



HYBRID ECOLOGY LTD
joined up thinking

Preliminary Ecological Appraisal/Low Impact

EcIA:

Mill View, Matching Lane, White Roding, Essex

On behalf of:

Mr. Emery

Prepared by:

Gemma Holmes BSc (Hons) ACIEEM

Report version:

Version 1:

September 2023

Summary

Mill View (hereafter referred to as 'the site') was visited on 4th September 2023. The development proposal involves demolition of outbuildings and construction of a house.

This report provides the results of an ecological survey and makes recommendations for precautionary methods and enhancement measures in the context of the proposal, referring to planning policy and best practice guidance where appropriate.

The report is required to inform design, and to provide the Local Planning Authority with certainty on impacts to designated sites, Priority Habitats and legally protected species.

Designated sites/Priority Habitats

- The project shows no potential to adversely impact designated sites or priority habitats.

Habitats

- Boundary vegetation will be retained and protected in accordance with arboricultural advice.

Legally protected species (summary)

- Given the lack of habitat diversity and site maintenance, the site is of low ecological value and risk of colonisation by legally protected species is low. Further survey is not required.
- Old swallow nests were identified in several outbuildings. No active nests were seen during the survey. Mitigation measures detailed in this report are recommended in relation to demolition. Compensatory nest provision should be incorporated for swallow, wherever possible.
- The outbuildings have no bat roost suitability (BCT, 2023), there were no suitable voids or crevices, and no evidence of roosting bats was found.
- The site should be kept maintained and tidy until development commences to discourage colonisation by wildlife, including reptiles.

Enhancement proposal

The development provides an opportunity for biodiversity enhancements, including enhanced hedgerow planting and habitat boxes. These measures will contribute to Government aims under Paragraph 180(d) of the National Planning Policy Framework 2023 and Local Plan policies which encourage all development to demonstrate biodiversity net-gain.

Table of Contents

1.0	INTRODUCTION	4
2.0	PLANNING POLICY AND LEGISLATION	6
3.0	METHODOLOGY: DESKTOP STUDY	11
4.0	METHODOLOGY: HABITATS AND SPECIES	12
5.0	RESULTS: DESKTOP STUDY	14
6.0	RESULTS: PHASE 1 HABITAT SURVEY	15
7.0	RESULTS: PROTECTED/PRIORITY SPECIES SCOPING	17
8.0	ECOLOGICAL CONSTRAINTS AND OPPORTUNITIES	25
9.0	CONCLUSIONS	26
	REFERENCES	27

Figures:

Figure 1.	Location plan
Figure 2.	Survey boundary
Figure 3.	Guidelines for assessing potential suitability of development sites for bats (BCT, 2016)
Figure 4.	Details of closest EPS licence to the site
Figure 5.	Annotated survey plan
Figure 6.	Photographs

Appendices:

Appendix 1.	Bat and bird boxes suitable for this scheme
-------------	---

1.0 Introduction

Personnel

- 1.1 This report has been prepared by Gemma Holmes, Consultant Ecologist at Hybrid Ecology Ltd. Gemma is a qualified ecologist with 16 years' experience in professional survey work and is an Associate member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Gemma holds licences to survey for great crested newt and bats in the UK (Licence numbers 2015-19096-CLS-CLS and 2016-27305-CLS-CLS respectively).

Brief

- 1.2 Mr. Emery instructed Hybrid Ecology to produce a Preliminary Ecological Appraisal/Low Impact EclA for Mill View, Matching Lane, White Roding, Essex. The proposal involves demolition of outbuildings and construction of a house. The garden will be retained. A location plan is provided in Figure 1 and survey boundary is provided in Figure 2.

Aims

- 1.3 This report aims to advise the client/developer and relevant members of the project team as to the key ecological constraints and opportunities associated with this project and any necessary mitigation requirements to ensure legal obligations in respect of protected species, designated sites and habitats are met.

Limitations

- 1.4 This report has been issued to support a planning application for demolition of outbuildings and construction of a house. It should not be used for any other purpose.
- 1.5 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. Wildlife is transient and mobile, and results of a survey can reasonably vary from one day to the next or across the seasons.
- 1.6 The protected species assessment provides a view of the likelihood of protected species occurring on the site based on the known distribution of species in the local area and the suitability of the habitat. However, it should not be taken as providing a full and definitive survey of any protected species/group.
- 1.7 In accordance with CIEEM Report Writing Guidelines (December 2017), this report is valid for 18 months, after which habitats are reasonably expected to have changed to warrant an updated survey. Beyond 18 months, this report should not be accepted in support of a planning application.

Figure 1. Location plan

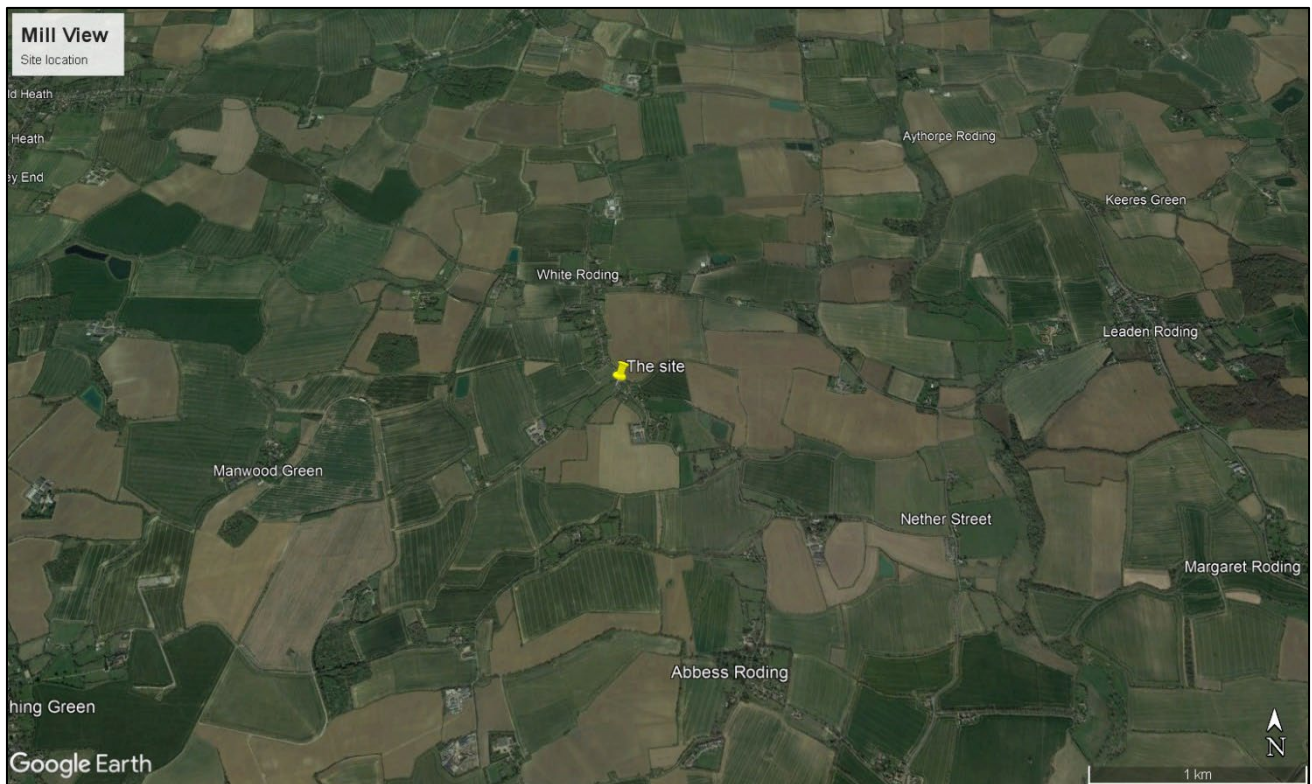


Figure 2. Survey boundary



2.0 Planning Policy and Legislation

National Planning Policy Framework (NPPF, 2023)¹ Paragraph 15. Conserving and enhancing the natural environment

Paragraph 180

- 2.1 Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Paragraph 181

- 2.2 Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Paragraph 182

¹ [National Planning Policy Framework - 15. Conserving and enhancing the natural environment - Guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101391/nppf-2023.pdf)

2.3 Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

Paragraph 183

2.4 When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

Paragraph 184

2.5 Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 182), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

Paragraph 185

2.6 To protect and enhance biodiversity and geodiversity, plans should:

- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Paragraph 186

- 2.7 When determining planning applications, local planning authorities should apply the following principles:
- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
 - c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
 - d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Paragraph 187

- 2.8 The following should be given the same protection as habitats sites:
- a) potential Special Protection Areas and possible Special Areas of Conservation;
 - b) listed or proposed Ramsar sites, and;
 - c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

Paragraph 188

- 2.9 The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects).
- 2.10 This is unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Legislation: Protection of Designated Sites, Habitats and Species

Please note this section is a summary of legislation only and should not be taken as a definitive interpretation of any wildlife law. UK wildlife legislation can be found here: [Legislation.gov.uk](https://www.legislation.gov.uk)

Designated sites

RAMSAR

- 2.11 Ramsar sites are designated under the Convention on Wetlands of International Importance especially as Waterfowl Habitat. Wetlands are designated, protected and promoted in order to stem the progressive encroachment on and loss of wetlands, which are broadly defined to include marsh, fen, peatland and water.

Special Areas of Conservation (SAC)

- 2.12 Special Areas of Conservation are sites designated by Member States under the EC Habitats Directive. The aim is to establish a network of important high quality conservation sites that will make a significant contribution to conserving habitats and species considered to be most in need of conservation at an international level.

Special Protection Areas (SPA)

- 2.13 Special Protection Areas are designated under the EC Birds Directive, to conserve the habitat of certain rare or vulnerable birds and regularly occurring migratory birds. Any significant pollution or disturbance to or deterioration of these sites has to be avoided.

National Nature Reserves (NNR)

- 2.14 National Nature Reserves are statutory reserves established for the nation under the Wildlife and Countryside Act, 1981. NNRs may be owned by relevant national body (e.g. Natural England in England) or established by agreement; a few are owned and managed by non-statutory bodies. NNRs cover a selection of the most important sites for nature conservation in the UK.

Sites of Special Scientific Interest (SSSI)

- 2.15 Sites of Special Scientific Interest are areas notified under the Wildlife and Countryside Act, 1981, as being of 'special interest for nature conservation'. They represent the finest sites for wildlife and natural features in Great Britain supporting many characteristic, rare and endangered species, habitats and natural features. Notification as a SSSI is primarily a legal mechanism organised by Natural England and selected according to specific criteria.

Local Nature Reserves (LNR)

- 2.16 Land owned, leased or managed by Local Authorities and designated under the National Parks and Access to the Countryside Act. A site of some nature conservation value managed for educational objectives – no need for SSSI status. Some reserves are managed by a non-statutory body.

Local Wildlife Site / Wildlife Sites

- 2.17 Local Wildlife Sites (LoWS) are non-statutory sites designated at a county level as being of conservation importance and often recognised in Local authority development plans. The aim of this identification is to protect such sites from land management changes, which may lessen their nature conservation interest, and to encourage sensitive management to maintain and enhance their importance. Although LoWS have no statutory protection they are a material consideration in the planning process.

Regionally Important Geological / Geomorphological Site (RIGS)

- 2.18 Regionally Important Geological/Geomorphological Sites are non-statutory earth science sites. The RIGS networks are locally based voluntary groups drawing on both professional and interest groups identifying sites using a methodical and rational approach. RIGS are analogous to non-statutory biological sites – they are not a second tier but sites of regional or local importance in their own right.

Legally protected species

- 2.19 The Conservation of Habitats and Species Regulations (2019, EU Exit) affords protection to various species/species groups including bats (all species), great crested newt, otter and dormouse.
- 2.20 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. Species protection is provided under Schedules 1, 5, 6 and 8 to species including bat, great crested newt, water vole, otter and nesting birds. Badgers are protected separately under the Protection of Badgers Act (1992).

Species and Habitats of Principal Importance in England (or Priority habitats/species)

- 2.21 The Natural Environment and Rural Communities Act (2006) places a duty on Local Planning Authorities to conserve and enhance certain habitats and species. The species that have been designated to be of “principal importance for the purpose of conserving biodiversity” are those that are most threatened, in greatest decline, or where the UK holds a significant proportion of the world’s total population. They mainly derive from lists originally drawn up for the UK Biodiversity Action Plan (UK BAP). Similarly, the list of habitats of principal importance in England also derive from the UK Biodiversity Action Plan.

3.0 Methodology: Desktop Study

Mapping exercise

- 3.1 Aerial imagery (Google Earth Pro, 2023) was used to examine the landscape context of the site in relation to significant ecological assets such as woodland, established hedgerows, grassland and any naturalised features that would allow wildlife use and dispersal.
- 3.2 Multi-Agency Geographical Information for the Countryside (MAGIC) mapping was used to:
- Determine whether the site is within the scope of the Essex Coast Recreational Avoidance and Mitigation Strategy (Essex County Council). The “Essex Coast RAMS” or “The Strategy” aims to deliver the mitigation necessary to avoid significant adverse effects from ‘in-combination’ impacts of residential development that is anticipated across Essex; thus protecting the Habitats (European) sites on the Essex coast from adverse effect on site integrity. All new residential developments within the evidenced Zone of Influence where there is a net increase in dwelling numbers are included in the Essex Coast RAMS.
 - Determine the proximity to international, national and locally designated sites and whether the site lies within the Zone of Influence/Impact Risk Zone, as appropriate.
 - Identify any areas of land mapped by Natural England as Priority Habitat within 250 metres of the site.
 - Identify any European Protected Species (EPS) mitigation licenses granted by Natural England for great crested newt or bats within a 5km radius of the site that could be relevant to this development.

Biological Records Search

- 3.3 Due to the small scale of the development, whereby any impacts will be confined to the site boundaries, coupled with the low ecological value of the site, an updated biological records search from a third-party source (i.e., Essex Field Club) was not considered necessary.

4.0 Methodology: Habitats and Species

Phase 1 Habitat Survey

4.1 An ecological walkover survey was carried out on 4th September 2023 by ecologist Anthony Owers (BSc Hons). The survey included all land shown in Figure 2. The survey was undertaken broadly in accordance with the Handbook for Phase 1 Habitat Survey (JNCC 2010).

Protected/priority species scoping

4.2 The survey also included an assessment of the site’s potential to support any legally protected species; or Species and Habitats of Principal Importance (Priority Species), as identified by Section 41 of the Natural Environment and Rural Communities Act (2006). Where best practice guidelines exist, these have been used to assess the likelihood that individual species will be present, for example Bat Surveys: Good Practice Guidelines (BCT 2023) and Habitat Suitability Index for Great Crested Newt (Oldham et al, 2000).

4.3 In accordance with BCT, 2023, the outbuildings on site were inspected internally and externally for evidence of bats (e.g. droppings) and any opportunities that could facilitate bat access/support a bat roost. Vegetation on the site boundary was subject to a ground-level assessment for features such as knot holes, woodpecker holes, hazard beams that could potentially support a roost. The habitats were also assessed for suitability to support commuting/foraging behaviour.

Figure 3. Guidelines for assessing potential suitability of development sites for bats (BCT, 2023)

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^a).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

The Mitigation Hierarchy

4.4 All development is expected to meet the highest planning standards and follow the Mitigation Hierarchy of avoid, mitigate, compensate and enhance to ensure that significant natural environment impacts are avoided.

- Avoid - Avoiding any loss of or damage to wildlife sites or to protected / Priority species – development must not damage or destroy important national and Local Wildlife Sites.
- Mitigate - Impacts considered unavoidable should be mitigated at the site where the impact occurs, if at all possible.
- Compensate - Any remaining significant biodiversity loss should be compensated for, as close to the area of loss as possible.
- Enhance: Improve degraded ecosystems/return an area to original ecosystem including creating new habitat - habitat creation should be a standard feature of all new development, wherever it is.

Evaluation criteria

4.5 Ecological features (designated sites, habitats, and species) were evaluated where possible in relation to a geographical context (i.e. International, National, Regional, Metropolitan, County, District, Borough, Local and Site), in accordance with CIEEM Ecological Impact Assessment Guidelines (2016). Criteria include designations, quality of habitat in relation to the site context, ability to support notable assemblages of species, contribution to habitat connectivity, dispersal opportunities or providing intrinsic ecological value.

5.0 Results: Desktop Study

Landscape context

5.1 The site is in a rural position to the south of White Roding in Essex. The surrounding landscape is generally arable. Grazing fields extend to the south-west and there are low density properties to the north and east. There are no significant ecological landscape features in close proximity and habitat connectivity is generally poor.

Designated sites and Priority Habitats

5.2 There are no designated sites within 2km and no Priority Habitats within 250 metres.

5.3 The site is not within the Zone of Influence for Essex coastal sites, a financial contribution is not required.

European Protected Species licenses

5.4 The closest EPS licence relates to bats, 1.2km to the north-west of the site. Details are below:

Figure 4. Details of closest EPS licence to the site

Site Check Report Report generated on Tue Sep 19 2023
You selected the location: Centroid Grid Ref: TL55291340
The following features have been found in your search area:

Granted European Protected Species Applications (England)	
Case reference of granted application	EPSM2012-5258
Species group to which licence relates	Bat
Species on the licence	C-PIP;S-PIP;BLE
Site county of licence	Essex
Licence Start Date	19/12/2012
Licence End Date	30/10/2014
Does licence impact on a breeding site	N
Does licence allow damage of breeding site	
Does licence allow damage of a resting place	
Does licence allow destruction of breeding site	N
Does licence allow destruction of a resting place	
Does licence impact on a hibernation site	Unknown
NERC agreement reference	Unknown

6.0 Results: Phase 1 Habitat Survey

An annotated plan is provided in Figure 5. Photographs from the site visit are provided in Figure 6. Please refer to Section 7 for information relating to legally protected species.

- 6.1 The site contains several outbuildings (B1 – B6), hard standing and a boundary hedgerow. A retained garden extends to the north-west.
- 6.2 Building details are provided below:
- B1 – Log store and machine shed. Weatherboard walls and metal roof. No evidence of bats.
 - B2 – Storage building. Rendered walls – well sealed. Pan tile roof – well sealed. Timber fascia and soffit well sealed. No evidence of bats.
 - B3 – lean-to. Open fronted barn with asbestos roof. No evidence of bats and no crevices in timber frame.
 - B4 – stables. Only used a few weeks of the year. Asbestos roof and timber cladding (well-sealed). No evidence of bats. Swallow nests present (inactive).
 - B5 – workshop. Timber frame and weatherboard cladding. Plastic lining on some parts of interior walls. Clay peg tiled roof, well-sealed with bitumen liner. No evidence of bats.
 - B6 – log store. Timber frame and shiplap. Pan tiles (well-sealed) with bitumen lining (well-sealed). Swallow nests present. No evidence of bats.
- 6.3 The buildings are surrounded by hard standing.
- 6.4 The hawthorn *Crataegus monogyna* hedgerow along the road frontage will be removed and replaced further back.
- 6.5 The garden area extending to the north-west is a mown amenity lawn with some immature trees (*Acer* sp.). The applicant proposes to infill plant the beech hedgerow along the north-eastern boundary.

Habitats evaluation:

The site is dominated by buildings, hard standing and amenity lawn. There are no aged or veteran trees. The frontage hedgerow and buildings hold value to nesting birds. The site and habitats therein are of low ecological significance at Site Level only.

Figure 5. Annotated plan



Figure 6. Photographs



a) B1



b) B2



c) B3



d) B4



e) B5



f) B6

7.0 Results: Protected/Priority Species Scoping

This section includes habitat requirements for species/species groups and an assessment in the context of the proposal. The data records from the PEA (2020) are included where relevant.

Bats

Habitat requirements:

- 7.1 Bats require safe, sheltered internal spaces in which to roost. In buildings, roosts are typically found in loft spaces, under fascias, weatherboards, lead flashing, under roof/ridge or hanging tiles. In trees, bats are typically found in woodpecker holes, flaking bark, wounds and hazard beams. The largest roosts are found close to foraging resources such as woodland and water.

Assessment:

- 7.2 None of the outbuildings on site (B1-B6) contain any suitable voids or crevices. No evidence of bats was seen internally or externally. None of the buildings on the site have any scope for roosting bats. No evidence of bats was seen.

Suitability: none (BCT, 2023)

- 7.3 There are no trees on the site. Garden boundaries may provide some interest to foraging bats.

Recommendations:

Further survey requirement	None
Avoidance	None
Mitigation	In the unlikely event that bats are encountered during demolition, work will cease until ecological advice has been sought.
Compensation	None
Enhancement	Gap up beech hedgerow to north-east of garden. Incorporate bat roost features in the new house.

Great crested newt

Habitat requirements:

- 7.4 Great crested newt (GCN) requires both terrestrial and aquatic habitats. They return to aquatic habitat to breed March-June, using small to medium-sized ponds with no fish and suitable marginal vegetation, including watercress and float grass (Froglife 2001).
- 7.5 Terrestrial habitat includes refuges and foraging and dispersal opportunities as well as hibernation sites such as rubble piles or mammal burrows. It is rare to find GCN over 250 metres from a breeding pond (Cresswell & Whitworth 2004).

Assessment:

- 7.6 There are no ponds on the site. There are a series of ponds beyond Matching Lane to the south-west. The closest pond is approximately 25 metres to the south. This is a domestic ornamental pond extending along the back of gardens. There are further ponds along Church Lane.
- 7.7 Given the obvious lack of suitable habitat on the site, there is negligible risk of colonisation by great crested newt. There are no opportunities for shelter or hibernation.
- 7.8 As there is not a reasonable likelihood of terrestrial presence, further survey is not required.

Recommendations

Further survey requirement	None
Avoidance	Ensure the site remains tidy and maintained until development commences.
Mitigation	None
Compensation	None
Enhancement	None

Dormouse

Habitat requirements:

- 7.9 The hazel dormouse requires wooded habitats, usually semi-natural woodland containing hazel coppice and oak, and a rich understorey cover through which to disperse safely between trees (English Nature 2006).

Assessment:

- 7.10 There is no ancient woodland on/connecting to the site nor any species-rich hedgerows. The site lacks any arboreal connectivity to potentially suitable woodland habitat in the wider landscape.

7.11 The likelihood of dormice presence on, or adjacent to the site, is assessed as being very low. Consequently, no further survey or mitigation measures are necessary.

Requirements for further survey, avoidance, mitigation, compensation and enhancement

Further survey requirement	None
Avoidance	None
Mitigation	None
Compensation/enhancement	None

Otter and water vole

Habitat requirements:

7.12 Both species require flowing water, deep enough to support foraging behaviour and with connectivity into the wider landscape.

Assessment:

7.13 There is no aquatic habitat on the site or in the surrounding area. Consequently, the presence of either species in the immediate surrounding landscape is highly unlikely and no further survey or mitigation is necessary.

Requirements for further survey, avoidance, mitigation, compensation and enhancement

Further survey requirement	None
Avoidance	None
Mitigation	None
Compensation	None
Enhancement	None

Reptiles

Habitat requirements:

7.14 Reptiles (common lizard, slow worm, grass snake and adder) require mosaic habitats with features in which to bask, forage and shelter. These habitats need to have onward connectivity for dispersal. Suitable habitats include grassland with scrub edges or small woodland coppices (Edgar et al. 2010).

Assessment:

- 7.15 The habitats on the development site provide low quality habitat for reptiles, comprising tidy, compacted hard core and managed grassland.
- 7.16 The likelihood of reptile presence on the site is considered negligible, and the risk of recklessly killing or injuring any reptiles from the proposed development is also negligible.

Requirements for further survey, avoidance, mitigation, compensation and enhancement

Further survey requirement	None
Avoidance	The site should be kept maintained and tidy to discourage colonisation until commencement of groundworks. Building materials should be stored within the application boundary, and not in adjacent land that is more suitable for reptiles.
Mitigation	In the unlikely event that reptiles are encountered, the animal should be carefully captured and relocated to a suitable area of rough grassland off-site.
Compensation	None
Enhancement	None

Birds

Habitat requirements:

- 7.17 Nesting birds can be found in scrub, trees and buildings between March and September inclusive (note some species, including pigeon, will nest all year round).

Assessment:

- 7.18 Several old swallow nests were identified in B4 and B6. There is potential for generalist bird species to nest in and around all buildings.
- 7.19 There is no potential for nesting barn owl.
- 7.20 There is potential for nesting birds to use the hawthorn hedgerow along the frontage, which will be retained.
- 7.21 Demolition should be timed to avoid nesting season.
- 7.22 Compensatory nest provision is required for swallow and generalist species.

Requirements for further survey, avoidance, mitigation, compensation and enhancement

Further survey requirement	None
Avoidance	Carry out demolition between October – February inclusive (avoiding nesting season) or commission an ecologist to undertake a check for active nests immediately prior.
Mitigation	If active nests are found, works must cease in the area and the nest left undisturbed with a species-appropriate buffer (advised by project ecologist) until the young have fledged.
Compensation	Swallow nest cups should be installed in an open building on the site, such as shed, stables or cart-lodge (where possible)
Enhancement	A variety of 32mm and open-fronted bird boxes should be incorporated on the site, within established vegetation (hedgerow) and on the new house.

Badger

Habitat requirements:

7.23 Badger is a widespread, common mammal and is legally protected due to persecution rather than rarity or conservation significance. European badger requires habitats in which to build their setts and in which to forage. Badgers preferentially choose sloping banks (road verges, railway embankments, woodlands) with easy-dig substrate for sett building where foraging habitat is available.

Assessment:

7.24 No evidence indicating the presence of badgers was recorded on the site or within 30m of the application boundary. As such, the potential for badgers to be impacted by the proposed development is negligible.

Requirements for further survey, avoidance, mitigation, compensation and enhancement

Further survey requirement	None
Avoidance	Ensure any deep excavations are either covered each night, or have a means of escape should a badger fall in. This can be simply achieved by placing a scaffold board in the trench to act as an escape ramp.
Mitigation	None
Compensation	None
Enhancement	None

Legally protected plants/invertebrates

Assessment:

- 7.25 The site is small and is dominated by hard standing and maintained lawn which provides negligible habitat for invertebrates and protected flora.

Requirements for further survey, avoidance, mitigation, compensation and enhancement

Further survey requirement	None
Avoidance	None
Mitigation	None
Compensation	None
Enhancement	The development could include wildlife friendly planting in the soft landscaping, particularly to attract pollinators such as bees.

8.0 Ecological Constraints and Opportunities

Constraints:

- 8.1 There are no constraints in relation to designated sites or Priority Habitats.
- 8.2 Retained boundary vegetation will be protected in accordance with arboricultural best practice.
- 8.3 The outbuildings have no bat roost suitability and further survey is not required. In the unlikely event that bats are encountered during demolition, an ecologist should be immediately contacted for advice on how to proceed.
- 8.4 The buildings are used by swallow, and generalist nesting birds could also use the buildings and boundary hedgerow. Removal of the hedgerow will be carried out between October and February inclusive to avoid impacts to active nests. Demolition should also avoid nesting season or be preceded by a check for active nests by an ecologist. Compensatory nest provision is required for swallow.
- 8.5 The site should be kept tidy and maintained to minimise the likelihood of reptiles using the development footprint.
- 8.6 Open trenches should be covered at the end of each day, or should have an escape ramp placed in them, to ensure badgers and any other animals don't fall in and become trapped.

Opportunities:

- 8.7 Biodiversity net-gain is now encouraged under the NPPF (2023). The following recommendations are reasonable and proportionate and would contribute to net-gain:

- Bat boxes: It is recommended that at least one bat roost feature is installed on the new house. This could either be a built-in box in the wall, or a bat tile on the roof, or a combination of both. Bat roost features will be installed above 2 metres and face south-east, south or south-west for maximum solar gain.
- Bird boxes: It is recommended that at least one sparrow terrace is installed on the new house. Sparrow terraces should be installed above 2 metres, ideally just below the eaves/gutter line and face north or east.

See Appendix 1 for recommended habitat boxes.

- Hedgerow replacement: The hawthorn hedge will be replaced with a mixed native species hedge including hawthorn, field maple, hornbeam, holly, dogrose.
- Planting: The applicant plans to "gap up" the beech hedgerow to the north-east of the retained garden. Wildlife friendly shrubs are recommended where possible to benefit pollinators.

9.0 Conclusions

- 9.1 Hybrid Ecology was instructed to carry out an ecological assessment in relation to proposed development at Mill View, White Roding.
- 9.2 A mapping exercise and desk study were undertaken to determine constraints relating to designated sites, Priority Habitats and protected species. A survey was carried out in September 2023 to map habitats and identify any potential for/evidence of legally protected species. The survey also identified opportunities for ecological enhancement.
- 9.3 The site is of low ecological value and further species survey is not required. Provided precautionary methods detailed in this report are followed, it is considered that the development can proceed with minimal impact to local biodiversity.

Enhancement opportunities

- 9.4 The development provides an opportunity for biodiversity enhancements including bat boxes, bird boxes, improved hedgerow and wildlife friendly planting. These measures will contribute to biodiversity net-gain in accordance with the NPPF. The design, maintenance and management could be secured by a condition.

References

BCT, 2023. Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

[Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition - Guidance for professionals - Bat Conservation Trust](#)

BS 5837, 2012. Trees in Relation to Design, Demolition and Construction – Recommendations.

CIEEM, 2015. Guidelines for Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.

Available at: http://www.cieem.net/data/files/Publications/Ecological_Report_Writing_23.12.2015.pdf

Conservation of Habitats and Species Regulations, 2017. Available at:

http://www.legislation.gov.uk/uksi/2010/490/pdfs/uksi_20100490_en.pdf

JNCC, 2010. Handbook for Phase 1 habitat survey: A technique for environmental audit. JNCC. Available at:

http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf?sm_au=ijvN1vPTstvVv1Dt

Multi-Agency Geographical Information for the Countryside (2023). Available at: [Magic Map Application \(defra.gov.uk\)](#)

Natural Environment and Rural Communities Act (NERC Act), 2006, as amended. Available at:

<http://www.legislation.gov.uk/ukpga/2006/16/contents>

National Planning Policy Framework, 2021. Available at: [16. Conserving and enhancing the historic environment - National Planning Policy Framework - Guidance - GOV.UK \(www.gov.uk\)](#)

Appendix 1. Habitat boxes suitable for use on this site

- a) Swallow nest cup [Swallow Nest Box | CJ Wildlife \(birdfood.co.uk\)](http://birdfood.co.uk) To be installed in an open building.



- b) Integrated bat boxes – Habibat Batbox (Plain for rendering)



- c) Spicer Tiles bat access tile set (clay)



d) Vivara Pro sparrow terrace

