



Ecological Impact Assessment

Tanners Farm, Lordings Road, Adversane, Billingshurst, RH14 9JE

February 2026

Client: H. Mitchell

Proposals: Restoration and conversion of a series of redundant agricultural barns.

Quality Assurance		
Report date:	Version:	Author:
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1. Executive Summary

Site Details
- Tanners Farm, Lordings Road, Adversane, Billingshurst, RH14 9JE - Central grid reference: TQ06782444
Scope of Works
Imprint Ecology was commissioned by H. Mitchell to undertake an Ecological Impact Assessment at Tanners Farm. The proposed scheme is for the restoration and conversion of a series of redundant agricultural barn outbuildings. The work is predominantly focused on the existing building footprints with access provided over gravel hardstanding and paving.
Key Ecological Constraints
Legal protection is afforded to particular habitats, species and designated sites. The legislation, and the habitats and species listed, vary between the different jurisdictions.
Baseline Ecological Conditions
- Seven bat roosts have been identified within the agricultural buildings at Tanners Farm. - The farmstead consists of buildings, hardstanding, large gravel areas, mown lawns, ornamental and native hedgerows, and two ponds. One pond (150m²) has "Average" suitability for GCN and the other is an ornamental fishpond which is unsuitable for GCN. - The site has low suitability for commuting and foraging [REDACTED] GCN, reptile, hedgehog, and nesting birds.
Key Impacts and Mitigation Measures
- Four bat roosts in Barn 1 will be retained during the development. These are: soprano pipistrelle, barbastelle, Natterer's and brown long-eared day roosts. - Three bat roosts across Barns 2 and 3 will be destroyed during the development. These are: soprano pipistrelle, brown long-eared and whiskered day roosts. Therefore, a European Protected Species Mitigation Licence (EPSML) is required to allow the works to proceed lawfully with regards to damaging and destroying bat roosts in Barns 2 and 3. Compensatory roosting opportunities will be provided, and only approved bat-safe or traditional roofing membranes will be used. Works will be timed to avoid bat hibernation season. - An unlicensed Precautionary Working Method Statement (PWMS) will be followed to prevent harm to GCNs and reptiles, which will also protect hedgehogs, [REDACTED] and other small animals like common toad. - Mitigation for nesting birds will be followed to avoid disturbing birds during nesting season or destroying bird nests while they are being built or used.
Compensation and Enhancement Recommendations
Enhancements for wildlife on site have been made in line with Policies 25 and 31 from the Horsham District Planning Framework as well as national planning policies.

2. Introduction

2.1 Background and Proposed Development

Imprint Ecology was commissioned by H Mitchell to undertake a Preliminary Ecological Appraisal and Ecological Impact Assessment (EclA) at Tanners Farm, Lordings Road, Adversane, Billingshurst, RH14 9JE, hereafter referred to as ‘the site’. It is located around central OS grid reference: TQ06782444. The scheme involves a planning application to Horsham District Council for the restoration and conversion of a series of redundant agricultural barn outbuildings. These outbuildings lie in the vicinity of the main farmhouse, which is not included within the scheme.

2.2 Personnel

This assessment has been carried out by Emily Luck, BSc (Hons), MCIEEM, MRSB, Senior Lead Ecologist and Managing Director of Imprint Ecology. As a Full member of the Royal Society of Biology (RSB) and the Chartered Institute of Ecology and Environmental Management (CIEEM), Emily upholds the highest standards of professional practice and is bound by their respective Codes of Professional Conduct. Emily is very experienced in designing surveys and mitigation for protected species. She holds a Natural England Level 2 Class Licence for bats (Registration number: 2024-12034-CL18-BAT).

2.3 Purpose of this Ecological Impact Assessment Report

This report will be valid for planning purposes for up to 24 months from the report date. However, bat survey data is typically valid for one year and may need updating if it lapses or extends beyond another survey season, regardless of when planning was approved. If an EPSML from Natural England is required, bat survey data will need to be obtained during the most recent survey season (May–September) or the original surveys will need updating. The report assesses the ecological effects of the proposed development, outlines mitigation measures, explains how they will be secured, expected residual impacts, recommends ecological enhancements, and specifies any necessary post-construction monitoring.

2.4 Site Description

Tanners Farm is located 1.5 miles south of Billingshurst, West Sussex, in the rural hamlet of Adversane. To the west of the main farmhouse are a series of redundant outbuildings including a threshing barn, cart barn, and animal sheds. See Figure 2.1 for the site location, Figure 2.2 for an aerial view, and Figures 2.3–2.4 for existing and proposed site plans.

Figure 2.1 – Location © OpenStreetMap is open data, licensed under the Open Data Commons Open Database License (ODbL) by the OpenStreetMap Foundation (OSMF).

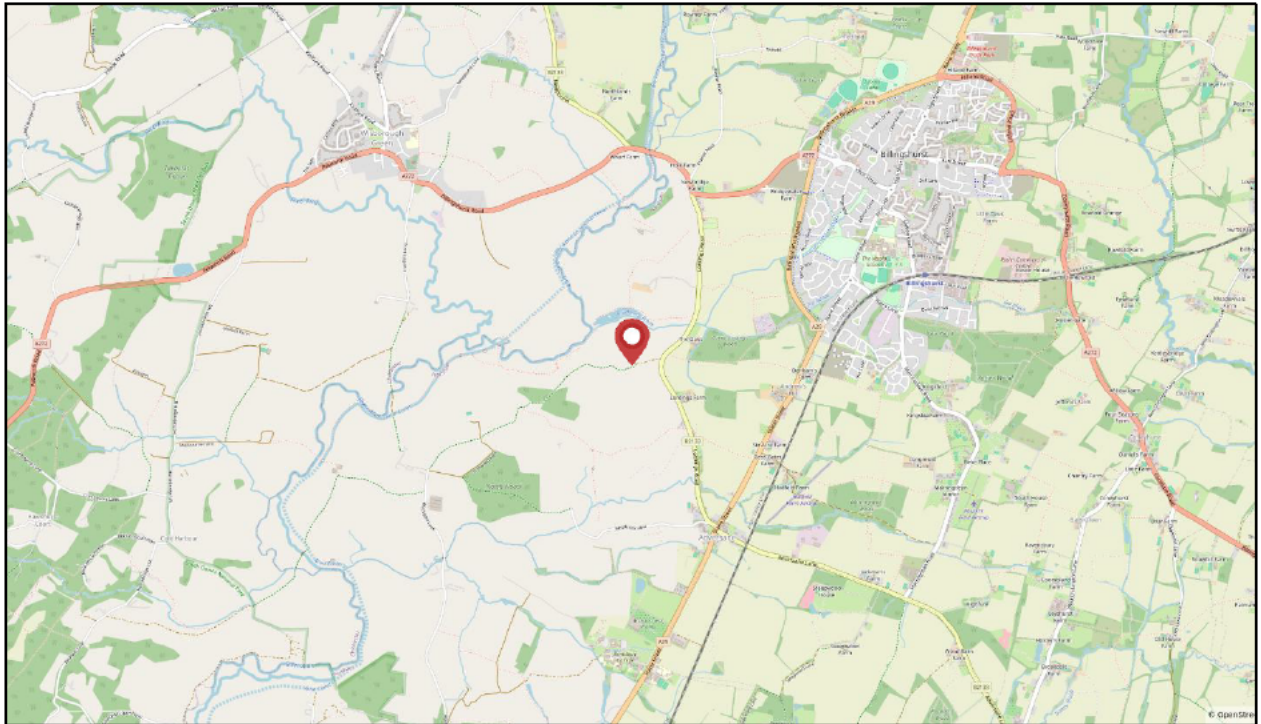


Figure 2.2 – Site aerial view. Buildings within the red line are assessed in this report. © Google Earth 2026.



Figure 2.3 – Existing site plans. ©Pullen Architecture

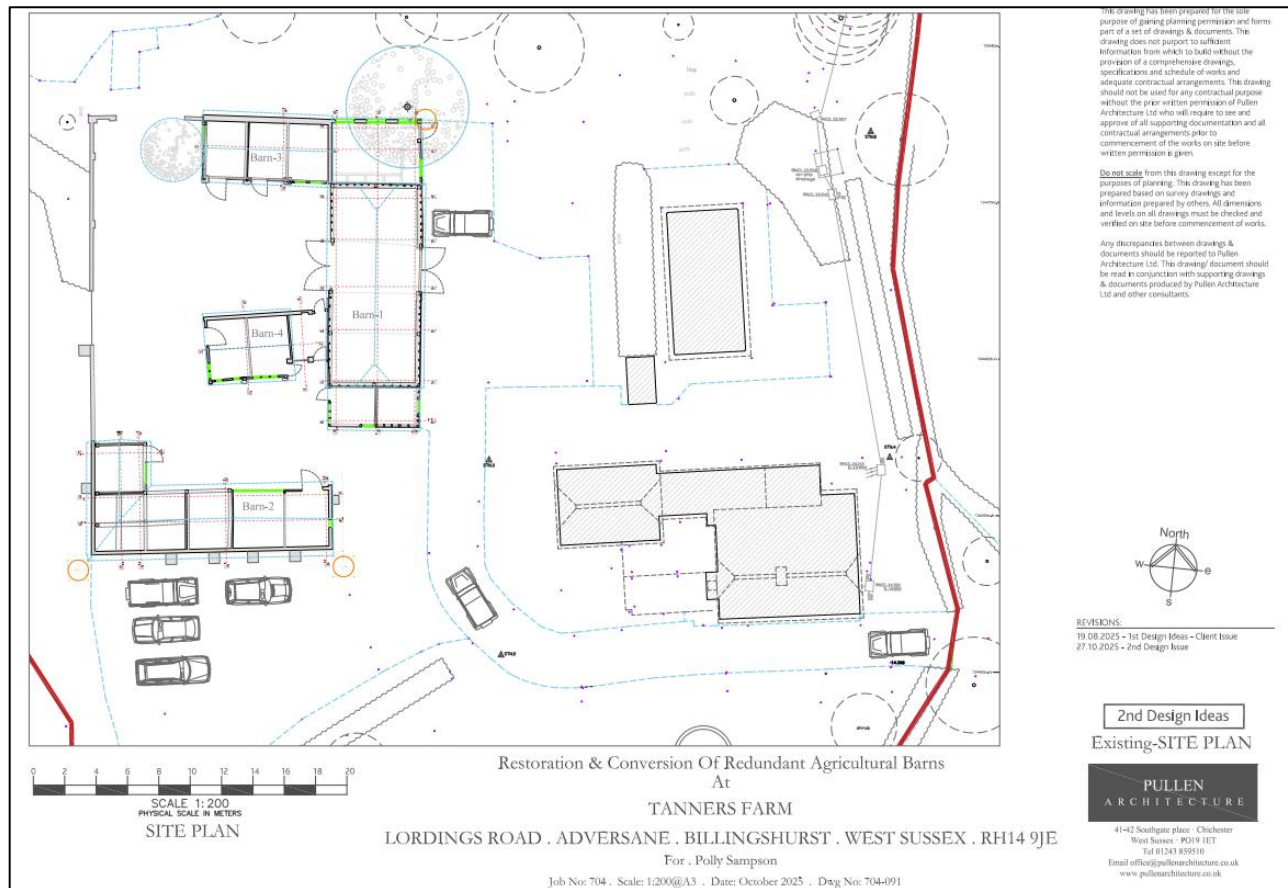
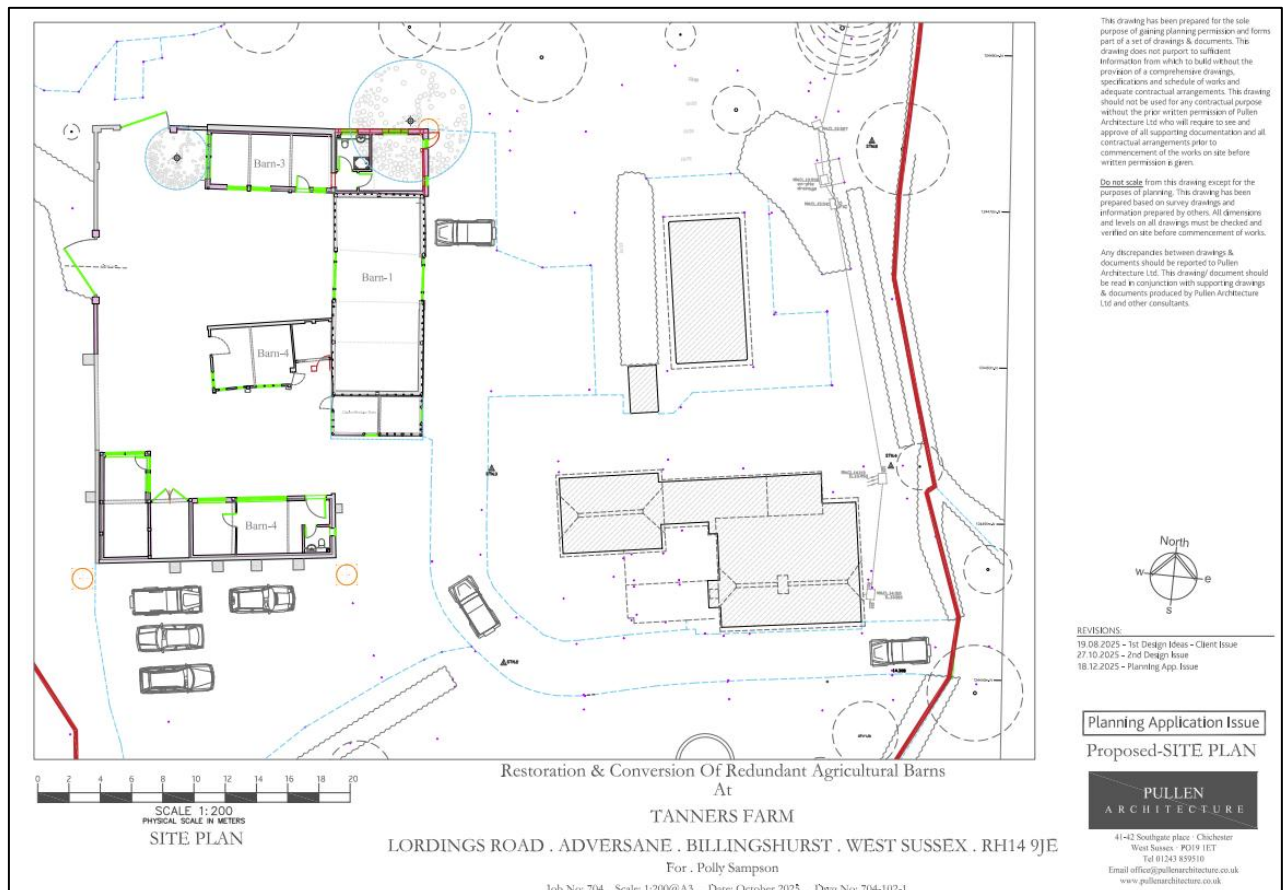


Figure 2.4 – Proposed site plans. ©Pullen Architecture



3. Legislation and Planning Policies

3.1 Policy

3.1.1 National Planning Policy

The latest National Planning Policy Framework (NPPF, 2024) was published in December 2024. Paragraph 187 states that planning policies and decisions must contribute to and enhance biodiversity and the natural environment by:

- Protecting and enhancing valued landscapes, biodiversity sites, geological features, and soils in line with statutory designations.
- Recognising the intrinsic character and beauty of the countryside, including the benefits of trees, woodlands, and agricultural land.
- Maintaining the character of undeveloped coastal areas while improving public access where appropriate.
- Minimising impacts on biodiversity and delivering net gains, including the establishment of resilient ecological networks and features supporting priority species such as swifts, bats, and hedgehogs.
- Preventing environmental harm from soil, air, water, and noise pollution, as well as land instability.
- Improving local environmental conditions, including air and water quality, informed by relevant policies such as river basin management plans.
- Remediating degraded, contaminated, or unstable land to enhance ecological value.

Paragraph 193 states that local planning authorities must apply the following principles when determining planning applications:

- Avoid significant harm to biodiversity where possible; if unavoidable, harm must be mitigated or compensated for, or planning permission should be refused.
- Development that affects Sites of Special Scientific Interest (SSSI) should not be permitted unless benefits clearly outweigh potential harm.
- Loss or deterioration of irreplaceable habitats (e.g., ancient woodland, veteran trees) should be refused unless there are exceptional reasons and a suitable compensation strategy.
- Development that enhances biodiversity should be supported, particularly where it secures measurable net gains or improves public access to nature.

In addition to the NPPF, Circular 06/2005: Biodiversity and Geological Conservation says, *“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.”*

Circular 06/2005 also provides statutory direction on biodiversity protection within the planning system. It clarifies legal obligations under the Wildlife and Countryside Act 1981, the Conservation of Habitats and Species Regulations 2017, and other key legislation. It outlines:

- The importance of ecological surveys and assessments in development proposals.
- The duty of local authorities to consider biodiversity in planning decisions, ensuring compliance with UK and European laws.
- Requirements for the mitigation hierarchy, ensuring avoidance, mitigation, or compensation for biodiversity impacts.
- The need for protected species licences where development affects legally protected species.

3.1.2 Local Planning Policy

Relevant key points within Policies 25 and 31 from the Horsham District Planning Framework are summarised follows:

- Policy 25 - Strategic Policy: The Natural Environment and Landscape Character:
 1. Supports development that protects, conserves, and enhances the district's landscape and maintains distinct settlement boundaries.
 2. Prioritises maintaining and enhancing the district's green infrastructure to address ecological needs.
 3. Aims for no net biodiversity loss, safeguarding protected sites and species, and promoting net biodiversity gains.
- Policy 31 - Green Infrastructure and Biodiversity:
 1. Development must preserve or enhance existing green infrastructure, with mitigation for any loss.
 2. Requires contributions to biodiversity, including creating habitats, green spaces, and connecting ecological networks.
 3. Supports tree replacement where felling occurs and protection of high-value sites (e.g., SPAs, SACs, SSSIs).

4. Requires justification and mitigation for development impacting biodiversity; certain impacts, especially on the Arun Valley SPA and Mens SAC, need a Habitat Regulations Assessment (HRA).

3.2 Conservation Legislation

Legislation for UK protected and non-native species is outlined in Table 3.1.

Table 3.1: Legislation of UK Protected/Priority species.

Species	Legislation
Bats	British bats are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended), which classifies them as European Protected Species (EPS). Additional protection is provided by the Countryside and Rights of Way (CROW) Act 2000, the Bonn Convention (Agreement on Bats in Europe), and the Bern Convention. Seven bat species are also listed under Section 41 of the NERC Act 2006 as priority species for biodiversity. It is a criminal offence to kill, injure, capture, or disturb bats, damage or destroy a roost, or obstruct access to roosting sites. Bat roosts are protected regardless of whether bats are present at the time, as bats often return to the same roost annually. If a proposed development risks disturbing bats or their roosts, an EPSML must be obtained from Natural England. This licence permits works subject to approved mitigation measures to safeguard bats. The Natural Environment and Rural Communities (NERC) Act 2006 requires due consideration of biodiversity and enhancement opportunities during development planning.
Dormice	Hazel dormice are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). This protection makes it an offence to intentionally kill, injure, or capture dormice, as well as to disturb them in their places of rest or damage, obstruct or destroy their breeding or resting sites. Due to their reliance on diverse, connected habitats such as woodland, hedgerows, and scrub, dormice are a priority species under Section 41 of the NERC Act 2006, meaning they must be considered in the planning process.
Great crested newts	Great crested newts (GCN) are strictly protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to capture, injure, kill, or disturb GCNs, as well as to damage or destroy their breeding or resting places. Licences from Natural England are required for activities affecting GCN or their habitats.

Hedgehogs	Hedgehogs are listed as a priority species under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Hedgehogs are particularly vulnerable during the winter months when they are in hibernation, and during spring when building and sheltering in nests with dependent young.
Invasive Non-Native Species (INNS)	Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) prohibits the planting, release, or causing the spread of invasive non-native species such as Japanese knotweed, Himalayan balsam, and giant hogweed. Landowners have a duty to manage these species to prevent their spread, and strict controls apply to their disposal.
Invertebrates	Development must comply with legal protections for invertebrates, including those listed as European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017 (as amended), such as large blue butterflies, Fisher's estuarine moths, and little ramshorn whirlpool snails. It is illegal to kill, injure, disturb, or destroy their breeding or resting sites, even when unoccupied. These species are also protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence to recklessly disturb or obstruct access to their shelters. Many other invertebrates are protected under Schedule 5 of the Act, while Section 41 of the NERC Act 2006 highlights rare species requiring conservation consideration during planning.
Nesting birds	Nesting birds are protected under several key pieces of legislation to prevent their disturbance or harm, particularly during the breeding season. The Wildlife and Countryside Act 1981 (as amended) makes it illegal to intentionally kill, injure, or take any wild bird, and to damage or destroy the nest of any wild bird while it is in use or being built. Some species, listed under Schedule 1 of the Act, receive additional protection. The Conservation of Habitats and Species Regulations 2017 (as amended) further implements protections for bird species considered of European importance, particularly through the designation of Special Protection Areas (SPAs). The term "nesting" encompasses all stages from adults building a nest or gathering nest materials to the point when chicks have fledged. To avoid disturbing nesting birds, works that could impact nests should generally be avoided from March to August inclusive. However, precaution should be given during February when some bird species can begin nesting, especially in milder conditions. Disturbance during these stages, such as interfering with eggs or nests with chicks, can cause significant stress or even nest abandonment, resulting in the failure of the breeding attempt
Other mammals	The Wild Mammals (Protection) Act 1996 protects all wild mammals, including ubiquitous species like mice, voles, as well as foxes, and rabbits, from intentional harm or preventable distress and suffering.
Otters	Otters are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). It is illegal to deliberately capture, kill, or disturb otters, or to damage or destroy their holts or resting places.
Reptiles	Widespread reptiles, such as slow worms and common lizards, are protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to intentionally kill, injure, or take these reptiles. Additionally, they are listed as priority species under Section 41 of the NERC Act 2006, requiring public bodies to consider their conservation. While these reptiles

	are not protected from habitat disturbance, developers must take reasonable steps to avoid direct harm during activities such as site clearance.
Water voles	Water voles are protected under the Wildlife and Countryside Act 1981 (as amended), making it illegal to intentionally kill, injure, or take water voles, or to damage, destroy, or obstruct access to their burrows.

4. Methods

4.1 Desk Study

4.1.1 Biological database searches

Desk studies were undertaken on 11th November 2024 and 7th February 2026. They involved reviewing online geographical databases and mapping tools to assess the site's proximity to key ecological features, including EPSMLs, designated sites, priority habitats, and protected habitats, within a 1km radius. A data search from the local biodiversity records centre was requested for bat records within 2km of the site. The following resources were used during the study:

- Google Earth Pro Satellite Imagery
- LandApp by DigitalLandSolutions Ltd
- Multi-Agency Geographic Information for the Countryside (MAGIC)
- Ordnance Survey (OS) Explorer (1:25,000 scale)

4.2 Preliminary Ecological Appraisal

4.2.1 UKHab Habitat Assessment

The site's habitats were most recently assessed on 30th July 2025 and 20th October 2025 following the UK Habitat Classification (UKHab) system (Version 2.0). The surveys involved a systematic site walkover to identify, classify, and map all habitats present. Pre-survey preparation included a review of existing ecological data, aerial imagery, and designated site information to establish a baseline and inform the survey strategy.

The on-site field survey recorded habitat features, vegetation types, and management practices. Vegetation communities were assessed against the UKHab Primary Habitat Hierarchy, with dominant species noted and habitats categorised using primary codes. Secondary UKHab codes were applied where relevant to provide additional detail, such as habitat modifications or land-use context. Habitat features were mapped on LandApp as polygons, lines, or points with spatial references. All species referenced follow standard UK common names, and Latin names can be provided upon request for clarification if required.

4.2.2 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

4.2.3 Bats

A comprehensive survey of buildings, trees, and surrounding habitats was undertaken across the site to evaluate the presence of suitable features for roosting, foraging, and commuting bats. Equipment used included a 20,000-lumen LED torch, 8x42 binoculars, telescopic ladders, an inspection mirror, and a camera. Potential Roost Features (PRFs) - specific features within buildings, trees, or other structures that could provide shelter for bats - were recorded. These include cracks, crevices, joints, cavities, lifted roof tiles or weatherboarding, or loose bark on a tree. A PRF can take the form of any crevice or cavity in a building, tree or other structure that offers space, protection, and appropriate conditions for bat roosting. Evidence of bat presence, such as droppings, feeding remains (e.g., moth wings), urine stains, grease marks, lack of cobwebbing, or bats themselves, was recorded. Surrounding habitats were also assessed for their suitability to support commuting and foraging bats, focusing on features such as hedgerows, treelines, rivers, and woodland edges. Trees were surveyed for PRFs, including rot holes, cracks, split limbs, cavities, or ivy cover that could serve as roosting sites. Structures were classified as having confirmed roosts, or as high, moderate, low, negligible, or no suitability based on their physical characteristics and surrounding habitat quality following BCT guidelines (Collins, 2023). Bat droppings collected on-site were submitted to Ecotype Genetics for DNA-based species identification. Ecotype Genetics uses optimised extraction followed by species-specific real-time PCR and DNA sequencing to determine the species present from samples.

4.2.4 Dormice

Woodland, hedgerows, and scrub habitats were inspected for their potential to support dormice. Particular focus was given to any dense, species-rich hedgerows and areas with abundant food sources such as hazel, bramble, and honeysuckle. Any signs of dormouse activity, including characteristic gnawed hazelnuts (nuts with clean, smooth inner surfaces with a neat circular opening) or woven dormouse nests, were recorded.

4.2.5 Great Crested Newts (GCN)

The large pond on-site was assessed for its suitability to support GCN based on criteria such as size, depth, presence of aquatic vegetation, absence of fish, and shading. Terrestrial habitats such as grassland, scrub, and woodpiles were examined for sheltering and foraging potential. Signs of GCN such as GCN eggs, efts, live or dead specimens were recorded. A Habitat Suitability Index (HSI) of the pond was undertaken. The GCN HSI is a quantitative tool used to assess the suitability of a waterbody for supporting GCN. It involves scoring ten key habitat factors, including pond size, water quality, shading, and connectivity to other suitable habitats. The

overall HSI score categorises the pond's suitability as poor, below average, average, good, or excellent for GCN.

4.2.6 Hedgehogs

Scrub, hedgerows, and grassland within the site were searched for hedgehog tracks, droppings, and nests. Habitat connectivity and the availability of hibernation-sites, such as piles of logs or leaves, were also recorded.

4.2.7 Invasive Non-Native Species (INNS)

The site was surveyed for invasive non-native species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), including Japanese knotweed, Himalayan balsam, and giant hogweed.

4.2.8 Nesting Birds

Habitats such as trees, hedgerows, scrub, grassland, and buildings were inspected for evidence of nesting birds, including nests, droppings, eggshells, or feathers. Suitability for breeding, foraging, and overwintering birds was assessed, and particular attention was paid to features likely to support species of conservation concern, such as holes in trees or buildings and dense scrub.

4.2.9 Otters

Rivers, streams, and other waterbodies where present within the site were assessed for signs of otters, including spraints (droppings often left on rocks or logs), footprints, slides, and holts. Riparian habitat quality, connectivity, and prey availability were also recorded where present.

4.2.10 Reptiles

Habitats within the site, including grassland, scrub, hedgerow bases and sheltered, sunny spots were assessed for their suitability to support widespread reptile species by providing basking, breeding, foraging, and hibernation opportunities. Any materials resting on the ground, such as wood, corrugated iron, or other debris (referred to as refugia), were lifted to check for sheltering reptiles.

4.2.11 Water Voles

Watercourses, ditches, and ponds where present within the site were searched for water vole signs, including burrows in banks, latrines (piles of droppings), feeding remains, and footprints in

soft mud. The suitability of aquatic habitats was evaluated based on water depth, bank vegetation, and the presence of suitable burrowing substrates.

4.3 Limitations and Constraints

No significant limitations were identified during the surveys. However, with all ecological assessments there are certain inherent constraints that apply. Ecological surveys represent a snapshot in time and may not detect all species that use the site throughout the year. Species presence and activity can vary due to seasonality, weather conditions, and environmental changes. Additionally, some species may be cryptic, transient, or difficult to detect, meaning their presence cannot be entirely ruled out based on a single survey. These factors are considered when interpreting the survey results and making recommendations.

4.4 Ecological Impact Assessment

In accordance with the Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2024), the methodology used to assess the potential impacts of the proposed development follows a structured approach. Initially, all important ecological features identified during the baseline surveys are evaluated based on their geographic level of importance, whether that be at an international, national, regional, county, or site level. This ensures that the assessment focuses on the features that are most vulnerable or critical to the local and wider ecological landscape.

The impacts are then characterised by considering their magnitude (the scale of the effect), extent (the area affected), duration (short-, medium-, or long-term), reversibility (whether the impact is permanent or temporary), and timing (taking into account seasonal factors such as breeding or migration periods). Using this information, the significance of the impacts is assessed by combining the importance of the ecological feature with the scale and likelihood of the impact. This determines whether the impact is significant in terms of its potential to affect conservation status or ecological function.

The assessment follows the CIEEM mitigation hierarchy, aiming first to avoid impacts through design alterations, then mitigating impacts that cannot be avoided, and finally compensating for any residual impacts where avoidance or mitigation is not possible. Residual impacts are those that remain after mitigation measures are applied, and their significance is evaluated to ensure that the overall ecological impact is minimised. Additionally, cumulative impacts from other

nearby developments are considered to provide a comprehensive understanding of the wider ecological effects.

4.5 Bat Emergence Surveys

Three dusk emergence surveys were undertaken in 2024 in accordance with guidelines outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, J. 2023) based on the building having high suitability for roosting bats.

Four surveyors and six Night Vision Aids (NVA)s were deployed in total around the site to observe signs of bats emerging from their roosts. See Appendix 2. Bats were identified using the following full spectrum recording bat detectors: Peersonic RPA3, Batlogger M, and Echometer Touch 2 Pro models connected to Amazon Fire tablets. The NVAs on each survey comprised of the following models: Canon XA10, XA50, XA60, Sony AX53, Nightfox Whisker, Pixfra Thermal Camcorder. To improve coverage and increase visibility after darkness, infrared illuminators were deployed around the site. The findings were added to the Bat Survey Results Plans: Appendix 3 and Appendix 4. Bat calls were analysed following each survey using Wildlife Acoustics Kaleidoscope Pro.

The surveys were designed by Emily Luck (qualifications in Section 2.2). Lead surveyors were Emily Luck and Aidan Bird ACIEEM. Aidan is an experienced bat ecologist and holds a Natural England Level 2 Class Licence for Bats. Assistant surveyors across the three surveys were a combination of experienced bat surveyors: Lucy Batchelor, Lexie Smith, Beth Smith, Joshua Blackman. Surveys were undertaken on the same nights as bat surveys on the main farmhouse which is approved under a separate application. The weather and timings of each survey are outlined in Table 4.1.

Table 4.1: Bat Emergence Survey details

Date	Sunset	Start	End	Weather - Start	Weather - End	Surveyor Initials
04/08/2024	20:40	20:20	22:10	17.1°C, BF.1, Okt.0, RH70%, Dry	12.6°C, BF.1, Okt02, RH90%, Dry	EL, LB, BS
26/08/2024	20:01	19:46	21:31	19.8°C, BF.1, Okt.0, RH66%, Dry	13.7°C, BF.1, Okt.0, RH90%, Dry	AB, LS, JB
18/09/2024	19:08	18:48	20:38	13.8°C, BF.3, Okt.3, RH72%, Dry	13.1°C, BF.2, Okt2, RH94%, Dry	EL, BS, LS

Abbreviations: BF: Beaufort scale (wind speed 0-12); Okt: Okta (cloud cover 0-8); RH: Relative humidity (0-100%)

5. Baseline Ecological Conditions

5.1 Designated Sites

The site is located 360m southeast of Upper Arun SSSI, a Site of Special Scientific Interest (SSSI). It falls within the SSSI's Impact Risk Zone (IRZ).

Two Special Areas of Conservation (SACs) designated for their bat populations are beyond the 1km radius but require consideration as they are within 12km of the site. The Mens SAC, 3.6km west, is designated for its extensive ancient woodland, while Ebernoe Common SAC, 8.2km west, is recognised for its beech-dominated woodland. Both SACs are protected under the EU Habitats Directive (Council Directive 92/43/EEC) particularly for supporting barbastelle and Bechstein's bats which are species listed under Annex II of the Directive.

5.2 Habitats

5.2.1 Desk Study

No priority or protected habitats lie within or directly adjacent to the site. Several Priority Habitats are present within 1km of the site, including coastal and floodplain grazing marsh, ancient and semi-natural woodland, deciduous woodland, and traditional orchard.

5.2.2 Site Assessment

The site survey area comprises the following habitats. Only the area relevant to the proposed scheme has been mapped, rather than the entirety of the applicant's landholding.

u1c – Artificial unvegetated; unsealed surface. Gravel along the main driveway, at the entrances to the site and around the buildings.

u1b/u1b5 – Buildings and sealed surfaces. The existing outbuildings on-site as well as large areas of paving and patio hardstanding.

u1 – built-up areas and gardens/vegetated garden. The gardens surrounding the outbuildings primarily lawns and introduced shrubs. No non-native invasive species were found.

h2a – native hedgerows. The site contains ornamental hedgerows composed of privet, hawthorn, beech, and cherry laurel. These hedgerows are short in length, ornamental in nature, and have

low species diversity, offering limited ecological value beyond general structural habitat for nesting birds and invertebrates.

g4 – modified grassland (frequently mown, scattered trees). Areas of grassland beyond the main gardens, with large lawns occasionally interspersed with fruit trees. These areas are regularly maintained with frequent mowing and therefore offer very limited structural variation and botanical diversity. They are dominated by common grass species such as red fescue, perennial rye-grass, and white clover. The presence of fruit trees provides some seasonal foraging opportunities for pollinators and birds.

r1e – pond. The site contains two ponds:

- An ornamental fishpond, located on the lawn directly south of the main house. This pond is enclosed by brick and stone, contains a high number of goldfish, and has little to no emergent or bankside vegetation.
- A natural pond, approximately 150m² in size, located in the northwest corner of the site, outside the construction impact zone.

See photos 1 to 8.

Photo 1: View of barns behind farmhouse annexe, from entrance driveway.



Photo 2: View of barns, looking northwest



Photo 3: View of barns, gravel and hardstanding, looking north.



Photo 4: Grassland, north of Barn 1.



Photo 5: Grassland and trees behind Barn 3.

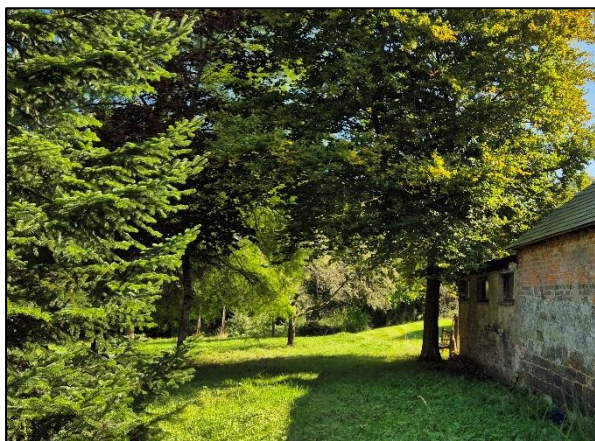


Photo 6: Pond, north of Barn 3.

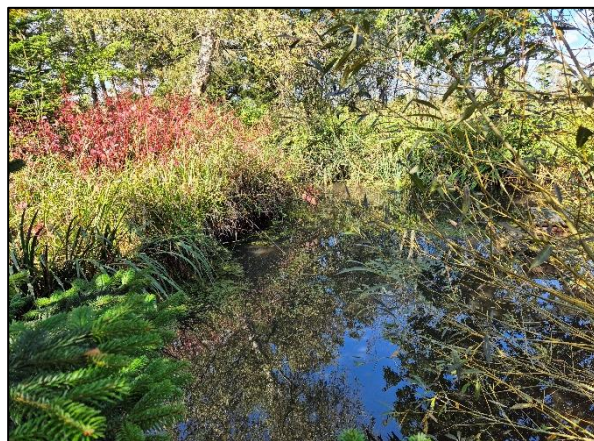


Photo 7: Grassland, west of barns.



Photo 8: Hardstanding, east of Barn 1.



[REDACTED]

[REDACTED] Badgers

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

5.3.2 Bats

Data Search

A data search was completed with Sussex Biodiversity Record Centre (SxBRC), returned on 21/11/2024. The search returned multiple bat records within 2km of the site, summarised below:

- Soprano pipistrelle: 9 records (1997-2018), including a known maternity roost (Wharf Cottage, 2018) which is 1.4km north of Tanners Farm, a rescued adult female (Brinsbury, 2016), and multiple building inspections and static detector records.
- Common pipistrelle: 13 records (1986-2021) across Billingshurst, Wisborough Green, and Natts Lane, including building inspections, unspecified roosts, static detector records, and one grounded and one dead individual.
- Brown long-eared bat: 4 records (1989 and 2014) from Billingshurst and Parbrook, including a juvenile found during a building inspection in 1989.
- Nathusius's pipistrelle: 1 record (2014) from Harsfold Manor, detected using a static bat detector.
- Serotine: 5 records between 1980 and 2014 from Billingshurst and Parbrook, including building inspections, unspecified roosts, and droppings.
- *Myotis spp.*: 2 records from 2010 and 2014, including field observations and static detector recordings; no roosts confirmed.
- Daubenton's: 1 record (2014) associated with an unspecified roost at Harsfold Manor Barns.
- Noctule: 4 records (2013-2014) from Billingshurst and Wisborough Green, recorded via static detectors and field observations.
- *Pipistrelle spp.* (unspecified): 2 field observation records from 1980 and 1992.

- Long-eared bat species (unspecified): 10 records (1986-2019), including building inspections, static detector recordings, droppings, and unspecified roosts.

In summary, there have been a good number of bat records submitted over the years from this area, including a maternity roost of soprano pipistrelle bats and multiple common pipistrelle records suggesting that these species are abundant in the area.

Site Assessment

Please note: the main farmhouse located 12m east of the barns is not included within this assessment but is confirmed to support a maternity roost for soprano pipistrelle and day roost of common pipistrelles.

Barn 1 - a large, tall, traditional agricultural barn clad in black horizontal weatherboarding with a clay tiled roof. The roof is highly undulating with numerous lifted, slipped and uneven tiles, providing many access opportunities for bats. The weatherboarding also contains gaps between boards which may be used by bats for access and roosting. Internally, the barn is open with exposed timber beams, rafters and roof structure. Bat droppings were recorded internally and subsequent DNA analysis confirmed use by soprano pipistrelle, brown long-eared, barbastelle and Natterer's. Barn 1 is assessed as being of **high suitability** for roosting bats and is confirmed to support multiple bat roosts.

Barn 2 - a dilapidated agricultural building in a significant state of disrepair. The structure is made from masonry walls and a clay pantile roof, both of which are degraded. Large gaps are present beneath and between roof tiles, along with extensive holes and crevices within the walls. Bat droppings were recorded internally, with DNA analysis confirming use by soprano pipistrelle and whiskered bats. Due to the unstable condition of the building, the internal inspection was necessarily brief and limited for health and safety reasons; however, the features visible were sufficient to demonstrate substantial bat roosting potential. The level of disrepair likely provides a wide range of access points, crevices and microclimates suitable for roosting bats. Barn 2 is assessed as being of **high suitability** for roosting bats and is confirmed to support multiple bat roosts.

Barn 3 - a former stable building located to the north of the barn complex. The structure is of traditional construction with a pitched slate-tiled roof, with visible gaps beneath roofing materials and at roof junctions providing access opportunities for bats with large openings in the wall of the west facing gable. Internally, the building contains exposed timber and stone wall crevices. Bat droppings were recorded internally, and DNA analysis confirmed the presence of brown

long-eared bats. Barn 3 is assessed as being of **high suitability** for roosting bats and is confirmed to support at least one bat roost.

Barn 4 - a smaller former storage building located centrally within the site. The structure is of more intact construction compared to the other barns, with relatively well-fitted roof materials and limited gaps or crevices externally. Access opportunities for bats are limited and largely restricted to minor gaps at the roof junctions. Internally, the roof structure is relatively tight with fewer exposed voids or sheltered areas suitable for roosting bats. No bat droppings, feeding remains or staining were recorded during the internal inspection, and the overall conditions are less favourable than those present within the other buildings on site. Barn 4 is assessed as being of **negligible suitability** for roosting bats.

In line with best practice guidance, **three dusk emergence surveys for bats** were recommended across Barns 1, 2 and 3. See photos 9 to 15.

Photo 9: Barn 1 east elevation.



Photo 10: Barn 1 south elevation.



Photo 11: Barn 1, west elevation.



Photo 12: Barn 1 interior.



Photo 13: Barn 1 bat droppings found internally.



Photo 14: Barn 1 lean-to on north elevation.



Photo 15: Barn 2 south elevation.



Photo 16: Barn 2 north and east elevations.



Photo 17: Barn 3 west gable.



Photo 18: Barn 3 north elevation.



Photo 19: Barn 3 south elevation.



Photo 20: Barn 3 interior.



Photo 21: Barn 3 bird nest.



Photo 22: Barn 4 south elevation.



Photo 23: Barn 4 west gable.



Photo 24: Barn 4 north elevation.



Photo 25: Barn 4 interior.



Dusk Emergence Surveys

Three Bat Emergence Surveys were carried out. The results are presented in Table 5.1 and should be read in conjunction with the Bat Survey Results Plans in Appendix 3 and Appendix 4.

Table 5.1: Bat emergence results for B3.

Survey Date	Emergences	Bat activity		
04/08/2024	Barn 1: 7x SPIP, 1x NATT.	Species	First pass	Last pass
		Common pipistrelle	20:55	21:34
		Noctule	21:05	21:23
	Barn 2: None.	Soprano pipistrelle	20:59	21:35
		Barbastelle	21:13	21:29
	Barn 3: None.	Natterer's	21:17	-
		Serotine	21:18	21:49
	Barn 4: None.	Long-eared <i>spp.</i>	21:48	21:53
		Seven soprano pipistrelle bats and one Natterer's bat emerged from under roof tiles on Barn 1. Two soprano pipistrelles then re-entered under roof tiles during the survey. High levels of soprano pipistrelle activity were recorded across the site, with frequent foraging activity observed. Later in the survey period, serotine, noctule, and brown long-eared bats were also detected. The majority of emerging pipistrelles were using hanging tiles, with some displaying maternity behaviour, including successive emergences most likely of a mother and pup. No emergences were recorded from the north elevation or annexe.		
Survey Date	Emergences	Bat activity		
26/08/2024	Barn 1: 5x SPIP, 1x NATT, 1x BARB.	Species	First pass	Last pass
		Common pipistrelle	20:06	21:04
		Serotine	20:10	20:32
		Soprano pipistrelle	20:03	21:12
		Natterer's	20:34	20:39

	Barn 2: None.	Barbastelle	20:16	20:45
		Long-eared <i>spp.</i>	21:14	21:15
	Barn 3: None.	<i>Myotis spp.</i>	20:21	20:45
	Barn 4: None.	Five soprano pipistrelle bats, one Natterer's bat and one barbastelle bat emerged from under roof tiles on Barn 1. Foraging and commuting activity was high across the site, with common and soprano pipistrelles active from early on. The emergence locations remained consistent with the initial survey although the numbers of the maternity colony had lessened by this point.		
Survey Date	Results	Bat activity		
18/09/2024	Barn 1: 2x SPIP.	Species	First pass	Last pass
		Common pipistrelle	19:23	20:21
		Soprano pipistrelle	19:25	20:18
	Barn 2: None.	Noctule	19:14	20:22
		<i>Myotis spp.</i>	19:49	20:09
	Barn 3: None.	Long-eared <i>spp.</i>	20:29	20:30
	Barn 4: None.	Two soprano pipistrelle bats emerged from under roof tiles on Barn 1. Bat activity was slightly lower than previous surveys. A total of seven soprano pipistrelle emergences were recorded. Bats continued to use the site as a commuting corridor, moving east to west. Noctule bats were regularly recorded commuting, along with some <i>Myotis spp.</i> commuting activity. Two long-eared <i>spp.</i> passes were also detected later in the survey.		

Abbreviations: SPIP: soprano pipistrelle; CPIP: common pipistrelle; WHISK: whiskered; BARB: barbastelle.

Summary of Bat Roosts

A summary of bat roosts recorded across the site, informed by all emergence/re-entry surveys and DNA analysis results, is presented in Table 5.2. Where DNA analysis has confirmed the presence of bats but no emergences were recorded during three survey visits, the feature is still classified as a bat roost. In these instances, the roost is considered to be an occasional roost, indicative of intermittent use and likely occupation by a single individual bat.

Table 5.2: Bat roosts present on-site

Building	Roosts recorded
Barn 1	- Day or satellite roost of seven soprano pipistrelles under roof tiles. <i>Possibly a satellite roost given the proximity of this roost to the main farmhouse, which is a confirmed maternity roost of soprano pipistrelles.</i> - Day roost of one barbastelle bat under a roof tile. - Day roost of one Natterer's bat under a roof tile. - Day roost of one brown long-eared inside barn.

Barn 2	• Occasional day roost for one soprano pipistrelle inside barn. • Occasional day roost for one whiskered bat inside barn.
Barn 3	• Occasional day roost for one brown long-eared bat.
Barn 4	No roosting bats.

Figures 5.1-5.6 show the infrared illumination at darkest point of survey to show maximum coverage of the buildings.

Figure 5.1: Barn 1.

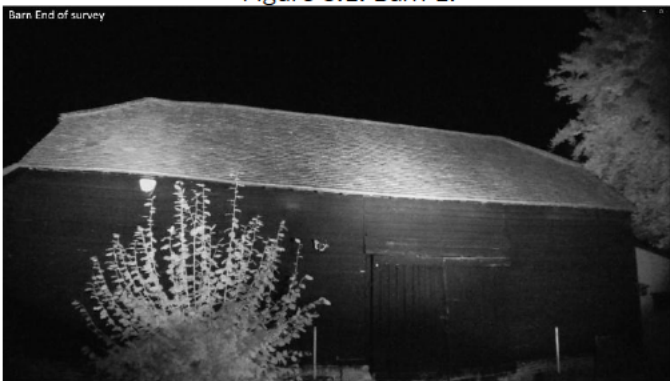


Figure 5.2: Barn 1.



Figure 5.3: Barn 1.



Figure 5.4: Barn 2..



Figure 5.5: Barn 2.



Figure 5.5: Barn 4.



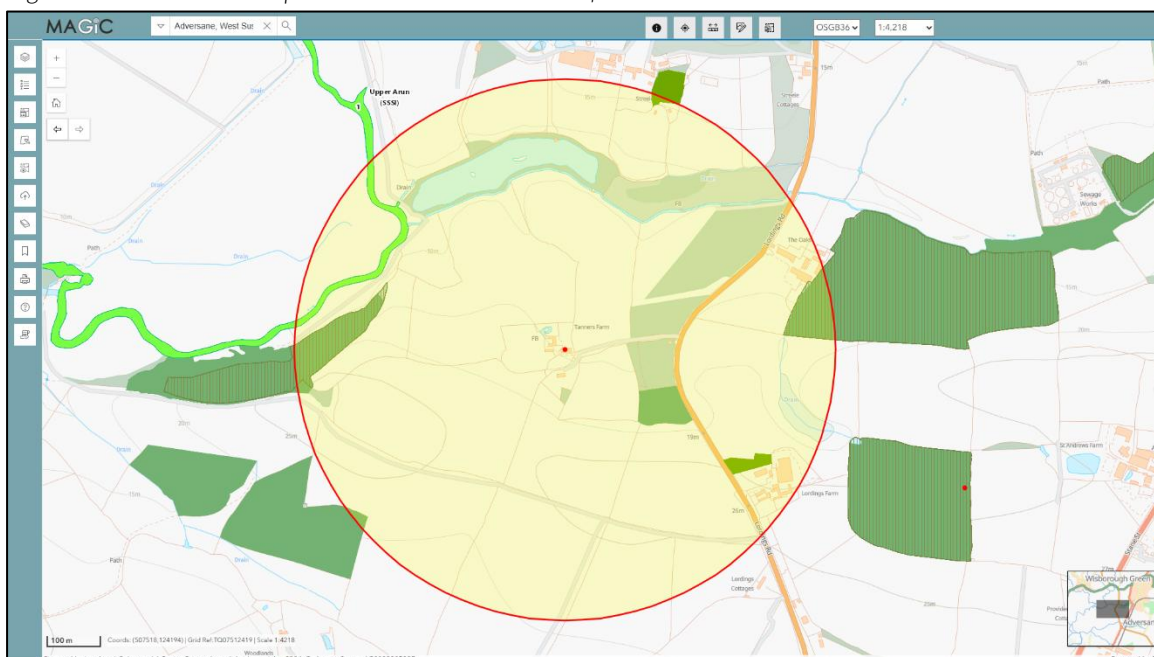
5.3.3 Great crested newts (GCN) and Other Amphibians

There are no EPSMLs for GCN within 1km of the site. The closest EPSML is recorded 1.8km east, granted in 2016. The site contains two ponds:

- Ornamental fishpond ($\leq 15\text{m}^2$) – unlikely to support GCN due to its small size, high density of goldfish, and lack of suitable aquatic vegetation.
- Natural pond (40m northwest of the main farmhouse) – located outside the construction impact zone. This pond has a Habitat Suitability Index (HSI) score of 0.69, categorising it as "Average" suitability for GCN.

Figure 5.6 confirms no additional ponds within 500m. The nearest large waterbody is the River Arun, located to the north, unlikely to be functionally linked to the site for GCN. Consultation with NatureSpace's Horsham District Council Impact Risk Zones shows the site is located within an Amber or Green GCN risk zone, meaning there is some potential for GCN presence but not at a level that necessitates a strategic licence approach. Despite limited pond connectivity and an "Average" HSI score of the on-site pond, GCNs may still pass through the site, as they are known to use suboptimal ponds or to use the site's peripheral areas for shelter and dispersal. However, significant GCN presence on-site particularly within the construction impact zone is unlikely. To minimise any potential risk, an unlicensed Precautionary Working Method Statement (PWMS) is recommended to ensure that any occasional or transient GCN individuals are protected.

Figure 5.6: No additional ponds within 500m radius of the site.



5.3.4 Hazel Dormice

No clear evidence of dormouse activity was recorded on-site, and there is no suitable habitat for nesting or breeding within the survey area. While adjacent woodlands and hedgerows may provide suitable foraging and sheltering habitat, no hedgerow removal is planned, and as such, dormice are not considered further in this assessment.

5.3.5 Hedgehogs

The site may provide suitable foraging and shelter opportunities for hedgehogs. The gardens offer cover that could be used for nesting and daytime refuge, while also supporting invertebrates that form a key part of a hedgehog's diet. While the site does not contain ideal hibernation features such as extensive leaf litter piles or dense undergrowth, it is likely that hedgehogs occasionally pass through as part of their commuting and foraging routes. Precautionary mitigation measures are recommended to minimise any risk of disturbance, killing or injuring during works.

5.3.6 Invertebrates

Much of the site is low in plant species diversity and regularly managed, reducing its overall suitability for invertebrates. While the site is likely to support low numbers of pollinating insects, its ecological value for a range of invertebrates or protected invertebrates remains limited due to the lack of diverse nectar sources and structural variety, and they are not considered further.

5.3.7 Nesting Birds

Empty and active bird nests were identified within the outbuildings during the suite of surveys. There are expected to be numerous nesting birds across the site every summer given the abundance of perches, ledges, and cavities available for birds. The grassland, garden shrubs and nearby trees which are due for retention provide foraging opportunities for widespread bird species, including house sparrow, robin, and blue tit. Precautionary mitigation measures are recommended to minimise any risk of disturbance, killing or injuring birds during works.

5.3.8 Reptiles

The site is considered to be of low value for reptiles, with hardstanding, gravel, and regularly managed lawns limiting suitable habitat particularly near the construction impact zone. While some areas of grassland beyond the immediate rear garden provide potential refuge and foraging opportunities, they are fragmented, and it is unlikely that reptiles will be using the buildings, hardstanding or gravel areas although they may cross these areas and therefore enter the works

zone. The peripheries of the garden provide some connectivity to the wider landscape. Grass snakes may occasionally be attracted to the ponds. A Precautionary Working Method Statement (PWMS) is recommended to minimise any potential impacts.

5.3.9 Other Species

The ponds on-site lack the characteristics necessary to support water voles or otters. It is neither wide nor deep enough to provide suitable habitat, and do not offer the dense bankside vegetation or continuous water presence required for water voles. Similarly, it does not provide the foraging opportunities, cover, or connectivity to larger watercourses that otters require. As a result, water voles and otters are not considered further in this assessment.

6. Mitigation

This section outlines the potential impacts of the proposed development on each relevant ecological feature identified in Section 5. The assessment considers all phases of the development, including but not limited to construction, operation, restoration, and decommission. Each impact is carefully described and justified, considering the scale, duration, and nature of the effect on the ecological receptors.

Mitigation measures are clearly presented to demonstrate how significant impacts can be avoided or reduced, following the CIEEM Mitigation Hierarchy (2024). Any residual impacts, after mitigation has been applied, are assessed to ensure their significance is minimised and fully accounted for in the overall ecological assessment.

6.1 Designated Sites

Potential impacts

No significant impacts upon designated sites are anticipated.

Mitigation

None required.

Significance of residual effects

There will be no residual effects.

6.2 Habitats

Potential impacts

Unmitigated site work may result in dust deposition on vegetation, soil contamination from accidental fuel, chemical or solvent spillages, and localised compaction of the ground by machinery which could lead to a loss of microhabitats as well as individual plants, shrubs or trees.

Mitigation measures

- All construction activities will be undertaken in accordance with relevant best practice guidance for the control of dust, noise and emissions.
- Hazardous materials will be stored securely on impermeable surfaces away from vegetated areas. This includes substances such as wet concrete, cement washings, oils, paints and solvents, which can cause pollution or damage to soils and vegetation if spilled. Accidental spills will be dealt with immediately by contractors.

- Contractor vehicles and machinery will remain on existing hardstanding or gravel surfaces where practicable. Temporary ground protection (e.g. track mats or boards) will be used where access across grassland or softer ground is unavoidable.
- Vegetation to be retained will be demarcated prior to works, and unnecessary encroachment into vegetated areas will be avoided.

Significance of residual effects

With mitigation measures in place, there will be no residual effects.

6.3 Protected Species

6.3.1 Bats

Potential Impacts

The proposed works will result in the destruction of three of the confirmed bat roosts, which is detailed in Table 6.1 and require an EPSML to proceed lawfully and in line with Table 3.2 of the Bat Mitigation Guidelines (2023).

As Barn 1's roof and interior roof structure is unaffected by the proposals, the four bat roosts located within the building and under its roof tiles will be retained and will not be subject to disturbance, damage or destruction that would constitute needing an EPSML. **Should the scope of the works or the proposals change in future, i.e. internal or external conversion, alterations, insulation, roof fabric modifications, or roof repairs, be required on Barn 1, ecological advice should be sought immediately as the building is likely to need to be covered under an EPSML.**

Table 6.1: Importance of each roost on-site according to Bat Mitigation Guidelines (2023)

Location	Bat species	Peak count	Roost type	Roost value	Impact
Barn 1	Soprano pipistrelle	7	Day	Site	Retain
Barn 1	Barbastelle	1	Day	Local	Retain
Barn 1	Natterer's	1	Day	Site	Retain
Barn 1	Brown long-eared	1	Day	Site	Retain
Barn 2	Soprano pipistrelle	1	Day	Site	Destroy
Barn 2	Whiskered	1	Day	Site	Destroy
Barn 3	Brown long-eared	1	Day	Site	Destroy

Mitigation Strategy for Bats

It is important that this section is reviewed and understood by all relevant parties prior to programming the proposed works.

This Bat Mitigation Strategy covers:

1. The need for, and timing of, a bat mitigation licence/EPsML and who can apply.
2. Commencement of works under the direct supervision of a licensed ecologist.
3. Timing restrictions.
4. Approved roofing membranes.
5. Lighting.
6. Compensation.

1. EPsML.

To lawfully destroy, damage, or cause obstruction to the bat roosts on-site, an **EPsML (European Protected Species Mitigation Licence)** from Natural England will be obtained. An **EPsML can only be applied for by a licensed and experienced bat ecologist**. Planning permission must be in place prior to submission of the licence application, with all relevant conditions discharged. The appointed ecologist should be given sufficient notice - ideally 10 weeks prior to the commencement of works - to prepare and submit the application. This timeframe allows for the preparation of all necessary documentation, an updated site visit to confirm site conditions have not materially changed, and Natural England's determination period. This lead-in time must be factored into the overall works programme. **Alternatively, a low impact licence** may be able to be applied for by a specialist consultant who is registered with Natural England, and these have a faster turnaround time of 2-3 weeks.

2. Supervision of works.

As a condition of the EPsML, on the first day of works the licensed bat ecologist will install two **bat boxes**, made of Woodcrete/Woodstone, or FSC certified exterior grade plywood with ceramic inserts onto a building or mature tree. The box will face between southeast and southwest, at a height of approximately 3m, receiving several hours of daylight. The box will remain in place for a minimum of five years, and any future relocation or removal will require advice from an ecologist. **The ecologist will ensure that the roof and internal structure of Barn 1 remain suitable for bats throughout the construction phases. These areas will remain unconverted, unobstructed and free from damage or disturbance, such that no offence is**

committed. As the bat roosts within Barn 1 are not included within the EPSML, they will be retained and unaffected by the proposed works.

Once the bat box is installed, the licensed bat ecologist will deliver a mandatory “toolbox talk” to all contractors working on-site. They will brief the contractors on how to work sensitively around roosts, such as the procedure of what happens when a bat is found. All roof tiles, cladding, and other PRFs will be removed by hand, by the ecologist or by a contractor under **direct ecological supervision** in a process known as the “destructive search.” Any such works carried out without ecological supervision, or without prior communication with the ecologist, will breach the terms of the EPSML. The ecologist will require the contractors to pause occasionally, for example, should they need to check underneath tiles using a torch or endoscope before removal, or where they may need to capture a bat to move it safely out of the works area. All healthy bats found during the destructive search by the ecologist will be relocated into the previously installed bat box.

Once all PRFs are removed and the ecologist confirms there is no further risk to bats, works may proceed without supervision. However, if a bat is found while the ecologist is off-site, work will stop, and the ecologist contacted for advice. **A bat found while the ecologist is off-site should avoid being handled and be left gently covered, for example, under an upturned box or by carefully replacing a tile over it to keep it sheltered.**

3. Timing.

Once planning is approved, and once the EPSML has been granted, **works can commence between spring and autumn**, avoiding commencement during November to February inclusive. This avoids disturbance of the roof and loft void during the winter hibernation when bats are highly vulnerable to disturbance while they are in torpor. No breeding roosts or opportunities for breeding roosts were recorded on-site, so there are proposed to be no summer restrictions on work timings.

4. Roofing membranes.

Roofing membrane – Breathable Roofing Membranes (BRMs) OR Non-Bitumen Coated Roofing Membranes (NBCRMs) that have not been approved by Natural England cannot be used in roofs or structures that are being or will be used by bats. NBCRMs are non-woven, and bat claws can loosen the fibres, leading to the fatal entanglement of wings and feet. This risk applies to all non-

woven membranes, including modern bitumen felts with polypropylene filaments (e.g., type 5U). The project may use *TLX BatSafe* BRM or traditional 1F roofing felt.

5. Lighting.

External lighting will be avoided or carefully designed to avoid light spill. Artificial Light at Night (ALAN) can disrupt natural bat behaviour by altering foraging efficiency, commuting and social behaviour. Even low levels of artificial light can fragment these routes and deter their activity entirely (Stone et al., 2009). As such, where lighting is intended to be installed for safety or security, the following mitigation measures will be implemented:

- Motion-activated lighting will be used in place of continuous illumination, with timers set to a short delay (1-2 minutes) after the last movement.
- Light intensity will be kept low (e.g. ≤ 500 lumens), using warm white light sources (approximately 2700 K) to reduce blue light content, which is especially disruptive to bats.
- All external fittings will be installed facing downward and fitted with appropriate shields or cowls to minimise upward and horizontal light spill.

6. Compensation

To ensure no net loss of bat roosting opportunities on-site, the **proposed development will include proportionate compensation measures** for bats, to be finalised at the EPSML application stage. These may include installing bat access tiles (either in the new roof ridges, or just below). See right, Figure 6.1.

Figure 6.1 Bat access roof tile and ridge tile.



Significance of residual effects

With mitigation measures in place, there will be no residual effects, and the works are highly unlikely to impact the Favourable Conservation Status (FCS) of the bats on-site.

6.3.2 Nesting Birds

Potential impacts

There is a risk that nesting birds, including their nests, eggs or dependent young, could be harmed, injured or killed during the works if buildings, vegetation, climbing plants or shrubs are disturbed, removed or damaged. This risk applies to both external vegetation and building fabric,

as well as internal features such as ledges, crevices and stonework within outbuildings, where bird nests have been recorded.

Mitigation for Nesting Birds

- To avoid delays, it is recommended that vegetation removal and works affecting internal nesting features are programmed outside the nesting season wherever possible.
- Vegetation clearance, including the removal of climbing plants where required to accommodate the works, will be undertaken outside the bird nesting season (defined as March to August inclusive, although some species such as robin and wren may begin nesting in February).
- Where works are required during the nesting season, the ecologist will undertake a check of all affected vegetation, building fabric and internal ledges immediately prior to works commencing. Should an active bird nest be identified, a minimum 5m buffer will be established around the nest. Works within this buffer will be postponed until the young have fledged and the nest is no longer in use, as confirmed by the ecologist.

Significance of residual effects

With mitigation measures in place, there will be no residual effects.

6.3.3 Reptiles and GCN

Potential impacts

Construction phase activities have very low potential to inadvertently harm or kill reptiles and amphibians that may occasionally cross the site in the absence of mitigation.

Mitigation measures

Works will follow this unlicensed Precautionary Working Method Statement (PWMS) to protect GCNs and reptiles from harm.

- Destructive works and groundworks will avoid the winter hibernation period (November–February inclusive). Groundworks will be short in duration and conducted only during daylight hours.
- The grassland on-site particularly near to the construction impact zone will be kept short to discourage animals from sheltering within it.
- Piles of soil, rubble, pallets, and other materials will be stored on hardstanding or gravel. When they require removal or relocation, they will be dismantled carefully by hand.

- Excavations left open overnight will be fully covered or fitted with escape ramps. Ramps should either be soil slopes or a gently sloping roughened timber plank (maximum 45° angle) to enable animals to escape freely overnight.
- Open pipework will be checked for animals before use and sealed overnight.
- Procedure for discovering animals on-site:
 - If a reptile is found during works, all works will pause. The animal will be allowed time to vacate the area safely or it will be moved gently by hand to the northwest boundary of the garden outside the impact zone. It will be carefully placed onto earth or grass, directly beneath a shrub or hedgerow. Provided the law has not been broken i.e. a reptile has not been killed or injured, no further action or licensing is required.
 - If a GCN is found during works, all works will stop. An ecologist will be contacted immediately to advise on next steps to determine the best course of action.
 - If another animal is found on-site that is neither amphibian nor reptile, such as a hedgehog, all works will pause to allow the animal to vacate the works area freely. If it cannot do this due to apparent illness or injury, an ecologist, a vet or a local wildlife hospital will be contacted immediately for advice.
- No vehicles will be parked on grassland overnight.
- No vegetation will be burned on-site.

Significance of residual effects

Following the PWMS will ensure there are no residual effects and this PWMS will also protect small animals such as [REDACTED] hedgehogs, common toad and other amphibians from harm.

7. Enhancements

The proposals at Tanners Farm will adhere to Policies 25 and 31 in the Horsham District Planning Framework by integrating ecological enhancements into the project's designs. The following recommendations have been made for this project in addition to mitigation measures:

Species	On-site Enhancements	Examples
Nesting Birds	At least two bird nesting features will be installed on-site. The type and placement of the boxes will be carefully chosen to maximise effectiveness. They may be: - External nest box: a standard nest box, such as those available from <i>Vivara Pro</i>, will be installed to support small garden birds like sparrows, robins, and wrens. Positioned around 2-4m above ground level, ideally under eaves or on a sheltered wall or mature tree. The box will be placed away from prevailing winds and direct sunlight. - Shrubs and vegetation: for bird species that prefer covered nesting sites, such as robins and wrens, nest boxes can also be positioned within dense shrubs or climbing vegetation. Placing boxes within thick hedgerows or ivy-covered areas helps replicate their preferred nesting environment, offering shelter and protection from predators.	<i>Schwegler 1B</i>  <i>Vivara Pro Seville</i>  <i>Schwegler 2H</i> 
Reptiles, GCNs hedgehogs, and invertebrates	One log pile or log pyramid is to be constructed on-site. The bottom layer will be buried to encourage beetles and earthworms and it will be positioned in an undisturbed location, e.g. behind shrubs. Logs may contain drilled holes 5-10mm wide for beetles and solitary bees to nest in.	<i>Log pyramid</i> 

8. Conclusion

The ecological surveys and impact assessment at Tanners Farm Barns have that the site supports seven bat roosts, of which three will be destroyed during works. To proceed lawfully the works will need to be covered under an EPSML from Natural England. Suitable mitigation measures, including bat access tiles, bat boxes, appropriate work timing, and bat-safe roofing membranes, have been proposed.

Other protected species, including [REDACTED] GCN, reptiles, hedgehogs, and nesting birds, may be at risk of harm during works. Precautionary Working Method Statements (PWMS) will be followed to avoid and minimise any risks. No hedgerows or other ecologically important habitats are proposed to be lost to the scheme which is predominantly set within the existing footprints of the barns.

By following the proposed mitigation, compensation, and enhancement measures, there will be no significant residual ecological effects.

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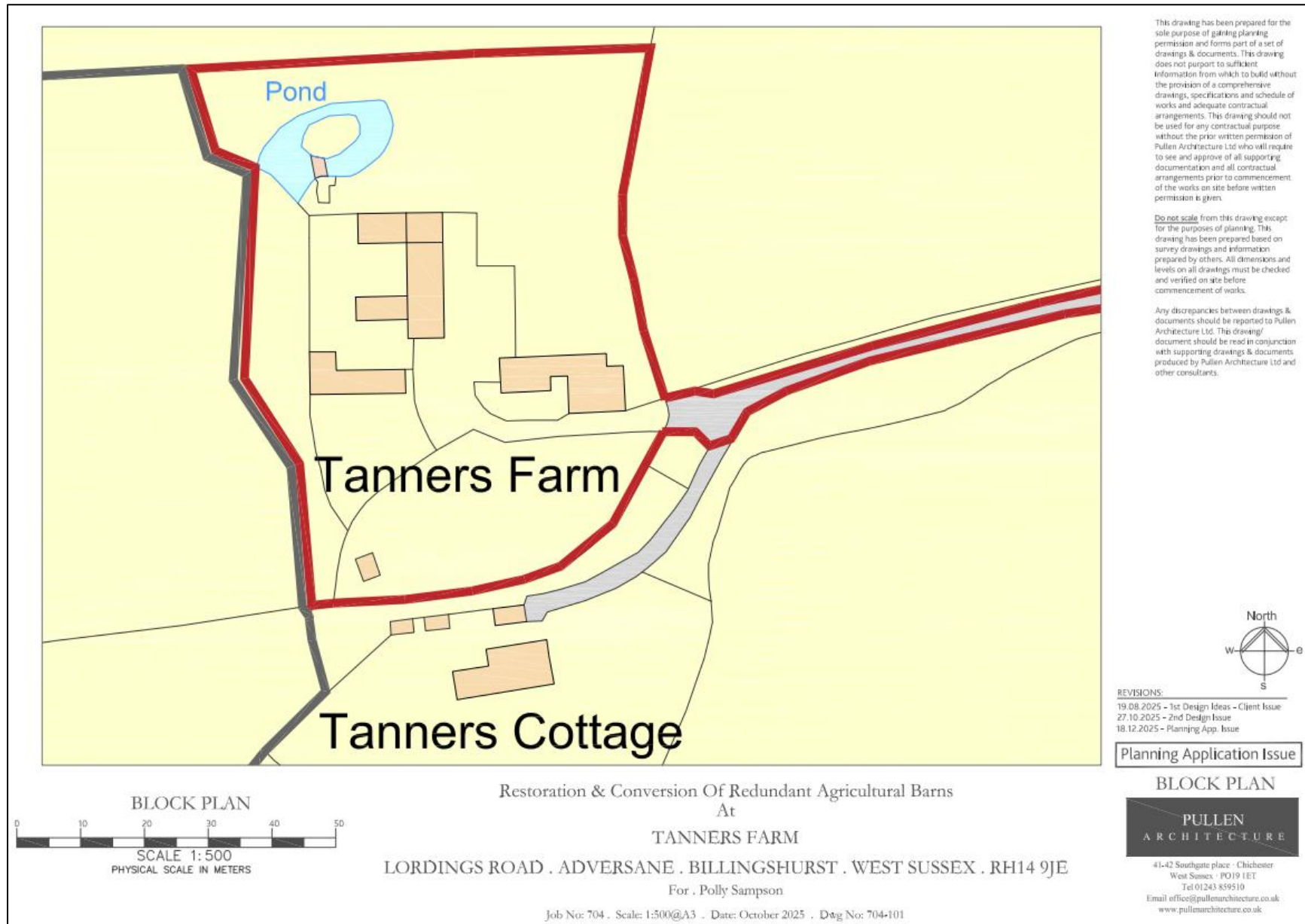
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Appendix 1: Existing Site Plan



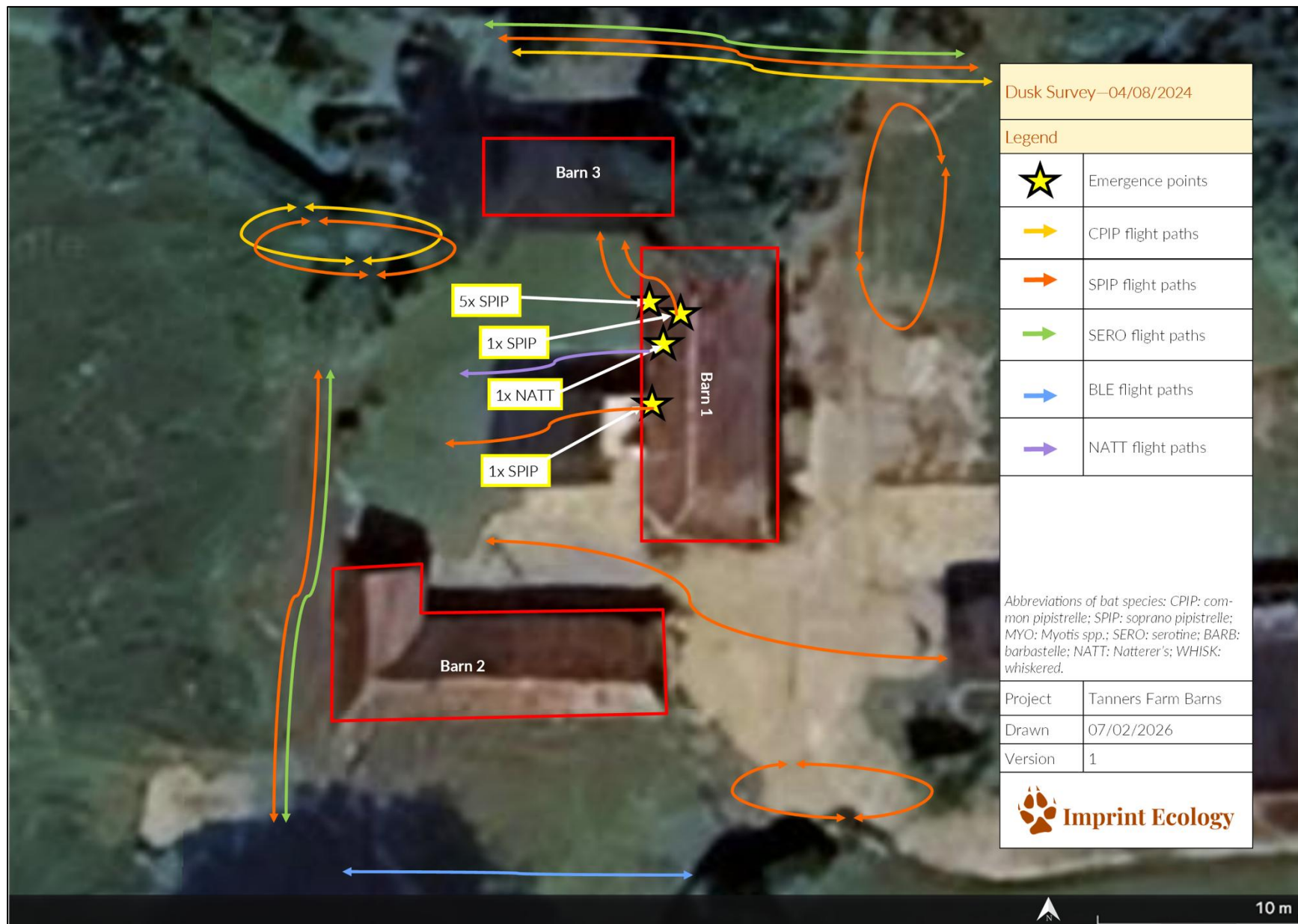
Appendix 2: Bat Surveyor and NVA Plan

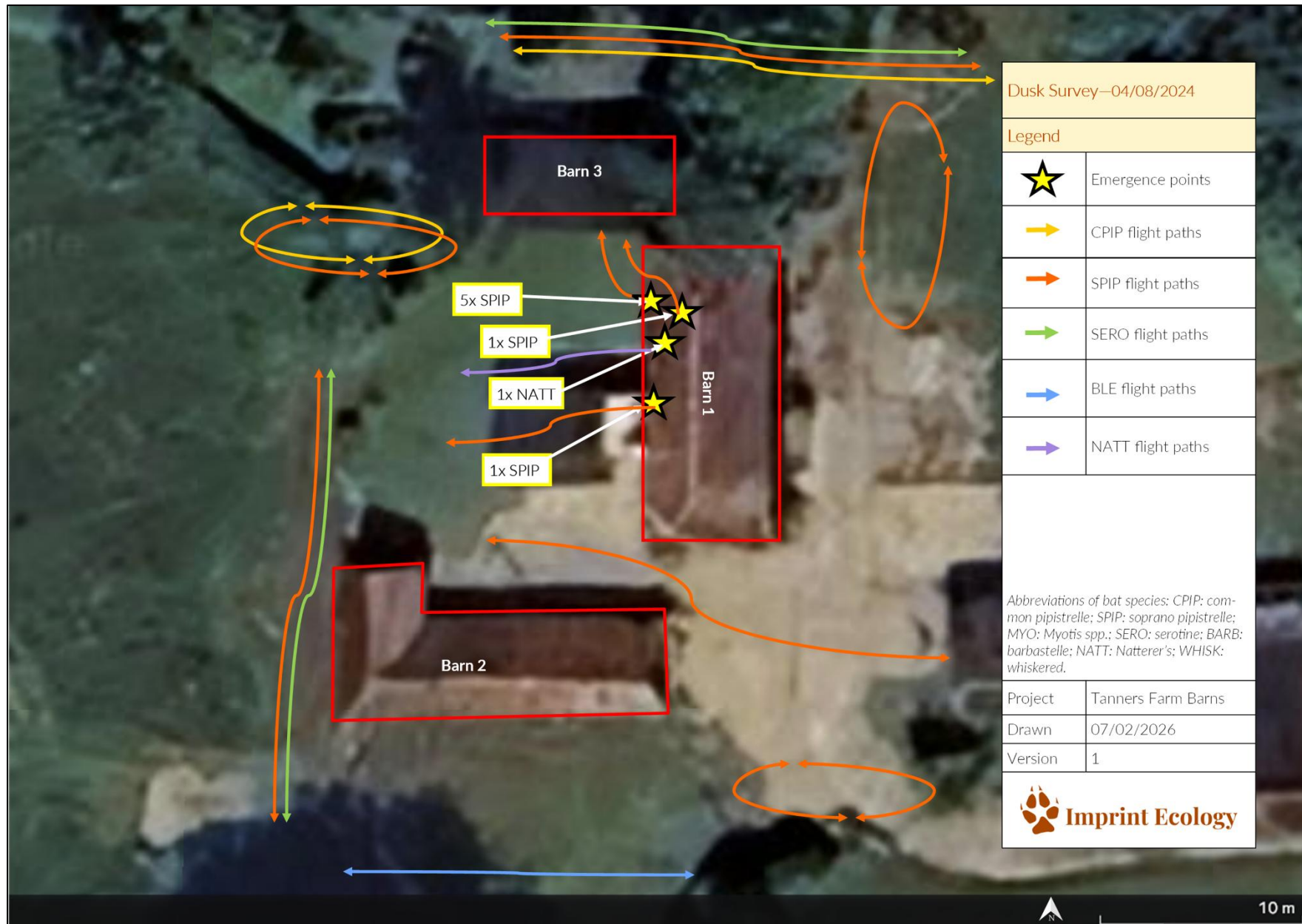


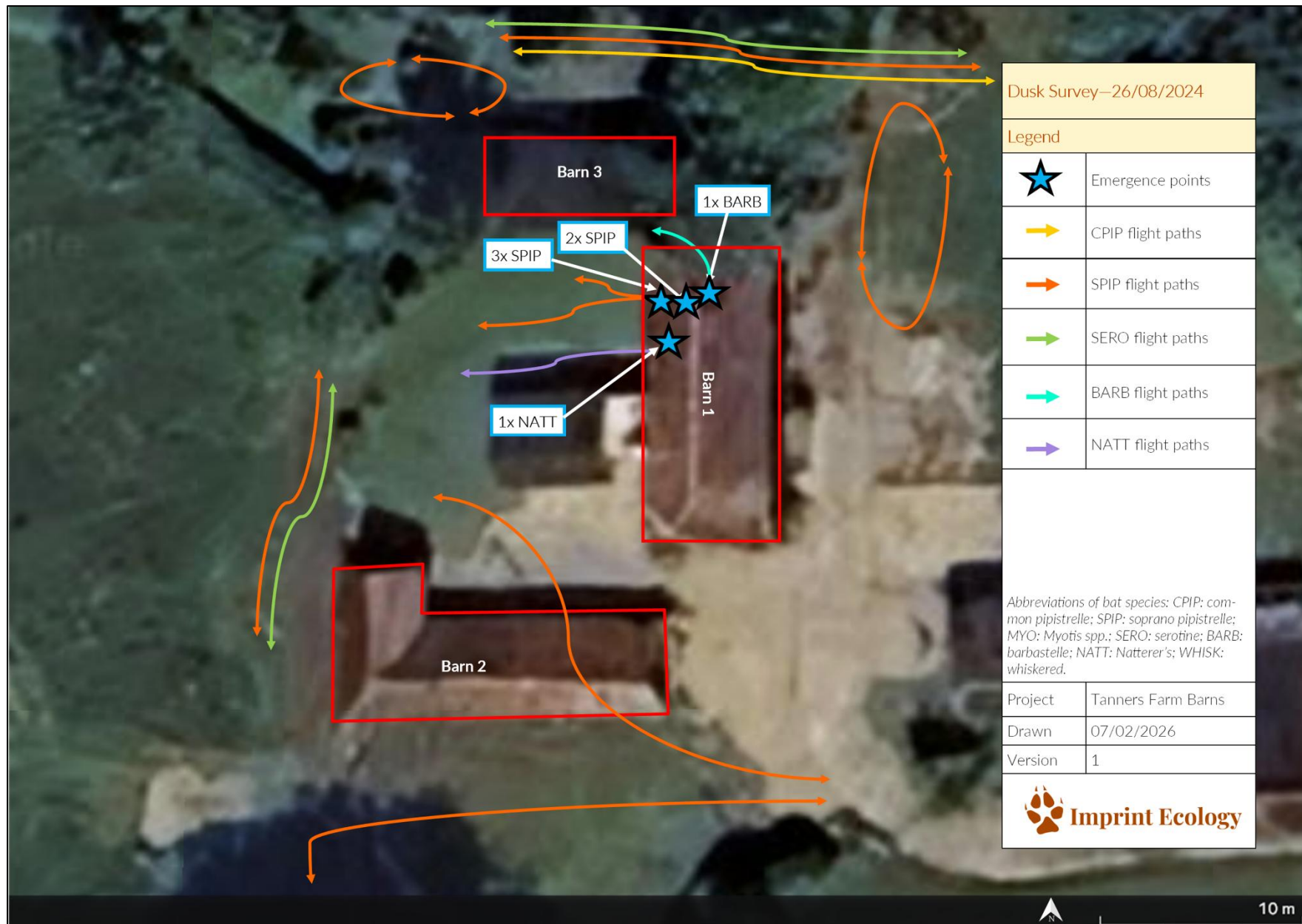
Appendix 3: Combined Bat Survey Results

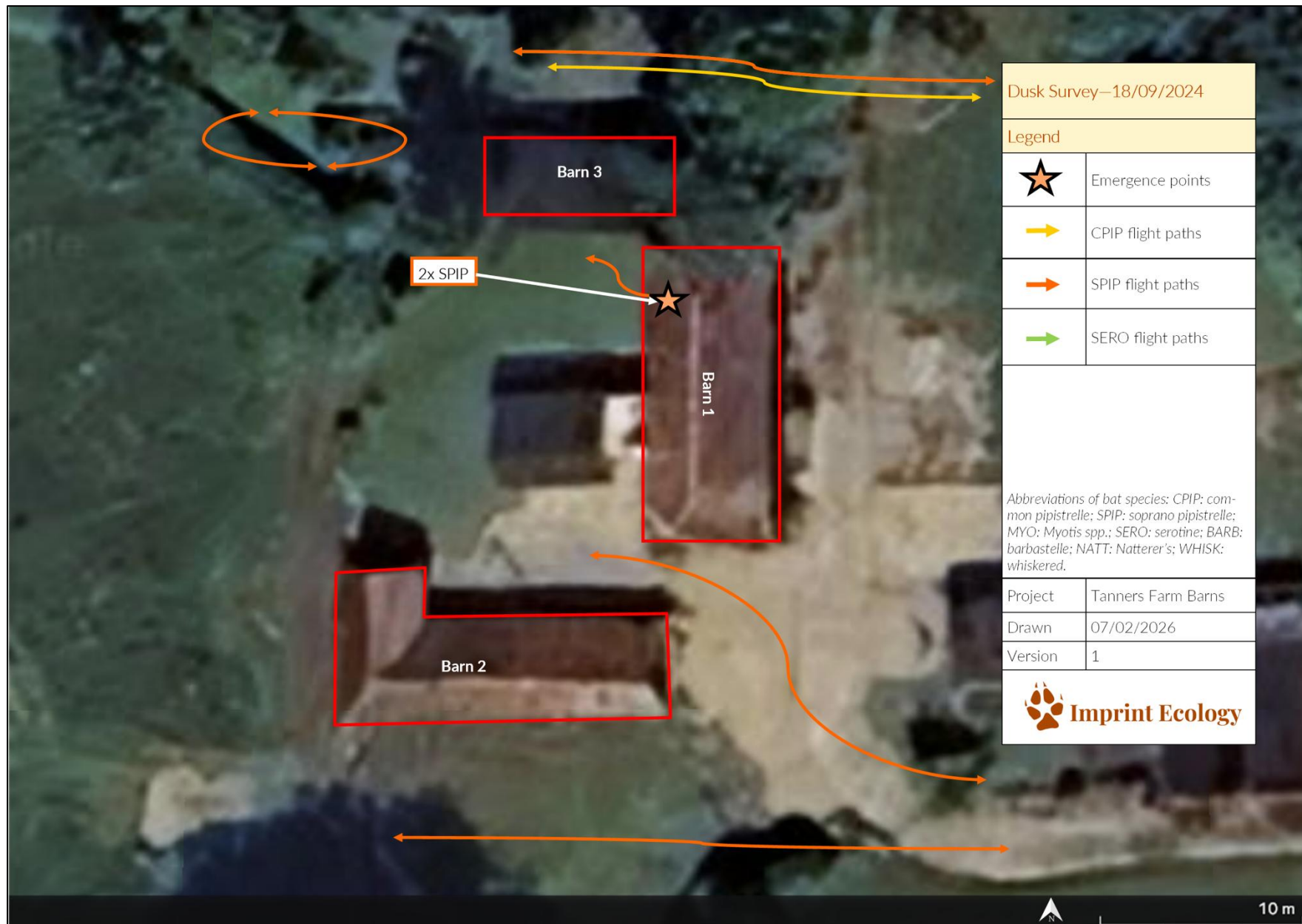


Appendix 4: Bat Survey Results Per Survey









Appendix 5: DNA Analysis Results

Barn 1:



Sample ID: EG-1827-2

Sample information:

Sample type: Faecal	Species group: Bats
Suspected species:	Site Location: TQ06758 24466
Comments: Tanners Farm, Large East Barn	

Laboratory information:

DNA Extraction Code: EG-2024-2192	Identification method: qPCR
Analysis Procedure Notes:	
Laboratory Comments:	
None	

Species Identified:

Species 1: Pipistrellus pygmaeus (Soprano pipistrelle bat)	qPCR Ct Value: 19
Species 2: Plecotus auritus (Brown long-eared bat)	qPCR Ct Value: 22
Species 3: Barbastella barbastellus (Barbastelle bat)	qPCR Ct Value: 23
Species 4: Myotis nattereri (Natterer's bat)	qPCR Ct Value: 20

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Barn 2:



Results

Sample ID: EG-1827-1

Sample information:

Sample type: Faecal	Species group: Bats
Suspected species:	Site Location: TQ06747 24452
Comments: Tanners Farm, South Barn	

Laboratory information:

DNA Extraction Code: EG-2024-2191	Identification method: qPCR
Analysis Procedure Notes:	
Laboratory Comments:	
None	

Species Identified:

Species 1: Pipistrellus pygmaeus (Soprano pipistrelle bat)	qPCR Ct Value: 25
Species 2: Myotis mystacinus (Whiskered bat)	qPCR Ct Value: 22

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Barn 3:



Sample ID: EG-1827-3

Sample information:

Sample type: Faecal

Species group: Bats

Suspected species:

Site Location: TQ06750 24477

Comments: Tanners Farm, North Barn

Laboratory information:

DNA Extraction Code: EG-2024-2193

Identification method: qPCR

Analysis Procedure Notes:

All UK bat species tested for - only a single species detected in this sample.

Laboratory Comments:

None

Species Identified:

Species 1: Plecotus auritus (Brown long-eared bat)

qPCR Ct Value: 23

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