



HYBRID ECOLOGY LTD

joined up thinking

Preliminary Ecological Appraisal/Low Impact EcIA:

The Old House, Duddenhoe End, Saffron Walden, Essex

On behalf of:

Old House Productions

Prepared by:

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Summary

The Old House, Duddenhoe End, Saffron Walden, Essex (the site) was visited on 22nd February 2023. The development proposal includes various minor additions and alterations to the main properties and outbuildings. It is understood the proposal may be split into several planning applications.

This report provides the results of a 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. Tree protection measures will be employed in the south of the site to protect boundary trees associated with ancient woodland.

Habitats

The habitat on the site is of low ecological value and is common and widespread in the local area. Any minor loss can be easily compensated for.

Legally protected species (summary)

Nesting birds: Old swallow nests were identified in the stables and tractor shed. A barn owl feeding perch was also identified in the stables, although no nests were seen. Trees and other vegetation will likely common nesting birds between March and September inclusive. Work to stables and any required tree work will be undertaken between October and February inclusive to avoid impacting active nests. One open-fronted building should be retained for swallow – if this is not possible compensatory nest provision will be provided.

Bats: The survey included a Preliminary Roost Assessment. All buildings to be impacted were found to have negligible bat roost suitability (BCT, 2016) – no suitable voids/crevices were identified, and further survey is not considered necessary.

Enhancement proposal

The development provides an opportunity for biodiversity enhancements, including a barn owl box, 32mm/open fronted bird nest boxes and bat boxes. Wildlife friendly planting can also be incorporated as required. These measures will contribute to Government aims under Paragraph 174(d) of the National Planning Policy Framework 2021 and Local Plan policies which encourage all development to demonstrate biodiversity net-gain.

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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

- 1.1 Old House Productions instructed Hybrid Ecology to produce a Preliminary Ecological Appraisal/Low Impact EclA for The Old House, Duddenhoe End, Saffron Walden, Essex (central grid reference TL4658636958). A location plan is provided in Figure 1 and survey boundary is provided in Figure 2.
- 1.1 Preliminary Ecological Appraisal (PEA) or "Low Impact EclA" is the term used to describe a rapid assessment of the ecological features present, or potentially present, within a site and its surrounding area (the zone(s) of influence in relation to a specific project).
- 1.4 A PEA comprises a desk study and a walkover survey, the methods for which are further defined later in this report. The key objectives of a PEA are 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 (EclA)
- Identify the opportunities offered by a project to deliver ecological enhancement.

Limitations

- 1.1 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.
- 1.4 February is a sub-optimal month to detect flowering plants. A species list is included but will not be exhaustive.
- 1.4 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.
- 1.4 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

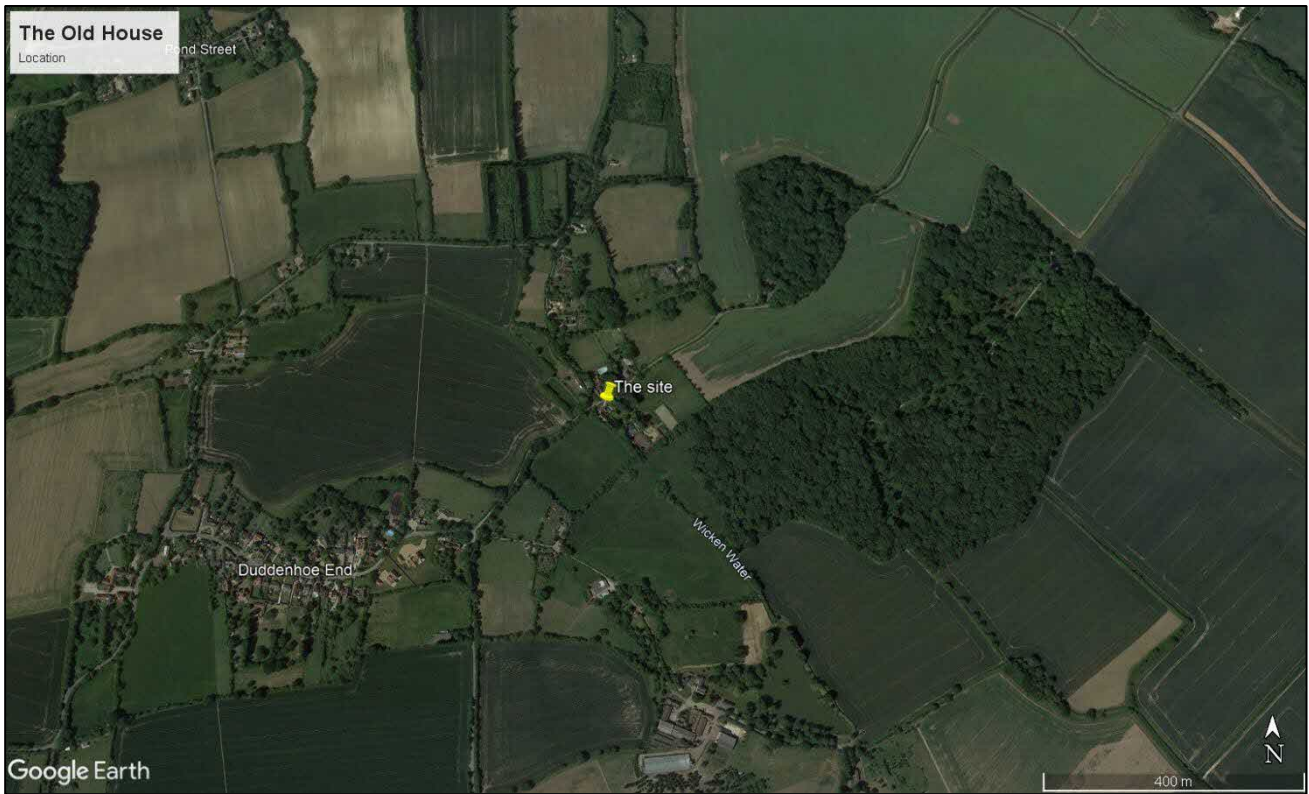
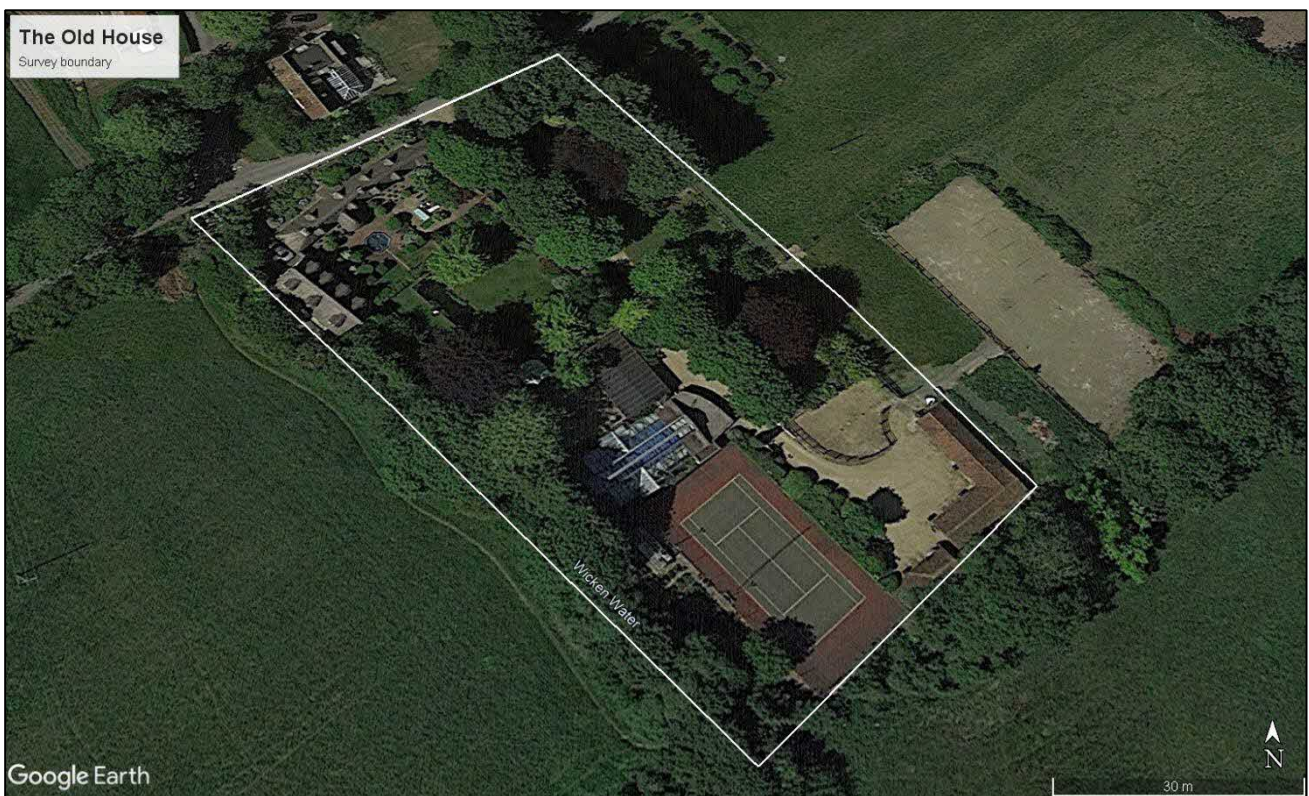


Figure 2. Survey boundary (approximate)



2.0 Planning Policy and Legislation

National Planning Policy Framework (2021): Conserving and Enhancing the Natural Environment

Please note the below policies have been taken directly from the National Planning Policy Framework, which can be found here: [National Planning Policy Framework - GOV.UK \(www.gov.uk\)](https://www.gov.uk/national-planning-policy-framework)

Paragraph 174

1.4 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;

Paragraph 179

1.4 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 180

1.4 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 181

2.4 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 182

1.4 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), 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

- 2.4 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)

- 2.4 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)

- 2.4 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)

- 1.4 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)

- 2.10 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)

- 2.11 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

- 2.11 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)

- 2.11 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

- 2.10 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.
- 2.11 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)

- 2.10 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.

2.0 Methodology: Desktop Study

Mapping exercise

1.4 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.

1.4 Multi-Agency Geographical Information for the Countryside (MAGIC) mapping was used to:

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.

Biological Records Search

1.4 A data search for records of legally protected species within 2km of the site was ordered from Essex Field Club on 20th March 2023.

4.0 Methodology: Habitats and Species

Phase 1 Habitat Survey

2.4 An ecological walkover survey was carried out on 22nd February 2023 by ecologist Gemma Holmes (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

2.4 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 2016) and Habitat Suitability Index for Great Crested Newt (Oldham et al, 2000).

2.4 In accordance with BCT, 2016, buildings and vegetation on the site were subject to Preliminary Roost Assessment (PRA) for bats in accordance with Figure 3 below. Buildings were inspected internally and externally for suitable voids/crevices and bat field evidence, such as droppings that indicates presence of a roost. The tree inspections were undertaken from ground level and aimed to identify potential roost features (e.g. suitable cavities in the stem or branches). The habitats on/adjacent to the site were also assessed in relation to commuting/foraging bats.

Figure 3. Guidelines for assessing potential suitability of development sites for bats (BCT, 2016)

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.		
Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. 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 or hibernation ^b). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. ^c	Habitat that could be used by small numbers of commuting bats 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 or tree 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 – the assessments in this table are 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 commuting 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 or tree 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.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats 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

- 2.4 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

- 1.4 The site is in a rural location to the north-east of Duddenhoe End, approximately 5km to the south-west of Saffron Walden. The immediate landscape includes low density residential housing, grazing meadows and a large woodland (Rockells Wood) beyond the south-eastern corner.

Designated sites and Priority Habitats

- 1.4 The site is not the subject of a conservation designation – there is no risk of direct or indirect impact on designated sites.
- 1.4 Rockells Wood is mapped as ancient woodland, an irreplaceable Priority Habitat. As all work will be outside of woodland limits, there is no risk of impact. Boundary trees beyond the south-eastern corner of the site are mature and ecologically important. These trees will be retained and protected through use of Heras fencing or a similar protective barrier during works.

EPS licenses

- 2.4 There are no EPS licenses granted within 2km of the site.

Sites evaluation: The development proposal will not adversely impact upon the nature conservation status of designated sites or priority habitats. Boundary woodland trees will be retained and appropriately protected throughout works.

2.0 Results: Phase 1 Habitat Survey

Photographs from the site visit are provided in Figure 4. A plan showing target notes is provided in Figure 5. For full details on legally protected species, please refer to Section 7. Latin names appear in the text once.

- 1.4 The site is accessed from Bridge Green Road to the north, and includes two detached thatched cottages, one original and one modern addition. Further buildings include a porch/log store, studio, pool house, stables and tractor shed. There is an ornamental garden with koi carp pond in the north of the site and amenity lawn with various trees to the east. The site is generally tidy and well-maintained.

Buildings/hard standing

- 1.4 The properties are situated to the north of the site. The property fronting Bridge Green Road is original (c.600 years old) and the property to the north-west is c. 70 years old. Both properties are two-storey with rendered walls and thatched roofs. Neither property contains a loft void and there are negligible opportunities for wildlife ingress. The proposal involves minor internal alterations and a new link joining the two properties across the existing driveway.
- 1.4 The porch/log store is adjacent to the driveway and comprises brick walls with a pitched tiled roof. There is a small room to the north and pergola with mature climber extending to the south. We understand the proposal involves extending this building on the western aspect.
- 2.4 In the centre of the site is a former studio building – with a flat roof and timber clad walls. There is dense ivy covering much of the exterior. To the south of the studio is a pool house (approximately 1960s) with glass roof and rendered walls. The proposal involves repairing both buildings. Decked areas extend into the landscaped garden to the north. A tennis court exists to the south.
- 1.4 On the south-eastern boundary is a stable block and small tractor storage shed. The stables are arranged in an L shape with tractor shed to the west. There is an internal courtyard and small raised fenced hard standing area. The stables have tongue and groove clad walls and a pitched roof covered with pan tiles. There are 3 stables and an open cart lodge section in the centre. We understand the proposal involves a conversion to accommodation. There is evidence of nesting swallow *Hirundo rustica* and a barn owl *Tyto alba* feeding perch on a rafter in the open section. The tractor shed is a small timber framed building with a tiled roof and is open to the north-west.

Garden areas: Amenity lawns, ornamental shrubs and trees

- 2.4 To the south of the original property is a landscaped garden containing a large rectangular koi carp pond, amenity grassland and a courtyard planted with various species including yew *Taxus baccata*, cedar *Cedrus* sp., Japanese maple *Acer palmatum*, magnolia, palm, cherry *Prunus* sp. and mulberry *Morus multicaulis* trees.
- 2.4 To the east of the access road is a large amenity lawn with established conifer hedgerow (we understand some of this was destroyed in recent storms), several mature beech *Fagus sylvatica*, yew, apple *Malus* sp. and horse chestnut *Aesculus hippocastanum* trees.

- 2.4 Along the western aspect of the access road is a row of established horse chestnut trees with understorey yew and ornamental mahonia.
- 1.4 Along the south western boundary are several mature ivy-clad oak *Quercus robur* and ash *Fraxinus excelsior* trees, a large woodland extends to the south.
- 2.10 Established trees exist along the western boundary following Wicken Water, this will not be impacted.

Habitats evaluation: The surveyed habitat is of low-ecological value at Site Level only. We understand the proposed work is related to buildings only, and all garden areas and trees will be unaffected. Boundary trees will be retained and protected in accordance with arboricultural advice.

Figure 4. Photographs



a) Thatched cottages – proposed link will be sited here.



b) Internal courtyard and landscaped garden with decked areas.



c) Log store/porch building, to be extended to the west.



d) Stables, to be converted.



e) Stables, internal.



f) Barn owl pellets below rafter in stables.



g) Ornamental koi carp pond in landscaped garden.



h) Oak and ash trees to south of the stables - unaffected.



i) Garden area with established vegetation to the east of the driveway – unaffected.

Figure 5. Plan showing target notes



Target note (TN)	Description
1	1960s thatched cottage.
2	Original thatched cottage.
3	Internal courtyard, landscaped garden.
4	Row of established horse chestnut trees along western aspect of the access drive.
5	Established conifer screen and amenity grassland to east of driveway.
6	Group of horse chestnut and fruit trees on amenity lawn.
7	Studio with dense ivy covering walls, flat roof.
8	Pool house with glass roof.
9	Stable block with timber walls and pitched tiled roof.
10	Tractor shed.
11	Off-site mature, ivy clad oak and ash trees.

2.0 Results: Protected/Priority Species Scoping

This section includes data search results, habitat requirements for species/species groups and an assessment in the context of the proposal.

Bats

Data search results:

- 1.4 Common pipistrelle, Natterer's bat and brown long-eared bat have been recorded within 2km. All species are common and widespread, known to roost in buildings and trees.

Habitat requirements:

- 1.4 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:

- 1.4 The thatched cottages have negligible roost suitability. The proposed link will not impact roosting bats since there are no loft voids to be impacted, nor any external cladding that could reasonably provide any crevices for roosting bats. Similarly, the studio and pool house have negligible roosting opportunities, both lacking loft voids and external crevices. The repair works are therefore unlikely to impact roosting bats.
- 2.4 The stables have limited external crevices, most roof tiles are covered with moss, ridge tiles are intact and well-sealed. There is no enclosed loft void. The tractor shed is open to the west and again provides no enclosed loft voids nor crevices bat could reasonably roost within.

All buildings have negligible roost suitability, evidence of bats was not found and further surveys are not justified.

- 1.4 There are no trees that will be impacted by the proposals. No trees were identified on site with potential roost features.
- 2.4 As the southern end of the site abuts ancient woodland and the western boundary abuts established vegetation, there is moderate suitability for foraging bats around the site. We recommend the following in relation to any proposed lighting to ensure bat foraging/commuting behaviour is maintained:

Brightness of lights should be as low as possible.

Lighting should not be directed at retained tree groups.

Directional lighting and/or fittings with hoods and cowls should be utilised.

Where possible, security lighting should be motion sensitive and on timers to minimise the amount of time that lights are on.

Where possible, directional low impact solar bollard lighting should be used to illuminate roads, paths and parking areas.

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

Further survey requirement	None
Avoidance	Ensure lighting is kept to a minimum.
Mitigation	In the unlikely event that bats are encountered, work will cease until ecological advice has been sought.
Compensation	None
Enhancement	Bat boxes are recommended on retained trees or buildings.

Great crested newt

Data search results:

- 2.4 No great crested newt records were returned within 2km.

Habitat requirements:

- 2.4 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).
- 1.4 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:

- 2.10 The pond on site is ornamental and stocked with koi carp (a contra-indicator to great crested newt presence). There are three ponds within 250 metres, the closest is on the opposing side of Bridge Green Road. This is privately owned and was not accessed during the survey.

- 2.11 The habitats to be impacted comprise:

A small paved area between the cottages that will be used to accommodate the link between buildings.

The studio/pool house and immediate hard standing/decked surrounds.

The stables, tractor shed and immediate surrounds.

- 2.11 None of the habitats to be impacted contain features that could be suitable for terrestrial great crested newt – they are typically found in rough grassland, woodland and use features such as log piles, buried rubble and mammal burrows as refuges for shelter and hibernation. No such habitats exist on the site and the work therefore shows negligible risk of killing, injuring great crested newt nor impacting habitat used for shelter and hibernation.

2.11 Based upon the lack of local records and poor habitat quality, it is not reasonably likely that great crested newt would be affected by, or be at risk from, the development proposals. Consequently, it is considered that the risk of potential impact of the proposals upon the conservation status of great crested newt is negligible and the risk of committing a criminal offence is highly unlikely. No further surveys are considered necessary or appropriate in respect of this species at this site.

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

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

Dormouse

Data search results:

2.10 No records were returned within 2km.

Habitat requirements:

2.11 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:

2.10 There is no suitable dormouse habitat on the site. Therefore, there is negligible risk of presence within the application boundary.

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

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

Otter and water vole

Data search results

2.10 No records were returned for either species.

Habitat requirements:

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

Assessment:

2.11 There is no suitable aquatic habitat on or adjacent to the site.

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

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

Reptiles

Data search results

2.10 No reptile records were returned.

Habitat requirements:

2.11 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:

2.11 The site is tidy and maintained, containing common habitats that are representative of most domestic gardens. Lawns are routinely mown leaving little structure or shelter. There is no rough grassland nor any log/rubble piles and no mammal burrows. The likely presence of reptiles on the site is considered to be very low, as is the risk of recklessly killing or injuring any reptiles. Consequently, no further survey or mitigation is necessary.

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

Further survey requirement	None
Avoidance	Ensure the development footprint is maintained to avoid colonisation.
Mitigation	None
Compensation	None
Enhancement	None

Birds

Data search results:

- 2.11 Birds listed on Schedule 1 of the Wildlife and Countryside Act (1981, as amended) returned from the data search include red kite and fieldfare. Priority Species recorded locally include cuckoo and yellowhammer.

Habitat requirements:

- 2.10 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:

- 2.11 Birds heard during the survey include wren, blackbird and green woodpecker. The trees surrounding the site have potential to support generalist nesting birds. Any tree work required to accommodate the development or on health and safety grounds will be carried out between October and February inclusive.
- 2.10 Evidence of barn owl in the form of pellets and white wash was identified below a rafter in the stable block. This is indicative of a feeding perch, no suitable ledges for nesting were seen nor any nesting material. Old swallow nests were also identified in the stable block and tractor shed.

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

Further survey requirement	None
Avoidance	Ideally the tractor shed or stables should be retained to maintain availability of nesting habitat for swallow. If this is not possible, compensatory nest provision should be included in the design for swallow. Work to the stables and tractor shed will be undertaken between October and February inclusive to avoid harm to active nests.

	In the unlikely event that tree work is necessary, it will be carried out between October and February inclusive to avoid the nesting season.
Mitigation	None
Compensation	Compensatory nest provision for swallow is recommended if the stables/tractor shed cannot be retained.
Enhancement	A barn owl box is recommended on the telegraph pole in the meadow, to the east of the site. A variety of bird nest boxes could be installed on retained trees/buildings.

Badger

Data search results

2.10 Confidential – available only on request.

Habitat requirements:

2.10 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:

2.11 No badger setts, or any other signs alluding to use of the site by badgers, were identified on the site. The mitigation measures in the table below/overleaf are recommended to protect all mammals that could disperse around the site during site works.

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

Further survey requirement	None
Avoidance	<p>Any trenches or deep pits that are to be left open overnight should be provided with a means of escape should a badger enter. This could simply be in the form of a roughened plank.</p> <p>Any trenches/pits should be inspected each morning before work commences to ensure no badgers have become trapped overnight. Should a badger be found then formal ecological advice must be sought before work commences for the day.</p> <p>The storage of topsoil or other 'soft' building materials within the site should be given careful consideration. To avoid the adoption of any mounds, they should be subject to daily inspections before work commences.</p>

	<p>During the work, the storage of any chemicals should be contained in such a way that they cannot be accessed or knocked over by any roaming badgers.</p> <p>Open pipework with a diameter of more than 120mm should be properly covered at the end of the work day to prevent badgers entering and becoming trapped. Again, should a badger trap itself then formal ecological advice must be sought before work commences for the day.</p>
Mitigation	None
Compensation	None
Enhancement	None

Legally protected plants/invertebrates

Data search results:

- 2.10 There are records for rare and notable plant species close to the site, including native bluebell, corn mint, sulphur clover and oxlip. Most records for notable plants originate from Rockell's Wood to the south-east of the site.
- 2.11 There is a high diversity of moths in the local area, including several Priority Species. Most records are 1.3km from the site at Lower Pond Street.

Assessment:

- 2.11 The site is limited in scale and comprises sparse ground cover and limited diversity. Consequently, the likelihood of rare, threatened or protected plants being present on the site is negligible. In addition, the site only provides low-quality habitat for invertebrates in general.

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, particularly to attract pollinators.

4.0 Ecological Constraints and Opportunities

Constraints:

- 2.4 There are no constraints in relation to designated sites or priority habitats. All trees surrounding the barn will be retained and protected in accordance with arboricultural advice. There are no constraints in relation to protected species, other than nesting birds.

Opportunities:

- 2.4 Biodiversity net-gain is now encouraged under Paragraph 174(d) of the National Planning Policy Framework (2021). The following recommendations are reasonable and proportionate and would contribute to net-gain:

Barn owl box: A barn owl box is recommended on the telegraph pole in the meadow to the east of the site, photo below. The Barn Owl Trust boxes are recommended. The box should face north or east and be positioned as high as possible.



Pole in meadow to the east, suitable for barn owl box installation.

Bat boxes: The installation of three bat boxes on a mature tree with no ivy cover and a clear flight line. Boxes should be installed facing between east, south and west (avoiding northern aspects) above 3 m and away from artificial lighting. Bat boxes could also be installed on buildings close to the woodland, facing south, for example on a gable end.

Bird boxes: A variety of woodcrete/woodstone bird boxes could be installed on retained trees, facing north or east above 2 metres. A mix of 32mm, open-fronted and sparrow terraces could be considered.

Wildlife friendly planting: Where possible, the development should include planting to attract wildlife, including pollinators. This could take the form of small trees or shrubs, including:

Trees:

- Apple
- Pear
- Rowan

Shrubs:

- Aubretia sp.
- Currant Ribes sp.
- Lungwort
- Primrose
- Sweet violet
- Winter aconite
- Wood anemone
- Purple toadflax
- Honeysuckle
- Red valerian

2.0 Conclusions

- 2.4 Hybrid Ecology was instructed to carry out an ecological assessment in relation to proposed building alterations at The Old House, Duddenhoe End, Saffron Walden, Essex.
- 2.4 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 February 2023 to map habitats and identify any potential for, or evidence of, legally protected species. The survey also identified opportunities for ecological enhancement.
- 2.4 The site comprises low ecological value, with limited habitats and negligible scope for protected species, other than nesting birds. Further surveys are not required. Assuming all measures in this report are adopted, there is no reason the proposal will cause impact to local biodiversity.

Enhancement opportunities

- 4.4 The development provides an opportunity for biodiversity enhancements, including a barn owl box, bat boxes, bird boxes and wildlife friendly planting (where possible). These measures will contribute to biodiversity net-gain in accordance with Paragraph 174(d) of the NPPF (2021). The design, maintenance and management of these features could be secured by condition.

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Appendix 1. Recommended habitat boxes



Vivara Pro woodcrete open-fronted bird box for trees



Vivara Pro woodcrete 32mm bird box for trees



Vivara Pro sparrow terrace for buildings

All Vivara Pro boxes can be found here - [Search results \(wildcare.co.uk\)](https://www.wildcare.co.uk)

SINGLE CREVICE BAT BOX	TWO CREVICE BAT BOX
	
£36	£48
Individually Handmade - Specifications are in CM and approximate.	Individually Handmade - Specifications are in CM and approximate.
External: 43 high x 21.5 wide x 6.8 deep.	External: 43 high x 21.5 wide x 6.8 deep.
Internal: 41 x 16.5 x 1.8 crevices @ 1.	Internal: 41 x 16.5 x 1.8 crevices @ 2.
Made with small groups of crevice dwelling bat species in mind, such as pipistrelles. Approx.	Made with small groups of crevice dwelling bat species in mind, such as pipistrelles. Approx.
4.75kg	6.75kg

Greenwoods Eco Habitats bat boxes for trees [Home](#) | [Greenwood's Ecohabitats](#)
greenwoodsecohabitats.co.uk



Barn owl box from The Barn Owl Trust