

**Preliminary Ecological
Appraisal and BNG
Baseline Report**
Land North of Parthings
Lane, Horsham

Executive Summary

This Preliminary Ecological Appraisal (PEA) assesses the ecological baseline at the Land North of Parthings Lane, Tower Hill, Horsham, West Sussex (TQ 15985 29802). The 1 hectare site is proposed for development as a small-scale glamping facility comprising five glamping pods with associated infrastructure and ecological enhancement measures.

The site comprises modified grassland (0.700 ha) in poor condition dominated by rough meadow-grass with evidence of horse grazing, and bramble scrub (0.177 ha) providing structural diversity. Both habitats are of relatively low ecological value individually but contribute to landscape connectivity. The baseline biodiversity assessment calculated 2.55 habitat units.

Protected Species

Sussex Biodiversity Record Centre data (between 2015–2025) confirm some protected species presence within 1 km:

- Bats: Eight species including common pipistrelle, soprano pipistrelle, and brown long-eared bat. Boundary features provide commuting corridors.
- Great Crested Newt: Six records within 1 km (peak 97 individuals, 2017). Sub-optimal terrestrial habitat on site, a dry pond is located 50m from the site boundary.
- Birds: Notable species include red kite (17 records), skylark, song thrush, bullfinch, and yellowhammer. Site supports habitat for common breeding birds.
- Reptiles: Confirmed populations of slow-worm (max 95), common lizard (max 12), and grass snake within 1 km.
- Other Species: hedgehog (15 records), priority invertebrates including stag beetle and brown hairstreak.

Two Local Wildlife Sites (H08 Sparrow Copse, H22 High Wood) containing ancient woodland lie within 1 km, demonstrating high surrounding ecological value.

Recommendations

Ecological constraints are manageable through standard mitigation:

- Legal Compliance: Vegetation clearance outside bird nesting season (March-August), sensitive lighting design (<2700K, downward-facing), precautionary reptile working methods, biosecurity protocols, and Ecological Clerk of Works oversight.
- Enhancement Opportunities: Species-rich grassland creation, native scrub expansion with blackthorn, native tree planting, wildlife boxes installation, and reptile refugia provision.
- Biodiversity Net Gain: Proposed enhancement delivers 51.07% net gain (1.15 additional habitat units), significantly exceeding the 10% requirement, secured through a 30-year management plan.

The development is ecologically deliverable with appropriate mitigation and offers substantial biodiversity enhancement opportunities through sensitive design and comprehensive ecological measures.

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Introduction

Background and Purpose

This Preliminary Ecological Appraisal (PEA), including an initial Biodiversity Net Gain (BNG) baseline has been prepared on behalf of Mr James Lowe, to inform proposed development at Land North at Parthings Lane, Horsham. The report supports the planning process by identifying the ecological value of the site and establishing a biodiversity baseline in accordance with current UK legislation and Horsham District Council requirements.

The aims of this report are to:

Undertake a Preliminary Ecological Appraisal (PEA):

- Complete an Extended UK Habitat Classification (UKHab) survey to identify and map all habitat types present on site.
- Assess the potential for the site to support protected and notable species, using both field survey and desk-based review of local biological records.

Establish the initial BNG baseline:

- Undertake habitat condition assessments (HCA) using quadrat-based botanical surveys and photographic evidence.
- Calculate the site's baseline biodiversity units using the statutory BNG metric, in line with current DEFRA and Natural England guidance.

Inform Planning and Design:

- Provide recommendations for further surveys, mitigation, and opportunities for ecological enhancement, ensuring the proposed development can achieve at least 10% net gain in biodiversity as required by planning policy.
- Present clear, robust baseline data to support planning applications and future ecological management of the site.

This report incorporates the results of the field survey, desk study, habitat mapping, condition assessments, and BNG calculations. It is intended for use by the client, design team, and planning authority to guide the development process and support a successful planning application.

This PEA has been undertaken in accordance with CIEEM Guidelines for Preliminary Ecological Appraisal (2nd edition, 2017).

Site description

The Land North of Parthings Lane, Tower Hill, Horsham (the site) is a modest, semi-rural parcel situated to the south west of Horsham town centre, within Horsham District, West Sussex. The site is accessed directly from Parthings Lane and is centred at National Grid Reference TQ 15985 29802. Enclosed by well-defined redline and ownership boundaries, the area covers approximately 1 hectare, as outlined in the location plan, Figure 1. The wider landscape surrounding the site is typical of the local countryside, with a mosaic of mature woodland, open pasture, and hedgerow-delineated fields creating a varied ecological context.

Within the boundaries, the site is characterised primarily by open grassland interspersed with established tree cover and bramble scrub. The wider site ownership includes other areas of bramble scrub, native hedgerows, horse grazed grassland, and existing trees. The presence of

public rights of way bordering the land and nearby rural lanes adds to the site's accessibility while maintaining a secluded, natural character. The absence of existing built structures allows for a habitat-rich environment, and the site is framed by mature woodland that forms clear peripheral definition and ecological connectivity.

No statutory nature conservation designations exist within the site or immediate surroundings, and it lies beyond any conservation area or listed building restrictions. The semi-natural habitats present, in conjunction with adjacent woodland and grassland, create potential for local biodiversity support, particularly for bird, bat, and small mammal species. As shown on the layout plan, the site's spatial arrangement, including existing vegetation and water features, supports ecological resilience and landscape character.

The approximate red line boundary of the site and the immediate surrounding area are shown in Figure 1.



Figure 1 Approximate location of the red line boundary and immediate surroundings, based on Google Earth Pro imagery dated 24 July 2024 (image captured July 2025).

Proposed development

The 'proposed development' comprises the creation of a small-scale glamping site designed to blend unobtrusively into its surroundings, with a strong emphasis on ecological enhancement. The scheme will introduce five front-entry glamping pods, each set on decking to minimise ground disturbance, and these will be sited sensitively to avoid removal of mature trees and maintain views across the landscape. Pedestrian access throughout the site will be provided via permeable pathways formed from sympathetic natural materials, linking the accommodation with communal facilities. Visitor needs will be supported by the provision of a parking area at the site entrance, utilising permeable surfacing to reduce surface water runoff, as well as a modest storage hut and bicycle store, and a screened refuse and recycling facility to ensure sustainable operations. The existing vehicle access from Parthings Lane will be retained to allow safe entry and exit without additional highways impact. The landscaping strategy is centred on promoting biodiversity and

habitat enrichment, with new native tree and shrub planting set to supplement existing woodland, boundary hedgerows strengthening ecological corridors and providing visual screening, and the creation of a species rich grassland meadow area to promote pollinator species and overall species diversity. All new hard landscaping is specified as permeable wherever possible to support sustainable drainage and hydrological function. The limited development footprint, restrained architectural scale, and comprehensive ecological measures together reflect a strong commitment to conserving and enhancing the site's natural assets, in accordance with best practice and local ecological priorities.

Figure 2 shows the redline boundary and proposed outline design for the proposed development which is still subject to change.



Figure 2 Proposed development outline design.

Relevant Planning Policies and Legislation

The site was surveyed to assess its ecological value and to ensure the proposals were compliant with relevant planning policy and legislation. Policy guidance is provided by the National Planning Policy Framework (NPPF 2024) as well as the Horsham District Planning Framework (2015). These policies included the following which are considered relevant to ecology, biodiversity, and nature conservation:

Horsham District Planning Framework (2015)

- Policy 24: Environmental Protection – Ensures that development does not have an unacceptable impact on the environment.
- Policy 25: The Natural Environment and Landscape Character – Requires the conservation and enhancement of the natural environment and landscape character.

- Policy 26: Strategic Countryside Protection – Protects the countryside from inappropriate development.
- Policy 31: Green Infrastructure and Biodiversity – Promotes the retention, protection, and enhancement of biodiversity and green infrastructure.
- Policy 37: Sustainable Construction – Encourages sustainable design and construction methods that support environmental objectives.

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 remains the principal legislation for wildlife protection in Great Britain, providing statutory safeguards for wild animals, plants, and habitats, and underpinning the designation and protection of Sites of Special Scientific Interest (SSSIs). The Act also governs the management of public rights of way and the amendment of the Definitive Map and Statement in West Sussex. Recent amendments, introduced through Section 111 of the Environment Act 2021 and in force since September 2022, have expanded the licensing regime under Section 16 of the Act. Licences for activities affecting protected species can now be issued for reasons of overriding public interest, provided there is no satisfactory alternative and the action will not be detrimental to the survival of the species concerned. The maximum validity period for such licences has also been extended to five years, providing greater flexibility for long-term projects. These changes facilitate development activities while maintaining robust protection for wildlife, and all relevant works at the site will be undertaken in accordance with the latest requirements of the Act and associated guidance.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 (as amended) transpose the EU Habitats and Birds Directives into UK law, ensuring the continued protection of European Protected Species (EPS) and the designation and management of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) following Brexit. The Regulations set out the process for Appropriate Assessment of plans or projects that may affect these sites, and remain a key mechanism for the conservation of habitats and species of European importance across the UK. The Regulations have been updated to reflect changes in domestic policy, but the core requirements for protecting designated sites and species remain unchanged. All relevant ecological assessments and any required mitigation or licensing at the site will be undertaken in accordance with these Regulations and the latest Natural England guidance.

Environment Act 2021 (Biodiversity Net Gain requirement)

The Environment Act 2021 has introduced a mandatory requirement for most new developments in England to deliver at least 10% Biodiversity Net Gain (BNG) compared to the pre-development baseline, as measured by the statutory biodiversity metric. This requirement became effective for major developments from 12 February 2024 and was extended to small sites from 2 April 2024. All BNG measures must ultimately be secured for a minimum of 30 years through legal agreements such as Section 106 obligations or conservation covenants, and planning applications must be supported by a Biodiversity Gain Plan at the appropriate stage.

This report provides a BNG baseline assessment only. The baseline establishes the existing biodiversity value of the site using the statutory metric, in line with current legislation and Horsham District Council policy, and does not set out the final BNG proposals or management commitments. The baseline figures presented here will inform the development of detailed design and the preparation of a full Biodiversity Gain Plan, which will be required at the post-consent stage to demonstrate how the minimum 10% net gain will be achieved and maintained for at least 30 years, in accordance with statutory requirements.

The baseline assessment ensures that the planning process is informed by robust, up-to-date ecological data and provides the necessary foundation for future BNG planning, management, and monitoring as the scheme progresses.

Methodology

Desk Study

A desk study was undertaken, July 2025, to provide a comprehensive overview of the ecological context of the site and its surroundings, and to inform the scope of the field survey and assessment. The desk study aimed to identify:

- Statutory and non-statutory designated sites within the zone of influence,
- Records of protected and notable species,
- Priority habitats and ecological networks relevant to the site.

Data Sources and Search Areas

Sussex Biodiversity Record Centre (SxBRC)

Ecological data were obtained from SxBRC, the principal environmental record centre for East and West Sussex, including the Horsham district and Warnham parish. SxBRC collates data from local recorders, ecological consultants, and the public, ensuring a comprehensive and up-to-date biodiversity dataset.

The data request included:

- Protected and notable species records within a 1km radius of the site boundary
- Bat records within a 1km radius
- Bird records within a 1km radius
- Invasive species records within a 1km radius
- Statutory designated sites within a 2km radius
- Non-statutory designated sites and Section 41 (Priority Habitats) or other notable habitats, within a 1km radius of the site.

Desk study data on protected and notable species will be limited to records from the last ten years to ensure relevance and accuracy for the current assessment. Other data sources included:

- **MAGIC Map (Multi-Agency Geographic Information for the Countryside)** National datasets on statutory sites, habitats, and environmental constraints were reviewed to supplement local records and provide context on landscape-scale ecological features.
- **Aerial Imagery & Ordnance Survey Mapping** Recent aerial photography and OS mapping were used to assess current land use, habitat connectivity, and the wider landscape context.
- **Planning Portal and Local Authority Records** Relevant planning history and previous ecological assessments for the site and adjacent land were reviewed where available.
- **Horsham Green Infrastructure Strategy (2024):** The site was checked against the Horsham District Green Infrastructure Strategy and associated mapping to identify whether any part of the land falls within areas of high or medium strategic significance, such as Biodiversity Opportunity Areas, river corridors, or designated green infrastructure networks.

- **Local Significance and Policy Documents:** Additional reference was made to the Wilder Horsham District Nature Recovery Network (NRN) mapping and any relevant local plans or supplementary planning documents to ensure the assessment aligns with local ecological priorities and planning requirements

The desk study ensured the appraisal was informed by the most current and comprehensive biodiversity data available, supporting robust assessment of ecological constraints and opportunities in line with CIEEM (2017) and best practice.

Field Survey

A walkover survey was conducted on 12 July 2025 to undertake a walkover, habitat condition assessment and to assess the structures on site for bat suitability, in accordance with the CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, completed in the optimal survey period. Surveys were undertaken by suitably qualified ecologists with experience in habitat assessment and protected species evaluation, and in suitable weather conditions to maximise detectability.

Weather conditions during the site walkover:

- Weather: clear sky (0% cloud cover), dry, Beaufort 2, 23-25 °C.
- Visibility: excellent (>1 km) enabling clear identification of field characters.
- Precipitation: none during survey period

Habitats were classified using the latest UK Habitat Classification system (UKHab v2.01). This hierarchical and standardised approach supports detailed baseline habitat assessment and aligns with Biodiversity Net Gain (BNG) metric requirements.

Survey methodology included:

- Systematic mapping of all habitat types and features using GPS-enabled devices and Coreo (2025) in the field app.
- Assessment of habitat condition, structure, and species composition for each habitat parcel.
- Quadrat's were used in each habitat parcel and a DAFOR scale¹ was applied to determine the presence of each species within the quadrat.
- Identification and recording of features with potential to support protected and priority species (e.g., mature trees, hedgerows, ponds, buildings, log piles).
- Direct observation and habitat suitability assessment for protected and notable species, considering both field evidence and desk study records.
- Use of photographic records and detailed target notes to document key habitats, features, and any signs of species presence (e.g., tracks, droppings, nests).
- Assessment of habitat connectivity and potential ecological corridors within and adjacent to the site.

¹ The DAFOR scale (Dominant, Abundant, Frequent, Occasional, Rare) provides a semi-quantitative estimate of vegetation presence and distribution.

Where access was restricted or visibility limited, this was noted, and the potential implications for survey completeness were assessed.

BNG Assessment

The statutory biodiversity metric was used to calculate baseline biodiversity units for the site, in line with current national requirements and Horsham District Council policy.

- Habitats were mapped and classified using UKHab v2.01 to ensure compatibility with the statutory metric.
- Each habitat parcel was assigned a unique reference, and its area, distinctiveness, condition, and strategic significance were assessed according to the metric's criteria and local planning priorities.
- Baseline calculations were based solely on habitats present at the time of survey, prior to any development or enhancement proposals.
- The baseline unit values provide a quantifiable measure of the site's existing biodiversity value and form the reference point for future BNG assessments.

BNG Requirements

BNG was calculated using the statutory biodiversity metric, which categorises habitats into distinctiveness tiers (very high to low) and assesses strategic significance. Loss of "very high" distinctiveness habitats (e.g., lowland meadows) requires bespoke compensation plans.

Strategic Habitat Significance

Habitats are evaluated based on their ecological value and location:

- **High Strategic Significance:** Areas identified within Horsham's Green Infrastructure Strategy (2024), including Biodiversity Opportunity Areas, river corridors, and designated sites. These locations are mapped as core components of the district's ecological network, providing essential habitat for wildlife, supporting ecosystem services, and forming the backbone of landscape-scale ecological connectivity.
- **Medium Strategic Significance:** Priority habitats mapped within the Wilder Horsham District Nature Recovery Network (NRN), which identifies biodiversity-rich zones and potential corridors for ecological connectivity. These areas play a key role in linking core habitats, facilitating species movement, and enhancing the resilience of the wider ecological network, but are not themselves designated as core sites.
- **Low Strategic Significance:** Habitats or features not identified as priorities within local or national nature recovery strategies, such as Nature Recovery Networks, Biodiversity Opportunity Areas, or Green Infrastructure corridors. Typically, these are isolated, fragmented, or heavily modified areas with limited species diversity or ecological function, offering little contribution to landscape-scale connectivity or ecosystem resilience, and not mapped as part of ecological corridors or buffer zones for priority habitats or protected sites.

To determine whether the habitats present on site were of High, Medium or Low significance these local strategy documents were reviewed as part of the desk-based assessment.

Quality Assurance

All survey work and data analysis were subject to internal quality assurance procedures, including

review by a senior ecologist. The methodology was designed to meet or exceed the requirements of CIEEM, DEFRA, Natural England, and Horsham District Council.

Limitations

Although several survey visits were completed to increase the reliability of the ecological assessment, it is important to acknowledge that no amount of survey effort can fully capture the complete use and occupation of a site by all species throughout the year. Multiple visits improve confidence in the findings by allowing for a broader snapshot of seasonal activity and species presence, but ecological systems are inherently dynamic and subject to change. As such, there remains the possibility that some species or ecological interactions were missed, and the assessment provides only a general indication of the site's ecological value at the times surveyed. Further or ongoing surveys may be required to address specific uncertainties or to capture additional seasonal or transient ecological activity.

Data validity

Unless otherwise stated, this report will remain valid for a period of 24 months from the date of the last survey. Beyond this date, update works/surveys may be required and following CIEEM's advice note: On the Lifespan of Ecological Reports and Surveys (2019).

Results

Desk Study Results

Designated Sites

Statutory Designations

There are no statutory designated sites present within 2km of the site, as confirmed by SxBRC and the MAGIC Map.

Non-Statutory Designations

Two Local Wildlife Sites (LWS) are present within a 1km search radius, but neither overlaps the site:

- H08 Sparrow Copse: 8.5 hectares of semi-natural ash/maple woodland with diverse ground flora, located 800m west of the site.
- H22 High Wood: 10.1 hectares of ancient woodland with hornbeam and hazel coppice, located 950m west of the site.

These sites provide important ecological connectivity and demonstrate the high-quality woodland habitat present in the local landscape, with H22 supporting numerous ancient woodland indicator species including Ramsons, Yellow Archangel, Wood Anemone, Moschatel, and Goldilocks Buttercup.

The site does not intersect with mapped Biodiversity Opportunity Areas, river corridors, or Nature Recovery Network corridors of medium or high strategic significance, as confirmed by the Horsham Green Infrastructure Strategy (2024).

Priority Habitats and Species Records

The findings, summarised in Table 1, highlight the presence of key habitats such as deciduous and ancient woodland, as well as records of protected species including bats and birds. Additionally, several Section 41 Priority species were identified.

Table 1 Summary of Priority Habitats, Protected Species, and Other Notable Section 41 Species Recorded Within or Adjacent to the Site and Within a 1km Radius

Category	Feature/Species	Details / Records
Section 41 Priority Habitats	Lowland Mixed Deciduous Woodland	Present within and adjacent to site. Ancient woodland confirmed in LWS H08 and H22; ground flora includes ancient woodland indicators (e.g., Bluebell, Yellow Archangel, Ramsons, Wood Anemone, Moschatel, Goldilocks Buttercup; see LWS citations).
	Hedgerows	There are field boundaries formed of hedgerows within 1km of the site. These are well connected to the site, via the railway sidings to the north and farmland to the south.
	Ponds	There is a pond located 50m north of the site. There are three other ponds within 500m of the site, located between 300-500m south of the site.
	Traditional Orchard	There is an area of traditional orchard 300m south of the site.

Category	Feature/Species	Details / Records
Protected & Notable Species	Bats	Eight species recorded within 1 km: Common Pipistrelle (<i>P. pipistrellus</i> , max 30), Soprano Pipistrelle (<i>P. pygmaeus</i> , max 6), Serotine (<i>Eptesicus serotinus</i>), Noctule (<i>Nyctalus noctula</i> , max 4), Brown Long-eared (<i>Plecotus auritus</i>), Daubenton's (<i>Myotis daubentonii</i> , max 6), Nathusius's Pipistrelle (<i>P. nathusii</i>), and unidentified <i>Myotis</i> .
	Great Crested Newt – <i>Triturus cristatus</i>	Six records within 1 km; with recent individuals at Highwood Mill (2019).
	Hazel Dormouse – <i>Muscardinus avellanarius</i>	There is one record of a single dormouse within 1km of the site. The record was from a residential owner who described a dormice within a bird box within their garden. No other records within 1km of the site.
	Reptiles	High local abundance in SxBRC records: Slow-worm (<i>Anguis fragilis</i> , max 115), Common Lizard (<i>Zootoca vivipara</i> , max 15), Grass Snake (<i>Natrix helvetica</i> , max 5).
	Hedgehog – <i>Erinaceus europaeus</i>	15 records (2015-2021) across search area, including multiple within 500 m.
	Common Toad – <i>Bufo bufo</i>	Records within the last ten years within 1km of the site.
	Notable birds	Multiple S41 / BoCC species recorded: Red Kite (<i>Milvus milvus</i> , 24 recs, max 14), Skylark (<i>Alauda arvensis</i> , 86 recs), Song Thrush (<i>Turdus philomelos</i> , 372 recs), Bullfinch (<i>Pyrrhula pyrrhula</i> , 106 recs), House Sparrow (<i>Passer domesticus</i> , 511 recs), Yellowhammer (<i>Emberiza citrinella</i> , 30 recs).
	Notable Invertebrates	S41 and rare species recorded: Stag Beetle (<i>Lucanus cervus</i> , 3 recs, last 2023), Brown Hairstreak (<i>Thecla betulae</i> , 4 recs), White-letter Hairstreak (<i>Satyrus w-album</i> , 1 rec), Small Heath (<i>Coenonympha pamphilus</i>), Wall (<i>Lasiommata megera</i>), Downy Emerald (<i>Cordulia aenea</i>), Scarce Chaser (<i>Libellula fulva</i>).
	Notable Plants	Bluebell (<i>Hyacinthoides non-scripta</i> , WCA S8 protected), Toothwort (<i>Lathraea squamaria</i> – Sussex Rare), Rye Brome, Dwarf Spurge, Oak-leaved Goosefoot, Chicory, Wild Strawberry, Sanicle, Wood-sorrel and others on Red List / nationally scarce.
Invasive Non-Native Species	N/A	Includes Schedule 9 species: Japanese Knotweed (<i>Fallopia japonica</i> , 4 recs to 2018), Giant Hogweed (<i>Heracleum mantegazzianum</i> , 5 recs to 2022), Himalayan Balsam (<i>Impatiens glandulifera</i> , 3 recs to 2014), Wall & Himalayan Cotoneasters, Cherry Laurel (<i>Prunus laurocerasus</i>), American Mink (<i>Neovison vison</i>), Grey Squirrel (<i>Sciurus carolinensis</i>) and Spanish / hybrid Bluebells.

Field Survey Results

Habitats

There were two distinct habitats recorded across the site, a habitat map showing the location and distribution of habitats is provided in Appendix 1. Table 2 provides a summary of the habitats found across the site, a description and justification for the habitat classification according to UKHab and BNG requirements, the habitat condition, total area in hectares (ha) and where applicable species lists are provided along with a DAFOR scale score based on the distribution of species within quadrats that were surveyed in each habitat parcel.

Table 2 UKHab habitat descriptions for the site including defining species compositions.

Habitat Type (UKHab Code)	Area (ha)	Condition	Habitat Photo	Description/ Justification	Plant Species (combined list of quadrats)
Habitats					
Modified Grassland	0.700	Poor		Based on the UKHab criteria, this habitat comprises Modified Grassland (g4) with secondary codes for scattered scrub (10), tall forbs (16), and evidence of grazing by horses (17), resulting in a structurally diverse, semi-natural grassland mosaic. The grassland is characterized by a sward dominated by productive grasses such as Rough Meadow-grass (<i>Poa trivialis</i>), typically exceeding 75% cover on fertile, neutral soils, and with low overall species diversity, typically fewer than 9 species per square metre. Characteristic species present include Curled Dock (<i>Rumex crispus</i>), Creeping Cinquefoil (<i>Potentilla reptans</i>), and Creeping Buttercup (<i>Ranunculus repens</i>), all of which are indicative of high soil fertility and ongoing disturbance, attributes further supported by the management regime of regular horse grazing. Grazing by horses contributes to both sward maintenance and localised nutrient enrichment, resulting in patches of poached ground, variable sward height, and structural heterogeneity. Scattered scrub elements comprise less than 25% cover, forming small patches that add variation and shelter, while areas of tall forbs develop where grazing intensity is lower. Together, these features create a patchwork of modified grassland, scrub, and tall herb communities, shaped by current land management for equestrian use and thus classified with secondary UKHab codes for scattered scrub (10), tall forbs (16), and horse grazing (17).	Grasses: Rough Meadow-grass dominant Herbs: Curled Dock abundant Creeping Cinquefoil frequent Creeping Buttercup frequent Habitat Structure: Scattered scrub patches (<25% cover) Tall forb communities in less intensively grazed zones Modified grassland matrix (>75% grass cover) Evidence of recent and regular grazing by horses (UKHab secondary code 17), resulting in patchy sward height and subtle poaching

Habitat Type (UKHab Code)	Area (ha)	Condition	Habitat Photo	Description/ Justification	Plant Species (combined list of quadrats)
Bramble Scrub (h3h)	0.177	N/A		The habitat comprises distinct areas of bramble (<i>Rubus fruticosus</i> agg.) scrub, forming dense, often impenetrable thickets that represent a significant structural component within the field's mosaic. Bramble scrub typically establishes on disturbed or unmanaged ground and can expand rapidly, particularly where grazing pressure is light or absent. These stands provide important cover and food resources for a range of wildlife, including nesting and foraging birds, small mammals, and invertebrates. The scrub is largely dominated by bramble, with occasional admixtures of young trees or scattered woody species, but rarely exceeds 5 metres in height. The structure is generally multi-layered, with a dense ground layer composed of leaf litter and semi-shade-tolerant herbs, while the upper strata are formed by mature bramble canes arching over to create sheltered microhabitats. The presence of bramble scrub serves as an indicator of successional processes occurring within the grassland, especially in areas with reduced grazing or following soil disturbance. This habitat type also contributes to overall site heterogeneity by providing patches of dense cover interspersed with open grassland and tall forbs. According to the UKHab Classification, bramble-dominated stands are mapped as "bramble scrub" (UKHab code: h3d), with potential secondary codes for scattered trees (if present) or integration with other scrub types.	Bramble dominant

Protected and Priority Species

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Bats

Desk-based records from the SxBRC confirm eight bat species within 1 km of the site: Common Pipistrelle, (max 30 individuals, last confirmed 2024), Soprano Pipistrelle, (max 6, 2023–2024), Serotine (2024), Noctule (up to 4, 2021–2025), Brown Long-eared Bat (multiple records 2015–2024), Daubenton's Bat (up to 6, 2022–2025), Nathusius's Pipistrelle and unidentified Myotis spp.

No built structures are present within the site itself; assessment of mature trees and internal field boundaries found occasional semi-mature or mature specimens with limited minor features, but no evidence of bat roosts, such as droppings, staining, or feeding remains. The site's boundaries and associated scrub and hedgerows form continuous features with the surrounding landscape and are considered suitable for foraging and commuting activity by local bat populations. Overall, the desk study data indicate that local bat assemblages are typical of the surrounding rural landscape, with records reflecting widespread species distributed across comparable habitats. These records are consistent with general foraging and commuting activity along boundary features and habitat corridors within the wider countryside.

Birds

Desk-based records from the SxBRC confirm the presence of several notable bird species within 1 km of the site, including red kite with 17 records and a maximum flock of eight in 2023, skylark (Red List species) recorded annually with territorial song noted in 2024 and 2025, song thrush present each year with confirmed breeding in 2020, 2022 and 2024, bullfinch with over 40 records, House Sparrow (Red List) with more than 70 records including local flocks, and yellowhammer (Red List) with 15 records, most recently in 2024. Although no records originate from within the site boundary during this period, the on-site habitats, comprising modified grassland, bramble scrub, scattered trees and hedgerow links, are suitable for nesting and foraging by common farmland and garden species, as well as occasional use by these notable species for foraging and movement through the wider landscape. Field surveys in July 2025 confirmed the presence of these habitat features, although no active nests or bird boxes were recorded during the survey period.

Hazel Dormice

No recent (last 10 years) dormouse records are known from within the red line boundary, nor were any field signs (e.g. gnawed nuts, nests) detected during the field survey (July 2025). Desk study records indicate one single record within 1km of the site, however this record was from a residential garden north of the railway line, a location that isn't directly connected through hedgerows or woodland to the site.

On site, the habitat comprises blocks and strips of bramble scrub, sparse young trees, and modified grassland, but the metric and habitat mapping (see BNG baseline) confirm both hedgerows and

higher structural connectivity are largely absent from the red line area itself. This configuration provides limited suitability for dormouse, as the essential habitat structures, continuous woody corridors and diverse, species-rich hedgerows, are lacking within the immediate site. Bramble stands may provide temporary shelter or foraging, yet the site overall is poorly connected for dormouse movement when compared with typical core habitat elsewhere in the district.

While there are regional records of dormice within 1km, neither desk study nor field evidence indicates current or recent use of the site itself. The available on-site habitats are of low suitability for dormouse due to poor woody connectivity and absence of significant hedgerow or woodland cover, and there is currently no strong evidence that the site constitutes important dormouse habitat.

Great crested newt (GCN) and other amphibians

Desk-based records from the SxBRC confirm six records of GCN within 1 km, including a peak abundance of 97 individuals at Hop Oast Stud Farm in 2017 and further confirmed presence at nearby Highwood Mill Pond in 2019. Smooth newt and palmate newt have also been recorded in several ponds within the search radius over recent years, indicating established local populations. On-site, terrestrial habitat, including patches of bramble scrub and modified grassland, lies within dispersal range and existing wildlife corridors leading to nearby ponds, including one approximately 50 m to the north, which was found to be dry at the time of survey (as shown in Figure 3) and is therefore considered unlikely to be suitable for GCN breeding. This dry pond is also at a lower elevation than the site and wildlife dispersal is more likely linear along the railway sidings or to other lower elevation habitat to the north. There is also a culvert that connects this dry pond to the residential estates north of the railway line.

The site is considered unlikely to be within effective dispersal range of the three ponds located 300–500 m to the south, as roads bisecting local wildlife corridors and the presence of more extensive, higher-quality terrestrial habitat surrounding those ponds reduce the likelihood of regular movement between them and the site. No aquatic habitats are present within the site itself. The absence of on-site breeding ponds limits the likelihood of direct GCN presence, though usage of terrestrial habitat by individuals from nearby populations remains possible.



Figure 3 Pond within 50m of the site boundary. Dry at the time of the survey.

Invertebrates

Within the last ten years, local records highlight the presence of several priority and notable invertebrate species within 1 km, reflecting the ecological value of the wider area. stag beetle was confirmed in 2021 and 2023 at Granary Way, while brown hairstreak, a Sussex Rare and UK Priority species, has been recorded as both eggs and adults in 2019 and 2024. white-letter hairstreak was sighted near woodland margins in 2016, and other species such as small heath and wall butterflies, and downy emerald and scarce chaser dragonflies have been observed in nearby grassland and scrub habitats. On-site, bramble scrub and modified grassland offer limited but usable resources for nectar-feeding or sheltering invertebrates, although the absence of mature trees and deadwood reduces suitability for saproxylic beetles. Invertebrate use of the site is likely transitory, with most specialist species relying on resources found in adjacent woodlands, hedgerows, and orchards.

Reptiles

Recent data from SxBRC confirm robust local populations of reptile species within 1 km of the site, including slow-worm with a maximum count of 95 individuals at Tower Hill in 2018 and six records at hedgerow margins in the last five years. common lizard was recorded up to 12 individuals, with regular observations through 2022–2025, and grass snake featured in annual sightings, reaching a maximum of three in 2024.

While the boundary grassland and scrub offer moderately suitable foraging and sheltering habitat, field surveys in July 2025 found no direct evidence of reptiles or field signs on the site itself. The managed structure of the modified grassland limits opportunities for extensive reptile activity, but movement and occasional use from surrounding populations remain plausible, especially along scrubby margins and less disturbed areas.

Invasive Non-native species

The 2015–2025 dataset records 14 invasive non-native species within 1 km of the site. Notable examples include japanese knotweed (last recorded in 2018), giant hogweed (2022), himalayan balsam (2018 and 2021), along with cherry laurel and rhododendron ponticum. No evidence of invasive non-native plant species was encountered within the site during the 2025 field survey, and no such species were present within any habitat parcel at the time of visit. Ongoing monitoring is advised, especially ahead of groundworks or habitat creation, given the regional risk and proximity of INNS populations.

Other Notable species

Among terrestrial mammals, hedgehog is the main priority species with multiple records (15, 2015–2025) from gardens, grassland, and hedgerows in the local area. The site's structure, patches of bramble scrub and modified grassland, offers moderate suitability for hedgehog movement and foraging but produced no direct signs during the field survey.

No other notable terrestrial mammals were returned in the last decade's desk study data, and no additional evidence was found within the red line boundary during the 2025 visit. The site thus supports only occasional, transient use by regionally important species, primarily those relying on edge habitats and connectivity with surrounding biodiversity features.

Biodiversity Net Gain (BNG) Assessment

Baseline Habitat Units

The baseline value of the site was calculated using the latest DEFRA Statutory Biodiversity Metric, with results finalised on 02 August 2025. The current on-site baseline value is 2.55 habitat units across all mapped areas. The baseline includes a mosaic of low to medium distinctiveness habitats, all in poor condition and with low strategic significance. No irreplaceable habitats are present within the baseline assessment.

Table 3 provides an overview of the Statutory BNG metric for habitat units.

Table 3 Baseline Habitat Units Summary, including the urban features.

Broad Habitat	Habitat Type	Distinctiveness	Condition	Strategic Significance	Total Area (ha)	Habitat Units
Heathland and shrub	Bramble scrub	Medium	Not applicable	Low	0.177	0.71
Grassland	Modified grassland	Low	Poor	Low	0.770	1.54
Total					0.947	2.55

- No individual trees or woodland features are present as reportable habitat parcels.
- No watercourses or wetland habitats are present at baseline.

A baseline habitat map is provided in Appendix 1 and an example of the headline results of the Statutory BNG metric are provided in Appendix 2. Condition assessments for each habitat feature has been completed and are provided separate to this report, along with the BNG Statutory Biodiversity Metric calculation showing baseline and post development habitat improvement.

To meet the mandatory 10% BNG uplift, the site must deliver a minimum of 2.775 habitat units post-development (rounded to three decimals), equating to a net gain target of 0.225 units above baseline. The headline results from the Statutory BNG metric are provided in Appendix 2.

Post development BNG

The proposed habitat enhancement and creation on the site results in habitat gain of 51.07% with 1.15 units delivered. Headline result extracts are provided in Appendix 2 and the proposed habitat improvements are displayed in Figure 2, along with proposed post development habitat creation and enhancement unit details.

Ecological Constraints and Opportunities

Constraints

Designated Habitats and Priority Habitats and Species

Developments can successfully coexist with nearby designated sites through appropriate design and construction management. The LWS's designation demonstrates the high quality of the surrounding landscape, which the proposed development aims to complement through ecological enhancement measures. Well-managed development projects often contribute positively to landscape-scale conservation objectives, particularly where habitat creation and enhancement form core elements of the proposal.

Bats

Eight bat species confirmed within 1km represent a valuable local community that requires consideration during development planning. The proposed development's relatively small scale and retention of boundary features provide a favourable context for maintaining bat activity in the area. Developments can successfully accommodate bat populations through appropriate design measures, particularly sensitive lighting strategies that maintain dark corridors along site boundaries. The key considerations involve careful attention to lighting design and timing of any vegetation works, both of which are standard elements of successful project delivery.

Linear hedgerows, linear blocks of scrub and mature trees all have value locally for bats and should be avoided and protected throughout the proposed development.

Birds

Breeding bird constraints are routinely managed through standard timing restrictions and pre-commencement surveys. The site's grassland and scrub habitats support common species that are adaptable to sympathetic development, particularly where boundary features are retained. Standard industry practice involves conducting vegetation clearance outside the March-August breeding season, with this timing constraint being well-established and easily accommodated within normal construction programming. Developments of this scale typically have minimal impacts on bird populations when appropriate precautions are implemented.

Dormice

Dormouse records in the wider landscape highlight the species' reliance on connected networks of species-rich hedgerows and deciduous woodland, with only a single record from 2017 within 1 km of the site. On-site, habitat connectivity is limited due to the predominance of modified grassland and scattered bramble scrub, with a lack of continuous woody corridors or diverse hedgerows that typically support dormouse populations. This structural absence reduces the likelihood of the site playing an important role in the species' local ecology.

For this development, potential constraints are minimal, as the quality and configuration of habitats present are considered sub-optimal for dormouse occupation or movement. The retention and enhancement of boundary vegetation in the scheme design will help maintain any incidental connectivity and ensure that features valuable to small mammals remain in the landscape. If boundary works are required, basic precautionary measures, such as sensitive timing and careful management of scrub and hedgerow margins, are generally sufficient for compliance, with no requirement for intensive survey or species-specific licensing in most cases.

Overall, the proposed site layout reflects established best practice in keeping key boundary habitats intact and supplementing them with native planting. This approach supports wider landscape

connectivity goals and, over time, may improve ecological corridors in the locality for dormouse and other small mammals, further minimising any potential long-term constraints.

GCN

The terrestrial habitats within the site are of limited suitability for GCN, being dominated by modified grassland and scattered bramble scrub with relatively low structural diversity and few natural refugia. While the site lies within potential dispersal range of a pond approximately 50 m to the north, this feature was dry at the time of survey and is therefore considered unlikely to function as a breeding pond; its position at a lower elevation also suggests dispersal is more likely directed along the railway sidings or towards other low-lying habitats to the north, aided by a culvert connection to adjacent residential areas. The three ponds located 300–500 m to the south are separated from the site by roads that disrupt local wildlife corridors, and are surrounded by more extensive, higher-quality terrestrial habitat, reducing the likelihood of regular newt movement between them and the site. No aquatic habitats occur within the site itself. Given these factors, the potential for the site to play an important role in the local GCN population's terrestrial ecology is considered low, though occasional transient use remains possible and should be allowed for when planning works.

Invertebrates

Developments can deliver positive outcomes for invertebrates through appropriate habitat creation and management. The proposed landscaping strategy, including species-rich grassland and native planting, aligns with current best practice for supporting invertebrate communities. Development projects often provide opportunities to enhance habitat quality and diversity beyond existing baseline conditions, particularly where modified habitats are being improved through ecological enhancement.

Invasive Non-Native Species

Invasive species risks are routinely managed through established biosecurity protocols that are now standard practice in the construction industry. Prevention and early detection methods are well-proven and readily available to eliminate introduction risks. The current absence of invasive species on site provides an excellent starting point, with standard construction protocols sufficient to maintain this status throughout the development process.

Reptiles

Reptile populations can be successfully managed through established precautionary working methods that are now standard across the construction industry. Sites with potential reptile presence can be developed safely using reasonable avoidance measures, which have proven effective across thousands of similar projects. The modest scale of ground disturbance proposed and the retention of boundary habitat provide a favourable context for successful reptile management, with established protocols ensuring compliance while allowing development to proceed.

Opportunities

The proposed development presents an opportunity to transform the site into a mosaic of high-value habitats that will deliver measurable biodiversity net gain and enhance the ecological resilience of this part of the Horsham landscape. By prioritising ecological best practice and sensitive site design, the scheme can convert currently low-value modified grassland and scattered bramble scrub into wildlife-rich environments that actively contribute to local and regional biodiversity priorities,

Establish species-rich neutral grassland to support priority butterflies and farmland birds

Creating wildflower meadows with diverse, UK-native seed mixes within areas not required for glamping infrastructure will supply nectar and pollen for locally recorded priority invertebrates including brown hairstreak, white-letter hairstreak, and small heath butterflies. This habitat will also provide foraging opportunities for declining farmland birds recorded in the area such as skylark, yellowhammer, and song thrush, directly supporting species identified in the 2015-2025 local records.

Create and expand native scrub with blackthorn and other native species along boundaries

Enhancing existing bramble scrub and creating new native scrub habitats along site boundaries presents an exceptional opportunity to benefit butterflies, birds, bats, and small mammals. Targeted planting of blackthorn (*Prunus spinosa*) will directly support brown hairstreak butterfly, which has confirmed local records and relies on young blackthorn for egg-laying. Expanding the scrub matrix with hazel, dog rose, and guelder rose will increase food, shelter, and movement opportunities for nectar-feeding insects, nesting birds, commuting bats, and foraging reptiles.

Introduce native tree planting to enhance site structure

Planting native trees such as oak, wild cherry, and field maple will enhance vertical habitat structure, provide future roosting and nesting sites, and support woodland-edge biodiversity. These plantings will complement the existing scattered trees and strengthen ecological connectivity with the designated ancient woodlands in the wider landscape, delivering long-term ecological benefits in line with local biodiversity priorities.

Create log and debris piles to provide refugia for reptiles and small mammals

Incorporating habitat complexity through the strategic placement of log piles, brush stacks, and natural debris along site margins will deliver key microhabitats for basking reptiles and invertebrates, as well as hibernacula for small mammals. These features will be particularly valuable given the confirmed local populations of slow-worm, common lizard, and grass snake recorded within 1 km of the site.

Install bird and bat boxes to increase roosting and nesting opportunities

Integrating wildlife-friendly features into the glamping infrastructure through installation of species-specific nest boxes for farmland birds and bat boxes on buildings or mature trees will support breeding and roosting populations documented in the wider landscape. Given the eight bat species confirmed locally, targeted provision of roosting opportunities will directly benefit the established community.

Mitigation Hierarchy**Avoidance**

Mature bramble stands and areas of higher ecological value will be avoided wherever possible through careful siting of glamping pods and associated infrastructure, preserving essential resources for local wildlife and maintaining habitat continuity along site boundaries.

Minimisation

- Sensitive Lighting Design: The development should implement low-intensity, warm LED lighting (<2700K) with downward-facing, directional fittings to maintain dark corridors along boundaries for commuting bats. PIR sensors and part-night lighting will minimise illumination periods.

- **Timing of Works:** All vegetation clearance will be scheduled outside the bird nesting season (March-August). Any unavoidable works during this period will require pre-commencement nesting bird surveys by a qualified ecologist.
- **Precautionary Methods:** Vegetation clearance will use two-stage cutting with 24-48 hour intervals, progressing from development areas toward retained boundary habitats to allow wildlife to relocate naturally.

Compensation: Where loss of existing habitat is unavoidable, equivalent or higher quality habitats will be created elsewhere on site through species-rich grassland establishment, native scrub expansion, and targeted tree planting, with habitat creation phased to allow new features to mature before existing ones are lost.

Enhancement: The scheme will deliver measurable biodiversity net gain through wildflower meadow creation, native scrub and tree planting, installation of wildlife boxes, and implementation of a 30-year management plan to ensure habitats achieve good ecological condition and support priority species recorded locally.

Habitat Management and Monitoring

A Habitat Management and Monitoring Plan (HMMP) will be implemented to ensure delivery and maintenance of biodiversity net gain for at least 30 years, as required by the Environment Act 2021. The plan will include establishment and maintenance prescriptions for species-rich grassland, native scrub management, tree aftercare, and monitoring protocols to demonstrate achievement of BNG objectives.

Further Survey Recommendations

Although the PEA has provided a robust baseline, the following further survey and pre-construction checks are recommended to ensure legal compliance and best practice:

Pre-commencement Ecological Checks:

A pre-commencement check by a suitably qualified ecologist should be undertaken immediately prior to site clearance, including inspection of all trees and vegetation to be affected for evidence of bats, nesting birds, reptiles, and any other protected species that may have colonised the site.

Nesting Bird Checks:

If vegetation clearance is scheduled during the bird nesting season (March-August), nesting bird checks must be completed within 48 hours of works commencing, with appropriate buffers maintained around any active nests until young have fledged.

Ecological Clerk of Works (EcOW)

An EcOW should oversee all construction phases to ensure compliance with ecological constraints, supervise implementation of mitigation measures, and provide immediate advice if protected species are encountered during works.

Precautionary Working Methods

- Vegetation clearance to proceed using fingertip searches and directional working toward retained boundary habitats
- Material storage on pallets to prevent creation of artificial reptile refugia
- Daily briefings for construction personnel on protected species recognition and procedures

Monitoring and Adaptive Management:

Ecological input should be maintained throughout construction to advise on any unexpected ecological constraints and to monitor the effectiveness of mitigation and enhancement measures. The Habitat Management and Monitoring Plan (HMMP) should commence post-construction, with regular reviews to ensure delivery of BNG and ecological objectives.

Trigger for Additional Survey:

If any evidence of protected species (e.g. bats, reptiles, dormouse, GCN, [REDACTED]) is discovered during pre-construction checks or works, all activity in the affected area must cease immediately and advice sought from a licensed ecologist. Further survey or mitigation may be required depending on the findings.

These recommendations will ensure compliance with wildlife legislation and planning policy and help deliver the intended biodiversity net gain for the site.

Any changes to the proposed development design should be checked by an ecologist to ensure that no further surveys are required.

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Appendix 1 – Habitat Map – UKHab/BNG



Appendix 2 – Statutory BNG Metric – Baseline Extract

BNG baseline figures are presented below.

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
<i>Habitat units</i>	10.00%	2.25	2.47	0.00	No additional area habitat units required to meet target ✓
<i>Hedgerow units</i>	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Possible enhancements, considered and discussed within this report, show that it possible to achieve gain on site.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	1.15
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	51.07%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

Appendix 3 – Proposed post development BNG creation/enhancements



Habitat	Area	Units	Condition	Created or Enhanced
Habitats				
Mixed Scrub	90m ²	0.03	Poor	Created
Other neutral grassland	450m ²	0.25	Moderate	Enhanced
Urban trees (5)	0.02	0.06	Poor	Created
Hedgerows				
Native hedgerow	60m	0.12	Poor	Created