



Preliminary Ecological Appraisal

Report prepared for: Stephanie Parsons

Land at Garsdon

Malmesbury

Wiltshire

SN16 9NW

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Methods used to prepare this report, including those carried out in the field followed The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

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1 INTRODUCTION

- 1.1 This report provides the results of a Preliminary Ecological Appraisal undertaken on land at Garsdon, Malmesbury, Wiltshire SN16 9NW (central Ordnance Survey (OS) Reference ST 97359 88333).
- 1.2 Development proposals are described as the following:
- Creation of a new 4 m wide agricultural access gateway from the adjacent road.
 - Formation of an access track, incorporating a central grass strip, extending from the new gateway to the proposed agricultural barn.
 - Erection of a 9 m × 13 m agricultural barn.
 - Erection of an adjoining 9 m × 13 m equine barn.
 - Change of use of the land from agricultural use to mixed agricultural and equestrian use.
- 1.3 The findings included in this report are based on a survey undertaken during July 2025 by Cotswold Environmental Ltd. The purpose of the survey was to undertake an appraisal of the site for its potential ecological value to notable and protected wildlife, and to look for evidence of such species. The survey results provide information to determine the likely ecological impact the proposed development will have on wildlife species, and to inform the level of further survey effort and mitigation required to comply with relevant nature conservation policies and legislation. The evaluation and findings in this report can be used by Wiltshire Council in their view of a planning application. Survey results detailed within this report should be considered valid for a period of 18 months from the survey date.
- 1.4 The land parcel is located to the north-east of Garsdon and to the north-west of Moor Lane. The site location is shown in Fig. 1.
- 1.5 All survey and assessment work was completed in accordance with official assessment guidelines¹ and largely followed that recommended by the Chartered Institute for Ecology and Environmental Management (CIEEM)² and follows the British Standard Code of Practice³.

Survey Objectives

- To determine suitability for protected species
- Ascertain evidence of protected species
- Determine potential ecological impacts the proposed development will have on protected species.
- Inform the level of further survey effort that is required.

¹ Collins J (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edn. Bat Conservation Trust, London.

² CIEEM (2017) Guidelines for Ecological Report Writing. CIEEM, Winchester.

³ British Standards Institution (2013) BS 42020:2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.

2 METHODOLOGY

Desk Study

- 2.1 A records search was undertaken using freely available desktop resources such as the Multi-Agency Geographic Information for the Countryside⁴ (MAGIC) website. MAGIC was used to search for records of designated sites, habitats and granted European Protected Species Licenses (EPSLs) within a 2km radius. Google Earth⁵ was also used to study the nearby landscape.

Field Survey

- 2.2 Ecological consultant Jason Skinner (NE Class 2 Bat Survey licence 2020-50774-CLS-CLS, NE Barn Owl licence number 2025-13085-CL29-OWL) carried out a field visit on Friday 18th July 2025.

Relevant surveyor experience

- 2.3 Jason Skinner has nine years professional ecological experience, primarily involved with bats and reptiles through consultancy and assisting on research projects. Experienced with small-scale and large-scale development projects and involvement in the management and supervision on multiple bat mitigation licences. Co-author of peer-reviewed research papers on reptiles and amphibians. Member, BBCARG and Wiltshire Bat Group.
- 2.4 The field visit involved a walkover using visual encounter survey techniques. The dominant vegetation structure was assessed, allowing habitats on site to be valued for their ecological importance to protected wildlife. Habitats were classified using the UK Habitat Classification Version 2.0 (UKHab V2)⁶, which provides a standardised framework for describing habitat types in the UK.
- 2.5 Binoculars were also used to scan for features likely to support protected species. All protected species were considered during the assessment and all wildlife species were recorded. The work was completed largely following methodologies set out by the Chartered Institute for Ecology and Environmental Management (CIEEM) and British Standard Code of Practice.

Species

- 2.6 All protected species were considered during the survey. Only those considered likely to utilise the site are mentioned in this report.

⁴ Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2025]. Ordnance Survey 100022861. Available at: <http://www.magic.gov.uk/>

⁵ https://www.google.co.uk/intl/en_uk/earth/

⁶ UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at: <https://ukhab.org/>

Bats

- 2.7 Survey effort was completed in line with official assessment guidelines⁷ and largely followed that recommended by the Chartered Institute for Ecology and Environmental Management (CIEEM)⁸ and British Standard Code of Practice⁹. The assessment followed the standard methodology. The site was searched using visual encounter survey techniques. Potential bat movement corridors and movement barriers were assessed and noted. During the site visit, where possible, all suitable areas were examined for evidence of bats.
- 2.8 Trees deemed suitable for use by roosting bats were identified at species level, their specific features were photographed, and a GPS recording was mapped. Notable bat roosting features may include:
- Rot holes
 - Woodpecker holes
 - Horizontal and/or vertical cankers in the stems of branches
 - Knot holes
 - Scar crevices
 - Loose/flaking bark
 - Covering of dense ivy
 - Bat boxes
 - Any other features deemed suitable for roosting bats

Table 1: Guidelines summary for assessing potential bat roost suitability

Suitability	Description of building, tree or structure
None	The building, tree, or structure has no features with the potential to support roosting bats and is entirely unsuitable. This includes structures that are fully sealed, modern, well-lit, and/or in exposed locations with no access points, no internal voids, and high levels of human disturbance.
Negligible	The building or tree has minimal features (e.g. small gaps or cracks), but these are assessed as highly unlikely to be used by bats due to their condition, location, or lack of access to suitable internal voids.
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, potential roost sites not suitable for larger numbers or regular use (i.e. maternity or hibernation).
Moderate	A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously

⁷ Collins J (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edn. Bat Conservation Trust, London.

⁸ CIEEM (2017) Guidelines for Ecological Report Writing. CIEEM, Winchester.

⁹ British Standards Institution (2013) BS 42020:2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.

	suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time.
Confirmed roost	Evidence of bats or use by bats found.

Badger

2.9 All habitats within the site boundary were inspected for badger *Meles meles* activity. Whilst on site, the search included evidence of:

- Scratching posts
- Faeces
- Latrines
- Guard-hairs
- Paw prints
- Trackways

Dormouse

2.10 Hedgerows, scrub and treelines within and bordering the surveyed site were assessed for their suitability to support breeding populations of hazel dormice *Muscardinus avellanarius*, as well as suitability to provide connectivity to nearby suitable breeding habitats.

European Hedgehog

2.11 The site was assessed for its suitability to support European hedgehog *Erinaceus europaeus*, a UK Biodiversity Action Plan species and Species of Principal Importance under Section 41 of the NERC Act 2006. Features such as hedgerows, scrub, dense vegetation, log piles, and gaps under fencing were checked for signs of hedgehog activity, including droppings, tracks, or nests. Habitat connectivity with surrounding green spaces was also considered to assess the site's value for hedgehog movement.

Reptiles and Amphibians

2.12 Habitats were assessed for their potential to support reptiles and amphibians, including great crested newt *Triturus cristatus* (GCN). Waterbodies typical of those utilised for breeding and foraging activity, and terrestrial refugia suited to sheltering and basking such as waste heaps and plastic/metal/timber sheeting were noted if present (see limitations). In addition, any dense vegetation including tall ruderal and scrub that is connected to hedgerows and linear tree features was inspected during the assessment.

Nesting Birds

2.13 The survey included a thorough inspection of all suitable habitats across the site for evidence of nesting birds, including both common and notable or protected species. Vegetation such as trees,

shrubs, hedgerows, and areas of dense ground cover were examined for nests, nesting material, and any signs of recent or historical nesting activity.

- 2.14 All accessible features within the site that offer potential nesting opportunities were assessed to determine whether the proposed development could adversely affect nesting birds. All wild birds, their active nests, and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). An active nest is defined as one under construction, containing eggs or chicks, or one where fledged chicks are still dependent on the nest site. Additional legal protections apply to bird species listed under Schedule 1 of the Act, such as barn owl *Tyto alba*, which are protected from disturbance during the nesting period.
- 2.15 The survey also considered the presence or likely presence of notable and protected bird species. Indicators such as droppings, feathers, vocalisations, or other signs of use were recorded, and areas commonly used as perches or nest sites—such as tree forks, hedgerow bases, and scrub thickets—were closely inspected where accessible.

Limitations

- 2.16 The absence of evidence for a particular species does not confirm its absence from the site. Many wildlife species are cryptic in nature, transient, or may use habitats sporadically, and could therefore go undetected during a single survey visit.
- 2.17 Signs of some protected species, such as droppings, can degrade rapidly due to environmental exposure. As such, a lack of visible field signs should not be taken as definitive evidence of absence.
- 2.18 Many UK bat species roost in natural crevices such as tree holes, split limbs, or behind loose bark. These features are often difficult to inspect thoroughly during tree assessments, particularly when using ground-based survey methods.
- 2.19 One pond was located within a 250 m radius of the site. Access to this waterbody was not obtained for Habitat Suitability Index (HSI) due to lying on private land, however, as the site offers overall poor terrestrial habitat for great crested newt, this was not considered significant and did not affect the conclusions made within this report.
- 2.20 Local biological records were not obtained. In light of the limited scale of the proposed development and low ecological value of the site, the absence of data from the Local Environmental Records Centre (LERC) is not considered to significantly constrain the findings or conclusions of this appraisal.
- 2.21 No further limitations are associated with the ecological survey.

3 RESULTS

Desk Study

Designated sites

- 3.1 According to the MAGIC website, no statutory or non-statutory designated sites exist within a 2 km radius and no internationally designated sites, such as special areas of conservation (SACs) designated for their bat populations, exist within a 10 km radius of the site.

Granted European Protected Species Licences (EPSL) within a 2km radius

- 3.2 According to the MAGIC website, a single EPSL has been granted at a site located 1.9 km to the south-east for common pipistrelle *Pipistrellus pipistrellus* bats. No EPS licences have been granted for other protected species and no GCN Class Survey Licence returns were identified, although two positive Pond Surveys (2017-2019) for GCN were identified 800 metres to the east and 1.6 km to the south-east of the site.

Surrounding Habitats

- 3.3 The site is located within a predominantly rural setting, characterised by agricultural land use. The surrounding landscape within a 2 km radius is dominated by pastoral fields with occasional arable rotations, interspersed with a well-established network of hedgerows, many of which contain mature standard trees. Built development within the wider area is sparse and mostly limited to isolated dwellings or small clusters of farm buildings.
- 3.4 Although the wider environment is generally open and farmland-dominated, a total of seven blocks of Deciduous Woodland (Priority Habitat under Section 41 of the NERC Act 2006) are present within the 2 km search area. The closest of these woodland patches is situated approximately 220 m to the south-west of the site. In addition, three parcels of Ancient Woodland, comprising both Ancient Semi-Natural Woodland and Ancient Replanted Woodland as listed on the Ancient Woodland Inventory, occur within the local landscape. The nearest of these is located approximately 1 km to the north-east of the survey boundary.
- 3.5 Other notable habitats in the surrounding area include a small parcel of Woodpasture and Parkland (a UK Priority Habitat) located approximately 1.7 km to the north-west. Grassland Priority Habitats were also recorded, including two parcels of Lowland Calcareous Grassland and a single area of Lowland Meadow, all situated approximately 900 m to the west of the site. These habitats are recognised for their species-rich assemblages and are of high biodiversity value. A minor watercourse flows east to west approximately 600 m to the south of the site; however, there are no significant wetland habitats associated with this feature in the immediate area.

- 3.6 No further Priority Habitats were identified within the 2 km search radius, and the landscape remains relatively open and intensively managed for agriculture, with scattered semi-natural features of ecological interest providing some level of habitat diversity within the wider countryside.

Local waterbodies

- 3.7 Through use of aerial imagery and the MAGIC website, one pond was identified within a 250 metre radius of the site, approximately 220 metres to the north-east at National grid Reference: ST 97473 88528. This pond was not accessed for HSI assessment (see limitations).

Field Survey

- 3.8 Weather conditions during the daytime assessment are shown in the below table. Temperatures were recorded onsite using an Elitech RC-51 Temperature Logger.

Table 2: Weather conditions during Preliminary Ecological Appraisal

Date	Start	Finish	Temp °C	Wind	Cloud %	Rain	Notes
18/07/2025	10:30	12:00	25	5 km/h	8	Dry	N/A

Onsite Habitats

- 3.9 The application site is situated at the northern extent of an agricultural field which was formerly under arable cultivation but has more recently been established as a rye grass *Lolium perenne* and clover *Trifolium* spp. ley. This area is intensively managed, resulting in a uniform and tightly mown sward with a low presence of broadleaved forbs. The grassland displays characteristics consistent with a modified or improved ley pasture.
- 3.10 The site is enclosed on all four sides by established native hedgerows. The northern and eastern boundaries are defined by species-rich, regularly managed hedgerows composed predominantly of native woody species and interspersed with mature standard trees of broadleaved composition. The western boundary hedgerow is structurally intact but currently unmanaged and exhibits a denser basal structure. The southern boundary features a short stretch of well-maintained beech *Fagus sylvatica* hedgerow running adjacent to the existing vehicular access point.
- 3.11 Mature trees are frequent within the hedgerow network, particularly along the eastern and western boundaries, and contribute to the site's vertical habitat structure. These trees include ash *Fraxinus excelsior*, oak *Quercus robur*, field maple *Acer campestre*, and hawthorn *Crataegus monogyna*, among others.
- 3.12 Two residential garden plots lie adjacent to the northeastern and southwestern corners of the site, with boundary treatments consisting of wooden post-and-wire fencing and ornamental beech hedging.

The current access route enters the site from the south, while a proposed new access point is located on the northern boundary and will require partial removal of the eastern hedgerow. No standing waterbodies or ponds were recorded within the site boundary.

- 3.13 The individual habitat types recorded at the site are described under the sub-headings below, using the UK Habitat Classification (UKHab) framework, with the location and extent of each illustrated in the Habitat Map in Figure 2.

c1b – Cropland: Temporary grass and clover ley

- 3.14 The dominant habitat within the survey boundary is a field under temporary grass and clover ley, previously of arable use and recently reseeded with a mixture dominated by perennial rye grass *Lolium perenne* and white clover *Trifolium repens*. The sward is tightly managed, with a uniform height maintained below 5 cm, reflecting regular cutting. The vegetation is species-poor, supporting limited botanical diversity and offering a relatively homogenous improved grassland landscape. This habitat currently covers the majority of the site, though it is understood that an undetermined portion will be lost to accommodate the proposed development of an agricultural building and associated access track.
- 3.15 Field margins along all boundaries support strips of unmanaged grassland, approximately 1 m in width. These field margins are structurally diverse, with a variable sward height and dense grass tussocks reaching up to 100 cm in height. The grassland is dominated by false oat grass, with abundant Yorkshire fog, cocks foot *Dactylis glomerata*, and frequent perennial rye grass. Occasional grasses include smooth brome *Bromus racemosus* and timothy-grass *Phleum pratense*. The forb component is well-represented by dominant bitter dock *Rumex obtusifolius*, cow parsnip *Heracleum sphondylium*, common nettle *Urtica dioica*, and lesser burdock *Arctium minus*. Additional frequent species include creeping buttercup *Ranunculus repens* and creeping thistle *Cirsium arvense*, with occasional wild chamomile *Matricaria chamomilla* and common chicory *Cichorium intybus*. These margins are to be retained in full under current proposals.

h2a5 – Species-rich native hedgerows

- 3.16 This is a well-managed, species-rich native hedgerow situated along the site's eastern boundary. The hedgerow is dominated by field elm *Ulmus minor*, with frequent wych elm *Ulmus glabra*, sycamore *Acer pseudoplatanus*, and occasional common hawthorn *Crataegus monogyna* and elder *Sambucus nigra*. Approximately eight mature broadleaved trees are integrated within the hedgerow, including horse chestnut *Aesculus hippocastanum*, English oak *Quercus robur*, ash *Fraxinus excelsior*, and field elm. Trees vary in age and size, with DBHs ranging from 20 cm to over 100 cm. The hedgerow is generally lacking a consistent understorey, although localised bramble *Rubus fruticosus* is present. A small section of hedgerow at the northern extent is to be removed to accommodate the new access, though none of the mature trees will be affected.

Notable Flora

- 3.17 No notable plant species were identified during the survey and no Schedule 8 or 9 plant species of the Wildlife and Countryside Act 1981 (as amended) were identified on site. An indicative plant species list is provided in Table 3: Plant Species Recorded Onsite. Site habitats are shown in Fig 2: Site Map.

Species

Bats

- 3.18 Several mature trees located within the hedgerows were assessed from ground level for features with the potential to support roosting bats. Notably, a mature ash in the eastern boundary hedgerow and the mature oak trees within western boundary hedgerow exhibit a range of Potential Roosting Features (PRFs), including rot holes, deadwood, and split or broken limbs. These features are considered suitable for supporting crevice-dwelling and cavity-roosting bat species, including pipistrelle *Pipistrellus* spp. and noctule *Nyctalus noctula*. No direct evidence of bat presence, such as droppings or feeding remains, was identified during the survey.
- 3.19 The boundary hedgerows, particularly the western boundary hedgerow which remains unmanaged and connects to a small copse and a broad band of unmanaged grassland, provide a structurally diverse corridor. These features support a high level of connectivity with the wider landscape and are likely to be used by local bat populations for commuting and foraging purposes.

Badger

- 3.20 The main field comprising intensively managed grass and clover ley offers limited foraging or sett-building potential for badgers. However, the boundary habitats, particularly the western margin where the unmanaged grassland is wider and adjoins a dense hedgerow, provide suitable conditions for foraging, commuting, and potential sett construction. A thorough search for field signs of badger activity was undertaken, including for evidence of latrines, snuffle holes, footprints, and sett entrances. No evidence of badger activity was recorded during the field survey.

Dormouse

- 3.21 The central field habitat is of no value to hazel dormouse due to its lack of arboreal connectivity and structural complexity. However, the boundary hedgerows are species-rich and include hazel among other native species, providing suitable foraging opportunities, nesting habitat, and commuting routes. Despite this suitability, no field signs or evidence of dormouse activity (e.g., gnawed hazelnuts or nests) were identified during the survey. Furthermore, connectivity to woodland beyond the site is limited, reducing the likelihood of dormouse presence.

European Hedgehog

- 3.22 No direct evidence of European hedgehog, such as droppings, tracks, or day nests, was recorded during the survey. The short-sward intensively managed grassland that dominates the site provides

limited foraging or sheltering opportunities. However, the unmanaged field margins and hedgerow bases offer more suitable habitat features for foraging and movement.

Nesting Birds

- 3.23 No active nests or signs of nesting birds were recorded during the survey within the site's trees or hedgerows. Nevertheless, boundary hedgerows and their associated mature trees provide high-quality nesting, foraging, and perching habitat for a variety of common garden and farmland bird species, such as blackbird *Turdus merula*, robin *Erithacus rubecula*, and dunnoek *Prunella modularis*. Additionally, areas of unmanaged grassland along the field margins provide some potential nesting cover for ground-nesting species, although no evidence of ground-nesting activity was discovered during the assessment.

Reptiles and Amphibians

- 3.24 The central rye grass and clover ley offers little structural or botanical diversity, and is of low value for reptiles or amphibians. However, the unmanaged grassland field margins offer more suitable habitat features, including tussocky grasses, herbaceous vegetation, and hedgerow bases, which could provide foraging and sheltering opportunities. While these areas present some potential for common reptile species such as slow worm *Anguis fragilis* and common frog *Rana temporaria*, no refugia such as logs, brash piles, or rubble were observed, and no individuals or field signs of reptiles or amphibians were recorded. There are no ponds or permanent waterbodies within the site, and no aquatic breeding habitat for amphibians, including great crested newt, was identified onsite.

4 DISCUSSION & RECOMMENDATIONS

Habitats

- 4.1 The application site lies within a rural agricultural setting, characterised by large fields bordered by hedgerows, interspersed with occasional mature trees and sparse residential development. Within a 2 km radius, several Priority Habitats have been identified, comprising blocks of deciduous woodland, that include areas of Ancient and Semi-Natural or Ancient Replanted Woodland, Wood-Pasture and Parkland, parcels of Lowland Calcareous Grassland and a single area of Lowland Meadow. In addition, the surrounding landscape is largely comprised of improved grassland, arable fields, and hedgerow networks. There are no statutory or non-statutory designated sites within a 2 km radius, and given the small scale of the proposed development, no impacts beyond the site boundary are anticipated.
- 4.2 The habitats within the survey boundary are representative of an intensively managed agricultural field. The central portion of the site comprises a recently established rye grass and clover ley which is species-poor and maintained at a short sward height, resulting in limited botanical interest or ecological value. Marginal areas of the field contain strips of unmanaged grassland, with a more

structurally diverse sward including a range of coarse grasses and ruderal forbs. These field margins offer greater habitat diversity and ecological function than the central sward, and are to be retained under the current proposals.

- 4.3 Species-rich native hedgerows define the field boundaries. These hedgerows support a variety of native woody species and a number of mature broadleaved trees, with the western boundary hedegrow in particular offering a structurally complex and ecologically valuable corridor due to its unmanaged character and connectivity to a small copse and broad field margin. These hedgerows are considered likely to qualify as Priority Habitat under the Natural Environment and Rural Communities (NERC) Act 2006, due to their native species composition and being over 20 metres in length. These hedgerows provide functional ecological links within the wider landscape that will likely support connectivity for a range of species.
- 4.4 The proposed works will involve the construction of a new agricultural building and access track. These will require the removal of an as yet undetermined area of improved grassland and a short section of the eastern boundary hedgerow to facilitate access. No removal of mature trees is proposed. Northern and western boundary hedgerows and all areas of unmanaged grassland will be retained and protected throughout construction. The section of the eastern boundary hedgerow to be removed does not support trees, a significant understorey, or a notable field margin and represents a small fraction of the total hedgerow network onsite.
- 4.5 Overall, the development is considered unlikely to result in significant adverse impacts to local or surrounding habitats. The majority of ecologically valuable habitat will be retained, and the site itself is situated within a broader intensively managed agricultural landscape where Priority Habitats occur at a distance and are well buffered. The loss of a small section of hedgerow and improved grassland is considered minor and will not disrupt habitat connectivity. Nonetheless, appropriate buffer zones should be maintained around retained boundary features, and lighting should be designed to avoid unnecessary illumination of hedgerows and marginal habitats to preserve nocturnal ecological function (see point 4.11).
- 4.6 To avoid negative impacts on the retained boundary habitats during construction and post-development, protective buffer zones are recommended as follows:
- Where works will take place in proximity to hedegrows, a minimum 5 m ecological buffer should be maintained from the base of each retained hedgerow free from construction activity, storage, or soil disturbance.

Species

Bats

- 4.7 A single EPSL has been granted for one common species of bat within a 2 km radius and habitats surrounding the site are considered to have a high level of suitability to support roosting, foraging and commuting activity for bats of various species.
- 4.8 No structures are present within the survey boundary, however, a number of mature trees growing within the boundary hedgerows were found to support Potential Roosting Features (PRFs) suitable for a range of bat species. These include rot holes, split limbs, and cavities typical of features used by crevice-dwelling and cavity-roosting bats. However, all trees identified as supporting PRFs are to be retained under the current proposals, and as such, no further survey effort for bats is required at this stage. If proposals are revised to include the removal or significant alteration of any of these trees, further consultation with a suitably qualified ecologist will be necessary, and a Preliminary Roost Assessment (PRA) or further surveys may be required to assess the likelihood of roosting bats being present.
- 4.9 The structurally complex hedgerows and unmanaged grassland margins across the site provide good foraging and commuting opportunities for local bat populations. To protect these features, it is recommended that nocturnal lighting measures should be considered with a view of retaining darkened corridors for bats.

Nocturnal lighting measures

- 4.10 The insensitive use of external lighting within the proposed development could have a negative impact upon bats using the site for foraging and commuting activity.
- 4.11 As suitable bat habitat occurs within the nearby surrounding environment, low-level lighting measures should be implemented to avoid indirect disturbance to bats and other nocturnal animal species that may exploit local habitats. Measures must be taken to ensure nocturnal animals are safeguarded from inappropriate use of light and noise throughout the hours of night during the construction period, as well as to protect important commuting corridors for bats. Any external lighting installed as part of the development must be used in accordance with Guidance Note 08/23: Bats and Artificial Lighting¹⁰.
- 4.12 Sensitive lighting strategy measures during the construction period are as follows:
- Works must not be carried out after dusk and must not commence until after dawn.
 - Generators and machinery that emit significant noise levels must not be left to run after dusk.
 - LED lighting sources must be used, which generally have a narrower and more directional beam.

¹⁰ <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

- Light spill must be controlled and if lighting is required at night, hooded shields must be fitted to prevent spill onto nearby habitats that are likely to support wildlife, including nearby trees and hedgerows.
- Lighting must not be directed towards any bat or bird compensation features.

4.13 In addition to the above, when selecting appropriate external lighting, the following specifications should be taken into consideration:

- Any external lighting incorporated into the proposed development should be LED luminaires due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats¹¹.
- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used¹²

Badger

4.14 No signs of badger activity were recorded during the field survey, and the intensively managed field offers negligible suitability for sett creation or regular foraging. However, the unmanaged field margins and hedgerow bases, particularly along the western boundary, provide potential commuting routes and intermittent foraging opportunities. As a precaution, Reasonable Avoidance Measures (RAMs) are recommended during the construction phase to ensure that any unexpected presence of badgers is appropriately addressed. A pre-commencement site walkover by a suitably qualified ecologist is advised if there is a delay between survey and construction.

Dormouse

4.15 The intensively managed central field lacks structural complexity or arboreal connectivity and is unsuitable for hazel dormouse. However, the boundary hedgerows, particularly the west boundary, which includes hazel and remains unmanaged, offer moderate suitability for commuting and foraging dormice. Despite this, no evidence of dormice was recorded during the survey, and habitat connectivity to suitable woodland beyond the site is limited. The proposed development will require the removal of only a small section of hedgerow at the eastern boundary. As the majority of hedgerow habitat will be retained and buffered, no further dormouse survey effort is recommended. RAMs should be implemented during vegetation clearance to avoid potential disturbance to this species, should it be present at low density.

European Hedgehog

4.16 Although no direct signs of European hedgehog were observed, suitable sheltering and foraging habitats exist within the boundary features, particularly the unmanaged field margins and hedgerow

¹¹ Stone, E.L. (2013) *Bats and lighting: Overview of current evidence and mitigation*

¹² Bat Conservation Trust & Institute of Lighting Professionals (ILP) 2023. *Guidance Note 08/23: Bats and artificial lighting in the UK. Bats and the Built Environment Series.*

bases, however, the intensively managed sward of the main field offers little value to hedgehog. The proposed works will result in the loss of a small section of hedgerow, but the majority of suitable hedgehog habitat will be retained. RAMs should be implemented to safeguard individuals during site clearance. These include checking for sheltering animals beneath vegetation, using hand tools in sensitive areas, and maintaining gaps (minimum 130 mm × 130 mm) at the base of any new fencing to allow for hedgehog movement.

Nesting birds

- 4.17 No active nests or signs of nesting birds were identified during the field survey. Nevertheless, the species-rich hedgerows and associated trees provide highly suitable nesting and foraging opportunities for a range of bird species. The proposed removal of a short section of a hedgerow carries the potential to impact nesting birds if undertaken during the breeding season (typically February to August inclusive). To avoid such impacts, it is recommended that works affecting vegetation be timed outside of this period. Where this is not possible, a nesting bird check should be conducted by a qualified ecologist no more than 24 hours prior to works. If an active nest is discovered, a temporary exclusion zone (typically a 5 m buffer) should be established around the nest until the young have fledged and the nest is no longer in use.

Reptiles and Amphibians

- 4.18 The main field is considered suboptimal for reptiles and amphibians due to its short, uniform sward and low structural diversity. However, boundary features such as hedgerows and unmanaged grassland margins offer limited potential for sheltering and foraging for common reptile species (e.g., slow worm, common frog). No refugia such as log piles or rubble were observed, and no individuals or field signs were recorded during the survey. Although two positive pond surveys were identified there are no ponds onsite and a search of public datasets confirms that no European Protected Species Licences (EPSLs) for great crested newt exist within a 2 km radius. Consequently, the risk to reptiles and amphibians is considered low, and no further surveys are required. RAMs should be implemented during vegetation clearance and groundworks to minimise any residual risk, particularly along the western boundary where habitat quality is highest.

Biodiversity Enhancement

- 4.19 A Biodiversity Net Gain (BNG) Assessment will be required to demonstrate that the proposals can deliver at least a 10% net gain in biodiversity value, in accordance with the Environment Act 2021. In addition, the NPPF (2024) outlines obligations of Local Planning Authorities to promote Biodiversity Net Gain where possible:

Bats

- 4.20 In addition to any mitigation that may be required, an option to increase biodiversity relating to bats on site would be to affix one or more bat boxes to mature trees within the site boundary, ideally using

either Schwegler 1FF boxes (or similar) or Schwegler 2F boxes (or similar). Alternatively, they may also be pole-mounted in an appropriate position or fixed to the walls of buildings. Bat boxes must be positioned no lower than 4m above ground level and they must not face in a northerly direction.

Nesting Birds

- 4.21 Swallow populations have declined in England as a result of a lack of nesting sites, and the loss of older buildings, particularly open agricultural structures, has directly contributed to the reduction of nesting opportunities for the species. An effective way to support swallows is by installing artificial nests within new agricultural buildings. Swallows prefer to nest in covered structures and provisions can be made within the new structure by using swallow nest cups, ideally using Schwegler No.10 Swallow Nest (or similar) which are installed internally, leaving a gap of 6cm between the top of the nest and the roof/roof structure. Multiple nests should be positioned at least 1 m apart and the nests should be situated where there is always available access, i.e., through open elevations or permanently open and fixed doors/windows.

5 REASONABLE AVOIDANCE MEASURES

- 5.1 Vehicles will use existing tracks onto and within the construction zone. It is advisable that only building products to be used on the day are brought and stored on the site. If building products need to be stored onsite (e.g. overnight or for more than one day), they will be stored on pallets or retained in bags on pallets to ensure that refuges are not created that may attract animals. Building products should be placed on existing hard standing if possible.
- 5.2 All holes created during the construction period will be filled in and finalised on the same day so as not to leave any pitfall traps. If this is unavoidable, they should be left with a sloping end or ramp to allow animals that may fall in to escape.
- 5.3 Lighting should be carefully considered during the construction phase and post-development. If lighting must be used at night, it should not be allowed to spill over habitats beyond the site boundaries or nearby sensitive features that may be used by nocturnal wildlife and it should only be used when absolutely necessary (see Nocturnal Lighting Measures point 4.11).
- 5.4 Holes should be covered over at night. Also, any pipes over 150mm in diameter should be capped off at night to prevent other animals from entering. Any spoil resulting from excavations will either be spread and compacted within the area on the same day or be removed from the construction area on the same day. It will not be left in loose heaps overnight. All cut vegetation will be removed from the development site and immediate surroundings to avoid use by birds as nesting habitat.

- 5.5 Vegetation within the zone of impact should be cut and maintained at a height of 15 cm or below throughout the development to discourage wildlife including great crested newt from taking refuge within the site boundary.
- 5.6 Should any impacts to protected species be determined during phased development, then all works must cease immediately and Cotswold Environmental be contacted on 07557539979. A European Protected Species Licence may be required from Natural England in order to allow works to proceed further.
- 5.7 Should onsite habitats become significantly overgrown, a new mitigation plan may be required in the form of a site specific Precautionary Working Method Statement (PWMS) which will contain more stringent RAMs.

APPENDIX A: PLANTS RECORDED¹³

Table 3: Indicative plant list recorded on site

Scientific Name	Common Name	DAFOR*
c1b – Cropland: Temporary grass and clover ley		
<i>Lolium perenne</i>	Perennial ryegrass	D
<i>Taraxacum sp.</i>	Dandelion	R
<i>Trifolium repens</i>	White clover	A
Arable margins		
<i>Arrhenatherum elatius</i>	False oat-grass	D
<i>Holcus lanatus</i>	Yorkshire fog	A
<i>Dactylis glomerata</i>	Cocks foot	A
<i>Lolium perenne</i>	Perennial rye-grass	F
<i>Bromus racemosus</i>	Smooth brome	O
<i>Phleum pratense</i>	Timothy-grass	O
<i>Rumex obtusifolius</i>	Bitter dock	D
<i>Heracleum sphondylium</i>	Cow parsnip	D
<i>Urtica dioica</i>	Common nettle	D
<i>Arctium minus</i>	Lesser burdock	D
<i>Ranunculus repens</i>	Creeping buttercup	F
<i>Cirsium arvense</i>	Creeping thistle	F
<i>Matricaria chamomilla</i>	Wild chamomile	O
<i>Cichorium intybus</i>	Common chicory	O
h2a5 – Species-rich native hedgerows		

¹³ Plant names according to Rose F, O'Reilly C (2006) The Wild Flower Key, Revised Edition. Penguin Books, London.

<i>Fraxinus excelsior</i>	Ash	F
<i>Prunus spinosa</i>	Blackthorn	D
<i>Crataegus monogyna</i>	Common hawthorn	A
<i>Cornus sanguinea</i>	Common dogwood	O
<i>Sambucus nigra</i>	Elder	O
<i>Ulmus minor</i>	Field elm	D
<i>Acer campestre</i>	Field maple	F
<i>Corylus avellana</i>	Hazel	O
<i>Ilex aquifolium</i>	Holly	O
<i>Aesculus hippocastanum</i>	Horse chestnut	F
<i>Quercus robur</i>	Oak	D
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Taxus baccata</i>	Yew	R

*D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

APPENDIX B: LEGISLATION SUMMARY

Habitats Directive

Species listed in the Habitats Directive 1992 (transposed into UK law through the Conservation of Habitats and Species Regulations 2010 and subsequently 2017 as amended) for which it is illegal to deliberately capture, kill or disturb any individual, or deliberately damage or destroy a breeding site or resting site. In 2007 and 2009, the Habitats Regulations were amended to define illegal disturbance as that which would affect the ability of a significant group of animals of a European Protected Species to survive, breed or to rear or nurture their young, or to hibernate or migrate, or to affect the local distribution or abundance of the species.

Natural Environment and Rural Communities (NERC) Act 2006

The act to makes provision about bodies concerned with the natural environment and rural communities; to make provision in connection with wildlife, Sites of Special Scientific Interest, National Parks and the Broads; to amend the law relating to rights of way; to make provision as to the Inland Waterways Amenity Advisory Council; to provide for flexible administrative arrangements in connection with functions relating to the environment and rural affairs and certain other functions; and for connected purposes.

Countryside and Rights of Way (CRoW) Act 2000

The CRoW applies to England and Wales only, enforcing a statutory policy for biodiversity conservation. The UK Biodiversity Action Plan (BAP) provides the framework for fulfilling the UK's responsibilities towards the Convention on Biological Diversity. The CRoW Act is compliant with the

provisions of the European Convention on Human Rights, requiring consultation where the rights of the individual may be affected by these measures.

The Conservation of Habitats & Species Regulations 2017 (the Habitat Regulations) (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations came into force on 30th November 2017 and extend to England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters). In Scotland, the Habitats Directive is transposed through a combination of the Habitats Regulations 2010 (in relation to reserved matters) and the and the Conservation (Natural Habitats &c.) Regulations 1994. The Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) transpose the Habitats Directive in relation to Northern Ireland.

Bats

In England and Wales, bats and their roosts are protected under the Conservation of Species and Habitats Regulations 2017 (as amended) and the Wildlife & Countryside Act 1981 (as amended). Taken together, this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not
- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being 'any structure or place that is used for shelter or protection' and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

Reptiles

All native British species of reptile (of which there are six) are listed in Schedule Five of the Wildlife and Countryside Act (1981) (as amended) and as such are protected from deliberate killing, injury or trade. Therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without an appropriate licence.

Great Crested Newts

Great crested newts and their habitats receive protection under The Conservation of Habitats and Species Regulations 2017 (as amended). This species is also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under such legislation it is an offence to:

- Intentionally or recklessly kill, injure or capture a great crested newt;
- Possess or control any live or dead specimen or anything derived from a great crested newt;
- Intentionally or recklessly* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- Intentionally or recklessly* disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.

*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.

Badger

Badger is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6 of the Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to Badgers and Badger setts and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

Dormouse

The dormouse has undergone substantial declines in recent years as a result of habitat loss, deterioration and fragmentation and is consequently protected as a 'European Protected Species' under the 2017 Conservation of Habitats and Species Regulations, which implements the EC Habitats Directive 92/43/EEC in the United Kingdom. In relation to European Protected Species (EPS), the 2017 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of a EPS;
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to:
(i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate or (ii) affect significantly the local distribution or abundance of the species to

which they belong;

- Damage or destroy a breeding site or resting place of such an animal; and/or
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

In addition, Dormice are protected under the 1981 Wildlife and Countryside Act (as amended).

Dormice are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a Dormouse while it is occupying a structure or place which it uses for shelter or protection; and/or
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a Dormouse.

Birds

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended).

Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

APPENDIX C: MAPS & SITE PLANS

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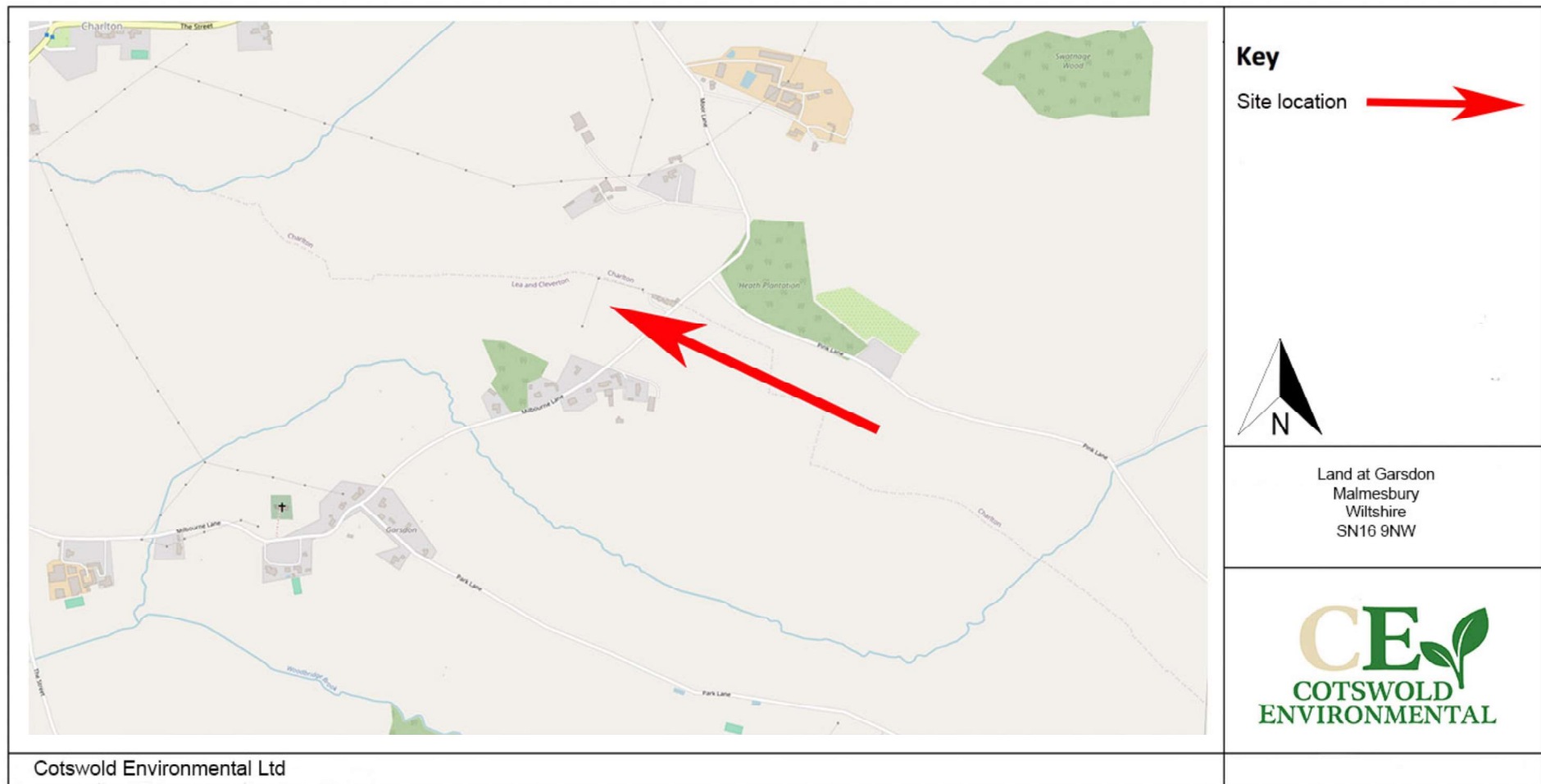


Figure 1: Location Map

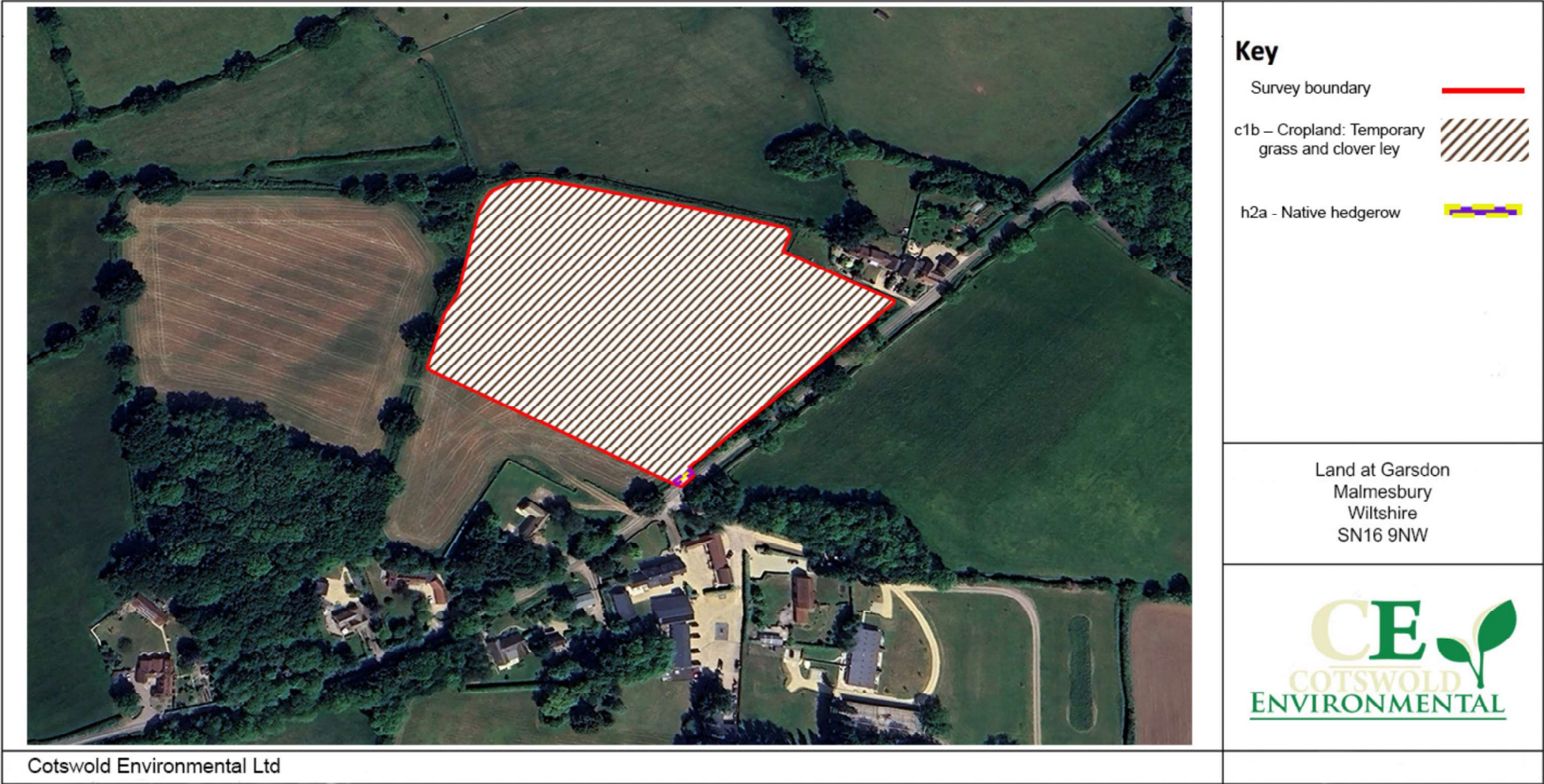


Figure 2: Habitat Map

APPENDIX D: SITE IMAGES



Photo 1: The eastern roadside boundary of the field where the new access is proposed.



Photo 2: The existing access track located at the south of the field.



Photo 3: The site of the proposed new building in the north-western corner of the field.



Photo 4: Eastern boundary hedgerow



Photo 5: A mature horse chestnut tree which grows within eastern boundary hedgerow.



Photo 6: Northern boundary hedgerow, outside of application boundary



Photo 7: Western boundary hedgerow which grows along the western boundary of the field.



Photo 8: A mature oak tree which grows within western boundary hedgerow.



Photo 10: Cropland: Temporary grass and clover ley which dominates the field.



Photo 11: A broken limb on a mature tree located within a hedgerow serving as an example of a PRF.



Photo 12: A rot hole in a mature tree located within a hedgerow serving as an example of a PRF.