

# Preliminary Ecological Appraisal

Meadow Farm, Pulborough, Horsham, West Sussex, RH20 1DF

August 2024

Arun Ecology Ltd

Registration in England and Wales. Company number: 12524764

Registered Address: Russetts, Hayes Lane, Slinfold, West Sussex

Email: enquiries@arunecology.com – www.arunecology.com

| | |
|---|---|
| Client | Plainview Planning Ltd. |
| Project | Preliminary Ecological Appraisal – Meadow Farm, Pulborough, Horsham, West Sussex, RH20 1DF |
| Version | Final |
| Project team | Joseph Baker – Project Director |
| Report reference | C-PVP-002-001-001 |

| Revision number | Date of issue | Author | Reviewer | Approver |
|---|---|---|---|---|
| 001 | 15/08/2024 | Elizabeth Boxall and Joseph Baker | Hannah Baker | Joseph Baker |

**Disclaimer**

This report has been issued to the commissioning party for their sole use as part of the intended project as outlined above. No other party may use, make use or rely upon the contents of this report without obtaining prior written permission from Arun Ecology Ltd. Arun Ecology Ltd accepts no liability for use of this report other than for its intended purpose at the time the report was prepared and issued and the agreement with the commissioning party under which the work was completed.

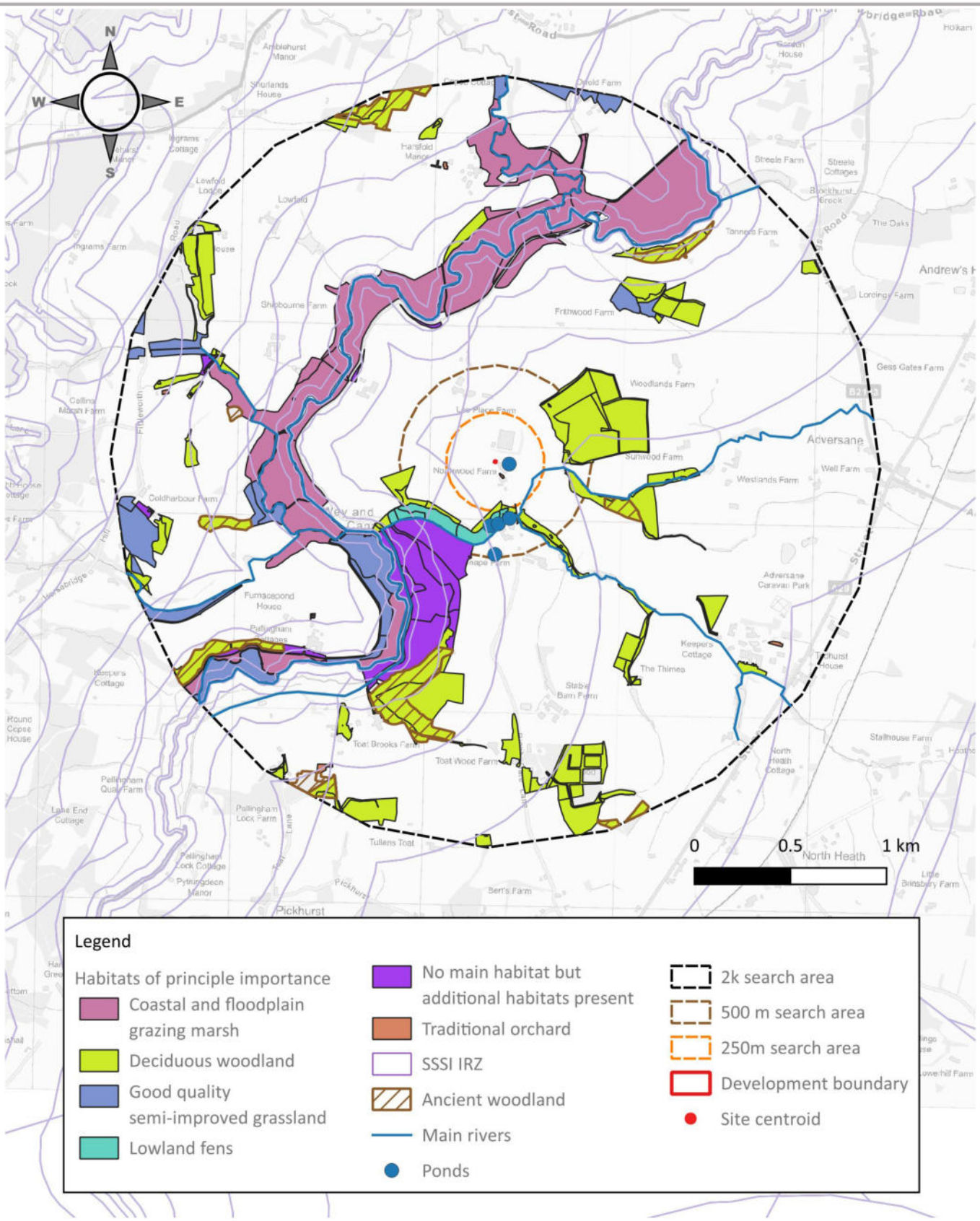
The content of this report has been provided in accordance with the provisions of the CIEEM Code of Professional Conduct and constitutes the professional opinion of Arun Ecology Ltd from an ecological point of view. The professional opinion of Arun Ecology Ltd does not constitute legal opinion, nor does it constitute structural or arboricultural advice. No warranty that is either expressed or implied, is provided by Arun Ecology Ltd in relation to the content of this report. Arun Ecology Ltd assumes no liability for any loss resulting from errors, omissions or misrepresentation made by the commissioning party or any other party. Any recommendation, opinion or finding stated in this report is based on circumstances and facts as they existed or were interpreted at the time that Arun Ecology Ltd completed the work. No independent verification has been made of any information by third parties used to inform this report and Arun Ecology Ltd accepts no responsibility for errors and omissions provided in such information.

This report is the copyright of Arun Ecology Ltd. All rights reserved. Any unauthorised reproduction or usage or this report is strictly prohibited.

# Contents


1. Summary and Recommendations ..... 8
2. Introduction ..... 10
2.1 Development Location ..... 10
2.2 Development Proposals ..... 10
2.3 Ecology Background ..... 10
2.4 Brief and Objectives ..... 10
3. Method ..... 12
3.1 Preliminary Ecological Appraisal ..... 12
3.2 Desk Study ..... 12
3.3 Field Habitat Survey ..... 13
3.4 Site Habitat Suitability Assessment ..... 13
3.5 Survey Dates and Conditions ..... 16
3.6 Surveyors ..... 16
3.7 Limitations ..... 16
4. Results ..... 17
4.1 Desk Study ..... 17
4.2 UK Habitat Classification Survey Results ..... 20
4.3 Site Habitat Suitability Assessment ..... 22
5. Legislation and Planning Policy ..... 25
6. Requirements and Recommendations ..... 32
6.1 Background ..... 32
6.2 Ecological Enhancements ..... 32
6.3 Mitigation ..... 32
7. Conclusion ..... 35
8. Bibliography ..... 36
Appendix I – Desk Study Protected Species and Species of Conservation Concern Records ..... 38
Appendix II – Bat Preliminary Roost Assessment Results ..... 41
Appendix III – Legislation & Planning Policy ..... 42

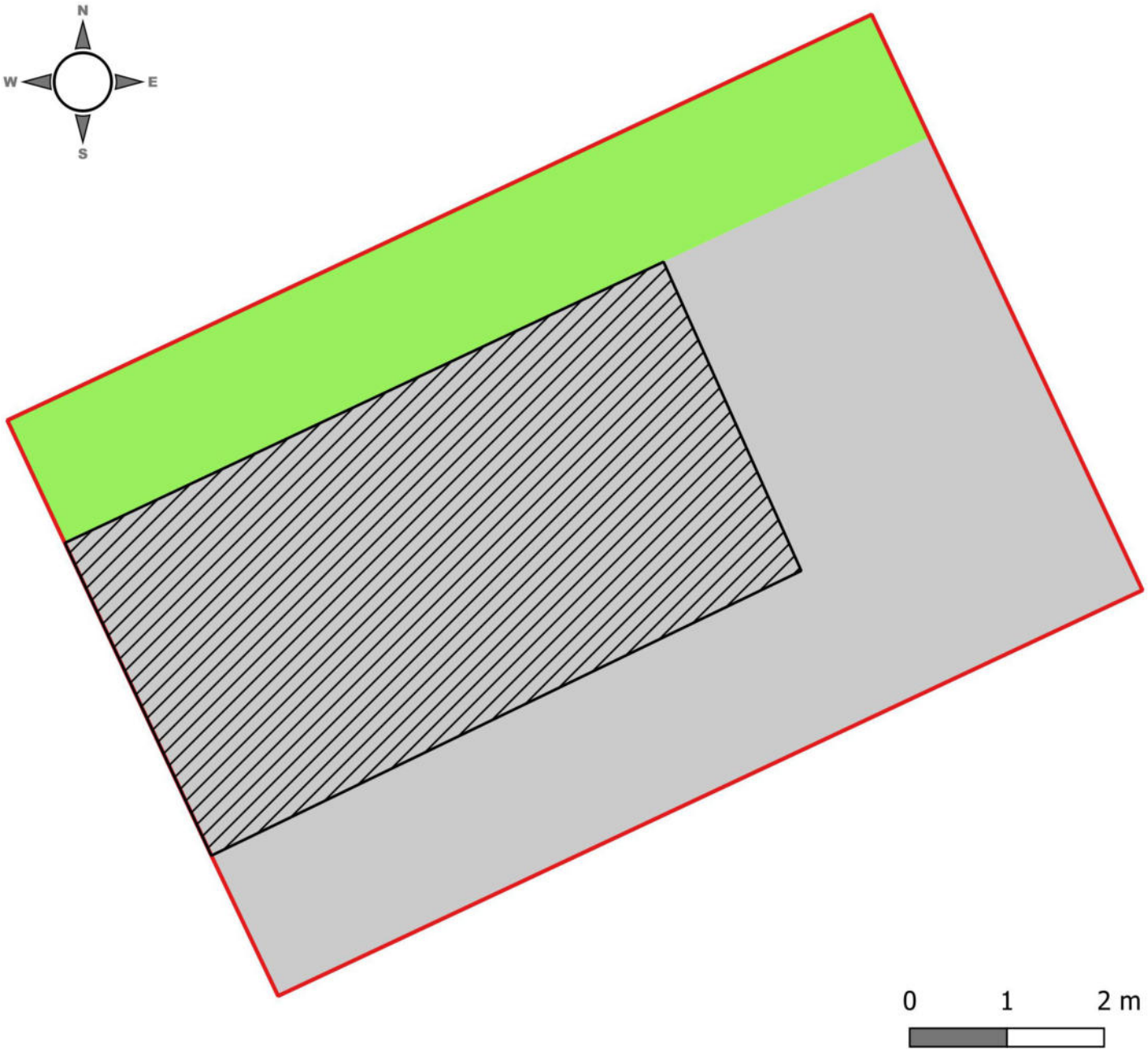
Figure 1 Site Location and Desk Study Results ..... 5
Figure 2a UK Habitat Classification Survey Results ..... 6
Figure 2b UK Habitat Classification – Photographs ..... 7




Contains Ordnance Survey Data. © Crown Copyright and Database Right 2022. Map not to be copied wihtout the Permission of Arun Ecology Ltd

| | | | |
|---|---|---|---|
| **Figure Title**<br>Site Location and Desk Study Results | | | **Client/Report Ref:**<br>Plainview Planning Ltd - C-PVP-002-001-001 |
| **Site Location**<br>Land at Meadow Farm, Meadow Farm,<br>Black Gate Lane, Pulborough, Horsham, West Sussex | | | |
| **Figure no:**<br>1 | **Revision no:**<br>1 | **Scale:**<br>1:45000 | |
| **Cartographer:**<br>JB | **Date Drawn**<br>14/08/24 | **Reviewed by:**<br>HB | |

arun ecology
enquiries@arunecology.com
www.arunecology.com




arun ecology

**Legend**

- Development boundary

UK Habitat Classification

- g4 - modified grassland
- u1b - developed land sealed surface
- u1b5 - building

Figure Title:

UK Habitat Classification Survey

Client/ Report ref:

Plainview Planning Ltd - C-PVP-002-001-001

Site Location:

Land at Meadow Farm, Blackgate Lane, Pulborough, Horsham, West Sussex.

| Figure no: | Revision no: | Scale: |
|---|---|---|
| 2a | 1 | 1:100 |

| Cartogragher: | Date Drawn: | Reviewer: |
|---|---|---|
| JB | 14/08/24 | HB |

Contains Ordnance Survey Data. © Crown Copyright and database right 2022. This map or any part cannot be copied without written permission from Arun Ecology Ltd

**Photo 1:** Displaying an area of modified grassland of which a small part falls within the development boundary.



**Photo 2:** Displaying the proposed development boundary including the temporary storage of garden materials.



**Photo 3:** Displaying an alternative perspective of the developed land sealed surface located within the development boundary.



**Photo 4:** Displaying the internal area of the building B1, a polytunnel located within the development boundary.



**Photo 5:** Displaying a native hedgerow habitat of principle importance located immediately adjacent to the development boundary.



**Photo 6:** Displaying an alternative perspective of the modified grassland within the development boundary.



This figure or the contents cannot be copied without the written permission of Arun Ecology Ltd.

| | |
|---|---|
| Site Location: Preliminary Ecological Appraisal - Photographs | Client: Plainview Planning Ltd |
| Figure Title: Land at Meadow Farm, Blackgate Lane, Pulborough, Horsham, West Sussex | Report referene: C-PVP-002-001-001 |

| Figure no: | Revision no: | Scale: | |
|---|---|---|---|
| 3 | 1 | n/a | |
| **Cartographer:** | **Date Drawn** | **Reviewed by:** | |
| Joseph Baker | 11/08/2024 | Hannah Baker | |

arun ecology
enquiries@arunecology.com www.arunecology.com

# 1. Summary and Recommendations

| | |
|---|---|
| **Proposals** | • Plainview Planning Ltd on behalf of their client are proposing a new development (Grid reference: TQ 05346 23301) on Meadow Farm, Black Gate Lane, Pulborough, Horsham, West Sussex, RH20 1DF (see Figure 1).<br>• The proposals include the construction of a timber frame agricultural storage building to replace an existing polytunnel structure. |
| **Surveys** | • A desk study was completed that included the purchase of records from the Sussex Biodiversity Record Centre.<br>• A site visit was completed that included a UK Habitat Classification Survey (UK Habs, 2023) and an appraisal of the site habitats to act as an ecological receptor for protected species and other species of conservation concern. |
| **Impact assessment** | • The development will not result in any adverse impacts to designated sites of international, nation or local importance.<br>• The development will not result in any impacts to ancient woodland or any other type of irreplaceable habitat.<br>• A native hedgerow with trees that will qualify as Habitats of Principle Importance was recorded near the development boundary. Furthermore, main waterbodies and a pond were recorded nearby to the site. Mitigation will be required during the construction stage of the project to ensure there is no adverse impacts as a result of construction-based pollution on these habitats.<br>• Based upon proposals, the desk study results, and the habitats recorded within or adjacent to the site, bats (foraging and commuting habitat), great crested newt (GCN) and nesting birds are a material consideration to the development.<br>• In-line with national and local policy, the development will be required to incorporate ecological enhancements into the design. The development will however be exempt from achieving measurable net gains as defined under The Environment Act, 2021. |
| **Recommendations** | **The recommendations below represent a summary only. The full recommendations are outlined in section 6 and should be referenced to in the use of this report.**<br><br>**Mitigation**<br>• A precautionary method of works including mitigation has been proposed to ensure GCN are appropriately safeguarded during the construction phase of a small-scale development.<br>• The mitigation measures outlined in this report for nesting birds should be followed during the construction phases of the development.<br>• The installation of any lighting as part of the development should be designed in line with current guidance issued by the Bat Conservation Trust and Institute of |

| | |
|---|---|
| | Lighting Professionals: Guidance Note 08/23: Bats and Artificial Lighting in the UK (BCT & ILP 2023) to ensure there are no adverse impacts on suitable commuting and foraging habitat for bats adjacent to the development boundary.<br>• The pollution prevention measures outlined in this report should be followed to reduce site-based pollution and prevent any offsite pollution to the nearby main river body.<br>**Ecological Enhancements**<br>• The ecological enhancements outlined within this report should be incorporated into the design of the development. |

# 2. Introduction

## 2.1 Development Location

2.1.1 Planview Planning Ltd on behalf of their client is proposing a development (grid reference: TQ 05346 23301) on land located at Meadow Farm, Black Gate Lane, Pulborough, Horsham, West Sussex (see Figure 1). The above address is hereafter referred to as 'the site' and Planview Planning Ltd as the 'applicant'.

## 2.2 Development Proposals

2.2.1 The applicant seeks planning consent for the construction of a new timber frame agricultural storage building to replace the existing polytunnel structure. The proposals above are hereafter referred to collectively as 'the development' in this report.

2.2.2 The local planning authority for the site's location is Horsham District Council. The applicant has informed Arun Ecology Ltd that they intend to submit the planning application to Horsham District Council in 2024.

## 2.3 Ecology Background

2.3.1 No previous ecology reports for the site were provided to Arun Ecology Ltd by the applicant prior to the preparation of this report.

## 2.4 Brief and Objectives

2.4.1 Arun Ecology Ltd were commissioned by the applicant to undertake a Preliminary Ecological Appraisal (PEA) at the site.

2.4.2 The key objectives of a PEA, as per CIEEM guidance (CIEEM, 2017) are as follows:

- Identify the likely ecological constraints associated with the development;
- Identify any mitigation measures likely to be required, following the 'mitigation hierarchy', as per BS42020:2013 Clause 5:2 (BSI, 2013);
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (ECiA); and
- Identify the opportunities offered by the development to deliver ecological enhancements and net gains for biodiversity.

2.4.3 The brief agreed with the applicant was to:

- Undertake a desk study search obtaining and purchasing records of designated sites, Habitats of Principle Importance (HPI), ancient woodland and records of protected species and species of conservation concern;

- Undertake a UK Habitat Classification Survey at the site to record the habitats within the site, assess their conservation value and suitability to act as ecological receptors for protected species and species of conservation concern, including a detailed assessment of the suitability of structures and trees to support roosting bats; and

- To provide a PEA report supported by digitized mapping that presents the methods and results of the desk study and the UK Habitat Classification survey at the site. The report will also include an initial impact assessment of the development and any recommendations, including opportunities for ecological enhancement and net gains for biodiversity.

# 3. Method

## 3.1 Preliminary Ecological Appraisal

### General Approach

3.1.1 The PEA was carried out in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and the CIEEM Guidelines for Ecological Impact Assessment (CIEEM, 2018).

## 3.2 Desk Study

3.2.1 The study area for the desk study at this stage of the development is based upon a provisional *'zone of influence'*. *'The 'zone of influence'* is defined as per CIEEM guidance *'the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities'* (CIEEM, 2018).

3.2.2 The provisional zone of influence for the development where data was sought is set as the following:

- RAMSAR, Special Conservation Areas (SACs) and Special Protection Areas (SPAs), (including potentially designated sites), Sites of Specific Scientific Interest (SSSI) and locally designated sites – 2 km;
- All other non-statutory designated sites – 1 km;
- Habitats of Principle Importance (HPI) – 2 km
- Ancient woodland – 2 km;
- Rivers – 2 km;
- Ponds – 0.5 km; and
- Protected Species, Species of Principle Importance (SPI) and other species of conservation concern – 1 km.

3.2.3 Sources of information within the study area for the desk study were as follows;

- The Multi-Agency Geographical Information for the Countryside (MAGIC);
- Government open-source GIS datasets;
- Satellite images (powered by google via QGIS 3.3); and
- Purchased records from Sussex Biodiversity Record Centre.

## 3.3 Field Habitat Survey

### Survey Area

3.3.1 The study area for the field survey was defined as all of the land within the development boundary (see Figure 2a).

### UK Habitat Classification Survey

3.3.2 The field survey was undertaken using the UK Habitat Classification system (UK Habs, 2023a) to record the habitat types within the site boundary. The UK Habitat Classification has 5 hierarchical levels of habitat classification that aligns with those outlined under national legislation and planning policy. Habitats were mapped in the field using the primary habitat codes described in the UK Habitat Classification Professional Edition to levels 3, 4 or 5 (UK Habs, 2023b).

3.3.3 Secondary habitat codes and target notes were assigned along with primary habitat codes to provide additional context where the habitat contained additional features that deviate from the primary classification.

3.3.4 To identify each habitat, the dominant plant and other readily identified species were recorded and their abundance within the site was measured using the DAFOR scale (Stace, 2019).

## 3.4 Site Habitat Suitability Assessment

### General Approach

3.4.1 The site was appraised for its suitability to support protected species and species of conservation concern at the time of the field habitat survey with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). The species-specific guidance and references used in the appraisal are outlined in Table 1 below.

**Table 1 –** References used to assess the suitability of habitat within the site to support protected species and species of conservation concern.

| Group/ taxa | Habitat Appraisal References |
|---|---|
| Amphibians/ GCN | • GCN Habitat Suitability Index (Oldham et al. 2010); and<br>• Great Crested Newt Conservation Handbook (Langton et al, 2001). |
| Bats | • Bat Conservation Trust Good Practice Guidelines (Collins, 2023). |
| Birds | • A Field Guide to Monitoring Nests (Ferguson-Lees et al, 2011); and<br>• Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment (Shawyer, 2011). |
| Mammals | • Surveying Badgers (Harris et al, 1989) and Badger Trust Best Practice Guidelines (Badger Trust, 2023);<br>• The Dormouse Conservation Handbook (Bright et al, 2006).<br>• UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation (Cresswell, et al, 2012);<br>• Otter (Woodroofe, 2007), Hedgehog (Morris, 2011); Water shrew (Carter, 2006) - Mammal Society Species Series; and<br>• Water Vole Field Signs and Habitat assessment (Dean, 2022) and Water Vole Mitigation Handbook (Dean et al, 2016). |
| Reptiles | • Herpetofauna Workers' Manual (Gent & Gibson, 2003); and<br>• Reptile Habitat Management Handbook (Edgar, 2010) |
| Invertebrates | • Good Planning Practice for Invertebrates (Buglife, 2015); and<br>• Organising Surveys to Determine Site Quality for Invertebrates (English Nature, 2005). |

### Bats – Preliminary Roost Assessment

3.4.2 A bat preliminary roost assessment (PRA) of structures and trees as well as an assessment of the sites habitat for bats was carried out in accordance with the Bat Conservation Trust Good Practice Guidelines for Ecologists (Collins, 2023).

3.4.3 A ground level inspection of the exterior of any structures and trees within the site was undertaken with the aid of torchlight and binoculars to search for bat PRFs that might provide suitable crevices or access/egress points to voids or cavities for roosting bats.

3.4.4 Where accessible and safe to do so, a search for signs of bats such as bat specimens, droppings, urine staining, and audible sound (such as social calls) was undertaken at each structure or tree. This included an internal inspection of roof voids at structures and the use of an endoscope to inspect any accessible bat PRFs.

3.4.5 A classification based upon the roosting suitability for bats was assigned for each structure and tree that was inspected within the site as well as the overall suitability of site habitat. The classification descriptions are detailed below in Table 2 for structures and Table 3 for trees.

**Table 2** – Suitability assessment for a proposed development site for bats, as adapted from BCT Good Practice Guidelines (Collins, 2023).

| Potential Suitability | Definition | |
|---|---|---|
| | **Roosting habitat** | **Potential flight paths and foraging habitat** |
| None | No habitat features on-site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/ suitable shelter at all ground/ underground levels. | No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/ protection for flight lines or that generates shelter for insect populations that is available to foraging bats. |
| Negligible | No obvious habitat features on site likely to be used by roosting bats, however, small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. | No obvious habitat features on site likely to be used as flight paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour. |
| Low | A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roosting sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats). | Habitat that can be used by a small number of bats as flightpaths such as a gappy hedgerow or unvegetated stream but isolated i.e. not very well connected to the surrounding landscape by other habitats.<br>Suitable, but isolated habitat that can be used by small numbers of foraging bats such as a lone tree (not in parkland situation) or a patch of scrub. |
| Moderate | 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, such as maternity or hibernation roosts). | Continuous habitat connected to the wider landscape that could be used by bats for flight paths such as lines of trees, scrub and linked back gardens and for foraging such as trees, scrub grassland and water. |
| High | A structure with one or more potential roosting sites that are obviously suitable for use by a larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation sites. | Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight paths such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br>High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined water courses and grazed parkland.<br>The site is close to and connected to known bat roosts. |

3.4.6 The bat PRA included the collection of information on the structure type and condition as well as the construction materials. For trees, the species height, condition, and approximate age was collected where a tree was assessed as having bat roosting potential.

**Table 3 –** Guidelines for assessing the suitability of trees for bats, adapted from BCT Good Practice Guidelines (Collins, 2023).

| Suitability | Definition |
|---|---|
| None | Either no PRFs in the tree or highly unlikely to be any present. |
| FAR | Further assessment required to establish if PRFs are present in the tree. |
| PRF | A tree with a least one PRF present |

## 3.5 Survey Dates and Conditions

3.5.1 Details on the date, timing and weather conditions recorded during the survey are provided below in Table 4.

**Table 4** – Field Survey Information.

| Date | Survey type | Survey timings | | Temperature (°C) | | Rain | Wind (Beaufort scale) |
|---|---|---|---|---|---|---|---|
| | | Start | Finish | Start | Finish | | |
| 13/06/2024 | UK Habitat Classification and Bat PRA | 11:00 | 12:00 | 16 | 16 | None | 4 |

## 3.6 Surveyors

3.6.1 The fields surveys were undertaken by Joseph Baker BSc (Hons). Joseph Baker is registered to use the Level 2 Class Licence to survey bats.

## 3.7 Limitations

3.7.1 No survey limitations were recorded during the site visit.

# 4. Results

## 4.1 Desk Study

### Designated Sites

4.1.1 The results of the desk study search for statutory and non-statutory designated sites are detailed below in Table 5 and displayed in Figure 1.

**Table 5** - Statutory and non-statutory designated sites returned from the desk study search.

| **Statutory and non-statutory designated sites** | | | |
|---|---|---|---|
| **Designation level** | **Site name** | **Distance & direction** | **Summary** |
| International | | | |
| RAMSAR/ SAC/SPA | Arun Valley | Site within Sussex North Water Resource Zone | This site covers an area of approximately, 487.48 ha – 553 ha in size (that includes the Pulborough Brooks, Amberley Wild Brooks and Waltham Brooks SSSI). Designated primarily for Ramshorn Snail, Bewick Swan and its bird assemblages. There are also 14 other qualifying features for the designations. |
| National | | | |
| SSSI | Upper Arun | River Arun is 780m east of the site. | The Upper Arun is a 13km section of the River Arun, it flows south over New Bridge, Billingshurst and Pulborough. The Upper Arun is designated for its dragonfly assemblages. |

### Habitats of Principle Importance

4.1.2 Details on the number of HPI, the habitat type and the distance from the site of the closest HPI parcel are detailed in Table 6.

**Table 6** - Habitats of Principle Importance returned from the desk study search within 2 km of the site.

| **Habitat of Principle Importance** | | |
|---|---|---|
| **Habitat type** | **Number of HPI parcels within 2km** | **Distance and direction of nearest HPI parcel and other notable parcels** |
| Deciduous woodland | 136 | • The nearest deciduous woodland parcel is 200 m from the development boundary; and<br>• There are 17 deciduous woodland parcels located within 500 m of the development boundary. |
| Traditional orchard | 10 | • There is one traditional orchard parcel located within 60 m from the development boundary. |
| Coastal and floodplain grazing marsh | 49 | • The nearest coastal and floodplain grazing marsh is 900 m from the development boundary. |
| Good quality semi-improved grassland | 25 | • The nearest good quality semi-improved grassland is 80m from the development boundary. |
| Lowland fens | 6 | • The nearest lowland fen parcel is 245 m from the development boundary; and<br>• There are 4 lowland fen parcels within 500 m of the development boundary. |
| No main habitat but additional habitats present | 6 | • The nearest parcel was located 430 m from the development boundary; and<br>• The habitats returned from this category included: Good semi-improved grassland, species rich grassland, lowland meadow and pasture, coastal floodplain grazing marsh and traditional orchard. |

4.1.3 One pond was identified within the site ownership boundary approximately 50 m from the development boundary. Four further ponds were identified from satellite imagery and OS mapping within 500 m of the site. All ponds returned from the desk study search are displayed in Figure 1.

4.1.4 Twenty-seven main river parcels were returned within 2 km of the site. None of the parcels were priority river habitat parcels.

### Ancient Woodland

4.1.5 There were 14 ancient woodland parcels returned within 2 km of the site. The nearest ancient woodland parcel was 0.51 km from the site.

### Protected Species and Other Species of Conservation Concern

4.1.6 Fifty-eight species of conservation concern that broadly could be relevant to the development were selected from the records returned by the Sussex Biodiversity Record Centre within 1 km of the site. The above species included 2 bats, 39 birds, 2 higher plant, 5 invertebrates, 2 mammals (excluding bats) and 8 invasive non-native species (see Table 12, Appendix I).

### Granted European Protected Species Licences

4.1.7 One EPSL has been granted within 2 km of the site. Information on the EPSL granted within 2 km of the site is provided below in Table 7.

**Table 7:** Information of EPSL licences granted within 2 km of the site.

| Licence number and year granted | Species | Grid reference | Distance from site | Summary of activities |
|---|---|---|---|---|
| 2014-4357-EPS-MIT | Brown long-eared, Common pipistrelle, Daubenton's, Serotine and Soprano pipistrelle. | TQ05202470 | 1.3 km | Allowed the damage and destruction of a resting place. |

## 4.2 UK Habitat Classification Survey Results

4.2.1 The habitats recorded within the development boundary during the UK Habitat Classification Survey are displayed in Figure 2a with photographs of habitats displayed in Figure 2b. A description of each habitat recorded within the site and the development boundary is given below in Table 8.

**Table 8** – Habitats recorded within the site during the UK Habitat Classification Survey.

| UK Habitat Classification | Approx. Area sqm | Summary and species list |
|---|---|---|
| **Grassland** | | |
| **Primary:** Modified grassland<br>**Code:** g4 | 13 sqm | There is an area of modified grassland in the northern section of the development boundary. The grassland had a short sword height of approximately 50 mm – 100mm with some taller grass remnants along the edge of the grassland. The modified grassland appears to be used for parking cars and storing trailers and as such the grassland shows signs of wear and compaction, with small areas of bare ground present. There is evidence of some grazing by chickens and ducks that are kept within the site. No invasive species were recorded within the grassland. The modified grassland category was selected due to the abundance of perennial rye grass, the species poor composition and abundance of forbs indicative of improvement.<br>**Species recorded.**<br>**Grasses:** (A) Yorkshire fog, (A) perennial rye grass (F) Annual meadow grass, (O) common bent grass, (O) rough meadow grass.<br>**Forbs and other plants:** (A) Yarrow, (A) greater plantain, (A) white clover, (F) nettle, (F) common daisy, (F) narrow leaf plantain; (O) germander speedwell, (O) hedge woundwort, (O) stone parsley, (O) oxeye daisy. |
| **Urban** | | |
| **Primary:** Developed land sealed surface<br>**Code:** u1b | 50 sqm | There is an area of developed land sealed surface located within the site that makes up much of the sites area. The habitat is formed of a hardstanding underlay with a permeable shingle material used as a carpark and for access around the buildings within the wider site.<br>**Species recorded.**<br>There is no vegetation associated with this habitat. |

| | | |
|---|---|---|
| **Primary:** Building<br>**Code:** u1b5 | 23 sqm | There is a single building located within the development boundary. The building is a steel framed polytunnel used for storage.<br>**Species recorded.**<br>There is no vegetation associated with this habitat. |

4.2.2 Habitats recorded outside but in close proximity of the development boundary during the UK Habitat Classification Survey that could be a material planning consideration are displayed in Figure 2a with photographs of habitats displayed in Figure 2b. A description of each habitat recorded within the site and the development boundary is given below in Table 9.

**Table 9** – Habitats recorded within the site but outside of the development that could be a material planning consideration during the UK Habitat Classification Survey.

| UK Habitat Classification | Approx. Area sqm | Summary and species list |
|---|---|---|
| **Heathland and Shrub** | | |
| **Primary:** Native hedgerow<br>**Secondary:** Hedgerow with trees<br>**Code:** h2a - 11 | 334 sqm | There is a native hedgerow located along the western boundary of the site bordered by a road on its western aspect and developed land, sealed surface on its eastern aspect. The hedgerow is approximately 223 m in length, 2 m tall, 1.5 m wide along the length of the property boundary. The native hedgerow with trees habitat will meet the criteria as a HPI.<br>**Species recorded.**<br>**Hedge layer: (D)** hawthorn, (F) blackthorn, (F) hazel, (F) spindle. (O) bramble, and (O) dogwood. |

## 4.3 Site Habitat Suitability Assessment

4.3.1 An assessment of the sites suitability to act as an ecological receptor for protected species and species of conservation concern based upon the desk study results and the habitats recorded during the UK Habitats Classification Survey is provided below in Table 10. Full results of the bat Preliminary Roost Assessment of structures is summarised below and provided in full in Table 13, Appendix II.

**Table 10** – Site habitat assessment for protected species and species of conservation concern.

| Species/group | Site Assessment and Rationale |
|---|---|
| GCN and Other Amphibians | • No records of GCN were returned from the desk study search within 1 km of the site. One pond was recorded within the site ownership boundary and is approximately 50 m from the development boundary. It is our understanding that the pond within the site boundary is newly created within the past 5 years. Four further ponds in close proximity of each other were identified from satellite imagery and OS mapping within 0.5 km of the site, the closest being 0.3 km south of the site. It was noted that three of the ponds appear to be online and are linked via a stream that forms part of the River Arun, as such, the probability of natural predators to GCN such as fish being present in these ponds is much greater. The four ponds outside of the site boundary are immediately surrounded by woodland and grassland as identified from aerial imagery.<br>• No GCN breeding habitats were recorded within the development boundary. The habitat within the development boundary is formed developed land sealed surface and does not provide suitable habitat structure as a resting place for GCN. There are wooden stake stacks and stacks of building materials, that broadly could provide suitable resting places for GCN, however these are likely to be in place on a temporary basis and regularly disturbed. Nearby to the development boundary there is a native hedgerow with trees and in the wider site grassland, scrub, orchard and woodland habitats that are reasonably likely to provide suitable resting places for GCN.<br>• Based on the above points it is reasonably likely that GCN could be found nearby to the site. The habitat within the development boundary, however, is reasonably unlikely to form part of the habitat for any nearby GCN habitats. In our professional judgment the probability of GCN being encountered within the development boundary is reduced by the age of the newly created pond within eh site ownership boundary and the distance of the four other ponds to the site (>250m) and the fact at least three are connected to a river. |
| Bats | • Records of two bat species were returned from the desk study search within 1 km of the site. |

| | |
|---|---|
| | • There is no suitable roosting habitat within the site for bats (see Table 13, Appendix II). The habitat within the development boundary is formed of developed land sealed surface and a small amount of modified grassland which provides very limited foraging habitat for bats. As such, the habitat within the development boundary was considered to have low suitability for roosting bats. The development is situated next to a native hedgerow with trees which provides a suitable foraging and commuting habitat that provides connectivity to the wider landscape which contains several high-quality habitats for bats (see Figure 1). |
| Birds | • Several SPI and bird species of conservation concern were returned from the desk study search within 1 km of the site, largely reflecting habitats in the wider rural landscape including deciduous woodland and wetland habitats nearby to the site.<br>• The habitat within the development boundary is formed primarily of developed land sealed surface and modified grassland with a short sword height (<100 mm) which provides no nesting opportunities for birds and limited foraging opportunity. The polytunnel building within the development boundary is reasonably unlikely to be suitable for nesting birds due to its open structure and lack of vantage points for nest construction. There are building materials within the development boundary which could be used by nesting birds.<br>• Based on the above points it is possible that nesting birds could be encountered within the development boundary. It is reasonably that any significant populations of SPI or important bird assemblages of conservation concern will be present within the development boundary. |
| Terrestrial mammals (non-bats) | • **Other mammal burrows:** Records of European rabbit was returned within 1 km of the site. No evidence of rabbit burrows was recorded within the development boundary at the time of the UK Habitat Classification Survey. The development boundary is formed primarily of developed land sealed surface that is subject to regular disturbance and as such burrowing mammals are reasonably unlikely to be encountered within the development boundary.<br>• **Badger:** No records of badger were returned within 1 km, and no field evidence was noted within the development boundary at the time of the UK Habitat Classification Survey. The surrounding grasslands and hedgerows provide requisite opportunities for foraging and commuting activities and are likely preferential in comparison to the sites developed land sealed surface hardstanding habitat. Therefore, in our professional judgment, it is considered reasonably unlikely for badger to be encountered within the development boundary.<br>• **Hazel dormouse:** No records of hazel dormouse were returned within 1 km of the site. The habitat within the development boundary was formed of developed land sealed surface and a small area of modified grassland which does not provide suitable/typical habitat structure that is required by hazel dormouse, furthermore no evidence of hazel dormouse was recorded at the time of the UK Habitat |

| | |
|---|---|
| | Classification Survey. There is a native hedgerow with trees located adjacent to the development boundary that broadly provides suitable habitat for hazel dormouse. However, several country lanes and the presence of the River Arun 900 m to the north pose significant barriers for dispersal of hazel dormouse locally.<br>• **Otter and Water vole:** No records of otter or water vole were returned within 1 km of the site from the desk study search, and no field evidence was noted during the time of the UK Habitat Classification Survey. No wetland habitats are present within the development boundary. Tributaries of the River Arun are located 200 m to the south and 800 m to the north of the development boundary and are typical habitats that could be used by otter or water vole. However, due to the lack of aquatic connectivity, and the scarce distribution of these species in Sussex it is considered reasonably unlikely that otter or water vole will be encountered within the site. |
| Reptiles | • No records of reptiles were returned within 1 km of the site from the desks study search.<br>• The site habitat is primarily formed by developed land sealed surface and short modified grassland that provides habitat with unsuitable structure to support a permanent reptiles population. Therefore, it is reasonably unlikely that reptiles will be present within the development boundary. |
| Invertebrates | • Several records of invertebrates including species of concern and SPI were returned from the desk study search within 1 km of the site.<br>• The habitat within the development boundary includes developed land sealed surface and short modified grassland that provide poor overall habitat quality for invertebrates. As such, it is reasonably unlikely that any important invertebrate assemblages or significant populations of conservation concern including SPI will be present. As such, many of the records returned are more likely to be associated with the wider rural landscape and higher quality HPI found nearby to the development boundary. |
| Plants | • The habitats recorded within the site included developed land sealed surface and species poor modified grassland of low distinctiveness. No protected species or SPI were recorded at the time of the survey, and based upon the habitats present, it is reasonably unlikely such species, or any fungi or lichens species of conservation concern will be present within the site. |
| Non-native and Invasive Species | • No invasive non-native species listed under schedule 9 of the Wildlife & Countryside Act. 1981 were recorded within the site at the time of the survey. |

# 5. Legislation and Planning Policy

5.1.1 The purpose of this section is to evaluate the legislation and planning policy that is either known to be, or that could be a material consideration to the development based upon the desk study survey and the field survey results. A summary of the relevant legislation and planning policy in context of the development is provided below in Table 11. Further details of the UK legislation and planning policy relevant to the qualifying features in this section are detailed in Appendix III.

**Table 11** – Legislation and planning policy evaluation of the development.

| Ecological Feature | Relevant Legislation & Planning policy | Impact assessment and legal compliance | Rationale and comments |
|---|---|---|---|
| **Designated sites** | | | |
| Arun Valley RAMSAR/SAC/ SPA | • Conservation of Habitat & Species Regulations, 2017;<br>• Wildlife & Countryside Act, 1981,<br>• Nation Planning Policy Framework, 2023; and<br>• HDC Local Plan 2015 – Chapter 9 – Policy 24 | No impact - Compliant | • The development will not require a new water supply and will therefore not result in an increase of the water supply in the NSWRZ and as such, will be compliant with respect to water neutrality.<br>• The development is small scale, located outside of the designation and is sufficient distance away that it is reasonably unlikely that any adverse impacts will arise as a result of the development. Furthermore, the development does not meet the SSSI IRZ criteria set out for further consultation with Natural England. No further recommendations are outlined within this report with respect to the Arun Valley RAMSAR/SAC/SPA. |

| | | | |
|---|---|---|---|
| Upper Arun SSSI | • Wildlife & Countryside Act, 1981;<br>• Nation Planning Policy Framework, 2023; and<br>• HDC Local Plan 2015 – Chapter 9 – Policy 24 | No impact - Compliant | • The development is located within the SSSI IRZ for the Upper Arun SSSI but is reasonably unlikely to impact the qualifying features of this designation for the following reasons:<br>  • The development is retained within the site boundary and will not result in any loss of area to Upper Arun SSSI; and<br>  • The scale and distance of the development means that it is reasonably unlikely that any adverse impacts will arise from degradation as a result of increased creational pressure or construction-based pollution.<br>• In our professional opinion further consultation with Natural England regarding the adverse impacts on the Upper Arun SSSI will not be required.<br>• No further recommendations are outlined within this report with respect to statutory designated areas. |
| **Habitats** | | | |
| Irreplaceable Habitat | • National Planning Policy Framework, 2023; and<br>• HDC Local Plan 2015 – Chapter 9 – Policy 24 | No impact – Compliant. | • No ancient woodlands are located within the development boundary or will be directly lost within the site as part of the development.<br>• The nearest ancient woodland parcel is located 600 m west of the development boundary, which is of sufficient distance to buffer any adverse impacts to the ancient woodland and its tree rooting zones.<br>• The scale of the development is small and there is sufficient distance to the nearest ancient woodland parcel that it is reasonably unlikely that any adverse impacts will arise from increased recreational pressure and construction-based pollution that may cause degradation to the ancient woodland. |
| Habitats of Principle Importance | • Natural Environment & Rural Communities Act, 2006 – Section 41; | Mitigation required | • There are no HPI located within the development boundary. There is a native hedgerow with trees HPI adjacent to the development boundary, however the development will not impact the rooting zone of the hedgerow, or any trees associated with the hedgerow. |

| | | | |
|---|---|---|---|
| | • National Planning Policy Framework, 2023; and<br>• HDC Local Plan 2015 – Chapter 9 – Policy 24. | | • Due to the proximity of the native hedgerow to the proposed development mitigation will be required during the construction phase of the development to ensure there are no adverse impacts on the native hedgerow that might arise from construction-based pollution.<br>• The recommendation outlined in section 6.3 should be followed to ensure the development proceeds lawfully. |
| Pollution | • Environmental Protection Act, 1990 | Mitigation required | • To ensure good construction practice and avoid pollution to nearby HPI and habitat offsite, including waterways pollution prevention measures should be incorporated into the construction phase of the development.<br>• The recommendation outlined in section 6.3 should be followed to ensure the development proceeds lawfully. |
| **Biodiversity Net Gain and Ecological Enhancements** | | | |
| Biodiversity Net Gain | • The Environment Act, 2021; and<br>• National Planning Policy Framework, 2023. | Exempt | • It is our understanding that this development falls below the threshold for mandatory BNG as it impacts less than 25 square metres (5m by 5m) of on-site habitat with a biodiversity value greater than zero.<br>• No further recommendations are outlined in this report with respect to BNG. |
| Ecological Enhancement | • National Planning Policy Framework, 2023;<br>• HDC Local Plan 2015 – Chapter 9 – Policy 24 | Further action required | • The development will be required to implement ecological enhancements into the design of the development to ensure it is compliant with national and local planning policy.<br>• The recommendations outlined in section 6.2 should be followed to ensure the development is compliant with national and local planning policy. |
| **Protected Species and Species of Conservation Concern** | | | |
| Badger | • Badger Protection Act, 1992 (Badger only); and<br>• Wild Mammals Protection Act, 1996 | Impacts/ offence reasonably unlikely | • The development is reasonably unlikely to result in impacts to individual badger, their setts or any habitat associated with any nearby badger populations. |

| | | | |
|---|---|---|---|
| Bats | • Conservation of Habitat & Species Regulation, 2017;<br>• Wildlife & Countryside Act, 1981 – schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41. | Mitigation required | • The removal of the building - polytunnel within the site is reasonably unlikely to result in impacts to individual bats or their roosts (resting/ breeding places) as this structure was classified as having negligible suitability for roosting bats.<br>• The development will result in the removal of a small area (approximately 10m$^2$) of modified grassland; however, this is reasonably unlikely impact the conservation status of bats locally; and<br>• There is a native hedgerow with trees adjacent to the development boundary that provides suitable foraging and commuting habitat for bats, as such mitigation will be required to ensure any lighting as part of the development does not adversely impact these habitats to ensure the development proceeds lawfully. |
| Birds | • Wildlife & Countryside Act, 1981 – Section 1 and Schedule 1; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41. | Mitigation required | • It is reasonably unlikely that significant or rare assemblages or populations of birds including SPI will be adversely impacted by the development.<br>• It is possible that nesting birds could use the building materials and construction site during this phase of the development and therefore, the recommendations outlined in section 6.3 of this report should be followed to ensure the development proceeds lawfully. |
| Great crested newts | • Conservation of Habitat & Species Regulations, 2017.<br>• Wildlife & Countryside Act, 1981 – schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41. | Mitigation required | • No breeding habitat or suitable terrestrial habitat for GCN is present within the development boundary. There is pond and suitable terrestrial habitat nearby to the development boundary which suggests it is possible that GCN could be found nearby to the site.<br>• In our professional judgement for the reasons outlined in Table 10, section 4.3 the probability of encountering GCN within the development boundary and any adverse impacts occurring on GCN at a population level as a result of the development is acceptably low.<br>• The above points taken together in our professional opinion suggest that there will be no licensable actions associated with the development and as such the |

| | | | |
|---|---|---|---|
| | | | development can proceed subject to certain precautionary mitigation measures being followed, as outlined in section 6.3. |
| Hazel dormouse | • Conservation of Habitat & Species Regulations, 2017.<br>• Wildlife & Countryside Act, 1981 – schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41. | Compliant/ Impacts reasonably unlikely | • There are no habitats suitable for hazel dormouse located within the development boundary and nearby habitats such as the native hedgerow with trees will not be adversely impacted as part of the development. As such, the development is reasonably unlikely to harm individual hazel dormouse or adversely impact potential hazel dormouse habitat. |
| Hedgehog | • Natural Environment & Rural Communities Act, 2006 - Section 41; and<br>• Wild Mammals (Protection) Act, 1996 | Compliant/ Impacts reasonably unlikely | • Based on the site habitat and the development proposals the risk of hedgehog being encountered and inadvertently killed with methods prohibited under the Wild Mammals (Protection) Act, 1996 is acceptably low.<br>• It is reasonably unlikely that a significant population of hedgehog will be impacted by the development. |
| Reptiles | • Conservation of Habitat & Species Regulations, 2017 (smooth snake and sand lizard only);<br>• Wildlife & Countryside Act, 1981 – schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41. | Impacts/ offence reasonably unlikely | • It is reasonably unlikely that individual reptiles or significant populations of reptiles or will be adversely impacted as a result of the development due to the absence of suitable reptile habitat within the site. |

| | | | |
|---|---|---|---|
| Invasive non-native species | • Wildlife & Countryside Act, 1981 – Schedule 9; and<br>• Invasive Alien Species Order, 2019. | Impacts/ offence reasonably unlikely | • The development is reasonably unlikely to result in an act that would constitute an offence for a species listed under Schedule 9 of the Wildlife & Countryside Act, 1981 or Invasive Alien Species Order, 2019 (i.e. intentional release or spreading). |
| Invertebrates | • Conservation of Habitat & Species Regulations, 2017 (listed species only);<br>• Wildlife & Countryside Act, 1981 – Schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – S40/41. | Impacts/ offence reasonably unlikely | • The development is reasonably unlikely to result in impacts to any European protected invertebrates, nationally protected species, important populations of SPI or nationally or locally important invertebrate assemblages of conservation value. |
| Protected plants, fungi and lichens | • Conservation of Habitat & Species Regulations, 2017 (listed species only);<br>• Wildlife & Countryside Act, 1981 - Schedule 8; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 40/41. | Impacts/ offence reasonably unlikely | • The development is reasonably unlikely to result in intentional picking, uprooting, destruction, or intentional clearance of any wild plant including European protected plants, national protected plants, SPI or those of national or local conservation concern. |
| Otter | • Conservation of Habitat & Species Regulation, 2017;<br>• Wildlife & Countryside Act, 1981 – schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41. | Impacts/ offence reasonably unlikely | • The development is reasonably unlikely to result in impacts to individual otter or their habitat and therefore will not impact the favourable conservation status of this species. |

| | | | |
|---|---|---|---|
| Water vole | • Wildlife & Countryside Act, 1981 – schedule 5; and<br>• Natural Environment & Rural Communities Act, 2006 – Section 41 | Impacts/ offence reasonably unlikely | • The development is reasonably unlikely to result in impacts to individual water vole or the conservation status of significant water vole populations of conservation concern. |

# 6. Requirements and Recommendations

## 6.1 Background

6.1.1 The recommendations included in this section are based upon the mitigation hierarchy (avoidance, mitigation, and compensation; BSI, 2013) and takes consideration of government circular: Biodiversity and Geological Conservation Circular 06/2005.

6.1.2 Mitigation is not discussed where further surveys are required to inform such mitigation or compensation, unless in our professional judgement it would not be proportionate to request further surveys as the risk of a legal offence being committed as a result of the development is acceptably low.

## 6.2 Ecological Enhancements

6.2.1 The following ecological enhancements relevant to the development are recommended within the site:

- Two bird boxes to be mounted on the proposed structure.
- Two solitary bee boxes to be mounted within the development boundary; and
- One small refugia/ hibernaculum (such as a log pile or constructed form mixed materials such as rubble, logs and soli) suitable for GCN and reptiles to be created within the wider site ownership boundary and be placed within suitable grassland or orchard habitat or nearby to the newly constructed pond.

## 6.3 Mitigation

### Bats

6.3.1 To ensure the development avoids impacts on bat foraging and commuting habitats that are located immediately adjacent to the site, any lighting as part of the proposed development should be installed in line with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: Guidance Note 08/23: Bats and Artificial lighting in the UK (BCT & ILP 2023).

6.3.2 The lighting strategy for the site as a minimum should aim to:

- Avoid illumination of the native hedgerow with trees habitat adjacent to the development boundary and other nearby habitats; and

- Minimise the overall level of light pollution within site as a result of the development by:
    - Selecting appropriate lighting sources such as LED lighting that lack UV components, have peak wavelengths higher than 550nm and that have a warm white light (27,000 kelvin or lower);
    - Appropriate fitting of lighting to include horizontal mounting with no light output above 90º and/or no upward tilt, or as a last resort the use of baffles, hoods or louvres to reduce light spill and direct lighting to only where it is needed;
    - Using light when only necessary within the site, by using timers and motion sensors; and
    - Providing natural screens in the landscaping plans of the development to break up artificial light where light spill cannot be avoided.

### Great Crested Newts

6.3.3 A precautionary method of works for GCN should be followed during the construction phase of the development. The following mitigation measures should be followed:

- A tool-box-talk given by an appropriately qualified ecologist to all contractors at the commencement of the construction-based activities to include the protection of GCN, the reason for the talk box talks and the necessary actions to take, including a stop works policy;
- Keeping a tidy construction site and where reasonably practicable keeping building materials off ground to prevent the creation of hibernacula/ refugia for GCN; and
- Any holes, pits or trenches should be kept covered over night and checked each morning in case a newt has become trapped. Where practical it is advised to include small escape ramps/sticks into any holes, pits and trenches (where it might be difficult to seal them effectively with a cover).

6.3.4 The precautionary method of works does not act as legal protection for an action that would otherwise be an offence with respect to GCN. Therefore, in the unlikely event a GCN is encountered within the development boundary, works must momentarily stop, and a professional ecologist should be consulted. The ecologist's professional judgement should be relied upon to determine the need for a GCN mitigation licence. Works should then recommence once a GCN mitigation licence has been obtained (if required).

6.3.5 Alternatively, to the above approach, the development could be registered under the HDC District Level Licence (DLL) Scheme for GCN, as administered by NatureSpace to ensure legal compliance. Registration under the GCN DLL would not require any further surveys and can be completed at any time of year.

### Nesting Birds

6.3.6 If an active bird nest or nesting activity is recorded within the main construction area of the development (such as within the stored building materials or site compounds), the nest should be protected from damage and destruction (including disturbance that may cause the nest to be abandoned). An exclusion area should be implemented around any active nests and works in and around these areas should be controlled or delayed until the chicks have fledged.

### Pollution Prevention

6.3.7 The following pollution prevention measures should be incorporated during the construction phase of the development to ensure that there is no offsite pollution to nearby water sources:

- Safe storage of fuels, oil and chemicals within the site with appropriate spill kits (for the scale of activities) available on-site at all times;
- Safe disposal of any contaminated water or soil and general waste within the site or with appropriate offsite and management;
- Appropriate monitoring and prevention of water and silt run-off from construction areas; and
- Where possible the use of fertiliser and herbicides should be minimised as part of on-going site management.

# 7. Conclusion

7.1.1 To ensure the development proceeds lawfully the mitigation outlined in this report with respect to bats and lighting, GCN, nesting birds and pollution prevention should be followed. The development will be required to incorporate ecological enhancement into the design of the development to be compliant with national planning policy.

.

# 8. Bibliography


8.1.1 Badger Trust (2023) Best Practice Guidance for Developers, Ecologists and Planners (England).

8.1.2 Baker, J., Hoskin, R. and Butterworth, T. (2019) Biodiversity Net gain. Good Practice Principles for development. A practical Guide. CIRIA, London.

8.1.3 Biggs, J. et al. (2014) Using eDNA to develop a national citizen science-based monitoring programme for the great crested newt (*Triturus cristatus*).

8.1.4 Bright, P., Morris, P. and Mitchell-Jones, T. (2006) The Dormouse Conservation Handbook Second Edition. English Nature.

8.1.5 BSI Group (2013), BS42020 – a code of practice for biodiversity in planning and development. The British Standards Institution. (Online) Available at http://www.bsigroup.com/LocalFiles/enGB/biodviersty. Accessed April 2022.

8.1.6 Buglife (2015) Good Planning Practice for Invertebrates. Buglife, Peterborough. Available at: https://www.buglife.org.uk/resources/planning-hub/good-practice-planning-for-invertebrates.

8.1.7 CIEEM (2017) *Guidelines for Preliminary Ecology Appraisal, 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester*.

8.1.8 CIEEM (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* Version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

8.1.9 CIEEM (2022) Code of conduct. Chartered Institute of Ecology and Environmental Management, Winchester.

8.1.10 Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London. ISBN – 13 978-1-872745- 96-1

8.1.11 Cresswell, W.J., et al, (2012) UK BAP Mammals. Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation. The Mammal Society. Southampton.

8.1.12 Dean, M. (2016) Water Vole Mitigation Handbook. Mammal Society Mitigation Guidance Series. The Mammal Society Publication.

8.1.13 Dean, M. (2021) Water Vole Field Signs and Habitat Assessment. A Practical Guide to Water Vole Surveys. Pelagic Publishing.

8.1.14 Edgar P, Foster J and Baker J (2010) Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.

8.1.15 English Nature (2006) The Dormouse Conservation Handbook Second edition. English Nature (now Natural England), Peterborough.

8.1.16 English Nature (2011) Organising surveys to determine site quality for invertebrates. English Nature. Available at: https://publications.naturalengland.org.uk/publication/69045.

8.1.17 Ferguson-Lees. J., Castell., R., & Leech, D. (2011) A field guide to Monitoring Nests. BTO Publication.

8.1.18 Gent T and Gibson S (2003). Herpetofauna Workers Manual.JNCC, Peterborough.

8.1.19 Harris, S., Cresswell, P., & Jefferies. D. (1989) Surveying Badgers. An Occasional Publication by The Mammal Society No.09. The Mammal Society. London.

8.1.20 HM Government (2022) Guidance Hazel dormice: advice for making planning decisions Available online at: www.gov.uk/goverment/publications.

8.1.21 ILP & BCT (2023) Guidance Note GN08/23 Bats and Artificial Lighting At Night. Institution of Lighting, Warwickshire. Bat Conservation Trust, London.

8.1.22 Langton T, Beckett C and Foster J (2001). Great Crested Newt Conservation Handbook. Froglife, Suffolk

8.1.23 Morris., P (2011) The Hedgehog - Mammal Society Species Series. The Mammal Society Species Series. The Mammal Society.

8.1.24 Oldham (2010) ARG UK Advice Note 5 Great Crested Newt Habitat Suitability Index. Amphibian and Reptile Groups of the United Kingdom. May 2010.

8.1.25 Shawyer C (2012). Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment. Wildlife Conservation Partnership.

8.1.26 Stace, C. (2019) New Flora of the British Isles 4th Edition, C&M Floristics, Middlewood Green, Suffolk.

8.1.27 Woodroffe, G. (2007) The Otter, 3rd Revised edition. The Mammal Society Species Series. The Mammal Society

8.1.28 UK Habs (2023a). The UK Habitat Classification User's Manual Version V2.0 at http://www.ukhab.org/.

8.1.29 UK Habs (2023b).UK Habitat Classification Definition V2.0 at http://www.ukhab.org/

# Appendix I – Desk Study Protected Species and Species of Conservation Concern Records

**Table 12 –** Records returned from the desk study search within 1 km of the site (SBRC, 2024).

| Species | | HSR[1] | W&C Act[2] | SPI[3] | BOCC[4] | IUCN Red List[5] | Other[6,7,8] |
|---|---|---|---|---|---|---|---|
| **Common name** | **Latin name** | | | | | | |
| **Bats** | | | | | | | |
| Serotine | *Eptesicus serotinus* | ✓ | ✓ (5) | | | | |
| Pipistrelle | *Pipistrellus sp.* | ✓ | ✓ (5) | | | | |
| **Birds** | | | | | | | |
| Barn Owl | *Tyto alba* | | ✓ (1) | | | | |
| Bullfinch | *Pyrrhula pyrrhula* | | ✓ | ✓ | Amber | | |
| Cuckoo | *Cuculus canorus* | | ✓ | ✓ | Red | | |
| Curlew | *Numenius arquata* | | ✓ | ✓ | Red | Global post 2001 NT | |
| Dunnock | *Prunella modularis* | | ✓ | ✓ | Amber | | |
| Grasshopper Warbler | *Locustella naevia* | | ✓ | ✓ | Red | | |
| Green Woodpecker | *Picus viridis* | | ✓ | | | | |
| Grey Wagtail | *Motacilla cinerea* | | ✓ | | Amber | | |
| Hawfinch | *Coccothraustes coccothraustes* | | ✓ | ✓ | Red | | |
| Hobby | *Falco subbuteo* | | ✓ (1) | | | | |
| House martin | *Delichon urbicum* | | ✓ | | Red | | |
| House Sparrow | *Passer domesticus* | | ✓ | ✓ | Red | | |
| Kestrel | *Falco tinnunculus* | | ✓ | | Amber | | |
| Kingfisher | *Alcedo atthis* | | ✓ (1) | | | | Birds Directive |
| Lapwing | *Vanellus vanellus* | | ✓ | ✓ | Red | | |
| Lesser Spotted Woodpecker | *Dryobates minor* | | ✓ | ✓ | Red | | |
| Linnet | *Linaria cannabina* | | ✓ | ✓ | Red | | |
| Mallard | *Anas platyrhynchos* | | ✓ | | Amber | | |
| Marsh tit | *Poecile palustris* | | ✓ | ✓ | Red | | |
| Merlin | *Falco columbarius* | | ✓ (1) | | Red | | Birds Directive |
| Mistle thrush | *Turdus viscivorus* | | ✓ | | Red | | |
| Mute Swan | *Cygnus olor* | | ✓ | | | | |

| Species | | HSR[1] | W&C Act[2] | SPI[3] | BOCC[4] | IUCN Red List[5] | Other[6,7,8] |
|---|---|---|---|---|---|---|---|
| **Common name** | **Latin name** | | | | | | |
| Nightingale | *Luscinia megarhynchos* | | ✓ | | Red | | |
| Red kite | *Milvus milvus* | | ✓ (1) | | Red | Global post2001 NT | Birds Directive |
| Reed bunting | *Emberiza schoeniclus* | | ✓ | ✓ | Amber | | |
| Skylark | *Alauda arvensis* | | ✓ | ✓ | Red | | |
| Song Thrush | *Turdus philomelos* | | ✓ | | | | |
| Spotted Flycatcher | *Muscicapa striata* | | ✓ | ✓ | Red | | |
| Starling | *Sturnus vulgaris* | | ✓ | ✓ | Red | | |
| Stock dove | *Columba oenas* | | ✓ | | Amber | | |
| Swallow | *Hirundo rustica* | | ✓ | | | | |
| Swift | *Apus apus* | | ✓ | | Red | | |
| Tawny Owl | *Strix aluco* | | ✓ | | Amber | | |
| Teal | *Anas crecca* | | ✓ | | Amber | | |
| Turtle Dove | *Streptopelia turtur* | | ✓ | ✓ | Red | | |
| Whitethroat | *Curruca communis* | | ✓ | | Amber | | |
| Willow Warbler | *Phylloscopus trochilus* | | ✓ | | Amber | | |
| Woodcock | *Scolopax rusticola* | | ✓ | | Red | | |
| Yellowhammer | *Emberiza citronella* | | ✓ | ✓ | Red | | |
| **Invertebrates** | | | | | | | |
| Brown Hairstreak | *Thecla betulae* | | ✓ (5 – sale only) | ✓ | | GB post2001 NT | |
| Small Heath | *Coenonympha pamphilus* | | | ✓ | | GB post2001 NT | |
| White Admiral | *Limenitis camilla* | | ✓ (5 – sale only) | ✓ | | GB post2001 EN | |
| Cinnabar | *Tyria jacobaeae* | | | ✓ | | | |
| Ghost Moth | *Hepialus humuli* | | | ✓ | | | |
| **Mammals – Terrestrial** | | | | | | | |
| European Water Vole | *Arvicola amphibius* | | ✓ (5) | ✓ | | GB post 2001 | WMA 2006[9] |

| Species | | HSR[1] | W&C Act[2] | SPI[3] | BOCC[4] | IUCN Red List[5] | Other[6,7,8] |
|---|---|---|---|---|---|---|---|
| **Common name** | **Latin name** | | | | | | |
| European rabbit | *Oryctolagus cuniculus* | | | | | Global post 2001 NT | WMA 2006[8] |
| **Higher Plant** | | | | | | | |
| Bluebell | *Hyacinthoides non-scripta* | | ✓ (8) Sale only | | | | |
| True Fox-sedge | *Carex vulpina* | | | ✓ | | GB post 2001 | |
| **Invasive non-natives** | | | | | | | |
| Mandarin Duck | *Aix galericulata* | | ✓ (9) | | | | |
| Egyptian Goose | *Alopochen aegyptiaca* | | ✓ (9) | | | | |
| Canada Goose | *Branta canadensis* | | ✓ (9) | | | | |
| Nuttall's Waterweed | *Elodea nuttallii* | | | | | | |
| Japanese Knotweed | *Fallopia japonica* | | ✓ (9) | | | | |
| Himalayan Balsam | *Impatiens glandulifera* | | ✓ (9) | | | | |
| A Flowering Plant | *Lamiastrum galeobdolon subsp. argentatum* | | ✓ (9) | | | | |
| A Flowering Plant | *Rhododendron ponticum* | | ✓ (9) | | | | |

[1] Conservation of Habitat and Species Regulation, 2017.

[2] Wildlife & Countryside Act, 1981 (Schedules – 1, 4. 8 and 9).

[3] Species of Principle importance listed under the Natural Environment & Rural Communities Act, 2006.

[4] Birds of Conservation Concern – RSPB

[5] Species listed on the Global and National IUCN Red data list (EX – Extinct, Extinct in wild, CE - Critically Endangered, Endangered, VU - Vulnerable, NR - Near Threatened, LC – Least Concern, Data Deficient. GB Red Data Book: Under IUCN Criteria Includes Nationally Rare, Nationally Rare Marine, Nationally Scarce

[6] EC Habitat Directive

[7] EC Bird Directive

[8] Wild Mammals (Protection Act, 1996

# Appendix II – Bat Preliminary Roost Assessment Results

**Table 13** – Bat Preliminary Roost Assessment of structures within the development boundary.

| Building no. | Description | External inspection | Internal inspection | Evidence of bats | Bat roost potential | Rational and potential roosting features recorded |
|---|---|---|---|---|---|---|
| B1 | Building B1 is polytunnel constructed with a steel tubular frame and finished with a clear PVC type material. | Yes | No | None recorded | Negligible | • The polytunnel is open faced with access to the internal area and light can penetrate through the cover material into the internal area.<br>• No external or internal bat potential roosting features were recorded at the time of the bat PRA.<br>• Based on the above points, the building does not provide the cover or stable condition typically required by bats for roosting. |

# Appendix III – Legislation & Planning Policy

## 8.2 Background

8.2.1 This section provides a summary of the legislation and planning policy that could be relevant to the development. Where possible we have limited this section to the areas relevant to this report. This means the legislation and planning policy outlined below is not included in its entirety.

8.2.2 This section does not constitute legal advice, and only, represents the interpretation and professional judgement of the ecologists named in this report, on the legislation and planning policy deemed relevant to the development.

## 8.3 RAMSAR Convention

8.3.1 RAMSAR sites are wetlands of international importance that have been designated under the criteria of the RAMSAR Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological biodiversity (JNCC, 2019).

8.3.2 The National Planning Policy Framework (NPPF, 2023) outlines the level of consideration that should be given to RAMSAR sites in Planning. Paragraph 187 states that RAMSAR and potential RAMSAR sites should be given the same protection as 'habitat sites' defined as those afforded protection under the Conservation of Habitat and Species Regulations (2017), such as Special Protection Areas or Special Areas of Conservation.

## 8.4 Conservation of Habitat and Species Regulations, 2017

8.4.1 The Conservation of Habitats and Species Regulations, 2017 transposes the EC Habitats Directive and some elements of the EC Bird Directive into national law in England and Wales. The objective of the Habitats Directive is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The directive lays down rules for the protection, management and exploitation of such habitats and species.

### Protected Species

8.4.2 The regulations include provisions that prohibit certain actions from the protection of species listed under Annex II of the Habitat Directive. It is a criminal offence for a person to 'intentionally or recklessly' take the following action:

- Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS);

- Deliberately disturb wild animals of any such species in such a way as to be likely to affect significantly the local distribution or abundance of the species to which they are likely to belong;
- Deliberately take or destroy eggs of any such wild animal;
- Deliberately pick, collect, uproot or destroy a wild plant of an EPS; and
- Keep transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal or plant of an EPS, or any part of or anything derived from such an animal or plant.

8.4.3 The disturbance of such animals includes in particular; any disturbance that is likely to impact their ability;

- To survive, to breed or reproduce, or to rear or nurture their young;
- In case of animals of a hibernating or migratory species, to hibernate or migrate; or
- To affect significantly the local distribution or abundance of the species to which they belong.

### Protected Sites

8.4.4 The Conservation of Habitats and Species Regulations, 2017 puts an obligation on the appointed appropriate authority for England & Wales to establish priorities for a network of nationally important sites.

8.4.5 The aforementioned sites, often referred to as European protected sites are formed of two types of sites, Special Protection Areas (sites specifically designated for birds) and Special Areas of Conservation (specifically designated for fauna and flora). The objective is for all species and habitats covered by these sites to contribute towards the maintenance and restoration of their favourable conservation status.

8.4.6 Designation can include but is not limited to the following reasons:

- A natural habitat type specific in Annex I of the Habitat Directive;
- A species specified in Annex II of the Habitats Directive;
- For the coherence of the national network of protected sites; and
- For threats of degradation or destruction to which the sites are exposed.

## 8.5 Wildlife and Countryside Act, 1981 (as amended)

8.5.1 The Wildlife and Countryside Act, 1981 (as amended) primarily transposes the UK Governments obligations under the Bird Directive and Bern Convention into law. The act outlines provisions for the protection of nationally important sites for nature conservation and provides protection at different levels for certain animals and plants, including certain prohibitions.

### Protection of Birds

8.5.2 Part 1 – Section 1 includes certain prohibitions for the protection of birds which make it a criminal offence for a person to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage, or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy the egg of any wild bird;
- Have in any one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act, 1954;
- Use traps or similar items to kill, injure or take wild birds;
- Have in one's possession or control any bird of a species occurring on schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the secretary of state's regulations; and
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the independent young of such a bird.

### Protection of Animals

8.5.3 Part 1 – Section 9 of the act includes certain prohibitions for the protection of certain animals named in schedule 5. In summary offences include:

- If any person intentionally or recklessly kills, injures or takes any wild animal included in schedule 5;
- If any person has in his possession or control any live or dead wild animal included in schedule 5, or any part of, or anything derived from, such an animal;

- If any person intentionally or recklessly damages or destroys, or obstructs access to, any structure or place which any wild animal included in schedule 5 uses for shelter or protection; or

- Disturb any such animal while it is occupying a structure or place which it uses for that purpose; and

- Sells, offers or exposes for sale, or has in their possession or transports for the purpose of sale, any live or dead wild animal included in schedule 5, or any part of, or anything derived from, such an animal, or publishes or causes to be published any advertisement likely to be understood as conveying that they buy or sell, or intends to buy or sell, any of those things.

### Protection of Plants

8.5.4 Part 1 – Section 13 includes certain prohibitions for the protection of certain wild plants named in schedule 8. In summary offences include if any person:

- Intentionally picks, uproots or destroys any wild plant included in schedule 8, or not being an authorised person, intentionally uproots any wild plants not included in that schedule;

- Sells, offers or exposes for sale, or has in their possession or transports for the purpose of sale, any live or dead wild plant included in schedule 8, or any part of, or anything derived from, such a plant; or

- Publishes or causes to be published any advertisement likely to be understood as conveying that they buy or sell, or intends to buy or sell, any of those things.

### Invasive Species

8.5.5 Part 1 – Section 14 includes certain prohibitions for the introduction of certain invasive species named in schedule 9 of the act. In summary offences include if any person:

- Subject to the provisions of this part, (a) if any person releases or allows to escape into the wild any animal which is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or (b)is included in Part of Schedule 9; and/ or

- Subject to the provisions of this part, any person who plants, or otherwise causes to grow, any plant in the wild at a place out with its native range is guilty of an offence.

### Sites of Specific Scientific Interest

8.5.6 Part 2 – Sections 28-33 of the act set out the law regarding Sites of Specific Scientific Interest (SSSI) by the conservation bodies in England (Natural England) and Wales (Natural Resource Wales) and outlines the offences with respect to SSSI.

8.5.7 The offences outlined in the act apply to any person(s), public body, landowner or occupier as well as statutory undertakers or permitted developments. Examples of offences include (but are not limited to):

- Any person intentionally or recklessly damaging or destroying any of the features of special interest of an SSSI, or disturbing wildlife for which the site was notified;
- Public bodies are not allowed to carry out damaging operations on an SSSI, except where they notified the relevant conservation agency. It is also an offence for a public body to fail to minimise damage on an SSSI or – if damage occurs – to fail to restore a SSSI to its former state; and
- Statutory bodies have a general duty to take reasonable steps to further to conservation and enhancement of the special feature of SSSI's;
- Where statutory bodies propose to undertake or permit activities that could affect a SSSI they must consult the relevant statutory nature conservation agency. If the activity cannot be avoided it must be undertaken in a way least damaging to the SSSI; and
- If you are the owner or occupier of a SSSI, it is an offence to carry out any activity that may likely damage the SSSI without consent from the relevant conservation agency. The law requires that you inform the conservation agency of any changes in the ownership or occupancy.

### Other Protected Areas

8.5.8 Part 2 – Section 34 to 52 of the act deals with other protected areas within the UK such as limestone pavements, national nature reserves and marine nature reserves. The act allows designation of these sites by the appropriate authority for the purpose of conserving flora and fauna or geological or physiological features of specific interest in an area to protect the site. Furthermore, the act prohibits certain actions in National Parks for certain habitats without consent from local authorities.

## 8.6 Countryside Right of Ways Act, 2000

8.6.1 The Countryside Right of Ways Act, 2000 (CRoW Act, 2000) makes provisions for public access, amends the law for public rights of ways and amends existing law on

nature conservation and the protection of wildlife as well as makes further provisions for Areas of Outstanding Natural Beauty.

### Wildlife Legislation

8.6.2 Part III of the CRoW Act, 2000 includes provisions for wildlife protection and nature conservation and includes amendments to the Wildlife & Countryside Act, 1981.

8.6.3 Schedule 9 of the CRoW Act, 2000 increases powers for the protection and management of SSSI. There are increased powers for appropriate authorities to secure management agreements for SSSI. A duty is placed on public bodies to have regard for the continued conservation and enhancement of SSSI. Furthermore, there are increased penalties for the prosecution of wildlife crime, including for third parties that damage SSSI.

8.6.4 Schedule 12 of the CRoW Act, 2000 makes certain offences under the provision of the Wildlife and Countryside Act, 1981 arrestable. Greater powers are given to police and appointed wildlife inspectors under the CRoW Act, 2000 and enables heavier penalties for the prosecution of wildlife crime.

## 8.7 National Parks and Access to the Countryside Act, 1949

8.7.1 This act makes provisions for National Parks and the establishment of a National Parks Commission; to confer on the Nature Conservancy and local authorities' powers for the establishment and maintenance of nature reserves. Part III of the act specifically outlines provisions for the designation of nature reserves.

## 8.8 Natural Environment & Rural Communities Act, 2006

8.8.1 The Natural Environment and Rural Communities Act (NERC), 2006 is primarily intended to implement key aspects of the governments rural strategy published in July 2004. It also addresses a wider range of issues relating broadly to the natural environment.

### Section 40

8.8.2 Section 40 of the NERC Act, 2006, places a duty on any public authority and statutory undertaker to have due regard for the conservation and enhancement of biodiversity when delivering their functions, extending the provisions outlined under section 74 of the CRoW Act, 2000.

8.8.3 The policy goes on to state that conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population of that habitat.

### Section 41

8.8.4 Section 41 of the NERC Act, 2006 requires the secretary of state in consultation with Natural England to outline Species of Principle Importance (SPI) and Habitats of Principle Importance (HPI) that in their opinion are important for the conservation of biodiversity.

8.8.5 The secretary of state is required to:

- Take such steps as appear to the secretary of state to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section; or
- Promote the taking by other of such steps.

8.8.6 The NERC Act, 2006 also provides some amendments to the Wildlife & Countryside Act, 1981 (as amended) and includes provisions for enforcement powers and the protection of SSSI.

## 8.9 Protection of Badgers Act, 1992

8.9.1 The Protection of Badgers Act, 1992 makes it a criminal offence to wilfully kill, injure or take any badger, or attempt to do so. It also makes it an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a badger sett.

## 8.10 Wild Mammals (Protection) Act, 1996.

8.10.1 The Wild Mammals (Protection) Act, 1996 makes provision for the protection of wild mammals from certain cruel acts, and for connected purposes. It would be an offence for any person that mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild animal with intent to inflict unnecessary suffering.

## 8.11 The Environment Act, 2021

8.11.1 The Environment Act, 2021 gained royal ascent on the 9th November, 2021. The act is wide ranging and broadly has the following aim:

'a bill to make provision about targets, plans and policies for improving the natural environment, for statements and reports about environmental protection; for the office of environmental protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards, about water, about nature and biodiversity; for conservation covenants; about the regulation of chemicals, and for connected purposes'.

8.11.2 Part 6 – Sections 98 - 101 of the act outlines provisions for biodiversity gain in planning.

8.11.3 Schedule 14 makes provision for biodiversity gain to be a condition of planning permission in England.

8.11.4 Schedule 14 states that, the biodiversity gain objective is met in relation to development for which planning permission is granted if the biodiversity value attributable to the development exceeds the pre-development biodiversity value of the on-site habitat by at least the relevant percentage.

8.11.5 It goes on to state that the biodiversity value attributable to the development is the total of:

- The post development biodiversity value of the on-site habitat;
- The biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development; and
- The biodiversity value of any biodiversity credits purchased for the development.

8.11.6 The relevant percentage is set at 10% for biodiversity gain.

8.11.7 Part 6 – Section 100 of the act outlines provisions by regulation for the secretary of a register of biodiversity gain sites (known as the biodiversity gain site register).

8.11.8 A biodiversity gain site is land where:

- A person is required under the conservation covenant or planning obligation to carry out works for the purpose of habitat enhancement;
- That or another person is required to maintain the enhancement for at least 30 years after the completion of the works; and
- For the purpose of schedule 7A to the Town and Country Planning Act, 1990 the enhancement is made available to be allocated (conditionally or unconditionally, and whether for consideration or otherwise) in accordance with the terms of the covenant or obligation to one or more developments for which planning permission is granted.

8.11.9 Part 6 – Section 101 states that the secretary of state may make arrangements under which a person who is entitled to carry out the development of any land may purchase a credit from the secretary of state for the purpose of meeting the

biodiversity gain objective referred to in schedule 7A to the Town and Country Planning Act, 1990 and Schedule 2A of the Planning Act, 2008.

8.11.10 A credit is to be regarded for the purpose of that schedule as having such biodiversity value as is determined under the arrangements.

8.11.11 The arrangements may in particular include arrangements relating to:

- Applications to purchase credits;
- The amount payable in respect of a credit of a given value;
- Proof of purchase; and
- Reimbursement for credits purchased for development which is not carried out.

## 8.12 National Planning Policy Framework (2023)

8.12.1 The National Planning Policy Framework (NPPF, Ministry of Housing Communities and Local Government, 2023) sets out the Governments planning policies for England and how these should be applied. It provides a framework which locally prepared plans for housing and other developments can be produced.

8.12.2 The NPPF supplements Government Circular: Biodiversity and Geological Conservation 06/2005 (Office of the Deputy Prime Minister, 2005).

### Conserving and Enhancing the Natural Environment

8.12.3 Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

8.12.4 Paragraph 181 states, that plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

### Habitats and biodiversity

8.12.5 Paragraph 185 states: To protect and enhance biodiversity and geodiversity, plans should:

- a) 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

- b) 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.

8.12.6 Paragraph 186 states that, when determining planning applications, local planning authorities should apply the following principles:

- a) If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The

only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.

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

- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

8.12.7 Paragraph 187 states, the following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;

- b) listed or proposed RAMSAR sites; and

- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

8.12.8 Paragraph 188 states: The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects) unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

## 8.13 Biodiversity and Geological Conservation Circular 06/2005

8.13.1 Biodiversity and geological conservation circular 06/2005 provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the NPPF, 2023 and the Planning Practice Guidance. Broadly the guidance covers designated sites, the conservation of habitats and species, including outside of designated sites, protected species by law and the duties and powers used by planning authorities.

8.13.2 Paragraph 82 of the guidance states that 'in determining the application for development that is covered by up-to-date standing advice, a planning authority must take into account this standing advice'.

### Protected Species and Planning

8.13.3 Paragraph 98 of the guidance states 'the presence of a protected species is a material planning consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

8.13.4 Paragraph 98 also states that 'they (the planning authority) should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species.

8.13.5 Paragraph 99 of the guidance goes on to state: 'it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision'. Paragraph 99 also states that 'this is justified only, where there is a reasonable likelihood of the species being present and affected by the development.'

## 8.14 Horsham District Council Adopted Local Plan (2015)

### Policy 25

8.14.1 Policy 25 sets out Horsham District Councils (HDCs) commitment to protecting the Natural Environment and Landscape Character. Policy 25 states:

8.14.2 The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which:

8.14.3 Protects, conserves and enhances the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintains settlement separation.

8.14.4 Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.

8.14.5 Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible.

8.14.6 Conserve and where possible enhance the setting of the South Downs National Park.

Policy 31

8.14.7 Policy 31 sets out Horsham District Councils (HDCs) commitment to protecting biodiversity in the district. Policy 31 states:

8.14.8 1) Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained.

8.14.9 2) Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.

8.14.10 3) Where felling of protected trees is necessary, replacement planting with a suitable species will be required.

8.14.11 4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:

i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)

ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs); and

iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in I & II above.

8.14.12 b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:

i. The reason for the development clearly outweighs the need to protect the value of the site; and,

ii. That appropriate mitigation and compensation measures are provided.

8.14.13 5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In

addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

## 8.15 Birds of Conservation Concern

8.15.1 Birds of Conservation Concern is a report compiled by a coalition of the UK's leading bird conservation and monitoring organisations and reviews the conservation status of all regularly occurring birds in the UK, Channel Islands and Isle of Man. The report was first released in 1996 and is currently in its 5th edition, released in 2021.

8.15.2 The bird species that breed and overwinter in the UK are assessed against a set of objective criteria and placed on the Green, Amber or Red lists that indicate the levels of conservation concern. The quantitative criteria collected is assessed against the historical decline, recent trends in population and range, population size, localisation, and the level of international importance of each species, as well as its global and European threat status.

## 8.16 IUCN Red List

8.16.1 The international Union for Conservation of Nature (IUCN) Red List of Threatened Species (also known as the IUCN Red List or Red Data Book) is an inventory of the global conservation status of biological species. The inventory is based upon internationally accepted criteria that evaluates the extinction risk of species in all regions of the world. There are two types of red list, the global and national lists. In the UK the IUCN Red List is overseen by an interagency working group that is coordinated by the Joint Nature Conservation Commission.

## 8.17 Bibliography – Appendix II


8.17.1 A., Eaton., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021) The Status of our bird populations: the firth Bords of Conservation Concern In the United Kingdown, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747. (Online). Accessed April 2024. Available online at https://britishbirds.co.uk/content/status-our-bird-populations.

8.17.2 Countryside Right of Ways Act, 2000 (C37) (Online) London, The Statutory Office. Accessed January 2024. Available at http://www.legislation.go.uk.

8.17.3 DEFRA (2011) Biodiversity 2020: A strategy for England's Wildlife and Ecosystem services. (Online). Available at https://assetts.publsihing.service.gov.uk.

8.17.4 HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment. Available online at: www.gov.uk/goverment/publications.

8.17.5 JNCC (2019) RAMSAR Convention, (Online) Joint Nature Conservation Committee. Available at http//www.JNCC.gov.uk/our-work/Ramsar-convention.

8.17.6 JNCC (2020) Red Lists in Great Britain, Joint Nature Conservation Committee. (Online) Accessed January 2024. Available at http://jncc.gov.uk/our-work/red-list-in-great-britain.

8.17.7 JNCC (2022) Conservation Designations for UK Taxa 2022. (Online), Joint Nature Conservation Committee. Available at http://hub.jncc.gov.uk/assetts/478f7160-967b-4366-acdf-8941fd33850b.

8.17.8 Ministry of Housing, Communities & Local Government (2023) National Planning Policy Framework. (Online) Ministry of housing and Local Government, Fry Building, 2 Marsham Street, London, SW1P 4DF. Accessed January 2024.

8.17.9 National Park and Access to the Countryside Act, 1949. (Online) Accessed February 2024. Available at http://legislation.gov.uk.

8.17.10 Natural Environment & Rural Communities Act, 2006. (Online) Accessed April 2023. Available at http://legislation.gov.uk.

8.17.11 ODPM Circular 06/2005. Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System (2005). Norwich: HMSO. Accessed April 2023. Available at http://www.go.uk/goverment/publications/biodiversity-and-geological-conservation-circular-06-2005.

8.17.12 Protection of Badgers Act (1992) (C1-3) (Online). London, The Statutory Office. Accessed January 2024. Available at http://legislation.gov.uk.

8.17.13 The Conservation of Habitat & Species Regulation (2017) (Online). London: The Statutory Office. Accessed January 2024. Available from http://legislation.gov.uk.

8.17.14 The Environment Act, 2021. (Online) Accessed April 2024. Available at http://legslation.gov.uk.

8.17.15 Wildlife and Countryside Act, 1981 (As amended). (Online) Accessed January 2024. Available at htttp://www.legislation.go.uk.

8.17.16 Wild mammals (Protection) Act, 1996. C1. (Online). London. Statutory Office. Accessed January 2024. Available at www.gov.uk/goverment /publications.