Ecological Constraints & Biodiversity Net Gain Assessment (BNG)

Gravatts Farm

Rudgwick

October 2024

DEEPDENE
ECOLOGY

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Data within this report is valid for a maximum of 18 months from the date of the survey. After this period, an updated site visit will be required to determine a new ecological baseline. More up-to-date survey data may be required for a planning application or licensing, depending on conditions and impacts.

Whilst every effort has been taken to ensure the accuracy of this report and its contents, in view of potential ecological constraints to development or the likely presence or absence of species, it must only be viewed as a snap-shot in time and, therefore, not be viewed as definitive. Due to external factors, such as seasonality, weather etc, having the potential to affect survey results, no liability can be assumed for omissions or changes that may, or may not occur, after the date this report was produced.

EXECUTIVE SUMMARY

SITE	• A section of Gravatts Farm which includes a parcel of woodland, an area of pasture and a section of existing access track.
PROPOSAL	• It is proposed for a small stable block and storage barn to be constructed within the Site. An existing access track will be used.
STUDIES COMPLETED	• Ecological Constraints Assessment (desk study and walkover survey) in September 2024. • Biodiversity Net Gain Assessment using the Statutory Metric.
KEY FINDINGS	• From the walkover survey and desk study assessment, the Site was predominantly comprised of broadleaved deciduous woodland with areas of other neutral grassland habitat. • At the location of the two proposed buildings, only one ash tree will require removal. The remainder of the areas was already cleared due to ash die back. • The Site has suitability to support individual reptiles, amphibians, bats (foraging/commuting), foraging and commuting badgers and hedgehogs. • Mitigation has been recommended for minimising potential impacts on other protected/notable species. • No irreplaceable habitat will be directly impacted by the proposed development. Ancient woodland is located close by. • No statutory or non-statutory designations apply to the Site. There are also no anticipated impacts on any sites nearby. • The only works will be the creation of stable block and small storage barn. This will result in the loss of an area of woodland. • Due to the nature of the proposed works, compensatory woodland planting will be undertaken to the north, along with the enhancement of the existing grassland to the south. • The baseline habitat units within the Site before development total 1.18 habitat units. • Post-development, within the Site, there will be a total of 1.58 habitat units. This provides a gain of 0.40 units (33.53%). • The trading rules have also been met. • Enhancement ideas have been suggested which could be incorporated into any design proposals.
OVERALL FINDING	• The Site was dominated by broadleaved woodland habitat with smaller areas of other neutral grassland. • Compensatory planting of broadleaved woodland and enhancement of grassland will ensure that the +10% increase can be met. In addition, all the trading rules are satisfied.

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1 INTRODUCTION

1.1 Project Background

Deepdene Ecology Ltd was instructed by Michael Townsend, to undertake an ecological constraints survey and Biodiversity Net Gain (BNG) assessment of a portion of land, in support of a planning application at 'Gravatts Farm, Guildford Road, Rudgwick, Sussex, RH12 3JD (from hereon in referred to as the 'Site'). It is proposed for a stable block and storage building to be constructed within the Site within an open area of woodland.

An ecological constraints assessment, including a Preliminary Bat Roost Assessment (PRA) was undertaken by Deepdene Ecology in September 2024 and that has helped to inform this assessment. No activities other than clearance of some ash trees due to ash dieback have been undertaken prior to this date in relation to the proposals and therefore the baseline was accurate at the time of the walkover survey.

1.2 Report objectives

This report details the current habitats present on the Site and their condition, where appropriate, to allow an assessment of the pre-development biodiversity units using the Natural England Statutory Biodiversity Metric. This report has been produced to provide Horsham District Council with sufficient information to determine whether the proposals are able to meet the requirements of on-Site BNG.

In addition, the report provides an overview of any potential ecological constraints to the proposed project with a focus on protected/notable species or habitats.

1.3 Site setting

The Site (TQ09373365) is situated in a semi-rural location to the southeast of the village of Rudgwick. The Site sits within Gravatts Farm and is bound on all sides by the wider grounds which includes areas of woodland, pasture, waterbodies and more formal gardens. Within the wider area, there are scattered dwellings, along with wider areas of farmland, scattered trees, treelines, woodland and hedgerow.



Figure 1: Site boundary (indicative only). Image taken from Google Earth.



Figure 2: Site context (indicative only). Image taken from Google Earth.

1.4 Proposed development

A planning application will be submitted for the construction of a small stable block consisting of four loose boxes and a tack/feed room. A detached barn is also proposed to be constructed (7.6m x 6.1m) in a separate area to the west of the stable block.

The existing access track will be utilised which runs from the Guildford Road up to the south of the woodland block. From the edge of the woodland, there is a short stretch of existing track to the proposed barn, which will be upgraded as part of the planning application, along with a new stretch proposed to be laid up to the stable block.

An area of compensatory woodland will be planted to the north of the existing woodland, within an area of sheep grazed pasture. Enhancements will also be undertaken to the grassland either side of the existing access track.

A full set of drawings will be provided with the planning application with the Site Plan provided in **Appendix D**.

1.5 Biodiversity Net Gain: Overview

The requirement for BNG is set out within legislation (The Environment Act 2021) and the National Planning Policy Framework (NPPF) 2021. Both require that planning applications for new developments will need to demonstrate a 10% BNG and the Government 25-year Environment Plan states that government will "*embed environmental net gain principle for development*".

Biodiversity Net Gain is the end result of a process which is designed to ensure that there is an increase in biodiversity when the value of habitats prior to and post-development are considered. The assessment calculates the change in ecological value at a Site by comparing the number of habitat units within the Site pre- and post-construction for both linear habitats such as hedgerows and area based habitats such as grassland. The ecological value of the Site is expressed as a percentage change in units following the proposed development. This is an indicator of the proposed development's impact on the Site's existing ecological value and establishes if there will be net gain, net loss or no net loss of biodiversity following the completion of the development and any subsequent management regime.

The process of BNG is designed to align with the mitigation hierarchy to ensure that firstly loss is avoided, secondly, loss is minimised and thirdly lost habitats are restored or mitigated for on-Site. Where this is not possible, and as a last resort, remaining losses must be compensated for off-Site.

1.6 Scope of the report

In order to inform the assessment, an ecological constraints assessment was undertaken which presents ecological information obtained during a desk study and walkover survey undertaken in September 2024.

The walkover survey included a brief assessment of the potential of the habitats within the Site to support any relevant protected or notable species to ensure that no valuable habitats/protected species are adversely affected by the proposed development.

The purpose of the appraisal is to satisfy the requirements of the National Planning Policy Framework (NPPF) by identifying the potential impacts of the proposed development on protected species and features of ecological value.

This report identifies the need for any measures to avoid or mitigate damage and disturbance to species, and provides recommendations for further ecological surveys, as required.

This report aims to describe the ecological baseline of the Site and the biodiversity changes that will be introduced by the proposed development.

The methods, results and recommendations of the BNG assessment are detailed, the scope of which is:

- Assess the ecological baseline of the Site by identifying the habitat types and features of potential ecological value including the potential presence of protected species.
- To establish the total number of area-based habitat units and linear hedgerow units (if present) within the Site.
- To establish the total number of units which will be retained, reinstated or created under the proposed landscape mitigation plan;
- To determine whether the proposed development will result in a net loss, no net loss or a net gain for biodiversity, with a focus on Habitats of Principal Importance (HPI).
- If necessary, and depending on the outcome of the above calculations, it will propose biodiversity improvements in order to achieve an overall net gain of at least 10% and adhere to the BNG trading rules on habitat distinctiveness and condition.

2 LEGISLATION AND POLICY

There is a framework of national and local legislation along with planning policy guidance that exists to protect and conserve wildlife and habitats. The following core legislation exists to protect habitats and species of nature conservation importance:

- Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019;
- Wildlife and Countryside Act 1981 (as amended) (WCA);
- Natural Environment and Rural Communities (NERC) Act 2006;
- The Countryside and Rights of Way Act 2000;
- The Hedgerow Regulations 1997;
- Protection of Badgers Act 1992.

The following national planning policies are relevant to assessing the impacts of development on nature conservation:

- National Planning Policy Framework (NPPF)4 (MHCLG, 2021);
- ODPM Circular 06/2005 (Defra Circular 01/2005)5; and

- Horsham District Council Local Plan.

Further details of the legislation and policy can be found in **Appendix C**.

3 METHODOLOGY

3.1 Desk study and walkover survey: Baseline

The baseline ecology of the Site was assessed using the following sources of information:

- Publicly available Open Source Natural England datasets for HPI, ancient woodland (classed as irreplaceable habitat), and statutory designated sites for nature conservation within 2km.
- Horsham District Council Planning Map[1]- to identify non-statutory designated sites (Sites of Nature Conservation Importance (SNCI) and potential (p)SNCIs) within 1km.
- Development proposals through assessing the Layout Plan (**Appendix D**) – White & Sons.

A walkover survey of the Site was undertaken on the 10th September 2024 by Deepdene Ecology which informed the existing habitats on Site and assessed the potential for notable fauna to occur in or adjacent to the Site. The walkover was undertaken in line with the JNCC and CIEEM guidelines. The survey results confirmed the UKHab types. UKHab supersedes previous systems such as Phase 1 Habitat Survey, allowing for direct interpretation of baseline habitat survey data into HPI and Annex I Habitat[2] types.

The survey was completed by Sally Dalrymple-Smith. Sally is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM and CEnv) and has over 16 years' experience of undertaking ecological surveys. She holds survey licences for bats (Level 2: 2023-11738-CL18-BAT & Level 1: 2018-34389-CLS-CLS), great crested newts (Licence: 2015-17014-CLS-CLS), dormice (2016-22745-CLS-CLS) and barn owls (Licence:CL29/00455).

All habitat types were mapped (**Appendix A**). A fine scale Minimum Mapping Unit (MMU) was deemed an appropriate level for mapping habitats i.e. a habitat area was only mapped if the habitat was greater than 25m^2 or 5m in length.

Each habitat was assigned a Primary Code of the Professional Edition of the UKHab Field Key[3] at a minimum of the Level 3 hierarchy, using the UKHab Habitat Definitions[4] for reference. Secondary Codes (SC) were then applied to provide additional context to the habitats, with no more than three SC being assigned.

[1] Horsham District Council Planning Map - https://horsham.maps.arcgis.com/apps/webappviewer/index.html?id=f8cab77b5b72485abe9b30d4349c0047 Accessed September 2024.
[2] Habitats listed in Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora.
[3] Carey. P., Butcher. B. (2018) *UK Habitat Classification Field Key*.
[4] UK Habitat Classification Working Group (2018). *UK Habitat Classification Definitions V1.0* at https://ukhab.org/ukhab- documentation/

3.2 Biodiversity Net Gain Assessment and Evaluation

The Site has been assessed using Natural England's Statutory Biodiversity Metric with the User Guide and technical supplements[5].

With the Metric, the habitats on Site are converted into 'biodiversity units' which are calculated using the size of the habitat parcels and their quality. The metric uses area (hectares) as its core measurement except for linear habitats (hedgerows, lines of trees, rivers and streams) where habitat length (kilometres) is used.

In order to assess the quality of a habitat, the metric scores the following:

a) Distinctiveness: how common/rare the habitat is, with scarce or declining habitats scoring higher than common and widespread types.
b) Condition: the biodiversity value of a habitat relative to others of the same type.
c) Strategic significance: habitats that are linked or joined to other key areas are considered more important than isolated habitat islands.

For habitats, the Statutory Metric provides a distinctiveness score automatically and for some habitats a condition assessment score is required to be chosen by the User. The Biodiversity Metric Condition Sheets in Excel format were used to assess each habitat type requiring a condition assessment against the appropriate condition to determine whether the habitat was of a poor, moderate or good condition.

There are three options for strategic significance which must be chosen and these are:

1) Area/compensation not in local strategy/ no local strategy;
2) Location ecologically desirable but not in local strategy; and
3) Formally identified in local strategy.

In order to determine the baseline units, a separate score is calculated for the area habitat units, linear river/stream units and the linear hedgerow/line of trees units. The three distinct unit types are unique and cannot be merged/traded or converted. Any gains or losses for each of the three scores must be reported separately.

The strategic significance for the assessment was determined by reviewing the Local Planning documents and using MAGIC (Natural England 2024) to identify any strategic policy relating to the Site, habitats on-Site or nearby.

The findings of the desk study and field surveys have been used to identify habitats and potentially significant ecological features at the Site currently. This information was then digitised and the resulting information was fed into the Statutory Biodiversity Metric.

[5] Defra, 2024. *The Statutory Biodiversity Metric User Guide*. Published February 2024.

3.2.1 Rural trees

Scattered trees in a rural setting are classed as 'rural trees' for the purposes of BNG. When rural trees are recorded within a Site, the area of habitat that falls within the Root Protection Area (RPA) is recorded as its corresponding habitat type e.g. the modified grassland beneath a canopy, along with the RPA of the tree which is recorded in the rural tree category.

The area calculations for the scattered rural trees on the Site for the purposes of the current BNG assessment have been based on the Tree Helper.

3.2.2 Limitations and Assumptions

UKHab Classification surveys can be undertaken at any time of year, with the optimal season being between March and September when most plant species are visible. Field surveys usually fail to record all species present for various reasons, including the seasonal absence of some species, and short survey duration. Rare or cryptic species are often missed in short surveys. However, based on the fact that the broad habitat types found were common and widespread, it is not considered likely that the surveys missed any valuable species.

3.2.3 Post-development Limitations and Assumptions

It is assumed that all habitats to be lost can be reinstated in their current position and can be subject to suitable management to achieve a condition identical to that which was achieved pre-development.

All habitat management will be secured for a minimum period of 30 years.

4 DESK STUDY & WALKOVER SURVEY FINDINGS: ECOLOGICAL BASELINE

4.1 Sites of Nature Conservation Interest and valuable habitats

There are no statutory designated sites within 2km of the Site.

There is one non-statutory designated site (Site of Nature Conservation Interest) within 1km of the Site (see **Table 1**).

Table 1: Non-statutory designated sites within 1km of the Site.

Site Name	Distance & direction	Description
Godley's Copse, Rudgwick SNCI	220m north east	Ancient hornbeam coppice and oak woodland with bluebell dominated ground flora and dissecting steep sided stream

There are small pockets of Priority Deciduous Woodland (Section 41 NERC Act habitats of principal importance) and Ancient Woodland in all directions in the wider landscape. The closest pocket of ancient woodland is located approximately 60m to the east of the proposed barn and storage building within the Site (see **Figure 3**). Compensatory woodland will be planted within the buffer zone, however no construction works are anticipated to be required.

The Site sits within an area designated as Priority Deciduous woodland (see **Figure 3**). Priority habitat is listed on Section 41 of the Natural Environment and Rural Communities Act (2006) as a habitat of principal importance. The woodland pocket that the Site sits within is linked to the corridor of ancient woodland to the west (see **Figure 3**).

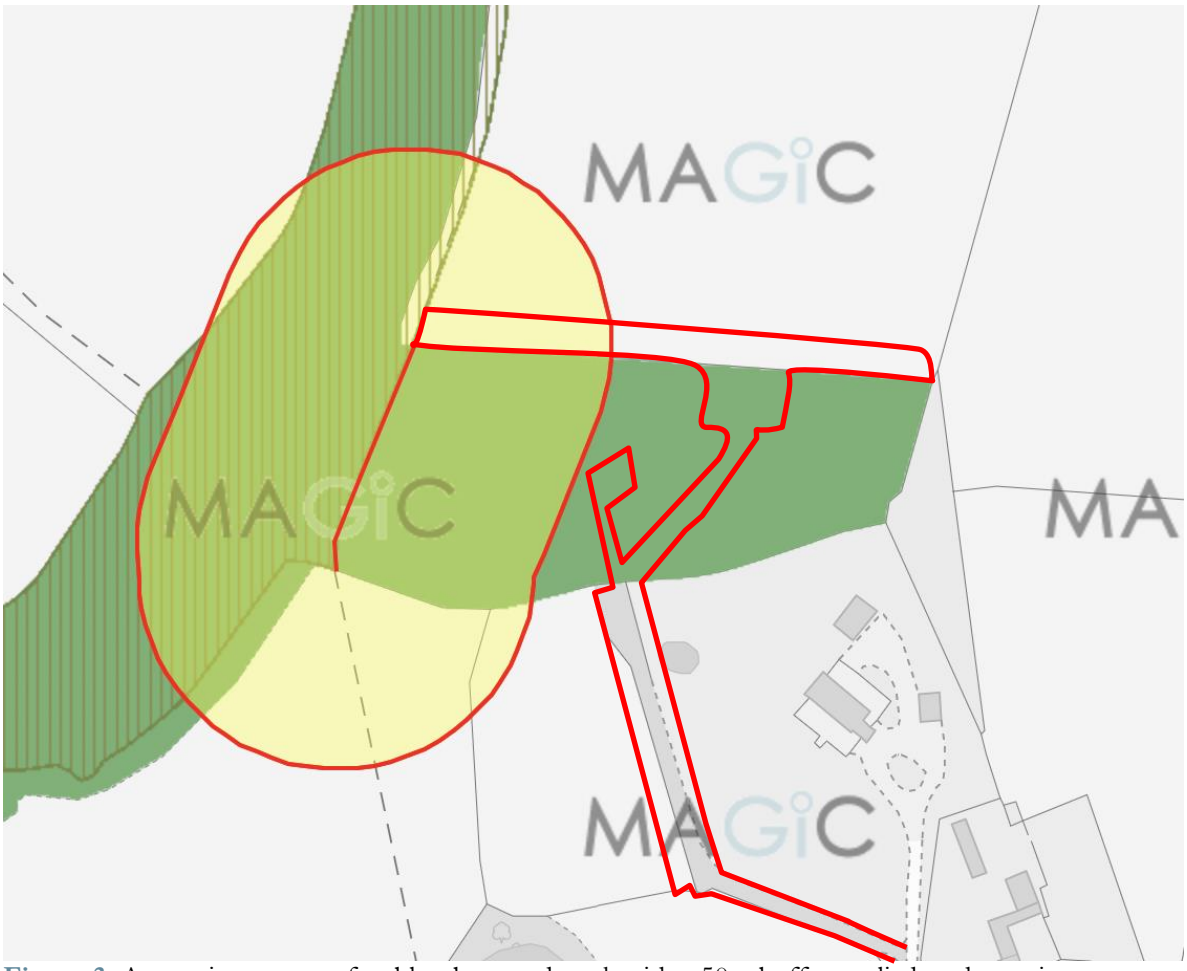


Figure 3: Approximate area of stables, barn and track with a 50m buffer applied to the ancient woodland (shown as hatched). The solid green depicts priority woodland (Retrieved from Magic.gov.uk).

Due to the location of the Site within the woodland habitat and near to ancient woodland, mitigation and compensation has been recommended in **Section 9**.

4.2 Walkover survey findings

4.2.1 Habitats

A summary of the existing habitats on Site is provided below. The predominant habitat was the deciduous woodland (Broadleaved woodland) with smaller areas of other neutral grassland and ephemeral vegetation growing over hardstanding. The existing hardstanding access track led from the Guildford Road.

Photographs from the survey are provided in **Appendix E.**

Other broadleaved woodland (broadleaved woodland)

The location of the proposed stable block and barn were in areas of cleared ash woodland. The ash has been historically cleared over a number of years due to ash die back and the location of the proposed buildings has been optimised to select the areas which do not contain mature trees and therefore won't require any additional clearance. As a woodland, it lacked a developed understorey and the canopy was very open in areas due to the felling of the ash trees.

The stable block area does not contain any canopy layer trees at all and the ground flora/understorey was comprised of scrub/ruderal type vegetation with false-brome *Brachypodium sylvaticum*, bramble *Rubus fruticosus* scrub, nettle *Urtica dioca*, soft rush *Juncus effusus*, willow herb *Chamaenerion angustifolium*, ragwort *Senecio jacobaea* and meadow buttercup *Ranunculus acris* recorded.

The proposed area for the barn was comprised of a slightly damper area of ground with marsh thistle *Cirsium palustre*, false-brome, willowherb, ragwort, self- heal *Prunella vulgaris*, bramble, soft rush and fleabane *Pulicaria dysenterica* recorded. A single mature ash standard was present within that area and will require clearance.

The remaining woodland block surrounding the two areas was comprised of even-age ash woodland with occasional semi-mature oaks *Quercus robur*, beech *Fagus sylvatica* and elm *Ulmus sp.* that had been managed and thinned recently due to ash die back. It was a block of plantation woodland that had been planted in the 70s according to the client. The woodland was linked to the off-Site ancient woodland that ran as a corridor north-south.

Developed land; sealed surfaces

An existing hardcore access track led up to the Site from the Guildford Road. A central band of grassland ran down the middle of the track in some areas.

The access track continued to the edge of the woodland and vegetation such as annual meadow grass *Poa annua*, sorrel *Rumex acetosa*, creeping buttercup *Ranunculus repens* and sedges *Carex spp.*, were recorded growing through the track.

Other neutral grassland

There was a central band of other neutral grassland within the centre of the access track, from the Guildford Road. Species such as annual meadow grass *Poa annua*, bird's foot trefoil *Lotus corniculatus*, dandelion *Taraxacum officinale*, white clover *Trifolium repens*, ragwort, tormentil *Potentilla erecta*, yarrow *Achillea millefolium* were recorded.

The areas proposed for habitat enhancement were also comprised of other neutral grassland. The area to the north was within a sheep grazed field and the two southern areas were mown/cut for hay.

4.2.2 Protected/notable species

Badgers: The Site and buffer zones, where access was possible, were searched for evidence of badgers. No badger setts and no badger signs were observed during the walkover survey. The Site is in a rural location which means that it is likely that badgers are likely to be present in the wider area. Mitigation has been recommended in **Section 5** below to minimise potential construction impacts on foraging/commuting badgers.

Bats: The proposed works will require the removal of a single standard ash tree. The tree was semi-mature and did not contain any features that could support roosting bats. The tree was considered to offer negligible suitability to support roosting bats and no further surveys are recommended.

The Site is considered likely to support foraging and commuting bats and precautionary mitigation for potential lighting impacts has been outlined.

Dormice: The woodland within the Site lacked a developed understorey layer and the canopy layer was sparse in areas due to the ash dieback. Therefore, overall the Site wasn't considered suitable to support the species.

Hedgehogs: The woodland floor habitat offered potential to support foraging/commuting hedgehogs and the Site is accessible to the wider area. Precautionary mitigation during construction has been outlined.

Nesting birds: The vegetation within the Site has the potential to support low numbers of common and widespread species of nesting birds. Common species of bird were noted within the Site during the walkover survey. There are no impacts on any trees or buildings and therefore mitigation is not required.

Reptiles: The area of the proposed buildings and track was comprised of relatively short grassland/scrub/ephemeral vegetation in places, along with the more ruderal vegetation at the proposed stable block location. Scattered log piles were located within the woodland, with some close to the proposed works area. Overall, the Site was considered to offer some potential to support individual reptiles. Precautionary mitigation for individuals has been outlined in **Section 5.**

Amphibians: The vegetation within the Site offered some suitability to support sheltering/foraging great crested newts. There are two ponds within the grounds of Gravatts Farm, the closer of the two is approximately 40m from the proposed barn. The pond was visited as part of the walkover and considered to have suitability to support great crested newts. The second pond was slightly further away, at just over 100m from the barn and this was a larger pond that had less suitability.

The works involve the construction of the two buildings within an area of cleared woodland.

When the area of the proposed barn and stable are calculated and put through the great crested newt mitigation Method Statement risk calculator[6], the risk of an offence being committed (based on the area of works and assumption of newt presence in the closest pond) is considered to be 'green, offence highly unlikely' (see **Figure 2** below). However, in order to reduce the risk to individuals that may be present, precautionary mitigation has been recommended in **Section 5**.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.05
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.05
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Figure 4: Great crested newt mitigation method statement 'risk assessment' calculation.

5 MITIGATION DURING THE WORKS

A summary of the recommended mitigation for minimising any potential impacts on ecological features during the works is provided in **Table 3** below.

Table 3: Recommendations for mitigation

Receptor	Recommended mitigation
Sites and habitats	
Designated Sites of Nature Conservation Interest	• No mitigation is required.
Woodland habitat & nearby ancient woodland	In order to ensure there are no negative impacts on the remaining valuable woodland habitat as a result of the proposals, a Construction Environmental Management Plan (CEMP) should be produced which includes the following measures: • The working area should be minimised and clearly marked with temporary fencing to ensure there are no encroachments outside the working area. • In order to prevent accidental encroachment into any RPAs, the protection fencing should be clearly labelled, with no access permitted until the completion of construction activities.

[6] Template for Method Statement to support application for licence under Regulation 55(2)(e) of The Conservation of Habitats and Species Regulations 2017 (as amended) in respect of great crested newts Triturus cristatus. Form WML-A14-2 (Version April 2020).

	• All machinery and any storage areas should be located on existing bare ground or hard standing. • There should be no night-time working or lighting (see further details below). • Development of a pollution prevention plan. • Pollution prevention guidelines should be followed at all times and run-off from construction activities should be minimised by working in accordance with CIRIA good practice guidance (2001) and Defra pollution control guidelines (https://www.gov.uk/guidance/pollution-prevention-for-businesses). • Notice boards, cables or other services will not be attached to retained vegetation; • Appropriate management of demolition and construction waste at all times. • Appropriate storage of any chemicals or hazardous materials. • Potential contaminants such as oil, vehicle washings and concrete mixes will not be stored or discharged during works and all cleaning etc will take place on hardstanding at an agreed location outside of the Site. • Fires will not be lit during the works to minimise any risks to the retained habitats; • Ensure appropriate dust control measures e.g. screens are in place during times of high wind or cutting operations. Damping down of dust sources and covering of loose materials within the construction zone. • No night-time working or lighting during construction. • Production of a sensitive lighting plan (see further details in **Section 6.3**) It is recommended that as compensation for the buildings, the woodland area of the Site should be managed for maximum biodiversity value including: • A detailed assessment of the woodland on Site should be undertaken to help inform the production of a woodland management plan to ensure the long-term viability of the remaining woodland habitat. • Selective planting of individual trees within the woodland in appropriate locations that could become veteran and ancient trees in the future. • Inclusion of deadwood habitat retaining a variety of species and sizes. • Inclusion of bat and bird boxes (see 'Enhancements').
Habitats - General	• Minimise impacts on natural habitats wherever possible. This can be achieved through, for example, minimising vegetation clearance required, ensuring that the volumes of material required is calculated to minimise any necessary stockpiles, ensuring that any temporary stockpiles for materials required are placed on geotextile matting to minimise impacts etc. • All mature trees close to the working area should be protected through the use of root protection zones following best practice guidelines (i.e. BS5837:2012 Trees in Relation to design, demolition and construction – Recommendations).
Protected/notable species	
Amphibians and reptiles	The Site had potential to support individual reptiles and amphibians. It is considered highly unlikely that great crested newts will be encountered during works.

	A small amount of clearance of vegetation is required in order to accommodate the buildings and therefore it is recommended that precautionary mitigation is followed prior to the vegetation clearance: • Ecological briefing (toolbox talk)-the Contractor should be made aware of the low risk of amphibians and reptiles being present within the working area, how to identify them, the legislation afforded to them and what to do if one is found. • Careful destructive searching of the log piles and supervised by an ecologist with relocation (where necessary), outside the working area. • Prior to the commencement of works, a hand search of the area should be undertaken by an ecologist. Any animals found should be safely relocated outside the Site. • Following completion of the hand search, clearance of tall or dense vegetation within the area should be undertaken in two stages and be undertaken using hand tools (a strimmer, hand-held brush cutter) only. • The area should be cut to a minimum height of 200mm (rather than to ground level), to minimise the risk to individual animals which could be sheltering. They are most likely to be present from around March to late June/July in particular, as they are returning to ponds for breeding. • The strimming should follow a specific direction within the area so as not to risk creating an isolated area of uncut habitat where animals may have been encouraged to move to. • On completion of the first stage of vegetation clearance, the arisings should be left for 24 hours. This will encourage the dispersal of animals from the working area into suitable retained habitats, while still providing sufficient clearance to avoid injury or killing of any animals present in the vegetation being removed. • The operator of the cutting machinery should watch for any movement within the vegetation during the works and if any amphibians, or other animals are seen to be present, then work should cease in the immediate area to allow them to naturally disperse before returning to the task again, as long as the animal has dispersed. • After 24 hours, the arisings should be raked up carefully and removed from the area and then the vegetation can be cut to ground level. • Maintenance of the short sward habitats at the stable block until the works commence. • Chance discovery -if at any point during the works, a reptile or amphibian is found, works in the immediate area should cease and an ecologist should be contacted for advice. If a great crested newt is found (considered unlikely), it may be necessary to consult with Natural England to agree a lawful approach to the works. With the use of precautionary mitigation, it is considered sufficient to protect reptiles and amphibians during the works.
Badgers and hedgehogs	• All contractors and site personnel should be briefed on the potential presence of badgers (and other mammals) and will remain vigilant for any signs of badger activity. • Any trenches or deep pits that are left open overnight should be provided with a means of escape should a badger (or any other mammal)

	fall in. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. • The trenches/pits should be inspected each morning by a nominated member of staff to ensure that no badgers (or other mammals) have become trapped overnight. Should a badger become trapped an ecologist should be contacted immediately for further advice. • No topsoil or other soft materials should be stored on Site to minimise the risk of badgers creating setts within it. • There should be no storage of any chemicals or fires on Site.

Bats: foraging and commuting	• No night-time working or operational lighting ideally.
	• If required, the Bat Conservation Trust guidance 'Bats and artificial lighting at Night' (2023) should be followed. This includes:
	  • Avoid artificial lighting close to any mature trees, hedgerows or woodland within the Site or close to the boundary;
	  • Directing any task lighting used during construction away from vegetation;
	  • White and blue wavelengths of the light spectrum should be avoided and the brightness should be kept as low as feasibly possible;
	  • All luminaires should lack UV elements and metal halide fluorescent sources should not be used;
	  • LED luminaires are preferred due to the lower intensity, sharp 'cut-off', colour rendition and dimming capability;
	  • A warm white light source (2700Kelvin or lower) should be adopted to reduce the blue light component;
	  • Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be used;
	  • Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt;
	  • Any necessary security lighting should be set on short timers (e.g. 1 minute) with a sensitivity to large moving objects only;
	  • Lighting times will be limited to provide dark periods; and
	  • The height of columns will be carefully considered to avoid light spill.

6 BIODIVERSITY NET GAIN ASSESSMENT

This section discusses the habitat values on the existing Site and post-development. The habitats have been mapped and are shown in **Appendix A** & **B**. The Biodiversity Metric calculations are provided in the accompanying document.

6.1 Baseline survey validity

The walkover survey confirmed the current on-Site habitats and there was no evidence of recent changes, works, ground disturbance or vegetation clearance in advance of the walkover survey that has resulted in any changes or degradation to the on-Site biodiversity value. Some clearance of trees had been undertaken historically within the Site due to ash dieback. This does not change the value of the Site since it was still considered to be deciduous woodland habitat, despite a lack of canopy trees in some areas. The photographs in **Appendix E** confirm this. As such, the baseline survey data from walkover is considered to be an accurate

depiction of the habitats on Site and appropriate to use as the baseline for the BNG assessment.

6.2 Overview

The mitigation hierarchy was applied to developing design proposals to avoid and reduce the biodiversity impacts from the scheme. The main adaption was the use of the existing access track for the construction phase of the project in order to reduce impacts on other areas of grassland within the Site. The habitats which will be impacted include only low distinctiveness habitats and no ecologically valuable habitat will be impacted by the proposals.

Although the Site is constrained due to size, additional mitigation measures were designed into the layout in the form of woodland and wildflower planting.

6.3 Strategic significance

The Site is not located within any of the Biodiversity Opportunity Areas (BOAs) and therefore it is not of formal strategic significance.

The location of the Site is of significance due to its connectivity to the neighbouring ancient woodland.

6.4 Baseline habitats and biodiversity value

6.4.1 Area based habitats

The baseline habitats drawing (see **Appendix A**) illustrates the habitats present across the Site and theses are described in more detail in **Table 4**:

- Other broadleaved woodland (w1g): the majority of the Site was comprised of deciduous woodland habitat.
- Developed land; sealed surfaces (u1b6): the access track that led from the Guildford Road up to the woodland edge.
- Other neutral grassland (g3c): the band of grassland that ran for the length of the track.

Other broadleaved woodland

The woodland within the Site was comprised of ash dominated deciduous woodland habitat. In terms of condition, it scored: A (1 point for even aged); B (3 points since there was no evidence of browsing pressure); C (3 points since no evidence of invasive plants); D (2 points for 3 native tree species); E (3 points for native canopy & shrub species); F (1 point for areas of temporary open spaces); G (2 points for one age class); H (2 points for tree health); I (1 point due to lack of woodland plant community); J (1 point for woodland structure); K (1 point due to lack of veteran trees); L (1 point due to lack of standing dead wood); M (2 points for compaction). Overall, this provided a total of 23 points and therefore was in poor condition.

Developed land; sealed surfaces

The existing access road off the Guildford Road will be utilised with no upgrades or alterations proposed. This habitat type is a very low distinctiveness habitat in terms of the biodiversity metric and do not have a condition score.

Other neutral grassland

The grassland within the track was comprised of species poor grassland of low diversity.

The track was of a low species diversity with less than 6-8 vascular plants per m^2 and therefore they did not pass the essential criteria (Criteria A). The sward height was not varied (Failed B), but did not have any invasive plants, large areas of bracken or scrub present (Passed Criteria C, F & G). Areas of bare ground was present, however not more than 10% of the overall area of the field and therefore Criteria E was also passed.

The grassland passed five of the criteria, however due to failing the essential Criteria A, the grassland was in poor condition.

The enhancement areas were in a similar condition, with the addition of passing Criteria B (varied sward height), however as they did not pass the essential criteria A, they were also in poor condition.

6.4.2 Linear habitats

There were no linear habitats within the Site.

6.4.3 Habitats of Principal Importance or Irreplaceable habitat

The buildings are proposed to be sited within an area of deciduous woodland which is recorded as a priority habitat. However, on the ground the woodland appeared to be even-age and lacking an understorey layer and other typical priority woodland features.

6.5 Post-development biodiversity value

The post-development habitats expected on Site after construction are based on the Site Plan (see **Appendix D**). The habitats drawing (see **Appendix B**) illustrates the habitats proposed across the Site and these are described in more detail below with calculations in **Table 1**.

The proposals are for the construction of a stable block and storage building with associated access.

6.5.1 On-Site

Lost habitats

The project will result in the loss of 0.02 ha of deciduous woodland habitat. Only a single canopy tree will be lost.

The area of grassland to the north, which is proposed for woodland planting, will also be lost to the proposals.

Retained habitats

The project will result in the retention of the wider area of woodland habitat within the Site, along with the existing hardstanding access track and grassland.

Enhanced habitats

It is proposed for the areas of grassland within the south to be enhanced to species-rich wildflower meadows. A diverse mix of species will be sown and all four other criteria will be reached through appropriate management. Further details on the habitat is provided in **Appendix F**.

Created habitats

0.02ha of developed land; sealed surfaces will be created. This includes the stable block and storage building. These habitats are a very low distinctiveness habitat in terms of the biodiversity metric and do not have a condition score.

It is proposed for the area of sheep grazed pasture to the north, to be planted as deciduous woodland as compensation for loss of the woodland area to the buildings. A variety of native species (such as oak, field maple, hazel, lime, hornbeam) will be planted based on mixes in the adjacent ancient woodland. The planting will aim for randomly spaced groups of trees and shrubs in a habitat mosaic that promotes a varied structure at a variety of scales. The aim will be to restore natural processes such as decomposition and decay.

It would be hoped that with time the woodland could reach moderate condition (scoring between 26-32 points) through appropriate management.

Table 4: Baseline and proposed habitats, along with the associated condition assessment.

	Existing		Proposed				
Habitat	**Baseline area ha/units**	**Assessment/Comments**	**Lost area/units**	**Retained area/units**	**Enhanced area/units**	**Created area/units**	**Assessment/comments**
Other broadleaved woodland (w1g)	0.0889ha 0.39 units	The majority of the Site was dominated by ash-dominated deciduous woodland habitat in poor condition.	0.02ha 0.7 units	0.0723ha 0.32 units	N/A	N/A	The area of habitat will be lost to the footprint of the buildings.
Other neutral grassland (g3c)	0.1983ha 0.79 units	The central grassland band that ran along the access track from the Guildford Road. Area of sheep grazed species-poor grassland which is proposed for woodland creation, along with an area of grassland in the south proposed for enhancement.	0.0895ha 0.36 units	0.0306ha 0.12 units	0.0782ha 0.31 units	N/A	No impacts or alterations to the access track. The area of grassland will be lost to the footprint of the woodland to be created. The grassland will be enhanced and through appropriate management will reach good condition.
Developed land; sealed surfaces (u1b5 & u1b6)	0.1049ha 0.00 units	The existing access track which led off the Guildford Road to the Site.	N/A	0.1049ha 0.00 units	N/A	0.02ha 0.00 units	Development entails the construction of small stable block and barn.
Other broadleaved	0.00ha	N/A	N/A	N/A	N/A	0.0895ha	A diverse mix of species will be included and with appropriate management, over

woodland (w1g)	0.00 units					0.46 units	time, moderate condition will be reached.
Totals	**0.39ha** **1.18 units**		**0.11ha** **0.43 units**	**0.21ha** **0.44 units**	**0.08ha** **0.31 units**	**0.11ha** **0.46 units**	

6.6 Summary of habitat units

A summary of the habitat units post- development is provided in **Table 5**. This considers the habitats that will be lost during construction and any habitats that will be created in the long-term. The net change in units is used in the BNG calculations.

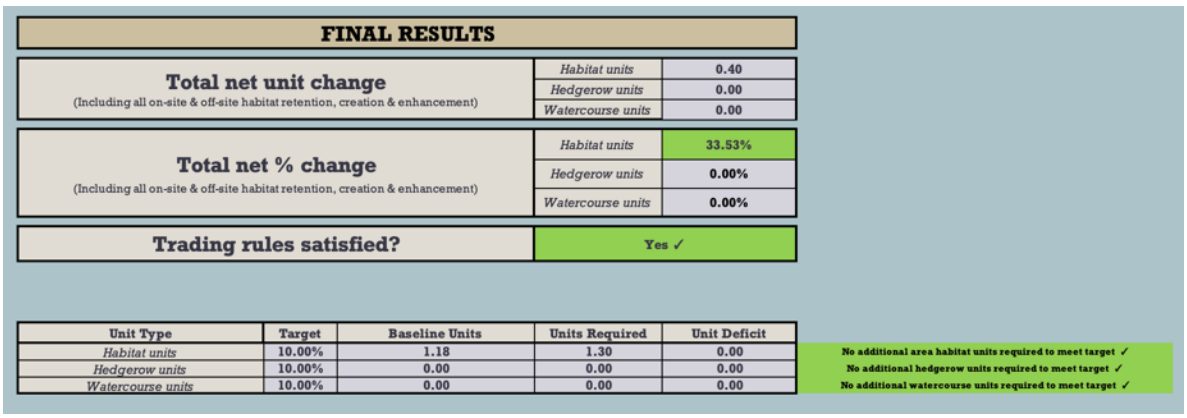
Table 5: Habitats present post-development

	Habitat units	Hedgerow units
On-site (redline boundary)		
Biodiversity units (baseline)	**1.18**	**N/A**
Units lost	(-) 0.43	N/A
Units retained	0.44	N/A
Units enhanced	0.31	N/A
Units created	0.46	N/A
Biodiversity units (post-development)	**1.58**	**N/A**
Net change (on-Site)	**0.40 units (33.53%)**	**N/A**

6.7 Biodiversity Net Gain Conclusions

Following this assessment of the Site and the calculation of biodiversity units, the biodiversity balance between the baseline and the post intervention situation has been calculated using the Statutory Metric. The key worksheets of the Calculation Tool are provided as a separate document.

The total change in habitat units has been calculated to be 0.40 units which equates to 33.53%. In addition, the trading rules have been met since the loss of the high distinctiveness habitat is adequately compensated.



FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.40
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	33.53%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	1.18	1.30	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

This is considered to be a good BNG for the proposed development, which meets the minimum goal of 10%. This is largely a function of the commitment to accommodate habitat

creation of higher value habitats. The commitment to the creation of a wildflower meadow and woodland has ensured significant gains.

The habitats to be introduced are anticipated to be of benefit to a variety of associated species including invertebrates and foraging birds. The post intervention habitats are also considered to provide benefit to the wider landscape by providing stepping stone habitats which will aid in supporting district wide wildlife corridors and habitat connectivity at a wider landscape scale, particularly for mobile species such as a wide range of invertebrate species.

7 LONG-TERM MANAGEMENT

Part of the requirement of BNG is to ensure the long term management of habitats on-Site to ensure the long term value of the Site is maintained.

Where any habitat units are created and used to offset any loss on Site, the long term management (30 years) of these habitats will need to be facilitated with a management plan. The financial mechanisms to ensure the management plan is implemented will need to be considered.

8 BIODIVERSITY ENHANCEMENTS

The NPPF states that local planning authorities should aim to conserve and enhance biodiversity where possible when determining planning applications. The development plans should maximise opportunities for enhancement, in order to achieve a net increase in biodiversity. This is in accordance with the NERC Act (2006) which requires that "*every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.*"

8.1 Protected and notable species

8.1.1 Bats

It is recommended that at least two bat boxes are installed on mature trees around the wider Site. Suitable models include the Large Multi Chamber WoodStone Bat Box (**Figure 4**) which is a multipurpose box designed for larger colonies and a range of bat species including pipistrelles, noctules and brown long-eared bats. The Schwegler 2f (**Figure 5**) is a good alternative and is a double fronted bat box for crevice species such as pipistrelles that supports a range of species.

The boxes should be positioned on mature trees in a shady position, 3-5m above ground level, and face in a south/south-westerly direction with a clear flight path to and from the entrance.



Figure 4: Large Multi Chamber WoodStone Bat Box



Figure 5: Schwegler 2f

8.1.2 Nesting birds

In order to increase the available nesting opportunities, bird boxes should be installed on mature trees. Suitable boxes include the Vivara Pro Seville bird box (see **Figure 6**) with a 32mm hole[7] or the Schwegler 2GR nest box (see **Figure 7**) as these boxes are suitable for species such as house sparrow *Passer domesticus*, blue tit *Cyanistes caeruleus*, great tit *Parus major*, nuthatch *Sitta europaea* and coal tits *Periparus ater*. All these species are commonly found within habitats such as those in the immediate vicinity of the Site.

All boxes should be installed at least 2 meters above ground level, away from possible sources of predation and away from direct strong sunlight and in proximity to vegetation where possible. This is in line with the RSPB[8] and British Trust for Ornithology's (BTO) guidance[9] on where to site a bird box.



Figure 6: Vivara Pro Seville bird box



Figure 7: Schwegler 2GR

[7] https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box

[8] https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-small-birds/making-and-placing-a-bird-box/

[9] https://www.bto.org/how-you-can-help/providing-birds/putting-nest-boxes-birds/putting-nest-box

8.1.3 Reptiles, amphibians & invertebrates

Log pile refugia could be incorporated into the design plan for the Site (see **Figure 8**). This log pile will provide a suitable refuge for species such as slow worm *Anguis fragilis,* grass snake *Natrix helvetica,* common frog *Rana temporaria* and hedgehog which may all be present within the wider area. In addition, invertebrates, particularly dead wood consuming species will benefit from a log pile.

In order to construct the log pile, branches at least 10cm thick should be used and these are stacked to create a pile at least 50cm tall. Where possible, a range of different sized logs and sticks should be used to create the log pile. To ensure the log pile remains stable, stakes or sticks will be inserted into the ground to prevent the logs from rolling.

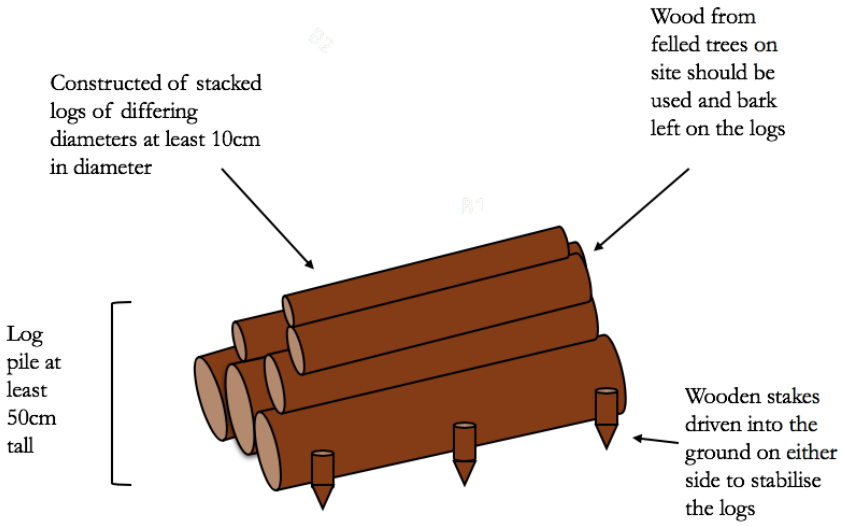


Figure 8: Example of a log pile that could be created as an enhancement on Site.

9 CONCLUSION

This report is based on an ecological desk study and a walkover survey undertaken in September 2024. Overall, the habitats within the Site were found to be common and widespread. The Site has potential to support individual amphibians, hedgehogs and foraging and commuting bats and badgers. Mitigation has been recommended to minimise potential impacts on protected/notable species.

The current proposals as outlined provide a gain of 33.53% habitat units at the Site which is achieved through wildflower meadow and woodland creation which will be of benefit to a wide range of wildlife. Enhancements have been recommended that should be incorporated into the design to improve the overall value of the Site for wildlife.

Measures to ensure the long-term management of any habitat will also need to be considered and the financial mechanisms to ensure their management will need to be secured through the planning process.

APPENDIX A – Habitats (Existing)



APPENDIX B - Habitats Post-development



APPENDIX C - Relevant Legislation and Policy

The following section summarises the relevant BNG legislation and policy. This includes the NPPF and local planning policy. As the implementation of the legislation is relatively current, the policy at the local level is currently being updated.

Environment Act 2021

The Environment Act 2021 makes a provision for BNG to be a condition of planning permission in England and planning applications need to demonstrate that a 10% BNG can be met.

National Planning Policy Framework (NPPF) July 2021

Planning policies and decisions should contribute to and enhance the natural and local environment by:

174 (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

174 (d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

175 take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries;

179 promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

180 (a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

180 (c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

180 (d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Local Planning policy – Horsham District Council Local Plan or Planning Framework (November 2015)

Policy 25: The Natural Environment and Landscape Character

The Natural Environment and landscape character of the District, including the landscape, landform and development pattern, together with protected landscapes and habitats will be protected against inappropriate development. The Council will support development proposals which:

1. Protects, conserves and enhances the landscape and townscape character, taking into account areas identified as being of landscape importance, the individual settlement characteristics, and maintains settlement separation.
2. Maintain and enhances the Green Infrastructure Network and addresses any identified deficiencies in the District.
3. Maintains and enhances the existing network of geological sites and biodiversity, including safeguarding existing designated sites and species, and ensures no net loss of wider biodiversity and provides net gains in biodiversity where possible.
4. Conserve and where possible enhance the setting of the South Downs National Park.

Policy 26: Countryside Protection

Outside built-up area boundaries, the rural character and undeveloped nature of the countryside will be protected against inappropriate development. Any proposal must be essential to its countryside location, and in addition meet one of the following criteria:

1. Support the needs of agriculture or forestry;
2. Enable the extraction of minerals or the disposal of waste;
3. Provide for quiet informal recreational use; or
4. Enable the sustainable development of rural areas.

In addition, proposals must be of a scale appropriate to its countryside character and location. Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, and/or conserves, and/or enhances, the key features and characteristics of the landscape character area in which it is located, including;

1. The development pattern of the area, its historical and ecological qualities, tranquillity and sensitivity to change;
2. The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features; and
3. The landform of the area.

APPENDIX D

Figure 1: Site Plan





Disclaimer

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Planning

This drawing is produced for PLANNING PURPOSES ONLY and is not to be used for construction.

This drawing illustrates a planning proposal only and as such subject to detailed site investigation, including ground conditions/contamination and drainage design. The layout may be based upon an enlargement of an O.S. sheet or other small scale plans and its accuracy needs to be verified by survey. CDM Regulations remain the responsibility of the principal contractor.

Project:	Gravatt's Farm Guildford Road Rudgwick RH12 3JD
Title:	Site Plan
Status:	Planning
Scale:	1:500 @ A3
Drawing no:	3946-PL-02A
Prepared by:	
Date:	19-Jan-2025

White & Sons Est. 1817 Planning & Architecture

APPENDIX E

Site Survey Photographs



Photograph 1: Area proposed for stable creation.



Photograph 2: Location of the proposed barn.



Photograph 3: Single ash tree that requires removal at the location of the proposed barn.



Photograph 4: Existing trackway which will be utilised.



Photograph 5: Existing access track leading from the Guildford Road which will be utilised.



Photograph 6: Large pond within the wider grounds of Gravatts Farm

	
Photograph 7: Waterbody close to the access track.	**Photograph 8**: Area of sheep grazed pasture which is proposed for woodland creation.

APPENDIX F

Wildlife Friendly Planting (Natural England, 2008. Gardening with Wildlife in Mind. London: Natural England)

Native and wildlife-friendly trees

Common Name	**Scientific Name**
Pedunculate oak	*Quercus robur*
Ash	*Fraxinus excelsior*
Wych elm	*Ulmus glabra*
Whitebeam	*Sorbus aria agg.*
Rowan	*Sorbus aucuparia*
Aspen	*Populus tremula*
Apple	*Malus domestica*
Bird cherry	*Prunus padus*
Common alder	*Alnus glutinosa*
Crab apple	*Malus sylvestris*
Crack willow	*Salix fragilis*
Downy birch	*Betula pubescens*
Field maple	*Acer campestre*
Hornbeam	*Carpinus betulus*
Juniper	*Juniperus communis*
Large-leaved lime	*Tilia platyphyllos*
Small-leaved lime	*Tilia cordata*
Pear	*Pyrus communis*
Scots pine	*Pinus sylvestris*
Sessile oak	*Quercus petraea*
Silver birch	*Betula pendula*
Sweet chestnut	*Castanea sativa*
Wild cherry	*Prunus avium*
Wild service-tree	*Sorbus torminalis*
Yew	*Taxus baccata*

Native and wildlife friendly shrubs

Common Name	**Scientific Name**
Hazel	*Corylus avellana*
Elder	*Sambucus nigra*
Goat willow	*Salix caprea*
Hawthorn	*Crataegus monogyna*
Dog rose	*Rosa canina*
Guelder rose	*Viburnum opulus*
Gorse	*Ulex europaeus*
Broom	*Cytisus scoparius*
Wayfaring tree	*Viburnum lantana*

Wild privet	*Ligustrum vulgare*
Bell heather	*Erica cinerea*
Bilberry	*Vaccinium myrtillus*
Black currant	*Ribes nigrum*
Blackthorn	*Prunus spinosa*
Buckthorn	*Rhamnus catharticus*
Butcher's-broom	*Ruscus aculeatus*
Cross-leaved heath	*Erica tetralix*
Dogwood	*Cornus sanguinea*
Field rose	*Rosa arvensis*
Holly	*Ilex aquifolium*
Midland hawthorn	*Crataegus laevigata*
Spindle	*Euonymus europaeus*

Wildflower species-rich other neutral grassland creation

An area to the west of the panels will be created as a species-rich wildflower meadow. An example of a suitable seed mix could include the EM2F Standard General Purpose Wild Flowers from Emorsgate seeds, with the following guidance provided:

Sowing
Best sown in the autumn or in the spring. Bulk up the seed with an inert carrier such as sand to make distribution easier. The seed must be surface sown and can be applied by machine or broadcast by hand. Rolling is not usually necessary.

100% wild flower mixtures are best sown into existing grass or combined with a suitable grass seed mix. If they are sown without grass onto bare soil, the spaces left between the flowers will be filled by grasses and other weeds.

First Year Management
After sowing continue mowing or grazing as needed, aiming to keep the grass short (30-50mm). Continue mowing/grazing through winter and early spring as needed. Stop mowing/grazing in April and leave until July/August at which time you can manage the sowing as you would established grassland as described below.

With the exception of yellow rattle most of the sown meadow species are perennial and will be slow to germinate, grow and flower, particularly against the competition from established grasses.

Management Once Established
Established grassland can be managed in a number of ways which, in association with soil fertility, will determine its character. The best results are usually obtained by traditional meadow management based around a main summer hay cut in combination with autumn, and possibly spring, mowing or grazing.

Meadow grassland should not be cut or grazed from spring through to late July/August to give sown species an opportunity to flower.

After flowering in July or August take a 'hay cut': cut back with a scythe, petrol strimmer or tractor mower to c 50mm. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to circa 50mm and again in spring if needed.