Applications. Development which is likely to have a direct or indirect adverse impact upon any such habitats or species will not be permitted unless it can be demonstrated that the reasons for the development clearly outweigh the harm, and stringent mitigation measures are implemented. Further, the enhancement of the wildlife network within the Borough is desirable and should be achieved by the inclusion of sympathetic measures and features in the layouts of development proposals.

Strategic Policy S11 'Nature conservation' states that the Borough Council will work with developers to:

- Protect, conserve and enhance areas subject to international, European, national and local nature conservation designations and
- Assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);
- Protect, conserve and enhance networks of natural habitats and features, including the Priority Biodiversity Areas, Priority Biodiversity Links, watercourses, trees and hedgerows important to biodiversity and local character;
- On new development sites seek enhancement of biodiversity through the provision of new habitats and features compatible with the native biodiversity characteristics of the borough; and
- Encourage and develop public understanding of biodiversity, enabling access where this does not harm nature conservation interests.

Policy DM9 'Nature conservation' states eventualities in which nature conservation would prevent development. For example development which is likely to adversely affect the integrity of sites of international or European nature conservation, Sites of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve will not be permitted.

In determining planning applications, the Borough Council seeks opportunities to create or enhance habitats and features of nature conservation interest, to protect and enhance the Priority Biodiversity Areas and the Priority Biodiversity Links and finally requires mitigation measures in connection with new residential development as identified by the Solent Disturbance and Mitigation Project unless it can be demonstrated to the satisfaction of the Borough Council that the development is not likely to have significant adverse impacts on the integrity of the Solent European marine sites.

Where mitigatory or compensatory provision are needed, the over-riding principle is that as a minimum, no net loss should occur to biodiversity and a net gain should be secured where possible.

### 3.0 METHODOLOGY

#### 3.1 Desk Study

##### 3.1.1 Data Request

A data request was submitted to the Hampshire Biodiversity Information Centre (HBIC) to ascertain any records held of nature conservation designations and protected species within 1 km of the boundary of the site.

The data search covered:

- Statutory designated sites
- Non-statutory designations such as SINCs
- Records of protected and notable species.

##### 3.1.2 Waterbodies

Any ponds located within 500 m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

#### 3.2 Field Survey

##### 3.2.1 Habitats

The field survey work which forms the basis of the findings of this report was carried out by Ashley James BSc (Hons) ACIEEM (principal ecologist with Ecosupport) on the 6<sup>th</sup> May 2022. Weather conditions during the survey comprised temperatures of 16 °C, light winds and sunny spells.

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 1 Habitat survey methodology has been ‘extended’ in this report to include the following:

- Floral species lists for each identified habitat;
- Descriptions of habitat structure, the evidence of management and a broad assessment of habitat condition;
- Mapping of additional habitat types (e.g. hardstanding);
- Identification of Priority Habitats under Section 41 of the NERC Act;
- Evidence of, or potential for, the presence of certain species/groups

In addition to the phase 1 habitats types, the corresponding UK Habs habitat type was also noted using Habitat Definitions Version 1.1 (UKHab Ltd., 2020).

##### 3.2.2 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.

### 3.2.3 Bats

The assessment of the buildings / trees noted on site was undertaken by Ashley James during the initial walkover survey under class level 1 survey licence number (2021-10059-CL17-BAT). This followed BCT (Collins (ed) 2016) best practice survey guidelines searching for any PRFs / evidence of bat occupation and assigning a roost potential assessment as outlined in **Table 1** below.

**Table 1.** Guidelines for assessing the potential suitability of a built structure for roosting bats (reproduced from BCT (Collins (ed) 2016).

| Suitability       | Description of Roosting Habitats                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Negligible</b> | Negligible habitat features on site are likely to be used by roosting bats                                                                                                                                                                                                                                                                                                                         |
| <b>Low</b>        | A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions <sup>2</sup> and/or suitable surrounding habitat to be used on a regular basis or by a large number of bats (i.e. unlikely to be suitable for maternity or hibernation). |
| <b>Moderate</b>   | A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).     |
| <b>High</b>       | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.                                                                                                                                    |

### 3.3 Biodiversity Net Gain

Biodiversity net gain (BNG) can be defined as *“an approach to development that aims to leave the natural environment in a measurably better state than beforehand”* (Defra 2019). The revised National Planning Policy Framework (NPPF) states that *“planning policies and decisions should ... identify and pursue opportunities for securing measurable net gains for biodiversity”* (MHCLG, 2018), however it anticipated following an announcement by the government in March 2019, that biodiversity net gain will be made mandatory for all new developments in England through the implementation of the Environment Bill which is currently under consideration by parliament before it can be given royal assent. Whilst there will be a two year transition period following the assent of the bill, an increasing number of Local Planning Authorities (LPA's) are already requiring new developments to consider BNG through the planning process. Current proposals state that developments should achieve at least 10% net gain, encouraging developers to provide an increase in both appropriate natural habitat and ecological features, and reduce the developments impact on biodiversity and associated ecological networks.

### 3.3.1 Establishing Pre-intervention Biodiversity Units

For the purposes of this report the Defra 3.1 metric has been utilized for the establishment of pre-intervention and post intervention biodiversity units for the site. The most up to date version of the metric was utilized (April 2022)<sup>2</sup>.

The Defra metric in effect achieves a pre - intervention (i.e. prior to any works having been undertaken) biodiversity unit score for a given site through the multiplication of the following factors:

***Area of habitat x distinctiveness x condition x strategic significance x ecological connectivity = No of biodiversity units***

The calculations of pre-intervention units are based on the habitat types and associated conditions identified during the onsite phase 1 habitat assessment. In the absence of the provision of exact areas/measurements, the areas of pre-invention habitats were estimated using a combination of the phase 1 survey/ habitat assessment and satellite imagery, and therefore some margin of error is anticipated within the enclosed calculations. Notwithstanding this, every effort has been made to ensure the calculations are as accurate as possible, and it is considered that this document provides a good indication of the potential net change following the proposed development, and therefore it is not considered to have a significant impact on the findings of this report.

***NB the information on how the scores / multipliers are applied for distinctiveness, condition, strategic significance and ecological connectivity are outlined within the User Guide (Crosher et al., 2021) associated with the metric and are not re-produced here.***

### 3.3.2 Establishing Post Intervention Biodiversity Units

Once the pre-intervention (before impact) number of Biodiversity Units (BUs) has been calculated following the steps outlined in the previous section, a new set of multipliers / scores are added to those used for the pre-intervention calculation to establish the post intervention unit score based on the nature of the works being conducted. The formula used is as follows:

***Area of habitat x distinctiveness x condition x strategic significance x connectivity x difficulty to create x time to target condition x off site risk (this multiplier is only required when enhancements / compensation is being proposed off site) = No of Bus***

## 3.4 Assessment Methodology

### 3.4.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on CIEEM'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.

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<sup>2</sup> (<http://publications.naturalengland.org.uk/publication/6049804846366720>)

### 3.4.2 Valuation

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.

## 3.5 Limitations

### 3.5.1 Habitats

Based on aerial images of the site, the majority of the habitat present around the chicken shed appears to have previously been scrub / secondary woodland. This had almost all been cleared prior to the walkover survey being conducted (indicated this happened in December 2021) and as such, the habitat types present now are not fully reflective of what was on site previously.

### 3.5.2 BNG Assessment

Following the submission of the first version of this report, comments were raised by the Eastleigh Borough Council ecologist relating to the habitat clearance that had taken place and the baseline habitats not being representative of what was on-site (and thus artificially lowering the baseline value of the site) (**Fig 2**).

As such, the baseline habitat assessment (only relating to the spatial extent of habitats as opposed to their conditions) was made using the remaining habitats on site, aerial imagery and pictures provided by the landowner. The mapping from Google used for this is indicated in **Fig 2** below and the updated baseline habitat map which the revised BNG calculations are based on is displayed in appended to this document. Aerial imagery is not currently available for the habitat on site post-clearance however, a photograph of the site is displayed in **Fig 4 (Section 4.2)** (***NB the Defra 3.1 metric has still been used as opposed to the newer 4.0 metric as the original work was undertaken in the older version***).

**Figure 3.** Google earth image of what the habitat types on-site looked like **before** clearance had taken place on site (dated 2019).



***NB: The details of this report will remain valid for a period of 18 months (i.e., until May 2024). Beyond this period, if works have not yet been undertaken, it is recommended that a review of the validity of the conclusions are undertaken. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the development layout which this report was based upon.***

## **4.0 ECOLOGICAL BASELINE**

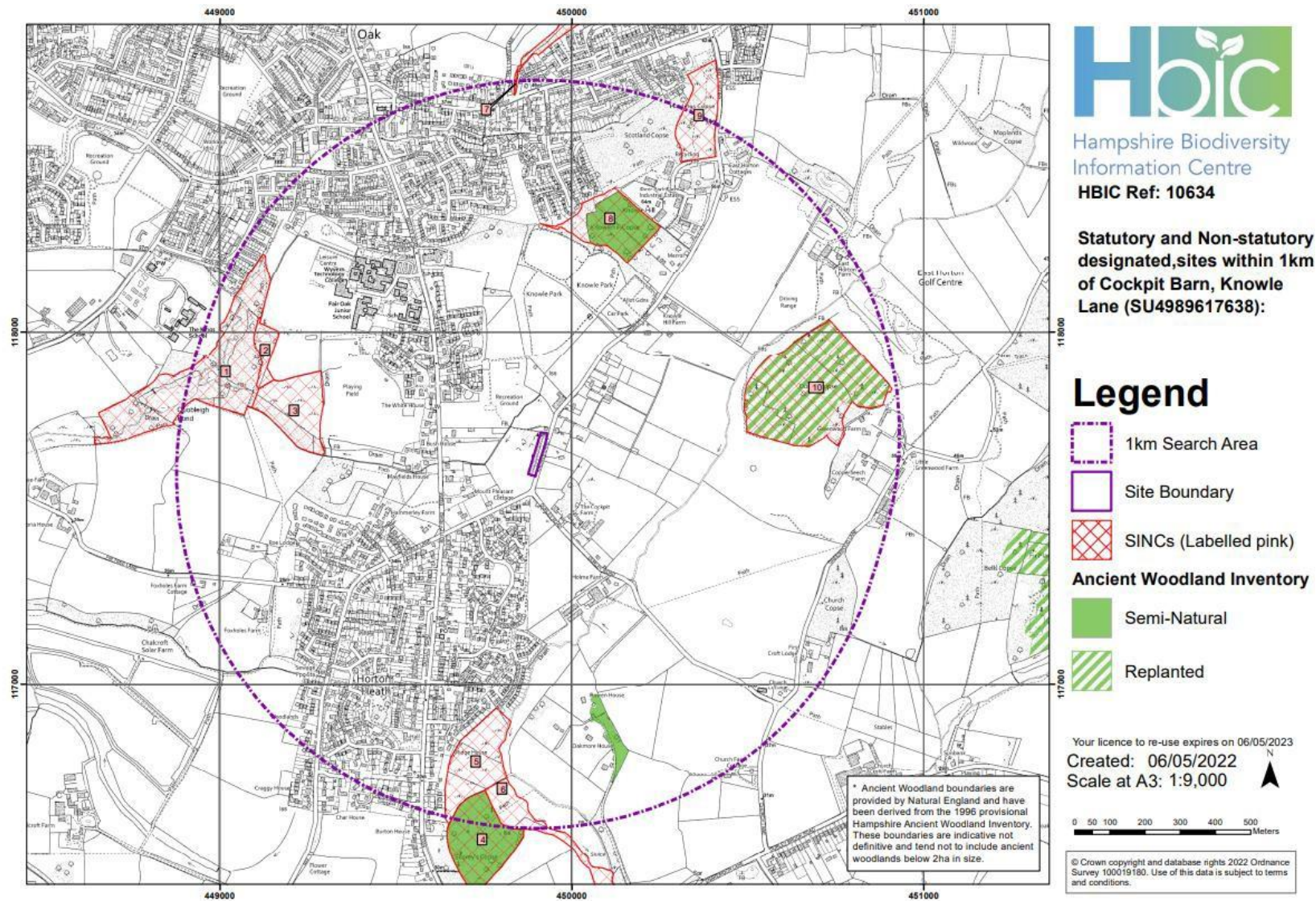
### **4.1 Designated Sites**

#### *4.1.1 Nationally Designated sites*

No nationally designated sites were identified by HBIC using the 1 km search radius.

#### *4.1.2 Locally Designated*

The locally designated sites identified by HBIC are shown in **Fig 4** with a summary of these sites presented in **Table 2**.

**Figure 4.** Map of Non-Statutory sites located within 2 km as provided by HBIC.

**Table 2.** Summary of locally designated sites within 2 km of the site as provided by HBIC and shown in **Fig 2** above.

| Status | SINC Ref | SINC Name                                            | SINC Criteria |
|--------|----------|------------------------------------------------------|---------------|
| SINC   | EA0096   | Quobleigh Pond & Woods                               | 1A/1Cii       |
| SINC   | EA0099   | Ponds & Meadow adjacent to Wyvern Technology College | 6A            |
| SINC   | EA0101   | Wyvern Technology College Meadow                     | 2A            |
| SINC   | EA0105   | Scorey's Copse                                       | 1A            |
| SINC   | EA0106   | Scoreys Copse Meadow                                 | 2D            |
| SINC   | EA0107   | Scorey's Copse Rush Pasture                          | 2B/5B         |
| SINC   | EA0110   | Gore Copse                                           | 1A            |
| SINC   | EA0114   | Knowlehill Copse                                     | 1A            |
| SINC   | EA0116   | Knowle Lane Open Space                               | 7A            |
| SINC   | WC0133   | Durley Copse                                         | 1B            |

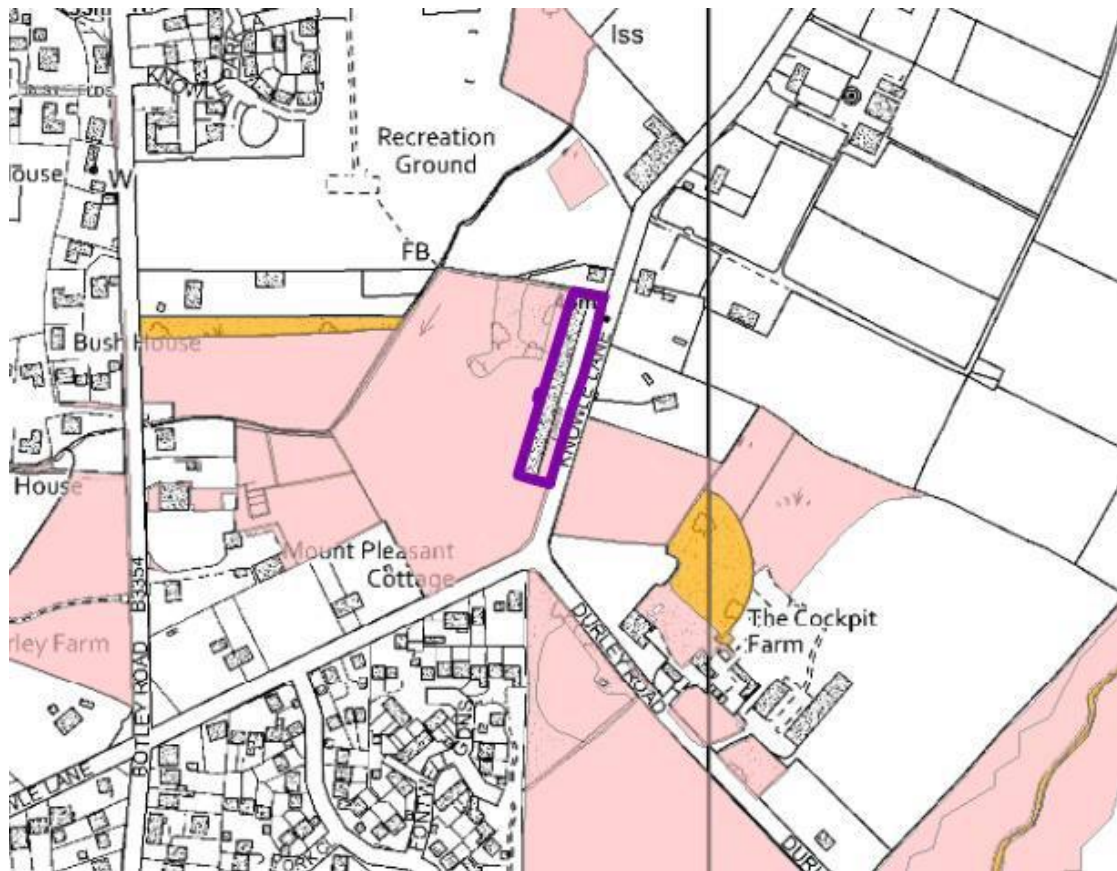
#### 4.1.3 Ecological Network

The data received from HBIC also includes the provision of information about the local Ecological Network designations, the aim of which is to:

- Improve the quality of current wildlife sites by better habitat management;
- Increase the size of existing wildlife sites
- Enhance connections between sites, either through physical corridors or through 'stepping stones'
- Create new sites; and
- Reduce pressure on wildlife by improving the wider environment (Court & Ritter, 2016)

As per **Fig 5** below, all of the habitats (excluding the building) are within the 'network opportunities' classification.

**Figure 5.** Screenshot from the ecological network map as provided by HBIC highlighting the areas on site that are within the 'network opportunities' classification (pink shading).



#### 4.2 Vegetation Survey Results

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described with JNCC (2010) (with the corresponding UK Habs habitat type also provided using Habitat Definitions Version 1.1 (UKHab Ltd., 2020). 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 (approximate spatial extent shown in the habitat map appended):

- Other woodland-Broadleaved (w1g)
- Bramble Scrub (h3d)
- Modified Grassland (g4) *with secondary codes (17) ruderal / ephemeral and (73) bare ground*
- Line of trees (w1g6)
- Developed land; sealed surface (u1b)
- Buildings (u1b5)

**N.B.** Prior to the Phase I Habitat Survey it was identified that the site had been recently cleared. The following vegetation survey results are based retrospectively on the habitats present prior to clearance. This information has been obtained via historical aerial imagery and photographs.

The majority of the site in its current form is dominated by bare ground that has been recently cleared of vegetation (**Fig 6**). From aerial images and further investigation of the site it appears the site prior to the visit consisted of a parcel of broadleaved woodland / scrub.

**Figure 6.** View of the bare ground (formally woodland / scrub that had been cut down ) (taken May, 2022 – post clearance).



#### 4.2.1 Other Woodland-Broadleaved (w1g)

Prior to clearance, the dominant habitat on site consisted of broadleaved woodland (**Fig 7**). The species in the woodland consisted of Hawthorn (*Crataegus monogyna*), Oak (*Quercus robur*), Goats Willow (*Salix caprea*), Silver birch (*Betula pendula*), Hazel (*Corylus avellana*), Downy birch (*Betula pubescens*) and Ash (*Fraxinus excelsior*). The ground flora was not characteristic of the woodland at the time of the walkover survey, due to the understory being recently cleared, so early establishing ruderal vegetation had started to establish with the following species noted: Germander Speedwell (*Veronica chamaedrys*), Nettle (*Urtica. Dioica*), Shepard's Purse (*Capsella bursa-pastoris*), Groundsel (*Senecio vulgaris*), Red Dead Nettle (*Lamium purpureum*), Cows Parsley (*Anthriscus sylvestris*), Cleavers (*Galium aparine*) and Green Alkanet (*Pentaglottis sempervirens*). Evidence of a more characteristic woodland flora was noted in areas that had not been cleared with Lesser Celandine (*Ficaria verna*) and Lords and Ladies (*Arum alpinum*) recorded.

**Figure 7.** View of the remnant broadleaved woodland on site (taken October 2022 – post clearance).



#### *4.2.2 Bramble Scrub (h3d) with secondary codes (11) scattered trees*

Based on historical imagery it was identified that the site supported a large area of Bramble scrub to the south of the woodland and west of the building on site (**Fig 8**).

**Figure 8.** View of the dense scrub located to the south of the woodland on site (taken prior to clearance).



#### 4.2.3 Modified Grassland (g4) with secondary codes (17) ruderal / ephemeral

A parcel of modified grassland was present to the east of the building on site with a strip of ruderal (17) located adjacent (**Fig 9**). The same habitat was present along the southern boundary of the site.

**Figure 9.** View of the modified grassland with ruderal vegetation located to the east of the barn on site (taken prior to clearance).



#### 4.2.4 Line of Trees (w1g6)

A line of trees was present along the eastern boundary to Knowle Lane (**Fig 10**). The trees present along the boundary consisted of Sycamore (*Acer pseudoplatanus*), Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*), Oak and Holly (*Ilex aquifolium*).

**Figure 10.** View of the line of trees along the eastern boundary (taken May, 2022 – post clearance).



#### *4.2.5 Developed Land. Sealed Surface (u1b)*

This covers the areas of concrete hard standing used by the entrance as a parking and was largely devoid of any significant vegetation community.

#### *4.2.6 Buildings (u1b5)*

The final habitat type present covered the chicken barn. An assessment of the building for bat roosting potential is provided in **section 4.3**.

### 4.3 Bat Survey Results

#### 4.3.1 Pre-existing Data

The data request from HBIC returned the following records within 1 km of the site (**Table 3**).

**Table 3.** List of Bat records within 1 km of the site provided by HBIC.

| Taxon Name                       | Species Name            | Number of Records | Further Information                                                                     |
|----------------------------------|-------------------------|-------------------|-----------------------------------------------------------------------------------------|
| <i>Eptesicus serotinus</i>       | Serotine                | 3                 | -                                                                                       |
| <i>Myotis spp</i>                | Myotis bat              | 3                 | Unidentified <i>Myotis</i> spp bat records (all from aural bat detectors)               |
| <i>Myotis daubentonii</i>        | Daubenton's Bat         | 1                 | -                                                                                       |
| <i>Myotis mystacinus</i>         | Whiskered Bat           | 6                 | -                                                                                       |
| <i>Nyctalus noctula</i>          | Noctule                 | 9                 | Both from aural bat detectors                                                           |
| <i>Pipistrellus spp</i>          | Pipistrelle Bat species | 9                 |                                                                                         |
| <i>Pipistrellus pipistrellus</i> | Common Pipistrelle      | 59                | Majority of records provided for roosts in buildings                                    |
| <i>Pipistrellus pygmaeus</i>     | Soprano Pipistrelle     | 16                | -                                                                                       |
| <i>Plecotus auritus</i>          | Brown Long-eared Bat    | 18                | Majority of records for roosts in building with at least one potential maternity roost. |
| <i>Plecotus spp</i>              | Long-eared bat species  | 3                 | 5 of the records were for roosts                                                        |

#### 4.3.2 Buildings

The findings of the updated preliminary roost assessment of all buildings on site is outlined in **Table 4** below.

**Table 4.** Results of the preliminary roost assessment undertaken of all built structures proposed for demolition under the current scheme.

| Building     | Figure                                                                                                                                                                                                                                                                                                  | Description of Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PRFs / Evidence of Occupation                                                                                                                                                                                                                                                   | Assessed Roost Potential |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Chicken Barn | <p><b>Figure 11.</b> Front elevation of the chicken barn.</p>  <p><b>Figure 12.</b> View of the internals of the chicken barns.</p>  | <p>The sole dwelling onsite consisted of an old commercial chicken barn which has been left derelict for the last 2 years. The barn is constructed of a breezeblock construction with a single skinned corrugated metal roof. Five small chutes are present across the roof of the dwelling (<b>Fig 11</b>).</p> <p>The internals consisted of one long room, which was supported by a network of wooden rafters (<b>Fig 12</b>). No loft void was present during the checks due to the nature of the building.</p> | <p>Due to the nature of the roofing materials, PRFs somewhat limited to small gaps where the metal ridge meets the corrugated roof (<b>Fig 13</b>).</p> <p>No physical evidence of bats was present externally or internally, in the form of droppings and feeding remains.</p> | <b>Low potential</b>     |

**Figure 13.** View of gaps underneath metal ridge.



#### 4.3.3 Trees

A number of trees were present on-site however none were noted as supporting PRF'S suitable for bats.

### 4.4 Badgers

#### 4.4.1 Pre-existing Information

HBIC provided 6 records of Badger presence from within 1 km of the site all recorded over 900m away from site.

#### 4.4.2 Site Survey

No evidence of Badger foraging was identified however the site could provide suitable commuting route for foraging and commuting badgers with a significant amount of varying grassland located directly adjacent to site. Given the records from HBIC and potential commuting routes through site, the site is considered to be of **Low potential** for foraging and commuting badgers.

### 4.5 Reptiles

#### 4.5.1 Pre-existing Information

HBIC have provided the following records for reptiles within 1 km of the site; 4 records of Grass Snake (*Natrix helvetica*), 6 records of Slow Worms (*Anguis fragilis*) and 3 records of Common lizard (*Zootoca vivipara*).

#### 4.5.2 On site Habitat Assessment

Prior to clearance the scrub on site does offer some suitability for reptiles, however the areas of scrub on site do not support understorey vegetation, in the form of tussocky grassland, therefore the site is considered to support **limited potential** for reptiles.

### 4.6 Great Crested Newts

#### 4.6.1 Pre-existing Information

HBIC returned 2 records of GCN record from within 1 km of the site with these associated with Quobleigh pond and a pond within Wyvern Technology College (see **Fig 14** below). The nearest record is 0.7 km from the site.

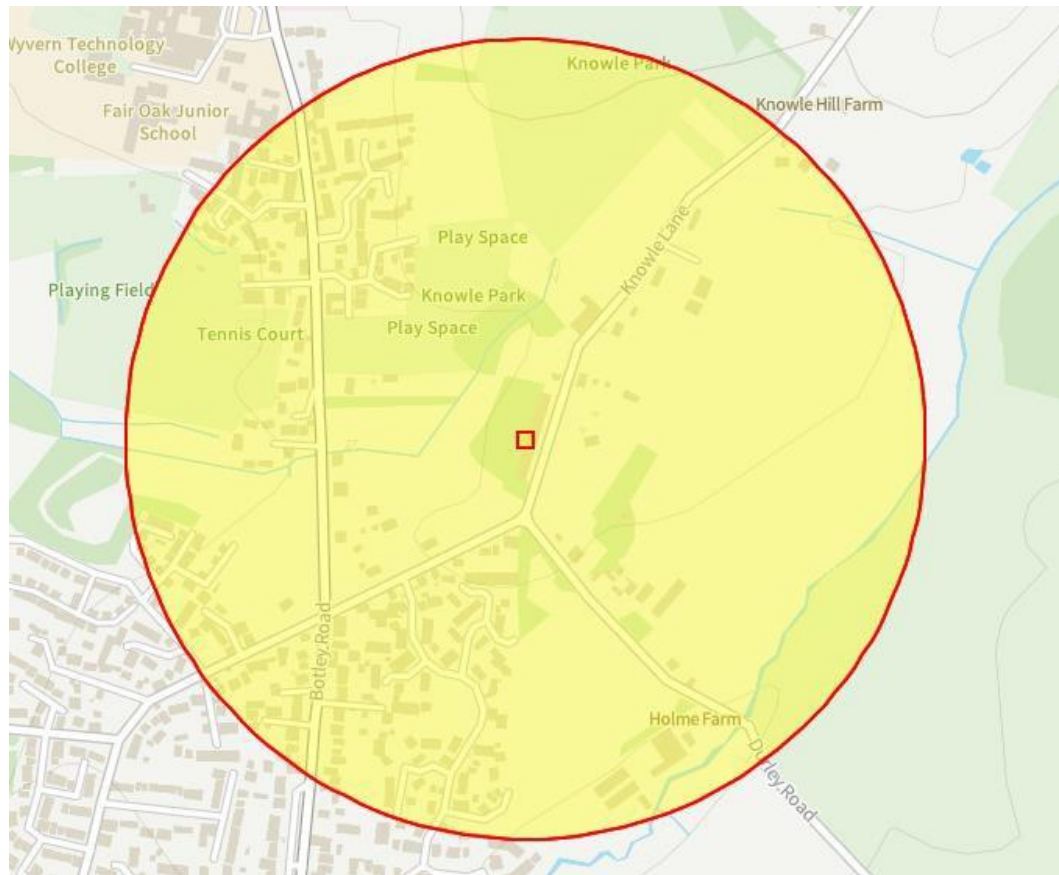
**Figure 14.** The location of the 2 GCN records approximately 0.7 km to the west of the site (approximate redline boundary given).



#### 4.6.2 Water Bodies Within 500 m

As per **Fig 15** below, no ponds are present within a 500m search radius from a central point of the site.

**Figure 15.** Map produced in Magicmaps using a 500m buffer radius from a central point of the site which did not identify any ponds within 500m.



#### 4.6.3 On site Habitat Assessment

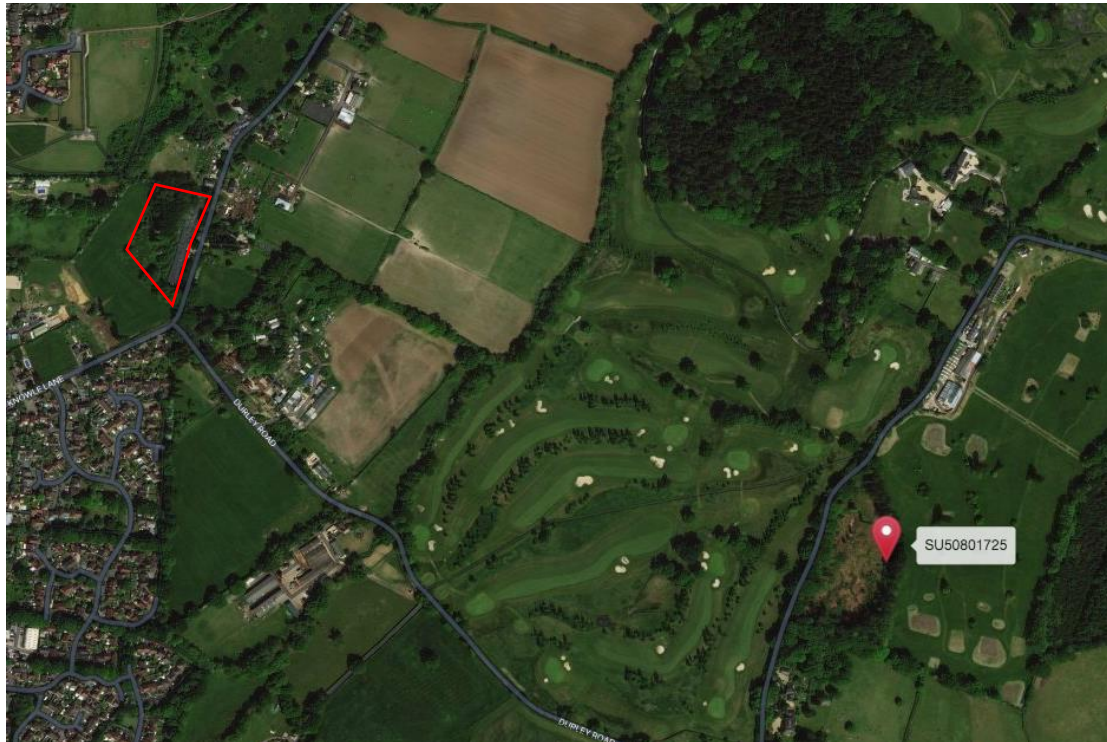
The terrestrial habitat on-site comprises of bare ground and early establishing ruderal vegetation all unsuitable habitats for terrestrial GCN. Taking this into consideration along with the nearest records being 0.7 km away, the terrestrial habitat on-site is considered to be of **negligible potential** for GCN.

### 4.7 Hazel Dormouse

#### 4.7.1 Pre-existing Information

HBIC returned a single record of Dormouse (*Muscardinus avellanarius*) presence within 1km of the site with this located 0.9 km to the east associated with Church Copse (**Fig 16**).

**Figure 16.** The single Dormouse record returned by HBIC approximately 0.9 km to the east of the site (approximate redline boundary given).



#### 4.7.2 Site Assessment

As native, fruiting tree species and scrub are present on site, the site supports some suitable habitat for Dormice. However, the site is not connected to additional areas of woodland and scrub with the habitats on site primarily surrounded by parcels of grassland. The line of trees however on the eastern boundary and the northern boundary supports a number of fruiting tree species suitable for Dormice and could be used as an important dispersal route for Dormice in the wider landscape. The site is therefore considered to be of **Low potential** for Dormice (restricted to the northern and the eastern boundary habitats on-site).

### 4.8 Notable and Birds of Conservation Concern (BoCC)

#### 4.8.1 Pre-existing Information

HBIC returned a high number of records of birds of conservation concern for within 1km of the site for species such as (Table 5).

**Table 5.** List of notable bird records within 1 km of the site provided by HBIC.

| Taxon Name                 | Species Name       | Number of Records |
|----------------------------|--------------------|-------------------|
| <i>Acanthis cabaret</i>    | Lesser Redpoll     | 1                 |
| <i>Cuculus canorus</i>     | Cuckoo             | 2                 |
| <i>Emberiza citrinella</i> | Yellowhammer       | 2                 |
| <i>Falco peregrinus</i>    | Peregrine          | 2                 |
| <i>Falco subbuteo</i>      | Hobby              | 5                 |
| <i>Linaria cannabina</i>   | Linnet             | 1                 |
| <i>Milvus milvus</i>       | Red Kite           | 24                |
| <i>Motacilla cinerea</i>   | Grey Wagtail       | 2                 |
| <i>Muscicapa striata</i>   | Spotted Flycatcher | 3                 |
| <i>Passer domesticus</i>   | House Sparrow      | 12                |
| <i>Spinus spinus</i>       | Siskin             | 1                 |
| <i>Sturnus vulgaris</i>    | Starling           | 12                |
| <i>Turdus iliacus</i>      | Redwing            | 4                 |
| <i>Turdus philomelos</i>   | Song Thrush        | 11                |
| <i>Turdus pilaris</i>      | Fieldfare          | 1                 |
| <i>Turdus viscivorus</i>   | Mistle Thrush      | 8                 |
| <i>Tyto alba</i>           | Barn Owl           | 3                 |

#### 4.8.2 Site Assessment

The trees within the woodland supports potential for birds in addition to the tree lines on the eastern and northern boundary. The site is situated within a surrounding environ that provides an ideal mosaic of habitats, including grassland, woodland and connecting hedgerows (in the wider area) providing ideal foraging habitat for any nesting or breeding birds using the site. Due to the large quantity of notable bird records and the ideal breeding and nesting bird habitat within and surrounding the site, the site is considered to be of **High** potential for nesting and breeding birds.

## **4.9 Hedgehogs**

### *4.9.1 Pre-existing Information*

HBIC returned 19 records for Western European Hedgehog (*Erinaceus europaeus*) presence within 1 km of the site.

### *4.9.2 Site Assessment*

The site provides suitable foraging and potentially nesting features within the tree lines along the eastern and northern boundaries and on-site, it is therefore considered the site to be of **Moderate** potential for Hedgehogs.

## 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 result in the demolition of the old chicken shed on-site which is considered to be of value at the **Site** level of significance.

A large proportion of the woodland and scrub on site will also be lost as a result of the development, although the trees lines and northern parcel of woodland are to be retained under current proposals. This would result in the loss of habitats of **Local** value and potential damage from machinery and particularly by root zone compaction. The loss of habitat and potential indirect effects would have a **moderate adverse impact** to habitats of **Local** value.

#### 5.2.2 Impacts to Wildlife

There were a range of suitable habitats present on site noted which could be used by breeding and nesting birds. Therefore, an **adverse impact is possible** if any clearance works are required and undertaken without adequate mitigation.

There are areas of habitat along the northern and eastern boundaries that could be used by Dormice. As such, removal of suitable habitat without adequate mitigation would constitute an offence under relevant legislation. However, under the current proposals all the suitable foraging and commuting habitat for Dormice will be retained as part of the development. Taking this into account (although considering there may be an increase in disturbance through building works and an increase in lighting during construction), the development is considered likely to have a **minor negative impact** upon dormice.

### 5.3 Site Operation

#### 5.3.1 Impacts to Wildlife

The development will result in an increase in lighting within the general area from street lights and external lights on the new houses. This can affect the behaviour, particularly foraging, of nocturnal wildlife. Therefore, an **adverse impact is likely** on Badgers, Bats and Dormice (should they be present on site).

## 6.0 RECOMMENDATIONS

### 6.1 Introduction

The below sections outline recommendations for further survey work required to fully assess the potential ecological impacts of the development and ensure and proposed mitigation and compensation appropriate and proportionate. In addition to this, measures are outlined to protect the existing features of value as well as providing targeted enhancements.

NB. These recommendations are based on the current plans and if the plans are to change and the development footprint is to increase then, the survey effort required will need to be re-assessed.

### 6.2 Bats

#### 6.2.1 Emergence / Re-entry Surveys

The chicken barn on site was assessed as being of '**Low**' roost potential and will therefore require 1 dusk emergence or dawn re-entry survey (as per the survey effort requirements from BCT 2016 **Table 6**).

**Table 6.** Recommended minimum number of survey visits (from Table 7.3 (BCT, 2016).

| Low Roost Suitability                                         | Moderate Roost Suitability                                                           | High Roost Suitability                                                                                                                 |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| One survey visit. One dusk emergence or dawn re-entry survey. | Two separate survey visits. One dusk emergence and a separate dawn re-entry survey*. | Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third could be either dusk or dawn. |
| May – August                                                  | May – September with at least one of the surveys between May - August                | May – September with at least two surveys between May and August                                                                       |

NB If bats are seen to emerge from the barn then a further two surveys will need to be completed to classify the roost present.

### 6.3 Dormice

Based on the current proposals, it is not anticipated there will be any work undertaken along the eastern and northern boundary. However, to ensure no one encroaches into these sensitive areas heras fencing will be erected around these areas prior to any construction work commencing and a precautionary method statement may be required to cover any clearance works (should this be necessary).

### 6.4 CEMP

A CEMP will be produced and followed to mitigate for air and aquatic pollution as well as outlining a working method for the protection of areas while under construction.

## 6.5 Biodiversity Net Gain

### 6.5.1 Habitat Assessment

Habitats on Site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 1.1 (UKHab Ltd., 2020). This was chosen as an appropriate habitat categorisation system as it fits within the Biodiversity Metric 3.1 calculation.

A condition assessment, in line with the Biodiversity Metric 3.1 Technical Supplement, was carried out on the Site on the 14<sup>th</sup> October 2022 following the initial PEA undertaken on 6<sup>th</sup> May 2022. The area of identified habitats is calculated in hectares (ha), ignoring linear features or ditches (the area is measured to the centre line of such features). The length of linear features is measured separately in kilometres (km). The dominant habitat type was selected, according to those defined by UKHab Ltd (2020). Where there was disparity between the UK classification for habitat type and those present within the Biodiversity Metric 3.1 calculator tool, this was noted within the condition assessment tables.

### 6.5.2 Habitat Distinctiveness

Each habitat was assigned a score for distinctiveness, according to the Biodiversity Metric 3.1 calculator tool and Technical Supplement (Natural England, 2021). This ranged from Poor - High for most habitats, or Not Applicable (e.g. Developed Land – Sealed Surface). Using the tool, habitats were assigned a score based on their distinctiveness.

### 6.5.3 Habitat Condition

The condition of each habitat was assessed following criteria set out in the Biodiversity Metric 3.1 Technical Supplement (Natural England, 2021), which includes detailed assessment criteria for different habitats. Project Ecologist Lewis Lakudzala BSc (Hons) MRes, undertook the surveys on the 14<sup>th</sup> October 2022, to undertake a condition assessment of the habitats present on site. The condition of each habitat was assessed individually on site, but was found to be the same for each type across the site. Therefore, the results of the habitat condition for each habitat are grouped together for each habitat.

### 6.5.4 Limitations

Prior to the initial survey visit, habitat clearance had taken place on site with some of the woodland and all of the scrub having been cleared. As these habitats had been cleared prior to the initial PEA, the condition of these habitats was unknown. The BNG assessment was conducted using the remaining habitats on site, historical aerial imagery and photographs therefore it may not be a true representation of the habitats that were on site. The remnant woodland on site was assessed as 'poor' condition at the time of the PEA. However, as a precautionary measure the woodland was assessed as 'moderate' condition within the BNG metric.

*The details of this report will remain valid for a period of 18 months. Beyond this period, if works have not yet been undertaken, it is recommended that a review of the validity of the conclusions are undertaken. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the development layout which this report was based upon.*

### 6.5.5 Existing Habitats

The Biodiversity Net Gain for the site is based on the habitats on site prior to clearance. The habitats recorded on site consisted of (according to UK Habs habitat types):

#### **Non-linear Habitats**

- Developed Land. Sealed Surface (u1b)
- Other Woodland; Broadleaved (w1g)
- Modified Grassland (g4)
- Bramble Scrub (h3d)
- Buildings (u1b5)

#### **Linear Habitats**

- Line of Trees (w1g6)

The baseline and post-development habitats used within the BNG metric can be seen below in **Fig 17**.

**Figure 17.** View of the baseline and post-development habitats.

Pre development

Post development



g3c - other neutral grassland  
g4 - modified grassland  
w1g - other woodland-broadleaved

w1g6 - line of trees  
h3 - scrub  
u1b - developed land. sealed surface

u1b5 - buildings  
u1c - artificial unvegetated unsealed surface  
r - ponds

Steps are being taken to ensure a minimal loss to biodiversity on site as possible. This includes the provision of a species-rich grassland area, 2 ponds and the enhancement of the remaining woodland and tree lines. As a result of these measures there will be a net gain of 0.30 units (4.75% loss) to the habitats units on site, with an increase of hedgerow units by 0.66 units (65.21%) (**Fig 18**).

**Figure 18.** Biodiversity net gain results from the 3.1 metric calculator.

|                                                                                                                                  |                |        |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|--------|
| On-site baseline                                                                                                                 | Habitat units  | 6.41   |
|                                                                                                                                  | Hedgerow units | 1.01   |
|                                                                                                                                  | River units    | 0.00   |
| On-site post-intervention<br>(Including habitat retention, creation & enhancement)                                               | Habitat units  | 6.71   |
|                                                                                                                                  | Hedgerow units | 1.67   |
|                                                                                                                                  | River units    | 0.00   |
| On-site net % change<br>(Including habitat retention, creation & enhancement)                                                    | Habitat units  | 4.75%  |
|                                                                                                                                  | Hedgerow units | 65.21% |
|                                                                                                                                  | River units    | 0.00%  |
| Off-site baseline                                                                                                                | Habitat units  | 0.00   |
|                                                                                                                                  | Hedgerow units | 0.00   |
|                                                                                                                                  | River units    | 0.00   |
| Off-site post-intervention<br>(Including habitat retention, creation & enhancement)                                              | Habitat units  | 0.00   |
|                                                                                                                                  | Hedgerow units | 0.00   |
|                                                                                                                                  | River units    | 0.00   |
| Total net unit change<br>(including all on-site & off-site habitat retention, creation & enhancement)                            | Habitat units  | 0.30   |
|                                                                                                                                  | Hedgerow units | 0.66   |
|                                                                                                                                  | River units    | 0.00   |
| Total on-site net % change plus off-site surplus<br>(including all on-site & off-site habitat retention, creation & enhancement) | Habitat units  | 4.75%  |
|                                                                                                                                  | Hedgerow units | 65.21% |
|                                                                                                                                  | River units    | 0.00%  |

## 6.6 Nitrogen / Phosphorus Budget

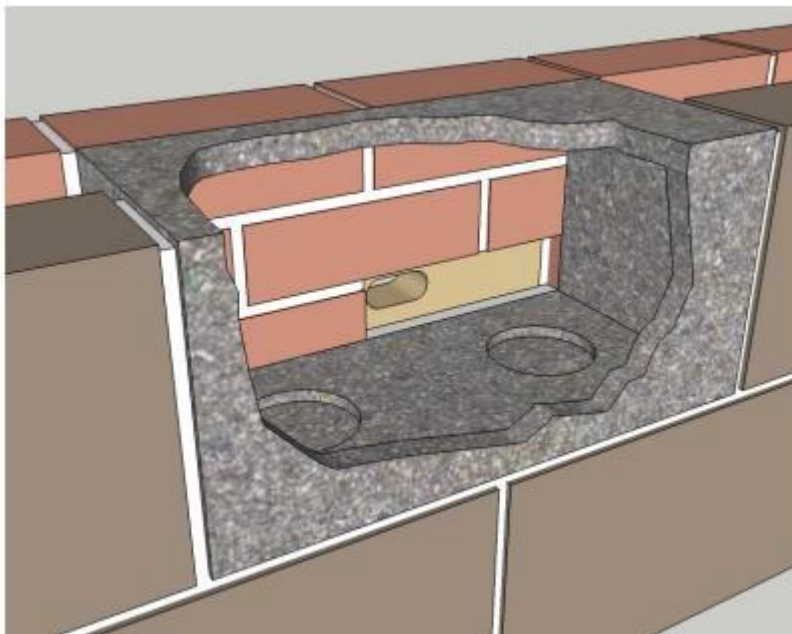
It is necessary to ensure that there is no net increase of nitrogen / phosphorus on site to ensure that the water quality of the Solent SPAs is not negatively impacted upon. A nitrogen / phosphorus budget will be required with the application for the development to calculate whether the site will result in a net increase in nitrogen. If it will result in an increase, mitigation will be required to offset this.

## 6.7 Enhancements

### 6.7.1 Birds

To act as biodiversity enhancement, 50 % (so at least 4 No) of the newly built dwellings will incorporate one Swift brick. The 'CJ Wildlife Swift maxi nesting box' (**Fig 19**) with entrance via a CJ Wildlife 'Cambridge Swift full-face brick' (The Cambridge System is a concept comprising an entrance piece and a nest box embedded in the cavity and inner leaf. It is particularly suited to gable ends at roof-space level). If this model is not suitable for the building specifications, an alternative swift box with internal floor space exceeding 400cm squared must be used. A list of swift boxes can be found on the RSPB website via the following link (<https://www.rspb.org.uk/globalassets/downloads/about-swifts/swift-bricks.pdf>) however it is worth noting that some of these do not have an internal floor space exceeding 400cm squared and are therefore not considered appropriate.

**Figure 19.** A schematic of how the Cambridge full face Swift brick leads into a cavity created by the prior installation of the Swift maxi nesting box.



## 6.8.2 Bats

### 6.8.2.1. Bat Bricks

Half of the newly built dwellings (so 4 No minimum) will also have Ibstock bat bricks (**Fig 20**) integrated within the external brick work. These features are entirely self-contained and available in a variety of different colours to match different construction materials. They should ideally be placed on an elevation which will benefit from some degree of sunlight exposure and be located away from windows.

**Figure 20.** Ibstock bat brick 'B' which will be integrated into the gable walls of 4 No (minimum) of the new dwellings on site.



In addition to the integrated bat boxes, the following woodcrete models will also be erected on suitable retained trees around the site's boundary (including the woodland area on the southern boundary):

- 1 No Vivara Pro Miramare Large WoodStone bat box
- 2 No Vivara Pro Harlech WoodStone bat box
- 2 No Vivara Pro Large Multi Chamber WoodStone bat box

The woodcrete bat boxes will be erected by or under the supervision of an ecologists to ensure they are placed in the most appropriate / effective locations.

#### 6.8.2.2 Bat Boxes

To provide further roosting opportunities for bats, 3 bat boxes will be put up on suitable trees within the woodland. The Schwegler 2F Bat Box (with double front panel) or CJ Wildlife Large Multi-Chamber Woodstone Bat Box, will provide a cavity for bats to roost in (**Fig 21**). This box will be erected by or under the supervision of an ecologist to ensure they are erected in an appropriate location.

The front panel on the Schwegler 2F has a second inner wooden panel fitted to it for bats that inhabit crevices, and is suitable for both Common Pipistrelles and Brown Long-eared Bats. These boxes have been designed as a summer roosting space for bats, such as those identified on site. The bat box maintains a stable temperature inside the box and is dark in colour to absorb warmth.

The CJ Wildlife Large Multi-chamber Woodstone Bat Box (**Fig 21**) features internal wooden dividers as well as a rough surface, which provides a wide variety of hanging spaces as well as making it easier for bats to grip. The front panel and internal wooden dividers can be removed for easy cleaning in the winter months, provided the box is not occupied. The bat boxes are manufactured from long-lasting Woodstone which will not rot, leak, crack or warp, and will last for at least 20 - 25 years, making it suitable for long-term mitigation projects.

**Figure 21.** The Schwegler 2F Bat Box (left) or CJ Wildlife Large Multi-Chamber Woodstone Bat Box (right) to be erected on a suitable location of on site.



The woodcrete bat boxes will be erected by or under the supervision of an ecologists to ensure they are placed in the most appropriate / effective place. These boxes in combination with the integrated bat boxes will provide a variety of roosting opportunities for a variety of bat species and will lead to a significant increase in the suitability of roosting opportunities on site.

### 6.8.2.3. Bat House

A further enhancement will include a bat house as seen in (Fig 22), this will be positioned away from the proposed buildings towards the western boundary. This purpose built bat house will be able to provide a home for a larger roost and bigger bat species.

**Figure 22.** View of bat house built on stilts to be designed and erected towards the western boundary.



### 6.8.3 Hedgehogs

To ensure permeability for small mammals across the site, the garden fences of the properties will ensure at least 2 gaps are present within the gravel boards / bases of each fence line to allow for movement of Hedgehogs between gardens and into the wider area. The gaps should be at least 15 cm high by 15 cm wide with permeability for small mammals.

Small signage could be installed at these points to ensure they remain open upon completion of the development. The People's Trust for Endangered Species provide such signage, the purchase of which also supports conservation efforts (Fig 23).

**Figure 23.** Example of Hedgehog Highway signage to be placed above fence gaps provided to allow movements between gardens.



## 7.0 REFERENCES

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK & Ireland

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APPENDIX 1. View of UK Habs Map



Legend

- Site boundary
- Modified grassland (g4)  
Secondary code(s):  
(17) - Ruderal / ephemeral
- Woodland-broadleaved (w1g)
- Line of trees (w1g6)
- Mixed scrub (h3)  
Secondary code(s):  
(11) - Scattered trees
- Developed land. sealed surface (u1b)
- Buildings (u1b5)



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|                                                                                                                       |                        |
|-----------------------------------------------------------------------------------------------------------------------|------------------------|
| Map                                                                                                                   | UK Habs Map            |
| Site                                                                                                                  | Cockpit Barn, Fair Oak |
| Client                                                                                                                | Alderbury Homes Ltd    |
| Date                                                                                                                  | 18/05/2023             |
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