

## **Ecological Feasibility Appraisal**

Project: Land at Foxhole Farm, Bolney

# **Ecological Feasibility Appraisal (Constraints, Opportunities and Deliverability)**

Date: June 2023

#### 1. Introduction

- 1.1. Aspect Ecology has been commissioned by Wates Developments to undertake an ecological feasibility appraisal of Land at Foxhole Farm, Bolney (Plan 6481/ECO1). The site has been proposed as a draft allocation in the emerging Mid Sussex District Plan.
- 1.2. To inform the ecological feasibility appraisal, baseline ecological information has been sourced from the Multi-Agency Geographic Information for the Countryside (MAGIC) database and Sussex Biodiversity Record Centre (SBRC), whilst a review of aerial photography and OS mapping has also been undertaken.
- 1.3. Following this, a survey of the site was undertaken in April 2022 based on Phase 1 Habitat Survey methodology1, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal2 to record details on the actual or potential presence of any notable or protected species or habitats. Additional habitat information was gathered during September 2022, whilst faunal surveys have commenced for bats, Dormouse, breeding birds, Great Crested Newt and reptiles.

### 2. Site Description

- 2.1. The site is located to the south-west of Bolney in West Sussex and comprises a number of grassland fields, which are bound by the A272 to the south and Foxhole Lane to the west. Established woodland bounds the site to the north, with further agricultural and residential land bounding the site to the north-east and east (see attached Plan 6481/ECO1).
- 2.2. The site itself comprises five main grassland fields bounded by established hedgerows, woodland and residential dwellings. Additionally, the northern boundary is adjacent to a public footpath. Within the site there are a number of internal boundary features including a treeline, hedgerows and a number of post and wire fences. A number of other habitats are present within the site including a single pond, scrub, tall ruderal vegetation, bare ground, hardstanding and buildings (see attached Plan 6481/ECO3).

Joint Nature Conservation Committee (2010) 'Handbook for Phase 1 habitat survey: A technique for environmental audit.'

<sup>&</sup>lt;sup>2</sup> Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) 'Guidelines for Preliminary Ecological Appraisal.'



#### 3. Ecological Baseline

#### **Ecological Designations**

- 3.1. Based on a review of the online MAGIC database and information returned from SBRC, no ecological designations are located within or bounding the site. The nearest statutory designation is Blunts and Paige's Wood Local Nature Reserve (LNR), which is located approximately 5.6km to the north-east of the site. The LNR comprises a mixture of deciduous woodland and meadows which supports a diverse range of species, including Black Poplar and Dormice. The next nearest statutory designation is Ashenground and Bolnore Woods LNR, located approximately 5.9km to the east of the site. The LNR supports a small area of ancient woodland.
- 3.2. The nearest European designation is Ashdown Forest Special Protection Area (SPA) and Special Area Conservation (SAC) located approximately 16km to the north-east of the site. Ashdown Forest is designated for its wet and dry heaths that support wide assemblages of rare and notable species including nationally important numbers of breeding Nightjar and Dartford Warbler.
- 3.3. A Designated Road Verge is located approximately 680m to the north-west of the site (see Plan 6481/ECO2). Otherwise, the nearest non-statutory designation is Seven Acre Hanger Local Wildlife Site (LWS), which is located approximately 1.7km to the north-east of the site. The LWS supports ancient woodland.
- 3.4. No areas of Ancient Woodland are located within or adjacent to the site, the closest located approximately 150m to the west.

#### **Habitats and Ecological Features**

3.5. Habitats and ecological features supported by the site have been identified following the review of baseline ecological information, OS mapping/aerial photography and the Phase 1 survey. A habitats plan is provided at Plan 6481/ECO3 and a discussion of main habitat types is given below.

### Grassland

- 3.6. The site is dominated by a number of grassland fields which are largely bordered by hedgerows and internal post and wire fences. Fields G5, G6, G7 and G8 were grazed by livestock (sheep and horses) at the time of survey maintaining a low sward height, whilst northern fields G1 and G2 appear to be subject to routine mowing. There are some small areas along field margins and fence lines where a longer sward has developed, providing some variation in grassland sward height and character.
- 3.7. The northern fields (G1 and G2) are categorised as species-poor semi-improved (modified) grassland and are largely similar in structure, character and species present. These fields are grass dominated with species including Yorkshire Fog, Common Bent and Perennial Ryegrass, with Creeping Buttercup infrequently recorded. Patches of longer sward vegetation were recorded along the fence line separating G1 and G2 and along the northern boundary, additionally supporting Common Bird's-foot Trefoil.
- 3.8. The southern fields (G5, G6, G7 and G8) were grazed by sheep and horses at the time of survey and are also categorised as species-poor semi-improved (modified) grassland. These fields are



similar in character and species composition to the northern fields, however a higher proportion of herb species was recorded with species including Common Sorrel, Creeping Buttercup, Meadow Buttercup, Dock sp., Dandelion and Creeping Thistle.

- 3.9. Additionally, there are small areas of grassland (G3 and G4) located at the west of the site surrounding the buildings (B3-B7). These areas of grassland appear to be managed by mowing with a sward height of 15-20cm and contain a higher proportion of herb species including Vetch sp., Broad-leaved Dock, Creeping Cinquefoil, Creeping Buttercup, White Clover, Common Bird'sfoot Trefoil, Crane's-bill sp., Ribwort Plantain, Greater Plantain, Dandelion, Creeping Buttercup and Common Nettle. Nonetheless, these areas are still characterised as species-poor grassland.
- 3.10. The grasslands are all relatively species-poor and are not characteristic of any Priority Habitat types. Accordingly, these do not form an important ecological feature.

Hedgerows, Treelines and Scattered Trees

- 3.11. The site contains numerous hedgerows which are largely associated with the site boundary, although several form internal hedgerows. The hedgerows throughout the site vary in height, width, age, species present and management.
- 3.12. Hedgerows H6, H10, H12, H13, H14 and H23, located at the western and northern boundaries of the site, are considered to be species rich3 and with the exception of H14 (forming a residential curtilage) are likely to qualify as ecologically 'important' under the Hedgerows Regulations 1997. Other hedgerows (including internal boundaries) are species-poor, with several being dominated by ornamental species.
- 3.13. Additionally, all of the hedgerows apart from H15 and H18, are likely to qualify as a Priority Habitat based on the standard definition<sup>4</sup> and therefore form important ecological features.
- 3.14. Several standard trees are located throughout the site, mostly associated with the hedgerows or adjacent to field boundaries. Mature trees are present along the western and northern boundaries, but elsewhere typically comprise only young or semi-mature specimens, not considered to be of elevated value.

Woodland

3.15. The site is located adjacent to woodland W1 which is largely offsite, however the woodland canopy does encroach onto the site at the northwest boundary by approximately 5m. The main woodland is characterised by high canopy Oak and Ash, with the encroaching vegetation comprising young Ash, Oak and Beech with an understorey of Hawthorn, Spindle, Rose sp. and Bramble. Woodland W1 forms the Priority Habitat type lowland mixed deciduous woodland and accordingly forms an important ecological feature.

Scrub and Tall Ruderal Vegetation

3.16. Small areas of scrub and tall ruderal vegetation were recorded within the site, mostly associated with the area of buildings in the central western part of the site, with smaller areas also present along field margins and hedgerow bases. These areas were largely dominated by Bramble, and Common Nettle with other species including Willow and Rose. More established areas of scrub

 $<sup>^3</sup>$  i.e. five or more native woody species within a 30m length (or four or more in Northern England) – FEP Manual

Based on: Biodiversity Reporting and Information Group (2011) 'UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions', ed. Ant Maddock



and tall ruderal vegetation are shown on Plan 6481/ECO3. Scrub and tall ruderal vegetation does not form an important ecological feature.

Ponds

3.17. The site contains a single small pond (P1) which is associated with hedgerow H12 at the western boundary of the site, measuring approximately 3m in width and 8m in length. The pond is shaded by a mature Oak and surrounding shrubby vegetation. The pond contained water during the initial Phase 1 survey in April 2022, although was dry during a subsequent visit in September 2022, indicating it is an ephemeral feature. No aquatic vegetation was noted associated with the pond. Given the pond is a low quality example of this habitat type, it is not considered to form an important ecological feature.

Buildings, Hardstanding and Bare Ground

3.18. A number of buildings are present within the central western part of the site, identified as buildings B1-B9 on Plan 6481/ECO3. Buildings B1-B4 and B6 are large open barns, of concrete pillar and corrugated sheeting construction, in varying states of repair. Buildings B5 and B7 are enclosed single-storey breezeblock structures with pitched roofs and a number of windows. Building B8 is a wooden horse stable with a pitched roof and wooden panelling, whilst building B9 is a greenhouse-type structure. The buildings are associated with a hardstanding access track, whilst an area of bare ground is located to the north forming a horse ménage.

#### **Faunal Species**

Bats

- 3.19. Several records of bat species have been returned from the 2km data search provided by SBRC, including records for Pipistrelle sp. and Brown Long-eared bat at the southern boundary of the site. A single record of the Annex 2 species Barbastelle was included within the data search information.
- 3.20. A number of trees within the site provide roosting opportunities for bats as shown on Plan 6481/ECO3, whilst the buildings in the central western part of the site offer low bat roosting potential. Further survey work will be undertaken to inform a planning application if potential roosting habitat is to be impacted.
- 3.21. Numerous areas of woodland are present within the nearby surrounds of the site, connecting to the woodland and hedgerow network within and adjacent to the site. These features form good quality foraging and commuting habitat for bats. Accordingly, further survey work is underway to determine the extent of use of the site by foraging and commuting bats to inform a planning application. To date, moderate levels of bat foraging and commuting activity have been recorded with species including Common Pipistrelle, Soprano Pipistrelle, Myotis sp., Nyctalus/Eptesicus sp. Long-eared sp. and notably Barbastelle. Surveys are ongoing and are scheduled to continue through 2023. The full survey results will identify particular features of value to bats to be retained under the proposals and inform requirements for mitigation and sensitive lighting.



#### Badger

3.22. A disused Badger sett has been recorded at the southern site boundary together with several Badger latrines. However, no active setts have been recorded within or adjacent to the site. Accordingly Badger is unlikely to form a constraint to the proposals.

Dormouse

- 3.23. The data search from SBRC returned two records of Dormouse within the 2km search area, the closest record located approximately 700m away, with both records to the north-east of the site and dated 2015.
- 3.24. The site provides suitable habitat to support Dormice in the form of onsite woodland and hedgerows, and connects to several areas of woodland within the wider landscape. Accordingly further survey to establish presence/absence of Dormouse has been undertaken in the form of a nest tube survey between August 2022 and May 2023. This survey has confirmed presence of Dormouse on site. Hedgerows and wooded vegetation is largely limited to the site boundaries such that suitable Dormouse habitat can largely be retained under the proposals, although a European Protected Species (EPS) mitigation licence will need to be obtained from Natural England should any suitable Dormouse habitat be affected (e.g. removal of hedgerows for road access). There are substantial opportunities for new woodland and hedgerow planting to enhance Dormouse habitat under the proposals.

Other mammals

3.25. Other mammal species are likely to utilise the site on occasion, such as the Priority species Hedgehog. However, Hedgehog are unlikely to form a significant constraint to development and can be safeguarded using standard mitigation methods.

**Great Crested Newt** 

- 3.26. A number of records of Great Crested Newt were returned from SBRC within the area surrounding the site, the closest located approximately 1km to the west of the site.
- 3.27. A single pond was identified within the site (P1), whilst numerous ponds were identified within 250m of the site boundary which could form potentially suitable breeding habitats for Great Crested Newt. In addition, the site contains grassland, woodland and hedgerows forming potentially suitable terrestrial habitat for Great Crested Newt. Accordingly, further surveys are proposed prior to the submission of a planning application to determine presence/absence of this species. To date, the single onsite pond P1 has been subject to an eDNA survey in April 2023, returning a negative result. If Great Crested Newt is present within ponds surrounding the site, a mitigation licence may need to be obtained for works at the site, albeit it is likely that mitigation requirements (e.g. new pond creation) can readily be accommodated within proposed open space at the site.

Reptiles

- 3.28. A small number of records of Grass Snake, Slow Worm and Adder were returned from SBRC, albeit no records originate from the site.
- 3.29. In general, the site is dominated by short sward grassland, providing suboptimal habitat for reptiles. However, more suitable habitat is formed by the longer sward margins in the northern



field and less intensively managed habitats surrounding the buildings in the west. Accordingly, reptile surveys have been undertaken during April and May 2023. These have recorded moderate numbers of Slow-worm and low numbers of Grass Snake, largely associated with the areas of better quality habitat. It is likely that reptiles can be suitably safeguarded through a translocation / habitat manipulation exercise, whilst new opportunities can be provided within open space under the proposals.

Birds

- 3.30. Records returned from SBRC include several records of Priority Species of birds, including species such as Song Thrush and Yellowhammer typically associated with habitats present at the site.
- 3.31. The hedgerows, trees, woodland and buildings onsite provide suitable nesting opportunities for a number of common bird species. Due to the moderate size of the site, the habitats present and the background records returned by SBRC, a breeding bird survey is being undertaken to assess use of the site by birds to inform a planning application.

*Invertebrates* 

3.32. Overall, the habitats present are considered to be of low value to invertebrates, such that no significant invertebrate assemblage is considered likely to make use of these areas. As such, invertebrates are not considered to form a significant constraint to development.

#### 4. Discussion of Constraints and Opportunities

#### **Ecological Designations**

- 4.1. The nearest statutory ecological designation is Blunts Wood and Paige's Meadow LNR located approximately 5.6km to the north-east of the site, whilst the nearest non-statutory designation is a Designated Road Verge located approximately 680m to the north-west. These designations are well separated from the site by roads, open countryside and existing built development, and as such are unlikely to be impacted by proposed development at the site.
- 4.2. The closest European designation to the site is Ashdown Forest SAC/SPA located approximately 16km to the north-east of the site. The site lies well outside of the identified 7km zone of influence in relation to this designation.

#### **Habitats and Ecological Features**

- 4.3. The site contains a number of habitats which have been identified as Priority Habitat and form important ecological features. These include hedgerows and a small area of deciduous woodland W1 at the north of the site. Priority Habitats are a material consideration in the making of planning decisions. Accordingly, the retention of the hedgerow network and woodland within the masterplan is recommended (as far as practically possible). Aside from some hedgerow losses to accommodate road access (which would be mitigated with new planting), such habitats can likely be readily accommodated under the layout.
- 4.4. The remainder of the site is dominated by species-poor semi-improved (modified) grassland, with other habitats including scrub, tall ruderal vegetation and a poor quality pond. These habitats are species-poor, common in the local area and are not considered to constitute



important ecological features and therefore would not represent a constraint to the proposed development.

4.5. There are significant opportunities for habitat creation and enhancement under the proposals to provide biodiversity net gain, with large areas of open space proposed under the illustrative masterplan which can incorporate habitats such as wildflower grassland and scrub planting, creation of new wetland features as part of the drainage strategy, and introduction of ecologically led management of existing hedgerows and ponds to increase their biodiversity value.

#### **Faunal Species**

4.6. The site provides opportunities for a range of faunal species, and accordingly further survey work is underway in relation to bats, Dormouse, breeding birds, Great Crested Newts and reptiles to determine presence/absence of protected and notable species to inform a planning application. Initial results have indicated moderate levels of bat foraging and commuting activity and the presence of Dormouse, Slow-worm and Grass Snake. Habitats of evaluated value for faunal species are predominantly limited to the boundary woodland edge, hedgerows and longer sward grass margins, with the majority of the site formed by open grassland fields which are of lower value to faunal species. As such, it is considered that faunal constraints can readily be accommodated as part of a sensitively designed masterplan and following implementation of appropriate safeguarding and mitigation measures. Notably, areas currently proposed for development are largely restricted to the open areas of grassland, with retention of boundary features of elevated value to faunal species. Opportunities for faunal enhancements could be included as part of any future development proposals, including new habitat and roosting creation for a range of faunal species.

#### **Biodiversity Net Gain**

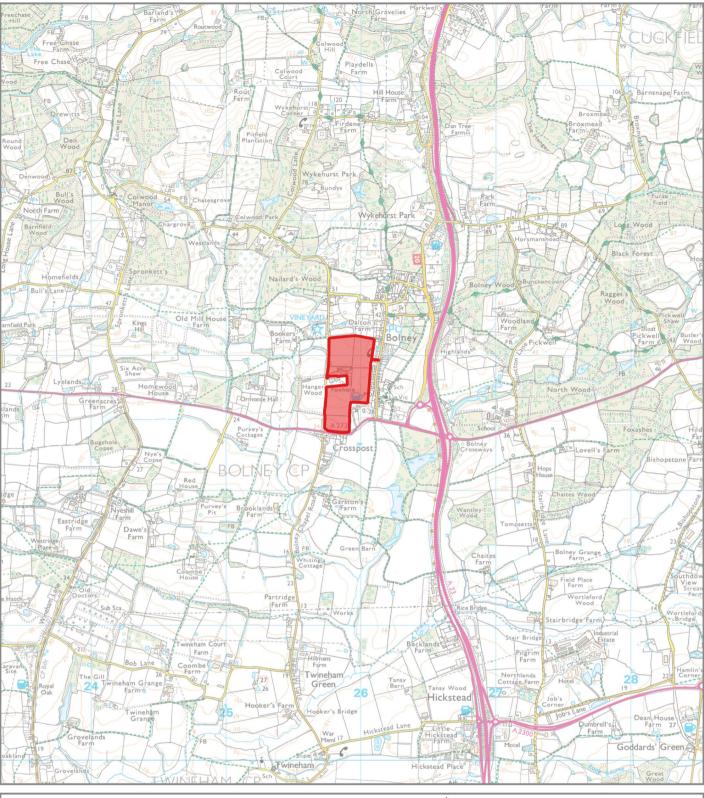
4.7. A preliminary assessment of biodiversity net gain has been undertaken based on the habitats recorded at the site, the illustrative masterplan and current Biodiversity Metric guidance. Based on approximately half of the open space areas comprising wildlife habitats such as wildflower grassland or scrub planting, this indicates that a net gain in the region of 30% can be achieved under the proposals, subject to a full biodiversity net gain assessment which would be provided to accompany a future planning application.

#### 5. Deliverability of the Proposed Development

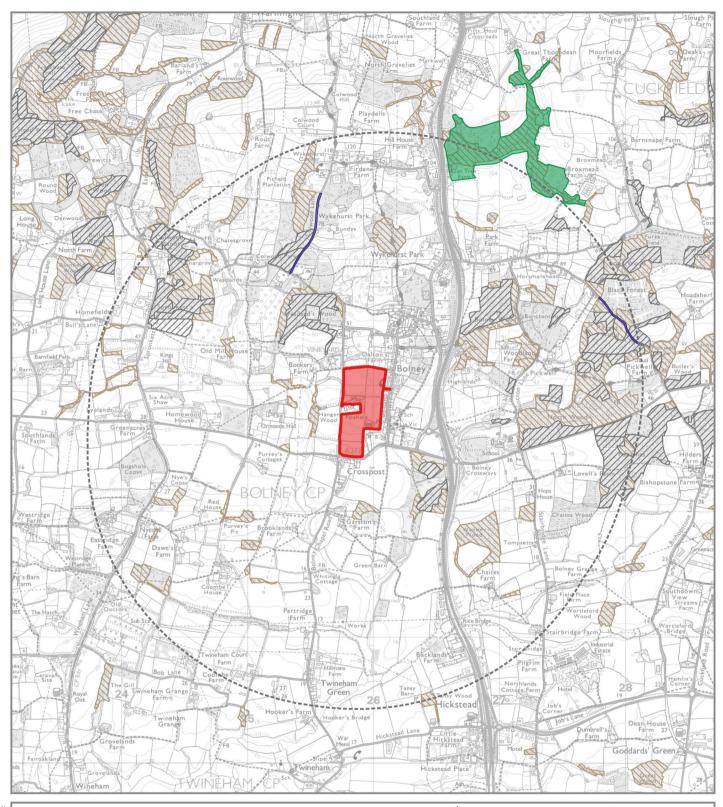
- 5.1. The site itself is not subject to any ecological designations, with the nearest statutory designations being well separated from the site and not considered to form a constraint to future development.
- 5.2. Habitats within the site are largely of low ecological value, whilst features of ecological importance including woodland edge and hedgerows can readily be retained under the proposals, aside from some minor hedgerow losses for road accesses. There are substantial opportunities for new habitat creation and enhancement of existing habitats to achieve a biodiversity net gain.
- 5.3. The site offers potential for faunal species, and further surveys are underway to determine presence/absence of protected and notable species including bats, Dormouse, breeding birds, Great Crested Newt and reptiles. However, following implementation of a sensitively designed



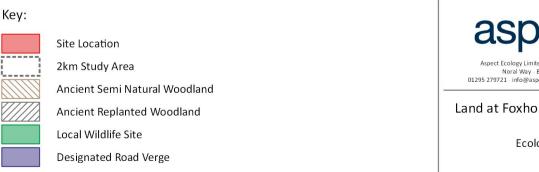
- masterplan, together with provision of appropriate avoidance and mitigation measures, it is considered that faunal species can be safeguarded and substantial enhancement opportunities are present within the open space under the proposed layout.
- 5.4. In summary, the site is not considered to be subject to any overriding ecological constraints, and the proposed development of the site is considered to be readily deliverable in ecological terms. Indeed, a preliminary assessment of biodiversity net gain indicates that a net gain in the region of 30% can be achieved under the proposals, subject to a full biodiversity net gain assessment which would be provided to accompany a future planning application.













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Land at Foxhole Farm, Bolney

**Ecological Designations** 

6481/ECO2

A/BG

June 2023

PROJECT

TITLE

REV

