

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Hillybarn Farm, The Mount, Ifield, Crawley, West Sussex RH110LF

Client:

Sammy Bristow

Survey date:

23/02/2026

Project:

This report is prepared to inform a planning application with Horsham District Council. This proposal can be described as full application for a proposed two pitch settled Gypsy accommodation site.

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Executive Summary

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Tables 1, 3 & 4 of this report.

Key Findings
❖ The proposed development may require a Biodiversity Net Gain assessment, to calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain. ❖ A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. ❖ Precautionary working measures have been recommended for nesting birds, reptiles, amphibians, badgers, and small mammals.

Contents

Introduction and Context.....	3
Introduction.....	3
Methodology	3
Limitations	3
Results, Impacts and Recommendations	4
Site Location and Landscape Context.....	4
Habitats and Flora.....	5
Fauna.....	8
Appendix 1: Proposed Development Plan.....	23
Appendix 2: Site Location Plan	24
Appendix 3: Habitat Survey Plan.....	25
Appendix 4: Habitat Survey Plan.....	26
Appendix 5: Site Photographs	27
Appendix 6: Baseline Condition Assessments	32
Limitations and Copyright.....	35
Version Control	35

Introduction and Context

Introduction

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development.

No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author's knowledge, by any other consultancy.

Methodology

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2026.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2026.](#)

Limitations

Whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report is a preliminary assessment and does not provide a complete characterisation of the site. Nor does it represent a full botanical assessment. It assesses the likelihood of protected, notable and important habitats and species being present, based on a site and landscape level habitat value-based risk assessment. This is based upon the ecology, biology and known distribution of species as currently understood.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

The survey was completed outside of the optimal survey period (April to October) for ground flora, and as such the accuracy of botanical assessment and condition assessment data may be limited in terms of species visible and ground conditions at the time of survey.

Results, Impacts and Recommendations

Site Location and Landscape Context

Table 1: Site location and landscape context

Site Location
The site is located at National Grid Reference TQ 23039 38006 and has an area of approximately 0.3ha comprising seven buildings, five scattered trees, modified grassland, artificial unvegetated, unsealed surfaces and a ditch. The site is located in a rural setting, immediately surrounded by grasslands and arable/pastoral fields. The site is enclosed by fencing and tree lines to the south and west. The grassland on site extends outside the site boundary on the north and east sides. The site is set within a wider agricultural landscape of arable and pasture, with dwellings intermittently scattered throughout. The fields are delineated by lines of trees and hedgerows extending throughout the landscape. There are parcels of woodland to the northwest and east of the site. There are 8 ponds (P1-P8) within 500m of the site. The River Mole is located ~470m south of the site. The area is characterised by medium, silt-loam but locally light, silt-rich, or sometimes heavy clay-rich soils and subsoils. Mildly Acidic to Neutral (pH: 6.0 - 7.0).
Priority Habitats and Designated Sites
Summary of Survey Findings <u>Priority Habitats</u> There are 5 priority habitats located within 2 km of the site. These comprise traditional orchard, deciduous woodland, ancient & semi-natural woodland, ancient replanted woodland and wood pasture and parkland. The closest priority habitat is a traditional orchard, located ~210 m N of the site. The site is well connected to nearby notable habitats through green spaces, lines of trees, and mature hedgerows. <u>Designated Sites</u> There are no other statutory sites within 2 km of the site. The site does fall within the impact risk zone for House Copse SSSI however, the proposed development type is not listed as possible high risk with regard to this designation.

The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre. Whilst some habitats in the wider landscape may host designations, the immediate environs of the site do not host habitats likely to be of designable quality.

Impacts

No direct impacts to any designated sites will occur as a result of the proposed development, due to the small scale and low overall impact of the development from such sites (where known).

Recommendations

No recommendations.

Habitats and Flora

The site survey was undertaken by Oliver Wills BSc (Hons), Graduate Ecologist.

Table 2: Survey weather conditions

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
23/02/2026	11.8	82	40	16.7	None

Table 3: Habitats and flora

Habitats and Flora: Conclusion, Impact or Recommendations <i>This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.</i>
Onsite habitats
Summary of Survey Findings <u>Modified grassland (g4) - Horse grazed (103) - Bare ground (510) - Scattered trees (32)</u>

Much of the site is comprised of modified grassland, predominantly in the west, east and north of the site. The grassland extends east and north outside of the site boundary. The majority of the grassland is fenced off for horse grazing, while the areas outside the allocated grazing fields, such as those surrounding the drive and main dwelling, are regularly maintained.

The field in the west of the site is heavily trampled by horses, and as such is predominantly bare of vegetation.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the modified grassland was assessed to have a poor condition value.

Table 3a: Modified grassland species abundance.

Abundance	Species
Dominant	Perennial rye-grass (<i>Lolium perenne</i>)
Abundant	Yorkshire-fog (<i>Holcus lanatus</i>)
Frequent	Creeping buttercup (<i>Ranunculus repens</i>), white clover (<i>Trifolium repens</i>), greater plantain (<i>Plantago major</i>)
Occasional	Broad-leaved dock (<i>Rumex obtusifolius</i>), common nettle (<i>Urtica dioica</i>), dandelion (<i>Taraxacum</i>), cow parsley (<i>Anthriscus sylvestris</i>), cleavers (<i>Galium aparine</i>), bramble (<i>Rubus fruticosus</i>)

There are five scattered oak trees (*Quercus robur*) within the grassland, comprising 3 medium and 2 large size. Collectively, these trees were assessed as being in good condition. All five trees are mature. T1 and T3 feature suitable roosting features for bats. More details about these trees can be found in the bat section of the report.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, all five trees were assessed to have a good condition value.

Artificial unvegetated, unsealed surface (u1c)

There is an artificial unvegetated, unsealed surface drive leading from the road to the west of the site towards the buildings in the centre of the site.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, this habitat is not subject to a condition assessment and is automatically assigned a poor condition.

Modified grassland (g4) - Ditches (50)

There is a ditch running along the south boundary of the site through the modified grassland. The ditch appears to originate from water run-off from the modified grassland field in the east of the site. The ditch continues to run west offsite. There is no aquatic vegetation growth in the ditch, and the ditch is predominantly lined with detritus.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the ditches was assessed to have a poor condition value.

Building (u1b5)

There are seven buildings on site; B1 is a settled mobile home with additional decking, B2 is a kennel, B3 and B5 are sheds, B4 is a shipping container and B6-B7 are stables. The buildings are located in the centre and south of the site. More details about the buildings can be found in the bat section of the report.

Impacts

The proposed development will result in the loss of ~0.01ha of modified grassland and unsealed surfaces. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats. However, this could lead to a net loss in biodiversity at the site.

Recommendations

Best practice measures to minimise the possibility of pollution must be implemented during construction. This should include the following measures:

- Remove only the minimum of habitat required to facilitate the development
- Protect retained turf and soil resource from destruction and compaction using plastic matting and wooden boarding. Do not store skips and other heavy materials on retained turf.

The proposed development may require a Biodiversity Net Gain assessment, to calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain.

Invasive / Non-native species

Summary of Survey Findings

No non-native invasive or otherwise problematic plants were recorded on site.

Impacts

None.

Recommendations

No further surveys but remain vigilant.

Fauna

Table 4: Fauna

Fauna: Conclusion, Impact or Recommendations

This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.

Invertebrates

Summary of Survey Findings

The habitats present on-site, including modified grassland, scattered trees, and a ditch likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.

Impacts

The proposed development will result in the loss of ~0.01ha of modified grassland. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat locally.

Recommendations

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates:

- Planting of pollinator friendly grassland species
- Installation of insect hotels
- Incorporation of bee bricks into the fabric of the new building. These should be installed 0.5m above ground level on a south-facing elevation

with no obscuring vegetation	
Roosting Bats	
Summary of Survey Findings A review of the MAGIC database for European Protected Species Licences (EPSL) within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. No EPSLs are present within a 2km radius of the site. Buildings and trees to be impacted by the proposed development are assessed for their suitability to support roosting bats below. There are a total of seven buildings on site: B1 is a settled mobile home with additional decking, B2 is a kennel, B3 and B5 are sheds, B4 is a shipping container and B6-B7 are stables. T1 and T3 both featured suitable roosting features for bats. No evidence of roosting bats was identified on or within any of the buildings or any of the surveyed trees on-site.	
B1 Building description	Photographs
Summary B1 is a one-storey settled mobile home. The building features a gable with a corrugated roof. There is an additional wooden decking on the west and north of the structure. The structure is relatively new, and as such all features including the walls, barge boards, soffits and roofing are in good condition with no gaps. No evidence of bats was found on or within the building. The building will be retained as part of the development. B1 is negligible for roosting bats.	
B2 Building description	Photographs

Summary B2 is a small timber and metal dog kennel. The kennel is in good condition with no gaps into the interior part of the structure. No evidence of bats was found on or within the structure. B2 is set to be retained as part of the development. B2 is negligible for roosting bats.	
B3 Building description	Photographs
Summary B3 is a small timber shed. The roof is lined with shed roofing felt. There is a gap into the shed in the timber on the west elevation, as well as a broken window on the east elevation. The window was curtained at the time of the survey which would limit access through this gap. The shed is in regular use for storage. There are no crevices for crevice dwelling bats, and the regular human activity makes the building unsuitable for roosting void dwelling bats. No evidence of bats was found on or within the building. B3 is set to be removed as part of the proposed development. B3 is negligible for roosting bats.	
B4 Building description	Photographs

Summary B4 is a metal shipping container. The structure is in good condition, with no gaps in the structure for crevice dwelling bats, or access points into the interior for void dwelling bats. No evidence of bats was found on or within the building. B4 is negligible for roosting bats.	
B5 Building description	Photographs
Summary B5 is a timber shed. The shed is split into two parts, the eastern section is enclosed, while the west section features an open north elevation. The roof on the east section is flat, and the west section is gabled, both constructed from corrugated metal. The west section features a damaged roof lining, with timber purlins, rafters, and joists. There is no central beam. The east section features several timber roof beams supporting the flat roof with no lining. The west wall is damaged and open on the east elevation. Used for storage, the building is regularly disturbed. Both sections are exposed. No evidence of bats was found on or within the building. B5 is negligible for roosting bats.	
B6 Building description	Photographs

Summary B6 is a timber stables building, with a corrugated metal flat roof. The building housed a horse at the time of the survey. The timber cladding and metal roofing were in good condition with no gaps for crevice-dwelling species. The stable doors are open and allow access into the interior space. There are some timber beams supporting the flat roof, but the regular disturbance and exposed nature of the building limit its suitability for bats. No evidence of bats was found on or within the building. B6 is negligible for roosting bats.	
B7 Building description	Photographs
Summary B7 is also a timber stable, slightly smaller than B6, and features a gabled roof, constructed of shed roofing felt over timber boards. The interior of the roof features timber purlins, rafters, and joists, with no central beam. The roof felt was in good condition with no gaps. The timber clad walls were in good condition with no gaps. A pony was housed in the structure at the time of the survey. The stable doors are open and allow access into the interior space. Regular disturbance and exposed nature of the building limit its suitability for bats. No evidence of bats was found on or within the building. B7 is negligible for roosting bats.	
T1 description	Photographs

<i>Summary</i> T1 is a mature oak located along the south boundary of the site along the ditch (TQ 23157 37920). The tree has a DBH of 40.5cm and a height of ~25m. Features identified on T1 during the survey are detailed below.			
PRF ref	Type of PRF	Condition/description/suitability	Photograph(s)
PRF-1	Knot hole	Knot hole located approximately 3m from ground level on northwest aspect of stem (northwest facing). Feature measures approximately 20cm height by 3cm width. The knot hole was too high to inspect from ground level, and as such the depth of the feature could not be determined. Therefore, the feature requires further investigation (i.e. FAR) to determine its suitability for roosting bats.	
T3 description			Photographs

<i>Summary</i> T3 is a mature oak located along the south boundary of the site along the ditch (TQ 23156 37932). The tree has a DBH of 80cm and a height of ~25m. Features identified on T3 during the survey are detailed below.			
PRF ref	Type of PRF	Condition/description/suitability	Photograph(s)
PRF-1	Split branch	Split branch located approximately 15m from ground level on a branch facing west. Feature measures approximately 40cm height by 10cm width. The knot hole was too high to inspect from ground level, and as such the depth of the feature could not be determined. Therefore, the feature requires further investigation (i.e. FAR) to determine its suitability for roosting bats.	
Impacts B3 will be removed to facilitate the development. Bats are very unlikely to be roosting within any of the buildings onsite and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development. All five trees (T1-T5) will be retained in the development, and as such no direct impacts to roosting bats are anticipated. However, the proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and may deter bats from using these areas.			

Recommendations

In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.

A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: <https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2>

The installation of one bat box at the site will provide additional roosting habitat for bats. The bat boxes will be installed onto retained mature trees in the wider ownership boundary. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction, with a clear flight path to and from the entrance, away from and unlit by artificial light.

The bat boxes will be a specification suitable for crevice dwelling species such as Beaumaris Woodstone Bat Box for crevice dwellers or a similar alternative brand.

Foraging and Commuting Bats

Summary of Survey Findings

Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of modified grassland, scattered trees, and a ditch. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Most notably, the scattered trees on site are adjacent to lines of trees along the south and west boundaries of the site which extend beyond the site adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites.

Impacts

The proposed development will result in the loss of ~0.01ha of modified grassland. Given the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats.

The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.

Recommendations

A low impact lighting strategy will be adopted for the site during and post-development, which will be designed to incorporate the measures laid out in the latest (2023) bat lighting guide Guidance Note 8 Bats and Artificial Lighting¹.

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats:

- Planting of locally characteristic tree, shrub and hedgerows to increase foraging opportunities.

Birds

Summary of Survey Findings

No evidence of nesting birds was identified on or within any of the scattered trees or buildings, however the scattered trees provides suitable shelter and could be used by common nesting birds - such as tree cavities which could support species such as tits, while the timber outbuildings may offer some limited nesting opportunities. The site is located near a network of arable and pastoral fields, as well as a woodland to the north which is likely to host a wide assemblage of bird species, and may, on occasion use the site.

A woodpecker and a red kite were heard and seen on site during the survey.

Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.

Impacts

Modified grassland and one outbuilding (B3) will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.

Recommendations

Any building and vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building/vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.

Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests, depending on species present, until the young have fledged.

The installation of a minimum of one bird box on a mature tree around the site boundaries or on retained buildings will provide additional nesting habitat for birds e.g.

- Schwegler 1B Nest Boxes (trees)
- Schwegler 2H Robin Boxes (trees)

- Woodstone Nest Box (buildings or trees)
- Or a similar alternative brand.

Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.

Reptiles

Summary of Survey Findings

The dominant habitat onsite modified grassland is considered suboptimal for reptiles due to the species content (common and widespread species with minimal diversity) and associated management regime, where at the time of the survey the grassland was recorded as being a relatively short sward. Given the management regime employed on the modified grassland, as well as the species composition, it is considered unlikely that this faunal group would be present within this habitat.

The wider landscape features a mosaic of arable and pastoral fields, alongside some larger parcels of woodland. The woodland in the wider landscape is of elevated ecological value, and is connected to the site through lines of trees and hedgerows lining fields. As such, the presence of reptiles on site cannot be discounted.

Impacts

The proposed development will result in the loss of ~0.01ha of modified grassland. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more suitable habitat locally. However, site clearance could result in the death or injury of reptiles, if present.

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:

- Vegetation will be maintained at a short sward (5cm) to discourage reptiles.
- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.
- If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.

- In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.

Amphibians

Summary of Survey Findings

A review of MAGIC database found no granted EPSL for great crested newts within 2km of the site.

No ponds are located on, or adjacent to, the site. There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of eight ponds within 500m; P1 is located ~80m southeast, P2 is located ~180m north, P3 is located ~240m south, P4 is located ~295m southeast, P5 is located ~325m northwest, P6 is located ~400m west, P7 is located ~415m southwest, and P8 is located ~465m southwest. P1 and P2 are connected to the site by grassland. P3-P8 are separated from the site by one road (Hillybarn Road or Ifield Road), but these do not act as significant barriers due to their small size, quiet traffic flow, and lack of high kerbs.

The site provides limited suitable terrestrial habitat for amphibians. The areas of artificial unsealed surface and modified grassland offer sub-optimal habitat for terrestrial amphibians. The ditch may offer some limited foraging and commuting opportunities for these species.

Impacts

When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.01ha of modified grassland. If great crested newts are present within the pond 80m to the southeast of the site, when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a **Green risk score**, which states: **Offence Highly Unlikely** (see **Figure 1** below).

Figure 1: Great crested newt rapid risk assessment (Natural England 2015)

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

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures:

- A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area.
- Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas.
- Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.
- If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.
- In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist.

Badgers

Summary of Survey Findings

The site is relatively flat and open, limiting sett excavation opportunities. No badger setts were noted on site or within a 30m radius of the site, where accessible. No evidence of badgers was found on site. The wider landscape features parcels of woodland which may host established populations. Field margins, tree lines and hedgerow networks, which are directly connected to the site, will provide value. As such, the presence of foraging, commuting, and sheltering badgers on site cannot be discounted.

Impacts

No works will be undertaken within 30m of a known badger sett. The proposed development will result in the loss of modified grassland. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to badger setts, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures:

- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.

In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist.

Riparian animals

Summary of Survey Findings

There are no suitable riparian habitats on or adjacent to the site. The ditch on site is very shallow, and as such is not deep enough to provide suitable foraging opportunities for riparian mammals. The vegetation on the banks is maintained as very short limiting foraging opportunities for water voles. The adjacent habitats lack structure and as such there are no shelter opportunities for riparian mammals. The ditch is not connected to further riparian habitats. As such, it is considered highly unlikely that riparian mammals are present onsite.

Impacts

Otters

No impacts are anticipated on riparian animals as a result of the proposed development.

Water Vole

No impacts are anticipated on riparian animals as a result of the proposed development.

Recommendations

Otters

None.

Water Vole

None.

Hazel dormouse

Summary of Survey Findings

The site lies within the current range for hazel dormice. Habitats on site are assessed to provide some limited foraging and commuting opportunities for dormice in the form of scattered trees. Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation. As such habitats on site are considered unsuitable for hazel dormice and therefore the likelihood of this species being present on site is considered acceptably low.

Impacts

Modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local dormouse populations owing to their low value and the presence of more extensive habitat locally.

Recommendations

None required.

Other e.g. small mammals

Summary of Survey Findings

The modified grassland and scattered trees onsite provides some foraging and commuting opportunities for small terrestrial mammals such as rabbits and hedgehogs, with woodland habitat connected by arable and pastoral fields, and hedgerows and trees.

Impacts

The proposed development will result in the loss of ~0.01ha of modified grassland. The loss of such habitats is likely to be inconsequential to local small mammal/hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.

Recommendations

A precautionary working method will be implemented during construction, including the following measures:

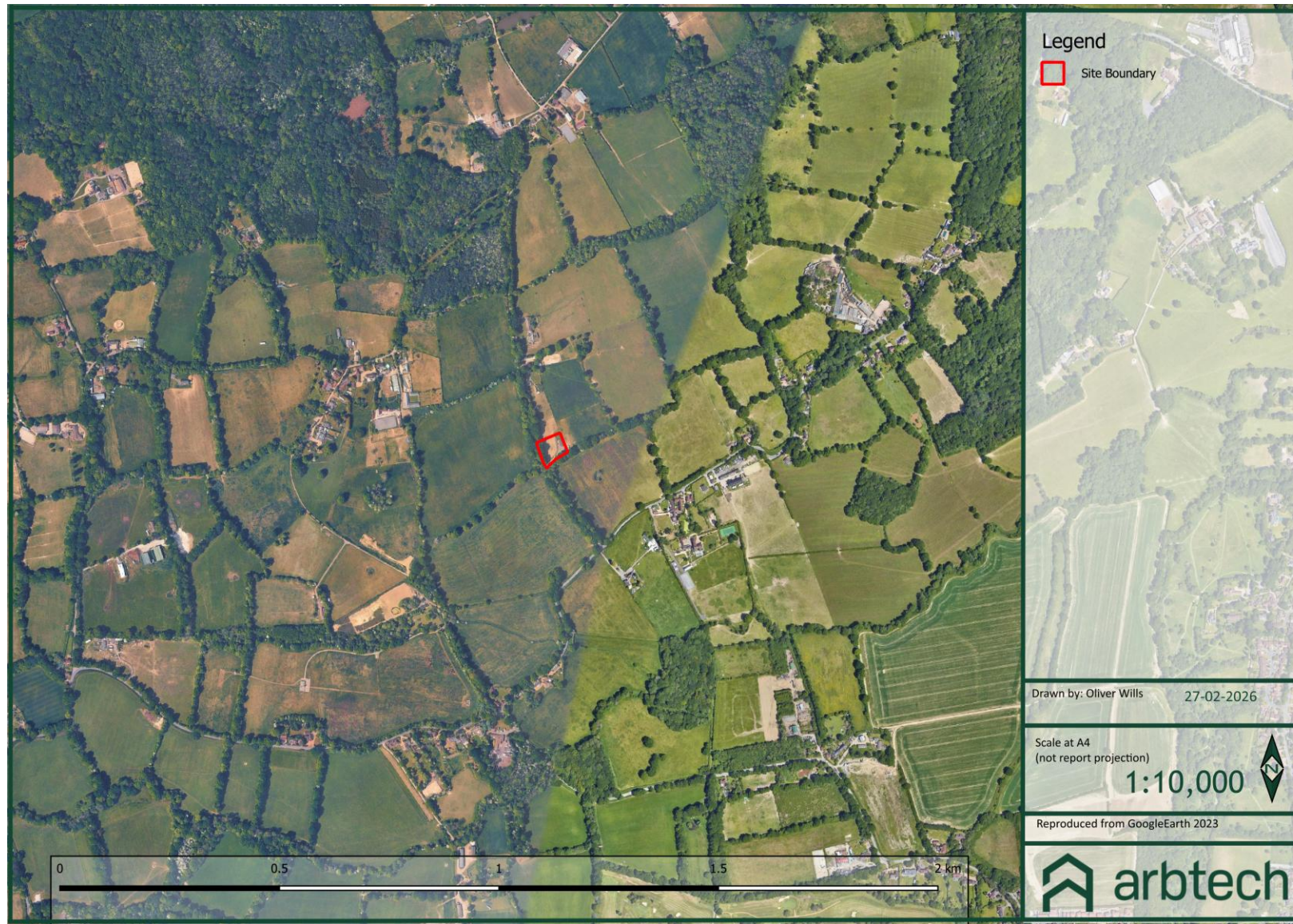
- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- Any pipework exceeding 100mm will be capped overnight.
- The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.
- If any small mammals are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:

- Installation of hedgehog houses in shady areas.

[illegible]

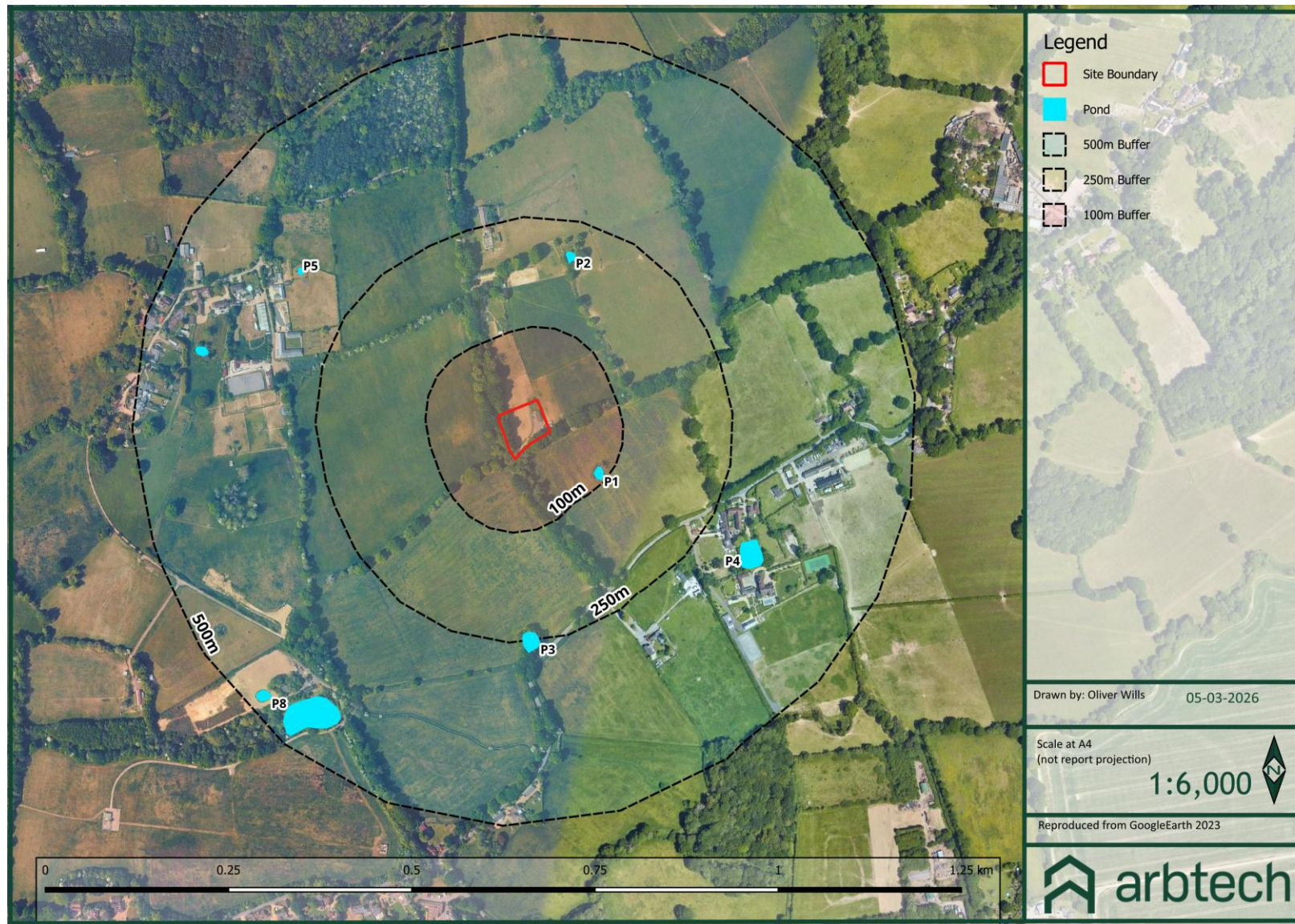
Appendix 2: Site Location Plan



Appendix 3: Habitat Survey Plan



Appendix 4: Habitat Survey Plan



Appendix 5: Site Photographs



Photo 1: Modified grassland



Photo 2: Modified grassland - bare ground



Photo 3: Modified grassland



Photo 4: Artificial unvegetated, unsealed surface



Photo 5: Ditches



Photo 6: Ditches



Photo 7: Common Oak (Quercus robur)



Photo 8: Common Oak (Quercus robur)



Photo 9: Common Oak (*Quercus robur*)



Photo 10: Common Oak (*Quercus robur*)



Photo 11: Common Oak (*Quercus robur*)



Photo 12: B1



Photo 13: B2



Photo 14: B3



Photo 15: B4



Photo 16: B5



Photo 17: B6



Photo 18: B7

Appendix 6: Baseline Condition Assessments

Table 6a: Modified grassland condition assessment.

	Criteria Description	Criteria Passed?
A	There are 6-8 vascular plant species per m2 present, including at least 2 forbs. Note - this criterion is essential for achieving Moderate or Good condition.	N
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens). For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.	N
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y
G	There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	Y
		Total 3/7
	Condition Poor due to failing one or more essential criteria.	

Table 6b: Ditches condition assessment.

	Criteria Description	Criteria Passed?
A	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Y
B	A range of emergent, submerged and floating-leaved plants are present. As a guide >10 species of emergent, floating or submerged plants present in a 20 m ditch length.	N
C	There is less than 10% cover of filamentous algae and or duckweed Lemna spp. (these are signs of eutrophication).	Y
D	A fringe of aquatic marginal vegetation is present along more than 75% of the ditch.	N
E	Physical damage is evident along less than 5% of the ditch, with examples of damage including: excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Y
F	Sufficient water levels are maintained - as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	N
G	Less than 10% of the ditch is heavily shaded.	N
H	There is an absence of non-native plant and animal species.	Y
		Total 4/8
	Condition Poor due to passing 4 of 8 criteria and all essential criteria.	

Table 6c: Scattered trees condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	Y
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Limitations and Copyright

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Version Control

Status	Issue	Name	Date
Draft	0.1	Oliver Wills BSc (Hons), Graduate Ecologist	27/02/2026
Proof	0.2	Elen Griffin BSc (Hons), MRSB, Senior Ecologist	05/03/2026
Final	1.0	Oliver Wills BSc (Hons), Graduate Ecologist	05/03/2026