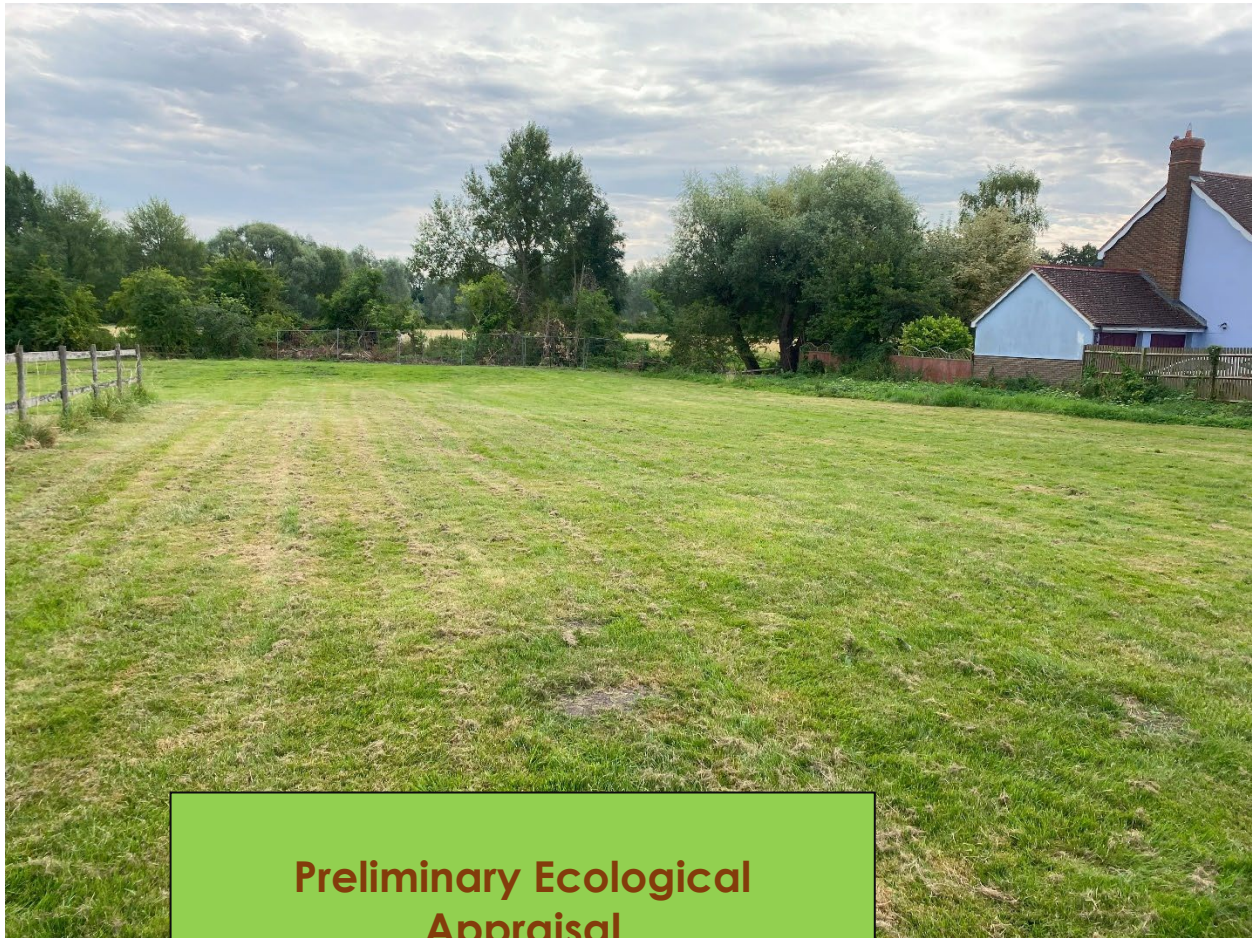




Preliminary Ecological Appraisal

**Land at Duncots Close
Ickleford
SG5 3FH**

April 2025

For and on behalf of:
Peter David Homes
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Date of Report

April 2025

Declaration

This report has been produced endeavouring to follow the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct and ecological information has been provided in accordance with British Standards BS 42020 2013-Biodiversity-Code of practice for planning and development.

Whilst every effort has been taken to ensure this report accurately identifies potential ecological constraints to development or the likely presence or absence of species and the spatial and temporal use of the site by such species, it must only be viewed as a snap shot in time and reflects the ecological status of the site at the time of survey.

No liability can be assumed for ecological changes that may or may not occur on the surveyed site after the production of this report. The author of this report must be consulted as to the current applicability of the report if there are any seasonal delays in the use of this report.

This report can only be used for the purposes for which it was instructed and agreed at the time of commission.

Quality Assurance

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Executive Summary

A planning application is being prepared for a new residential development comprising nine dwellings, with associated gardens, access and a SUDS swale, on an existing former horse-grazed paddock and adjoining field, located to the east of Duncots Close, in Ickleford, north Hertfordshire.

As part of the planning application submission, the application site has been ecologically evaluated by Mr Keith Seaman, Principal Ecologist with ELMAW Consulting, in August of 2024 and January 2025, using the Preliminary Ecological Appraisal (PEA) and Potential Bat Roosting Assessment (PRA) methodologies.

The application site is dominated by heavily managed g4 Modified grassland, with small areas of h3d Bramble scrub, 81 Ruderal or ephemeral and a very small area of h3h Mixed scrub. The application site also contains two apple trees (*Malus sp.*). None of the application site's habitats are listed as NERC Section 41 Priority Habitats and all are deemed to be geographically of only Site value. Their loss, to a greater or lesser degree, through development, is not predicted to have a significant adverse impact on important habitats.

One of the apple trees however has an open rot hole, leading into an open cavity within its trunk. This presents an opportunity for use by both nesting birds and as a Potential Roosting Feature (PRF) for bats. Anecdotal evidence indicates this feature is used by nesting starlings (*Sturnus vulgaris*) each year, precluding its use as a summer bat roost. Winter endoscope inspections of the PRF found no evidence of bat hibernation, but confirmed its use by grey squirrels (*Sciurus carolinensis*).

Mitigation measures during construction to protect nesting birds and mammals will be implemented.

The Statutory Biodiversity Metric has calculated the application site's baseline habitats to be worth 1.70 Habitat Units and, following the site's development, a biodiversity net loss of -24.13% results. In order to achieve the minimum +10% BNG, the deficit of 0.58 Habitat Units will need to be made up by habitat creation off-site or the purchase of BNG credits. The planting of 12m of new

native hedgerow within the developed site will achieve a +100% net gain in Hedgerow Units since there are no existing hedgerows on site.

Ecological enhancements specifically for species will be included within the developed site including bird nest boxes, cavity bat tubes and hedgehog pop-holes in rear garden fences.

1.0 Introduction

1.1 Background

- 1.1.1 A planning application is being prepared for a new residential development comprising nine dwellings, with associated gardens, access and SUDS swale, on an existing former horse-grazed paddock and adjoining field, located to the east of Duncots Close, in Ickleford, north Hertfordshire.
- 1.1.2 As part of the planning application submission, a Preliminary Ecological Appraisal (PEA) has been commissioned by Peter David Homes, on behalf of the applicant. The purpose of this PEA is to detail the results of an initial ecological appraisal of the application site, with the aim of identifying potential biodiversity constraints that may affect the development, inform mitigation measures and establish the potential need for further species surveys considered necessary under UK legislation and both national and local planning policies. Specifically, these constraints typically involve the provision of biodiversity net gain and the protection and enhancement of protected and Priority Species and Habitats.
- 1.1.3 In addition, a Biodiversity Net Gain (BNG) Assessment has been completed of the application site, following the standard Statutory Biodiversity Metric methodology.
- 1.1.4 The site with which this study is concerned is referred to throughout this report as the application site. The proposed site plan and aerial photograph below indicate the indicative extent of the application site and show it in its geographical context, within its landscape surroundings.



Plate 1: Proposed site layout and aerial photo with indicative application site boundary

- 1.1.5 The report's author is Keith Seaman, who holds a Bachelor of Science Degree in Environmental Studies; Agri-Ecosystem Management, a Diploma of Higher Education in Ecology and a Certificate of Higher Education in Ecology and Conservation. His professional qualifications include membership of the Royal Society of Biology (RSB) registered as a Chartered Biologist and professional grade membership of The Chartered Institute of Ecology and Environmental Management (CIEEM). Keith Seaman also holds Natural England Survey, Research and Development licences for all species of bat, badger (*Meles meles*), great crested newt (*Triturus cristatus*), otter (*Lutra lutra*), barn owl (*Tyto alba*) and dormouse (*Muscardinus avellanarius*).
- 1.1.6 Keith Seaman has been an academically qualified Ecologist since 1995 and a professionally qualified Ecologist since 2004 and since then has gained considerable experience working in both the public and private sectors carrying out Ecological Impact Assessments as well as protected species appraisals and developing mitigation strategies.

2.0 Planning Policy and Legislation

2.1 Relevant National and Local Planning Policies

National Planning Policy Framework

2.1.1 The National Planning Policy Framework (NPPF) superseded Planning Policy Statement 9 (PPS9) in March 2012. The NPPF 2024 states that 'planning policies and decisions should contribute to and enhance the natural and local environment by', in part;

- 'Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.'

It also states that 'when determining planning applications, local planning authorities should apply the following principles';

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

for biodiversity or enhance public access to nature where this is appropriate.'

2.2 Local Plan Policies

2.2.1 The North Hertfordshire Local Plan (adopted 8th November 2022) is the current local level policy guidance covering the application site. The following policy from the document is, in part, relevant to this study;

Policy NE4: Biodiversity and geological sites

2.2.2 *'Planning permission will only be granted for development proposals that appropriately protect, enhance and manage biodiversity in accordance with the hierarchy and status of designations and features listed in Policy SP12.*

All development should deliver measurable net gains for biodiversity and geodiversity, contribute to ecological networks and the water environment and/or restore degraded or isolated habitats where possible.

Applicants should, having regard to the status of any affected site(s) or feature(s):

- a) Submit an ecological survey that is commensurate to the scale and location of the development and the likely impact on biodiversity, the legal protection or other status of the site;*
- b) Demonstrate that adverse effects can be avoided and/or satisfactorily minimised having regard to the hierarchy of protection below;*
 - i. Locating an alternative site with a less harmful impact;*
 - ii. Providing adequate mitigation measures; or*
 - iii. As a last resort compensated for.*

The acceptability of approach(es) to avoidance, mitigation and compensation will be commensurate with the status of the asset(s) likely to be affected by the application; compensation is unlikely to be an appropriate solution for proposals affecting nationally or internationally designated sites other than in the most exceptional circumstances.

- c) Include appropriate measures to manage construction impacts by demonstrating how existing wildlife habitats supporting protected or priority species will be retained, safeguarded and managed during construction;*
- d) Integrate appropriate buffers of complementary habitat for designated sites and other connective features, wildlife habitats, priority habitats and species into the ecological mitigation and design. The appropriateness of*

- any buffers will be considered having regard to the status of the relevant habitat. 12 metres of complimentary habitat should be provided around wildlife sites (locally designated sites and above), trees and hedgerows. It may be necessary to exceed this distance for fragile habitats such as ancient woodland or to provide appropriate root protection for mature trees; and*
- e) *Provide a long-term management and monitoring plan including mitigation measures as necessary.*

2.3 Legislation

The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019

- 2.3.1 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 in the UK implement the EC Habitats Directive in the UK. These regulations mainly deal with the protection of sites that are important for nature conservation in a European context (eg Special Areas of Protection [SACs] and Special Protection Areas [SPAs]). The legislation also gives protection to certain species of flora and fauna.
- 2.3.2 The 2019 Regulations makes it an offence to deliberately capture, kill or disturb wild animals and it is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time).

Wildlife & Countryside Act (WCA)

- 2.3.3 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive).

Natural Environment & Rural Communities Act (NERC)

- 2.3.4 The NERC Act of 2006 places a duty on authorities to have due regard for biodiversity and nature conservation during the course of their operations.

3.0 Methodology

3.1 Field Survey

- 3.1.1 This report has been produced following the *Guidelines for Preliminary Ecological Appraisal* 2017 (Chartered Institute of Ecology and Environmental Management). Habitats have been described, based, on the methodology from the UK Habitat Classification (Ref. 4). In some circumstances, habitat descriptions and mapping may have been adapted, to suit non-standard site-specific conditions.

3.2 Scoping for Protected & Important Species

- 3.2.1 The habitat survey has been extended to include a scope of the application site's habitats as to their likely importance or potential to support protected or important species and habitats, as identified under the following legislation; the Habitat Regulations 2019, the Wildlife & Countryside Act (as amended) 1981, the Protection of Badgers Act 1992, the Hedgerow Regulations 1997, International Union for Conservation of Nature (IUCN) Birds of Conservation Concern (BoCC) Red and Amber Lists and the Natural Environment & Rural Communities (NERC) Act 2006.
- 3.2.2 Some species and species groups have been scoped out of this PEA because of the lack of biological records, limitations in geographical distribution and the absence of species-specific suitable habitat and connectivity within or adjacent to the application site. Only those important and protected species and species groups deemed likely to be present on site or affected by the proposals have been included in this PEA.
- 3.2.3 The PEA was carried out on the 19th of August 2024 and updated on 28th January 2025 - by Mr Keith Seaman, Principal Ecologist with ELMAW Consulting Ltd and Ms Jasmine Stephenson, Assistant Ecologist. Weather conditions on the days were suitable for surveying.

3.3 The Statutory Biodiversity Metric

- 3.3.1 The Statutory Biodiversity Metric uses habitat as a proxy for wider biodiversity with different habitat types scored according to their relative biodiversity value. This value is then adjusted, depending on the condition and location of the habitat, to calculate 'biodiversity units' for the specific project or development.

The Statutory Biodiversity Metric incorporates separate calculations for linear habitats that require a different method of measurement such as hedgerows and lines of trees, rivers and streams, if present.

- 3.3.2 The Statutory Biodiversity Metric can be used to measure both on-site and off-site biodiversity changes for a development and can be used to measure the change in biodiversity achieved by different land management interventions. The Metric also accounts for some of the risks associated whenever new habitat is created or existing habitat is enhanced. The Metric calculates the change in biodiversity resulting from a development by subtracting the number of pre-intervention or 'baseline' biodiversity units (ie those originally existing on-site) from the number of post-intervention units (ie those projected to be provided after the development or change in land management).

3.4 Limitations

- 3.4.1 Plant species lists in this report are recorded to provide a snapshot of the site and are not exhaustive. It is possible that certain plant species may have not been recorded during the survey due to seasonal constraints, such as flowering time, or other limitations. It is, however, considered that the species characteristic to the habitats on site were recorded, unless otherwise advised in this report. This report is not designed or required to present a complete inventory of flora/fauna.
- 3.4.2 As to the reliability of the assessment for protected species, it must be further acknowledged that this PEA is based on the presence of suitable habitat, local biological records, geographical distribution and habitat connectivity to support such important species and not on qualitative species-specific surveys. Where the potential for important species has been identified, further species-specific surveys are considered necessary to be confident of either a positive or negative conclusion as to the presence of protected species on site. Where a European Protected Species Mitigation (EPSM) licence is required, species survey data of the current season and year of the application is required by Natural England.

- 3.4.3 The Chartered Institute of Ecology and Environmental Management (CIEEM) advises that where mobile species such as reptiles and bats are concerned, this report is likely to be out of date within 12 - 18 months and will need updating.
- 3.4.4 The study specifically addresses the issues of potential development constraints affecting important and protected species and habitats.

3.5 Desk Study

- 3.5.1 Biological records of protected and important species and habitats from a radius of 2km around the application site have been sourced from the Hertfordshire Environmental Records Centre (HERC) on the 29th July 2024. Records were also received from the Bedfordshire and Luton Biodiversity Recording and Monitoring Centre, as part of the 2km radius around the application site overlapped the county boundary between Hertfordshire and Bedfordshire. The results of the data search request were received on the same day as the request.
- 3.5.2 In addition, all international sites of nature conservation importance within a 10km radius, nationally important sites within a 5km radius and local sites within a 2km radius of the application site have been sourced.
- 3.5.3 Only species records from the last ten years have been included as it is considered that records older than this are not sufficiently recent to be relevant to this study.
- 3.5.4 Google earth aerial photographs and DEFRA's Magic Map Application images have been examined of the application site and surrounding landscape as have the relevant Ordnance Survey Explorer Maps at a 1:25,000 scale.

3.6 Determining Biodiversity Significance

- 3.6.1 The Institute of Ecology and Environmental Management in 2016 identified various ecological features and resources which are likely to be important in terms of biodiversity. These are likely to include habitats, species and species groups and ecological communities and are determined on the basis of a number of factors which include size, rarity, conservation status and geographical distribution. Assigning a biodiversity value on a geographical scale is based on the above principles and geographical value is assigned to

international, national/regional, county, district, parish/neighbourhood and site level only.

3.6.2 Geographical Range of Reference

Value Category	Site or Ecological Feature
International	All internationally important Sites or candidate/proposed Sites. Regularly occurring, nationally significant population of protected or internationally important species. A viable area of habitat type listed in Annex 1 of The Habitats Directive or smaller areas of such habitat which are essential to maintain the viability of a larger whole
National/ Regional	SSSIs and other nationally designated Sites. A viable area of a priority habitat identified in the UKBAP or an area of such habitat which are essential to maintain the viability of a larger area Regularly occurring, regionally or nationally significant population of European Protected Species or habitats Regularly occurring, locally significant population of a regionally or nationally important species.
County	County designated Sites (CWS) Other Sites with BAP priority habitats or species of appreciable value not included in the above. Regularly occurring, locally significant population of a County important species. Local Nature Reserves and other viable areas of key habitat identified in the County or LBAP.
District	Area of habitat identified in a District/Borough BAP and other natural or semi-natural Sites of significant biodiversity. Regularly occurring, locally significant population of a District/Borough important species during a critical stage of its life cycle.
Parish/Neighbourhood	Areas of habitat considered to appreciably enrich the local habitat resource within approximately 2km of the application site, parish or neighbourhood.
Site level only	Sites with limited biodiversity, providing some biodiversity enrichment at project site only.

3.6.3 The valuation, levels of geographical importance and significance have been determined following the guidance of the CIEEM in the *Ecological Impact Assessment in the UK 2018* (updated 2019) and the *Handbook of Biodiversity Methods. Survey, Evaluation and Monitoring 2005* and have been tabulated above.

3.6.4 The baseline conditions of the application site have been determined for the year 2024.

4.0 Resulting Baseline Ecological Conditions & Preliminary Evaluation

4.1 Designated Sites of Nature Conservation Importance

- 4.1.1 The desk study revealed there are no internationally important designated sites of nature conservation within 10km of the application site. There is a single statutory site of national importance within 5km of the application site – a Site of Special Scientific Interest (SSSI) - Oughtonhead Lane SSSI, which lies approximately 1.9km south-west of the site.
- 4.1.2 Within 2km of the application site there is a single Local Nature Reserve (LNR) - Oughtonhead Common LNR, which lies approximately 0.8km to the south-west of the application site.
- 4.1.3 In addition, there is a single Herts and Middlesex Wildlife Trust (HMWT) Nature Reserve (NR) – Oughtonhead NR (Ref: 11/001/x01), which lies approximately 1.7km to the south-west of the application site. Finally, there are 15 non-statutory site Local Wildlife Sites (LWSs) within 2km of the application site, the closest of which is Cadwell Marsh and Burymead Springs (Ref. 11/023/01), located approximately 50m east of the application site. This site supports a mosaic of habitats including derelict marshy meadows, scrub, reed beds, hazel (*Corylus avellana*) coppice, willow (*Salix* sp.) plantation, a dismantled railway embankment, an old hedge and spring-fed pools.

4.2 Habitats

- 4.2.1 The application site is dominated by heavily managed g4 Modified grassland, with bordering areas of h3d Bramble scrub, 81 Ruderal or ephemeral and a small area of h3h Mixed scrub. The application site contains two apple trees (*Malus* sp.) - one within the Modified grassland and the other fallen over and located within the parcel of Mixed scrub.

G4 – Modified Grassland

- 4.2.2 A large area of the application site is comprised of Modified grassland, found within the main field of the application site and within a two-metre-wide linear strip to the north (proposed land for the creation of a swale), within the adjacent field. The Modified grassland found within the application site is currently heavily managed and regularly mown and until recently has been grazed by horses. Whilst acknowledging the limitations from constant

management, the grassland appeared species-poor. Species evident included perennial rye grass (*Lolium perenne*), cock's-foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), smooth meadow grass (*Poa pratensis*), false-oat grass (*Arrhenatherum elatius*), red fescue (*Festuca rubra*), selfheal (*Prunella vulgaris*), white clover (*Trifolium repens*), daisy (*Bellis perennis*), dandelion (*Taraxacum* agg.), and germander speedwell (*Veronica chamaedrys*).

- 4.2.3 The BNG Condition Assessment found the Modified grassland met five of the seven assessment criteria (C, D, E, F & G), failing the essential criteria for achieving Moderate or Good condition and was therefore found to be in Poor condition.
- 4.2.4 Areas of grassland subject to this type of management typically support stress-tolerant plant species typical of these conditions and are very common habitats throughout the UK. As such, these habitat types are not considered protected or listed as NERC Sect. 41 Priority Habitats. Considering the lack of a heterogenous grass sward and its very close-mown height, the Modified grassland's value to wildlife is considered to be very low and geographically is considered to be of Site value only.



Plates 2 & 3: Modified grassland areas within the application site

81 - Ruderal or Ephemeral

- 4.2.5 The Ruderal or ephemeral habitat along part of the application site's southern boundary and in the north-eastern corner, are dominated by common nettle (*Urtica dioica*), with creeping thistle (*Cirsium arvense*), ground elder (*Aegopodium podagraria*), nipplewort (*Lapsana communis*), herb Robert (*Geranium robertianum*), black horehound (*Ballota nigra*) and ground-ivy

(*Glechoma hederacea*). The BNG Condition Assessment found this habitat to be in Good condition, having met all three of the Condition Assessment criteria.

- 4.2.6 Ruderal or ephemeral habitats dominated by such common, stress-tolerant species are commonly found in diverse growing conditions but are often associated with a cessation of or lack of management, or with neglect. This habitat is not a protected habitat, nor is it a NERC Sect.41 Priority Habitat. It could however potentially provide some limited value to common species of wildlife and therefore may contribute to the application site's intrinsic wildlife resource, suggesting it to of Site level value.



Plates 4 & 5: Two views of the strip of Ruderal/ephemeral vegetation along the southern boundary of the application site

- 4.2.7 There are two UKHab scrub habitat types within the application site – h3h Mixed scrub and h3d bramble scrub.

H3d – Bramble Scrub

- 4.2.8 The bramble scrub, which had been cut down to ground level, had ground flora such as comfrey (*Symphytum officinale*) and common nettle growing within. There is no BNG Condition Assessment required for bramble scrub. Bramble scrub can, when dense, provide ideal bird nesting habitat as well as small mammal and insect habitat. However, in its current condition its value to wildlife is considered negligible.



Plates 6 & 7: Two views of the bramble scrub, cut down to ground level, along the western boundary of the application site

H3h – Mixed Scrub

- 4.2.9 The Mixed scrub, located in two very small areas towards the northern area of the application site, are comprised of blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*) and bramble (*Rubus fruticosus* agg.) and include a fallen (but growing) fruit tree, with ground flora of black horehound and common nettle. The most northern area of scrub had been cut down to ground level at the time of surveying.
- 4.2.10 Based on the scrub's small size and current condition, this presents little potential value for wildlife and lacks nesting habitat for birds. However, if left to regrow, it's condition will be elevated with regard to wildlife suitability. The BNG Condition Assessment found the mixed scrub met only two of the five assessment criteria (A and C), classifying it as in Poor condition.



Plates 8 and 9: Photos of the two areas of mixed scrub within the application site.

- 4.2.11 Bramble scrub and Mixed scrub are not listed under Sect 41 of the NERC Act as Priority Habitats and are also not protected habitats as vegetative features.

Scrub supporting the aforementioned shrub species are very common habitats throughout the UK. In its current poor condition, this habitat offers limited feeding and sheltering resource to local wildlife. Therefore, at this time, the areas of Mixed and Bramble scrub habitat of the application site are valued as of Site level only.

Individual Trees - Urban

- 4.2.12 The two apple trees (T1 and T2) within the application site are considered to be semi-mature/mature. One of the apple trees has an open rot hole, leading into an open cavity within the trunk. This presents an opportunity for use by both nesting birds and as a Potential Roosting Feature (PRF) for bats. The cavity was inspected during the initial assessment and was found, at the time, to be empty, with no evidence of roosting bats, but with bird nesting material. Anecdotal evidence indicates that this cavity is habitually used by starlings as a nest site every year, likely precluding its use by summer roosting bats.



Plates 8 & 9: Apple tree (left) and the rot hole in the same tree, offering bat roosting and bird nesting potential (right)

4.3 Protected and Priority Species

Plants

- 4.3.1 There is a single Priority Species of plant recorded within the 2km Zol; cornflower (*Centaurea cyanus*). This plant was not recorded within the application site and the habitats within the site are not suitable for this plant of arable land.
- 4.3.2 Generally, the habitats within the application site are common, supporting very limited botanical diversity and, as such, it is considered highly unlikely that the application site would support either protected or Priority Species of plant. It is therefore concluded that the application site's value to important plant species is likely to be negligible, at this time.

Invertebrates

- 4.3.3 There are ten invertebrate species recorded within the 2km Zol. These include species of beetle, wasp, butterfly and moth, with no records from the application site itself. The majority of the application site supports limited habitat diversity that could potentially support important assemblages of invertebrates and, whilst the site will have some value to invertebrates, the site's majority habitat, modified grassland, is considered unlikely to support important assemblages of invertebrates, at this time.

Amphibians

- 4.3.4 There are three records of common toad (*Bufo bufo*) within the 2km Zol, but there are no great crested newt records within the Zol. The application site does not contain any waterbodies although evidence of a pond and ditch is found outside the application site, in the south-eastern corner. Anecdotal evidence and the evident lack of aquatic vegetation indicate that this pond and ditch rarely habitually hold water and only for very short periods of time during flood or high rainfall conditions. These inundation conditions would suggest that the pond and ditch are highly unlikely to support breeding amphibians.

Reptiles

- 4.3.5 There are records of common lizard (*Zootoca vivipara*) within the 2km Zol, with two records located in a neighbouring field to the east of the application site.
- 4.3.6 The application site itself offers little potential value to reptiles in its current condition although the occasional transient reptile could utilise the site's boundary habitats. However, should the modified grassland be left ungrazed or uncut, it may develop a heterogenous grassland sward which could allow colonisation of the application site by common lizards from the adjoining field.

Birds

- 4.3.7 There are 43 species of specially protected or Priority bird recorded within the 2km Zol. The application site, whilst offering some very limited common bird nesting habitat within some of the site's scrub habitats, is considered highly unlikely to be important to specially protected or Priority Species of bird, at this time.

Bats

- 4.3.8 There are no bat records within the 2km Zol within the last ten years.
- 4.3.9 The apple tree containing a PRF was initially considered to be a PRF. However, anecdotal evidence indicates that the feature is used each year by nesting starlings - nesting material found inside confirmed its used by birds. The PRF was subsequently endoscopically inspected in December 2024, January 2025 and February 2025 and no hibernating bats or indicative evidence of bats such as droppings were found. The endoscope inspection carried out in February 2025 found evidence that the PRF was being used by grey squirrel with indicative gnawing at the cavity entrance and twigs and wood taken inside, presumably in preparation for a squirrel drey. Following the surveys and evidence of both nesting birds and denning squirrels using the features, it has been concluded that the feature is not currently supporting roosting bats.

Hedgehogs

- 4.3.10 There are numerous records of hedgehog within the 2km Zol, with the closest from approximately 260m to the north of the application site, in the village of Ickleford. There was no indicative evidence found of the presence of

hedgehog when the site was surveyed but these mammals of Principal Importance can be nomadic and could utilise the application site at any time in the future. That said, there is however very little suitable habitat within the site, with the better quality habitat found within the areas of scrub and at the base of the trees. Therefore, whilst the presence of hedgehog should not be discounted, the potential value of the site to hedgehogs is considered to be low.

Other Mammals

- 4.3.11 There are a number of records of badger, brown hare (*Lepus europaeus*) and otter within the 2km ZOI but none from the application site itself.
- 4.3.12 The closest badger record is from approximately 1km to the west of the application site – unfortunately a road casualty on the Bedford Road. No evidence of badger (such as setts, snuffling holes, digging or latrines) was found during the site survey and although badgers may cross the application site on occasion, it is not thought that the site will be important to this species, at this time.
- 4.3.13 The closest record of brown hare is from the 1km grid square adjacent to the application site. There was no evidence of this species found on site at the time of the survey and, whilst occasional presence should not be discounted, the site is devoid of optimal habitat for this Priority Species. It has been concluded that the application site is unlikely to be important to this species, at this time.
- 4.3.14 Otters are recorded approximately 1.5km to the north of the application site, on the River Hiz. The River Hiz runs within approximately 100m of the application site (to the east), so although occasional presence should not be discounted, the application site contains no suitable habitat for this species and it has been concluded that the site is unlikely to be important to this protected riparian mammal, at this time.

4.4 Results of Biodiversity Metric On-Site Baseline Calculations

On-Site Habitat Baseline

Habitat	Area (ha)	Habitat Condition	Habitat Units
Mixed scrub	0.0089	Poor	0.04
Modified grassland	0.3359	Poor	0.77
Ruderal or ephemeral	0.047	Good	0.32
Bramble scrub	0.027	Condition Assessment N/A	0.12
Urban tree	0.032	Good	0.44
Total			1.70

On-Site Hedge Baseline

- 4.4.1 There are currently no hedgerows within the application site.

5.0 Ecological Constraints & Opportunities

- 5.1.1 The application site is not designated a site of nature conservation importance and neither are there any such designated sites adjoining the application site. There is however a non-statutory LWS within approximately 50m of the application site, to the east and separated by a grassland field. This site, Cadwell Marsh & Burymead Springs LWS, is designated as a mosaic site supporting a number of primarily wetland habitats. Whilst close, this designated site is not linked by any wetland habitat connectivity and the proposed swale is not designed to flow into the Hiz, or the wetland LWS therefore the development of the application site is not considered likely to adversely affect this LWS.
- 5.1.2 The application site supports habitats common to a former horse-grazed field. None of the application site's habitats are listed as NERC Section. 41 Priority Habitats and all are deemed to be geographically of Site value only. Their loss, to a greater or lesser degree, through development, is not predicted to have a significant adverse impact on important habitats.
- 5.1.3 With regard to protected and/or Priority Species, one species/species group is considered potentially adversely impacted by the application site's development; nesting birds, specifically starling, which is a Priority Species for Conservation - nesting in the apple tree.

6.0 Mitigation, Compensation and Further Surveys

6.1 Requirements for Mitigation and Compensation

Nesting Birds

- 6.1.1 It is proposed to remove small amounts of potential bird nesting habitat – the mixed scrub, bramble scrub and two apple trees, one of which is a habitual nest site for starlings. If carried out during the bird nesting season (March through to the end of August) then there is a risk of disturbing nesting birds, contrary to the Wildlife & Countryside Act 1981 (as amended). To avoid incidental disturbance to nesting birds, the removal, pruning or cutting back of any identified bird nesting habitat such as trees or scrub will be carried out either outside the bird nesting season or following an inspection by the Ecological Clerk of Works (ECoW) and only once declared free of nesting birds.
- 6.1.2 A single nest site of a single Priority Species of bird (starling) will be lost and this loss will be compensated for by the installation of a number of starling nest boxes (examples of which are shown below) on some of the newly built dwellings:



Vivara Pro woodstone starling box



Habitat integral starling box

- 6.1.3 The Vivara Pro woodstone starling box is extremely long-lasting as woodstone will not rot away or deteriorate. Woodstone also provides a consistent internal temperature. This is important as young birds have a greater chance of survival if they do not experience temperature fluctuations.
- 6.1.4 The Habitat integral starling box is a small, solid box made of insulating concrete which provides an internal roost space and can be integrated into the fabric

of a building as it is built. The access hole is specifically designed to accommodate starlings.

Mammals

- 6.1.5 To avoid the incidental harming of foraging mammals during the construction phase of the development, any trenches such as services and footings left open at night will either be covered by boarding or have a mammal ladder (in the form of a scaffold board or similar) placed in the trench, to allow any badgers, hedgehogs or brown hares to escape, should they fall into the trench.
- 6.1.6 All trenches left open at night will be checked by construction staff the following morning to ensure that there are no mammals trapped or injured in the trench(es). The ecologist will be informed immediately if a trapped or injured animal is discovered.
- 6.1.7 In the event that any pipe or servicing pipework is needed, exposed ends will be capped or blocked overnight, to ensure that mammals such as badgers, brown hares or hedgehogs do not get stuck in the pipework.

6.2 Further Surveys

- 6.2.1 None considered necessary at this time.

6.3 Further Considerations

- 6.3.1 All species of bat, to a greater or lesser degree, use their places of shelter in a temporal and spatial way which may affect the status of a site or tree at any given time. Roost sites which may appear temporarily vacated or abandoned could be re-occupied at any time in the future.
- 6.3.2 Some of the preliminary bat roosting data gathered for the proposed development site was obtained in 2024 and 2025. Because of the high mobility of roosting bats, this data is only considered reliable for 12 months and should be updated after 12 months from the date of the survey. Natural England requires bat data of the current season to support any application for a European Protected Species Mitigation (EPSM) licence.

6.4 Biodiversity Net Gain

- 6.4.1 The National Planning Policy Framework (NPPF) 2023 requires local planning authorities, when determining planning applications, to contribute to and enhance the natural and local environment by; (among other things); "minimising impacts on and providing net gains for biodiversity..."

On-site Habitat Creation

- 6.4.2 The development of the application site will result in the creation of new dwellings and access (Developed land, sealed surface), Vegetated gardens, an area of Modified grassland, as a green communal-use feature. In addition, a new swale will be created, planted with good condition Other Neutral Grassland (wildflower planting) and planted with 30 alder (*Alnus glutinosa*). Together, these result in a post-development site value of 1.29HUs.

Site Habitat Creation	Area (ha)	Habitat Condition	Habitat Units
Developed land, sealed surface	0.24	N/A - Other	0.00
Modified grassland	0.02	Poor	0.04
Vegetated garden	0.14	Condition Assessment N/A	0.31
Other neutral grassland	0.024	Good	0.23
Individual tree - urban	0.219	Poor	0.7
Total			1.29

Site Hedge Creation

Site Hedge Creation	Length (km)	Habitat Condition	Habitat Units
Native hedgerow	0.012	Poor	0.02
Total			0.02

- 6.4.3 A new native hedgerow comprising wildlife-beneficial species and measuring approximately 12m in total will be planted as part of the soft landscaping proposals for the site. This new hedgerow will be worth 0.02HrU and will achieve an **+100%** biodiversity net gain in hedgerow habitat.
- 6.4.4 In order to achieve the minimum +10% BNG, the deficit of 0.58 Habitat Units will need to be made up by habitat creation off-site or the purchase of BNG credits.
- 6.4.5 The proposed biodiversity net gain measures discussed above are specific to this particular project and will form part of the design scheme for the application site. Their inclusion will ensure compliance with the NPPF and local

planning policies. Should the design of the scheme change before being finalised, these measures may need to be reviewed.

6.5 Ecological Enhancements for Species

Bird Nest Boxes

- 6.5.1 Several nest boxes for different species of bird (similar to that illustrated below), will be erected on the newly planted trees within the developed site, high enough to be out of the reach of domestic cats. Siting can be advised by the ecologist.



Bats

- 6.5.2 Four integrated cavity bat roosting tubes (Wienerberger Habibat, as illustrated below) will be installed in four of the new dwellings, at the time of construction. The tubes will be installed at least four metres above the ground.



- 6.5.3 These bat tubes are especially suitable for (among others) both common and soprano pipistrelle bats (*Pipistrellus pipistrellus* and *P. pygmaeus*), the latter being a Species of Principal Importance and the subject of a UK Biodiversity Species Action Plan. These Habibat bat boxes are made from brick slips, featuring a plinth detail at the bottom to allow bats to enter and exit. Habibat boxes can be integrated into the façade of a new building or installed retrospectively, using matching or a contrasting colour brick.
- 6.5.4 This type of bat tube is specifically designed to meet the characteristic behavioral requirements of the species of bat that inhabit buildings. The design maintains excellent climatic conditions inside, providing bats with a safe and stable environment in which to roost and it requires no maintenance because droppings fall out of the entrance ramp.

Hedgehogs

- 6.5.5 It is also proposed to provide a number of hedgehog 'pop-holes' around the newly redeveloped site to allow the free movement of hedgehogs between the gardens and also into the wider countryside. The site has been shown to support this declining mammal and also provides connectivity to other areas of suitable habitat outside its boundaries.
- 6.5.6 The hedgehog is a UK Biodiversity Action Plan Species and a Species of Principal Importance under Section 41 of the NERC Act 2000. As such, small hedgehog 'pop-holes' (as illustrated below) will be provided at the bases of close-board fencing within the site, to allow the free movement of hedgehogs around the site. Hedgehog 'pop-holes' measuring 13cm x 13cm, as illustrated below, will be pre-cut at the base of the close-board fencing in a number of locations within the newly redeveloped site, as advised by the ecologist.



Example of a hedgehog 'pop-hole' in base of close-board fencing

- 6.5.7 The 'pop-holes' will be installed at the soft landscaping stage of the development. No post-development maintenance is required of these features.
- 6.5.8 The ecological enhancements (and precautionary mitigation measures) are likely to be secured by an appropriate planning condition. This should ensure compliance with local and national policies.

7.0 References

- Ref. 1 Chartered Institute of Ecology and Environmental Management. 2017 *Guidelines for Preliminary Ecological Appraisal*
- Ref. 2 Chartered Institute of Ecology and Environmental Management. 2017 *Guidelines for Ecological Report Writing*
- Ref. 3 Joint Nature Conservation Committee. 2010. *Handbook for Phase 1 Habitat Survey* Revised re-print
- Ref. 4 UK Habitat Working Group (2018). *UK Habitat Classification*
- Ref. 5 Bat Conservation Trust. 2016. *Bat Surveys for Professional Ecologists Good Practice Guidelines 3rd Edition*
- Ref. 6 Sewell D, Griffiths RA, Beebee TJC, Foster J and Wilkinson JW 2013 *Survey Protocols for the British Herpetofauna Version 1.0*
- Ref. 7 Rose F 2006 *The Wildflower Key* Fredrick Warne & Co.
- Ref. 8 Hubbard CE, 1992 *Grasses 3rd Edition* Penguin Books
- Ref. 9 CIEEM (2021). *Biodiversity Net Gain Report and Audit Templates* Chartered Institute of Ecology and Environmental Management, Winchester, UK.

8.0 Appendix 1 – Habitat Map



9.0 Appendix 2

9.1 Botanical Species List

Common Name	Latin Name
Trees and shrubs	
Apple	<i>Malus sp.</i>
Blackthorn	<i>Prunus spinosa</i>
Hawthorn	<i>Crataegus monogyna</i>
Herbs	
Black horehound	<i>Ballota nigra</i>
Bramble	<i>Rubus fruticosus agg.</i>
Comfrey	<i>Symphytum officinale</i>
Daisy	<i>Bellis perennis</i>
Dandelion	<i>Taraxacum agg.</i>
Germander speedwell	<i>Veronica chamaedrys</i>
Ground elder	<i>Aegopodium podagraria</i>
Ground Ivy	<i>Glechoma hederacea</i>
Herb Robert	<i>Geranium robertianum</i>
Selfheal	<i>Prunella vulgaris</i>
Common nettle	<i>Urtica dioica</i>
White clover	<i>Trifolium repens</i>
Grasses/Sedges	
Cock's-foot	<i>Dactylis glomerata</i>
False-oat grass	<i>Arrhenatherum elatius</i>
Perennial rye grass	<i>Lolium perenne</i>
Red fescue	<i>Festuca rubra</i>
Smooth meadow-grass	<i>Poa pratensis</i>
Yorkshire fog	<i>Holcus lanatus</i>