Lyncorte, RH13 8NW

Preliminary Ecological Appraisal

Lyncorte – Phase 1

Preliminary Ecological Appraisal

EHM Ltd

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Executive Summary

EHM Ltd has been commissioned to carry out a Preliminary Ecological Appraisal (PEA) of a property located in Horsham, West Sussex. This report will provide an assessment of the site reporting on the current conditions of the habitats present and their potential to support protected and notable species.

The site is roughly square in shape, covering an area of approximately 0.4ha. It comprises of a garden area, that includes plant beds and hedgerows. The site is located within a community of similar sized properties. The local landscape is largely rural in nature, aside the village (Dial Post) that this site is in, with residential properties immediately to the north of the site, but a mixture of hedgerows, grassland, agricultural land and pockets of woodland dominating the wider landscape. The centre of Horsham, the closest large town, is approximately 11km north of the site.

Species	Sites potential to support
Bat roosts- buildings.	Negligible
Bat roosts- mature trees	Low
Bat foraging/ commuting areas	High
Badgers	Low
Dormice	Negligible
Small Mammals	High
Reptiles	Moderate
Common Amphibians	Low
Great Crested Newts	Low
Breeding birds	High
Plants	Low
Invertebrates	Moderate

Recommendation	Action
Retention of wider habitats	Protect and retain wider habitats such as grassland and hedgerow during and post construction.
Protection of breeding birds	Carry out vegetation clearance outside of bird breeding season or under ecological supervision of an ecologist following a breeding bird survey.
Appropriate lighting for bats	Compile a sensitive lighting plan to avoid illuminating bat foraging and commuting habitat – woodland, hedgerow, scrub and scattered trees, through construction and post construction. This can be a condition of planning.
Remove vegetation in stages	Follow the vegetation clearance method statement in stages for all habitats on site to reduce the risk of impacting protected/notable species.
Implement biodiversity enhancements	Follow recommendations for planting, bird, bat and hedgehog boxes, log piles and compost heaps etc.,
Adequate pollution control	Habitats on site should be adequately protected to ensure no polluted runoff enters on site or adjacent land. All oils, fuels and chemicals should be adequately stored on site in bunded containers with appropriate spill kits and emergency procedures in place. Establish exclusion zones before construction.
Conduct Reptile Surveys	Conduct presence/absence surveys of the site, mainly the grassland area, prior to planning permission (as planning committees recommend this), between April and September. Further recommendations may be made after reptile survey is completed.
Follow badger protection measures	Follow badger protection measures during construction.
Follow any recommendations that results from the arboricultural assessment	Follow any recommendations and plans that have resulted from the arboricultural impact assessment that has been undertaken for this proposed development.

1. Introduction

EHM Ltd has been commissioned to carry out a Preliminary Ecological Appraisal (PEA) of a property in Dial Post, West Sussex, RH13 8NW, which is hereafter referred to as the 'site'. This report will provide an assessment of the site reporting on the current conditions of the habitats present and their potential to support protected and notable species.

1.1 Project outline

At the time of the site visit and report write-up, EHM Ltd understands that the development will involve the construction of a single dwelling on land to the south of an existing property, as well the construction of a driveway to allow the new property its own access to the road.

1.2 Site Description

The site is roughly square in shape, covering an area of approximately 0.4ha. It comprises of a garden area, that includes plant beds and hedgerows. These are currently accessed through the garden of the existing property further north on the land. Hedgerows form the east, south and west boundary and the garden continues at the north boundary.

The site is located within a community of similar sized properties. The local landscape is largely rural in nature, aside the village (Dial Post) that this site is in, with residential properties immediately to the north of the site, but a mixture of hedgerows, grassland, agricultural land and pockets of woodland dominating the wider landscape. The local landscape appears to have good connectivity between habitat from aerial images in the form of hedgerows, grassland edges and woodland edges, although roads to separate habitats. The centre of Horsham, the closest large town, is approximately 11km north of the site.

The site (as shown on figure 1) is in Dial Post, Horsham, West Sussex; TQ 15305 19246. Locations of broad habitats on the site are shown in the appendix.

1.3 Aims of PEA

The aim of this PEA is to:

- Identify the likely ecological constraints associated with a project.
- Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'.
- Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA).
- Identify the opportunities offered by a project to deliver ecological enhancement.

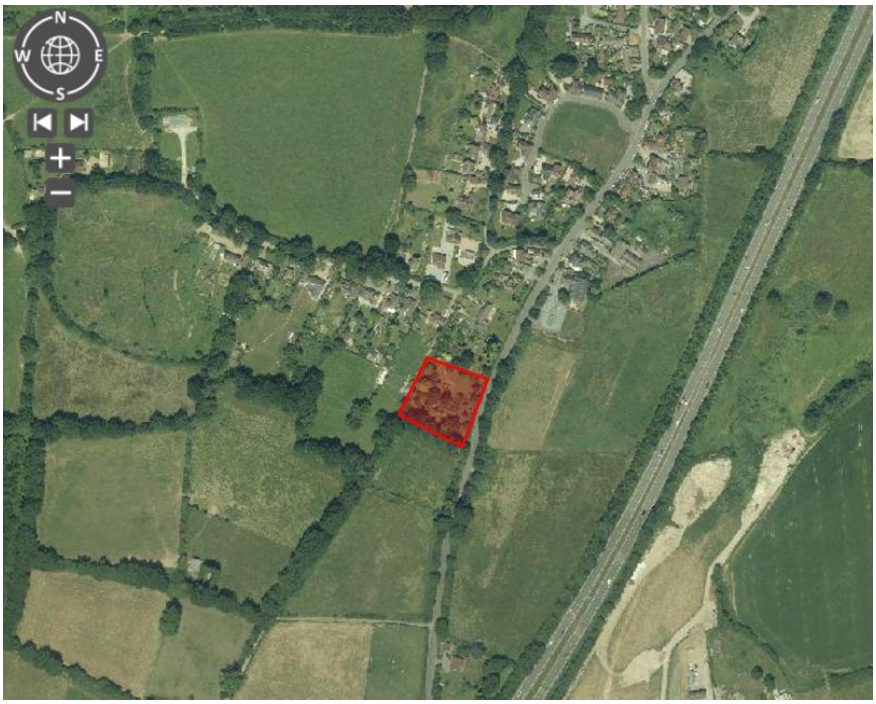


Figure 1: *Approximate boundary of the site. Data Source: Magic Map.*

2. Methods

2.1 Site Visit

EHM Ltd undertook a site visit on the 16th of October 2024. This was to carry out a walk over of the site, determining the basic habitats present and their current condition. The potential for these habitats to support protected and notable species was also recorded. The site visit was carried out by an experienced professional who is able to appropriately identify habitats and assess their quality and suitability to support species.

The methodology followed that of an Extended Phase 1 Habitat Survey following the methodology of JNCC (1993) as modified by IEA (1995). The Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are likely to be ecologically important.

2.2 Protected Species

The following evidence of protected species or habitats to support them was assessed.

Badgers

Evidence of badger activity on site was assessed by searching for:

- Presence of setts, indicated by suitably sized holes or burrows with evidence of badgers such as badger hair and footprints.
- Evidence of well runs supported by secondary evidence such as foraging signs or footprints; and

- Presence of badger latrines

Bats

The site was assessed for its potential to support:

- Roosting bats
- Foraging and commuting bats.

Features which could indicate a potential bat roost include:

- Holes and fissures in trees
- Gaps in buildings that could allow access to areas such as roof voids, e.g., holes in soffits, broken, loose, or missing tiles, damaged lead flashing, etc.

The methodology for assessing bat roost potential followed that recommended by the Bat Conservation Trust[1].

Breeding birds

The site was assessed for its potential to support nesting and breeding birds, considering factors including sufficient habitat cover and food sources.

Dormice

The site was surveyed for suitable dormouse habitat, such as the presence of a well-connected understorey broadleaf habitat, and suitable food sources such as hazel, oak and other nut-bearing trees, fruiting trees and shrubs, flowers and invertebrates. Where hazel nut shells were found, these were inspected for evidence of dormouse feeding.

Aquatic mammals

Aquatic habitats were assessed for their potential to support aquatic mammals such as Otter or water vole. Signs including footprints, droppings and evidence of feeding were searched for.

Reptiles

The site was assessed for its potential to support reptile populations. Suitable habitat for reptiles includes long grass, scrub, woodland and hedgerow borders and wood/rubble piles that act as hibernacula.

Amphibians

Any aquatic habitat was assessed for its potential to support amphibian species, including Great Crested Newts. Any ponds on site were assessed, using the Habitat Suitability Index, for its

[1] Collins, J. (ed) (2016). Bat Surveys for professional Ecologists; Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

potential to support Great Crested Newts. Terrestrial habitat was also accessed for its ability to support amphibians.

Other species

The site was assessed for its potential to support other notable species.

2.3 Desktop Study

In conjunction with the site visit a report was compiled of relevant ecological records within 1km of the site. This provided details of protected and notable species in the area which will help inform the potential of the site to support such species. The report from the Sussex Biodiversity Record Centre (SxBRC) also provides details of protected sites within a 1km radius of the site. The Multi-Agency Geographical Information for the Countryside (MAGIC) map was also reviewed for additional relevant protected species and habitat information.

2.4 Limitations

The contents of this report are based on a single site visit and a search of the local records centre and MAGIC Map. Though the survey and interpretations of the data were carried out by a competent assessor there may be things that have been overlooked, missed, or not present at the time of the visit.

2.5 Relevant Legislation and Planning Policies

A full list of UK wildlife legislation and designations can be seen in the appendix. Relevant legislation implications for this site include:

- The Conservation of Habitats and Species Regulations 2010 (as amended)
- The Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act 2000
- The Natural Environment and Rural Communities Act (NERC Act) 2006

Planning policies, both local and national, may affect any proposed development. Relevant planning policies to this development include:

- National Planning Policy Framework (NPPF)
- City of Westminster's City Plan 2019-40

3. Results

3.1 Habitats

The location and extent of the habitats are shown in the figure in appendix 1. TN refers to a target note and the habitat code after the habitat name below refer to the Phase I habitat classification. CIEEM guidance recommends that the value or potential value of an ecological

resource or feature should be determined within a defined geographical context[2]. It recommends the following frame of reference;

- International
- UK
- National (i.e., England/Northern Ireland/Scotland/Wales)
- Regional
- County (or Metropolitan - e.g., in London)
- District (or Unitary Authority, City, or Borough)
- Local or Parish
- Site
- Within zone of influence only (which might be the project site or a larger area).

The habitats will be assessed based on these criteria.

Amenity Grassland (J1.2)

The site contains grassland that is intensively managed and regularly mown as an ornamental lawn. Dominant species within the sward includes perennial ryegrass *(Lolium perenne),* selfheal *(Prunella vulgaris)* and buttercup *(Ranunculus sp.).* The grassland is likely semi-improved neutral grassland, however, for the purpose of this report and for clarity, the shortly kept mown areas will be mapped as amenity grassland as to separate it from areas of grassland that are left to grow long. This grassland is considered to have a low potential to support protected species and is considered as having a value at a zone of influence level.

Semi-Improved Neutral Grassland (B2.2)

The site contains grassland that is less managed and no longer mown. Dominant species within the sward includes willowherb *(Chamaenerion angustifolium),* selfheal *(Prunella vulgaris),* dock *(Rumex sp.)* and various grasses. Scrubby species have also began encroaching the grassland areas with species including bramble *(Rubus sp.)* and nettles *(Urtica dioica).* It is considered as having a potential to support protected species and is considered as having value at a site level.

Intact Species-Poor Hedgerow (J2.1.2)

The site contains two hedgerows that form the east and west boundary. Both hedgerows are somewhat maintained, however, the hedgerow on the western boundary is greater managed. The eastern hedgerow is approximately 1m wide by 2m high and the western boundary is approximately 1m wide by 1.5m high. The eastern boundary hedgerow includes the species hawthorn *(Crataegus monogyna),* blackthorn *(Prunus spinosa),* field maple *(Acer campestre),* bramble *(Rubus sp.),* nettles *(Urtica dioica)* and ivy *(Hedera helix).* The western boundary hedgerow includes the species holly *(Ilex aquifolium),* hazel *(Corylus avellana),* hawthorn *(Crataegus monogyna)* and foxglove *(Digitalis purpurea).* Considering their connectivity to the

[2] GUIDELINES FOR ECOLOGICAL IMPACT ASSESSMENT IN THE UNITED KINGDOM. IEEM. June 2006.

wider landscape, these hedgerows are considered as having a potential to support protected species and are considered as having a value at a local level.

Introduced Shrub (J1.4)

There are several formal beds of shrubs within the site. These are predominantly non-native ornamental species and include species such as sowbread *(Cyclamen hederifolium),* Japanese barberry *(Berberis thunbergii),* snowmound spirea *(Spiraea nipponica),* bigleaf hydrangea *(Hydrangea macrophylla)* and Japanese azalea *(Rhododendron japonicum).* Other species within the beds include bramble *(Rubus sp.),* nettles *(Urtica dioica)* and willowherb *(Chamaenerion angustifolium).* Formal planter beds towards the south of the site have become more overgrown with the presence of more scrubby species. The introduced shrubs are considered as having a potential to support protected species and are considered as having a value at a site level.

Scattered Trees (A3.3)

There are several trees scatted across the site, both within formal planters and outside of formal planters. They are mostly of a standard size and presumed to have all been planted in the site. These trees are considered as having potential to support protected species and are considered as having a value at a site level.

Species-Poor Hedgerow with Trees (J2.3.2)

Along the south border of the site there is a hedgerow formed of a line of oak *(Quercus robur)* trees and hawthorn *(Crataegus monogyna).* Considering its connectivity with other hedgerows that lead to woodland, this hedgerow is considered as having a potential to support protected species and is considered as having a value at a local level.

Fence (J2.4)

There is fencing behind each hedgerow (south, east and west boundary). These do not contain any floristic value and are therefore not considered further.

Summary

The table below summarises the habitats on site and their value within a geographical context.

Habitat	Value	Comments
Amenity Grassland	Zone of Influence	Grassland that is regularly mown to maintain an ornamental lawn provides a low potential to support protected and notable species.
Semi-Improved Neutral Grassland	Site	Grassland allowed to grow long provides potential to support protected and notable species.
Intact Species-Poor Hedgerow	Local	Hedgerows that form the east and west border. These provide potential to support protected and notable species.

Introduced Shrub	Site	Several formal planter beds. Although predominately non-native species, these provide a potential to support protected and notable species.
Scattered Trees	Site	Many scattered trees of a mostly standard size. These provide potential to support protected and notable species.
Species-Poor Hedgerow with Trees	Local	Hedgerow forms the south boundary of the site. It provides potential to support protected and notable species.
Fence	Zone of influence	Fencing does not contain any floristic value and is therefore not considered further.

Table 1: *Summary of value of habitats present on site.*

3.2 Species Desktop Results

Desktop Records

A recent biological record search from Sussex Biodiversity Information Centre (SxBRC) produced 11,448 records of protected and notable species within 1km of the site, and 418 records of invasive non-native species within 1km of the site. The table below summarises the key species groups and protected areas within these results. A full list of the species can be seen on request.

Protected species are those listed on EC Habitats Directive- Annexes II and IV, EC Bird Directive- Annex I, Conservation (Natural Habitats) Regulations 1994- Schedules 2 & 5, NERC 2006 Section 41, Wildlife and Countryside Act 1981 (as amended_-Schedules 1, 5 & 8, Protection of Badgers Act 1992. Notable species are categorised as being a: BAP priority National, Red list species (not least concern) and or Red Status bird species, Red Data Book Species, NERC species. Legislation and BAP designation are explained in the appendix.

It should be noted that SxBRC does not hold comprehensive species data for all areas. Even where data are held, a lack of records for a species in a defined geographical area does not necessarily mean that the species does not occur there, the area may simply not have been surveyed.

Sites and Habitats	**Present/Absent**	**Details**
Statutory Sites	Absent	None present
Non-Statutory Sites of Local Wildlife Sites	Absent	None present
Ancient Woodland	Present	Pockets of ancient woodland is present to the east, north and south of the site.
Priority Habitats	Present	Priority Habitat Inventory – Traditional Orchard Priority Habitat Inventory – Deciduous Woodland

		Priority Habitat Inventory – Open Water		
Protected and Notable Species	**Number of Species recorded within 1km**	**Number of Records**	**Date of Oldest Record**	**Date of Latest Record**
Amphibian Species	5	21	01/01/1990	10/09/2021
Reptile Species	2	5	11/06/2016	27/05/2024
Invertebrate Species	76	259	21/07/1995	03/08/2024
Terrestrial Mammal Species (excl. Bats)	2	31	15/02/1997	31/05/2023
Bat Species	10	47	03/09/1992	21/07/2020
Bird Species	151	2375	01/05/1991	11/07/2024
Plant Species	28	52	1990	10/07/2024

Table 2: *Summary of Protected Areas and Species Information. Data Source: SxBRC.*

Regarding the site, the majority of species records received can be viewed as being in one or more of the following three categories.

- Occurred a considerable distance away from the site.
- Few or irregular occurrences of an identified species.
- Not been recorded for some considerable time.

This does not mean that a particular species isn't or has never been present on the site, only that the records held suggest that it is probably unlikely given a number of factors, such as species distribution, habitats present, site connectivity, etc.

3.3 Species Site Assessment

The following assessment considers the information from the desktop study as well an assessment of the habitats on site and their potential to support protected and notable species. The likelihood of species being found on site is defined as follows;

- High- Definite signs of species identified on site and habitat considered suitable.
- Moderate- habitat considered suitable but obvious signs not necessarily detected.
- Low- no obvious signs and habitat considered sub-optimal. Though species may be present.
- Negligible- highly unlikely that species is present.

Bat Commuting/ Foraging Habitat Assessment

The information supplied by the SxBRC provided records of 10 species of bat found within 1km of the site. Local records include species of the common pipistrelle *(Pipistrellus pipistrellus),* the soprano pipistrelle *(Pipistrellus pygmaeus)* and the Leisler's bat *(Nyctalus leisleri).* Magic Map was also consulted for any granted EPS licences within 1km of the site and none were found.

All bat species in the UK eat insects and forage along habitats such as hedgerows, woodlands, grasslands and waterways[3]. Bats use woodland edges, hedgerows, rivers and other linear features like tree-lined footpaths as corridors to commute from one area of countryside to another[4]. The site contains areas of suitable commuting, and some suitable foraging habitat, which is mainly the hedgerows as the shrubs are mostly non-native ornamental species. The site has good connectivity across the wider landscape, particularly through the hedgerows, including to areas where bats have been recorded. It is likely that bats commute across the site.

The presence of foraging/commuting habitat is considered **high**.

Building Bat Roosts Assessment

Buildings are known to provide suitable roosting opportunities for a number of bat species[5]. The site boundary does not include a building and hence there is **negligible** opportunity to support a building bat roost.

Bat Roost Tree Assessment

The trees on site were also assessed for any Potential Roost Features (PRFs). The bat conservation trust provides information regarding features that may be present in trees that bats could potentially use for roosting[6]. There are many trees on the site that are of a suitable age and structure to support PRFs. However, no trees within proximity to the location of the development were identified as having PRFs or active bat roosting signs. As EHM understands, no trees are to be removed as part of this development.

These are considered to have a **low** potential to support a bat roost.

Badger Assessment

The site was investigated for evidence of Badger (*Meles meles*) such as, setts or signs such as tracks, hair, or latrines. No evidence of badger was noted on site. The habitats on site provide little opportunity for foraging considering lack of native species and building setts considering human disturbance. However, the hedgerows may provide commuting habitat, particularly as

[3] https://www.bats.org.uk/about-bats/where-do-bats-live/bat-habitats/foraging-habitats

[4] https://www.bats.org.uk/about-bats/where-do-bats-live/bat-habitats/commuting-habitats

[5] Bats and Buildings. Bats and the Build Environment Series. Bat Conservation Trust. January 2012.

[6] http://www.bats.org.uk/pages/bat_roosts.html#TreeRoosts

there is a block of woodland approximately 400m southwest of the site. The likelihood of badger being on site is **low**.

Dormouse Assessment

No evidence of dormice (*Muscardinus avellanarius*) activity, such as feeding remains or nests was observed on site. Across its range dormice prefer the successional stage of woody vegetation; this is the new growth that arises after woodland management such as coppicing, ride widening, thinning or glade creation, they may also occur in scrubby habitat[7]. The site, nor its surroundings, does not contain any optimal habitat for this species. The likelihood of dormouse being present is considered **negligible**.

Small Mammal Assessment

The local data contained records of the west European hedgehog and European rabbit from within 500m of the site. Several burrows, thought to be of rabbit were found on the site. The sites habitats provide suitable commuting, burrowing and some suitable foraging habitat, particularly towards the south of the site where management of vegetation is carried out less. The likelihood of the presence of small mammals is considered **high**.

Reptile Assessment

Reptiles prefer sites with a diversity of habitats containing a number of micro habitats that provide suitable foraging and refuge sites[8]. The site contains suitable habitat for these species. The semi-improved neutral grassland that is not regularly mown provides habitat for reptiles, as well as the hedgerows and formal plant beds. The hedgerows also provide connectivity to the site and the wider landscape, including to large woodlands. Also, the local data contained records of slow worm *(Anguis fragilis)* within 250m of the site and grass snake *(Natrix helvetica)* within 700m of the site. Both species have also been recorded recently. The potential for reptiles being present is considered **moderate**.

Amphibian Assessment

The European protected species Great Crested Newt (*Triturus cristatus*) requires both suitable aquatic habitats for breeding and terrestrial habitats to forage and shelter during the active season and hibernate over winter[9]. There are 3 records of GCN in the local area in the provided SxBRC data. These records are from over 500m away from the site (approximately 975m), at the Knepp rewilding project. There is one waterbody adjacent to the site, and three others within 500m of the site, however these are almost 500m away, and are separated from the site by many main roads. The waterbody adjacent to the site was able to be accessed and scored a 'below average' (see appendix 3) which means it has a low potential to support GCN. The site contains some suitable terrestrial habitat, mainly the hedgerows and some of the formal plant

[7] https://ptes.org/get-informed/facts-figures/hazel-common-dormouse-muscardinus-avellanarius/

[8] Edgar, P., Foster, J. and Baker, J. (2010). Reptile Habitat Management Handbook. Amphibian and reptile Conservation, Bournemouth

[9] Great crested newt mitigation guidelines. August 2001. English Nature.

beds. The European protected species information from Natural England (magic.gov.uk) shows no granted European licences for GCN within 1km of the site. Considering this information, the potential for GCN being present is considered **low**.

Additionally, the SxBRC record search returned records of other amphibian species. The terrestrial habitat on site provides some opportunity for common amphibians. However, there is a lack of suitable aquatic habitat in the local area. The likelihood of common amphibians being present is considered **low**.

Bird Assessment

The site contains suitable habitat for nesting birds, all bird nests are protected whilst they are in use. The shrubs, hedgerows, trees and possible even grassland provide suitable nesting bird opportunities. The likelihood of nesting birds being present is considered **high**.

The local records data contained a number of records of notable bird species. The site has potential to support some of these species such as house sparrow *(Passer domesticus)* and grey wagtail *(Motacilla cinerea).* The likelihood of notable bird species being on site is considered **moderate**.

Plant Assessment

The SBIC results produced a number of records of notable plant species, mostly associated with wet grassland indicator species. Species within the local records include devil's-bit scabious *(Succisa pratensis),* ragged-robin *(Silene flos-cuculi)* and marsh ragwort *(Jacobaea aquatica).*

The site contains semi-improved grassland, some of which is regularly mown, as well as formal plant beds and hedgerows. After speaking with the owner of the site, all plants were planted. Therefore, the likelihood of protected and notable species being present on site is considered **low**.

Invertebrate Assessment

The local records data produced many records of notable and protected invertebrate species. The site contains hedgerows, trees, shrubs and grassland which provides some foraging, commuting and nesting habitat. Although, most of the shrubs within the formal plant beds are non-native species. The likelihood of protected and notable invertebrate species being found on site is considered **moderate**.

3.4 Summary

Table 3 below summarises the sites potential for protected and notable species. Designations for potential are as follows.

- High- Definite signs of species identified on site and habitat considered suitable.
- Medium/ moderate- habitat considered suitable but obvious signs not necessarily detected.
- Low- no obvious signs and habitat considered sub-optimal. Though species may be present.
- Negligible- highly unlikely that species is present.

Species	Sites potential to support	Justification
Bat roosts- buildings.	Negligible	No buildings within site boundary.
Bat roosts- mature trees	Low	The trees present do not exhibit obvious features that could be used by a bat or bats to roost in.
Bat foraging/ commuting areas	High	The hedgerows and grassland provide suitable foraging and commuting habitat. Linear features are present across the site.
Badgers	Low	No evidence found and little suitable habitat.
Dormice	Negligible	No evidence found and unsuitable habitat.
Small Mammals	High	Local records found and suitable commuting habitat. Burrows, identified as rabbit burrows, were found on site.
Reptiles	Moderate	Semi-improved grassland, hedgerows and shrubs provide suitable reptile habitat. The site is also connected to other suitable habitat, including woodlands.
Common Amphibians	Low	Lacks suitable aquatic habitat nearby and little terrestrial habitat present on site.
Great Crested Newts	Low	Lack of suitable aquatic habitat nearby and lack of close by records.
Breeding birds	High	Hedgerows, introduced shrub, trees and possible grassland provide suitable nesting opportunities.
Plants	Low	No plants encountered were of ecological significance.
Invertebrates	Moderate	Hedgerows, trees, shrubs and grassland provide some suitable habitats to support these species.

Table 3: *Summary of the sites potential to support certain protected and notable species.*

3.5 Protected Areas

Statutory Protected Areas

There are no statutory protected areas within 1km of the site.

Non-statutory Protected Areas

There are no non-statutory protected areas within 1km of the site.

Priority Habitats

There are areas of priority habitat within 1km of the site. Habitats listed on the Priority Habitat Inventory within proximity of the site include deciduous woodland, ancient woodland and traditional orchard. These habitats are not found on the site or directly bordering the site.

Figure 2: *Location of priority habitats (dark green = deciduous woodland, ancient woodland = brown/green lines, light green = traditional orchard) Data Source: Magic Map.*

4. Discussion

The following sections consider the effects on protected areas, priority habitats, protected species, notable species and habitats on site. Recommendations for additional surveys and or enhancements are made as necessary.

4.1 Effects on Designated Sites

Designated sites are not within 1km of the proposed development. Therefore, direct and indirect impacts will not occur. Considering the size of the proposed development, any

designated sites located further than 1km away from the site are not expected to be impacted in any way by the proposed development.

4.2 Effects on Priority Habitats

As discussed, priority habitats are present within a 1km radius of the site's boundary. The identified priority habitats are located in excess of 0.15km from the red-line site boundary and are separated by roads. Considering these, no adverse impacts are expected upon these habitats.

4.3 Effects on Habitats on Site

EHM understands that the development will involve the construction of a single dwelling on land to the south of an existing property, as well the construction of a driveway to allow the new property its own access to the road. This will involve the removal of some of the amenity grassland, some of the semi-improved grassland, some of the introduced shrub and a small section of hedgerow on the eastern boundary (2-3m). It is recommended that as much of the current habitats on site are retained as possible.

The habitats across the wider site will not be directly impacted. Recommendations below are made with respect to protected and notable species as well as habitat enhancements.

4.4 Effects on Protected and Notable Species

Bats

The site is considered as having high potential to support bat foraging and commuting bats. This is predominately the hedgerows and grassland as they provide linear features. The introduced shrub may provide some foraging habitat, however, most of the species are non-native. The hedgerows will be retained (apart from a small portion mentioned above) which will ensure the retention of most of the commuting and foraging habitat. Proposed enhancements will benefit bat species.

Furthermore, a sensitive lighting scheme should be incorporated into the final design to protect these edge habitats and newly created habitats on site. To protect potential roost or bat foraging/commuting habitat in the area it will be important to;

- Avoid illuminating the wider habitats on site, particularly the scrub, hedgerow and nearby trees, at dusk or nighttime – Guidelines provided by the Bat Conservation Trust and ILP should be followed[10]
- Limit work to daylight hours
- Limit noise disturbance and other forms of pollution such as dust
- Maintain the wider habitats on site

[10] https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

- Lighting should also be considered post-development with any external lighting positioned so as not to illuminate potential foraging or commuting habitats.

Badgers

Signs of badger were not found during the site walkover and there is little suitable habitat on site. However, there is suitable habitat within the local area. Therefore, as a precaution, to ensure badgers are not harmed during the development, the following actions are recommended;

- To prevent badgers becoming trapped in open earth works or excavations that any excavations, that are to be left overnight, should either be covered over or a board placed securely within the excavation that allows access from the bottom of the excavation to the ground level.
- All excavations and trenches should be inspected each morning before works commence. If a badger is found trapped on site, the ecologist or local badger group/RSPCA should be contacted.
- Any loose or soft material such as topsoil should be covered overnight and when not in use to discourage their use by badgers as potential setts. Any mounds should be inspected daily to ensure badgers have not established a sett. If a potential sett is discovered an ecologist should be consulted immediately and the area not disturbed.
- If pipework (over 120mm in diameter) is stored on site, the ends should be covered and inspected before use.
- Chemicals must be stored in a secure/bunded container to avoid disturbance by badgers.

Small Mammals

As small mammals have been recorded close to the site, suitable habitat is within the site and rabbit burrows were found during the site visit, precautions to protect these species must be followed. Although further surveys are not recommended as evidence was found in areas that will not be affected by the development. Further surveys are also not recommended on the assumption that mitigation measures will be in place, these will adequately protect small mammal species that are likely using the site. Retaining as much hedgerow on site as possible, as well as long grassland and shrubs will help to retain potential habitats and wildlife corridors for these species. Any vegetation clearance should be cleared systematically by hand and cut down to ground level in stages (described below). This will allow any animals present to leave the work area safely.

Dormouse

The site is considered as having a negligible potential to support dormouse due to lack of suitable habitat or any local population.

Reptiles

There is a moderate potential for reptiles being on site, due to suitable habitat and recent reptile records being close to the site. As suitable habitat, including semi-improved grassland,

shrubs and hedgerow will be directly impacted by the proposed development, as well as the site being directly connected to large areas of suitable habitat close by, it is recommended that further reptile surveys are conducted. Following reptile survey guidelines, presence/absence and population surveys should be carried out during the active season (April-September), although there is variability which is dependent upon weather conditions. At least 7 visits are required to prove absence, these are included within the one survey.

Precautions to protect these species during construction should be followed. Connectivity should be retained across the wider landscape through retaining hedgerows on site (as much as possible). Furthermore, retained grassland, shrubs and hedgerows should not have materials stored on it, as this will severely damage habitats and possible harm reptiles.

To reduce possible impacts to reptiles, it is recommended that the habitats that will be directly impacted, be cleared using a suitable method statement to reduce the likelihood of impacting reptiles;

This can be done under ecological supervision if that is wanted, although not necessary.

Stage 1 – the vegetation will need to be reduced to a height of 150-200mm using hand tools (e.g., strimmer). It is recommended that cutting works towards retained areas, where there is connectivity to wider habitats. All potential refugia such as log or rubble piles should be removed by hand to outside of work area.

Stage 2 – after a period of at least 24 hours has passed a second vegetation cut should be undertaken to ground level. Again, it is recommended that this second-stage cutting works towards retained areas (south and west). All cuttings to be removed from work area. The site can be completely cleared and worked upon as necessary.

If a reptile is seen, then works should stop until an appropriate mitigation strategy can be agreed and implemented.

Additional recommendations may be made following the completion of reptile surveys. Additional enhancements for reptiles could be incorporated into the final development, particularly within any retained habitats or green spaces.

Amphibians

The site is considered as having a low potential to support the European protected species Great Crested Newt. There are no ponds within the site boundary, but there is one adjacent to the site boundary. GCN typically inhabit terrestrial habitat within 100m of a breeding pond[11]. The terrestrial habitats are considered as having a low potential to support GCN, as the suitable

[11] Herpetological Journal, Vol. 10, pp. 137-142 (2000). The terrestrial summer habitat of radio-tracked great crested newts *(Triturus cristatus)* and marbled newts *(T. Marmoratus).* Robert Jehle.

habitat is predominately located towards the south of the site which will not be directly impacted.

The below table uses the Natural England Risk Assessment for GCN. Though imperfect this tool provides an assessment of the likelihood of the proposed development causing an offence and whether there is a need for a licence.

The table assumes that the pond on site and those within proximity and in the local area are breeding ponds. This provides a worst-case scenario. The assessment assumes no mitigation measure are in place.

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**	

Table 4: *Rapid Risk Assessment for Great Crested Newt.*

As can be seen the rapid assessment suggests that the risk is Green and that an offence is highly unlikely. This does not take into account the suitability of habitats impacted. The development will largely impact amenity grassland, as well as a few shrubs. Considering the pond scoring a 'below average' suitability, and the rapid assessment scoring green, further surveys are not recommended. As a precaution, the following mitigation should be in place for amphibians;

- To prevent amphibians becoming trapped in open earth works or excavations that are to be left overnight, should either be covered over or a board placed securely within the excavation that allows access from the bottom of the excavation to the ground level.
- All excavations and trenches should be inspected each morning before works commence. If an amphibian is found trapped on site, the amphibian should be safely removed and allowed to disperse within suitable habitat that has connectivity to wider habitats. However, if suspected to be a newt, works should cease, and an ecologist must be contacted, as great crested newts are a fully protected species, and only an ecologist holding a great crested newt licence is allowed to handle this species. All three newt species look very similar, only an experienced ecologist should identify the newt found.

Birds

There is a high level of potential for birds to be nesting on the site. The shrubs, hedgerow, trees and possible grassland provide the best habitats for nesting, and these should ideally be

retained where possible. To ensure breeding birds are not impacted by any project works, any vegetation that requires removal should be removed outside of the breeding bird season, this typically runs from 1st March to 1st September. If vegetation requires removal during the nesting bird season the area should be subjected to a survey by an experienced ecologist. If there are any nest sites located within the work area a suitable exclusion zone will have to be established until the chicks have fledged. All bird nests are protected in the Wildlife and Countryside Act (see appendix).

Additional planting and inclusion of nest boxes would help replace any potential loss in nesting habitat.

Invertebrates/Plants

Retention of the wider habitats on site (mainly hedgerow, shrubs, trees and grassland) will help maintain suitable habitats on site for invertebrates and plants. Inclusion of log or brush piles is also recommended in retained habitats. Any post project planting should be of native species to provide enhancements to invertebrate species.

4.5 General Ecological Protection Measures

The following measures are suggested to help minimise the impact to the wider environment;

- Establish a biodiversity protection zone to include areas of retained grassland and hedgerow habitats on site. All project personnel and materials will be excluded from this area; these areas should be clearly marked on site.
- Suppression and monitoring of dust where relevant.
- Control sources of aquatic pollution, particularly from entering local water courses or ground water.
- All proposed work must strictly be in accordance with all relevant Pollution Prevention Guidelines (PPG) published by the Environment Agency which may include but is not limited to PPG1 (general), PPG5 (works in, near, or liable to affect watercourses) and PPG6 (work at construction & demolition sites). Contingency plans should be drawn up to address chemical spillage, collision, etc.

4.6 Ecological Enhancements

A number of enhancements can be made in the event of any relandscaping works on site to help reduce any potential ecological impacts. It is important to utilise native plant species of local provenance in landscaping schemes to enhance the ecological value of the site. A few general enhancements are recommended to be considered when designing the final plan.

Planting
Any native tree and flower plantings should ideally be used to replace or provide additional habitats. The hedgerows and any trees on site should be retained where possible.

Any areas of green roofs or green walls possible would also provide a benefit for a number of species.

Additional Features
To enhance the local bat population and provide roosting opportunities within the site an artificial roost site could be incorporated into the development. The bat box should ideally be hung on a tree, mounted on a pole or placed on the southern side of the building. The Schwegler 2F is a good general-purpose box. Additionally, the inclusion of a bird nest box/boxes would also provide a benefit for the local bird population. A range of different boxes is recommended. Those most applicable are single hole-fronted for tits, colony hole-fronted for house sparrows and deep nestboxes for owls.

It is also recommended that log piles could be made near areas of retained hedgerow or nearby trees. The log piles can be created during site management from leftover wood. Log piles offer shelter for hibernating small mammals and insects, as well as a foraging area for some birds.

Compost heaps can also be formed in areas of retained hedgerow or nearby trees. The compost heaps should be placed in sunny, south-facing areas. These can be created during site management or development. Compost heaps offer excellent habitats for reptiles and insects.

Hedgehog homes could also be placed along the boundaries of the site, ideally within/nearby hedgerows. These provide areas of shelter for hedgehogs within the site, helping support any local population.

Further protection and enhancement plans
It may be that for any re-landscaping projects, other requirements may be needed by the LPA.

Additional recommendations may be made following the completion of species surveys.

5. Impact Assessment
The following section provides an ecological assessment of the proposed development and is designed to quantify and evaluate the potential impacts of the development on habitats and species present on site or within the local area.

5.1 Methodology
The approach to this assessment accords with guidance presented within the CIEEM Guidelines for Ecological Impact Assessment (EcIA) in the UK and Ireland (CIEEM 2018). In essence, an EcIA assesses the activities associated with a proposed scheme that are likely to generate changes within identified zone of influences, on identified ecological features and receptors. The

proposals are subsequently reviewed, and mitigation and compensation measures are outlined which help to reduce negative impacts.

Zone of Influence
The zone of influence for the project is defined as:

- The project red line, for effects on habitats and species.
- Adjacent habitats, considered of use by species, for mobile species with territories or foraging ranges that may overlap the site.

Features Considered
The types of features considered in the assessment of effects, to meet legislative and policy requirements are:

- Designated sites (European, national and local).
- Protected species.
- Habitats and species of principal importance (Section 41 list).
- Hedgerows and woodland, where not of principal importance; and
- Habitats, where not of principal importance, that may function as wildlife corridors or stepping-stones.

Features on Site
The site contains the following important ecological features:

- Hedgerow
- Shrubs
- Grassland
- Scattered Trees

The site is also considered as having some level of potential to support the following ecological features:

- Bats
- Nesting Birds
- Small Mammals
- Badger
- Reptiles
- Amphibians
- Notable Plants
- Notable Invertebrates

5.2 Impact Assessment & Mitigation

The table below summarises the features present on site, their geographical scale of importance, potential impact in case of future re-landscaping, and proposed mitigation.

Feature	Scale of Importance	Potential Impact	Suggested Mitigation/ Compensation
Hedgerow	Local	Loss of habitat. Damage during construction.	Retain hedgerow where possible. Establish adequate root and crown protection during construction and exclusion zones. Encourage native species within hedgerows.
Shrubs	Site	Loss of habitat. Damage during construction.	Retain shrubs where possible. Replace lost shrubs with native shrub species. Establish adequate root and crown protection during construction and exclusion zones.
Grassland	Site	Loss of habitat. Damage during construction.	Wider grassland will be retained. Do not store construction materials/anything on grassland. Grassland can be enhanced through appropriate management, e.g., less frequent cuts.
Scattered Trees	Site	Loss of habitat. Damage during construction.	Retain trees. Establish adequate root and crown protection during construction and exclusion zones. Follow any recommendations from the arboricultural assessment that has been conducted.
Commuting/ foraging Bats	Local	Loss of commuting and foraging habitats.	Retain habitats on site such as scattered trees, shrubs and hedgerows. Especially linear features. Suitable native plantings to provide replacement and additional commuting and forging habitat for bats. Sensitive lighting scheme during development and as part of the proposed development.
Nesting birds	Local	Loss of habitats/nests.	Remove any vegetation outside of the bird breeding season. Inclusion of artificial nest sites within re-landscaping/new development. Including native planting in the development.
Small Mammals	Local	Loss of habitats. Harm during construction.	Retain shrub and hedgerow where possible. Follow method statement for clearing vegetation.

Feature	Scale of Importance	Potential Impact	Suggested Mitigation/ Compensation
			Any open earth works or excavations should be covered overnight or have a means of escape placed from the bottom of the excavation to ground level. Include additional native planting within the development. Enhance retained areas with hedgehog boxes.
Reptiles	Local	Loss of habitats. Harm during construction.	Conduct further reptile surveys. Follow method statement for clearing vegetation. This can be done under ecological supervision, although not required. Retain shrub, grassland and hedgerow where possible. Any open earth works or excavations should be covered overnight or have a means of escape placed from the bottom of the excavation to ground level. Enhance retained areas with additional log piles and compost piles.
Amphibians	Local	Loss of terrestrial habitats. Harm during construction.	Retain shrub and hedgerow where possible. Any open earth works or excavations should be covered overnight or have a means of escape placed from the bottom of the excavation to ground level. Follow method statement for clearing vegetation.
Plants and Invertebrates	Local	Loss of habitats. Harm during construction.	Retain shrub, grassland, trees and hedgerow where possible. Include additional native planting within the development. Inclusion of features such as log piles.

Table 5: *Assessment of potential Impacts from development and proposed mitigation and compensation.*

6. Conclusion

The site was assessed as having potential to support protected and notable species. Following an initial impact assessment, recommendations have been made to reduce the proposed development impacts on wildlife as well as ensuring compliance with relevant legislation and planning policies. The below table summarises the recommendations.

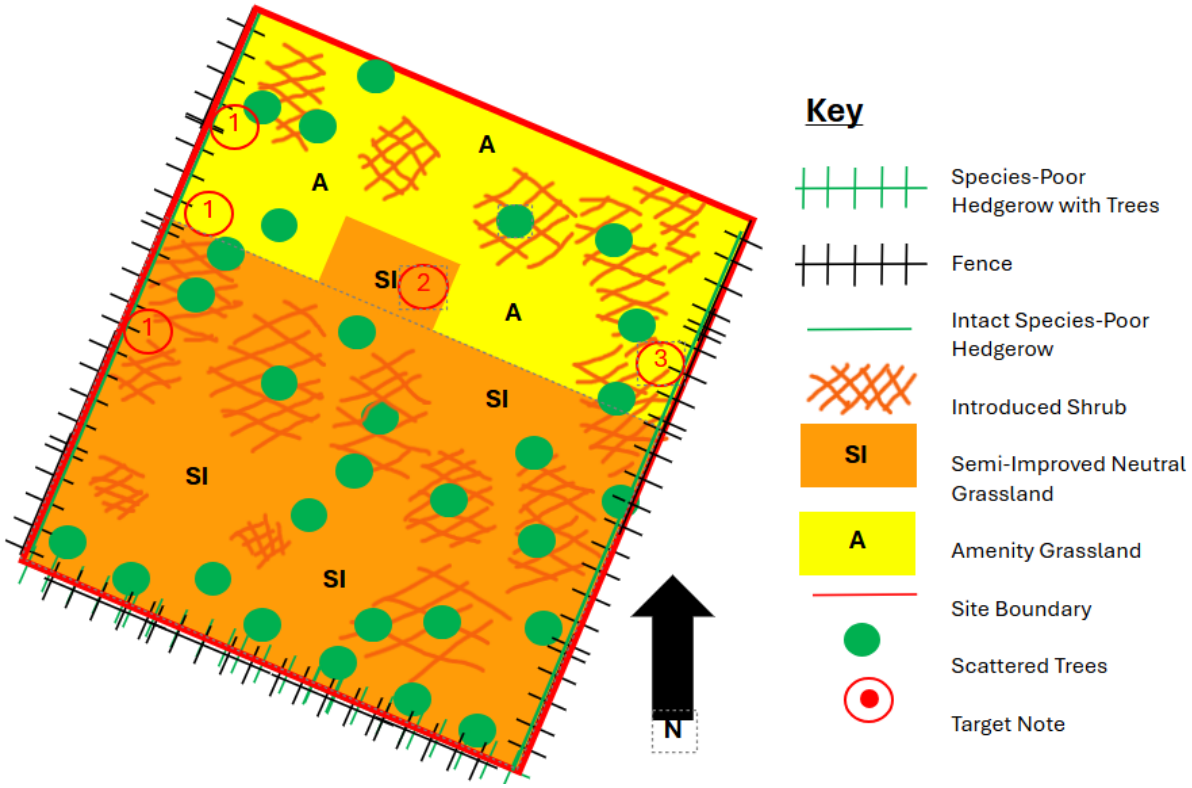
Recommendation	Action	Justification
Retention of wider habitats*	Protect and retain wider habitats such as grassland and hedgerow during and post construction.	This will ensure that important habitat is protected. It will also provide a means of escape and protection for any wildlife.
Protection of breeding birds*	Carry out vegetation clearance outside of bird breeding season or under ecological supervision of an ecologist following a breeding bird survey.	The vegetation provides opportunities for breeding birds.
Appropriate lighting for bats*	Compile a sensitive lighting plan to avoid illuminating bat foraging and commuting habitat – woodland, hedgerow, scrub and scattered trees, through construction and post construction. This can be a condition of planning.	This will help limit disturbance to bat species long term.
Remove vegetation in stages*	Follow the vegetation clearance method statement in stages for all habitats on site to reduce the risk of impacting protected/notable species.	This will allow small mammals, reptiles, amphibians and invertebrates, if present, to leave the area safely.
Implement biodiversity enhancements	Follow recommendations for planting, bird, bat and hedgehog boxes, log piles and compost heaps etc.,	This will provide a greater longer-term benefit for wildlife.
Adequate pollution control	Habitats on site should be adequately protected to ensure no polluted runoff enters on site or adjacent land. All oils, fuels and chemicals should be adequately stored on site in bunded containers with appropriate spill kits and emergency procedures in place. Establish exclusion zones before construction.	This will protect habitats on site and those in the local area.
Conduct Reptile Surveys*	Conduct presence/absence surveys of the site, mainly the grassland area, prior to planning permission (as planning committees recommend this), between April and September. Further recommendations may be made after reptile survey is completed.	This will provide information on the presence/absence of reptiles.
Follow badger protection measures*	Follow badger protection measures during construction.	This will stop badgers becoming potentially trapped and harmed.
Follow any recommendations that results from the arboricultural assessment	Follow any recommendations and plans that have resulted from the arboricultural impact assessment that has been undertaken for this proposed development.	This will ensure that trees on site have been assessed, and protection measures are in place.

Table 6: *Summary of recommendations.*

*Indicates recommendation to avoid impact to legally protected species.

7. APPENDIX

7.1 Appendix 1: Habitat Map



Target Note	Details
1	Location of rabbit burrows found.
2	This is an old pond that has returned to grassland.
3	This is where the new dwelling will have access to the road.

7.2 Appendix 2: Photos

Old pond that has returned to grassland

Example of formal plant bed

Long grassland and shrubs

Amenity grassland and long grassland

Pond adjacent to the site

South border hedgerow

East border hedgerow

Tracks under hedgerow/fence on west border

Example of burrow

7.3 Appendix 3: Great Crested Newt Habitat Suitability Index

Pond Ecology ID	Adjacent Pond to Lyncorte Site	Grid Reference	TQ 15327 19314
Surveyor(s)	LS	Date	16/10/2024
Description of Water Body	Small pond with sheet lining		

HSI Factor	HSI Criteria/Score	Field Survey Results	Suitability Index Score
Geographic Location	Sites should be scored according to the zone in which they occur. this scoring can be carried out either in the field, or as part of a desktop exercise.	Zone A	1
Pond Area	Calculated based on surface area when water is at its highest level (m2). N.B. In accordance with the 'ARG UK Advice Note 5: GCN HSI document area should be rounded to the nearest 50m2.	150	0.2
Permanence	Never dries; Rarely dries (no more than two years in ten or only in drought); Sometimes dries (between three years in ten or most years); Dries annually	Rarely Dries	1
Water Quality	Good = abundant and diverse invertebrate community; Moderate = moderate invertebrate diversity; Poor = low invertebrate diversity, e.g., midge and mosquito larvae, and few submerged plants; Bad = clearly polluted. Only pollution-tolerant invertebrates, e.g., rat tailed maggot.	Poor	0.33
Shade	Estimate percentage of pond perimeter shaded to at least 1m from the shore. Do not include shading from emergent pond vegetation.	50%	1
Waterfowl	Absent = no evidence of waterfowl impact (moorhen may be present); Minor = waterfowl present, but little evidence of pond vegetation; Major = severe impact of waterfowl, little or no submerged plants, water turbid and banks showing patches where vegetation removed.	Absent	1
Fish	Absent = no records of fish stocking and no evidence of presence during torching/netting; Possible = no evidence but local conditions suggest they may be present; Minor = small numbers of crucian carp, goldfish or stickleback known to be present; Major = dense populations of fish known to be present.	Absent	1
Pond Count	Number of ponds occurring within 1km of survey pond and divide ponds by Pi. Exclude ponds where major barriers such as main roads exist.	0	0.1
Terrestrial Habitat	Good = habitat that offers good opportunities for foraging/shelter (covers more than 75% of available area); Moderate = habitat that offers opportunities for foraging/shelter but may not be extensive (25-75% of available area); Poor = habitat with poor structure that offers limited opportunities for foraging/shelter (less then 25% of available area); None = no suitable habitat around pond.	Moderate	0.67

Macrophytes	Estimated percentage of pond surface area occupied by macrophyte cover. Includes emergent, floating (excluding duckweed) and submerged plants reaching the surface.		10%	0.4
Habitat Suitability Rating	Below Average		**Resulting HSI Score**	**0.53**

7.4 Appendix 4: Legislation

Protected species have protection under national legislation such as the Wildlife and Countryside Act 1981 and European legislation such as the Habitats Directive.

Please note the following:

(1) If there is no record of a particular protected species, this does not signify that that the species is absent from the site in question. It may mean that it has not been recorded, that the site has not been surveyed for this species, or that data relating to its presence has not been made available to us.

(2) The presence of a protected species record does not mean that the species is still present. It means that the species was recorded at that time and place. The implications of the record should be further evaluated, and a survey to establish the current status may be required.

(3) The following summary of legislation is designed purely as a basic guide, if any action is to be taken regarding any of the protected species listed, then it is imperative that the full relevant legislation be consulted.

WILDLIFE PROTECTION LEGISLATION IN ENGLAND

Legislation that protects wildlife in England exists at the European and national level.

European Law

The Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) was aimed at ensuring conservation and protection of all wild plants and animals, increasing cooperation between states, and affording special protection to the most vulnerable or threatened species. It was implemented by the EC Birds Directive (Council Directive 79/409/EEC) and the EC Habitats Directive (Council Directive 92/43/EEC).

The Bonn Convention on Migratory Species of Wild Animals (1979 & 1994) requires the protection of migratory animals. It was implemented by the EC Birds Directive (Council Directive 79/409/EEC) and the EC Habitats Directive (Council Directive 92/43/EEC).

The EC Habitats Directive aims to establish a network of protected areas in order to maintain the distribution and the abundance of threatened species and habitats. A number of species are listed in the annexes.

Annex II lists animals and plants whose conservation requires the designation of Special Areas of Conservation (SACs).

Annex IV lists animals and plants in need of strict protection. For the animals, this prohibits deliberate capture, killing, disturbance (especially during breeding period), destruction or taking of eggs from wild, and destruction or deterioration of breeding sites or resting places. For the

plants, this prohibits deliberate picking, collecting, uprooting, cutting, destruction, and trade in entire plants or parts, at all stages of life.

Annex V lists animals and plants for which taking in the wild may be subject to management measures.

National Law

Wildlife and Countryside Act The Wildlife and Countryside Act 1981 (as amended) is the main source of legal protection for wildlife in England and was strengthened by the Countryside and Rights of Way Act 2000. A statutory five-yearly review of Schedules 5 and 8 (protected wild animals and plants) is undertaken by the relevant authorities. Species protection is provided under Schedules 1, 5, 6 and 8:

Schedule 1 lists bird species that are rare, endangered, declining or vulnerable. The Schedule is divided into two parts. Part I lists birds which receive special protection; these birds receive additional protection from disturbance at the nest. Part II lists birds that receive the same level of special protection, but only during the breeding season.

Schedule 5 protects animal (other than bird) species from certain actions, according to the sections of the Act under which they are listed:

S9 (1) prohibits the intentional killing, injury or taking. S9 (2) protection is limited to possessing and controlling. S9 (4a) prohibits the damaging, destroying or obstructing access to any place used by the animal for shelter or protection. S9 (4b) prohibits disturbing the animal while it is occupying any structure or place which it uses for shelter or protection. S9(5) prohibits the selling, offering for sale, possessing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from such an animal. Species on this Schedule do not appear on the PSI.

Schedule 6 lists animals that may not be killed by certain methods. Even humane trapping for research requires a licence.

Schedule 8 lists plant species for which it is prohibited to intentionally pick, uproot, destroy, trade in, or possess (for the purposes of trade).

Under the Wildlife and Countryside Act, all wild plants in Britain are protected from intentional uprooting by an unauthorised person. Landowners, land occupiers, persons authorised by either of these, or persons authorised in writing by the Local Authority for the area are exempt from this, except for Schedule 8 species.

Conservation Regulations the Conservation of Habitats and Species Regulations 2010 (as amended) transpose the EC Habitats Directive into national law. In addition to enabling the designation of SACs, the regulations also provide species protection:

Schedule 2 protects the listed animals from deliberate capture, killing, disturbance or trading in.

Schedule 4 protects the listed plants from picking, collecting, uprooting, destroying or trading in.

These actions can be made lawful through the granting of licences by the appropriate authorities. Licences may be granted for a number of purposes, but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild the population of the species concerned.

Protection of Badgers Act the Protection of the Badgers Act prohibits the killing, injuring or taking of badgers and damage or interference with a badger sett, unless licensed to do so by a statutory authority.

International and European Obligations

In the UK, species receiving protection under international legislation and agreements are protected through the Wildlife and Countryside Act, so are not shown separately in the BMERC notable species lists. For reference, the relevant categories are shown below.

Bern Convention on the Conservation of European Wildlife and Natural Habitats the Bern Convention aims to ensure the conservation of wild flora and fauna species and their habitats.

• Appendix 1 (strictly protected flora) - Plants for which contracting parties will prohibit deliberate picking, collecting, cutting or uprooting.

• Appendix 2 (strictly protected fauna) - Animals for which contracting parties will prohibit deliberate capture, possession, killing, damage to or destruction of breeding or resting sites, disturbance or destruction or taking of eggs. Appendix 3 (protected fauna) - Animals for which contracting parties will include closed seasons and regulate their sale, keeping for sale, and transport for sale or offering for sale of live and dead wild animals. (Not included in Notable Species List).

Bonn Convention on Migratory Species the Bonn Convention aims to conserve terrestrial, marine and avian migratory species throughout their range.

• Appendix 1 (migratory species threatened with extinction) - Species for which contracting parties will strictly protect and endeavour to conserve or restore the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.

• Appendix 2 (migratory species that need or would benefit from international co-operation) - Species for which contracting parties will be encouraged to conclude global or regional agreements for the conservation and management of individual species or, more often, of a group of species. (Not included in Notable Species List).

The EC Council Directive on the Conservation of Wild Birds the Birds Directive provides a framework for the conservation and management of all wild birds in Europe. As well as designating important sites for birds as Special Protection Areas, birds are generally protected

from deliberate killing or capture and destruction of or damage to their nests or eggs, and deliberate disturbance. Allowances are made for game birds.

UK BAP & notable species

UK Biodiversity Action Plan and Section 41 Species

Biodiversity, or biological diversity, is the whole variety of life on Earth. The Convention on Biological Diversity (CBD) came about as a result of the 1992 Earth Summit. As one of 168 countries to sign up to the CBD, the UK was required to develop a national strategy for the conservation of biodiversity; the UK Biodiversity Action Plan (UKBAP) was born.

The UKBAP is the result of contributions involving a wide range of people and organisations, enabling the identification of species and habitats that are listed as priorities for conservation action. A 2007 review of the UKBAP has resulted in 1149 species and 65 habitats being listed as conservation priorities. For more information see www.ukbap.org.uk.

In addition to the national priorities and targets, action is also being taken at local level. The Essex Biodiversity Project is responsible for implementing the Essex Biodiversity Action Plan, which has 28 priority species and 15 priority habitats currently listed. For more information see www.essexbiodiversity.org.uk.

The UK BAP

(From Explanatory Note by Defra and Natural England on Section 41 of the Natural Environment and Rural Communities

(NERC) Act 2006 - Habitats and Species of Principal Importance in England)

The England Biodiversity List has been developed to meet the requirements of Section 41 of the Natural Environment and Rural Communities Act (2006). This legislation requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity.

The S41 list will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions. In particular:

• Regional Planning Bodies and Local Planning Authorities will use it to identify the species and habitats that should be afforded priority when applying the requirements of National Planning Policy framework (NPPF) and PPS9 Circular to maintain, restore and enhance species and habitats.

• Local Planning Authorities will use it to identify the species and habitats that require specific consideration in dealing with planning and development control, recognising that under NPPF and PPS9 Circular the aim of planning decisions should be to avoid harm to all biodiversity.

• All Public Bodies will use it to identify species or habitats that should be given priority when implementing the NERC Section 40 duty.

Habitats of Principal Importance Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that have been identified as requiring action in the UK Biodiversity Action Plan (UK BAP). They range from habitats such as upland hay meadows to lowland mixed deciduous woodland and from freshwater habitats such as ponds to marine habitats such as subtidal sands and gravels.

Species of Principal Importance There are 943 species of principal importance included on the S41 list. These are the species founding England which have been identified as requiring action under the UK BAP. In addition, the Hen Harrier has also been included on the List because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

Relationship with the UK Biodiversity List of Species and Habitats the UK BAP list of priority species and habitats is an important reference source and will be the focus for conservation action across the UK over the next decade. It has been used to draw up the species and habitats of principal importance in England under S41 of the NERC Act.

The revised UK BAP list of priority species and habitats can be downloaded from the UK Biodiversity Website: http://www.ukbap.org.uk/NewPriorityList.aspx

Relationship with the biodiversity duty under Section 40 of the NERC Act There is a general biodiversity duty in the NERC Act (Section 40) which requires every public body in the exercising of its functions to 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.

There is no direct relationship between the Section 41 duty on the Secretary of State to publish the list and promote the taking of steps to conserve the habitats and species on it, and the Section 40 duty on public bodies to have regard to the purpose of conserving biodiversity. Importantly:

(a) Biodiversity, as covered by the Section 40 duty includes all biodiversity and not just the habitats and species of principal importance. However, there is an expectation that public bodies would refer to the S41 list when complying with the section 40 duty.

(b) The duty on the Secretary of State to promote the taking of steps by others is not restricted to public bodies.

Defra guidance for local authorities and public bodies on implementing the biodiversity duty in the NERC Act draws attention to the S41 list, emphasising that local authorities and public

bodies have a role to play in ensuring the protection of these species and habitats. Copies of the guidance can be downloaded from:
http://archive.defra.gov.uk/environment/biodiversity/documents/pa-guid-english.pdf