LIZARD

Landscape Design and Ecology

# ECOLOGICAL IMPACT ASSESSMENT

## Land at Lower Perryland Farm, Dial Post

On behalf of: Church Barn Group

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|---|---|---|---|---|
| **Client:** | Church Barn Group | | | |
| **Project:** | Land at Lower Perryland Farm, Dial Post | | | |
| **Reference:** | LLD3521-ECO-REP-003-00-EcIA | | | |
| **Revision:** | **Date:** | **Author** | **Proof** | **Approved** |
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**Validity:**

This report is valid for 18 months from the date of the site visit. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

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## SUMMARY

Lizard Landscape Design and Ecology has been commissioned by Church Barn Group to undertake an Ecological Impact Assessment of the proposed development of Land at Lower Perryland Farm, Dial Post (*Grid Reference: TQ 1447 1880 – hereafter referred to as 'the site'*). A Preliminary Ecological Appraisal of the site was undertaken on the 17th of April 2025. Reptile surveys and barn owl nest verification surveys were recommended and subsequently undertaken between April and June 2025. An assessment of the ecological impact of the proposals was then undertaken using this baseline data.

The site covers an area of 0.81ha and is located to the southwest of Dial Post village. The site comprises former agricultural barns including hard standing, buildings, dense scrub, other neutral grassland, scattered trees, and ruderal / ephemeral habitats, with a stream crossing the site and species-rich native hedgerow on the east boundary. The greatest ecological interest at the site is associated with the stream which is to be protected throughout development.

The site is situated within the Sussex North Water Supply Zone; therefore, a water neutrality statement is to be provided to demonstrate that proposals will have no indirect impacts upon the Arun Valley SAC, SPA and Ramsar.

Further surveys identified the presence of a low population of slow worm, and the presence of a winter barn owl roost. Appropriate mitigation strategies for the species shown to be present on-site are outlined herein, which could be secured through an appropriately worded planning condition, alongside a landscape creation, management, and monitoring plan. The site also offers some suitable habitats for commuting and foraging bats, badgers, widespread mammal species, widespread invertebrates, and breeding birds. Avoidance and mitigation measures have been built into the design of the scheme in accordance with the mitigation hierarchy and BS42020: 2013.

Opportunities for ecological enhancement have been provided to allow the ecological value of the site to be maximised. As this is a full planning application, the development proposals shall be subject to the standard Biodiversity Gain Condition. A full Biodiversity Net Gain Report which discusses the baseline value of the site, and proposed habitat creation measures will accompany this application.

## 1.0 INTRODUCTION

1.1 Lizard Landscape Design and Ecology has been commissioned by Church Barn Group to undertake an Ecological Impact Assessment (EcIA) of the proposed development of Land at Lower Perryland Farm, Dial Post (*Grid Reference: TQ 1447 1880 – hereafter referred to as 'the site'*).

1.2 The scope of this assessment has been determined with consideration of best-practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) and the Biodiversity: Code of practice for planning and development published by the British Standards Institute (BS 42020:2013).

1.3 An initial Preliminary Ecological Appraisal of the site was undertaken on the 17th of April 2025. The following phase 2 survey work was recommended and subsequently undertaken:

- Reptile presence / likely absence surveys
- Barn owl nest verification surveys.

1.4 A summary of the results of these surveys, potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. Residual impacts are then discussed once all mitigation and compensation measures have been taken into account.

### *Site Information*

1.5 The site is a roughly rectangular shaped plot with an associated access route to the A24. The core development area is a c. 0.81-hectare (ha) plot consisting of a former cattle yard, several storage barns, tool sheds, and associated areas which are now overgrown and derelict. On-site habitats include rough neutral grassland, dense scrub, ruderal habitats and a small stream which crosses the site from east to west.

***Surrounding Landscape***

1.6 The site is located within a rural setting, and is surrounded by arable land, with a complex network of hedgerows, lines of trees, woodland shaws, and small woodland parcels. Several barns and dwellings are directly adjacent to the north, with Perryland Farm located c. 100m to the southeast. Areas of rewilded grassland within Knepp Wilding Estate lie c. 350m to the northwest. The village of Dial Post lies c. 0.8km northeast, and the A24 lies c. 0.6km to the east. The underlying geology is slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

***Development Proposals***

1.7 It is understood that the proposals are for the construction of 3no. dwellings with associated car ports, and access. This would necessitate construction within the riparian zone of the stream and the removal of areas of existing ruderal and grassland habitats.

***Report Aims***

1.8 The aim of the baseline surveys and Ecological Impact Assessment has been:

- Describe baseline conditions at the site;
- Determine the importance of features which may be impacted by the scheme;
- Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;
- To identify any residual impacts;
- To provide details of enhancements to be incorporated into the scheme;
- Provide sufficient information to determine whether the project accords with relevant nature conservation policies and legislation, and where appropriate, to allow conditions or obligations to be proposed by the relevant authority.

# 2.0 METHODOLOGY

## 2.1 Desk Study

2.1.1 The Multi-Agency Geographical Information Centre (MAGIC) website was consulted for information regarding the location of waterbodies, priority habitats, statutory designated sites and existing wildlife mitigation licences, within a potential zone of influence of the site. Additionally, the Local Planning Authority (LPA) website was consulted for information regarding the location of non-statutory designated areas, and satellite imagery and historic mapping was used to inform an assessment of the recent land use changes and habitat types within the area. The following potential zones of Influence's have been used for the following potential ecological receptors during the desk study assessment:

***Table No. 01 – Zones of Influences for Ecological Receptors***

| Potential Zone of Influence | Type of Record / Designation/s / Ecological Receptor |
|---|---|
| 0.5km | • Ponds, ditches and other water bodies. |
| 2.0km | • Priority Habitats (UKBAP) (NERC, 2006);<br>• European Protected Species Mitigation Licences (EPSMLs);<br>• Local Nature Reserves (LNRs);<br>• National Nature Reserves;<br>• Sites of Special Scientific Interest (SSSIs); and<br>• Local Wildlife Sites (LWS) / Site of Nature Conservation Interest (SNCI). |
| 10.0km | • Special Protection Areas (SPAs);<br>• potential Special Protection Areas (pSPAs);<br>• Ramsars (Wetlands of International Importance);<br>• proposed Ramsars (pRamsar);<br>• Special Areas of Conservation (SACs); and<br>• possible Special Areas of Conservation (pSACs). |
| 12.0km | • Special Areas of Conservation (SACs) and possible Special Areas of Conservation (pSACs) designated for supporting Annex II bat species. |

2.1.2 All protected / notable species records within a 2.0km radius of the site were provided by Sussex Biodiversity Records Centre (SxBRC) on the 19th of May 2025.

2.1.3 The Local Planning Authority website was consulted to inform of additional relevant information to this assessment, including local development plan policies in relation to ecology and biodiversity (see *Appendix A – Planning Policy and Legislation*) as well as any Local Nature Recovery Strategies, Nature Improvement Areas (NIAs) and Biodiversity Opportunity Areas (BOAs) etc.

## 2.2 Field Survey

2.2.1 The field survey was undertaken on the 17th of April 2025 by a Suitably Qualified Ecologist (Max Day, 2 years professional experience). Weather conditions were warm (c.15°C), with a light northerly wind (Beaufort Scale 1-2), 10% cloud cover and sunny.

2.2.2 The field survey comprised a walkover inspection of the site, immediately adjacent land and boundaries features, in which ecological features were noted and mapped in accordance with principles of the UKHabs-Professional Classification System (UKHabs Ltd., 2023). A minimum mapping unit of 25m$^2$ / 5m length was used and habitats were identified to at least level 4 wherever practicable. Habitat categories were slightly amended to be consistent with those used as part of Biodiversity Net Gain calculations.

2.2.3 A list of plant species noted was compiled, together with an estimate of relative abundance made according to the DAFOR scale (see Table No. 15). In addition, Target Notes were used to provide supplementary information where necessary on any features encountered which were notable, relevant to the assessment or too small to map (see Table No. 16).

## 2.3 Evaluation of Ecological Features

2.3.1 An assessment was made to determine the likely importance of any flora / habitats present, as well as determining whether any qualified as being of conservation merit, such as those listed as habitats and species of principal importance for the conservation of biodiversity (NERC, 2006). Likely importance was determined in reference to a predefined geographical frame of reference, as laid out in *Guidelines for Ecological Impact Assessment* (CIEEM, 2022), this was assessed in accordance with the accordance with the criteria outlined below:

***Table No. 02 – Likely Importance Assessment Criteria***

| Likely Importance Categories | Likely Importance Criteria |
|---|---|
| Negligible | Of no notable ecological value. |
| Site | Ecologically valuable within the context of the site |
| Local | Ecologically valuable within the context of the immediate surrounds, i.e., c. 1km$^2$ |
| District | Ecologically valuable within the context of the wider surrounds / LPA district, i.e., c. 10km$^2$ |
| County | Ecologically valuable within the context of the wider county, i.e., c. 100km$^2$ |
| Regional | Of ecological value within the region, i.e., south east, south west, midlands etc. |
| National | Of ecological value within the context of the United Kingdom, such as a SSSIs, NNR's etc. |
| International | Ecological value of global significance, such as SACs, SPAs etc. |

2.3.2 Habitats within and adjacent to the site were assessed to determine their potential to support protected and notable fauna. This assessment was based on professional judgment and experience, with due consideration to industry standard best practice guidance for the relevant taxa, as laid out in the table below. The possible presence of each taxon was summarised as either negligible, low, moderate, high or confirmed.

***Table No. 03 – Habitat Suitability Assessment References***

| Fauna | Relevant Best Practice Guidance |
|---|---|
| Great Crested Newts | *Great Crested Newt Conservation Handbook* (Langton *et al*, 2001) & *Evaluating the Suitability of Habitat for the Great Crested Newt* (Oldham *et al,* 2000) |
| Reptiles | *Herpetofauna Workers' Manual* (Gent and Gibson, 2003) |
| Bats | *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)* (Collins, 2023) |
| Dormice | *The Dormice Conservation Handbook* (English Nature, 2006) |
| Badger | *Survey Badgers* (Harris *et al,* 1989) |
| Water Vole | *The Water Vole Mitigation Handbook* (Dean *et al,* 2016) |
| Birds | *Guidance for Bird Surveys in Relation to Development* (NE, 2022) |
| Invertebrates | *Considering Terrestrial Invertebrates in Preliminary Ecological Appraisals* (Jukes, 2021) and *Organising Surveys to Determine Site Quality for Invertebrates* (English Nature, 2005) |

2.3.3 Photographs were taken as evidence and to illustrate any notable ecological features on site. These have been provided within the body of the relevant parts of the Results section, where appropriate.

## 2.4 Daytime Bat Walkover Survey

2.4.1 A Daytime Bat Walkover (DBW) survey was undertaken as part of the field survey assessment by the suitably experienced surveyor (Max Day; accredited agent under 2016-20460-CLS-CLS).

2.4.2 The Daytime Bat Walkover (DBW) survey entailed a slow walkover of the site, during which time the surveyor identified any structures, trees and other features that could be suitable for bats to roost in, and any habitats which could be suitable for bats to commute, forage or swarm in.

2.4.3 During this survey any direct evidence of bats was searched for and recorded, such as grease marks, urine stains, bat droppings, feeding remains and dead / live bats. Furthermore, any structures or trees which offered features with the potential to support bats were noted. For trees this included the identification of features such as, but not limited to, cracks, crevices and holes naturally formed by trees. For structures this included the identification of features such as, but not limited to, slipped, missing or uneven tiles, gaps around the soffit / barge board, raised flashing.

*Evaluation Criteria*

2.4.4 All suitable bat habitat was assessed in accordance best practice criteria (Collins, 2023), which is outlined herein. During the survey all trees within and immediately adjacent to the site were assessed using the following criteria:

***Table No. 04 – Criteria for Assessing the Bat Roosting Suitability of Trees***

| Suitability | Description |
|---|---|
| **None** | Either no potential roosting features in the tree, or highly unlikely to be any. |
| **FAR** | Further assessment required to establish if potential roosting features are present in the tree. |
| **PRF** | A tree with at least one potential roosting feature present. |

2.4.5 If it was possible to adequately assess a Potential Roosting Feature (PRF) from ground level then this was completed, and the feature classified as either:

- **PRF-I**: Feature only suitable for individual or very small numbers of bats, either due to size or lack of suitable surrounding habitat; or
- **PRF-M**: PRF is suitable for multiple bats and therefore has the potential to be used by a maternity colony.

2.4.6 Furthermore, all structures were assessed externally, and internally wherever possible for their potential to support bats, using the following criteria:

***Table No. 05 – Criteria for Assessing the Bat Roosting Suitability of Structures***

| Potential Suitability | Description |
|---|---|
| **None** | No habitat features on site likely to be used by any roosting bats at any time of year. |
| **Negligible** | No obvious habitat features on site likely to be used by roosting bats. However, some small uncertainty remains, as bats can use small and apparently unsuitable features occasionally. |
| **Low** | A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. However, these do not provide enough shelter, space, protection, appropriate conditions or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats. |
| **Moderate** | A structure with one of 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, irrespective of species conservation status. |
| **High** | A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat, with the potential to support high conservation status roosts irrespective of species conservation status. |
| **Confirmed** | Direct evidence of bats identified. |

2.4.7 Finally, an assessment of the winter hibernation potential of the structures was made, in accordance with the following criteria:

***Table No. 06 – Criteria for Assessing the Winter Bat Roosting Suitability of Structures and Trees***

| Potential Suitability | Description |
|---|---|
| **Low** | No or very limited potential winter roosting habitat |
| **Moderate** | Non classic site |
| **High** | 'Classic sites', which offer stable humidity and consistent temperatures throughout the winter period, such as underground sites, cellars, tunnels etc. |

## 2.5 Badger Walkover Survey

2.5.1 A walk over assessment was conducted in order to search for evidence of badgers. The survey area covered the red line boundary of the site, and all land within a 30m radius (where access was available).

2.5.2 The survey area was systematically searched for any evidence of badger such as:

- Setts.
- Latrines.
- Snuffle Holes.
- 'Push-unders' through boundary fencing.
- Hair caught on fencing or sett entrances.
- Prints left in mud or sand.
- Mammal tracks.

2.5.3 Any evidence was then mapped to allow the status and distribution of badger activity to be assessed.

## 2.6 Great Crested Newts – Habitat Suitability Assessment

2.6.1 Any ponds identified within or adjacent to the site were subject to a Habitat Suitability Index (HSI) assessment to determine their suitability to support GCN, in line with current guidance (Oldham *et al*, 2000). The HSI is a numerical index, between 0 and 1 (0 representing completely unsuitable habitat and 1 representing optimal habitat), calculated based on the suitability of 10 calculable indices.

2.6.2 HSI assessment is useful to aid in determining how suitable a given waterbody is for GCN, but it does not directly correlate with GCN presence or population numbers and serves as information only.

2.6.3 The 10 indices considered as part of the HSI assessment include geographic area, pond area, permanence of waterbody, water quality, shading, waterfowl presence, fish presence, number of ponds within 1.0km, suitability of terrestrial habitat and macrophyte cover, which were investigated during the field survey assessment.

## 2.7 Reptile Surveys

2.7.1 A total of 20no. artificial reptile refugia *(roofing felt; 1.0 x 0.50 m)* were laid around the site area on the 17th of April 2025. Mats were distributed along suitable habitat and allowed to bed-in for 14 days prior to survey visits beginning on the 8th of May 2025. The locations of artificial reptile refugia are detailed within *Figure No. 01.*


***Figure No. 01 – Reptile Refugia Locations.***

2.7.2 A total of 7no. site visits were conducted, where the number, species, age and sex of the reptiles present were recorded. Debris piles on-site considered suitable as reptile refugia were checked during the surveys, and repeated walkovers of the site were used to search for active reptiles.

2.7.3 Surveys were undertaken during recommended times *(08:30–11:00 and 16:00-18:30)* with suitable weather conditions for surveying reptiles wherever possible *(guidelines recommend temperatures 9-18°C).*

***Table No. 07 – Weather Conditions during Reptile Surveys***

| Survey | Date of Visit | Time | Temp. | Weather Conditions |
|---|---|---|---|---|
| 1 | 08/05/2025 | 10:20 | 14ºC | Dry, WF1, 65% cloud |
| 2 | 13/05/2025 | 09:20 | 18ºC | Dry, WF1, 30% cloud |
| 3 | 20/05/2025 | 09:15 | 16ºC | Dry, WF1, 10% cloud |
| 4 | 22/05/2025 | 09:28 | 13ºC | Dry, WF1, 40% cloud |
| 5 | 30/05/2025 | 10:00 | 17ºC | Dry, WF2, 60% cloud |
| 6 | 02/06/2025 | 09:00 | 14ºC | Dry, WF2, 10% cloud |
| 7 | 08/06/2025 | 10:00 | 15ºC | Dry, WF3, 40% cloud |

*Population Assessment*

2.7.4 Reptile populations were assessed in accordance with population level criteria as stated for the Key Reptile Site Register (*Froglife, 1999*). This system classifies populations of individual reptile species into three population categories assessing the importance of the population. These categories are based on the total number of adult animals observed during individual survey occasions and based upon a survey density of 10/Ha.

***Table No. 08 – Reptile Population Size Assessment***

| Species | Low Population | Good Population | Exceptional Population |
|---|---|---|---|
| Slow Worm | <5 | 5-20 | >20 |
| Common Lizard | <5 | 5-20 | >20 |
| Grass Snake | <5 | 5-10 | >10 |
| Adder | <5 | 5-10 | >10 |

*Details of Surveyors*

2.7.5 The reptile survey was undertaken by the following ecologists, all of which have extensive experience undertaking both reptile surveys and reptile translocations:

- Eve Hills – Assistant Ecologist (2 years' experience);
- Max Day – Consultant Ecologist (2 years' experience);
- Sam Hall – Consultant Ecologist (5 years' experience).

## 2.8 Barn Owl Surveys

2.8.1 An initial Potential Nest Site Survey (PNS) was undertaken on the 17th of April 2025 by a suitably qualified surveyor (Max Day MSci (Hons) – 2 years' professional experience). The surveyor used the 'bottom up' approach to search the entire site area for any potential nest or roost sites. Potential features which could be utilised by barn owls within the site were identified, including:

- *Buildings with suitable access and a flat surface suitable for nesting e.g. a wide wall plate, tank, bale stack, ducting or nest box;*
- *Mature trees (located either in isolation or to the edges of woodland) with a large cavity;*
- *Rock faces with caves or fissures;*
- *Bale stacks.*

2.8.2 A Nest Site Verification Survey was subsequently undertaken by Catherine O'Reilly MCIEEM (Barn Owl licence holder CL29/00507) on the 19th of June 2025 to assess the status of features identified during the PNS Survey. This was considered late enough in the year to avoid potential nest abandonment, should one be present. Field signs which would indicate an active roost or nest site were searched for, including:

- *'White washing' of floors or walls;*
- *Barn Owl pellets;*
- *Presence of feathers, including nestling fluff;*
- *Presence of nest debris.*

## 2.9 Ecological Impact Assessment

2.9.1 The methodology for Ecological Impact Assessment (EcIA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

2.9.2 The CIEEM guidelines (2018) state that ecological features should be considered within a 'defined geographical context'. The geographical frame of reference used to determine ecological importance in this assessment is detailed below:

- International and European;
- National;
- Regional;
- County;
- District;
- Local;
- Site Level;
- Negligible.

2.9.3 Based upon CIEEM guidance, value was determined with reference to the following factors:

- Its inclusion as a Designated Site or other protected area;
- The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);
- The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);
- The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;
- The sites social and economic value.

2.9.4 The ecological impacts resulting from the proposals were then described according to a defined set of characteristics as defined within *'Guidelines for Ecological Impact Assessment in the UK and Ireland*' (*CIEEM, 2018*). When describing impacts the assessment refers to characteristics such as the extent; magnitude; duration; frequency; and, reversibility of the impact in order to provide justification for any conclusions about the nature and likelihood of the impact described.

2.9.5 Where initial impacts have been identified as significant, avoidance, mitigation and compensation measures have been proposed to avoid, prevent or offset such effects. This assessment then considers residual impacts (*once all mitigation has been taken into account*), with any significant effects highlighted. A significant effect is defined as "*an effect which either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general*". Enhancement has been proposed to ensure that the development represents a net gain in biodiversity in accordance with National Policy.

## 2.10 Constraints and Limitations

2.10.1 Due to the field survey consisting of only one site visit, certain species, particularly some of the flowering plants, may not have been visible or may have been otherwise inconspicuous at the time of the survey and hence overlooked. These are accepted constraints associated with the UKHabs Survey Methodology.

2.10.2 No other limitations were encountered, or assumptions made during either the desk study or the field survey and it is considered that with the access gained and recording undertaken an accurate assessment of the site's ecological value has been made.

## 3.0 BASELINE ECOLOGICAL CONDITIONS

### 3.1 Desk Study

***Pond Study***

3.1.1 A total of 13no. ponds were identified within 500m of the site, based on OS mapping and satellite imagery. A total of 2no. ponds were located within 250m of the site, the closest of which was located c. 20m east-northeast and comprised an ornamental pond surrounded by dwellings. The other pond was located c. 150m east within the curtilage of Perryland Farm estate. The remaining ponds were scattered across the southeast and north, and included ornamental ponds, drainage ponds, and several located within and adjacent to woodland plantations (see *Figure No. 01 – Surrounding Pond Plan* below).

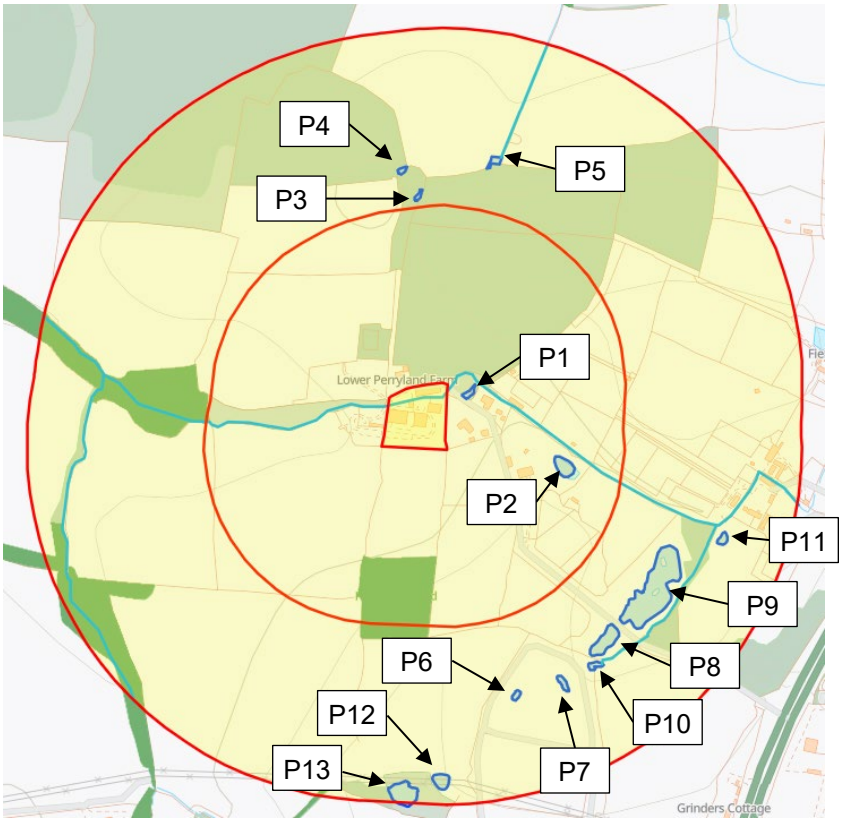



**Figure No. 02 – Surrounding Pond Plan.**
Buffer zone of 250m and 500m from site boundary shown with areas of Lowland Mixed Deciduous Woodland highlighted in dark green, ponds shown in dark blue, and streams and drainage ditches shown in light blue. Data taken from MAGIC dataset.

***Priority Habitats***

3.1.2 In accordance with the MAGIC dataset, within a 2.0km search radii of the site the following UKBAP Priority Habitats (NERC, 2006) were identified: *Coastal and Floodplain Grazing Marsh*, *Priority Ponds*, *Lowland Mixed Deciduous Woodland* (some of which was *Ancient and Semi-Natural Woodland* and *Ancient Replanted Woodland*), and *Traditional Orchards*.

***European Protected Species Mitigation Licence (EPSML) Search***

3.1.3 In accordance with the MAGIC dataset, within a 2.0km search radii of the site, the following records for existing European Protected Species Mitigation Licences (EPSMLs) were returned:

***Table No. 09 – EPSMLs within Potential Zone of Influence***

| Date | Species | Licence Permission | Distance and Direction from Site |
|---|---|---|---|
| 26/10/17 | Common pipistrelle *Pipistrellus pipistrellus* | Destruction of a resting site and destruction of a breeding site. | c. 0.82km W |

## 3.2 Statutory Designated Sites

3.2.1 No nationally designated statutory sites were identified within 2km of the site. However, internationally designated statutory sites were identified within a potential zone of influence of the site including:

***Table No. 10 – Statutory Designated Sites***

| Site | Description | Location |
|---|---|---|
| ***International Statutory Designated Sites within a Potential Zone of Influence*** | | |
| Arun Valley SAC | The site is primarily designated for supporting the following Annex II species:<br>• Ramshorn snail *Anisus vorticulus* | c. 8.3km west |
| Arun Valley SPA | The SPA is designated under article 4.1 of Directive 79/409/EEC for regularly supporting at least 1% of the biogeographical population of the following Annex I species:<br>• Bewick's swan *Cygnus columbianus.* | c. 8.3km west |

| Site | Description | Location |
|---|---|---|
| Arun Valley Ramsar | The Ramsar is designated as a wetland of international importance as it meets criteria 2, 3 and 5 of the Ramsar convention: It is designated for supporting:<br>• Threatened wetland invertebrate species;<br>• A diverse and rich wetland flora community; and<br>• Supporting internationally important populations of greater than 20,000 waterfowl. | c. 8.3km west |

3.2.2 The site is located within the Impact Risk Zone of Arun Valley SSSI, but development proposals do not meet the criteria which would require the LPA to consult with Natural England (NE) regarding potential impacts.

3.2.3 However, the site is located within the Sussex North Water Supply Zone whereby any development resulting in additional private water usage may adversely affect the integrity of the Arun Valley SAC, SPA and Ramsar.

### 3.3 Local Non-Statutory Protected Areas

3.3.1 Local Wildlife Sites (LWSs) are designations applied to the most important non-statutory nature conservation sites. They are recognised by the National Planning Policy Framework (2024) and as such are material considerations when assessing planning applications. The following non-statutory designated areas were identified within 2.0km of the site.

***Table No. 11 – Non-Statutory Designated Areas***

| Site | Location |
|---|---|
| Knepp Castle Rewilding Estate | 0.41km NW |
| Hooklands Farm Meadow LWS | 0.46km S |
| Higher Level Stewardship area | 0.59km SW |
| Capite Wood LWS | 1.20km SE |
| Kneppmill Pond, the River Adur & Lancing Brook LWS | 1.36km N |

3.3.2 The site is comprised of distinctly different habitat to that of the above *Non-Statutory Protected Sites*, the site area provides no supporting habitat, and proposals would have no impact upon these areas due to the intervening distance.

## 3.4 Existing Habitat Assessment

***Site Assessment***

3.4.1 Habitats within and adjacent to the site include:

- *Developed Land; Sealed Surface*
- *Buildings*
- *Artificial Unvegetated; Unsealed Surface*
- *Other Neutral Grassland*
- *Blackthorn Scrub*
- *Bramble Scrub*
- *Ruderal/Ephemeral*
- *Tall Forbs*
- *Rural Trees*
- *Species-Rich Native Hedgerow*
- *Other Rivers and Streams*

*Developed Land; Sealed Surface and Buildings*

3.4.2 The centre of the site comprised a former cattle yard and storage barns with fragmented areas of concrete slabs between buildings. These areas were derelict at the time of survey and were covered with moss, lichens, and scattered areas of grass and forb species. These areas were *de minimis* in size and so were not mapped.

3.4.3 A total of 4no. buildings were identified on-site. This included a former cattle shed in the northeast (B01), three open storage barns (B02, B03, and B04) in the west, centre, and east respectively, and a small tool shed (B05) in the centre of the site. In addition, a storage silo was identified in the centre of the site, as well as a small greenhouse in the southeast. All buildings were overgrown and derelict. Large elder *Sambucus nigra*, and ash *Fraxinus excelsior* shrubs were present inside several of the buildings, alongside ivy *Hedera helix,* and *de minimis* areas of ruderal / ephemeral forbs. Overall, this habitat was considered to be of **low site** value.

***Photograph No: 01*** *– Area of concrete hard standing in centre of the site with de minimis areas of ruderal visible. Tree T01 and an off-site tree within the north of site are visible to the left of the image.*

*Artificial Unvegetated; Unsealed Surface*

3.4.4 The existing access track to the site comprised packed gravel and dirt which was cleared of all vegetation. This habitat was considered to be of **negligible** ecological value.

*Other Neutral Grassland*

3.4.5 The south of the site comprised two distinct parcels of grassland. These swards were unmown and c. 20cm height at the time of survey, with numerous neutral grassland indicators present in both parcels. Several minor areas of scrub were also present around the margins of these parcels.

3.4.6 The grassland parcel to the north (NG01) had significant evidence of disturbance where large amounts of agricultural rubble had recently been cleared. As a result, the sward height and composition varied greatly, with numerous areas of bare ground and ruderal vegetation present. The sward diversity was high with c. 12 species per $m^2$ at the time of survey. The grass composition was dominated by meadow foxtail *Alopecurus pratensis* with localised and occasional areas of Yorkshire fog *Holcus lanatus*, barren brome *Bromus sterilis*, soft brome *Bromus hordeaceus* and cock's-foot *Dactylis glomerata*. Forbs varied greatly but red deadnettle *Lamium pupureum*, hogweed *Heracleum sphondylium*, broadleaved dock *Rumex obtusifolius*, bristly oxtongue *Helminthotheca echioides*, burdock *Arctium* sp., cut-leaved crane's-bill *Geranium dissectum* and creeping thistle *Cirsium vulgare* were most frequent within the sward.

3.4.7 Several tall rubble piles were still present within the southwest of this parcel (see *Target Note 01* on *Figure No. 02 – Site Habitat Plan*), which had become densely colonised by numerous ruderal, and successional species such as common nettle *Urtica dioica*, hogweed and red deadnettle. Several areas of extraneous clay spoil had also been dumped within and around this grassland area on subsequent site visits (see Photograph No. 03).

***Photograph No: 02** – Rubble pile present within neutral grassland area (NG01) in centre of the site. Less diverse grassland visible to left (NG02), and mature oak tree in background (T02).*

3.4.8 The southern parcel (NG02) was less diverse with c. 6 species per $m^2$ at the time of survey. The sward primarily comprised grasses such as meadow foxtail and Yorkshire fog, with locally abundant areas of soft brome, and false oat-grass *Arrhenatherum elatius*. Hairy tare *Ervilia hirsute*, dandelion *Taraxacum officinale* agg., and cut-leaved crane's-bill were the most frequent forbs within the sward.

***Photograph No: 03*** *– Loose substrate dumped within neutral grassland in southwest (NG02) on subsequent site visit.*

3.4.9 A discrete other neutral grassland sward was also present within the north of the site (NG03) from where successional grassland had established a small verge on the north bank of the stream. This comprised Yorkshire fog, barren brome and cock's-foot with occasional forbs such as cleavers *Galium aparine* and broadleaved dock amongst others. Overall, these habitat areas were considered to be of value at the **site** level.

*Blackthorn Scrub*

3.4.10 A mature area of blackthorn *Prunus spinosa* scrub was present within the northeast of the site (SC01). This comprised dense blackthorn, dogwood *Cornus sanguinea*, and elder shrubs along the bank of the stream. Dense bramble *Rubus fruticosus* agg. was present in some areas but the ground layer was generally sparse, with occasional lords-and-ladies *Arum maculatum* and ivy present.

***Photograph No: 04*** *– Area of dense blackthorn scrub (SC01) in the northeast of the site adjacent to stream, with tall forbs (TF02) and cattle barn (B01) visible to right.*

3.4.11 Another area of blackthorn scrub was present within the southeast of the site (SC02) from where suckering blackthorn growth had encroached upon the grassland from the adjacent hedgerow. This area was still young and low at the time of survey, with other shrub species only rarely present such as European gooseberry *Ribes uva-crispa*, English elm *Ulmus procera*, and bramble. Overall, this habitat was considered to be of value at the **site** level.

*Bramble Scrub*

3.4.12 A small patch of bramble scrub was identified on the east site boundary (SC03), adjacent to Building B04. This comprised dense bramble with occasional forbs such as cleavers, creeping thistle, burdock sp., and common nettle. Overall, this habitat was considered to be of value at the **site** level.

***Photograph No: 05*** *– Bramble scrub (SC03) adjacent to storage barn (B04) within east of the site. Other neutral grassland (NG01) in foreground and species-rich native hedgerow (H01) visible to the right.*

*Ruderal/Ephemeral*

3.4.13 A dense area of ruderal forbs was present on the banks surrounding the small stream which crossed the centre of the site, and over the surrounding hard standing areas. This area was variable and included dense locally abundant areas of bluebells *Hyacinthoides non-scripta*, hart's tongue fern *Alliaria petiolata*, pendulous sedge *Carex pendula*, and hemlock water-dropwort *Oenanthe crocata*. This indicated that the stream is frequently wet, well-established and provides good connectivity to woodland and/or woodland shaws within the surrounding area. Some areas of the banks and riparian zone were colonised with grasses such as perennial rye *Lolium perenne*, cock's-foot and Yorkshire fog. Frequent forbs included broadleaved dock, ivy, cleavers, red campion *Silene dioica*, and cut-leaved crane's-bill, amongst others.


***Photograph No: 06*** *– Area of ruderal and ephemeral species (RD01) surrounding watercourse on steep banks in the west of the site.*

3.4.14 Additional areas of sparse ruderal habitats were present across the former cattle yard in the centre of the site (RD02) from where successional species had begun to encroach over concrete, rubble piles, and compacted gravel. This included localised areas of bramble, nettles and Yorkshire fog, with a scattered but highly diverse ruderal forb community including species such as garlic mustard *Alliaria petiolata*, broadleaved dock, willowherb sp. *Epilobium* sp., herb-Robert *Geranium robertianum*, and Bilbao fleabane *Erigeron floribundus*.

***Photograph No: 07*** *– Hard standing areas in centre of site with localised dense areas of colonising ruderal and ephemeral species (RD02) present.*

3.4.15 Together the on-site other neutral grassland, hard standing, and ruderal/ephemeral habitats which had developed over and around the hard standing habitats formed a small mosaic. However, these were not considered to qualify for the priority habitat *Open Mosaic Habitats on Previously Developed Land* under the NERC Act (2006). This is because the area did not meet criteria 1 and 4 of the habitat definition, given that these areas total less than 0.25ha, and only *de minimis* areas of loose unvegetated substrate were identified. However, the remainder of criteria were met, with several communities present including annuals, ruderals, and species-rich grassland, and with a known history of disturbance on-site from agricultural rubble dumping and clearance. Overall, given these habitat traits, these ruderal areas were considered to be of **local** value.

*Tall Forbs*

3.4.16 A dense area of common nettle, red deadnettle and cleavers was present within the southeast corner of the site (TF01). Scattered bramble was also present adjacent to the blackthorn parcel to the south of this area. This habitat had significant evidence of mammal digging present, with several piles of spoil and mammal tracks visible (see Photograph No. 09 below). These were assessed to likely belong to rabbit.

***Photograph No: 08*** *– Areas of loose substrate dumping within other neutral grassland area (NG02) adjacent to tall forbs (TF01) in the south of the site.*

***Photograph No: 09*** *– Evidence of digging within area of tall forbs in the southeast of the site (TF01).*

3.4.17 Another minor area of tall forbs was identified in the northeast of the site (TF02). Common nettle was the most abundant forb, with scattered areas of Yorkshire fog and ruderals which had colonised over several rubble piles. Overall, this habitat was considered to be of **site** value.

*Rural Trees*

3.4.18 A total of 4no. individual rural trees were identified on-site and in immediately adjacent areas. This included a large semi-mature oak *Quercus robur* on the banks of the stream within the north of the site (T01), a very large mature oak to the west of the grassland with a small tree house present (T02), and two trees to the northeast of the site adjacent to the stream including a young horse chestnut (T03) and a semi-mature oak (T04). Overall, these trees were considered to be of **site** value.

***Photograph No: 10*** *– Semi-mature oak tree (T01) located on the banks of the stream to the north of the site. Building B05 visible to right.*

***Photograph No: 11*** *– Semi-mature horse chestnut (T03) far left and oak tree (T04) to the right located within northeast of the site adjacent to stream. Areas of litter, rubble, and loose substrate are also visible within area of tall forbs (TF02).*

*Species-Rich Native Hedgerow*

3.4.19 A species-rich native hedgerow (H01) formed the east site boundary. This hedgerow was c. 2m height and 1.5m width and comprised a diverse assemblage of shrubs. The hedgerow was dominated by blackthorn, with scattered elder, English elm, hawthorn *Crataegus monogyna*, willow sp. *Salix* sp., and dogwood. The ground layer was very sparse with bramble most abundant and small patches of forbs present including ground ivy *Glechoma hederacea* and lords-and-ladies.

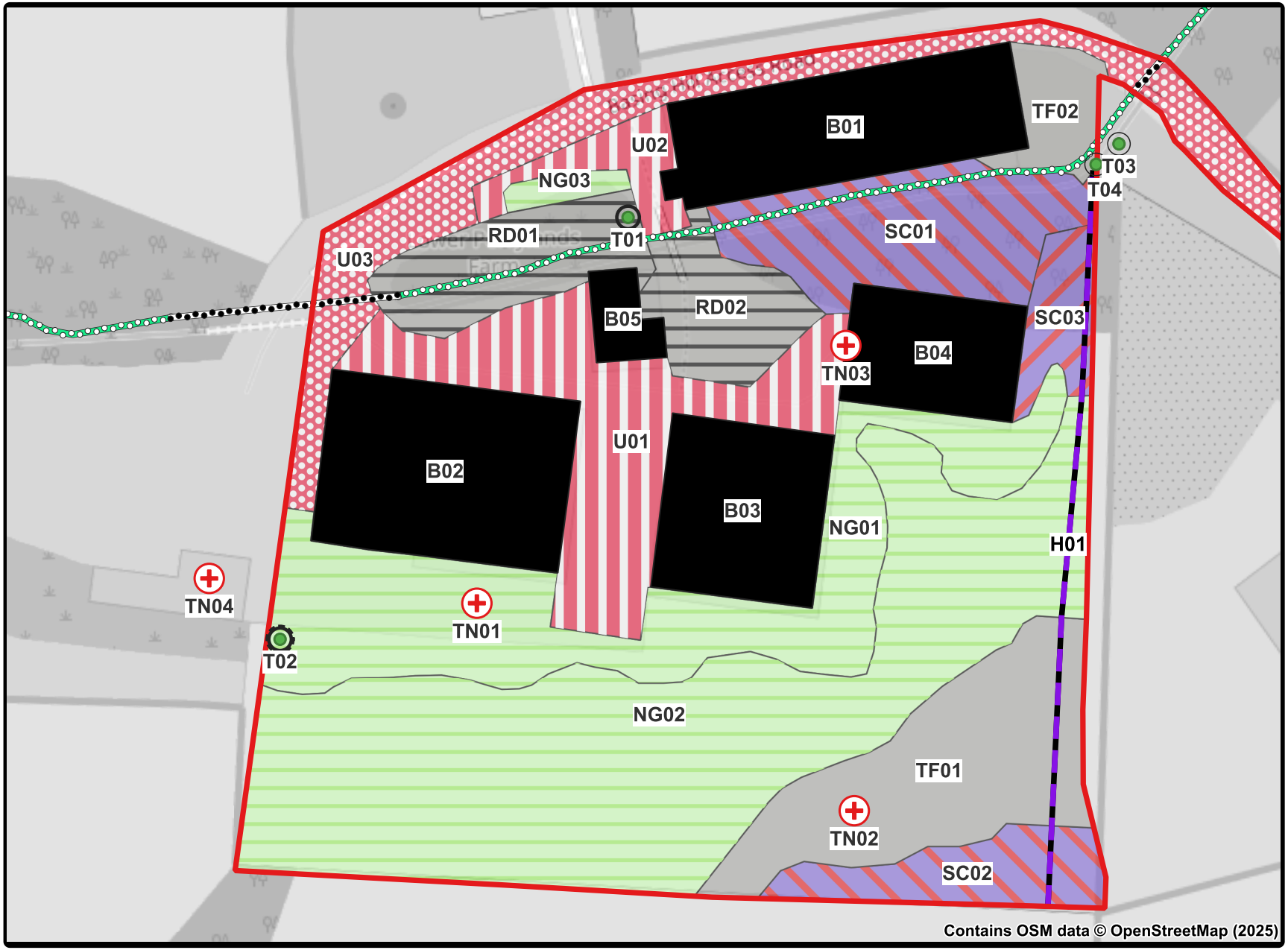
***Photograph No: 12*** *– Species-rich native hedgerow (H01) on east site boundary.*

*Other Rivers and Streams*

3.4.20 A narrow stream was identified across the centre of the site, flowing from the northeast towards the west. The stream was culverted to the west and northeast of the site beneath access tracks. It had steep banks along the remainder of its length which were reinforced with concrete in some places, and with a small bridge across it in the centre of the site. At the time of survey, the watercourse was shallow and slow-moving with minimal aquatic vegetation including rushes *Juncus* sp. and hemlock water-dropwort. This stream is identified as an ordinary watercourse by Horsham District Council and is a tributary to the River Adur, which lies to the north. Overall, this watercourse was considered to be of **local** value.

## 3.5 Invasive Species

3.5.1 No species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified on-site.




## Legend

- Red Line Boundary
- Target Notes

**Baseline Habitats**

- Artificial unvegetated, unsealed surface
- Blackthorn scrub
- Bramble scrub
- Developed land; sealed surface
- Other neutral grassland
- Ruderal/Ephemeral
- Tall forbs
- Buildings

**Baseline Hedgerows**

- Species-rich native hedgerow

**Baseline Watercourses**

- Culvert
- Other rivers and streams

**Baseline Individual Trees**

- Existing Very Large Rural Tree
- Existing Large Rural Tree
- Existing Medium Rural Tree

LIZARD
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The Old Bank, 34 South Street, Tarring, Worthing, West Sussex, BN14 7LH
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**Client**
Church Barn Group

**Project Title & Location**
Land at Lower Perryland Farm, Dial Post

| Drawn by | Approved by | Rev | Date |
|---|---|---|---|
| MD | SH | 00 | 26/08/25 |

25 50 m

# Figure No. 03 - Site Habitat Plan

N

1:600

## 3.6 Protected Species Assessment

***Amphibians***

*Desk Study*

3.6.1 SxBRC returned 7no. records for great crested newt *Triturus cristatus* from within a zone of influence. These were spread across the north of the search area, within Knepp Wilding Estate. The closest of which was located c. 1.7km north and was for a female GCN hibernating. Records were also returned for individual numbers within a garden pond at the same location.

3.6.2 A total of 13no. ponds were identified within 500m of the site, including 2no. ponds within 250m. In addition, the site is situated with a NatureSpace Partnership Red Impact Risk Zone.

*Site Assessment*

3.6.3 No ponds were identified on-site. However, a small stream was identified within the centre of the site, which was surrounded by several ferns, ruderal and ephemeral forb species, and scattered scrub. This was slow moving at the time of survey, with surrounding vegetation indicating that it is persistent throughout the year. However, this was previously identified to have a significantly faster rate of flow in early spring so was considered generally unsuitable as amphibian breeding habitat. A total of 2no. waterbodies were identified within 250m of the site, and a further 11no. within 500m. The closest pond (P1) comprised an ornamental pond adjacent to nearby dwellings; a HSI assessment is provided below. The next closest (P2) was also situated within private land but it was not possible to complete a HSI assessment owing to lack of access.

***Photograph No: 13*** *– Ornamental pond P1 identified off-site to the east within residential garden. Significant evidence of fish and a small fountain were visible.*

***Table No. 12 – Summary of HSI Results***

| **HSI Criteria** | **P1** | |
|---|---|---|
| Location | 1 | Zone A |
| Pond Area | 0.3 | 160m$^2$ |
| Permanence | 0.9 | Never dries |
| Water Quality | 0.67 | Moderate |
| Shade | 1 | 30% cover |
| Waterfowl | 0.67 | Minor |
| Fish | 0.01 | Major |
| Pond Count | 1 | >12 per km$^2$ |
| Terrestrial Habitat | 0.67 | Moderate |
| Macrophytes | 0.6 | 30% cover |
| **HSI Score** | **0.4664** | **Poor** |

3.6.4 The on-site habitats were assessed to provide suitable opportunities for GCN in their terrestrial phase. Grassland, scrub, ruderal/ephemeral and tall forb areas with large amounts of rubble could all provide suitable foraging, shelter and commuting habitats for this species, as well as opportunities for hibernation. Overall, given the presence of GCN in the wider area, presence of ponds in the nearby surrounds, and the presence of suitable terrestrial habitat it is assessed that there is **moderate** potential for GCN to be present on-site.

***Reptiles***

*Desk Study*

3.6.5 SxBRC returned 24no. records for two species of reptiles, including 14no. records for slow worm *Anguis fragilis* and 10no. records for grass snake *Natrix helvetica*. These records were mostly centralised c. 1.1km to the north within Knepp Wilding Estate.

*Site Assessment*

3.6.6 Reptiles require a mosaic of habitats to persist in a landscape, including vegetative cover for refuge opportunities, open areas for basking and diverse flora suitable to support viable invertebrate prey throughout the year. Given the presence of ruderal, bramble and blackthorn scrub, and rough grassland with rubble piles it was determined that the habitats on site offer all of these niches, and as such could support reptile species.

*Further Reptile Surveys*

3.6.7 Further reptile surveys recorded a peak count of 1no. adult female slow worm. No other reptile species were recorded during the surveys. The full results of these surveys are set out within *Appendix B – Reptile Survey Results*.

3.6.8 The results indicate that the site supports a low population of slow worm and does not qualify as a Key Reptile Site. No juveniles were recorded, indicating the absence of any breeding populations. Reptile distribution was limited across the site, as the individual was found under a single refugia (tile no. 06). The tile was situated within the centre-north of site, directly adjacent to a dense area of nettles and an area of sparsely vegetated ground.

***Bats***

*Desk Study*

3.6.9 SxBRC returned 192no. records for 12no. species of bat, including records for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Nathusius' pipistrelle *Pipistrellus nathusii*, noctule *Nyctalus noctula*, Leisler's *Nyctalus noctula*, serotine *Eptesicus serotinus*, Bechstein's *Myotis bechsteinii*, Brandt's *Myotis brandtii*, Daubenton's *Myotis daubentonii*, whiskered *Myotis mystacinus*, Natterer's *Myotis nattereri*, and brown long-eared bats *Plecotus auritus*, from within the search area. This included records for building inspections, harp trapping, hibernation sites, and day roost sites, including observations of bats in the field and acoustic analysis. The closest records were centred c. 0.1km east and were for a grounded common pipistrelle.

*Daytime Bat Walkover - Trees*

3.6.10 Various trees were identified as offering some level of bat roost suitability during the ground level assessment. A summary of these features is illustrated in the table below. The tree reference numbers are illustrated on *Figure No. 01 – Site Habitats Plan.*

***Table No. 13 – Preliminary Bat Roost Assessment Results - Trees***

| Tree Ref | Description | Category |
|---|---|---|
| T01 | Semi-mature oak tree with minor deadwood present within the crown. Minor ivy cover at the base of the main stem. Minor bark intrusions visible but appeared superficial from ground level. Tree not considered to be of an age generally suitable to support large PRFs. | PRF-I |
| T02 | Mature oak tree with significant epicormic growth. Tree house located within separation point on main stem. Moderate deadwood within crown and significant evidence of branch pruning. Bark peeling visible around areas of pruning, and moderate-sized cracks visible on several smaller branches. | FAR |
| T03 | Young horse chestnut immediately off-site to the northeast. No deadwood identified within crown and no suitable PRFs identified. | None |
| T04 | Semi-mature oak tree within the northeast of the site. Minor deadwood identified within crown, but no evidence of significant PRFs visible from ground-level assessment. Tree not considered to be of an age generally suitable to support large PRFs. | PRF-I |

***Photograph No: 14*** *– Pruned branches visible within crown of T02. Loose bark visible around the point of the cut.*

***Photograph No: 15*** *– Crown of T04 with minor deadwood visible.*

*Daytime Bat Walkover - Buildings*

3.6.11 All buildings within the site were assessed internally and externally for bats. A summary of this assessment is provided in the table below. Building reference numbers are illustrated on *Figure No. 01 – Site Habitats Plan*.

***Table No. 14 – Bat Roost Assessment Results - Buildings***

| Building Ref. | External Assessment Results | Internal Assessment Results | Suitability |
|---|---|---|---|
| B01 | A rectangular derelict cattle shed comprising breezeblock walls, with a corrugated steel gable roof. Steel ridge sheets were present, in addition to several plastic sky lights. The roof and walls were partially collapsed in the northeast corner. The building was also heavily ivy clad on the northern side and open at the eaves. No suitable PRFs were identified on the external structure. A small lean-to was present on the western elevation. | The internal structure was framed with timber trusses. There was no internal insulation or roof voids present. The roof had numerous sky lights and was open at the eaves, allowing significant light ingress. Minor cavities were present behind timber purlins at the eaves but were considered unsuitable to support roosting bats owing to light ingress and temperature fluctuations from the metal roof material. | **Negligible** |
| B02 | A storage barn comprising breezeblock walls with areas of timber cladding. The roof comprised two parallel gables. These comprised corrugated steel sheeting with metal ridge sheets and bargeboards. An open extension comprising asbestos sheeting was present on the western elevation. The building was open at the eaves and had no walls present on the eastern and western elevation. The roof also had collapsed in several places with several large gaps providing access to the internal structure. Some areas of lifted ridge sheeting were visible but were considered unsuitable to support roosting bats owing to the metal material which will cause significant temperature fluctuations. | The internal structure was framed with a mixture of steel and timber trusses. There was no internal insulation or roof voids present, with numerous corrugated plastic skylights. Significant light ingress from open elevations, collapsed roof, gaps at eaves, and skylights. Significant internal growth of elder shrubs and ruderal species. A caravan was parked within the barn, beneath the open extension to the west. No suitable PRFs identified. | **Negligible** |
| B03 | A storage barn with similar composition to B02 but with no extensions. Minor lifting on metal bargeboards but considered unsuitable to support roosting bats owing to metal material. | Similar internal composition as B02. No suitable PRFs identified. | **Negligible** |

| Building Ref. | External Assessment Results | Internal Assessment Results | Suitability |
|---|---|---|---|
| B04 | A storage barn comprising breezeblock walls with areas of timber cladding. Roof comprising a corrugated steel gable with metal ridge sheets, and plastic skylights present. The building was open at the eaves with corrugated asbestos cladding present on the western elevation. The east elevation lacked doors or cladding, so was very open. The north elevation was concealed by dense scrub, and the southern elevation was densely ivy clad in places. No external PRFs identified. | The internal structure was framed with steel, with timber purlins. There was no internal insulation or roof voids present, with numerous corrugated plastic skylights. Significant light ingress from open elevations, gaps at eaves, and skylights. No suitable PRFs identified. | **Negligible** |

***Photograph No: 16*** *– View across building B02 and B03 with open elevations, gappy roof and lifted ridge sheeting visible.*

***Photograph No: 17*** *– Internal structure of building B01 with sky lights and gaps at the eaves visible.*

***Photograph No: 18*** *– Internal structure of building B04 looking east, with sky lights and gaps at the eaves visible. Building generally open with no doors present.*

***Photograph No: 19*** *– View of building B05 in centre of site with dense ivy cover present.*

3.6.12 Several additional buildings were identified to the west of the site which had timber cladding, and ceramic ridge tiles. These buildings were considered to offer some roosting suitability for bats given the presence of warped timber weatherboarding, and loose, slipped and missing roof tiles. Given that these are in a close zone of influence to the site, works should be mindful of potential impacts to these buildings through light, noise and vibration, both during construction and post-development.

*Winter Roosting Potential*

3.6.13 The buildings on-site lacked any elements which could offer stable temperature and humidity for winter hibernating bats. No opportunities for internal or external roosting bats were identified and all buildings were therefore assessed as offering **negligible** winter roosting potential.

*Foraging and Commuting Suitability*

3.6.14 It was assessed that the hard standing, packed gravel, and other neutral grassland sward are unlikely to be of anything above **low** value to foraging bats and are only likely to be utilised by gap and light tolerant species. However, the stream, boundary hedgerow, individual trees, dense scrub and ruderal / ephemeral habitats could all provide a range of opportunities for invertebrates and are therefore likely to support viable invertebrate prey populations throughout the active bat season. Given the small scale of the site, but close proximity of the site to several mature tree lines, shaws and woodland areas in the wider surrounds the site was considered to offer **moderate** value to commuting and foraging bats at the **site** level.

***Dormouse***

*Desk Study*

3.6.15 SxBRC returned 3no. records for hazel dormouse *Muscardinus avellanarius* from within the search area. The closest of which was located c. 1.1km to the northwest within the parish of Shipley. However, the closest records were from 1999 and are therefore unlikely to be representative of the surrounding landscape.

*Site Assessment*

3.6.16 The species-rich native hedgerow, bramble scrub, and blackthorn scrub all comprised species which would be suitable to support dormouse foraging. However, these habitats were small, isolated, and were not functionally connected to larger areas of suitable habitat within the wider landscape. Therefore, it was assessed that there was **negligible** potential for dormice to be present on-site.

***Badgers***

*Desk Study*

3.6.17 SxBRC class badger *Meles meles* records as confidential and were therefore not included within the data search. However, public records for European badger *Meles meles* records were returned from within the search area.

*Site Assessment*

3.6.18 Evidence of push throughs, digging, and mammal tracks were identified on-site within the area of tall forbs (see *Photograph No. 09* above), but no more conclusive evidence, such as setts, latrines, footprints or badger guard hairs were identified. However, some suitable habitats were identified for badgers in the surrounding area such as within nearby field margins, woodland shaws, and within lowland mixed deciduous woodland parcels to the north, west, and south. Overall, it was assessed that there was **negligible** potential for sett building badgers to be present on-site but **low** potential for the site to support foraging and commuting badgers from the wider surroundings.

***Water Vole***

*Desk Study*

3.6.19 No records were returned for water vole *Arvicola amphibius* from within the search area.

*Site Assessment*

3.6.20 A small stream was present across the north of the site. Whilst the banks were steep and the stream had evidence of being persistent, it was shallow and fast moving in winter, with concrete reinforcement present behind the banks and culverts present on the east and west of the site. In addition, most of the surrounding riparian vegetation was densely overshaded by trees, bramble and blackthorn scrub. Adjacent habitats further along the stream included woodland, woodland shaws, and scrub providing poor connectivity to surrounding better quality areas. Overall, whilst the site offers some of the habitat preferences for water vole, there was an absence of records in the surrounds, and the habitats adjacent to the site were considered unsuitable for this species. Therefore, it was assessed that the site offered **negligible** potential to support water vole.

***Other Mammals***

*Desk Study*

3.6.21 A total of 4no. records were returned for European hedgehog *Erinaceus europaeus*, 1no. record for harvest mouse *Micromys minutus*, 1no. record for polecat *Mustela putorius*, and 52no. records for rabbit *Oryctolagus cuniculus* from within the search area.

*Site Assessment*

3.6.22 Habitats identified on-site and in surrounding areas would be suitable to support foraging hedgehogs including rough grassland with rubble piles, hedgerows, and ruderal areas. Overall, it was assessed that the site offered **moderate** potential to support hedgehogs.

3.6.23 Some habitat was identified on-site that would be suitable for nesting harvest mice and burrowing polecats however, on-site habitats are subject to regular disturbance from agricultural activities and plant machinery. Given the surrounding anthropic activity the site was assessed to offer **low** potential for polecats and harvest mice.

3.6.24 Evidence of mammal digging and rabbit droppings were identified within an area of tall forbs within the southeast of the site. However, no rabbit warrens were identified during the site walkover. Overall, the site was assessed to have a **high** potential to support rabbits.

***Birds***

*Desk Study*

3.6.25 SxBRC returned 3,389no. records for 69no. species of notable birds from within the search area. This included records for 15no. species listed on Schedule 1 (Wildlife and Countryside Act, 1981) (as amended), as well as records for 27no. species of birds listed on the Birds of Conservation Concern (BoCC) Red List (Stanbury *et al*, 2021). This included records for urban species such as house sparrow *Passer domesticus*, and starling *Sturnus vulgaris*. In addition, records for farmland species such as yellowhammer *Emberiza citrinella*, and turtle dove *Streptopelia turtur*, alongside ground nesting bird species such as meadow pipit *Anthus pratensis*, lapwing *Vanellus vanellus*, and skylark *Alauda arvensis* were returned. Records for birds of prey, wintering wildfowl, seasonal migrants, reedbed species, and woodland species were also returned.

*Site Assessment*

3.6.26 The dense bramble and blackthorn scrub, boundary hedgerow and mature individual trees all support opportunities for nesting passerine birds. Areas of nest debris were visible within several buildings and an active wood pigeon *Columba palumbus* nest was also identified within building B04. Overall, these habitats could offer value to a range of species but are not unique to the wider area.

***Photograph No: 20 –*** *Nest debris identified within building B01.*

3.6.27 An adjacent barn was identified within 5m of the site, which was densely overgrown at the time of survey. This barn had significant evidence of usage by barn owl *Tyto alba* with droppings and multiple pellets present. Barn owls are a Schedule 1 bird species that are afforded additional protection from disturbance whilst nesting. Given that the redline boundary is situated within 5m of the nest site and is likely to be subject to disturbance from construction traffic and activity there is potential for this species to be impacted. Whilst there is already some farm traffic in the vicinity of the barn there is likely to be significantly more activity compared with existing levels.

3.6.28 The on-site grassland area did have some of the structure required to support ground nesting birds with variation in sward height and scattered scrub but was considered to be too small to support these species. Additionally, this habitat was enclosed to the east and west by hedgerows and tree lines. The site's value to ground nesting birds was considered to be further reduced by the frequent disturbance on-site owing to anthropic activity, and from grazing horses in the field directly adjacent to the south site boundary.

3.6.29 Overall, the site is considered to be of **moderate site value** for widespread breeding and foraging birds. There is **negligible** potential to support ground nesting birds.

*Barn Owl Potential Nest Site Survey*

3.6.30 The initial field survey identified that the site contains a number of agricultural buildings, most of which are open sided former cattle barns. One of these buildings contained potential suitable nesting space upon a platform within the apex of the roof (outlined in pink below). No other potentially suitable nest sites were noted within the buildings on site.

3.6.31 The large, mature oak tree (T02) located to the western boundary of the site (circled green below) contained a number of cavities which were considered potentially suitable for supporting nesting barn owl.

3.6.32 1no. adult barn owl was previously disturbed by the client from within the small barn adjacent to the site (outlined in yellow below). An extensive number of barn owl pellets of varying ages were recorded beneath timber beams with extensive whitewashing to the floor and roof beams.

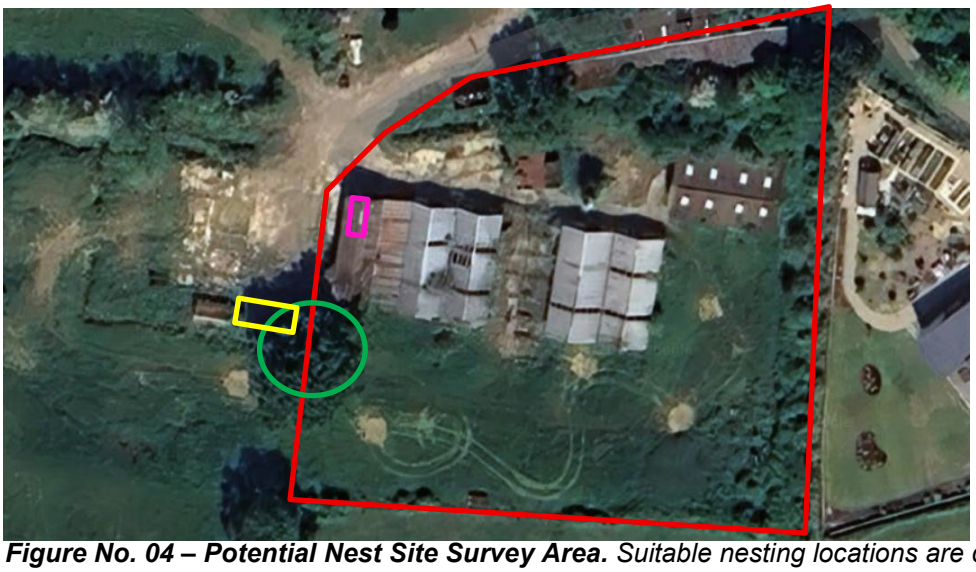

***Figure No. 04 – Potential Nest Site Survey Area.*** *Suitable nesting locations are circled including suitable building nesting platforms (pink), tree cavities (green) and previous locations of barn owls (yellow).*

***Photograph No: 21 –*** *Buildings directly to east of the site which were open and densely overgrown.*

***Photograph No: 22 –*** *Evidence of barn owls including droppings and pellets within adjacent overgrown barn.*

*Barn Owl Nest Verification Survey*

3.6.33 No evidence of barn owl was recorded within the vicinity of the mature oak tree or agricultural shed, suggesting the likely absence of a nest or long-standing roost. Suitable areas for nesting, such as the top of wall plates and the top of wide light fittings within the adjacent barn were searched for any nest debris however none was found. An area of stored timber along the rafters created a highly suitable nesting location however no evidence of nesting activity was recorded here either.

3.6.34 2no. small downy feathers were identified within the adjacent barn, which were identified as belonging to an adult barn owl rather than nestling fluff on account of the presence of a quill. No wing feathers were noted within the barn. A large number of pellets were still present within the adjacent barn. These were of varying ages and stages of decomposition indicating the long-standing use of the building by barn owl.

3.6.35 The evidence found on site, and lack of moulted wing feathers, suggests the use of the barn as a winter roost by barn owl. The roost appears to be well-used and has evidently been in use for an extended period of time.

***Invertebrates***

*Desk Study*

3.6.36 SxBRC returned records for 115no. species of protected / notable invertebrates from within the search area. This included records for 10no. notable species of butterfly, including purple emperor *Apatura iris*, white letter hairstreak *Satyrium w-album*, brown hairstreak *Thecla betulae*, and large tortoiseshell *Nymphalis polychloros* and 62no. species of moth including cinnabar *Tyria jacobaeae*, white ermine *Spilosoma lubricipeda*, and blood vein *Timandra comae*, amongst others. Records were also returned for 39no. species of notable species of beetle including the scarce four-dot pin-palp *Bembidion quadripustulatum*, 12no. species of notable spiders including the thin weblet *Agyneta mollis*, and 21no. species of notable ants, bees, sawflies and wasps including black-headed mason wasp *Odynerus melanocephalus*, amongst others.

*Site Assessment*

3.6.37 The on-site habitats closely resembled those of the Priority Habitat *Open Mosaic Habitats on Previously Developed Land*. Whilst the site did not qualify for this habitat the grassland, scrub, and ruderal areas on-site all supported a reasonably diverse assemblage of early successional plant species (although no particularly notable plants were identified). These habitats were small but could provide a variety of nectar sources which would be of benefit to a range of pollinating species.

3.6.38 Blackthorn is the food plant for brown hairstreak caterpillar and was identified within dense scrub areas to the northeast and within the boundary hedgerow to the east. These areas were considered to be of site value and are not unique to the wider area so were considered unlikely to support a notable species population.

3.6.39 Overall, the site was considered to offer habitat which had **high** value to common and widespread invertebrates at the **site** level. There was **low** potential to support a notable invertebrate assemblage.

## 4.0 ASSESSMENT OF EFFECTS

4.0.1 Using the Guidelines for Ecological Impact Assessment (IEEM, 2006 & updated by CIEEM, 2018), the assessment set out below considers the potential impacts of the scheme prior to mitigation. Detailed avoidance, mitigation and compensation measures are then discussed, with residual impact identified once these measures have been taken into account. Wherever possible mitigation measures have been designed into the scheme as this gives greater certainty over deliverability and ensures the correct application of the 'Mitigation Hierarchy' (as advocated by BS42020:2013, Defra 2019 and CIEEM, CIRIA & IEMA 2016).

4.0.2 Protected species for which the site offers negligible suitability have been scoped out of further assessment.

### 4.1 Internationally Designated Sites

*Potential Impacts*

4.1.1 A total of 3no. internationally designated statutory sites were identified within a potential zone of influence of the proposed development site. Due to the intervening distances, the existing habitats present on-site and small scale of the development, no direct impacts upon Arun Valley SAC, SPA and Ramsar are likely to occur.

4.1.2 However, the site is located within the Sussex North Water Supply Zone. Therefore, in the absence of mitigation the development has the potential to adversely affect the integrity of the Arun Valley SAC, SPA and Ramsar through increased water abstraction in the catchment area.

*Mitigation and Compensation*

4.1.3 A water neutrality statement is to be provided alongside this application to demonstrate methods of offsetting that are to be implemented to ensure there is no increase in water abstraction, and therefore avoiding adverse impacts upon the Arun Valley SAC.

*Residual Impacts*

4.1.4 Once mitigation measures have been considered, there shall be **no likely significant effect** upon any designated site as a result of this development.

## 4.2 Nationally and Locally Designated Sites

*Potential Impacts*

4.2.1 Several locally designated areas were identified within a potential zone of influence of the site. However, none exist within or directly adjacent to the site, so would not be likely to be directly impacted by proposals.

4.2.2 Kneppmill Pond, the River Adur & Lancing Brook LWS was identified downstream from the on-site watercourse. Therefore, the development could result in habitat degradation of local designated sites through construction activity in the vicinity of the watercourse resulting in excess dust, emissions, and chemical pollution of the watercourse.

*Mitigation and Compensation*

4.2.3 Works during the construction phase will be undertaken in accordance with best practise guidelines to control any excess dust creation which may impact the on-site stream. Measures shall include sheeting of lorries carrying loose loads to and from site, wheel wash facilities, and use of water suppression systems.

4.2.4 All re-fuelling and chemical storage shall take place in a bunded enclosure with appropriate containment measures in place and spill kits available. Solid hoarding shall be in place for the duration of construction to minimise impacts from dust and debris entering the stream.

*Residual Impacts*

4.2.5 Provided mitigation and protection measures are followed, no off-site designated areas will be indirectly affected by this development. Therefore, impacts will be **negligible and non-significant.**

## 4.3 Habitats

*Potential Impacts*

4.3.1 Overall, the habitats on site were assessed as being of broadly low ecological value with the greatest ecological interest at the site associated with the stream. The mature rural trees, blackthorn scrub and neutral grassland habitats are also of higher ecological value. Areas of neutral grassland, ruderal/ephemeral and tall forbs are to be permanently lost for the construction of new dwellings and gardens. Therefore, in the absence of appropriate mitigation, proposals could result in biodiversity net loss overall.

4.3.2 All existing trees and hedgerows, and the majority of scrub habitats are proposed to be retained. However, in the absence of appropriate mitigation inappropriate construction methods could still result in smothering or pollution of these habitats as well as disturbance through excessive noise, vibration, and emissions. There is also the risk of crushing, compaction of soils and leeching of chemicals into the root systems of trees, scrub, and hedges, which could impact their life span and ultimately cause death. Given the scale of the development the potential impacts would be of minor-moderate **site** impact magnitude and likely to occur.

4.3.3 The watercourse is proposed for retention in its entirety. However, inappropriate construction methods have the potential to adversely impact this habitat through chemical and excess water runoff and the smothering of marginal aquatic vegetation through the production of dust. Given that this habitat forms a locally important ecological link with surrounding habitats this would result in minor-moderate **local** impacts, which are likely to occur.

*Mitigation and Compensation*

4.3.4 All construction will be undertaken in accordance with best practice guidelines with regards to control of dust, noise and emissions. Where appropriate measures such as debris netting will be used to prevent unnecessary damage to hedgerows and ditches. To ensure trees and hedgerows scheduled for retention are sufficiently protected throughout the construction and operational phases, a full Arboricultural Impact Assessment, Methods Statement and Tree Retention and Protection Plan accompanies this application, which are compliant with best practice (BSI, 2012).

4.3.5 Storage of fuel etc will be avoided adjacent to trees, scrub, hedgerows, and the stream. All re-fuelling and chemical storage shall take place in a bunded enclosure with appropriate containment measures in place and spill kits available. Solid hoarding shall be in place for the duration of construction to minimise impacts from dust and debris entering the stream.

4.3.6 In order to offset the loss of habitats scheduled for removal, all new areas of soft landscaping will be designed to maximise the biodiversity value of the site. This will be done by seeding of new wildflower areas, and planting of new native hedgerows and scrub areas around the boundaries of the site, alongside planting of flowering and fruiting trees of known value to wildlife. A full Biodiversity Net Gain statement accompanies this application which details how these enhancements can contribute to the +10% net gain mandate detailed under the *Environment Act (2021)* and has been prepared in line with best practice guidance (CIEEM, 2021).

*Residual Impacts*

4.3.7 Provided protection measures are followed, no priority or other important habitats or plant species will be affected by this development. Once mitigation and compensation is taken into account, the impacts will be **negative** in the short-term, with **long-term impacts at the site and local level improving** once vegetation and new habitats have established.

## 4.4 Amphibians

*Potential Impacts*

4.4.1 The protected species assessment identified that the site and adjacent habitats offered **moderate** potential to support GCN. Given the abundance of ponds in the surrounds and known records for GCN, GCN are likely to exist in these ponds, and could therefore disperse across and/or use the site occasionally. Therefore, in the absence of mitigation there is some potential for works to result in the killing / injury of GCN, which would constitute an offence under the *Conservation of Habitats and Species Regulations (2017) (as amended)* and the *Wildlife and Countryside Act (1981) (as amended)* with adverse impacts significant at the **site** level.

*Mitigation and Compensation*

4.4.2 The site shall be entered into the DLL scheme managed by NatureSpace which will, subject to payment of the specified fees, require no further investigation of surrounding ponds and can be entered into at any time of year. A report produced by NatureSpace is to accompany this application which may include additional mitigation requirements post-planning.

*Residual Impacts*

4.4.3 Once the above mitigation measures are taken into account, the impact of the scheme shall be **negligible**.

## 4.5 Reptiles

*Potential Impacts*

4.5.1 Further reptile surveys identified the site supports a low population of slow worms and would therefore not be classified as a Key Reptile Site (Froglife, 1999). However, in the absence of mitigation, works could result in the killing or injuring of common, widespread reptiles and removal of small areas of suitable habitat. Given the generally low suitability of the site, impact would be moderate at the **site** level and likely to occur. This could therefore result in a breach of the Wildlife and Countryside Act (as amended) 1981.

*Mitigation and Compensation*

4.5.2 Reptiles are distributed across a relatively small section of the site. However, the need for large areas of the site to be altered during development means that most of the suitable habitat shall be lost. To ensure that works proceed in accordance with the protection afforded reptiles under The Wildlife and Countryside Act 1981 (as amended), phased clearance shall be undertaken as follows:

- All areas of grassland considered unsuitable for reptiles shall be kept short prior to the commencement of works to prevent possible colonisation of these areas by reptiles.
- All suitable areas of reptile habitat which require removal will be cleared in stages during the active reptile season (March – October inclusive) in suitable weather conditions for reptiles to disperse (+9°C, sunny, dry).
- Vegetation in these areas shall be cut to no less than 150mm using hand tools. Following a fingertip search of the area by a professionally qualified ecologist (PQE) to ensure that reptiles are absent, the vegetation shall then be reduced to <50mm rendering it unsuitable for reptiles.
- These shall be directional vegetation cuts moving from south to north towards retained suitable reptile habitat including scrub areas and ruderal areas. All works shall be supervised by a PQE.
- Any reptiles found throughout the site clearance shall be caught by hand and stored in a lidded bucket or cloth bag prior to their release.
- Reptiles shall be released into areas of retained habitat to the northeastern section of the site.
- The vegetation is to be maintained at this height prior to and during construction to ensure that reptiles do not re-colonise the area.

4.5.3 The scheme shall include areas of suitable reptile habitat creation within the north of the site to provide compensation for the fragmentation of on-site reptile habitats. These habitats are to include areas of tussocky grassland with areas of scattered scrub. A suitable management plan is to be implemented to ensure the retention of suitable habitat along the northern boundary, and within any habitat creation areas in perpetuity. Management shall include low-intensity mowing of the grassland and cutting and pruning of shrubs to prevent scrub encroachment whilst ensuring that areas of suitable habitat always remain present on site.

*Residual Impacts*

4.5.4 Once mitigation measures are taken into account, the impact of the scheme shall be **negligible** and shall ensure the retention of suitable reptile habitat in the long-term.

## 4.6 Bats

*Potential Impacts*

4.6.1 Several mature trees were identified to have some potential to support roosting bats but are proposed to be retained throughout development. However, in the absence of mitigation inappropriate construction methods could result in damage or loss of these trees. Therefore, it would not be possible to completely scope out the potential that works could result in the destruction of a roost or killing / injury of bats, which would constitute an offence under the *Conservation of Habitats and Species Regulations (2017) (as amended)* and the *Wildlife and Countryside Act (1981) (as amended)* with adverse impacts significant at the **site** level but are unlikely to occur.

4.6.2 In the absence of mitigation impacts could also include the disruption of commuting corridors and foraging habitat through inappropriate external lighting. Due to the moderate suitability of the on-site habitats including mature rural trees, hedgerows, and a stream, impacts would be of moderate **site** significance and likely to occur.

*Mitigation and Compensation*

4.6.3 All boundary trees and hedgerows are proposed to be retained and protected during construction and operation in accordance with BS5837:2012, as detailed in the full arboricultural package which accompanies this application. Habitat fragmentation has been minimised by retaining semi-natural habitats in the vicinity of the stream wherever possible.

4.6.4 The proposed lighting scheme is to be reviewed by an ecologist to ensure protection of all ecological features on site. Nocturnal lighting should be avoided where possible and any required nocturnal lighting is to be directed away from commuting habitats such as the stream, trees, and hedgerows. The lighting scheme must be designed to comply with the ILP Guidance Note 08/23 *Bats and artificial lighting at night* wherever possible and consider the following when choosing luminaires:

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone *et al*, 2012).
- Internal luminaires within dwellings can be recessed where installed in proximity to windows to reduce glare and light spill.
- The use of specialist bollard or low-level downward directional luminaires on external pathways to retain darkness above could be considered.
- However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component, and poor facial recognition, and their use should only be as directed by the lighting professional.
- Column heights should be carefully considered to minimise light spill.
- Only luminaires with an upward light ratio of 0% and with good optical control should be used – See ILP Guidance Note 01/21 *Guidance for the Reduction of Obtrusive Light*.
- Luminaires should always be mounted on the horizontal, i.e. no upward tilt.
- Any external security lighting within communal garden areas should be set on motion-sensors and have short (1min) timers.

4.6.5 New commuting and foraging opportunities for bats shall be provided via new hedgerow habitat creation, native scrub planting, and creation of new wildflower grassland, such that negligible impacts to foraging and commuting bats are anticipated overall.

*Residual Impacts*

4.6.6 Once mitigation is taken into account, the impacts will be **negative** in the short-term, with **long-term impacts at the site and local level improving** once new hedgerows and other habitats have established.

## 4.7 Badger

*Potential Impacts*

4.7.1 The protected species assessment identified that the site and adjacent habitats supported **low** potential for commuting and foraging badgers with no direct evidence of badgers identified on-site or in the immediate surrounding area. However, in the absence of mitigation, construction works could result in adverse impacts to commuting badgers including the direct killing / injury of badgers, which would constitute an offence under the *Badgers Protection Act (1992)*. These are unlikely to occur but could result in adverse impacts to badgers significant at the **site** level.

*Mitigation and Compensation*

4.7.2 The following Reasonable Avoidance Measures shall be implemented during construction:

- Within 1 month prior to commencement of work an updated walkover should be conducted by a suitably qualified ecologist to ensure that no new potential setts or mammal burrows have been excavated on site.
- All contractors should be given a toolbox talk to make them aware of the presence of badgers in the locality.
- All trenches or excavations over 1.0m deep should be covered overnight or have a ramp installed to prevent badgers of other mammals becoming trapped.
- Any exposed pipework greater than 120mm diameter should be blocked to prevent badgers gaining entry.

- Any loose material stockpiled on site for an extended period should be fenced to prevent badger access, as they readily build setts in loose, easy-to-excavate material.
- Short-term stockpiles should be checked daily for any signs of digging and fenced if appropriate.
- During the work, the storage of any chemicals should be contained in such a way that they cannot be accessed or knocked over by any roaming badgers.
- Litter, tools and potentially dangerous materials on site should be cleared at the end of the working day. Care should be taken that there are no sharp metal objects or pointed protrusions on the ground which could seriously injure a badger due to their poor eyesight.
- Ensure no dogs are brought to the work site.

*Residual Impacts*

4.7.3 Once mitigation measures are taken into account, the overall impact of the scheme will be **negligible.**

## 4.8 Other Mammals

*Potential Impacts*

4.8.1 The protected species assessment identified that the site and adjacent habitats offered habitats of **high** value to common mammal species such as rabbits, wood mice, and field vole; **moderate** potential to support hedgehogs; and **low** potential to support harvest mice and polecats. Therefore, in the absence of mitigation it would not be possible to scope out the potential for works to result in the entrapment, asphyxiation or otherwise unnecessary suffering of these mammal species. This would constitute an offence under the *Wild Mammals Protection Act (1996)*.

*Avoidance, Mitigation and Compensation*

4.8.2 Clearance of any scrub habitat will be undertaken with an awareness for the potential presence of small mammals, and any individuals found will be caught with gloved hands and moved off-site, away from the proposed works by a suitably qualified ecologist. Clearance of any grassland, ruderal / ephemeral, and tall forb areas shall be cut with care to no less than 150mm initially, followed by a shorter cut which shall be done outside the hibernation season.

4.8.3 If excavation within proximity of a rabbit burrow is necessary (i.e., within 10m) then prior to commencement of works a torch and a long pole will be used to check the rabbit holes for occupancy and to encourage any inhabiting mammal to leave the hole. If this is not possible, such as due to a bend in the tunnel which may make it impossible to see / probe the entire hole it would be possible to carefully and manually dig out the hole to persuade any mammals therein to vacate.

4.8.4 The same precautionary working practices outlined for badgers would also be of benefit for the remaining mammal species.

4.8.5 Additional provisions for these mammal species are to be provided through the creation of new mixed scrub areas, and enhancement of the surrounding grassland.

*Residual Effects*

4.8.6 Providing the measures outlined above are incorporated **negligible** impacts to other mammal species are anticipated overall.

## 4.9 Breeding Birds

*Potential Impacts*

4.9.1 The field survey identified the presence of nest debris within buildings, and suitable trees, scrub, and hedgerow habitats which could support nesting birds. Therefore, in the absence of avoidance / mitigation, the development could result

in the damage / destruction of a bird nest.

4.9.2 Further barn owl surveys identified the absence of a barn owl nest on-site, and the presence of a winter roost within directly adjacent off-site barns. Given the absence of evidence of nesting barn owls within or adjacent to the proposed construction site, the proposed development stands a negligible risk of disturbing a Schedule 1 species. However, increased residential pressure adjacent to the winter roost could still result in adverse pressure to surrounding barn owl populations.

*Mitigation and Compensation*

4.9.3 Any hedgerow sections, dense scrub, ruderal/ephemeral, or tall forb vegetation scheduled for removal will be removed outside the nesting season *(season: March-August, although pigeons may nest all year)* or shall be checked prior to removal by a suitably qualified ecologist. To compensate for the loss of small areas of suitable nesting habitat bird boxes shall be fitted to the northern side of existing trees.

4.9.4 As detailed in *BS 42021:2022 Integral nest boxes* (BSI, 2022), integral nest boxes should be installed in all new developments, at a rate equal to the number of dwellings. This is to comprise integrated or affixed bird boxes targeted for a range of species. Boxes are to be installed to the north-facing aspect of the new buildings, avoiding areas above windows and doors.

4.9.5 Given the increased levels of disturbance likely post-development, from both human and pets, a barn owl nest box is to be installed within a mature tree to the south-west of the wider site. The box should be of standard design and installed within an open position 3-5m from the ground. The exact location will be agreed with an ecologist on site. These measures shall ensure the continued ecological functionality of the site for barn owl.

*Residual Impacts*

4.9.6 The overall impact of the scheme will be **negligible,** with the proposed scheme likely to provide a long-term minor positive impact.

## 4.10 Invertebrates

*Potential Impacts*

4.10.1 The protected species assessment identified that the site offered **low** potential to support a notable invertebrate assemblage. The most valuable habitats for invertebrates included the blackthorn scrub which would be of value to brown hairstreak butterflies.

4.10.2 The site also supports habitats of **high** value to common and widespread invertebrate species, including the other neutral grassland, ruderal/ephemeral and tall forb areas, marginal bramble scrub, a species-rich hedgerow, and stream. Some of these areas are to be lost. Therefore, in the absence of mitigation it would not be possible to scope out the potential that the development would result in net losses for widespread invertebrates, significant at the **site** level which would be certain to occur.

*Mitigation and Compensation*

4.10.3 Areas of blackthorn scrub have been retained within proposals wherever possible. The surrounding area to the northeast of the mature scrub (SC01) will be enhanced with areas of new mixed native scrub to expand the area and provide further sheltered edges.

4.10.4 Losses of grassland shall be compensated for with the creation of wildflower grassland areas. This shall be implemented through the overseeding of an appropriate wildflower seed mix. New soft landscaping will also comprise native tree and scrub planting including flowering species of known value to invertebrates, to provide opportunities for these species throughout the year. Where possible, all species recommended within the soft landscape scheme will be as listed on '*RHS Plants for Pollinators'* to maximise the invertebrate resource within the site.

4.10.5 Installation of 2no. log piles shall be incorporated into the area surrounding the mixed scrub planting areas. They shall comprise partially buried log piles including cut or fallen deadwood in an arranged pile. The wood will be from native species and will comprise a mix of logs, branches and / or tree roots. Wherever possible these will be provided from existing deadwood on-site.

*Residual Impacts*

4.10.6 The overall impact of the scheme will be **negligible**, with a positive impact in the long-term once vegetation has established.

## 4.11 Future Baseline

4.11.1 The site is subject to irregular management. Therefore, general habitat and building maintenance works are to be prescribed to keep the site in a semi-natural managed state, similar to that found during the initial habitat assessment.

## 5.0 ECOLOGICAL ENHANCEMENTS

5.1 The design of the proposed development includes ecological enhancements for the benefit of wildlife to ensure compliance with National Planning Policy Framework (Department for Levelling Up, Housing & Communities, 2024) and Local Planning Policy and the Environment Act (2021) which mandates a minimum 10% net gain in biodiversity across all development sites. Ecological enhancements which will be included as part of development proposals include:

- The use of flowering plants with a recognised wildlife value within the soft landscape scheme to provide year-round interest for invertebrates.
- The use of seed and fruit bearing tree species such as cherry, alder, hornbeam, and crab apple within the scheme to provide a foraging resource for birds and invertebrates.
- The provision of 'bat-friendly' planting including pale and night scented species to increase the foraging resource within the site.
- Incorporation of bird boxes suitable for a range of species within the scattered trees and to the northern aspect of the proposed buildings.
- Bat boxes suitable for a range of species to be incorporated into the southern aspect of the proposed buildings.
- Installation of invertebrate bricks or boxes suitable for a range of invertebrates to south facing walls / trees and in more sheltered areas in vegetation to provide for a range of species.
- Installation of hedgehog homes within semi-natural habitats.
- Creation of log piles within the area of wildflower grassland and scrub surrounding the stream.

## 6.0 CONCLUSIONS

6.1 The site covers an area of 0.81ha and is located to the southwest of Dial Post village. The site comprises former agricultural barns including hard standing, buildings, dense scrub, other neutral grassland, scattered trees, and ruderal / ephemeral habitats, with a stream crossing the site and species-rich native hedgerow on the east boundary. The greatest ecological interest at the site is associated with the stream which is to be protected throughout development.

6.2 The site is situated within the Sussex North Water Supply Zone; therefore, a water neutrality statement is to be provided to demonstrate that proposals will have no indirect impacts upon the Arun Valley SAC, SPA and Ramsar.

6.3 Further surveys identified the presence of a low population of slow worm, and the presence of a winter barn owl roost. Appropriate mitigation strategies for the species shown to be present on-site are outlined herein, which could be secured through an appropriately worded planning condition, alongside a landscape creation, management, and monitoring plan.

6.4 The site also offers some suitable habitats for commuting and foraging bats, badgers, widespread mammal species, widespread invertebrates, and breeding birds. Avoidance and mitigation measures have been built into the design of the scheme in accordance with the mitigation hierarchy and BS42020: 2013.

6.5 Once avoidance, mitigation and compensation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible and non-significant.**

6.6 Opportunities for ecological enhancement have been provided to allow the ecological value of the site to be maximised. As this is a full planning application, the development proposals shall be subject to the standard Biodiversity Gain Condition. A full Biodiversity Net Gain Report which discusses the baseline value of the site, and proposed habitat creation measures will accompany this application.

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**Table No. 15 – Species List for Habitat Parcels**

***D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally***

***Other Neutral Grassland (NG01)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Ash (shrub) | *Fraxinus excelsior* | **R** |
| Barren Brome | *Bromus sterilis* | **LA** |
| Bittersweet | *Solanum dulcamara* | **R** |
| Bramble | *Rubus fruticosus* agg. | **R** |
| Bristly Oxtongue | *Helminthotheca echioides* | **A** |
| Broadleaved Dock | *Rumex obtusifolius* | **F** |
| Burdock | *Arctium* sp. | **LA** |
| Cleavers | *Galium aparine* | **R** |
| Cock's-Foot | *Dactylis glomerata* | **O** |
| Common Nettle | *Urtica dioica* | **O** |
| Common Ragwort | *Senecio jacobaea* | **O** |
| Common Sowthistle | *Sonchus oleraceus* | **R** |
| Creeping Buttercup | *Ranunculus repens* | **O** |
| Creeping Thistle | *Cirsium arvense* | **LA** |
| Curled Dock | *Rumex crispus* | **R** |
| Cut-Leaved Crane's-Bill | *Geranium dissectum* | **R** |
| Dandelion | *Taraxacum officinale* | **R** |
| Early Forget-Me-Not | *Myosotis ramosissima* | **LF** |
| Elder (shrub) | *Sambucus nigra* | **R** |
| Garlic Mustard | *Alliaria petiolata* | **R** |
| Germander Speedwell | *Veronica chamaedrys* | **O** |
| Hairy Tare | *Ervilia hirsute* | **R** |
| Hedge Mustard | *Sisymbrium officinale* | **R** |
| Herb Robert | *Geranium robertianum* | **R** |
| Hogweed | *Heracleum sphondylium* | **R** |
| Lesser Celandine | *Ficaria verna* | **R** |
| Lords-and-Ladies | *Arum maculatum* | **R** |
| Meadow Buttercup | *Ranunculus acris* | **R** |
| Meadow Foxtail | *Alopecurus pratensis* | **F** |
| Red Deadnettle | *Lamium purpureum* | **LA** |
| Soft Brome | *Bromus hordeaceus* | **O** |
| Spear Thistle | *Cirsium vulgare* | **R** |
| Sun Spurge | *Euphorbia helioscopia* | **R** |
| White Clover | *Trifolium repens* | **LA** |
| Willow Sp. | *Salix* sp. | **R** |
| Yarrow | *Achillea millefolium* | **R** |
| Yellow Salsify | *Tragopogon dubius* | **R** |
| Yorkshire Fog | *Holcus lanatus* | **F** |

***D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally***

***Other Neutral Grassland (NG02)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Blackthorn | *Prunus spinosa* | ***R*** |
| Bramble | *Rubus fruticosus* agg. | ***R*** |
| Broadleaved Dock | *Rumex obtusifolius* | ***R*** |
| Cock's-Foot | *Dactylis glomerata* | ***O*** |
| Common Nettle | *Urtica dioica* | ***R*** |
| Creeping Thistle | *Cirsium arvense* | ***R*** |
| Curled Dock | *Rumex crispus* | ***R*** |
| Cut-Leaved Crane's-Bill | *Geranium dissectum* | ***O*** |
| Dandelion | *Taraxacum officinale* agg. | ***O*** |
| False-Oat Grass | *Arrhenatherum elatius* | ***R*** |
| Hairy Tare | *Ervilia hirsute* | ***O*** |
| Hogweed | *Heracleum sphondylium* | ***R*** |
| Meadow Buttercup | *Ranunculus acris* | ***R*** |
| Meadow Foxtail | *Alopecurus pratensis* | ***A*** |
| Soft Brome | *Bromus hordeaceus* | ***O*** |
| White Clover | *Trifolium repens* | ***R*** |
| Yellow Salsify | *Tragopogon dubius* | ***R*** |
| Yorkshire Fog | *Holcus lanatus* | ***F*** |

***Blackthorn Scrub (NE – SC01)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Blackthorn | *Prunus spinosa* | ***D*** |
| Bramble | *Rubus fruticosus* agg. | ***F*** |
| Common Nettle | *Urtica dioica* | ***F*** |
| Dogwood | *Cornus sanguinea* | ***R*** |
| Elder | *Sambucus nigra* | ***R*** |
| Hawthorn | *Crataegus monogyna* | ***R*** |
| Hazel | *Corylus avellana* | ***R*** |
| Ivy | *Hedera helix* | ***R*** |
| Lords-and-Ladies | *Arum maculatum* | ***R*** |
| Rose sp. | *Rosa* sp. | ***R*** |

***Blackthorn Scrub (SE – SC02)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Blackthorn | *Prunus spinosa* | ***D*** |
| Bramble | *Rubus fruticosus* agg. | ***O*** |
| Creeping Thistle | *Cirsium arvense* | ***R*** |
| English Elm | *Ulmus procera* | ***O*** |
| Gooseberry | *Ribes uva-crispa* | ***O*** |
| Ground Ivy | *Glechoma hederacea* | ***R*** |

***D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally***

***Bramble Scrub (SC03)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Bramble | *Rubus fruticosus* agg. | **D** |
| Broadleaved Dock | *Rumex obtusifolius* | **R** |
| Burdock sp. | *Arctium* sp. | **O** |
| Cleavers | *Galium aparine* | **O** |
| Common Nettle | *Urtica dioica* | **O** |
| Creeping Buttercup | *Ranunculus repens* | **R** |
| Creeping Thistle | *Cirsium arvense* | **F** |
| Elder | *Sambucus nigra* | **O** |
| Hawthorn | *Crataegus monogyna* | **R** |
| Spear Thistle | *Cirsium vulgare* | **R** |

***Tall Forbs (TF01)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Common Nettle | *Urtica dioica* | **D** |
| Red Deadnettle | *Lamium purpureum* | **R** |
| Cleavers | *Galium aparine* | **O** |

***Tall Forbs (TF02)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Bramble | *Rubus fruticosus* agg. | **R** |
| Cleavers | *Galium aparine* | **F** |
| Common Mallow | *Malva sylvestris* | **R** |
| Common Nettle | *Urtica dioica* | **A** |
| Creeping Thistle | *Cirsium arvense* | **O** |
| Dandelion | *Taraxacum officinale* agg. | **R** |
| Elder | *Sambucus nigra* | **R** |
| Lords-and-Ladies | *Arum maculatum* | **R** |
| Pendulous Sedge | *Carex pendula* | **LA** |
| Spear Thistle | *Cirsium vulgare* | **R** |
| Yorkshire Fog | *Holcus lanatus* | **O** |

***D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally***

***Ruderal/Ephemeral (RD01)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Barren Brome | *Bromus sterilis* | **LF** |
| Cuckooflower | *Cardamine pratensis* | **R** |
| Black Bryony | *Dioscorea communis* | **R** |
| Bramble | *Rubus fruticosus* agg. | **O** |
| Broadleaved Dock | *Rumex obtusifolius* | **F** |
| Bluebell | *Hyacinthoides non-scripta* | **LF** |
| Burdock sp. | *Arctium* sp. | **O** |
| Cleavers | *Galium aparine* | **LA** |
| Cock's-foot | *Dactylis glomerata* | **R** |
| Common Mallow | *Malva sylvestris* | **R** |
| Common Ragwort | *Senecio jacobaea* | **R** |
| Creeping Thistle | *Cirsium arvense* | **O** |
| Early Forget-Me-Not | *Myosotis ramosissima* | **R** |
| Ground Ivy | *Glechoma hederacea* | **R** |
| Cut-Leaved Crane's-Bill | *Geranium dissectum* | **R** |
| Hart's Tongue Fern | *Asplenium scolopendrium* | **O** |
| Hedge Mustard | *Sisymbrium officinale* | **R** |
| Hemlock | *Conium maculatum* | **R** |
| Hemlock Water-Dropwort | *Oenanthe crocata* | **R** |
| Primrose | *Primula vulgaris* | **R** |
| Red Campion | *Silene dioica* | **F** |
| Red Deadnettle | *Lamium purpureum* | **R** |
| Rush sp. | *Juncus* sp. | **R** |
| Ribwort Plantain | *Plantago lanceolata* | **O** |
| Rose sp. | *Rosa* sp. | **R** |
| Stone Parsley | *Sison amomum* | **R** |
| Willowherb sp. | *Epilobium* sp. | **F** |
| Yorkshire Fog | *Holcus lanatus* | **LF** |

***Ruderal/Ephemeral (RD02)***

| Common Name | Scientific Name | DAFOR |
|---|---|---|
| Annual Meadowgrass | *Poa annua* | **R** |
| Bilbao Fleabane | *Erigeron floribundus* | **O** |
| Bramble | *Rubus fruticosus* agg. | **F** |
| Bristly Oxtongue | *Helminthotheca echioides* | **R** |
| Broadleaved Dock | *Rumex obtusifolius* | **F** |
| Burdock sp. | *Arctium* sp. | **O** |
| Cleavers | *Galium aparine* | **O** |
| Common Mallow | *Malva sylvestris* | **R** |
| Common Nettle | *Urtica dioica* | **LA** |

***Ruderal/Ephemeral (RD02) cont.***

| ***Common Name*** | ***Scientific Name*** | ***DAFOR*** |
|---|---|---|
| Common Ragwort | *Senecio jacobaea* | ***R*** |
| Creeping Thistle | *Cirsium arvense* | ***O*** |
| Dandelion | *Taraxacum officinale* agg. | ***R*** |
| Elder | *Sambucus nigra* | ***R*** |
| Early Forget-Me-Not | *Myosotis ramosissima* | ***R*** |
| Garlic Mustard | *Alliaria petiolata* | ***LA*** |
| Germander Speedwell | *Veronica chamaedrys* | ***R*** |
| Hawthorn (sapling) | *Crataegus monogyna* | ***R*** |
| Herb-Robert | *Geranium robertianum* | ***O*** |
| Ribwort Plantain | *Plantago lanceolata* | ***O*** |
| Spear Thistle | *Cirsium vulgare* | ***R*** |
| White Clover | *Trifolium repens* | ***R*** |
| Willowherb sp. | *Epilobium* sp. | ***O*** |
| Wintercress | *Barbarea vulgaris* | ***R*** |
| Yorkshire Fog | *Holcus lanatus* | ***LF*** |

***Species-Rich Native Hedgerow***

| ***Common Name*** | ***Scientific Name*** | ***DAFOR*** |
|---|---|---|
| Blackthorn | *Prunus spinosa* | ***A*** |
| Dogwood | *Cornus sanguinea* | ***R*** |
| English Elm | *Ulmus procera* | ***O*** |
| Hawthorn | *Crataegus monogyna* | ***R*** |
| Elder | *Ulmus procera* | ***R*** |
| Bramble | *Rubus fruticosus* agg. | ***F*** |
| Willow sp. | *Salix* sp. | ***R*** |
| Hazel | *Corylus avellana* | ***R*** |
| ***Ground Flora*** | | |
| Ground Ivy | *Glechoma hederacea* | ***R*** |
| Creeping Thistle | *Cirsium arvense* | ***R*** |
| Broadleaved Dock | *Rumex obtusifolius* | ***R*** |
| Hogweed | *Heracleum sphondylium* | ***R*** |
| Common Nettle | *Urtica dioica* | ***O*** |

***D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally***

***Table No. 16 – Target Notes***

| *Ref* | *Feature* | *Description* |
|---|---|---|
| TN01 | Rubble pile | Tall rubble pile with loose substrate and ruderal vegetation present. |
| TN02 | Mammal digging | Evidence of spoil from mammal digging with rabbit dropping and tracks between. |
| TN03 | Bird nest | Occupied bird nest within building. |
| TN04 | Barn owl pellets | Significant evidence of barn owl within off-site building including pellets and droppings. |

**Appendix A – Planning Policy and Legislation**

***Legislation***

Legislation relating to wildlife and biodiversity of particular relevance to this report includes:

- *The Conservation of Habitats and Species Regulations 2017;*
- *The Wildlife and Countryside Act 1981 (as amended);*
- *The Natural Environment and Rural Communities (NERC) Act 2006; and*
- *The Environment Act 2021.*

This above legislation has been addressed, as appropriate, in the production of this report. Further details of legislation relating to the protection of particular ecological receptors are provided in the table below:

| Ecological Constraint | Rationale |
|---|---|
| SACs (Special Area of Conservation), SPAs (Special Protection Areas) and Ramsars (Wetlands of International Importance) | Under the Conservation of Habitats and Species Regulations 2017 places a duty on the competent authority to maintain the favourable conservation status of designated SAC, SPA and Ramsar sites. Therefore, where it appears to the appropriate nature conservation body that a notice of a proposal relates to an operation which is, or forms, part of a plan or project which is likely to have a significant effect on a European site (either alone or in-combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, it must make an appropriate assessment of the implications for that site in view of that site's conservation objectives. In the light of the conclusions of the assessment, it may give consent for the operation only after having ascertained that the plan or project will not adversely affect the integrity of the site. |
| European protected species (bats, otters, dormice, water voles, great crested newts) | It is an offence under the Conservation of Habitats and Species Regulations 2017 to deliberately kill or injure a European protected species, to destroy breeding/resting sites, or to deliberately disturb these species and affect their ability to survive, rear young, breed, or hibernate. |
| Nationally protected species (bats, water vole, otter) | It is an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly disturb a species listed on Schedule 5 whilst it is in a place of shelter, or to obstruct access to a place for shelter. |
| Nationally protected species (reptiles) | It is an offence under the Wildlife and Countryside Act 1981 (as amended) to kill or injure common species of reptiles. |
| National conservation priority species (white-clawed crayfish, fish, common toad, reptiles, noctule, water vole, otter, hedgehog), i.e., UKBAPs | Section 41 of the NERC Act 2006 requires the Secretary of State to publish a list of species and habitats that are of principal importance for the conservation of biodiversity, and to take, and promote others to take, such steps to further the conservation of these habitats and species. These species and habitats will be considered by Planning Authorities in regard to the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) to conserve and enhance the natural environment. |

| Ecological Constraint | Rationale |
|---|---|
| Badgers | It is an offence under the Protection of Badgers Act 1992 to damage or destroy a badger sett; obstruct any entrance of a badger sett; and disturb a badger whilst it is occupying a badger sett. |
| Wild mammals (rabbits, foxes, water vole, otter, hedgehog, badger) | It is an offence under the Wild Mammals (Protection) Act 1996 to inflict unnecessary suffering to any wild mammal with intent. |
| Nesting birds | It is an offence under the Wildlife and Countryside Act 1981 (as amended) to damage or destroy a bird's nest whilst it is in use, and to kill or injure a bird or destroy an egg. |
| Non-statutory designated sites (SNCI's, LWS, LNR's, etc.) | LNRs are designated under Section 21 of the National Parks and Access to the Countryside Act 1949, which was amended by the Natural Environment and Rural Communities Act 2006. The value for biodiversity of LNRs and LWSs are recognised, and the sites and surrounding buffers are protected by the Local Plan. |
| Biodiversity | Section 40 of the NERC Act 2006 states that each public authority "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications. Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that the planning system and policies should minimise impacts on and provide net gains for biodiversity, and that, if significant harm to biodiversity would result from a development, then development should be avoided (through locating on alternative sites with less harmful impacts). |
| Irreplaceable habitats (ancient woodland, veteran trees, lowland meadows) | Chapter 15 of the National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2021) states that 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. |
| Biodiversity Net Gain | +10% Biodiversity Net Gain (BNG) for new developments will be mandatory under the Environment Act (2021), although this deadline will be extended to April 2024 for small sites and there are exemptions for development below a 25m2 threshold, and for householder applications and self-builds. BNG means that proposals must result in more and/or better-quality natural habitats than there were before development. This also requires that any proposed habitats within the scheme would be necessary to manage for at least 30 years, which would be sought through the provision of S106 legal agreements or conservation covenants. |

***Local Planning Policy***

The Horsham District Planning Framework (Horsham District Council, 2015) sets out the planning policies for development in the district in relation to biodiversity. Those of potential relevance to this assessment are highlighted in the table below:

| Policy Reference | Policy Text |
|---|---|
| Policy 2 – Strategic Policy: Strategic Development | To maintain the district's unique rural character whilst ensuring that the needs of the community are met through sustainable growth and suitable access to services and local employment, the spatial strategy to 2031 is to:<br>12. Retain and enhance natural environmental resources, including landscapes and landscape character, biodiversity, and retaining and enhancing environmental quality including air, minimises energy and resource use and provides flood mitigation. |
| Policy 25 – Strategic Policy: The Natural Environment and Landscape Character | 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:<br>1. 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.<br>2. Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.<br>3. 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.<br>4. Conserve and where possible enhance the setting of the South Downs National Park. |
| Policy 31 – Green Infrastructure and Biodiversity | 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.<br>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.<br>3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required. |

| Policy Reference | Policy Text |
|---|---|
| | 4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:<br>i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)<br>ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)<br>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.<br><br>4. 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:<br>i. The reason for the development clearly outweighs the need to protect the value of the site; and,<br>ii. That appropriate mitigation and compensation measures are provided.<br><br>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. |

**Appendix B – Reptile Survey Results**

**Reptile Survey Results**

**Visit 1:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | EH | | | |
| **Date** | 08/05/2025 | | | |
| **Time** | 10:20 | | | |
| **Temperature** | 14°C | | | |
| **Wind (Beaufort)** | 1 | | | |
| **Cloud Cover %** | 65 | | | |
| **Weather** | Light Cloud | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| | | | | No reptiles |

**Visit 2:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | EH | | | |
| **Date** | 13/05/2025 | | | |
| **Time** | 09:20 | | | |
| **Temperature** | 18ºC | | | |
| **Wind** | 1 | | | |
| **Cloud Cover %** | 30.00% | | | |
| **Weather** | Clear & Sunny | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| | | | | No reptiles |

**Visit 3:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | MD | | | |
| **Date** | 20/05/2025 | | | |
| **Time** | 09:15 | | | |
| **Temperature** | 16ºC | | | |
| **Wind** | 1 | | | |
| **Cloud Cover %** | 10 | | | |
| **Weather** | Clear & Sunny | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| | | | | No reptiles |

**Visit 4:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | EH | | | |
| **Date** | 22/05/2025 | | | |
| **Time** | 09:28 | | | |
| **Temperature** | 13ºC | | | |
| **Wind** | 1 | | | |
| **Cloud Cover %** | 40 | | | |
| **Weather** | Clear & Sunny | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| | | | | No reptiles |

**Visit 5:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | SH | | | |
| **Date** | 30/05/2025 | | | |
| **Time** | 10:00 | | | |
| **Temperature** | 17ºC | | | |
| **Wind** | 2 | | | |
| **Cloud Cover %** | 60 | | | |
| **Weather** | Light Cloud | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| 6 | Slow Worm | Adult | Female | N/A |

**Visit 6:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | MD | | | |
| **Date** | 02/06/2025 | | | |
| **Time** | 09:00 | | | |
| **Temperature** | 14ºC | | | |
| **Wind** | 2 | | | |
| **Cloud Cover %** | 10 | | | |
| **Weather** | Clear & Sunny | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| | | | | No reptiles |

**Visit 7:**

| | | | | |
|---|---|---|---|---|
| **Surveyor** | EH | | | |
| **Date** | 08/06/2025 | | | |
| **Time** | 10:00 | | | |
| **Temperature** | 15ºC | | | |
| **Wind** | 3 | | | |
| **Cloud Cover %** | 40 | | | |
| **Weather** | Light Cloud | | | |
| **Tile No.** | **Species** | **Ad/J** | **Sex** | **Notes** |
| | | | | No reptiles |