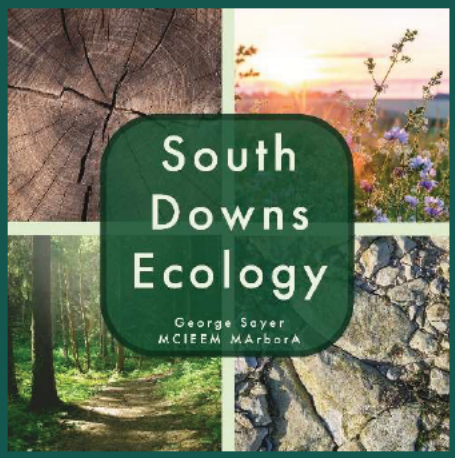
Ecological Impact Assessment

Land at Swains Farm, Henfield



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Version 2 – 2nd May 2025

Document Reference: GS319.SwainsFarm.EcIA.v2

Contents

Summary

The applicant has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Ecological Impact Assessment of proposals for new dwellings at Swains Farm, Henfield (*centred on TQ 22393 15700, hereafter referred to as 'the site'*). A Preliminary Ecological Appraisal, Baseline UKHabs Survey, and Preliminary Bat Roost Assessment of the site was carried out on the 24th April 2024. Further reptile surveys and trail camera monitoring were undertaken between May-June 2024.

The existing site consists of an existing agricultural barn surrounded by bare surfaces, vacant land, grassland, scrub and pond.

The proposals are for the construction of four new dwellings on the site.

The proposals are not anticipated to have any significant impact upon ecology; the habitats proposed for removal are of low-moderate distinctiveness and offer no significant potential for protected species. The proposals present some potential for impacts to birds, common amphibians, reptiles, commuting and foraging bats. These impacts can be avoided or mitigated through design and through protection measures during construction. The operation phase would result in minimal impacts, mainly relating to lightspill onto surrounding vegetation.

When mitigation and enhancements have been taken into account, the proposals are not considered to have a significant negative impact upon designated sites, habitats or protected species in accordance with planning policy. A separate Biodiversity Net Gain Assessment details how proposals will accord with The Environment Act 2021. The proposals would therefore accord with the relevant Horsham Local Plan Policies.

1.0 Introduction

1.1 The applicant has commissioned a Preliminary Ecological Appraisal, Preliminary Bat Roost Assessment and Ecological Impact Assessment of proposals for new dwellings at Swains Farm, Henfield (centred on TQ 22393 15700, hereafter referred to as 'the site'). A Preliminary Ecological Appraisal, Baseline UKHabs Survey, and Preliminary Bat Roost Assessment of the site was carried out on the 24th April 2024. Further reptile surveys and trail camera monitoring were undertaken between May-June 2024.

1.2 The following ecological impact assessment report has been completed in June 2024 and updated in May 2025, by George Sayer (*BSc (Hons)* Environmental *Sciences, PgDip Endangered Species Recovery, MArborA, MCIEEM, NE Licence Holder – Bats Level 2 and GCN - Ecologist*). This appraisal consisted of a site visit to identify existing habitats on site; the habitats have been categorised broadly following the UK Habitats Classification Guidance V2.01 (*UKHab Ltd 2023)*. In addition, an assessment of habitats and structures on the site was made to determine their potential for protected species. Following this an on-site and desktop assessment was undertaken, of the likelihood of National or European Protected Species being present on or near site, and the constraints these may pose on the development proposals.

1.3 Based on the results of the appraisal, recommendations for potential ecological enhancements have been provided.

Site Description and Surrounding Area

1.4 The existing site consists of an existing agricultural barn, surrounded by bare ground, sparse vacant land, a pond and a bank of bramble scrub. The site is bounded by arable land to the west, arable land and other agricultural land, including barn, track and grassland to the north, a track with woodland beyond to the south, and a track with residential dwellings beyond to the east.

1.5 The site lies in a rural area south-east of Henfield, which is relatively open and surrounded by farmland and patches of woodland. An area of woodland is present immediately south of site.

Proposals

1.6 The proposals are for construction of a residential development of 4no. dwellings on the site. The barn would be removed, and the pond would be retained and enhanced.

2.0 Scope of Appraisal

1. *Identify the habitats and vegetation on site and display this in a habitat plan;*
2. *Identify habitat which may have potential for protected species;*
3. *Identify whether any signs of protected species are present on-site;*
4. *Recommend whether further surveys are required, or whether there are any relevant constraints with regards to protected species;*
5. *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
6. *Provide suggestions as to how the site and proposals could be enhanced with regards to protected species and habitats.*

2.1 This appraisal and assessment is deemed to be relevant for a maximum of 18 months due to the possibility of changes in the habitats on-site. Should the site or proposals alter, the ecologist should be consulted to confirm that the appraisal is still valid.

3.0 Planning Policy and Legislation

National Planning Policy

3.1 The National Planning Policy Framework (NPPF) 2024 sets out the government planning policies for England and how they should be applied. 'Chapter 15: Conserving and Enhancing the Natural Environment' states that development should be 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.'

3.2 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

3.3 The Horsham District Local Plan (2020) Regulation 19 Local Plan is shortly to be submitted to the Secretary of State for approval. The Horsham District Planning Framework (2015) contains Policy 31 - Green Infrastructure and Biodiversity, which details the following:

3.4 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.

3.5 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.

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

3.7 Particular consideration will be given to the hierarchy of sites and habitats in the district as follows: i. Special Protection Area (SPA) and Special Areas of Conservation (SAC) ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) 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.

3.8 Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that: i. The reason for the development clearly outweighs the need to protect the value of the site; and, ii. That appropriate mitigation and compensation measures are provided.

3.9 Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to HRA to determine need for Appropriate Assessment. In addition, development will be required to be in accordance with necessary mitigation measures for development set out in HRA of this plan.

Legislation

3.10 Legislation relating to wildlife and biodiversity of particular relevance to this EcIA 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;
- The Hedgerow Regulations 1997;
- The Protection of Badgers Act 1992;
- The Protection of Mammals Act 1996;
- The Environment Act 2021.

3.11 All species of bat and their roosts are protected under The Conservation of Habitats and Species Regulations 2017 and The Wildlife and Countryside Act 1981. It is an offence to intentionally kill, injure or handle a bat, to possess a bat (live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

3.12 All UK bird species are protected against disturbance whilst occupying a nest under the Wildlife and Countryside Act 1981. Developments that could predictably disturb, kill or injure nesting birds could result in an offence. Furthermore, a number of bird species are targets of UK and Local Biodiversity Action Plans and listed as Species of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. This obligates local authorities to have regard to the purpose of conserving biodiversity with particular emphasis on targeted species.

3.13 All widespread reptiles are protected against killing and injury under the Wildlife and Countryside Act 1981, with rarer reptiles receiving further protection under EU regulation. Reptiles must also be given consideration under the NERC Act 2006 as part of the planning process.

3.14 Great crested newts (GCN) are protected under The Conservation of Habitats and Species Regulations 2017. It is an offence for anyone to intentionally kill, injure or disturb a GCN or to damage, destroy or block access to areas of suitable habitat.

3.15 Badgers are protected under the Protection of Badgers Act 1992. It is an offence to harm badgers or disturb badgers and their setts.

3.16 Water voles are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species. It is an offence to intentionally capture, kill or injure water voles, damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care), disturb them in a place of shelter or protection (on purpose or by not taking enough care), possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

3.17 In the UK, dormice are legally protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and have significant further protection as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Dormice are also a 'Species of Principal Importance for the conservation of biodiversity' listed under section 41 of the Natural Environment and Rural Communities Act 2006 (NERC). It is an offence for anyone to intentionally kill, injure or disturb a dormouse or to damage, destroy or block access to areas of suitable habitat.

3.18 All other mammals receive general protection against cruelty, inhumane killing or injuring under the Protection of Mammals Act 1996.

3.19 In England, Biodiversity Net Gain (BNG) is mandatory from 12 February 2024 under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of 10%. This site is subject to Mandatory BNG.

4.0 Methodology

Desktop Study

4.1 A desktop study was conducted using the government 'MAGIC' Map GIS tool; a search was carried out for all international statutory designated sites (Ramsar, SAC, SPA) within 12.0 km of the site; national statutory designated sites (SSSI, NNR, LNR) within 2.0 km of the site; and non-statutory designated sites (SNCI / LWS) and priority habitats within 1.0 km of the site. These have been summarized below and their significance considered in the context of the development proposals. A search was also carried out to identify features of ecological interest in the area, such as water bodies and ancient woodland.

4.2 Given the overall scale and nature of the site and the proposals, a full data search from Sussex Biodiversity Information Centre was obtained on 21st March 2024 with a 2.0 km buffer round the site. This is in accordance with CIEEM current guidance for such projects (CIEEM, 2020).

Site Visit

4.3 A site visit was conducted on 24th April 2024, during suitable weather (16 degrees, wind force 2; 6/8 cloud, dry). Habitats were recorded according to the UK-Habs Classification System as described within the UK Habitats Manual, Version 2.01 (UKHab Ltd. 2023). All habitats present on-site were recorded on a UKHab map (Figure No. 01 – Site Habitat Plan).

4.4 During the survey any constraints with regard to protected species were considered; the site was considered for their potential for protected species even when signs of these species were not noted at the time of survey.

4.5 Points of interest for protected species have been plotted into the Site Habitat Plan and within target notes. Protected and Notable Species considered as part of this assessment include but are not limited to:

- Bats – Foraging, Commuting, Roosting, Swarming and Hibernating
- [redacted]
- Dormice – Nesting and Commuting
- Great Crested Newts and other Amphibians such as Common Toads – Terrestrial Active and Hibernation Habitat and Aquatic Habitat, Including Commuting
- Reptiles – Terrestrial Active and Hibernation Habitat
- Rare or Notable Invertebrates
- Rare or Notable Plants
- Water Voles – Foraging and Shelter Habitats
- Otters – Foraging and Shelter Habitats
- White-clawed Crayfish

4.6 Trees were inspected for features conducive to bat and bird roosting, including knot holes, limb failures, cavities and heavy ivy cover; any identified bird nests have been recorded.

4.7 The buildings were assessed externally by an experienced, licenced bat surveyor (George Sayer 2018-34434-CLS) for their potential to hold roosting bats; obvious access points or roost features were identified where relevant. Any evidence of bats such as grease marks, bat droppings, urine splashes were noted. The bat roost assessment was conducted following the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023).

[redacted]

4.9 Due to the site visit being carried out over one day, it is possible that some signs of protected species may not be apparent within this short timeframe. This is a constraint recognised within best practice guidelines and all reasonable effort has been made to identify evidence of protected species.

Reptile Survey

4.10 Surveys were conducted in broad accordance with guidance provided by Froglife (1999). 16 no. artificial reptile refugia (roofing felt; 0.50 x 1.0 m2) were laid out around the site on 25th May 2024 and allowed to settle for 12 days prior to commencement of the survey.

4.11 7no. site visits were conducted, where the number, species, age and sex of the reptiles' present were recorded.

4.12 Surveys were undertaken where possible during recommended times (08:00-11:00 and 16:00-18:30) with suitable weather conditions for surveying reptiles (guidelines recommend temperatures 9-18oC with intermittent or hazy sunshine during warm days). Weather conditions recorded at each survey visit are shown below.

Survey No.	Date	Time	Weather
1	27/05/2024	08:30	14 degrees, Wf1, Sunny Spells
2	31/05/2024	08:30	13 degrees, Wf1, Sunny Spells
3	06/06/2024	09:00	15 degrees, Wf1, Light cloud
4	09/06/2024	10:00	14 degrees, Wf0, sunny
5	17/06/2024	09:00	14 degrees, Wf1, Clear
6	19/06/2024	08:30	16 degrees, Wf0, Light cloud
7	12/06/2024	09:00	18 degrees, WF1, Clear

[redacted]

Ecological Impact Assessment

4.15 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.

4.16 Each ecological feature within the site has been considered within a defined Geographic context such as:

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

4.17 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.

4.18 Specifically in the case of bats, the impact assessment has been conducted in accordance with the recently published Bat Mitigation Guidelines (Reason and Wray 2023).

5.0 Baseline Ecological Conditions and Protected Species Assessment

5.1 There are no national statutory designated sites within 2.0 km nor international sites within 12.0 km of the site.

5.2 The following non-statutory designated sites are present within 1.0 km of the proposal site.

Table 2: Non-statutory Protected Designated Sites

Site Name	***Reason for designation***	***Distance from site***
Henfield Common SNCI/LWS	*The northern part of the common is registered and supports some rare and fragile wildlife, grassland and wetland habitats and a host of native wildflowers.*	*500.0 m W*
Broadmere Common SNCI/LWS	*Poor fen and scrub with ponds and semi natural woodland which is managed for nature conservation*	*850.0 m SW*
Oreham Common SNCI/LWS	*The common supports some rare and fragile wildlife, grassland and wetland habitats and a host of native wildflowers. Part of same LWS as Henfield Common hence inclusion beyond the 1.0 km buffer.*	*1.66 km S*

Habitats

Desk Study

5.3 Within 1.0km of the site there are Priority Habitats of Ponds, Ancient Woodland, Deciduous Woodland and Traditional Orchard. The land abutting the site to south is deciduous woodland.

Site Assessment

5.4 The site is given over to the habitats discussed further below.

U1b 804 808 - Developed Land; Sealed Surface (Car Park and Track)

5.5 The access drive, parts of the parking area north of the barn are formed of solid surfaces, mostly worn tarmac and concrete. The habitat is of **negligible ecological value.**

U1b5 833 – Buildings (Barn)

5.6 The site is dominated by a modern open-fronted agricultural barn. The habitat is of **negligible ecological value.**

G3c 127 – Other Neutral Grassland (Sward Type Mosaic)

5.7 Small patches of grassland are present on the site, of varying sward height. Smaller patches surrounding tracks generally consists of red fescue *Festuca rubra,* Yorkshire fog *Holcus lanatus,* soft brome *Bromus hordaceous* and rarely perennial ryegrass *Lolium perenne* with forbs such as ribwort plantain *Plantago lanceolata* and germander speedwell *Veronica chamaedrys.* These areas displayed reasonably diversity with 8-11 species/m². Taller sections to the west contain dense Yorkshire fog *Holcus lanatus ,* false oat *Arrhenatherum elatius* and forbs such as creeping thistle *Cirsium arvense* and bristly oxtongue *Helminthotheca echioides.* Diversity here was much lower at 4-6 species/m². Given the small scales of habitats, the two grasslands have been combined. An average species richness returned from 10no. square metre quadrats of 8.4 species/m² was recorded and the lack of perennial rye dominance suggests this is a neutral rather than modified grassland, albeit not a good example. The habitat is of **site ecological value**.

H3d - Bramble Scrub

5.8 The south-west, east and north of site are covered in dense bramble scrub. Common ruderals such as teasels *Dipsacus fullonum* emerged from the dense scrub. The scrub is of **site ecological value.**

H3h 82 - Mixed Scrub (Abandoned Land)

5.9 Scattered throughout the site are areas of land whereon patches of shrubs including elder *Sambucus nigra,* hawthorn *Crataegus monogyna,* elm *Ulmus minor,* hazel *Corlyus avellana* and aspen *Populus tremula* have established. The scrub is limited in age, regrowth stages, structure and diversity and is of **site ecological value.**

U1f 16 81 – Sparsely Vegetated Land (Tall Forbs, Ruderal)

5.10 There is a large continuous stand of nettle *Urtica dioica* to the west of site. To the south of site is an area of disturbed ground colonised by sparse nettles, cleavers *Galium aperine,* harts-tongue fern *Asplenium scolpendrium,* forget-me-not *Myosotis arvensis* and other common ruderal species. The habitat is of low diversity and a single structural type at most of **site value.**

R1g 41 – Pond (Non-priority)

5.11 There is a small pond to the south-east corner of site. The pond is on the fringe of the adjacent woodland and is heavily shaded, appears relatively full of leaf litter, and displays both algae and surface scum. No aquatic macrophytes are present. By June 21st the pond was effectively dry. The habitat is not considered a priority habitat and is at most of **site value.**

6.0 Protected Species Assessment

Bats

Desk Study

6.1 2no. EPSML licences are recorded within 2.0 km of site, for soprano pipistrelle, common pipistrelle, and brown long-eared bats. One of these (2017-29484-EPS-MIT) appears to be sited at Swain's Farm and likely relates to works to the main dwelling under DC/16/2282.

6.2 Other bats recorded within 2.0 km include Serotine, Bechstein's, Daubenton's, Whiskered, Brandt's, Natterer's, Noctule bats. Sussex is known to support 15 species of bats.

Site Assessment

6.3 The barn consists of a large, modern barn. The lower portion is formed of concrete breeze blocks upon which stands a steel frame. The frame and roof are covered in corrugated panels. The front aspects of the barn are either open or covered in polycarbonate panels, allowing lots of light in. The building was inspected internally and externally and found to be devoid of any suitable roost features or evidence of bats. The structure offers **negligible bat roost potential.**

6.4 There is a collapsed willow in the pond to south, but this displays no significant cracks likely to support bats. The surrounding woodland-edge trees display dense ivy which might obscure features, but being semi-mature the features would only be PRF-Is.

6.5 The site itself is largely open and therefore unlikely to form a significant commuting route, but the bramble, scrub and grassland are likely to be used for foraging by light-tolerant bats and are of **site value**. The boundary woodland edges offer high potential for foraging and commuting bats, , and as such are of at least **local value**.

Birds

Desk Study

6.6 Numerous bird species are present in the local area, including a number of woodland and farmland species.

Site Assessment

6.7 The woodland edge trees and the areas of scrub are highly suitable for foraging and nesting birds. House sparrows were noted perching on the scrub. Given the scrub is on the edge of farmland it is also likely suitable for foraging and possibly nesting by farmland bird species such as yellowhammer.

6.8 A large nest suggestive of a pigeon was noted in the barn. A grey wagtail was also noted flying around the barn.

Reptiles

Desk Study

6.9 The wider surroundings support reptiles including adder *Vipera berus,* common lizard *Zootoca vivipara,* slow worm *Anguis fragilis* and grass snake *Natrix Helvetica.*

Site Assessment

6.10 The bare ground and developed habitats are too well-maintained to support populations of common reptiles. The bramble scrub, tall forbs and grassland were considered suitable for reptiles.

6.11 The reptile survey revealed a 'low' population of both slow worm and common lizard, with peak counts of 3no. slow worms and 1no. common lizard. Findings declined as temperatures increased and the survey was undertaken slightly later than the optimal season, but still during a suitable period of time and during appropriate weather. The overall population is unlikely to be significantly higher during cooler periods. Overall the habitats offer **site value** for reptiles.

Reptile Survey Results

Survey No.	Date	Results
1	27/05/2024	3 slow worms
2	31/05/2024	2 slow worms, 1 common lizard spotted in scrub
3	06/06/2024	3 slow worms
4	09/06/2024	2 slow worms
5	17/06/2024	2 slow worms
6	19/06/2024	1 slow worm
7	12/06/2024	No reptiles

Amphibians

Desk Study

6.12 There are 2no. EPSML for great crested newt *Triturus cristatus* (GCN) within 2.0 km; one 2.0 km west and another 1.6 km south-west. There are no closer licence returns than these. SxBRC hold 14 records within 2.0 km. Common toad, common frog, smooth and palmate newt are recorded locally including a notable maximum abundance of 800 common frogs.

Site Assessment

6.13 The bare ground and developed habitats are too well-maintained to support populations of amphibians. The bramble scrub, tall forbs and grassland were considered suitable for amphibians. The pond and others nearby have previously been subject to HSI assessment by Sylvatica Ecology in November 2023 (refer to appendix 2), which this assessment concurs with; the assessment found the on-site pond to offer 'poor' suitability and the proposals as a whole to be highly unlikely to result in any offence. The low suitability of the on-site pond, distance to other ponds and lack of GCN records locally suggests these are unlikely to be present on-site or nearby. Overall the habitats would offer **site value** for common amphibians.

[redacted]

Dormice

Desk Study

6.16 Dormice are not well-recorded locally with no records within 2.0 km; this may be due to under-recording.

Site Assessment

6.17 There is a dense patch of bramble scrub and small patches of mixed scrub on site. Whilst offering some suitability for dormice, the habitats are not connected to other habitats to the north. The habitats are partially connected to the woodland edge to south. The site is likely of **negligible value to dormice** although they cannot be categorically ruled out**.**

Other

6.18 No potential for or evidence of any other protected species was recorded. Water voles and otters are poorly recorded locally. There is a ditch leading off from the pond but this is unsuitable for both species. The site offers limited potential for hedgehogs with grassland and scrub offering the habitats they require. The habitats would harbour mainly common invertebrates. During surveys a European mole *Talpa europaea* was recorded under a reptile felt.

7.0 Evaluation of Impacts and Mitigation

Designated Sites

Potential Impacts

7.1 Given the lack of local sites, and the nature of the proposals, any impacts upon designated sites would be of minor magnitude and highly unlikely to occur.

Mitigation and Compensation

7.2 None required.

Residual Impacts

7.3 The impacts will be negligible.

Habitats

Potential Impacts

7.4 The proposals would remove existing developed land and areas of poor neutral grassland, bramble scrub, mixed scrub and tall forbs. In the absence of mitigation, the proposals would include dust, noise and light pollution of adjacent woodland, trees and pond. Given the proposals' nature and scale, impacts are of **moderate magnitude** but at no more than **site-local level.**

Mitigation and Compensation

7.5 All construction will be undertaken in accordance with best practice advice with regards to control of dust, noise and emissions. Dust and runoff suppression must be employed where risk of impacts upon the woodland and pond exist. Any chemicals or fuel shall be stored appropriately and on existing surfaces. All storage will be undertaken outside tree and hedge RPAs and at least 5.0 m from the woodland and pond edges. All liquids and fuels must be stored in bunded containers whereby they cannot leak into the pond. There is ample bare ground on the site which can be used for construction storage, compound and other such uses.

7.6 A Biodiversity Net Gain Assessment accompanies this application detailing how the proposals would mitigate for lost habitats and achieve a 10% gain. Above and beyond this, enhancements are recommended in section 8.0 to result in gains for wildlife on-site.

Residual Impacts

7.7 Once mitigation is taken into account, the impacts will be negligible and non-significant.

Bats

Potential Impacts

7.8 The proposals are highly unlikely to disturb any bat roost. Small day roosts are present in houses to the east, but the bats present would be undisturbed. The loss of scrub and grassland on-site would reduce its foraging and commuting potential. Construction noise, dust, lighting and vibration may temporarily make the site slightly less suitable for foraging bats, and bats commuting along the woodland edge. Given the overall size and nature of the site, the potential impacts to foraging and commuting bats is low during works, but given the woodland extends further west and south, the impact would occur at the local level. Inappropriate lighting design might result in lightspill onto the pond and woodland during the occupation phase, reducing their suitability for bats.

Mitigation and Compensation

7.9 Any works shall be undertaken with due consideration and measures to minimise dust and noise. No works shall take place externally between 30 minutes before sunset until 30 minutes after sunrise. No external works lighting shall be used other than for security purposes; such lighting must be angled at least 30 degrees below horizontal and pointing east and north, away from vegetation.

7.10 In the first instance, external lighting shall not be installed onto dwellings unless strictly necessary. Any new lighting if necessary, shall accord with the principles of the BCT/ILP Guidance Note 08/23. Lighting of footpaths should consist of downlighters on bollards to prevent lightspill across the site. Should larger lighting be required e.g. floodlighting, a lighting design shall be produced confirming no significant lighting onto boundaries (0.2 lux horizontal/0.4 lux vertical).

7.11 The southern boundaries of the southern plots shall be planted with shrubs and trees to limit the lightspill from windows (with such features retained in communal land outside of private ownership) and the western boundary shall be planted with native hedge with trees to ensure a commuting route remains along this boundary.

Residual Impacts

7.12 The overall impact of the scheme will be negligible.

Nesting Birds

Potential Impacts

7.13 There is significant potential to disturb nesting birds in the scrub and any birds nesting in the barn. Such impacts would be major but unlikely to extend beyond the site level.

Mitigation and Compensation

7.14 Scrub must be cleared slowly in phases, outside of nesting season (March-August inclusive) and in any case, following a thorough check for any nesting birds. Nests in the barn must be removed prior to demolition.

7.15 New nest boxes and hedge planting will help to compensate for loss of scrub.

Residual Impacts

7.16 The overall impact of the scheme will be an overall minor loss of nesting potential; however this is unlikely to extend beyond the site level.

Reptiles

Potential Impacts

7.17 There is potential to disturb or harm reptiles when clearing the bramble scrub, grassland and tall forbs. The majority of the suitable habitat would be lost. The low populations of slow worm and common lizard might be entirely lost and individual reptiles killed or injured.

Mitigation and Compensation

7.18 The scrub shall be cleared manually using brushcutters, working slowly from north to south. The first cut shall take all brambles to no lower than 150mm height; the habitat must then be left for 24 hours to allow reptiles to vacate, before a final cut to ground level. Any reptiles present will be dispersed into the areas surrounding the pond. Whilst the areas are smaller than existing scrub, tall forbs and grassland, given much of the scrub is very dense and that only a low population of each species was found, it is considered possible to retain reptiles here provided appropriate enhancement of the area is undertaken first. This would involve planting of lower more diverse scrub with grassy margins suitable for reptiles, with log piles and a hibernaculum. Such areas must be secured outside of private gardens to ensure the habitats can be retained and managed appropriately.

Residual Impacts

7.19 The proposals will likely result in a minor overall loss of reptile potential at the site. Off-site enhancements for the purposes of achieving BNG would however result in an overall gain for reptiles, with new grassland and scrub being created off-site.

Amphibians

Potential Impacts

7.20 Common amphibians might be injured through inappropriate storage and excavations.

Mitigation and Compensation

7.21 Works to the building shall be aware of the possibility of amphibians, providing ramps or covers to any excavations or pipework, and keeping materials storage away from the site boundaries. The reptile mitigation would otherwise protect amphibians.

Residual Impacts

7.22 The overall impact of the scheme will be negligible.

Dormice

Potential Impacts

7.23 No significant impact provided hedges and woodland edges are retained. A very low risk of disturbance of dormice in the bramble scrub exists.

Mitigation and Compensation

7.24 The proposals retain and protect all woodland edges. Given the low risk involved, further survey is not considered necessary. The mitigation measures proposed for nesting birds, [redacted] reptiles would protect dormice. All stumps and roots must be cleared outside of hibernation season (November-March inclusive) as dormice might hibernate within.

Residual Impacts

7.25 The overall impact of the scheme will be negligible.

[redacted]

7.29 [redacted]

Hedgehogs

Potential Impacts

7.31 Individual hedgehogs and other small mammals may use the site and be injured during works.

Mitigation and Compensation

7.32 Works to the building shall be aware of the possibility of small mammals, providing ramps or covers to any excavations or pipework, to accord with the Protection of Mammals Act 1996. Any piles of timber, blocks etc. shall be checked before removal to ensure no hedgehogs are sheltering within.

Residual Impacts

7.33 The overall impact of the scheme will be negligible.

Invertebrates

Potential Impacts

7.34 No direct impacts beyond those to habitats. Common invertebrates would be lost to development through habitat loss.

Mitigation and Compensation

7.35 Habitat compensation measures shall protect invertebrates in the longer term.

Residual Impacts

7.36 The overall impact of the scheme will be negligible. Enhancement of the pond would lead to an increase in invertebrate diversity within.

8.0 Ecological Enhancements

8.1 The proposals will be expected to demonstrate an overall positive impact on the natural environment as set out in Horsham Local Policy. A detailed Biodiversity Net Gain Assessment accompanies this application which details how a 10% gain will be achieved. Much of this relies on off-site enhancements and as such the following on-site enhancements are proposed to accord with local policy and ensure no overall loss of biodiversity at the proposal site.

8.2 The following ecological enhancements have been proposed as suited to the location and the proposals and would result in Enhancements for Biodiversity, in accordance with Local and National Policy.

- Addition of woodcrete bird boxes to the trees and open nestboxes in the scrub; boxes for wrens, wagtails and thrushes should be included;
- Addition of an integrated bat box to each dwelling;
- Addition of a swift brick and a general integrated bird box to each dwelling;
- Addition of a bee brick or similar integrated insect house to each dwelling;
- Existing scrub shall be enhanced through addition of suitable species including dogwood, alder buckthorn, guelder rose, osier willow, wych elm, bird cherry, blackthorn. The scrub shall be scalloped and reduced in height to encourage a greater density and to allow wildflowers to establish beneath (N.B. The scrub must be in communal not private ownership such that management can be secured);
- Addition of a hedgehog house or similar log shelter to each dwelling's garden, with holes in fences to allow hedgehogs access between;
- Planting of new native trees suited to the location within gardens and frontages;
- Enhancement of the pond, through removal of shading trees and pruning of scrub, de-silting, planting and seeding of native macrophytes (N.B. The pond must be in communal not private ownership such that management can be secured);
- Addition of native hedges to all boundaries – single-species between houses and mixed native to the outer boundaries;
- Addition of at least 3no. log piles, and a hibernaculum to the corners of the site for insects, reptiles, and hedgehogs;
- Seeding of bases of hedges and scrub with hedgerow wildflower seed to increase density and diversity.

8.3 proposed for planting should be suited to this location and soil type. Examples of species which would be suited include varieties of willow (which benefit moths and provide early nectar), crab apple, wild cherry, guelder rose and wild service (which flower and fruit heavily), alder and birch (suited to wet sites with seeds eaten by winter birds) oaks and field maples (generally suited to the location and of broad ecological value).

9.0 Conclusions

9.1 Overall, the proposals are considered to represent a 'low' impact upon ecology. The proposal area consists of habitats of negligible, low and moderate distinctiveness, classified of negligible and site ecological value. The pond is considered the highest value feature and shall be retained and enhanced. Small areas of grassland of moderate distinctiveness and bramble scrub shall be lost; the loss of these habitats require off-site compensation to achieve a 10% Biodiversity Net Gain.

9.2 The proposals are not anticipated to have any significant impact upon ecology. The proposals present potential for impacts to birds, common amphibians, reptiles, [redacted] commuting, and foraging bats. These impacts can be avoided or mitigated through design and through protection measures during construction. The operation phase would result in minimal impacts, mainly relating to lightspill onto surrounding habitats.

9.3 No significant effects are anticipated upon any designated sites or priority habitats.

9.4 When mitigation and enhancements have been taken into account, the proposals are not considered to have a negative impact upon habitats or protected species in accordance with planning policy and once enhancements are considered, would result in a net gain.

9.5 The proposals include for new proportionate ecological enhancements. The proposals would therefore accord with the relevant Local Plan Policies.

10.0 Bibliography

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11.0 Species Lists

Neutral Grassland

Common Name	Scientific Name	DAFOR
Bristly Oxtongue	*Helminthotheca echioides*	O
Broadleaved Dock	*Rumex obtusifolius*	O
Cleavers	*Galium aperine*	O
Creeping Thistle	*Cirsium arvense*	LF
Dovesfoot Cranesbill	*Geranium molle*	O
False Oat	*Arrhenatherum elatius*	LA
Germander Speedwell	*Veronica chamaedrys*	O
Hawkbit	*Leontodon sp.*	R
Nettle	*Urtica dioia*	LD
Perennial Rye-grass	*Lolium perenne*	R
Ragwort	*Jacobaea vulgaris*	R
Red Fescue	*Festuca rubra*	F
Ribwort Plantain	*Plantago lanceolata*	A
Soft Brome	*Bromus hordaceous*	O
Spear Thistle	*Cirsium vulgare*	R
Spotted Medick	*Medicago arabica*	O
Vetch	*Vicia sp.*	R
White Dead-nettle	*Lamium album*	R
Yarrow	*Achillea millefolium*	F
Yorkshire Fog	*Holcus lanatus*	F

Vacant Land (Tall Forbs)

Common Name	Scientific Name	DAFOR
Broadleaved Dock	*Rumex obtusifolius*	F
Cleavers	*Galium aperine*	F
Common Hogweed	*Heracleum sphondylium*	R
Cow Parsley	*Anthriscus sylvestris*	O
Creeping Buttercup	*Ranunculus repens*	O
Creeping Thistle	*Cirsium arvense*	R
Ferns	*Deryopteris sp.*	R
Forget-me-not	*Myosotis arvensis*	LF
Harts-tongue Fern	*Asplenium scolopendrium*	LF
Ivy	*Hedera helix*	LD
Lesser Burdock	*Arctium minus*	R
Lesser Celandine	*Ficaria verna*	O
Lords and Ladies	*Arum maculatum*	R
Nettle	*Urtica dioia*	D
Teasel	*Dipsacus fullonum*	O
Water Avens	*Geum rivale*	R
White Dead-nettle	*Lamium album*	R

Trees and Scrub

Common Name	Scientific Name	DAFOR
Aspen	*Populus tremula*	LA
Bramble	*Rubus fruticosus agg.*	D
Crack Willow	*Salix fragilis*	LF
Elder	*Sambucus nigra*	LD
Elm	*Ulmus minor*	LA
Goat Willow	*Salix caprea*	LD
Hawthorn	*Crataegus monogyna*	O
Hazel	*Corylus avellana*	R

12.0 Appendix 1 – Site Photos

Photo 1 – View looking south-west to the barn.

Photo 2 – View looking south to the barn over the bramble scrub.

Photo 3 – Pond to the south of site.

Photo 4 – Vacant land with tall forbs to the south of the barn and west of the pond.

Photo 5 – Possible mammal excavations beneath the barn.

Photo 6 – South-eastern edge of site where vacant land and mixed scrub will be enhanced around the pond and larger shading scrub reduced.

Photo 7 – Dense neutral grassland and tall forbs (nettles) to the west of site.

Photo 8 – Shorter neutral grassland to the north of site.

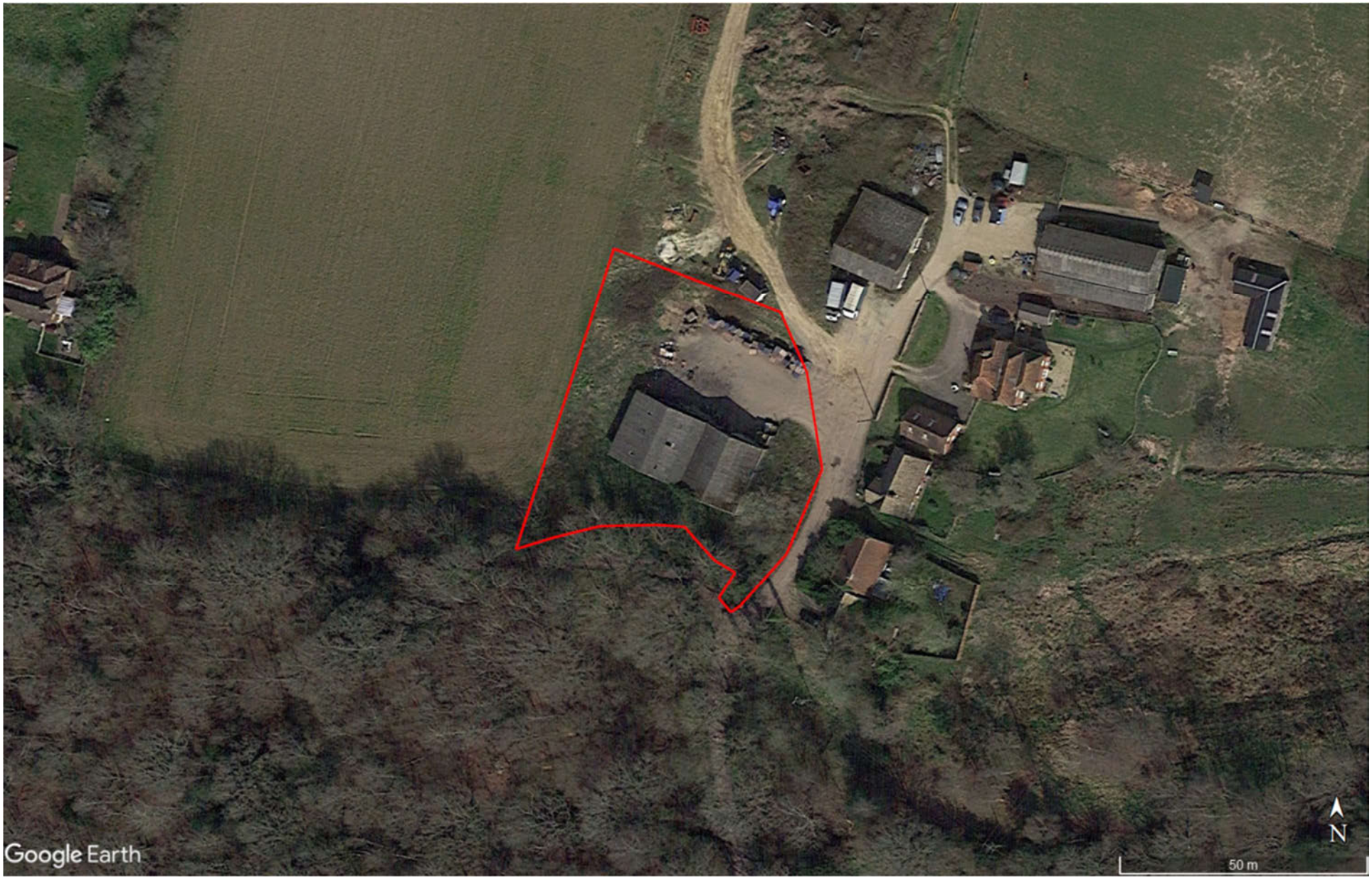
Photo 9 – Access drive into the site (N.B. barn in photo is not part of site).

Photo 10 – Parking area to north-west with bramble scrub beyond.

13.0 Site Habitat Plan

14.0 Phase 2 Survey Plan

15.0 Site Aerial



16.0 Appendix 2 – Sussex Biodiversity Records Centre Summary

Sussex Biodiversity Record Centre

Ecological Data Search SxBRC/24/246 - Summary Report

An ecological data search was carried out for land at Swains Farm, Henfield on behalf of George Sayer (South Downs Ecology) on 21/06/2024.

The following datasets were consulted for this report:

	Requested	Radius/buffer size
Designated sites, habitats & ownership maps	No	
Protected, designated and invasive species	Yes	2km

Summary of results

Sites and habitats

Statutory sites	Not requested
Non-statutory sites	Not requested
Section 41 habitats	Not requested
Ancient and/or ghyll woodland	Not requested

Protected and designated species

International designations	47 species	1,042 records
National designations	168 species	10,199 records
Other designations	389 species	18,555 records
Total	**412 species**	**19,577 records**
Invasive non-native	45 species	491 records

The report is compiled using data held by Sussex Biodiversity Record Centre (SxBRC) at the time of the request. SxBRC does not hold comprehensive species data for all areas. Even where data are held, a lack of records for a species in a defined geographical area does not necessarily mean that the species does not occur there – the area may simply not have been surveyed.

This summary page may be published.
The full report and maps may not be published or otherwise shared.

The data search report is valid until 21/06/2025 for the site named above.

17.0 Appendix 3 – GCN Report by Sylvatica Ecology

27th November 2023

To Ben Kirk

Manorwood Ltd

Suite 114

26 The Hornet

Chichester

West Sussex, PO19 7BB

SWAINES FARM, BRIGHTON ROAD, HENFIELD, WEST SUSSEX, BN5 9RP

NGR: TQ 22390 15695

GREAT CRESTED NEWT (*TRITURUS CRISTATUS*) HABITAT SUITABILITY INDEX (HSI) SURVEY AND SITE RISK ASSESSMENT

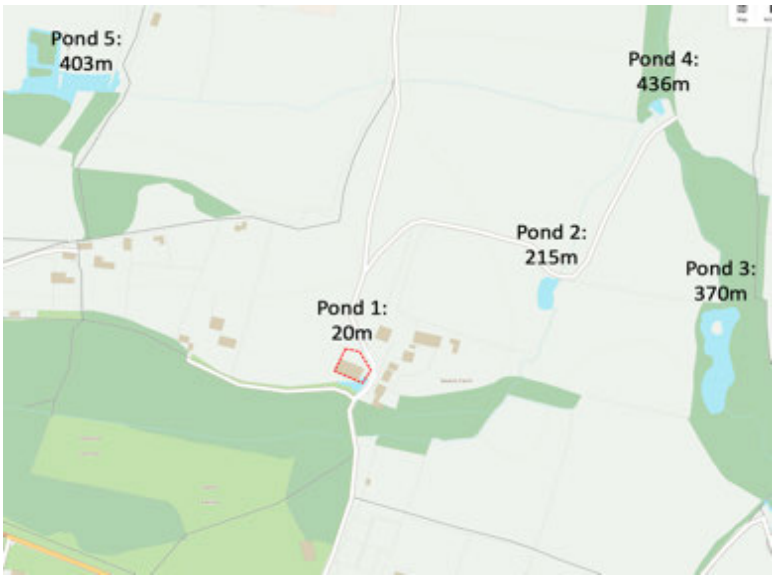
1.0 SITE SURVEY AIMS

1.1 This document presents the findings of a habitat suitability index survey (Oldham *et al.* 2000) and great crested newt risk (GCN) assessment carried out for the proposed development at Swaines Farm, Brighton Road, Henfield, West Sussex, BN5 9RP, NGR: TQ 22390 15695. henceforth referred to as the Site. The size of the site was approximately 0.127ha. It is proposed that the agricultural building be demolished and replaced with a new residential building. Landscaping works will take place, which would include native species hedge and scrub planting and restoration works to the pond which will include the removal of the encroaching bankside vegetation around the pond adjacent to the development area.

1.2 The Site was located within rural West Sussex, approximately 3km to the east of Henfield and 150m to the north of the A281 main road. Situated within the setting of a farm, there was a large block of woodland to the south of the proposed development, with open pasture agricultural land surrounding to the west, north and east. There were five ponds within 500m of the proposed development area, with access to four ponds granted and no access granted to Pond 5. Pond 1 was directly adjacent to the proposed development area. The primary habitats present within the development footprint were an agricultural storage barn and an area of hard-standing.

1.3 ***Figure 1: Development Area (Redline Boundary)***

1.4 ***Figure 2: Location of Ponds within 500m of the Proposed Development Site.***



1.5 The survey work and reporting has been carried out by Richard Law BSc MRes CEnv MCIEEM FLS. Richard has been undertaking ecological survey work within the last 18 years on a number of differing locations throughout the United Kingdom for a variety of protected species, including bats (Class 2 2015-12576-CLS-CLS), reptiles, amphibians including great crested newt (Class 1 2016-20290-CLS-CLS) and terrestrial mammals including dormice (Class 1 2015-13188-CLS-CLS) and birds including barn owl licence (CL29/00236). Richard is also qualified in track and sign and trailing *via* an international system of assessment (www.trackercertification.com).

2.0 HABITAT SUITABILITY INDEX

2.1 ***Table 1: Habitat Suitability Index of Ponds 1 to 4***

Component	***Pond 1***	***Pond 2***	***Pond 3***	***Pond 4***
Scale, 500mm on ground = mm on map	100	100	100	100
Number of Waterfowl	0	0	0	0
Shape	Ellipse	Ellipse	Ellipse	Ellipse
Long Axis Length (m)	4	40	110	5
Short Axis Length (m)	7	25	20	4
Calculated Area (m^2)	22	785	2159	15
% Shaded Area	100	10	50	100
% Macrophyte Cover	0	25	25	0
Fish	nil	major	major	nil
Water Quality	poor	mod	mod	mod
Ponds within 500m	5	5	5	5
Years Dry per Decade	10	0	0	0
Barriers to Newt Migration	mod	mod	mod	mod
Geographic Zone	A	A	A	A
Area of Good Habitat on Map (mm2)	400	400	400	400
Length of Good Hedges on Map (mm)	200	200	200	200
Habitat Suitability Index (HS) for Site	0.38	0.54	0.52	0.49
HSI Category	Poor	Below Average	Below Average	Poor

2.2 Ponds 1 & 4 both had a ***Poor*** category for habitat suitability index score for great crested newts. Ponds 2 & 3 both had a ***Below Average*** habitat suitability index score for great crested newts. Pond 1 was the pond adjacent to the proposed development.

3.0 GREAT CRESTED NEWT RISK ASSESSMENT

3.1 The application site is within 25m from the nearest pond and the habitats present within the site can be considered as sub-optimal for great crested newt. This pond had been assessed for their potential to support a breeding population of GCN and it is considered that these are not suitable to support such. The next nearest pond was within 215m. The total size of the application site was 0.127ha with the area of impact less than this overall amount. With the assumption that this pond (Pond 2) could potentially represent a breeding pond for great crested newt, the risk calculator gives an overall score of 0.1, which indicates that an offence is highly unlikely regarding great crested newt, with the potential risk of great crested newt impact being ***negligible***. However, as a precaution, a non-licenced method of works has been compiled.

3.2 ***Table 2: Great Crested Newt Impact Risk Calculator (from Natural England)***

Component	***Likely effect***	***Notional offence probability score***
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	0.1- 0.5ha lost or damaged	0.1
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
Maximum:		0.1
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Non-Licenced Method of Works for Great Crested Newt

3.3 A precautionary non-licenced method of works has been drafted to account for great crested newt presence within the wider landscape. It has been considered that there is a ***negligible*** risk of this species being present on site, but a precautionary method of works will be adhered to. This is presented below.

- *The schedule of works is yet to be finalised, but any vegetation and soil removal should be undertaken outside of the terrestrial phase of the life cycle of great crested newt. This period is normally considered to be between March and April, with this species within aquatic habitats for their breeding season.*
- *Vegetation removal would be carried out by hand and these clearance works would be supervised by a licenced ecological consultant. This licenced ecologist would only be required onsite during this vegetation removal but would brief all site workers on amphibian*

identification and what to do if one is found and where to relocate it to, with the worker given advice on how to proceed with care and where to relocate any amphibian if required. If great crested newt are found, then the works would cease and consultation sought with the licenced ecological consultant.

- *Hibernaculum habitat would be created prior to the start of the construction phase, with this being situated outside of the works impact zone. This would consist of a mixture of soil over stone and untreated wood, normally cut vegetation. Any amphibians found would be moved to this hibernacula.*
- *Any excavations should be covered at night to prevent any amphibians falling in and becoming trapped. This would also be applicable to terrestrial mammals and any transient reptiles.*
- *Ground works would be carried out for a short a period as possible and all works would be conducted during daylight hours only, so to above the time when great crested newt are most active.*
- *The storage of any debris, soil or cut vegetation on site would be avoided to prevent this becoming hibernacula for great crested newt.*

4.0 SUMMARY

4.1 Overall, the risk to GCN as a result of the proposed development at this location is ***negligible***. The measures outlined as part of the non-licenced method of works will prevent any potential harm to individual GCN that are found to be present onsite, however unlikely it is for this to occur.

Signed

Richard Law BSc (Hons) MRes CEnv MCIEEM FLS

Sylvatica Ecology Ltd

References

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APPENDIX A: PHOTOS OF PONDS AND DEVELOPMENT LOCATION

Plate 1: Pond 1	***Plate 2: Pond 2***
	
Plate 3: Pond 3	***Plate 4: Pond 4***
	
Plate 5: Development Footprint	***Plate 6: Adjacent Scrub Habitat***