Preliminary Ecological Appraisal Survey associated with a development proposal at New Manor Farm, Sawtry Way, Wyton, Huntingdon, Cambridgeshire, PE28 2DY.

FINAL REPORT

For:

[redacted]
George Pension Trust
c/o Mattioli Woods
1 New Walk Place
Leicester
LE1 6RU

[redacted]
BSc (Hons) CEnv MCIEEM CBiol MRSB

December 2024

© Cambridge Ecology
Hilton House
37 Hilton Street
Over
Cambridge
CB24 5PU
Telephone: +44 (0)1954 231239
Fax: +44 (0)1954231093
E-mail: info@cambridgeecology.com
Web address: www.cambridgeecology.com

Place of Registration: Cardiff UK
Cambridge Ecology - Company Registration: 6357707
Registered Office: Hilton House 37 Hilton Street, Over, Cambridgeshire, CB24 5PU

Notice to Interested Parties

© Cambridge Ecology Limited. All rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Cambridge Ecology Limited. If you have received this report in error, please destroy all copies in your possession or control and notify Cambridge Ecology Limited.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Cambridge Ecology Limited, no other party may use, make use of or rely on the contents of the report. No liability is accepted by Cambridge Ecology Limited for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Cambridge Ecology Limited using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted, and it is expressly stated that no independent verification of any of the documents or information supplied to Cambridge Ecology Limited has been made.

To achieve the study objectives stated in this report, we were required to base our conclusions on the best information available during the period of the investigation and within the limits prescribed by our client in the agreement.

No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations completely defined the degree or extent of e.g. species abundances or habitat management efficacy described in the report.

This report is only valid for external use in its final issued version.

Document Information

Report title:	Preliminary Ecological Appraisal Survey associated with a development proposal at New Manor Farm, Sawtry Way, Wyton, Huntingdon, Cambridgeshire, PE28 2DY
Client:	Julie Synan, Mick George Pension Trust
Document ref:	P2019-R-001a **FINAL Report**
Author(s):	[redacted]
Report date:	December 2024

CONTENTS

0 NON- EXECUTIVE SUMMARY 1

1 INTRODUCTION 3

Background to the Study 3
Aims and objectives 3
Ecology Survey Area and Development Proposals 4
Relevant Legislation and Policy 4

2 METHODS 6

Desk-based literature search 6
UKHAB Habitat Survey 6
Protected Species Scoping Survey 7
Staff 9
Site Evaluation 9
Assessment Methodology 10
Limitations and Assumptions 10

3 RESULTS 12

Desk-based literature search 12
Statutory Designated Sites of Nature Conservation Importance 12
Non-Statutory Designated Sites of Nature Conservation Importance 12
Protected Habitats 13
Protected Species 13
Date, Time and weather conditions 14
UKHAB Habitat Survey 14
Habitats 14
Target Notes 17
Protected Species 17

4 IMPLICATIONS OF THE DEVELOPMENT PROPOSALS 22

5 ECOLOGICAL EVALUATION, CONSTRAINTS AND RECOMMENDATIONS 23

Birds 25
Foraging Bats 27
NERC Act Section 41 Species - Species of Principal Importance 28

6 KEY POINTS AND FINDINGS 30

7 BIBLIOGRAPHY 32

8 FIGURES 35

9 PHOTOGRAPHS 40

10 APPENDICES 48

Appendix 1 : UKHab Habitat Survey Species List 48

Modified Grassland 48

Vegetated Garden - Introduced Shrub 48

Individual Trees 48

Waterbody – Dry Ditch 48

Native Hedgerow 48

Appendix 2: Relevant Wildlife Legislation and Planning Policy 49

The Environment Act 2021 55

Natural Environment and Rural Communities Act (2006), ... 55

National Planning Policy Framework (NPPF) 55

Schedule 9 of Wildlife and Countryside Act 1981 (as amended) 56

Wild Mammals (Protection) Act 1996 56

Birds of Conservation Concern (BoCC) 56

Appendix 3: Habitat Condition Assessment Sheets 58

TABLES

Table 2.1: DAFOR scale 7

Table 2.2: Protected Species Assessment 7

Table 2.3 Bat roost evaluation protocol for trees and buildings 8

Table 3.1: Designated sites within 1km of the development site 12

Table 3.2: Weather Conditions during the survey visit 14

Table 3.3: UKHab Habitat Survey Results 15

Table 3.4: Target Notes 17

Table 10.1 Common statutory and non-statutory designations 49

Table 10.2 Summary of Wildlife Protection for Species 51

FIGURES

Figure 1.1: Plan showing the red line boundary of the development site and survey area 35

Figure 1.2: Plan showing the indicative layout of the proposed development 36

Figure 3.1: UKHab Habitat Map 37

Figure 5.1: Suggested Bird Nest Box Designs 38

Figure 5.2: Suggested Bat Box Designs 38

Figure 5.3: Suggested Hedgehog House Designs and fence passes 39

0 NON- EXECUTIVE SUMMARY

0.1 Cambridge Ecology Ltd was commissioned to carry out a Preliminary Ecological Assessment (involving UKHab Habitat Survey and Protected Species Scoping Survey at New Manor Farm, Sawtry Way, Wyton, Huntingdon, Cambridgeshire, PE28 2DY. The results of the survey would aim to inform the planning application being prepared for the conversion of an existing garage into a new home gym and office.

0.2 This survey aimed to provide an up-to-date baseline evaluation of the ecological value of the development site and to highlight the potential for ecological features (e.g. protected species) that could be present, which may need to be considered in relation to maintaining compliance with wildlife legislation and planning policy.

0.3 It was considered that the study provided a robust and valid indication of the potential for the site to support protected species and habitats. The survey was considered to have been carried out methodically and all accessible areas searched thoroughly to locate signs indicating the presence of protected species and habitats.

0.4 There were four statutorily designated site of nature conservation value within 1km of the development site. These were the Houghton Meadows site of special scientific interest (SSSI) and Anglian Meadows and Houghton Grange Grassland County Wildlife Sites (CWS). The nearest was Anglian Meadows located approximately 0.8 km to the south.

0.5 Given the scale and nature of the proposed development, it is considered that the statutorily designated sites do not represent a constraint to the proposed development.

0.6 Based on the survey findings, an evaluation of the ecological importance of the proposed development site, using recognised ecological criteria, indicated that the site should be considered of **local biodiversity value**.

0.7 The results of the UKHab Habitat survey indicated that the dominant habitats present within the development site was **developed land and modified grassland** and considered to be of limited biodiversity value.

0.8 The presence of habitat, such as the boundary hedgerows and a dry ditch with potential to support nesting birds and foraging bats and West European Hedgehog was located within the site.

0.9 Therefore, the Preliminary Ecological Appraisal has identified some potential protected species constraints; namely nesting birds and foraging bats and West European Hedgehog; which must be of material consideration for this development.

0.10 The absence or low potential for other protected species such as Great Crested Newt, reptiles, roosting bats, Eurasian Badger, European Otter, European Water Vole, Brown Hare, invertebrates and flowering plants, within the development site, indicated that these species do not represent a constraint to this development.

0.11 Provided the measures described in the report are implemented fully no further ecology surveys involving species-specific survey are considered necessary.

0.12 The following mitigation measures have been identified and are recommended to address the actual and potential ecological constraints at the site:

- **Birds:** site clearance to avoid the breeding season which runs from March to September. Site clearance works between the months of March and September will require an experienced ornithologist to conduct a breeding bird inspection survey beforehand.
- **Foraging Bats:** avoid lighting the site at night.
- **West European Hedgehog:** vigilance and sensitive approach to construction activities mindful; of the potential presence of this species.

0.13 Opportunities exist to enhance the biodiversity value of the site post-development. These enhancement recommendations would meet the requirements of the Huntingdon District Council (HDC) adopted Local Plan and the National Planning Policy Framework (NPPF 2021 as amended), which aims for "no net loss" of biodiversity. Ecological enhancement recommendations comprise:

- **Habitats:** areas of soft landscaping - where soft landscaping is proposed; suitable native plant species must be planted with the aim to provide suitable habitat for wildlife. Enhanced native species-rich hedgerows planted along the site boundaries, planting additional trees and hedgerow, as part of the scheme and must be designed to benefit biodiversity.
- Installation of up to 5 bird nest boxes of various designs.
- Installation of up to 5 bat roost boxes of various designs.
- Installation of up to 5 Hedgehog boxes of various designs and three Hedgehog passes as appropriate.

1 INTRODUCTION

Background to the Study

1.1 Cambridge Ecology Ltd was commissioned to carry out a Preliminary Ecological Assessment (involving UKHab Habitat Survey and Protected Species Scoping Survey of the site at New Manor Farm, Sawtry Way, Wyton, Huntingdon, Cambridgeshire, PE28 2DY. The results of the survey would aim to inform the planning application being prepared for the conversion of an existing garage into a new home gym and office.

1.2 Wildlife such as Bats, Badgers, Great Crested Newt and nesting birds etc. are protected by National and International law. Protected and Biodiversity Action Plan (BAP) species such as native reptiles are also of material consideration for individual planning consents under the National Planning Policy Framework (NPPF), which promotes the enhancement of natural and local environments through planning and encourages a move towards achieving net gains for biodiversity where possible (DCLG, 2012).

1.3 This survey was required to provide an up-to-date baseline evaluation of the ecological value of the site and to highlight the potential for ecological features (e.g. protected species) to be present, which may cause a constraint to the proposed development and need to be considered in relation to maintaining compliance with wildlife legislation and planning policy.

1.4 For clarity in this report the development site and survey area both refer to the site and adjacent land within 50m of the proposed development and includes the potential zone of influence (see Figure 1.1).

Aims and objectives

1.5 The aim of this survey was to establish the current ecological value of the site at New Manor Farm, Sawtry Way, Wyton, Huntingdon, Cambridgeshire, PE28 2DY, including its potential to support protected species and habitats.

1.6 The key objectives of the literature search, survey and report were to:

- collate baseline data for the site through a review of recent biological records,
- provide a record of the ecological features present within the site/study area,
- determine which species (some of which could be protected) were currently or had been utilising the site,
- identify any potential ecological constraints that might require species specific surveys,
- determine the ecological interest of the site in relation to the surrounding area; achieved by using various criteria, such as the presence of protected species, local and UK BAP species and habitat,
- identify any other surveys that may be necessary to ensure legal compliance afforded certain protected species under the terms of national statutory instruments such as the Wildlife & Countryside Act 1981 (as amended).

1.7 The data collected would be used as the basis to:

- determine the ecological value of the site,
- highlight the potential ecological features that may be affected by possible future development on or near the site,

- enable any possible future development to address and maintain any existing ecological features that may be of biodiversity value,
- enable any possible future development to incorporate potential opportunities to enhance the ecological value of the site.

Ecology Survey Area and Development Proposals

1.8 It was considered that due to the size and character of the site; the extent of the proposed development within the footprint of the site; the character of the surrounding area and proximity of the nearest protected and/or priority habitats/species, an actual zone of influence within the development site was considered proportionate.

1.9 Therefore, the survey area for the ecology survey comprised the area with the red-line boundary of the site (See Figure 1.1) and a buffer area up to 50m boundary beyond the development site, where access was possible.

1.10 Currently, the area of the red line boundary site sits on ~0.1ha of land which comprises an extensive built area comprising an existing residential building, concrete hard standing and garden contain amenity grassland and introduced shrub plants, plus adjacent boundary hedgerows and trees.

1.11 The site was located approximately 6km to the east of the town of Huntingdon and was approximately 22km to the north west of the Cambridge city centre. The centre of the development site was located at grid reference TL 28970 72735.

1.12 The site was bordered on all sides by the existing area of developed land associated with the New Manor Farm site. In the wider area the site was surrounded by arable land.

1.13 The proposed development would involve the conversion of an existing garage into a new home gym and office. It is understood that the conversion and extension will be on the footprint of the existing buildings. Therefore it is expected that adjacent hedgerows and trees will remain unaffected by the proposed development. Access would be via the existing access point and therefore no trees or hedgerows would be lost or removed.

1.14 The plan in Figure 1.2 shows the indicative layout of the proposed development.

Relevant Legislation and Policy

1.15 Relevant legislation and policies relating to the remit of this survey are listed below and outlined in more detail in the Appendices.

- Conservation of Habitats and Species Regulations 2017 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities (NERC) Act 2006;
- Wild Mammals (Protection) Act 1996.
- The Countryside and Rights of Way (CRoW) Act 2000;
- Protection of Badgers Act 1992;
- The UK and Cambridgeshire Biodiversity Action Plan;

1.16 In addition to duties under the terms of the wildlife legislation; the National Planning Policy Framework (NPPF 2021 as amended); requires planning decisions to contribute to conserving and enhancing the local environment.

1.17 The Huntingdon District Council (HDC) has produced an adopted Local Plan which deals with a number of policies relating to biodiversity and habitat conservation, including statutorily designated sites, biodiversity and development, sustainable development, river corridors, trees, woodland and hedgerows, light pollution and landscaping.

2 METHODS

Desk-based literature search

2.1 A desk-based literature search was undertaken in **November 2024** to gather existing ecological information relating to the proposed survey area. Only records of species and habitats that were less than ten years old (i.e. since **November 2014**) were included, older records were noted, but less likely to be relevant.

2.2 Records of protected species were gathered from various sources. These included the following:

- Cambridge and Peterborough Environmental Records Centre
- Multi-Agency Geographical Information Coverage (MAGIC)
- National Biodiversity Network Database (NBN)

2.3 The scope of the literature searches for protected species and habitats data comprised a search area up to **1km** from the development site.

2.4 The findings of the desk-based literature search have been reported in Section 3 (Results).

UKHAB Habitat Survey

2.5 Figure 1.1 illustrates the extent of the ecology survey area. It was considered that an actual zone of influence comprising the red line boundary of the development site plus an area up to 50m beyond the red line boundary was proportionate.

2.6 Only habitats on the landholding were available to survey.

2.7 A fine scale minimum measurable unit (MMU) of $10m^2$ was selected as the features within the site were large enough for the most detailed mapping to be feasible.

2.8 Habitats were assigned according to the UK Habitat Classification Habitat Definitions 2.0 (UKHab 2023) and using the guidance of the UK Habitat Classification User Manual (Butcher et al., 2023). Level four classification was achieved where appropriate and possible. The aim of this survey was to provide a record of the vegetation and wildlife habitats present within the site.

2.9 Each distinct habitat unit within the site was observed by the surveyor and classified in accordance with the habitat codes within the UKHAB guidelines.

2.10 Level four classification was achieved where appropriate and possible. The extent of area-based habitats was defined.

2.11 Distinctiveness and condition scores were assigned to habitats based on the results of the UKHabs habitat classification survey and guidance in the DEFRA Statutory Biodiversity Metric Tool User Guide and Technical Supplement (including the Condition Assessment Sheets for each habitat type).

2.12 At the time of any future Biodiversity Net Gain Assessment study, distinctiveness and condition scores should be re-assigned to habitats and area calculations carried out prior to undertaking the metric calculation. Distinctiveness and condition scores and area calculations were not assigned to habitats in detail as this was beyond the scope of this PEA Study.

2.13 Maps were annotated in the field with features of species and habitat interest. Where necessary target notes were added to the UKHAB habitat map to provide information on the location of any habitats and plant communities of interest and which were too small (e.g. badger latrines) to be recorded in detail on the habitat map. A UKHab habitat plan was then produced of the existing habitats on site in ArcGIS and is provided in Figure 3.1.

2.14 A description of the ecological features highlighted by the target notes was provided in a table in the results section.

2.15 Data collected from the field surveys were used to determine an ecological baseline for the site.

2.16 Botanical nomenclature follows that of the 4th edition of the 'New Flora of the British Isles' (Stace, 2019). Dominant plant species were noted, as were any that are legally protected (Schedule 8 of the Wildlife and Countryside Act (WCA) 1981), notable (GB/England Red Listed, Section 41), or invasive species listed on Schedule 9 of the WCA 1981. Plants recorded during the survey are provide in Appendix 1.

2.17 The DAFOR scale was used to define the relative abundance of species. The scale is shown in Table 2.1. It is important to note that where a species is described as rare this description refers to its relative abundance within the site and is not a description of its rarity at a county, regional or national level.

Table 2.1: DAFOR scale

DAFOR code	Relative abundance
D	Dominant
A	Abundant
F	Frequent
O	Occasional
R	Rare

Protected Species Scoping Survey

2.18 A protected species scoping survey was carried out on the **25th November 2024** to locate signs indicating the presence of protected species and assess the site's suitability to support protected species, including priority and rare species, in accordance with approved guidelines.

2.19 It should be noted that this protected species scoping survey is aimed at assessing the potential for a species or species group to be present or absent, and it does not constitute a full survey for these species.

2.20 For each species, an assessment of their likely presence was undertaken. The assessment was based of the factors shown in Table 2.2.

Table 2.2: Protected Species Assessment

Assessment Results	Criteria
Confirmed	The species is confirmed on the site during the Preliminary Ecological Appraisal, previous survey results or biological records from the last 10 years.
High	Highly suitable habitats present onsite for the species and onsite biological records from the

Assessment Results	Criteria
	last 10 years. The surrounding habitats also provide widespread opportunities for the species which are well connected to the site.
Moderate	Some suitable habitats available on site for the species although not of optimum quality. Biological records of the species within the last 10 years.
Low	Some suitable habitats available on site for the species but this is low value and possibly of small scale or with poor connectivity. No, or very few, biological records returned in the literature search of the species within the last 10 years.
Negligible	No suitable habitat available for the species, or very little poor-quality habitat. No biological records of the species within the last 10 years.

2.21 Photographs were taken (see Photographs Section) to illustrate the presence of protected species; or verify features showing evidence of protected species.

2.22 **Amphibians:** all known and accessible ponds within 250m of the site (unless ecologically separated from the site by significant barriers, such as major roads or rivers or where access was not possible) were assessed for their potential to support breeding protected amphibians, such as Great Crested Newt. If necessary, a Habitat Suitability Index for breeding Great Crested Newt would be carried out on all accessible suitable water bodies.

2.23 **Bats:** Mature trees and suitable structures within the site boundary, which would be affected by the development, were assessed to evaluate their potential to support roosting bats (see Table 2.3 for evaluation criteria) and to look for potential roost features (PRFs).

Table 2.3 Bat roost evaluation protocol for trees and buildings

Bat Roost Potential	Field Signs
Confirmed Roost	Evidence of the past or current presence of bats, e.g. bats, droppings, staining.
High Potential Roost Site	Features suitable to support roosting bats. Character and condition of tree/building suitable to support roosting bats
Medium Potential Roost Site	Some optimal features suitable to support roosting bats. Character and condition of tree/building suitable to support roosting bats
Low Potential Roost Site	Few suboptimal features suitable to support roosting bats. Character and condition of tree/building unsuitable to support roosting bats
Negligible Potential Roost Site	No features present, character and condition of tree/building unsuitable to support roosting bats

[redacted]

2.25 **Water Vole/Otter:** A visual survey of ditches and water courses was made to search for, latrines, prints, feeding remains, burrows and holts or other signs of Water Vole and Otter was undertaken within the site boundary.

2.26 **Dormice**: A visual survey for the presence of suitable habitat; such as woodland/suitable hedges with good under-storey/shrub layer and a range of food plant species, such as hazel, bramble and honeysuckle; was carried out to assess if dormice were likely to be present.

2.27 **Birds:** A visual survey of bird activity and suitable nesting habitat was carried out, to determine if any areas would be suitable for WCA Schedule 1 birds, Birds of Conservation Concern or other common and widespread nesting birds.

2.28 **Reptiles:** A visual survey for the presence of habitat suitable to support reptiles was carried out.

2.29 **Invertebrates:** The site was inspected for significant areas of rotting deadwood, open mosaic habitat, and high-quality aquatic or other habitats; such as short ephemeral perennial and bare-ground; which could be used by significant assemblages of invertebrates, or by any of the invertebrates highlighted in the data search. Any water bodies were assessed for their potential to support white-clawed crayfish.

2.30 **Species and habitats listed on Section 41 of the NERC Act 2006 and Red and Amber listed Birds of Conservation Concern (BoCC) as per Stanbury et al., 2021**: all habitats, animal and plant species which were identifiable at the time of the survey were recorded.

Staff

2.31 The extended Preliminary Ecological Appraisal was undertaken by Darren Frost BSc. (Hons.) CEnv MCIEEM, CBiol MRSB.

2.32 [redacted] is a Chartered Environmentalist based near Cambridge with over fifteen years of experience in environmental consultancy. He has undertaken surveys, produced ecological assessments and provided advice on legislative constraints and solutions to private and public-sector developments throughout the UK. He holds bat, Great Crested Newt, White-clawed Crayfish survey licences and Schedule 1 bird species (Barn Owl) disturbance licences from Natural England.

2.33 [redacted] meets the requirements for knowledge, skills and practical experience as set out in the Competencies for Species Survey guidelines (CIEEM 2013) for all surveys undertaken.

Site Evaluation

2.34 An initial evaluation of the ecological importance of the site was made by comparing the field survey results against recognised criteria for establishing the presence of valued ecological receptors.

2.35 The criteria used to determine the ecological value of the site included the following:

- Species and habitats listed as part of the Conservation of Habitats and Species Regulations 2017 (as amended).
- Species protected under Schedule 5 and Section 9 of the Wildlife and Countryside Act (1981 as amended).

- Badgers protected under the Protection of Badgers Act.
- Nesting birds protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended).
- Bird species protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
- Species and Habitats of Principal Importance– as listed on Section 41 of the Natural Environment and Rural Communities Act (NERC 2006).
- Birds of Conservation Concern (BoCC) Red/Amber List (Stanbury et al., 2021).
- Important habitats – as listed on the UK BAP priority habitats.
- Important species – as listed on the UK BAP priority species.
- Important hedgerows – as defined by The Hedgerow Regulations 1997.

Assessment Methodology

2.36 The methodology for the assessment of the likely ecological effects of the proposed development is based on the principles of CIEEM's Guidelines for Preliminary Ecological Appraisal in the UK, 2nd Edition (2017). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the CIEEM guidelines provide a useful framework for assessing ecological impacts at any level.

2.37 Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

Limitations and Assumptions

2.38 The survey provided a representative indication of the potential for the site to support protected species and habitats. The survey was considered to have been carried out methodically and all accessible areas searched thoroughly to locate signs indicating the presence of protected species and habitats.

2.39 The survey was carried out in **November** after the optimal season (April- September) for Habitat surveys. It was considered that due to the nature of the site, the habitats identified were representative of those that were present and would not be significantly different if the survey had been carried out at a different time of year. Although it is acknowledged that the list of plant species recorded would likely be greater than that encountered during this single site visit.

2.40 It must be noted that the absence of certain protected species, such as bats and amphibians, would not preclude their presence on a site. There would always be a risk that a protected species was over-looked, either owing to the timing (both time of day and time of year) of the survey, the scarcity of the species at the site or the ability of protected species to move to new sites periodically and therefore move into an area after the survey had been carried out. It should be noted that for some species signs and evidence are rarely found during a single survey visit, even if the species is on site.

2.41 The desk study used available records and historical data for the local area. The biological records are useful as a general guide to supplement the site visits, but absence of records does not necessarily indicate the absence of species from the site. Therefore, on their own, these records do not provide a reliable indication of

species present/absence as records depend entirely on survey effort in the area, which can be highly variable.

2.42 The baseline conditions reported and assessed in this document represent those identified at the time of the survey on the **25th November 2024.** Although a reasonable assessment of habitats present can be made during the survey visit, changes due to seasonal variations were not observed.

3 RESULTS

Desk-based literature search

3.1 The key ecological features associated with the study area fell largely within the following categories:

- Statutory and non-statutory designated sites
- Protected habitats and species; and
- Non-protected habitats and species.

3.2 This section outlines the baseline data for the site under these broad headings and incorporates the results from the desk-based literature search.

Statutory Designated Sites of Nature Conservation Importance

3.3 Statutory sites are those that are legally protected and development within or near them is strictly controlled, such as Sites of Special Scientific Interest (SSSI). There were no statutory designated sites within the site.

3.4 There were three statutory designated sites within 1km of the site. These were the Houghton Meadows site of special scientific interest (SSSI) and Anglian Meadows and Houghton Grange Grassland County Wildlife Sites (CWS). The nearest was Anglian Meadows located approximately 0.8 km to the south. The details of these sites are shown in Table 3.1.

Non-Statutory Designated Sites of Nature Conservation Importance

3.5 Non-statutory designated sites include Local Wildlife Sites (LWS), Sites of Importance for Nature Conservation (SINC) and other locally designated sites that receive some limited protection. There were no non-statutory designated sites within the site or within 1km of the development site.

Table 3.1: Designated sites within 1km of the development site

Site Name	Grid Ref	Approximate distance (km) and direction from site	Area (ha)	Reasons for designation
Site of Special Scientific Interest (SSSI)				
Houghton Meadows	TL293716	1km South East	4.65	These ridge-and-furrow meadows hold neutral grassland communities of a type now rare in Cambridgeshire and declining nationally. A rich variety of broadleaved herbs is present.
County Wildlife Site (CWS)				
Anglian Meadows	TL289717	0.8km South	7.88	The site qualifies as CWS because it supports at least 0.05ha of NVC community MG5 Crested Dog's-tail - Black Knapweed grassland. Additionally it supports frequent numbers of at least 8 neutral grassland indicator species.
Houghton Grange Grassland	TL295718	0.9km South East	4.31	The site qualifies as CWS because it supports at least 0.05ha of NVC

Site Name	Grid Ref	Approximate distance (km) and direction from site	Area (ha)	Reasons for designation
				community MG5 Crested Dog's-tail - Black Knapweed grassland.

Protected Habitats

3.6 The desk-based research indicated that there were no UKBAP Priority Habitats and Habitat of Principal Importance (NERC Act 2006) present within the site.

3.7 It was recognised that there were UKBAP habitats and/or Habitats of Principal Importance (NERC Act 2006) present within 1km of the development site. These included Deciduous Woodland and Coastal and Floodplain Grazing Marsh.

Protected Species

3.8 The data search from **November 2024** found no records (within the last 10 years) for any protected or notable species actually located within the red line boundary of the development site.

3.9 It was noted that within 1km of the development site, records of protected and notable species (Species of Principal Importance) were found, these included:

- records of three species of amphibians, including Common Toad, Common Frog and Great Crested Newt being present within 1km of the development site. The nearest record of Great Crested Newt was ~1 km to the south east of the development site at Houghton Grange.
- there was a record of a Protected Species Licence application being granted for Great Crested Newt, within 1km of the development site at Houghton Grange.
- one record of one species of reptile, namely Grass Snake, being present within 1km of the development site, at Houghton Grange.
- records of eight species of bird, listed on various conservation designations.
- records of three species of bat, namely Common and Soprano Pipistrelle, and Brown Long-eared Bat.
- there was a record of a Protected Species Licence application being granted for bats, within 1km of the development site at Houghton Grange.
- [redacted]
- no records of European Otter.
- no records of European Water Vole.
- no records of Brown Hare.
- one record of West European Hedgehog.
- records of five species of flowering plant, listed on various conservation designations.
- records of 11 species of invertebrate, listed on various conservation designations.

Date, Time and weather conditions

3.10 Table 3.2 details the weather conditions at the time of the UKHab Habitat Survey and Protected Species Scoping Survey on the **25th November 2024**.

Table 3.2: Weather Conditions during the survey visit

Time of Survey	Weather Conditions	
1020	Temperature	11°C
	Cloud	0%
	Wind	WSW 15 mph
	Humidity	75%
	Rain	None
	Sun	Dry and Sunny

UKHAB Habitat Survey

3.11 It is considered that the survey recorded appropriate and accurate data to enable the ecological value of the site to be determined. The habitat within the red line boundary of the site comprised an extensive area of Modified Grassland, Scrub and two boundary hedgerows.

Habitats

3.12 The results of the field survey undertaken on **25th November 2024** are in Figure 3.1 and described in Table 3.3. Where applicable, Priority Habitats are in bold. Photographs of the site are provided in Section 9 and a full list of species, with scientific names, is provided in Appendix 1. The following habitats (Level 5 Primary Habitat labels and codes, where applicable) were recorded on site:

- Built-up area and garden including:
  - Modified Grassland – on site and adjacent to the site
  - Introduced Shrub – on site and adjacent to the site.
  - Artificial Unvegetated Unsealed Surface – on site.
  - Buildings - on site and adjacent to the site.
- Individual Trees - on site and adjacent to the site.
- Waterbody: Dry Ditch - on site and adjacent to the site.
- Native Hedgerow – on site and adjacent to the site.

Table 3.3: UKHab Habitat Survey Results

UKHab Primary Code	Habitat Type	UKHab Secondary Code	Description	Habitat Condition Assessment (See Appendix 3)	NERC Act 2006 Habitat of Priory Importance*	Photograph Reference No.	Location
g4c	Modified Grassland	108, 516, 523, 827, 828, 846, 847	This habitat was associated with the large areas of grassland throughout the site and was part of the garden. This grassland comprised perennial rye grass as part of a garden lawn and contained less than 9 species/metre. Flowering plants included daisy and dandelion. The management had resulted in a short sward height (e.g. <10cm). There was also garden flower beds associated with this habitat. Plants included cotoneaster and honeysuckle.	Poor	No	1-4	On site
	Individual Trees	203	There were approximately 10 individual trees in the survey area. These included field maple, silver birch and ash none of the tree were considered to be a veteran tree. The trees were similar in size from being approximately 5m tall and a trunk width of 100mm at chest height.	Good	No	5-7	On site boundary
	Waterbody – Dry Ditch (D1)	49, 50, 500, 510, 516,	There was dry ditch associated with Hedgerow H2. The ditch was approximately 30m long and 2m wide at the top and <0.1 wide at the bottom. The vegetation associated with the ditch was tall ruderal vegetation comprising nettle, bristly ox-tongue most of the banks were bare and devoid of plants mainly comprising compacted earth.	Poor	No	10	On site boundary
h2a6	Native Hedgerow (H1 and H2)	11, 116, 516,	Two species-poor native hedgerows (H1-H2) were located along the eastern and southern boundary of the site. Both hedgerows comprised a limited variety of species. Both comprising mainly hawthorn, with occasional elderberry. H2 also comprised trees and a dry ditch. Both the hedges were approximately 1.5m	Moderate	Yes	8-9	On site boundary

UKHab Primary Code	Habitat Type	UKHab Secondary Code	Description	Habitat Condition Assessment (See Appendix 3)	NERC Act 2006 Habitat of Priory Importance*	Photograph Reference No.	Location
			tall and 1m wide. The hedgerows were characterised by having a uniform heights and widths, suggesting that they appeared to currently be heavily managed.				

Target Notes

3.13 Target notes have been added to the habitat map (Figure 3.1) to provide information on the location of any habitats and plant communities of interest (if present). The target notes have also been included to identify the location of features that are too small to be recorded in detail on the habitat map. They include the location of signs/features (such as sites for nesting birds) of any protected species (if found). Target notes (TN) have been annotated within the text with specific descriptions given in Table 3.4.

Table 3.4: Target Notes

Target Note	Description	Reason for Classification
TN1	Hedgerow with nesting potential for birds	The presence of protected species and or habitat suitable to support their presence is of material consideration when considering planning applications. Information is needed to ascertain the current status of protected species on and within close proximity to the development site.

Protected Species Scoping Survey

Protected Species

3.14 Photographs (see Photographs Section) illustrate the characteristics of the habitats at the site and the surrounding area and its suitability to support protected species.

3.15 Figure 3.1 shows that location of notable ecological features within the survey area.

Amphibians – Great Crested Newt

3.16 There were few records to indicate the presence of Great Crested Newt within 1km of the site with the last 10 years. A search of appropriate databases revealed that one Protected Species Licence applications had been granted for Great Crested Newt within 1km of the proposed development site at Houghton Grange.

3.17 An Ordnance Survey map and aerial photographs were checked for the presence of waterbodies within 250m of the site boundary. No waterbodies were found.

3.18 During the site visit a thorough search was carried out of suitable areas and natural refugia to detect the presence of amphibians.

3.19 No amphibians were found. It was recognised that the survey was carried out during the day and during a part of the year when Great Crested Newt and other amphibian species would be sheltering/hibernating and therefore inactive and less noticeable.

3.20 The habitat within the development site mainly comprised built areas and hard standing and modified grassland. There was a garden with amenity grassland and boundary hedgerows and a dry ditch, which were therefore of limited suitability for parts of the terrestrial life-cycle of Great Crested Newt and other amphibian species.

3.21 The development site as a whole and the adjacent areas had limited potential to support parts of the life cycle of amphibian species.

3.22 It is recognised that the site has been identified as being within the Green Risk Zone for Great Crested Newt (GCN) in **Cambridgeshire**.

3.23 In combination, the paucity of biological records showing the presence of Great Crested Newt within 1km, together with the limited availability of suitable terrestrial habitat, the absence of suitable waterbodies within 250m, the character of the site, and the absence of signs of Great Crested Newt, suggested that the likelihood of Great Crested Newt using the site is **Negligible.**

Reptiles

3.24 There were records found of one species of reptile, namely Grass Snake, to indicate the presence of reptiles within 1km of the site during the last 10 years.

3.25 During the site visit a thorough search was carried out of suitable areas, to detect the presence of reptiles, such as Common Lizard, Grass Snake and Slow Worm.

3.26 No reptiles were found. It was recognised that the survey was carried out during the day, but during part of the year when reptiles would be sheltering/hibernating and therefore inactive and less noticeable.

3.27 The habitat within the development site mainly comprised built areas and hard standing and modified grassland. There was a garden with amenity grassland and boundary hedgerows and a dry ditch, which were therefore of limited suitability for parts of the terrestrial life-cycle of reptile species.

3.28 The development site as a whole and the adjacent areas had limited potential to support parts of the life cycle of reptile species.

3.29 The paucity of biological records of reptiles within close proximity of the site, together with the limited availability of suitable habitat, suggested that the likelihood of reptiles using the site is **Negligible**.

Birds

3.30 The biological records highlighted the presence of eight species. These included species listed on Annex 1 of the Birds Directive, Schedule 1 of the Wildlife and Countryside Act 1981, Section 41 of the NERC Act (2006), UK Biodiversity Action Plan and birds listed as Red and Amber on BoCC.

3.31 During the survey seven bird species were recorded. The following species: Hedge Sparrow were recorded during the survey and are recognised as being of conservation value based on their listing on certain designations (i.e. UKBAP priority species, Species of Principal Importance and BoCC Red/Amber List species).

3.32 The other bird species seen during the survey included Robin, Wren, Blackbird, Blue Tit, Wood Pigeon and Carrion Crow.

3.33 Due to the nature of the ecology survey (comprising a single site visit), the list of bird species observed may not be considered comprehensive.

3.34 The hedgerows and trees had potential to support nesting birds.

3.35 There were no trees or buildings within the development site with potential to support nesting Barn Owl. The paucity of biological records of Barn Owl within close proximity

of the site, together with the limited availability of suitable nesting habitat, suggested that the likelihood of Barn Owl using the site for breeding is **Negligible**.

3.36 The likelihood of breeding birds utilising the site for nesting was considered to be **High** due to the presence of some suitable nesting habitat for breeding birds. The potential for the site supporting important (at a district level) assemblages of birds is **Negligible**. This is based on the variety of habitats present, and the biological records of bird species listed on Annex 1 of the Birds Directive, Schedule 1 of the Wildlife and Countryside Act 1981, Section 41 of the NERC Act (2006), UK Biodiversity Action Plan and birds listed as Red and Amber on BoCC. It is recognised that the presence of one UKBAP/ Species of Principal Importance is of particular note.

Mammals

Bats

3.37 There were biological records to indicate the presence of species of bats within 1km of the site within the last 10 years. A search of appropriate databases revealed that one European Protected Species Licence applications had been granted for bat species within 1km at Houghton Grange.

Bats – Roosting Bats in Trees

3.38 There was an absence of potential roost features associated with the mature trees within the development site. Therefore none of the trees were considered suitable for roosting bats. Therefore, the likelihood of bats utilising trees for roosting was considered to be **Negligible**.

Bats – Roosting Bats in Buildings

3.39 There was an absence of potential roost features associated with the buildings within the development site. Therefore none of the buildings were considered suitable for roosting bats. A search of the buildings revealed no signs to indicate the presence of roosting bats.

3.40 Therefore, the likelihood of bats utilising buildings for roosting was considered to be **Negligible**.

Adjacent Habitats for Roosting Bats

3.41 Beyond the site boundary (within 500m), there were few buildings and trees that could support roosting bats, most of the land was arable and the buildings were modern metal framed and metal clad structures.

Bats – Foraging and Commuting Bats

3.42 The site itself was considered to provide limited foraging and commuting habitat for bats, along the hedgerow boundaries. The site was considered to support a very limited range of invertebrate prey. Consequently, there was likely to be a limited abundance of invertebrates on which bats would feed. The site was also isolated from any substantial network of hedgerows and linear features that could act as commuting routes to woodland and roost sites further afield.

3.43 Beyond the development site boundary there was limited abundance of habitat suitable for commuting and foraging bats there was a lack hedgerows and trees, most of the adjacent land was used for arable purposes.

3.44 The biological records show the presence of species of bats within 1km of the site, together with the limited availability of suitable habitat for foraging and commuting indicated that the likelihood of the site supporting foraging and commuting of bats is **Low**. Therefore, the proposed development should be mindful of the potential for commuting and foraging bats to be present nearby.

[redacted]

European Otter

3.48 The absence of suitable habitat within the site suggested that the likelihood of European Otter using the site is **Negligible.**

Brown Hare

3.49 The absence of suitable habitat within the site suggested that the likelihood of Brown Hare using the site is **Negligible.**

European Water Vole

3.50 The absence of suitable habitat within the site suggested that the likelihood of European Water Vole using the site is **Negligible.**

Other protected mammal species

3.51 There were no habitats present within the site suitable to support Dormouse sp. No biological records were found to indicate their presence within 1km of the site. The likelihood of the site supporting Dormouse species is **Negligible**.

Invertebrates

White-clawed Crayfish

3.52 The absence of suitable habitat within the site suggested that the likelihood of White-clawed Crayfish using the site is **Negligible.**

Invertebrates

3.53 The site comprised only a limited variety of habitats (e.g. modified grassland and native hedgerows) and therefore had the potential to support only a limited range of invertebrate groups and species of principal importance.

3.54 The limited diversity of invertebrate species and habitats recorded during the survey and the paucity of biological records suggest that the likelihood of the site supporting protected or notable assemblages of invertebrate species is **Negligible**.

Plants

3.55 Within the site there were no specialist plant species of high conservation value.

3.56 There were no signs indicating the presence of alien invasive plant species, namely Japanese Knotweed within the site.

3.57 The limited diversity of plant species recorded during the survey and the paucity of biological records suggest that the likelihood of the site supporting protected or notable plant species is **Negligible**.

NERC Act Section 41 Species

West European Hedgehog/Common Frog/Common Toad

3.58 No West European Hedgehog, Common Frog or Common Toad were found during the searches made of the site. It was recognised that the survey was carried out during the day and during a part of the year when these species would be sheltering/hibernating and therefore inactive and less noticeable.

3.59 The habitat within the development site mainly comprised built areas and hard standing and modified grassland. There was a garden with amenity grassland and boundary hedgerows and a dry ditch, which were therefore of limited suitability for parts of the terrestrial life-cycle of West European Hedgehog, Common Frog or Common Toad.

3.60 There were few records of West European Hedgehog, Common Frog and Common Toad within 1km of the site. The site contained limited suitable breeding, foraging, sheltering and commuting habitat for West European Hedgehog and foraging, sheltering and commuting habitat for amphibians which in combination, suggested that the likelihood of these species using the site is **Low.**

4 IMPLICATIONS OF THE DEVELOPMENT PROPOSALS

4.1 There are three phases of the development that have the potential to affect the ecological value of the site. These include:

i. Site clearance – e.g. building demolition and vegetation clearance
ii. Construction
iii. Post-construction operation/management

Site Clearance and Construction

4.2 Factors associated with the proposed development that have the potential to affect the ecological value of the site during site clearance and construction include the following:

i. Habitat loss, species displacement, direct mortality.
ii. Disturbance – noise, visual, light, dust.

Post Construction Operation and Management

4.3 Factors associated with the proposed development that have the potential to affect the ecological value of the site post-construction operation/management include the following:

i. Direct mortality
ii. Habitat creation/enhancement.
iii. Disturbance – noise, visual, light.

Potential Impacts

4.4 Without mitigation, the proposed development may result in the following biophysical changes during construction and/or post-construction operation:

- Death and/or injury to and loss of habitat for protected species and/or Species of Principal Importance should they be present.
- Loss of habitat and nesting sites for birds, including species listed as UKBAP, Species of Principal Importance and BoCC Red/Amber List species.
- Loss of and/or disturbance to commuting/foraging habitat for protected species, namely bats.
- Habitat creation/enhancement opportunities.

5 ECOLOGICAL EVALUATION, CONSTRAINTS AND RECOMMENDATIONS

5.1 The results of the literature search and survey have been used to outline key ecological issues for consideration, such as: make recommendations for further survey work, ecological mitigation and where appropriate biodiversity enhancements.

5.2 Provided the measures described in the report are implemented fully no further ecology surveys involving species-specific survey are considered necessary.

5.3 The site contained a poor selection of species and habitats, to be expected of a site of comparable size and bio-geographical location that primarily comprised **modified grassland** and **boundary hedgerows**. Based on the findings of the UKHab Habitat and Protected Species Scoping Survey, the limited presence of species and habitats listed on the criteria used to evaluate the ecological importance of the site indicates that it is considered to be of **local biodiversity value**.

5.4 Of the criteria used to evaluate the importance of the site for biodiversity the following are considered to be relevant to this site:

- Nesting birds protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended).
- Birds of Conservation Concern (BoCC) Red/Amber List (Stanbury et al., 2021);
- Important species – as listed on the UK BAP priority species.
- Species and Habitats of Principal Importance– as listed on Section 41 of the Natural Environment and Rural Communities Act (NERC 2006).

5.5 There are a number of different species that are afforded protection under European and UK national legislation. For this site, the species groups that would be considered as being present or having potential to be present within and immediately adjacent to the site are:

- Breeding Birds – nesting
- Bats – foraging and commuting
- Species of Principal Importance - West European Hedgehog

Off-site habitats

5.6 There were no statutorily designated or non-statutorily designated sites of nature conservation value within the site. However, there were four statutory designated sites within 1km of the site. These were the Houghton Meadows SSSI and Anglian Meadows and Houghton Grange Grassland CWS's. The nearest was Anglian Meadows located approximately 0.8 km to the south.

5.7 Therefore, it is considered that any potential future development at the site should be mindful and take into consideration the proximity of the designated sites, to ensure that they do not represent a constraint to any future proposed development.

5.8 Given the nature and scale of the proposed development it is considered that in combination the proposed development, within the potential zones of influence of the

designated sites, would **not likely cause a direct or in-direct impact.** This is because:

- the extent and type of development being proposed, would not be expected to have an effect of the designated sites.
- there is no direct habitat loss to these features.
- the new development is not expected to significantly increase the number of visitors to the area above that already encountered by the operation of the site would be expected to be sourced from the existing nearby communities, providing local employment. Therefore, there is little likelihood of increased visitor pressure on these designated sites.
- management of construction traffic and during operation of the site will ensure that the main roads are used as the main route to and from the site. This will ensure minor roads in proximity to the designated sites are largely avoided.
- the area between the proposed development site and the designated sites, already contains existing barriers such as roads, arable land, agricultural/commercial industrial estates and residential areas. Therefore, noise and light pollution from the proposed development would unlikely have an additional adverse impact on these sites.
- drainage from the site will comply with the appropriate legislation and approved by the local water company and the Environment Agency. Water will be treated with filtration SUDS to mitigate typical pollutant loads, to a degree that is in accordance with the SUDS Manual (Ciria C753). There is not expected to be any run-off into the surrounding area, which could flow in to the designated sites.

5.9 Therefore, it is considered that the presence of the designated sites does not represent a constraint to the proposed development.

On-site habitats

5.10 There were no habitats on-site that were considered to be priority habitats. Adjacent habitats that were considered to be priority habitats were the hedgerows H1 and H2. These habitats would not be lost by the proposed development.

Protected Species

5.11 Species that are not considered to represent a constraint to the development include:

- Amphibians, inc. Great Crested Newt
- Reptiles
- Roosting Bats
- [redacted]
- European Otter
- European Water Vole
- Brown Hare
- Flowering Plants

- Invertebrates

5.12 As a precaution construction works must proceed with vigilance and sensitivity in the event that any of these protected species appear at the site. To that end all appropriate site personnel should be informed of their obligations, responsibilities and what to do in the event that amphibians and reptiles are found on site. This should be achieved through the provision of a toolbox talk and the inclusion of general good practise precautions.

5.13 Good practise general precautions include the following recommendations:

- **Avoid night-time construction works.**
- **Cover any exposed excavations at night.**
- **Provide a means of escape for any animals, which may accidentally enter excavation works.**
- **Keep external lighting (e.g. security) to a minimum and operated by motion sensors only.**
- **Any vegetation and site clearance work must proceed with vigilance and sensitivity to address the potential for protected species to be present.**
- **Protected species toolbox talks prior to site clearance and construction work commencing. All appropriate site personnel must be informed of their legal obligations, responsibilities and what to do in the event that a protected species is found on site.**

- **Biodiversity enhancements including:**
    - **areas of soft landscaping – where soft landscaping is proposed; suitable native plant species must be planted with the aim to provide suitable habitat for wildlife.**
    - **new native species-rich hedgerows planted along the site boundaries, planting additional trees to benefit biodiversity.**

5.14 The likelihood of each species/species group occurring on site was based on local biological records; the suitability of the habitat on site; connectivity of habitats to the site; the suitability of surrounding habitats and whether signs or evidence of the species/species group were found during the survey visit. It should be noted that signs and evidence for some species are rarely found during a single survey visit, even if the species is on site.

5.15 The risk of impact was determined based on the likelihood of the species occurring on site within the area of impact, and the hazard presented based on the extent and form of the current maintenance and potential maintenance/development proposals.

5.16 Each species/group will be discussed in turn below.

Birds

Breeding Birds

5.17 There was suitable habitat available on site for breeding birds namely amongst the boundary hedgerows and trees. Although, at the time of the survey no signs of nesting birds were found at the site (due to the time of year). In addition the trees and hedgerows would remain unaffected by the proposed development. However as

a precaution, clearance/preparation at the time of construction should be mindful of the potential presence of nesting bids in close proximity to the site.

5.18 All wild birds, their active nests and eggs are protected under The Wildlife and Countryside Act 1981 (as amended), which makes it an offence deliberately, or recklessly, to kill or injure any wild bird or damage or destroy any active birds' nest or eggs.

5.19 Mitigation measures must be implemented to avoid contravention of the law pertaining to breeding birds and prevent the potential to kill or injure wild birds or damage or destroy any active birds' nest or eggs as well as cause the loss of the potential nesting habitat.

5.20 Enhancement opportunities that could help deliver a net gain in biodiversity and therefore meet the terms of the NPPF 2021 (as amended) would also be possible as a result of incorporating features suitable for breeding birds as part of the development proposals.

5.21 Recommendations:

- Scheduling any clearance works between the months of October and February inclusive (i.e. outside of the bird season) would avoid impacts on breeding birds.
- If site clearance/preparation works was necessary during the breeding season (between March and September inclusive), such works must only proceed in the absence of any active birds' nests. For instance following a site inspection by an appropriately skilled ecologist to search for birds' nests.
- Any active birds' nest found during the survey or during site clearance /construction must be protected from harm until the nesting attempt is complete. This may require an exclusion zone to be left around the nest, the size of which will depend upon the species involved (generally, this would be 10m in all directions around the nest). Before any vegetation in the buffer area can be removed it must be checked a second time after the original nesting attempt is completed.
- Protected species toolbox talks prior to site clearance and construction work commencing. All appropriate site personnel must be informed of their legal obligations, responsibilities and what to do in the event that a protected species is found on site.

- **Biodiversity enhancements including:**
    - **areas of soft landscaping – where soft landscaping is proposed; suitable native plant species must be planted with the aim to provide suitable habitat for nesting birds.**
    - **enhanced native species-rich hedgerows planted along the site boundaries, planting additional trees, creating a pond as part of the scheme, designed to benefit biodiversity.**
    - **installation of up to 5 bird nest boxes of various designs (see Figure 5.1), including the incorporation of nest boxes onto the converted building and on adjacent trees.**

Foraging Bats

5.22 Bat behaviour and therefore roosting, commuting and foraging activity can be adversely affected by artificial lighting (The Bat Conservation Trust, 2018). The development work could result in a change in lighting conditions present within the site. Therefore, the development works, and operation of the site must be mindful of the potential adverse effect on roosting, foraging and commuting bats. As a precaution, some basic measures should be taken to minimise any adverse effects of artificial lighting on local bat populations. The proposed development will take into consideration the advice set out in 'Bats and artificial lighting in the UK' Guidance Note 08/18 (The Bat Conservation Trust, 2018). These measures include:

- Avoid night-time construction works.
- Lighting at the site will be kept to a minimum and for health and safety purposes only. Security lighting will only be wall mounted at low level, no more than 2m above ground level and downward facing and directed to shine on the footpath only.
- The lighting will be activated by timer or PIR sensors set to the least sensitive setting and serviced and maintained in good working order.
- Avoid additional illumination of site boundary features. Install lighting that is hooded/shielded and directed where needed to avoid unnecessary light spillage to minimise light spready. The lights will be downward facing. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Baffles, hoods, louvres and shields should be used where necessary to reduce light spill.
- Avoid direct illumination of any bat boxes added as part of biodiversity enhancement.
- Use light sources that emit minimal ultraviolet light and avoid white or blue wavelengths to avoid attracting lots of insects (attracting insects to lamps may reduce their abundance in darker foraging areas favoured by bats). Avoid using UV elements and metal halide fluorescent sources.
- LED luminaires will be used (due to their sharp cut-off, lower intensity, good colour rendition and dimming capability) and a warm white spectrum (less than 2,700 Kelvin) will be adopted to reduce blue light component.
- **Biodiversity enhancements include:**
    - **areas of soft landscaping – where soft landscaping is proposed suitable native plant species should be planted with the aim to provide suitable feeding and commuting habitat for bats.**
    - **the installation of up to 5 bat roosting boxes of various designs, see Figure 5.2 for examples.**

NERC Act Section 41 Species - Species of Principal Importance

West European Hedgehog

5.23 No West European Hedgehog were found within the development site during the survey. However, the habitat was considered suitable for parts of their life-cycle, and there were some biological records to indicate this species was present within 1km of the site.

5.24 Therefore, the proposed development should be mindful of the potential presence for foraging and sheltering/hibernating West European Hedgehog, within the site boundary. As a precaution, some basic measures to avoid direct mortality should be in place prior to and during construction.

5.25 Enhancement opportunities that could help deliver a net gain in biodiversity and therefore meet the terms of the NPPF 2012 (as amended) would also be possible as a result of incorporating features suitable for West European Hedgehog, as part of the development proposals.

5.26 Recommendations:

- **Avoid night time construction works.**
- **Cover any exposed excavations at night.**
- **Provide a means of escape for any animals that may accidentally enter excavation works.**
- **Keep external lighting (e.g. security) to a minimum and certainly no more than that already present.**
- **Any vegetation and site clearance work must proceed with vigilance and sensitivity to address the potential for West European Hedgehog, to be present. To that end vegetation clearance must proceed with vigilance and sensitivity to address the potential for these species to be present.**
- **Boundary fences must include Hedgehog size gaps beneath the fences to allow Hedgehogs to safely pass from garden to garden and avoid being forced to crossroads.**
- **Protected species tool-box talks prior to site clearance and construction work commencing. All appropriate site personnel must be informed of their legal obligations, responsibilities and what to do in the event that a protected species is found on site.**
- **Biodiversity enhancements including:**
    - **areas of soft landscaping – where soft landscaping is proposed, suitable native plant species should be planted with the aim to provide suitable habitat for West European Hedgehog.**

- **the installation of up to 5 Hedgehog boxes of various designs, see Figure 5.3 for examples; would provide feeding and commuting routes for Hedgehog.**
- **if a solid boundary fence is installed, fences must include West European Hedgehog size gaps beneath the fences to allow Hedgehogs to safely pass. See Figure 5.3 for examples of hedgehog passes.**

5.27 Therefore, provided these measures are implemented fully it is considered that the potential presence of West European Hedgehog does not represent a constraint to the proposed development.

6 KEY POINTS AND FINDINGS

6.1 Cambridge Ecology Ltd was commissioned to carry out a Preliminary Ecological Assessment (involving UKHab Habitat Survey and Protected Species Scoping Survey of the site at New Manor Farm, Sawtry Way, Wyton, Huntingdon, Cambridgeshire, PE28 2DY. The results of the survey would aim to inform the planning application being prepared for the conversion of an existing garage into a new home gym and office.

6.2 It was considered that the study provided a robust and valid indication of the potential for the site to support protected species and habitats. The survey was considered to have been carried out methodically and all accessible areas searched thoroughly to locate signs indicating the presence of protected species and habitats.

6.3 There were four statutorily designated site of nature conservation value within 1km of the development site. These were the Houghton Meadows SSSI and Anglian Meadows and Houghton Grange Grassland CWS's. The nearest was Anglian Meadows located approximately 0.8 km to the south.

6.4 Given the scale and nature of the proposed development, the lack of linkage with the proposed development site, plus the implementation of some general mitigation measures; it is expected that these sites of nature conservation value would not be adversely affected by the development. Therefore, it is considered that the statutorily designated sites do not represent a constraint to the proposed development.

6.5 The site contained a poor selection of species and habitats, to be expected of a site of comparable size and bio-geographical location that primarily comprised agricultural buildings and hard standing. Based on the findings of the UKHab Habitat and Protected Species Scoping Survey, the limited presence of species and habitats listed on the criteria used to evaluate the ecological importance of the site indicates that it is considered to be of **local biodiversity value**.

6.6 The results of the UKHab Habitat survey indicated that the dominant habitats present within the development site was **developed land and modified grassland** and considered to be of limited biodiversity value.

6.7 The presence of habitat with potential to support nesting birds, foraging bats and foraging and breeding West European Hedgehog was observed within the site.

6.8 Therefore, the Preliminary Ecological Appraisal has identified some potential protected species constraints; namely nesting birds, foraging bats and foraging and breeding West European Hedgehog; which must be of material consideration for this development. Where these species are present/potentially present, mitigation measures are necessary to fulfil legal and planning policy obligations and to ensure the continued conservation status of these species in the area. Careful management would also be required to address their actual or potential presence, but it is unlikely that they should preclude the proposed development at the site.

6.9 The likely absence of other protected species such as amphibians including Great Crested Newt, reptiles, roosting bats [redacted] European Otter, European Water Vole, Brown Hare, invertebrates and flowering plants, within the development site, or habitat to support these species indicated that these species do not represent

a constraint to this development. Although some standard non-licensable measures should be implemented as a precaution, should these species arrive at the site.

6.10 In addition, enhancement measures have been recommended, which if included in the development proposals and implemented fully, could provide biodiversity enhancement and biodiversity net gain and therefore meet national and local planning policy requirements relating to biodiversity targets.

6.11 Bearing in mind the ability for wildlife to periodically move to new locations, it is recommended that if the planning application and/or development proposals were likely to be delayed (e.g. for one year from the date of this study), then a further equivalent ecological survey (and or certain species-specific surveys) would be required to update the results provided; hence an equivalent ecological survey would need to be carried out.

7 BIBLIOGRAPHY

Anon. (2012). *UK Biodiversity Action Plan List of Priority Species and Habitats*. JNCC. (See - www.ukbap.org.uk).

Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F (2014). Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Freshwater Habitats Trust, Oxford.

Brown. A. and Grice. P. (2005). *Birds in England*. Natural England. T. & A.D. Poyser. London.

BSI (2006). PAS 2010:2006 Planning to halt the loss of biodiversity. Biodiversity conservation standards for planning in the United Kingdom – code of practice. British Standards Institute.

BSI (2013) Biodiversity - Code of practice for planning and development [BS 42020:2013], The British Standards Institution.

Butcher, B., Carey, P., Edmonds, R., Norton, L., & Treweek, J. (2020). UK Habitat Classification User Manual v1.1. Available to download at https://www.ukhab.org.

Butcher, B., Carey, P., Edmonds, R., Norton, L., & Treweek, J. (2023). UK Habitat Classification version 2.0. – Advanced Publication of selected Habitat Definitions. Available to download at https://www.ukhab.org.

Butcher, B. and Stone, D (2023). Statutory Biodiversity Metric Tool: Auditing and accounting for biodiversity – User Guide. Natural England, Peterborough.

CIEEM. (2013). Competencies for Species Survey in Britain and Ireland: Overview. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM. (2016). Guidelines for Ecological Assessment in the UK and Ireland – Terrestrial, Freshwater and Coastal, 2nd Edition January 2016. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal. Chartered Institute of Ecology and Environmental Management, 2nd Edition, CIEEM, Winchester.

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

Collins, J. (ed). (2016). Bat Surveys for Professional Ecologists – Good Practice Guidelines, 3rd Edition. The Bat Conservation Trust, London

Department of Communities and Local Government (2012). *National Planning Policy Framework.* ISBN: 9781409834137

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

English Nature (2001) Great Crested Newt Mitigation Guidelines. English Nature

English Nature (2004) Reptiles: Guidelines for Developers, English Nature, Peterborough.

Froglife (1999) Reptile Survey: An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation. Froglife Advice Sheet 10.

Gent, T. and Gibson, S. (eds.) (2003) The Herpetofauna Workers Manual, JNCC, Peterborough.

HMSO (1981) Wildlife and Countryside Act. HMSO, London.

HMSO (1991) Environmental Protection Act (Duty of Care) Regulations 1991.

HMSO (1992) Protection of Badgers Act, HMSO London.

HMSO (2000) Countryside and Rights of Way (CRoW) Act. HMSO, London.

HMSO (2006) Natural Environment and Rural Communities Act HMSO London.

HMSO (2010) Conservation of Habitats and Species Regulations 2010 (as amended) HMSO, London.
Langton T., Beckett C. and Foster J. (2001). Great Crested Newt Conservation Handbook, Froglife, Halesworth.
Mitchell-Jones. A.J. and McLeish. A.P., Eds (2004). Bat Workers Manual. 3rd Edn. Joint Nature Conservation Committee (JNCC. Peterborough.
Mitchell-Jones. A.J., (2004). Bat Mitigation Guidelines. English Nature. Peterborough
Natural England (2006) Dormouse Conservation Handbook. 2nd Edition.
Natural England (2011) Badgers and Development - A Guide to Best Practice and Licensing
Oldham, R.S., Keeble, J., Swan, M.J.S. and Jeffcote, M. (2000). *Evaluating the Suitability of Habitat for the Great Crested Newt* (*Triturus cristatus*). Herpetological Journal Vol. 10 pp. 143-155.
Planning for Biodiversity and Geological Conservation: A Guide to Good Practice (2006) Office of the Deputy Prime Minster.
Rose, F. (2006) The Wild Flower Key. How to identify wildflowers, trees and shrubs in Britain and Ireland.
RSPCA (1992) The Protection of Badgers Act.
Stace, C. (2019) New flora of the British Isles (4th ed). Cambridge University Press: Cambridge.
Stanbury A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747
Strachan, R. (2011) Water Vole Conservation Handbook (3rd Edition). Wildlife Conservation Research Unit (WildCRU), Oxford University
Shawyer, C. (1998). The Barn Owl. Arlequin Press. Chelmsford. UK
The Bat Conservation Trust (2011). Statement on the impact and design of artificial light on bats. Bat Conservation Trust, London.
The Bat Conservation Trust (2018) Bats and artificial lighting in the UK. Bats and the Built Environment series, Guidance Note 8 Bat Conservation Trust (BCT). Bat Conservation Trust, London.
UK BAP Biodiversity Reporting and Information Group (ed. Ant Maddock) (2008). UK Biodiversity Action Plan; Priority Habitat Descriptions (Updated 2011). BRIG, Peterborough.
UKHab Ltd (2023). UK Habitat Classification version 2.0.

Web references

MAGIC: Designated area data downloaded from URL (http://www.magic.gov.uk.html)
NERC S41 (www.ukbap.org.uk)
UK Biodiversity Action Plan (www.ukbap.org.uk).
Conservation of Habitats and Species Regulations 2019 (as amended)
Full legislation at: http://www.legislation.gov.uk/uksi/2017/1012/contents/made
The Wildlife and Countryside Act 1981 (as amended)
Full legislation at: http://www.legislation.gov.uk/ukpga/1981/69/contents.
Countryside and Rights of Way Act 2000
Full legislation at: http://www.legislation.gov.uk/ukpga/2000/37/contents
Protection of Badgers Act 1992
Full legislation at: http://www.legislation.gov.uk/ukpga/1992/51/contents
Section 41 of Natural Environments and Rural Communities (NERC) Act 2006

Full legislation at: http://www.legislation.gov.uk/ukpga/2006/16/section/41

Wild Mammals (Protection) Act 1996

Full legislation at: http://www.legislation.gov.uk/ukpga/1996/3/contents

National Planning Policy Framework (NPPF)

Full text at: https://www.gov.uk/government/collections/revised-national-planning-policy- framework

8 FIGURES

Figure 1.1: Plan showing the red line boundary of the development site and survey area

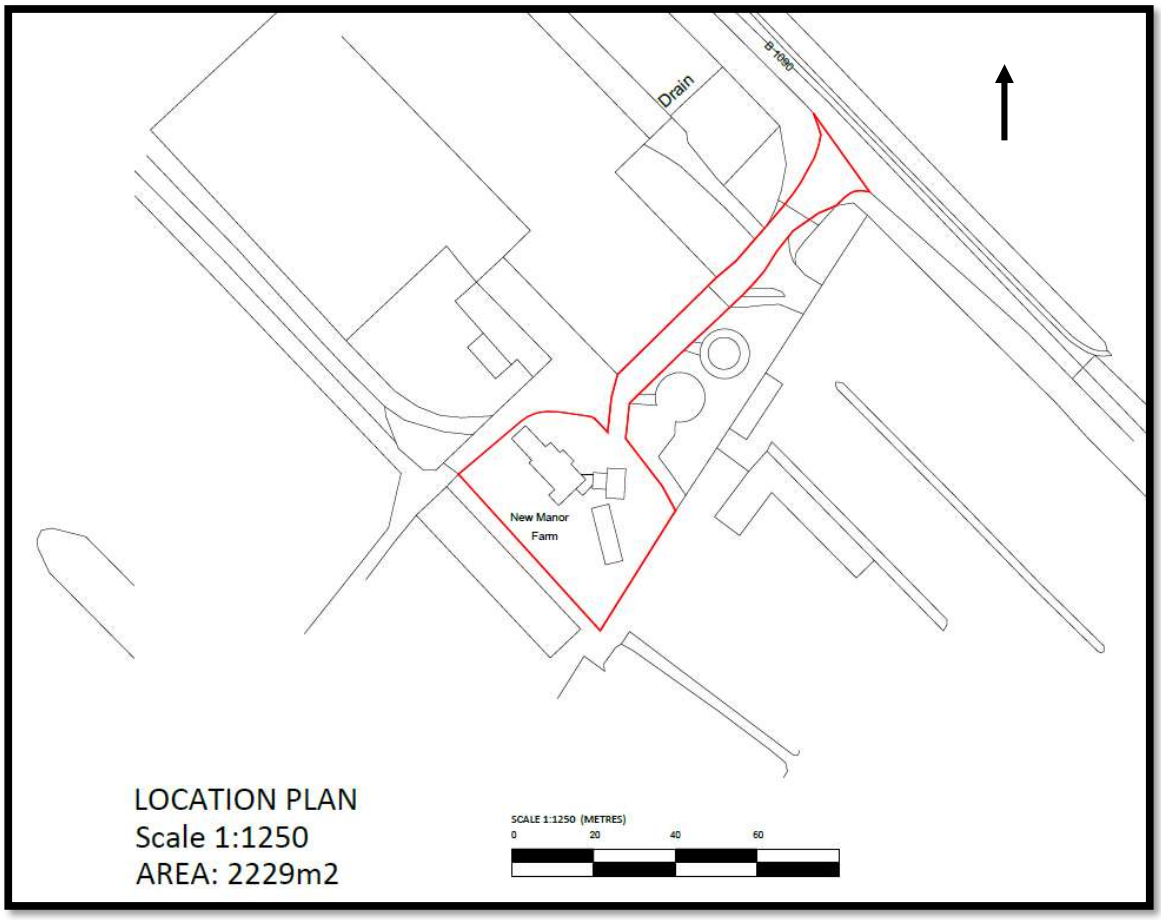


Figure 1.2: Plan showing the indicative layout of the proposed development

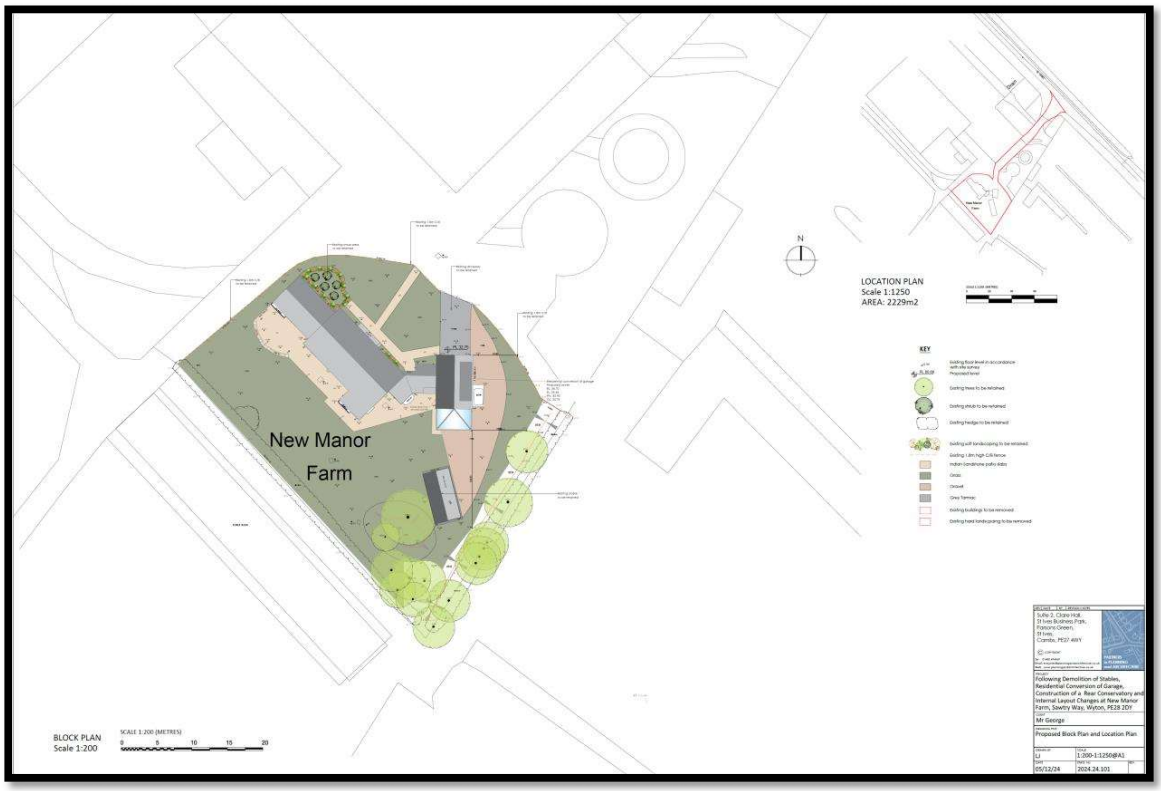


Figure 3.1: UKHab Habitat Map



Figure 5.1: Suggested Bird Nest Box Designs









Figure 5.2: Suggested Bat Box Designs





Figure 5.3: Suggested Hedgehog House Designs and fence passes







9 PHOTOGRAPHS

Photo No.	Photograph	Description
1		Example of Modified Grassland (g4) Habitat present within the site
2		Example of Modified Grassland (g4) Habitat present within the site

3		Example of Vegetated Garden (u1) – Introduced Shrub Habitat present within the site
4		Example of Vegetated Garden (u1) – Introduced Shrub Habitat present within the site
5		Example of Individual Trees present within the site

6		Example of Individual Trees present within the site
7		Example of Individual Trees present within the site
8		Example of Native Hedgerow (H1) Habitat present within the site

9		Example of Native Hedgerow (H2) Habitat with dry ditch present within the site
10		Example of Waterbody - Dry Ditch (D1) present within the site
11		Example of developed land (u1b) within the site

12		Example of artificial unvegetated unsealed surface (u1c) within the site
13		Example of linked extension to be converted into residential dwelling (u1b5)
14		Example of linked extension to be converted into residential dwelling (u1b5)

15		Example of linked garage to be converted into residential dwelling (u1b5)
16		Example of linked garage to be converted into residential dwelling (u1b5)
17		Example of linked garage to be converted into residential dwelling (u1b5)

18		View inside of linked garage to be converted into residential dwelling (u1b5)
19		View inside of linked garage to be converted into residential dwelling (u1b5)
20		View of remaining stable block unaffected by development (u1b5)

21		View of remaining stable block unaffected by development (u1b5)

10 APPENDICES

Appendix 1 : UKHab Habitat Survey Species List

10.1 The list of plant species given for each habitat represent those recorded at the time of the survey and are intended to be sufficient to enable a general habitat classification to be established. These records are not intended to constitute a full botanical survey of the site. The relative abundance uses the DAFOR scale as detailed in Table 2.1.

Modified Grassland

Common Name	Systematic Name	Relative Abundance
Daisy	*Bellis perennis*	O
Creeping Buttercup	*Ranunculus repens*	O
Perennial Rye Grass	*Lolium perenne*	A
Dandelion	*Taraxacum officinale*	O

Vegetated Garden - Introduced Shrub

Common Name	Systematic Name	Relative Abundance
Cotoneaster sp.	Cotoneaster sp.	O
Dogwood	*Cornus sp.*	O
Laurel	*Prunus laurocerasus*	O
Honeysuckle	*Lonicera sp.*	O

Individual Trees

Common Name	Systematic Name	Relative Abundance
Silver Birch	*Betula pendula*	O
Ash	*Fraxinus excelsior*	O
Goat Willow	*Salix caprea*	O

Waterbody – Dry Ditch

Common Name	Systematic Name	Relative Abundance
Perennial Rye Grass	*Lolium perenne*	A
Stinging Nettle	*Urtica dioica*	A
Bramble	*Rubus fruticosus*	A
Cleavers	*Galium aparine*	O
Broad-leaved Dock	*Rumex obtusifolius*	O
Colt's Foot	*Tussilago farfara*	O
Bristly Ox-tongue	*Helminthotheca echioides*	O

Native Hedgerow

Common Name	Systematic Name	Relative Abundance
Hawthorn	*Crataegus monogyna*	D
Dog-rose	*Rosa canina*	O
Stinging Nettle	*Urtica dioica*	A
Bramble	*Rubus fruticosus*	A
Privet	*Ligustrum ovalifolium*	O
Elderberry	*Sambucus nigra*	O

Appendix 2: Relevant Wildlife Legislation and Planning Policy

Habitats

10.2 A variety of sites are designated in the UK, under The Conservation of Habitats and Species Regulations 2019 (as amended), for their nature conservation importance and interest. These are statutory designated sites. The general aim of these designations is to conserve and protect ecological resources in addition to raising awareness and understanding of the general public of the ecological value of these sites. Non-statutory sites are afforded some protection through local plans. Table 10.1 outlines the most common statutory and non-statutory designations.

Table 10.1 Common statutory and non-statutory designations

Designation	Brief Description
Ramsar Sites	Wetlands of international importance. Ramsar Sites are effectively protected, through the planning system, under the Wildlife and Countryside Act 1981, as amended, and the Countryside and Rights of Way Act 2000 through their notification as SSSIs and through other regulatory systems addressing water, soil and air quality.
Special Protection Areas (SPAs)	SPAs are the most important habitats for rare and migratory birds within the European Union. The Birds Directive, adopted by the UK in 1979, provides for the protection, management and control of all species of naturally occurring wild birds in the European territory of Member States, including the UK. Conservation of Habitats and Species Regulations 2019 (as amended).
Special Areas of Conservation (SACs)	SACs are sites that are chosen to conserve the natural habitat types and species of wild flora and fauna listed in Annex I and II of the Habitats Directive. They are the best areas to represent the range and variety of habitats and species within the European Union. Conservation of Habitats and Species Regulations 2019 (as amended).
National Nature Reserves (NNRs)	NNRs are nationally important areas of wildlife habitat and geological formations in Britain. NNRs are designated and protected under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981, as amended. They receive additional protection under the Countryside and Rights of Way Act 2000. They are managed for the benefit of nature conservation.
Sites of Special Scientific Interest (SSSIs)	SSSIs are nationally important sites for wildlife, geological and geomorphological features in England. They are designated and protected under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981, as amended. They receive additional protection under the Countryside and Rights of Way Act 2000.
Local Nature Reserves (LNRs)	LNRs are similar to NNRs but they apply to the local context. They are sites of value to nature conservation and are designated under the National Parks and Access to the Countryside Act 1949. They are managed for the benefit of nature conservation.

Designation	Brief Description
Hedgerows	Hedgerows are a very significant wildlife habitat over large parts of Britain. They provide essential refuge for a great many woodland and farmland plants and animals. Hedgerows are given protection under The Hedgerows Regulations 1997. As a result, since 1 June 1997, it has been against the law to remove most countryside hedgerows (or parts of them) without first notifying the local planning authority.
Ancient Woodland	Ancient woodlands are woodlands that have been established since or before 1600AD. They are non-statutory sites and are not legally protected, but they may be afforded some protection in, for example, structure and local plans.
Wildlife Sites	These non-statutory sites are sites designated by a local authority as being of county nature conservation value but may not be notified as SSSIs. These include County Wildlife Sites (CWS).

Species

10.3 In addition to habitats, a number of species have now become so rare that they are also afforded protection through international and National law (Conservation of Habitats and Species Regulations 2019 (as amended)). Other species are considered to contribute to our 'quality of life'. Although these species do not benefit from legal protection, they can be material considerations in the planning process.

10.4 Table 10.2 outlines the key forms of protection afforded to species. The details provided are intended to highlight the most relevant legislation pertaining to species commonly linked with development sites.

10.5 For full details of the relevant legislation it is recommended that the appropriate government webpages be consulted at www.legislation.gov.uk.

Table 10.2 Summary of Wildlife Protection for Species

Species	Relevant Legislation	Details
Amphibians		
Great Crested Newt *Triturus cristatus* **Natterjack Toad** *Epidalea calamita*	Schedule 2 of Conservation of Habitats and Species Regulations 2019 (as amended) Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	• Deliberately capture or kill, or intentionally injure; • Deliberately disturb or recklessly disturb them in a place used for shelter or protection; • Damage or destroy a breeding site or resting place; • Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection; and • Possess an individual, or any part of it, unless acquired lawfully.
Reptiles		
Common lizard *Zootoca vivipara* **Adder** *Vipera berus* **Slow-worm** *Anguis fragilis* **Grass snake** *Natrix helvetica*	Part of Sub-section 9(1) of Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	Intentionally kill or injure individuals of these species (Section 9(1)).

Sand lizard *Lacerta agilis*
Smooth snake *Coronella austriaca*
	Full protection under Section 9 of Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	• Deliberately or intentionally kill, capture (take) or intentionally injure;
		• Deliberately disturb;
		• Deliberately take or destroy eggs;
		• Damage or destroy a breeding site or
		  • resting place or intentionally damage
		  • a place used for shelter; or
		• Intentionally obstruct access to a
		  • place used for shelter.

Birds		

Species	Relevant Legislation	Details
All wild birds	Wildlife and Countryside Act 1981 (as amended)	• Intentionally kill, injure or take any wild bird. • Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built. • Intentionally take or destroy the egg of any wild bird. • Have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954. • Have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954. • Use traps or similar items to kill, injure or take wild birds. • Have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations
Birds listed as Schedule 1 species	Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)	• Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.
Mammals		
Bats (all UK species)	Schedule 2 of Conservation of Habitats and Species Regulations 2019 (as amended) Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	• Deliberately capture, injure or kill a bat; • Deliberately disturb a bat (disturbance is defined as an action which is likely to: (i) Impair their ability to survive, to breed or reproduce, or to rear or

Species	Relevant Legislation	Details
		nurture their young; (ii) Impair their ability to hibernate or migrate; or (iii) Affect significantly the local distribution or abundance of the species); • Damage or destroy a bat roost; • Intentionally or recklessly disturb a bat at a roost; or • • Intentionally or recklessly obstruct access to a roost. A bat roost is defined as "any structure or place which any wild [bat]...uses for shelter or protection". Legal opinion considers that a roost is protected respective of whether bats are present at the time or not.
Badger *Meles meles*	Protection of Badgers Act 1992	• Damage a sett or any part of it; • Destroy a sett; • Obstruct access to, or any entrance of, a sett; or • Disturb a Badger when it is occupying a sett. A sett is defined legally as any structure or place which displays signs indicating current use by a Badger (Natural England 2007).
Hazel Dormouse *Corylus avellus*	Schedule 2 of Conservation of Habitats and Species Regulations 2019 (as amended) Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	• Intentionally or deliberately capture or kill, or intentionally injure; • Deliberately disturb or intentionally or recklessly disturb them in a place used for shelter or protection; • Damage or destroy a breeding site or resting place; • Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection; and

Species	Relevant Legislation	Details
		• Possess an individual, or any part of it, unless acquired lawfully.
Otter L*utra lutra*	Schedule 2 of Conservation of Habitats and Species Regulations 2019 (as amended) Section 9(4)(b) and (c) of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	• Deliberately capture, injure or kill; • Deliberately disturb in such a way as to be likely to significantly affect the local distribution or abundance or the ability of any significant group to survive, breed, rear or nurture their young; • Intentionally or recklessly disturb whilst it is occupying a holt; • Damage or destroy or intentionally or recklessly obstruct access to a holt.
Water Vole *Arvicola amphibius*	Section 9 of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	• Intentionally kill, injure or take; • Possess or control live or dead or derivatives; • Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection; or • Intentionally or recklessly disturb whilst occupying a structure or place used for that purpose.
Crustaceans		
White-clawed crayfish *Austropotamobius pallipes*	Section 9(1) of Schedule 5 of Wildlife and Countryside Act 1981 (as amended)	Intentionally kill, injure or take by any method.

Other Relevant Legislation and Policies

10.6 The intention of all nature conservation planning policy is that sites and species of nature conservation concern are to be protected from the impact of development. Where development is allowed, which could potentially harm such sites, mitigation measures aimed to protect, conserve and enhance and benefit species and wildlife are required.

The Environment Act 2021

10.7 The Environment Act (2021) requires all development schemes in England to deliver a mandatory 10% biodiversity net gain to be maintained for a period of at least 30 years. The concept seeks measurable improvements for biodiversity by creating or enhancing habitats in association with development. Key parts of the Environment Act 2021 which relate to biodiversity net gain and its delivery are Part 6 Nature and Biodiversity and the supporting Schedule 14, particularly sections 9(3), 13(1), 14(2) and 15.

Natural Environment and Rural Communities Act (2006),

10.8 Under the Natural Environment and Rural Communities Act (2006), "*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity*". In order to comply with this 'Biodiversity Duty', planning decisions must ensure that they adequately consider the potential ecological impacts of a proposed development.

10.9 Section 41 (S41) of the Natural Environment and Rural Communities (NERC Act 2006) requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) has been drawn up in consultation with Natural England and draws upon the UK Biodiversity Action Plan (BAP) List of Priority Species and Habitats.

10.10 The S41 list should be used to guide decision-makers such as local and regional authorities to have regard to the conservation of biodiversity in the exercise of their normal functions – as required under Section 40 of the NERC Act 2006. The duty applies to all local authorities and extends beyond just conserving what is already there, to carrying out, supporting and requiring actions that may also restore or enhance biodiversity.

National Planning Policy Framework (NPPF)

10.11 The government policy for England on biodiversity is covered under the National Planning Policy Framework (NPPF, 2021 as amended), which includes multiple mentions of the requirement for a measurable net gain (highlighted in the following extracts below):

- Para 174: 'Planning policies and decisions should contribute to and enhance the natural and local environment by…minimising impacts on and providing net gains for biodiversity, including by establishing ecological networks that are more resilient to current and future pressures…'
- Para 179b: 'To protect and enhance biodiversity and geodiversity, plans should…promote the conservation, restoration and re-creation 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.'
- Para 180d: '…when determining planning applications…opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.'

10.12 Furthermore, there is a focus on re-use of existing brownfield sites or sites of low environmental value as a priority, and discouraging development in National Parks, Sites of Specific Scientific Interest, the Broads or Areas of Outstanding Natural Beauty other than in exceptional circumstances.

10.13 Where possible, planning policies should also "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".

10.14 Natural England has published Standing Advice on protected species and Ancient Woodland. When determining an application for development that is covered by the Standing Advice, Local Planning Authorities must take into account the Standing Advice. The Standing Advice is a material consideration in the determination of applications in the same way as a letter received from Natural England following consultation.

10.15 The UK Biodiversity Action Plan (BAP) published in 1994, sets out this Country's response to Article 6 of this Convention. Previously, management and progress were implemented by Species Action Plans (SAPs) and Habitat Action Plans (HAPs). However, a review completed in 2008 concluded that these action plans were best assessed at a country level, whilst still largely being delivered at a local level by Local Biodiversity Action Plans (LBAPs). This is because "priority species whose needs can be fulfilled by general habitat management actions will be the responsibility of country habitat groups. This is to try to ensure that the broad habitat management actions that are taken also consider the needs of priority species and provide suitable conditions for these species across the UK". Under the terms of NERC Act 2006 there are currently 1150 Priority Species 65 Priority Habitats that extend across the UK. They are aimed at specific species and habitats considered to be at risk of damage, decline or extinction.

Schedule 9 of Wildlife and Countryside Act 1981 (as amended)

10.16 In addition to affording protection to some species, The Wildlife and Countryside Act 1981 (as amended) also names species which are considered invasive and require control. Section 14 of the Act prohibits the introduction into the wild of any animal of a kind which is not ordinarily resident in, and is not a regular visitor to, Great Britain in a wild state, or any species of animal or plant listed in Schedule 9 to the Act. In the main, Schedule 9 lists non-native species that are already established in the wild, but which continue to pose a conservation threat to native biodiversity and habitats, such that further releases should be regulated.

Wild Mammals (Protection) Act 1996

10.17 This legislation makes it an offence to cause unnecessary suffering to wild mammals, including by crushing and asphyxiation. It mainly deals with issues of animal welfare and covers all non-domestic mammals including those commonly encountered on development sites such as rabbits and foxes as well as small mammals.

Birds of Conservation Concern (BoCC)

10.18 This is a quantitative assessment of the status of populations of bird species which regularly occur in the UK. It assesses a total of 246 species against a set of objective criteria to place each on one of three lists - Green, Amber and Red - indicating an

increasing level of conservation concern. There are currently 70 species on the Red list, 103 on the Amber list and 72 on the Green list. The classifications described have no statutory implications and are mainly used to assess the scarcity and conservation value of a given species.

Appendix 3: Habitat Condition Assessment Sheets

Modified Grassland

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type(s)			
Grassland - Modified grassland			
Site name and location	New Manor Farm	**On-site or off-site**	On site
Limitations (if applicable)	n/a	**Survey reference (if relating to a wider survey)**	n/a
Grid reference		**Habitat parcel reference**	n/a
Habitat Description			
ukhab – UK Habitat Classification			

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	There are 6-8 vascular plant species per m^2 present, including at least 2 forbs (this may include those listed in Footnote 1). **Note - this criterion is essential for achieving Moderate or Good condition.** Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m^2 (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	N	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	
C	Some scattered scrub (including bramble *Rubus fruticosus* agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	N	
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	N	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Y	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Y	
	Essential criterion achieved (Yes or No)		
	Number of criteria passed		

Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓
Passes 6 or 7 criteria including passing essential criterion A	Good (3)	
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	X
Suggested enhancement interventions to improve condition score		

Individual Trees

Condition Sheet: INDIVIDUAL TREES Habitat Type												
Habitat Type(s)												
Individual trees – Urban trees **Individual trees – Rural trees** Complete a condition sheet for each tree or block of trees. **Please see separate Line of trees condition sheet for a line of Rural trees.**												
Habitat Description												
Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching. **Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):** Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies must overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.												
Site name and location	New Manor Farm		**On-site or off-site**									
			Survey reference (if relating to a wider survey)									
Limitations (if applicable)			**Habitat parcel reference**									
			T1	**T2**	**T2**	**T4**	**T5**	**T6**	**T7**	**T8**	**T9**	**T10**
			Grid reference									
Condition Assessment Criteria												**Notes (such as justification)**
			Criterion passed (Yes or No)									
A	The tree is a native species (or at least 70% within the block are native species).		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
C	The tree is mature (or more than 50% within the block are mature).		N	N	N	N	N	N	N	N	N	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Number of criteria passed	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**
Condition Assessment Result (out of 6 criteria)		**Condition Assessment Score**	**Score Achieved ×/✓**									
Passes 5 or 6 criteria		Good (3)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Passes 3 or 4 criteria		Moderate (2)										
Passes 2 or fewer criteria		Poor (1)										
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.												
Suggested enhancement interventions to improve condition score												
Footnotes												
Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk and:												

Dry Ditch

Habitat Type			
Watercourses - Ditches			
Habitat Description			
See the Biodiversity Metric 4.0 User Guide.			
Site name and location	New Manor Farm	**On-site or off-site**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	

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

Condition Assessment Result (out of 8 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 8 criteria	Good (3)	
Passes 6 or 7 criteria	Moderate (2)	
Passes 5 or fewer criteria	Poor (1)	1

Suggested enhancement interventions to improve condition score

Native Hedgerow

Condition sheet: HEDGEROW Habitat Types

Habitat Type

Native hedgerow
Native hedgerow - associated with bank or ditch
Native hedgerow with trees
Native hedgerow with trees - associated with bank or ditch
Species-rich native hedgerow
Species-rich native hedgerow - associated with bank or ditch
Species-rich native hedgerow with trees
Species-rich native hedgerow with trees - associated with bank or ditch

Habitat Description

See the Biodiversity Metric 4.0 User Guide Section 9.
Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.

Site name and location	New Manor Farm	**On-site or off-site**	On Site
Limitations (if applicable)	None	**Survey reference (if relating to a wider survey)**	n/a

Condition Assessment Criteria

A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook[1] and Favourable Conservation Status document[2]. For further clarification please refer to the Hedgerow Survey Handbook.
Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.

Hedgerow favourable condition attributes

Attributes and functional groupings (A, B, C, D and E)		**Criteria - the minimum requirements for 'favourable condition'**	**Criteria description**	**Habitat parcel reference** H1 / **Grid reference**	H2								**Notes (such as justification)**
Core groups - applicable to all hedgerow types				**Criterion passed (Yes or No)**									
A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).	N	N								
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn *Prunus spinosa* suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	N	N								
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Y	Y								
B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length, and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Y	Y								
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - Measured from outer edge of hedgerow; and - Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.	Y	Y								
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Y	Y								
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA[3]) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website[4], as well as the BSBI website[5] where the 'Online Atlas of the British and Irish Flora'[6] contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website[7].	Y	Y								
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g., excessive hedgerow cutting).	N	N								
Additional group - applicable to hedgerows with trees only													
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example young, mature, veteran and or ancient[8]), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	N	N								
E3.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	Y	Y								

The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.

Condition categories for hedgerows without trees

Category	**Category Requirements**	**Metric Score**
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	**2**

Condition categories for hedgerows with trees

Category	**Category Requirements**	**Metric score**
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; **AND** Does not fail both attributes in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; **OR** Fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	2

Suggested enhancement interventions to improve condition score