

Greena Ecological Consultancy

***PRELIMINARY ECOLOGICAL
ASSESSMENT REPORT***

Green Acres

Blounts Court

Potterne

SN10 5QF

12th May 2025

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Brief

A preliminary ecological assessment report was requested to support a full planning application to erect a self-build residential building and adjacent parking and garden area. Access is to be created from an area of modified grassland connected to existing access and a public road.

This ecological survey is intended to ascertain sufficient information to evaluate the situation adequately in preparation of the above-mentioned works. The information gathered will be necessary to comply with European regulations, which are connected with planning regulations and with The Wildlife and Countryside Directives and Habitat Regulations. Consultation with the Local Planning Authority, Wiltshire Council, is required.

Summary

- Greena Ecological Consultancy was instructed by Context Planning, planning consultant of proposed development, to undertake a desktop survey, field survey and following Preliminary Ecological Appraisal to support a planning application (PL/2024/11095)
- The survey site is comprised of an area of modified grassland, wooden fence, stone wall and areas of trees.
- The site was inspected on the 22nd of April 2025.
- Surrounding the affected site are mature trees, during the daytime survey on the 22nd of April 2025 no obvious features with bat roost potential were identified and no mature trees are to be lost in proposed plans. Habitats on site and surrounding the site include mature hedgerows, a traditional orchard and areas of woodland as well as grassland. Affected site is currently subject to little artificial light and the habitat on and directly surrounding the site was therefore deemed to provide moderate potential for foraging and commuting bats. Proposed development is not to exceed more than 0.5 lux at any bordering hedgerows or trees post development and a light scheme is to be produced and accepted prior to work commencing.
- There were no obvious signs of nesting birds on site, the trees and hedgerows surrounding the site are however deemed as highly suitable for nesting birds and any work affecting the trees (including pruning) is not to be performed during the nesting bird season (March- August inclusive).
- During the daytime survey on the 22nd of April 2025 there were no signs of badgers on site or within 30m of the site. The visual search included animal paths, hairs/fur on branches, latrine and entrances for setts.
- There were no signs of reptiles on site during the daytime survey on the 22nd of April 2025. The grassland is however deemed to provide potential for reptiles and vegetation is to be cut in stages. Reptiles are deemed as more likely to be present near bordering hedgerows and mature trees.
- The pond located adjacent west of the site had clear signs of amphibians present during the daytime survey. This includes hundreds of tadpoles present, likely to be *common frog (Rana temporaria)* and it is advised work around the pond for when amphibians are likely to be in the pond and in terrestrial habitat to avoid harming any animals. The pond was also deemed as suitable for *great crested newts (Triturus cristatus)*, DNA analysis of water samples determined absence of the species in the pond and no further mitigation measures are required.
- *Hedgehogs (Erinaceus europaeus)* can potentially move through the site, especially in the north and eastern area of the site.

1. Introduction

1.1 Background

Greena Ecological Consultancy was instructed by Context Planning, planning consultant of the proposed development, to undertake a desktop survey, field survey and following Preliminary Ecological Appraisal report to support a full planning application for a self-build residential property and adjacent parking and a sunken garden with ferns and water features. Proposed plans further include landscaping of nine native trees and scrub areas. Affected site includes an area of traditional orchard, mature hedgerows along the northeast and south boundary which is not affected by proposed plans.

Greena have carried out extensive fieldwork for bats in the area where at least 15 bat species have been recorded.

The surrounding habitat offers high quality roosting and foraging opportunities for bats, birds, mammals and amphibians as well as other biodiverse subgroups.

1.2 Legislation

1.2.1 National Planning Policy

Conserving and enhancing the natural environment:

- Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas and should be given great weight in National Parks and the Broads⁵⁹. The scale and extent of development within all these designated areas should be

limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

- When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:
 - The need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
 - The cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
 - Any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.
- Within areas defined as Heritage Coast, planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate unless it is compatible with its special character.

Habitats and biodiversity:

- To protect and enhance biodiversity and geodiversity, plans should:
 - Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶¹; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- 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 reasons⁶³ 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.

- The following should be given the same protection as habitats sites:
 - Potential Special Protection Areas and possible Special Areas of Conservation;
 - Listed or proposed Ramsar sites; and
 - Sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.
- The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

1.2.2 Bats

All UK bat species and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5, under the Countryside and Rights of Way Act 2000, and under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Regulations designate bats as European Protected Species (EPS).

Taken together, the Acts and Regulations protecting bats make it an offence to:

- Deliberately kill, injure, capture or take bats;
- Deliberately disturb bats. This particularly relates to disturbance that is likely to:
 - Impair their ability to survive, breed or reproduce, or to rear or nurture their young;
 - Impair their ability to hibernate or (for migratory species) migrate; and/or
 - Affect significantly the local distribution or abundance of the species to which they belong.
- Damage or destroy bat roosts;
- Possess or transport a bat or part of a bat, unless acquired legally; and
- Sell, offer for sale or exchange bats or parts of bats.

A roost is any structure or place used for shelter or protection. Bats need to have access to a number of roosts because they use different roosts depending on season, breeding status and prevailing weather conditions. For this reason roosts are protected whether or not bats are present at the time.

As bats are designated EPS, development and building works that are likely to result in the disturbance of bats, damage to or destruction of their roosts, or require bats to be caught or translocated, usually require an EPS licence to be obtained from Natural England before any works begin. Obtaining a licence involves completing an Application Pack, including a Method Statement that details mitigation appropriate to maintaining the 'favourable conservation status' of the local bat population. Three conditions must be met before a licence can be granted:

- There is no satisfactory alternative;
- The development will not be detrimental to the maintenance of local bat populations at a 'favourable conservation status' in their natural range; and
- The development must be for 'imperative reasons of overriding public interest including those of a social or economic nature'.

An EPS licence is required for all development activities if there is a reasonable likelihood that an offence against Conservation of Habitats and Species Regulations 2017 (as amended), Wildlife and Countryside Act 1981 (as amended) or Environmental Damage Regulation 2009 (as amended) will be committed.

The following offences could potentially be committed by carrying out the proposed development if any bat species are present during the conversion works:

- Capturing or killing – a wild animal of a European Protected Species (EPS) could be deliberately captured, injured or killed (Reg 41(1)(a));
- Disturbing EPS – a wild animal of an EPS could be deliberately disturbed including in particular a disturbance which is likely to impair its / their ability to survive or hibernate (Reg 41 (1)(b));
- Disturbing EPS whilst occupying a structure or place used for shelter or protection – includes intentional and reckless disturbance (s9 (4)(b) WCA); and
- Damage of an EPS breeding site or resting place – (Reg 41 (1)(d)) – strict liability.

The above stated offences can be avoided where works are to take place when bats are not present and bat roost will be maintained unchanged. If roost is going to be available to bats at the time they usually occupy the structure, a continued ecological functionality of the site will be preserved. Suitable mitigation measures must be put in place prior, during and post works to ensure that continued ecological functionality will be maintained.

In case the above listed offences cannot be guaranteed to be avoided throughout the proposed development, an EPS licence to derogate must be sought.

The full EPS licence generally applies if the proposed development is to cause greater than low ecological impact. A simpler and faster way of carrying out development with low ecological impact had been implemented by Natural England under the Bat Mitigation Class Licence (BMCL). It involves BMCL Registered Consultants who can supervise the proposed low impact development under their personal class licence, the need for preparation and processing of an EPS licence is vastly reduced. The development is carried out under a site registration prepared for the works and under the supervision of the licensed ecologist. BMCL only covers low impact development affecting low numbers of “common” bats and providing the site in question does not serve as a maternity or hibernation roost.

1.2.3 Birds

In the UK, with the exception of 13 ‘pest species’ of birds, which may be killed by authorised persons only, wild birds have general protection under the Wildlife and Countryside Act (1984). It is an offence to: kill, injure or take a wild bird; take, damage or destroy nests (in use or being built); and take or destroy eggs. Under Schedule I of the Act, some species (including the barn owl *Tyto alba*) are protected by special penalties at all times.

Birds receive additional protection under the European Communities Council Directives on the Conservation of Wild Birds. This directive relates to the conservation of all species of birds naturally occurring in the wild in European territory of the Member States, as well as their nests and habitats.

If any of the above resulted from a person being reckless, even if they had no intention of committing the offence, their action would still be considered an offence.

1.2.4 Badgers (*Meles meles*)

Badgers (Meles meles) are protected in Britain by the Protection of Badger Act 1992 as well as the Wild Mammals (Protection) Act 1996. The purpose of the Badger Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause harm.

Under this legislation it is an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger, or attempt to do so
- Interfere with a sett by damaging or destroying it

- Obstruct access to, or any entrance of a badger sett
- Disturb a badger when it is occupying a sett

If any of the above resulted from a person being reckless, even if they had no intention of committing the offence, their action would still be considered an offence.

The following activities will generally require a licence from Natural England:

- Works undertaken using heavy machinery (generally tracked vehicles) within 30m of an active sett entrance
- Using lighter machinery (generally wheeled vehicles), particularly for any digging operation within 20m of an active sett entrance
- Light work such as hand digging or scrub clearance within 10m.

No offence will be committed if no parts of the sett will be damaged during works and if badgers are not occupying the sett at the time of works.

1.2.5 Reptiles

All reptile species native to the UK are afforded legal protection under the Wildlife & Countryside Act 1981 (as amended). All native reptile species are protected in respect to their deliberate killing and injury only. Protection is not extended to their habitat. There are 6 native species of reptile which occupy the UK and all of them are UK Biodiversity Action Plan (BAP) priority species. *Sand lizard (Lacerta agilis)* and *Smooth snake (Coronella girondica)* are the rarest with restricted distribution (possible to occur in Somerset although more commonly found in south England) and protection under both, the UK and European legislation.

Common lizard (Zootoca vivipara) and *Slow worm (Anguis fragilis)* are widespread and still common throughout much of England, in a wide variety of habitat types. *Grass snake (Natrix natrix)* is still fairly common throughout most of southern England and parts of lowland Wales but is rarer further north. *Adder (Vipera berus)* has become much less common in recent years but is still frequent in some areas of Britain (Gasc et al. 2004, Beebee & Griffiths 2000, Arnold 1995). Our view from the many site surveys we carry out is that *Slow-worm (Anguis fragilis)* are still common in many areas but *Grass snake (Natrix natrix)* and *Common lizard (Zootoca vivipara)* less so. *Adders (Vipera berus)* are becoming decidedly rare. The Wildlife and Countryside Act 1981 (as amended) provides protection for the *Slow-worm (Anguis fragilis)*, *Common lizard (Zootoca vivipara)*, *Grass snake (Natrix natrix)* and *Adders (Vipera berus)* from deliberate killing and injury. Sale and related commercial activities are also proscribed. Edgar, Foster & Baker (2010) note declines in all the common reptile species in Britain in recent years, in some places severe. Factors may include:

- Habitat and micro-habitat degradation;
- Changes in land use such as agriculture and development;
- Fragmentation of habitats and population isolation;
- Ecological succession;
- Predation by domestic cats (and pheasants) and disturbance by dogs;
- Fire (especially moors and heaths);
- Inappropriate conservation/habitat management;
- Overgrazing;
- Invasive exotic plant species;
- Damage to habitats by excessive visitor pressure/off-road vehicles;
- Deliberate killing by people, especially Adder, Grass snake and Slow worm.

1.2.6 Hazel dormice (*Muscardinus avellanarius*)

The *hazel dormouse (Muscardinus avellanarius)* is legally protected under schedule 5 of the Wildlife and Countryside Act 1981(as amended) and protected under the Conservation of Habitats and species Regulations 2010 (as amended).

Collectively and in summary:

Intentionally or deliberately kill, injure or capture dormice

Intentionally, deliberately or recklessly disturb dormice in such a way as to be likely to significantly affect the ability of any significant group of dormice to survive, breed, or rear or nurture their young or the local distribution of or abundance of the species;
Intentionally or recklessly damage, destroy or obstruct access to places used by Dormice for shelter or protection (whether occupied or not) or intentionally or recklessly disturb a dormouse whilst it is occupying such a place;

- Damage or destroy a breeding site or resting place of a dormouse;
- Possess or transport a dormouse (or any part thereof) unless under licence; and sell or exchange dormice.

Development proposals affecting the dormouse require a European Protected Species licence from Natural England.

The dormouse is a 'Species of Principal Importance for the conservation of biodiversity' (sometimes referred to as a "Priority Species"), listed under section 41 of the NERC Act 2006.

Section 40 (S40) of the Act places a 'Biodiversity Duty' on all public bodies to have regard to the conservation of biodiversity when carrying out their normal functions. This includes giving consideration to the restoration and enhancement of species and habitats.

1.2.7 Great Crested Newt (*Triturus cristatus*)

The *Great Crested Newt* (*Triturus cristatus*) is protected under European and British legislation. Under European legislation it is protected under EC Directive (92/43/EEC) 'The Conservation of Natural Habitats and of Wild Fauna and Flora', being listed under Annexes IIA and IVA. This is implemented in Britain under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and is further protected under the Conservation of Habitats and Species Regulations 2010.

This prohibits the intentional killing of newts, the deliberate taking or destruction of eggs, damage or destruction of a breeding site or resting place, intentional/reckless damage to or obstruction of a place used for shelter or protection, possession of a great crested newt and any form of trade of great crested newts.

Under British legislation, the great crested newt is given full protection under Section 9 of the Wildlife and Countryside Act 1981 (as amended). This Act transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention').

This prohibits the intentional killing, injuring or taking, possession or disturbance of great crested newts whilst occupying a place used for shelter or protection and the destruction of these places. Protection is given to all stages of life (e.g. adults, sub-adults, larvae, and eggs).

In combination the above legislation prohibits the following:

- Intentionally kill, injure or take 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;
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose;
- Deliberately capture or kill a great crested newt;
- Deliberately disturb a great crested newt;
- Deliberately take or destroy eggs of a great crested newt;
- Damage or destroy a breeding site or resting place of a great crested newt

Great crested newt (*Triturus cristatus*) has also been identified in the UK Biodiversity Steering Group

Report, Volume 2: Action Plan (UK BAP, 1995), as a priority species requiring conservation action and consequently, an Action Plan has been developed for the conservation of this species. The following are cited within the UK Action Plan as causing loss and decline:

Loss of suitable breeding ponds caused by water table reduction, in-filling for development, farming, waste disposal, neglect or fish stocking and the degradation, loss and fragmentation of terrestrial habitats.

Pollution and toxic effects of agrochemicals.

1.2.8 Hedgehog (*Erinaceus europaeus*)

Hedgehogs (Erinaceus europaeus) are listed on schedule 6 of the Wildlife and Countryside Act 1981 (as amended), which makes it illegal to kill or capture wild hedgehogs. The species is also listed under Wild Mammals Protection Act (1996), which prohibits cruel treatment of *hedgehog (Erinaceus europaeus)* and the species is listed as a species of 'principal importance' under the Natural Environment & Rural Communities Act 2006, which confer a duty of responsibility to ensure minimal impact on the species for local planning authorities when making decisions. *Hedgehogs (Erinaceus europaeus)* are in serious decline, a major factor is deemed to be loss and damage of suitable habitat, depriving the species of both food and shelter from predation. In urban areas, the use of impermeable fencing, loss of greenery in gardens and increasing development is thought to be negatively impacting hedgehog populations too. Another threat is roads, with many thousands of hedgehogs killed by cars each year.

2. Aims & Objectives

The aim of the survey and supporting desk study was to satisfy the requirements of the National Planning Policy Framework (NPPF), identify ecological features within or near the site that could potentially pose a constraint to the proposed development and opportunities for incorporating biodiversity enhancements into the development proposals. The following ecological features were relevant to the survey carried out by Greena Ecological Consultancy:

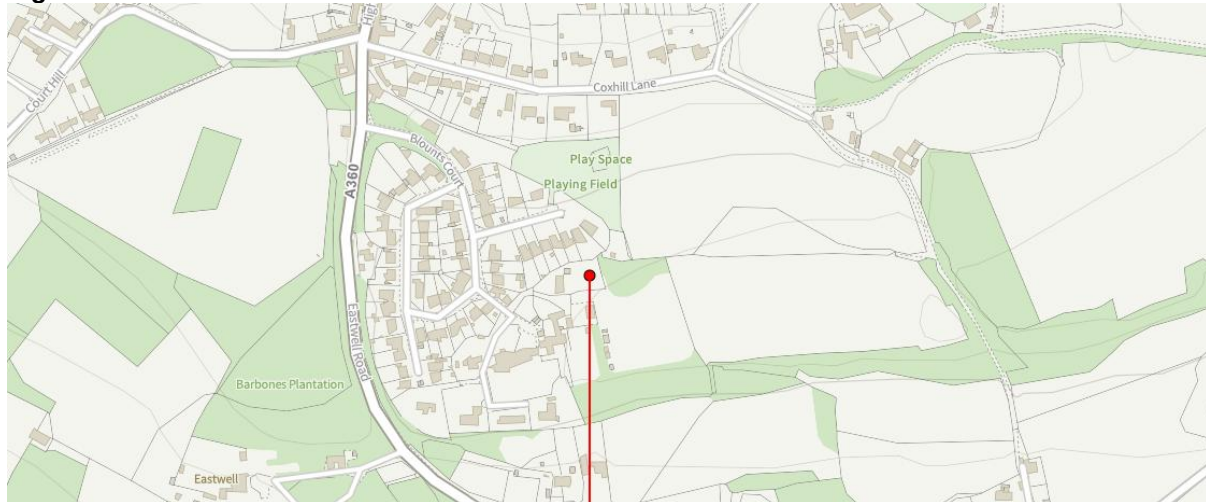
- Proximity of statutory and non-statutory designated wildlife sites;
- Proximity of Habitats and Species of principal Importance, or local Biodiversity Action Plan (BAP) habitats and networks of these habitats.
- Legally protected wildlife species; and
- All other species of wildlife potentially affected by the proposed development

This report has been produced with reference to current guidelines for preliminary ecological appraisal (CIEEM, 2017).

3. Site Description

The site is located in the village of Potterne at OS grid reference ST9969558181 (see Figure 1). Affected site lies in a residential built-up area with similar residential buildings on the north, south and west elevations. The nearest woodlands lie 115m south, the nearest hedgerows lie on the northern boundary, and the nearest agricultural land lies 53m east of the site.

Figure 1: Site Location



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3.1 Site Description

The site comprises of two areas of grassland, two hedgerows and an orchard, directly west of affected site lies a garden pond with a *silver birch* (*Betula pendula*) growing around it. Surrounding an area of modified grassland is a fence, both wooden and a stone wall. Access is obtained from a public road onto a track leading to proposed access.

The eastern part of site consists of modified grassland with a short grass sward, this grassland extended to the access area. In the southeast part of the site is an area of traditional orchard, this area is to mainly to be retained.

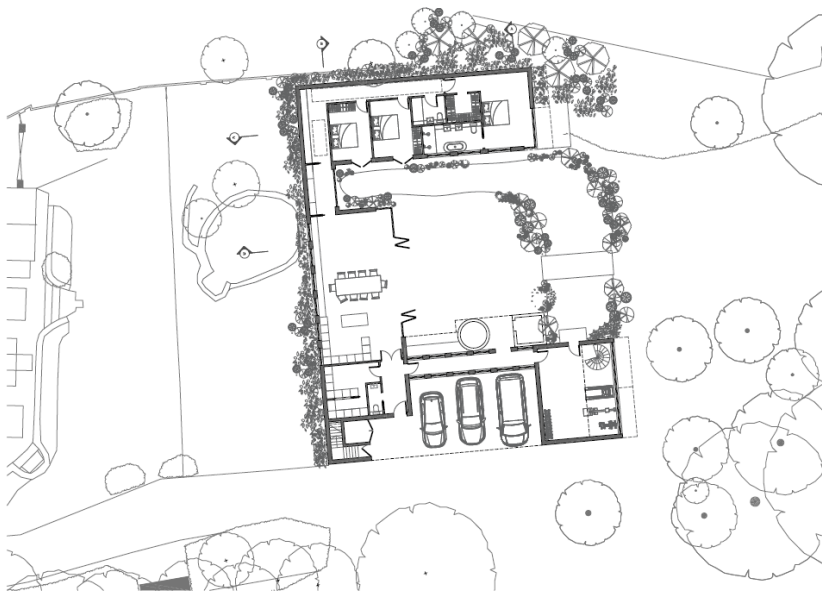
The north and south boundary of site consist of hedgerows with trees, these are to be retained post development. Some trees are however required to be trimmed for safe access. Directly west of affected site lies a garden pond with *south african waterweed* (*Aponogeton distachyos*), *yellow flag* (*Iris pseudacorus*), *water lily* (*Nymphaea spp.*) and *rush* (*Juncus spp.*). The owner has previously stated that there has been fish and newts present in the pond. Surrounding the pond is a patio area.

The site owners aim to retain all tree possible and to incorporate enhancement for biodiversity post development.

Figure 2: Location Plan



Figure 3: Proposed Plans



Photographs 1 - 3: The Pond & Tree near Pond



Photograph 4: The Patio

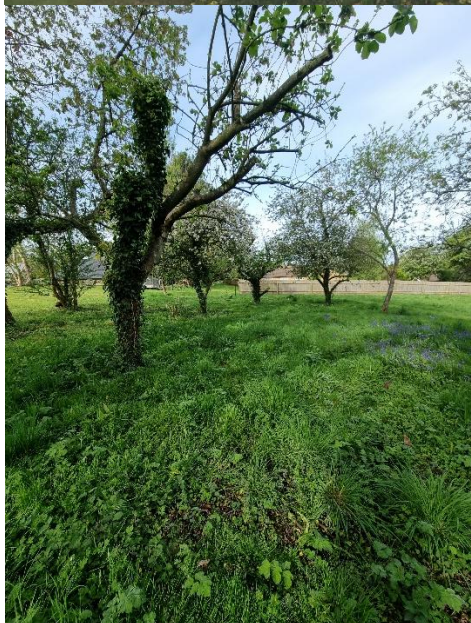
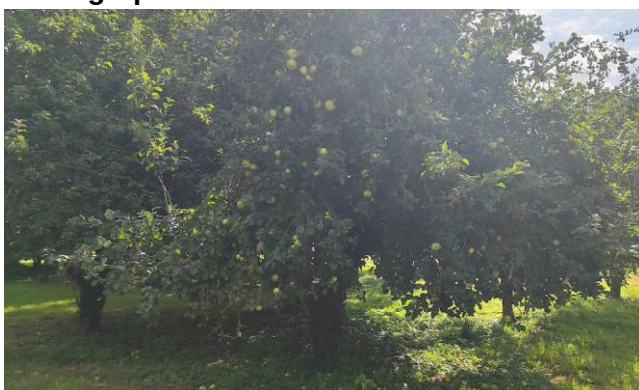


Photograph 5-9: North Hedgerow





Photographs 10-12: Orchard



Photograph 13: Grassland North of Site



Photographs 14-15: Grassland in current amenity grassland

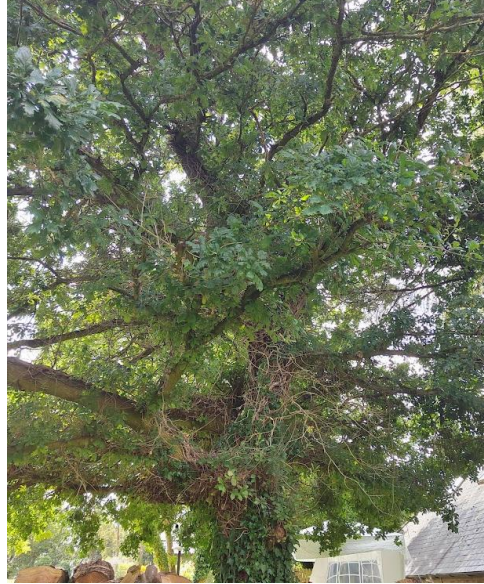


Photographs 16-17: Proposed access

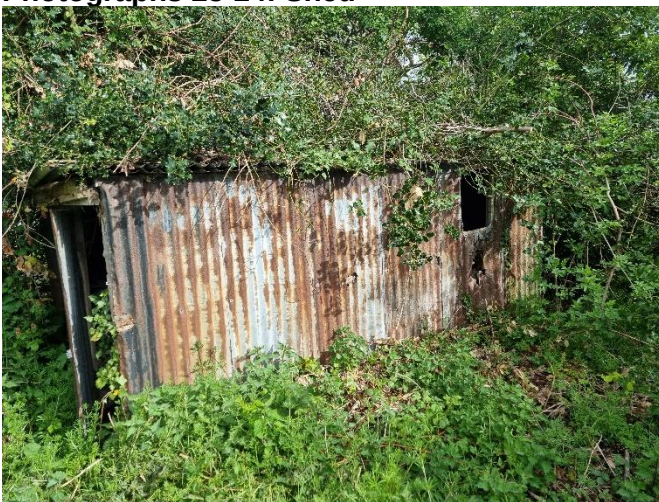


Photographs 18-22: South Hedgerow





Photographs 23-24: Shed





Photograph 25: Access from public road



4. Methods

Surveyor Line Andresen BSc Hons, assistant ecologist at Greena Ecological Consultancy, working under Geoff Billington MCIEEM (Greena Ecological Consultancy, holder of Natural England class 3 & 4 bat survey licences) licence, undertook a daytime inspection of the site on the 22nd of April 2025.

No overall desktop search has been carried out for bat records because already 15 bat species have been recorded by Greena and others in the local area including the four more common Annex II species, so this assemblage are taken to be the species occurring in the area.

Searches were made for the following:

- Past records in this actual site;
- Nearest designated site; and
- Nearest bat licence that has been issued

Instruments at hand if needed throughout the field survey were a high-end torch (Glaryligh – GL-P70-DK-A), ladder, binoculars and suitable field guides.

4.1 Habitats

A walkover assessment of the site was conducted to assess habitats, UK Habitat Classification System Version 2.0 (2023) was used.

4.2 Bats

The site was surveyed for potential bat roost features and the habitat was assessed as high potential for foraging and commuting bats.

4.3 Birds

The site was inspected during the daytime visit in April 2025 for nesting birds, to locate signs of use such as nests and/or droppings.

4.4 Badgers

The site was inspected during the daytime visit in August 2023 for badger signs. Visual inspection was utilized.

4.5 Amphibians & Great Crested Newts (*Triturus cristatus*)

The site was inspected during the daytime visit in April 2025 for *great crested newts* (*Triturus cristatus*) and the habitat was assessed for suitability. Visual inspection was utilized.

4.6 Reptiles

The site was inspected during the daytime survey in April 2025 for signs reptiles and the habitat was assessed for suitability to reptile species. Visual inspection was utilized.

4.7 Other

The site was inspected and assessed for other protected and rare fauna and flora.

5. Report Limitations

An ecological survey is limited by factors that affect the presence of plants and animal, this includes time of the year, migration and behaviour. As the field survey was performed in April flowering plant species and grass species could have been missed.

Furthermore, species and features can be missed during the inspection due to the human factor and even though the ecological survey present species present on site, this is not a definite list of all species on-site and evidential absence of other species is not be taken as conclusive proof that the species is not present or will be present on the affected site.

The result of the desk- and field surveys are deemed to provide significant proof of habitats and species affected by proposed plans. Over time habitats and species supported within habitats can change through natural processes and human interference. Therefore, is this report valid for two years, in line with current guidelines, and thereafter the site will need re-surveying and the report updated accordingly to new findings.

6. Results

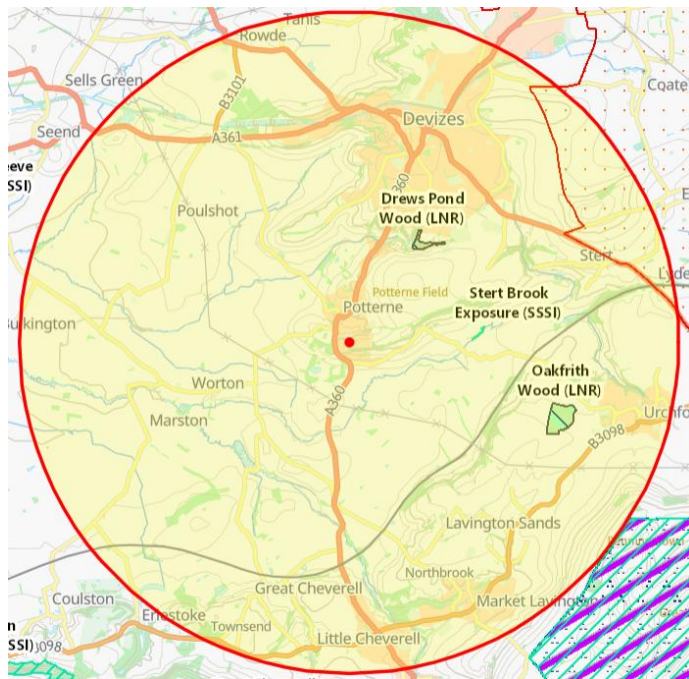
Greena Ecological Consultancy has previously conducted a daytime survey in August 2023 following a desktop survey and produced a Preliminary Ecological Appraisal for the site, final version November 2023.

6.1 Designated sites

There is multiple nationally and locally designated sites however no internationally designated sites within 5km of the site, presented in figure 4.

The nearest designated site is Stert Brook Exposure Site of Special Scientific Interest (SSSI) located approximately 1.8km east of the site. Salisbury Plain SSSI, Special Area of Conservation (SAC) and Special Protected Area (SPA) is located approximately 5km southeast of the site and affected site lies within the SSSI Impact Risk Zone, however as proposed development is minor no consultation with Natural England is require as per guidance provided by Natural England. Furthermore, proposed development is deemed to not affect internationally protected Salisbury Plain SPA and SAC due to being located in already developed area, the proposed project being minor and at a distance of 5km from protected areas.

Figure 4: Designated sites

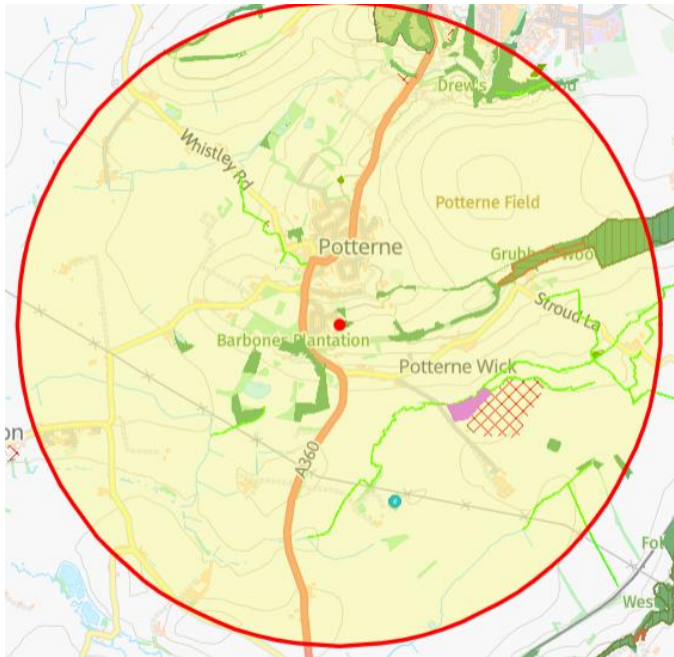


6.2 Habitats

There are multiple areas of priority habitats within 2km of the site. These are presented in figure 5. In accordance with Magic Map affected site lies in an area of priority habitat deciduous woodland, however as baseline evidence shows the area is modified grassland with a mature hedgerow along the north boundary not an area of deciduous woodland. This was confirmed during the daytime survey in 2023 and 2025 as well as historic images on Google Earth dated back to 2002. Magic map further presents an area of traditional orchard present in the east part of the site, this was confirmed during both the daytime survey in 2023 and 2025 as well as historic images on Google Earth.

Priority habitat located further from the affected site include, traditional orchard, ancient woodland, replanted woodland, priority habitat, woodland and parkland BAP, good quality semi-improved grassland and priority pond.

Figure 5: Priority habitat



Field survey performed on the 22nd of April 2025 determined that habitat on site consist of native hedgerows- Hed 1 & Hed 2 (h2a –11, 517, 522, 523 & h2a-11,516, 522, 523), modified grassland- Hab 2 & Hab 5 (g4-106, 516, 522), traditional orchard- Hab 3 (g4-27), built linear feature- Fence (u1e), artificial unsealed surface- Hab 1 (u1c). All habitats were assessed and identified in accordance with UK Habitat Classification (2023). Species present on site are presented in table 1 and baseline habitats are presented in figure 6.

Figure 6: Habitats on site

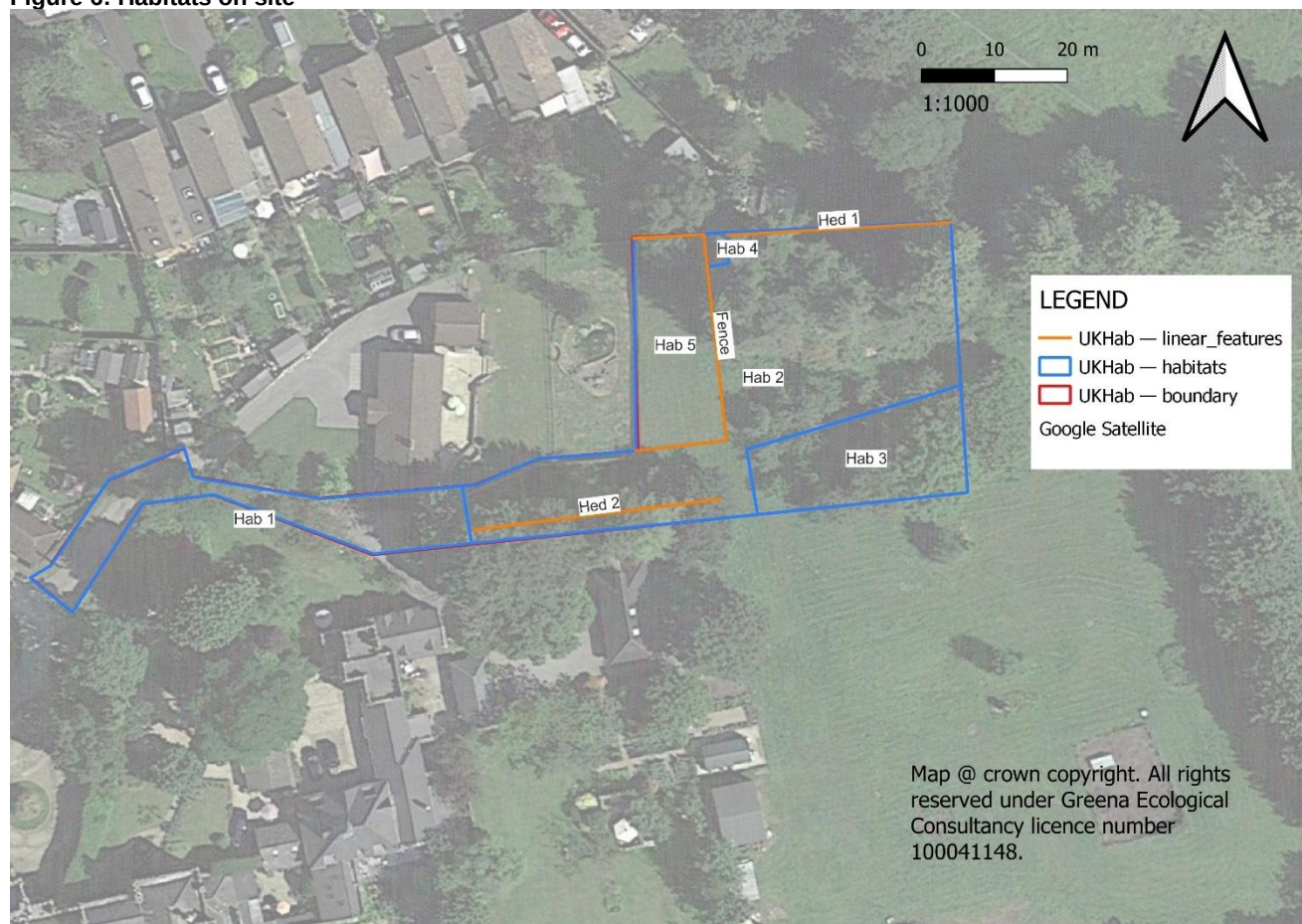


Table 1: Species

Vernacular	Taxon	Abundance	Ref	Date
Common Nettle	<i>Urtica dioica</i>	Frequent	Hab 2	22/04/2025
Lords-and-Ladies	<i>Arum maculatum</i>	Rare	Hab 2	22/04/2025
Cow Parsley	<i>Anthriscus sylvestris</i>	Abundant	Hab 2	22/04/2025
Ground-ivy	<i>Glechoma hederacea</i>	Frequent	Hab 2	22/04/2025
Yorkshire-fog	<i>Holcus lanatus</i>	Dominant	Hab 2	22/04/2025
Soft rush	<i>Juncus effusus</i>	Rare	Hab 2	22/04/2025
Red Fescue	<i>Festuca rubra</i>	Dominant	Hab 2	22/04/2025
Creeping Thistle	<i>Cirsium arvense</i>	Occasional	Hab 2	22/04/2025
Creeping Buttercup	<i>Ranunculus repens</i>	Frequent	Hab 2	22/04/2025
Dandelion	<i>Taraxacum officinale</i> agg.	Abundant	Hab 2	22/04/2025
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Occasional	Hab 2	22/04/2025
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Frequent	Hab 2	22/04/2025
White Clover	<i>Trifolium repens</i>	Abundant	Hab 2	22/04/2025
Spear Thistle	<i>Cirsium vulgare</i>	Abundant	Hab 2	22/04/2025
Bluebell	<i>Hyacinthoides non-scripta</i>	Frequent	Hab 3	22/04/2025
Yorkshire-fog	<i>Holcus lanatus</i>	Dominant	Hab 3	22/04/2025
Creeping Buttercup	<i>Ranunculus repens</i>	Abundant	Hab 3	22/04/2025
Cow Parsley	<i>Anthriscus sylvestris</i>	Abundant	Hab 3	22/04/2025

Dandelion	<i>Taraxacum officinale</i> agg.	Abundant	Hab 3	22/04/2025
Annual Meadowgrass	<i>Poa annua</i>	Abundant	Hab 3	22/04/2025
Common Nettle	<i>Urtica dioica</i>	Frequent	Hab 3	22/04/2025
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Frequent	Hab 3	22/04/2025
Cut-leaved Crane's-bill	<i>Geranium dissectum</i>	Occasional	Hab 3	22/04/2025
Ground-ivy	<i>Glechoma hederacea</i>	Abundant	Hab 3	22/04/2025
Small-leaved Lime		Abundant	Hed 1	22/04/2025
Elder	<i>Sambucus nigra</i>	Abundant	Hed 1	22/04/2025
Beech	<i>Fagus sylvatica</i>	Frequent	Hed 1	22/04/2025
Holly	<i>Ilex aquifolium</i>	Dominant	Hed 1	22/04/2025
Sycamore	<i>Acer pseudoplatanus</i>	Rare	Hed 1	22/04/2025
Bramble	<i>Rubus fruticosus</i> agg.	Abundant	Hed 1	22/04/2025
Cherry Laurel	<i>Prunus laurocerasus</i>	Abundant	Hed 1	22/04/2025
Beech	<i>Fagus sylvatica</i>	Rare	Hed 2	22/04/2025
Holly	<i>Ilex aquifolium</i>	Frequent	Hed 2	22/04/2025
Cherry laurel	<i>Prunus laurocerasus</i>	Frequent	Hed2	22/04/2025
Oak	<i>Quercus</i> spp.	Rare	Hed 2	22/04/2025
Silver birch	<i>Betula pendula</i>	Rare	Hed 2	22/04/2025
Hazel	<i>Corylus avellana</i>	Frequent	Hed 2	22/04/2025
Cleavers	<i>Galium aparine</i>	Frequent	Hab 2	22/04/2025
Common Nettle	<i>Urtica dioica</i>	Abundant	Hab 5	22/04/2025
Yorkshire-fog	<i>Holcus lanatus</i>	Dominant	Hab 5	22/04/2025
Cleavers	<i>Galium aparine</i>	Abundant	Hab5	22/04/2025
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	Abundant	Hab 5	22/04/2025
Ground-ivy	<i>Glechoma hederacea</i>	Frequent	Hab 5	22/04/2025
Annual Meadowgrass	<i>Poa annua</i>	Abundant	Hab 5	22/04/2025

6.3 Bats

Table 2: Bat species recorded in the local area

Bat species recorded in the area	<i>Rhinolophus hipposideros</i> (Lesser horseshoe Bat)
	<i>Rhinolophus ferrumequinum</i> (Greater horseshoe Bat)
	<i>Plecotus auritus</i> (Brown long-eared Bat)
	<i>Plecotus austriacus</i> (Grey long-eared Bat)
	<i>Pipistrellus pipistrellus</i> (Common pipistrelle Bat)
	<i>Pipistrellus pygmaeus</i> (Soprano pipistrelle Bat)
	<i>Pipistrellus nathusii</i> (Nathusius pipistrelle Bat)
	<i>Myotis daubentonii</i> (Daubenton's Bat)
	<i>Myotis bechsteinii</i> (Bechstein's Bat)
	<i>Myotis mystacinus</i> (Whiskered Bat)
	<i>Myotis brandtii</i> (Brandt's Bat)
	<i>Myotis nattererii</i> (Natterer's Bat)
	<i>Eptesicus serotinus</i> (Serotine Bat)
	<i>Barbastella barbastellus</i> (Barbastelle Bat)
	<i>Nyctalus noctule</i> (Noctule Bat)

No bat records at this site are known and there are no European Protected Species (EPS) licences for bats species within 2km of the site. There are 9 records of *common pipistrelles bats* (*Pipistrellus pipistrellus*) recorded between 2007 and 2012 within a 2km radius of the site on National Biodiversity Network.

There were no signs of bats being present on site. In the south boundary hedgerow four trees with bat roost potential due to ivy cover was identified:

- 1x *Oak* (*Quercus spp.*) – moderate roost potential
- 2x *European larch* (*Larix decidua*) – moderate bat roost potential
- 1x *Beech* (*Fagus sylvatica*) – low roost potential

The habitat on site and directly surrounding the site provides a mix of fruit trees, hedgerows with mature trees and grassland. The existing pond directly west of the site further contributes to diverse habitat creating opportunities for foraging and commuting bats.

6.4 Birds

No obvious evidence of nesting birds was identified on site. However, existing trees and hedgerows on site and bordering the site are deemed to provide high suitability for nesting purposes.

6.4 Badgers

There were no signs of badgers on site and within 30m of affected site. Visual inspection included searching for latrine, animal paths and hair/fur on branches.

6.5 Amphibians & Great Crested Newts (*Triturus cristatus*)

Habitat for *great crested newts* (*Triturus cristatus*) does occur on site due to the pond and surrounding grassland with taller grass sward, furthermore the client has previously seen newts in the pond area. An eDNA analysis was performed on the pond and result came back as *great crested newts* (*Triturus cristatus*) being absent on site. Habitat Suitability Index (HSI) for the pond directly west of affected site was calculated as average (0.57).

The pond present on site had a large number (hundreds) of tadpoles present during the daytime survey on the 22nd of April 2025. Further habitat deemed as suitable for amphibians on site include grassland with slightly taller vegetation, especially near bordering existing hedgerows east of existing wooden fence. Surrounding the pond with tadpoles is a wooden fence with no gaps east and south and a stone wall is located north of the pond. The only elevation with a mean of movement through is north of the site, an existing residential building is present, however gates with gaps provide access for animals to pass through. Habitats further west include residential built-up areas and public lanes/roads.

6.6 Reptiles

Areas of grassland east of existing wooden fence is deemed to provide suitable habitats for reptiles as the grass sward is tall enough to provide shelter for animals to move through. It is deemed as especially likely that individual reptiles would be present in the grassland near the north boundary hedgerow.

6.7 Other

Other species considered to potential be present on affected site or moving through the site is *European hedgehog (Erinaceus europaeus)*. Hedgerows present on site were deemed to provide suitability for *European hedgehog (Erinaceus europaeus)* and the species can move through the grassland west of existing wooden fence. There are 19 records of *European hedgehog (Erinaceus europaeus)* within 2km of the site between 2005-2024.

7. Conclusions

7.1 Designated sites & Habitats

The proposed plans are deemed to not affect any designated sites, internationally, nationally or locally. This is due to not being located near any protected sites and due to the small-scale development proposed in an area with already human interference.

The habitats on site range from very low distinctiveness to medium distinctiveness. The native hedgerow consists of ground flora including indicator species for woodland habitat. The hazel scrub present on site provide higher ecological value as the scrub provides shelter, forage and other opportunities for a range of animal species.

Proposed development enhancement includes enhancing areas of hazel scrub and further planting of native trees along the east boundary towards the public road. All grassland is to be over sown with a local wildflower mix and to create stepping blocks between habitats it is proposed to leave wilder areas, especially towards hedgerow and scrub.

7.2 Bats

During the daytime survey on the 22nd of April 2025 no obvious signs of bats were identified in any trees within affected trees. Trees present along the south boundary are to be retained in proposed plans, some will be pruned but none felled, and therefore will any potential roosting features for bats be retained. However, if this is changed further bat activity surveys are required on four trees, 1x *Oak (Quercus spp.)* – moderate roost potential, 2x *European larch (Larix decidua)* – moderate bat roost potential and 1x *Beech (Fagus sylvatica)* – low roost potential.

The habitats on-site were deemed to offer moderate potential for foraging and commuting bats due to the diverse habitat including fruit trees, hedgerows with mature trees, grassland and the pond directly west of affected site. These features create opportunities of foraging and commuting bats. Affected site is currently not subject to large amount of artificial lights which further creates suitable flight routes for bats.

Proposed plan is to include installation of a bat box on proposed building and any proposed lighting is not to illuminate retain hedgerow and trees by more than 0.5 lux. Furthermore, the

planting of native trees is deemed to create further opportunities for foraging and commuting bats.

7.3 Birds

During the daytime survey 22nd of April 2025 no obvious signs of nesting birds were found in existing trees and hedgerows. Hedgerows and trees present on site were deemed as highly suitable for nesting bird. Nesting birds are protected under Wildlife and Countryside Act (1984) and have additional protection under the European Communities Council Directives on the Conservation of Wild Birds legislation, birds habitat are however not protected unless under designated protected sites. To ensure no nesting birds are harmed no clearing of vegetation or any work affecting hedgerows or trees are to take place within bird nesting season (March – August inclusive).

7.4 Badgers (*Meles meles*)

The site had no evidence (sett, animal paths, hair, latrine etc) of *badgers (Meles meles)* during the daytime survey on the 22nd of April 2025. The hedgerows bordering the site to the north was deemed to as suitable for *badgers (Meles meles)* and individuals can move through the site and therefore should precautionary approach be applied throughout construction. This includes keeping the site tidy with any material stacked on pallets to avoid creating refugia which could be used by protected species. Any excavation deeper than 1m and any pipework with a diameter larger than 120mm should be covered overnight to ensure no animals fall in and get trapped. Furthermore, any animals found should be allowed to disperse naturally. *Badgers (Meles meles)* are deemed as more likely to be present north and east of the site with areas of grazed pasture and agricultural land is present.

7.5 Amphibians & Great Crested Newts (*Triturus cristatus*)

eDNA analysis of the pond water determined that *great crested newts (Triturus cristatus)* are absent on site. The newts previously identified by the owner may be *smooth newt (Lissotriton vulgaris)* or *palmate newt (Lissotriton helveticus)*. During the survey on the 22nd of April hundreds of unidentified tadpoles were identified in the pond. The tadpoles are deemed as likely to be *common frog (Rana temporaria)*, due to surrounding habitat and the character of the pond, however this could not be confirmed. To ensure minimal risk of animals being harmed in proposed development it is advised that work on terrestrial habitat away from the pond is planned for the late spring when amphibians are expected to be in the pond and work affecting the aquatic habitat is planned for late autumn when amphibians are likely to be on land.

7.6 Reptiles

The grassland present east of existing wooden fence was deemed to provide potential for reptiles. Especially grassland adjacent to the existing hedgerow along the north boundary of the affected site.

7.7 Other

Hedgehog (Erinaceus europaeus) was identified to potentially be impacted by proposed plans. Following best practice methods for reptiles and cut vegetation in stages is deemed to reduce the risk of harm to any potential *hedgehogs (Erinaceus europaeus)* individuals.

No other protected species are deemed to be affected by proposed plans due to the small scale development within an already developed site. The site does have potential to increase value for wildlife by planting native trees, over sow areas with a local wildflower mix, allow for areas to become wilder and create a sunken garden with water features are all deemed to

further create more diverse habitats. Furthermore, a bee brick is to be installed proposed building.

8. Mitigation & Enhancement

8.1 Habitats

8.1.1 Trees

Enhancement of habitats on site include; planting native trees, over sow grass areas with a local wildflower mix and create a sunken garden area with water features.

Native trees are to be planted surrounding proposed dwelling. Species deemed as suitable for the site are;

English Oak (Quercus robur), Wild cherry (Prunus avium), Beech (Fagus sylvatica), silver birch (Betula pendula), Wild pear (Pyrus pyraster) and Crab apple (Malus sylvestris).

When planting the ground should be prepared 1m around each tree being planted, it is advised this is done by physical stripping due to the small scale of the site. The choose of trees being planted can range from maiden to larger trees. Maidens require less initial impact on the soil, it can be limited to relieving soil impaction and removing larger stones if present, however each maiden will need protection like tree guards from disturbance. When planting a T or a X should be created in the soil prior to inserting the tree and then place to soil back.

If larger trees are planted pit planting is preferred. The hole should not be more than 50cm deep and accommodate the roots without bending them. The hole can be dug mechanically, however filling the hole should be done by hand to avoid root damage. Each hole should be dug as close to planting as possible and water filling the hole should be avoided. The removed soil for each hole should be placed in separate piles, turf, topsoil and any subsoil. Large stones need removing and the sides and bottom of the pit should be broken up to ensure better drainage and root penetration. Before planting each tree, a stake should be driven vertically into the bottom of the hole, this will allow the tree's roots to be arranged around the stake. The position of the stake should be on the upwind (usually south-west) of the tree to prevent the stake and tree rubbing. Furthermore, the stake should extend 30cm above ground level and around 10-15cm from the stem of the tree. Some topsoil (not the removed turf) should be placed in the bottom of the hole to bed the roots on. The tree should be placed in the hole so the root collar (the original soil mark on the trunk) is level with the top of the hole. The tree should be rotated to obtain the best fit ensuring the roots are spread out, at the correct depth and the tips not pointing upwards. Damaged or excessively long roots should be trimmed to fit the hole rather than twirled round the sides. The hole can then be backfilled with the remaining soil, whilst shaking the tree gently and ensuring it stays vertical. Guards are to be installed to protect trees from wildlife, on this site deer is of specific concern. Guards design for cattle or sheep, with sheep guards being the cheaper option, can be used to protect trees from deer as long as the guards are at least two metres.

Larger trees can be planted all year around, however planting should be avoided within periods of draught, hard frosts (most likely January and February) or particular cold and windy periods. If trees are planted in spring and summer regular watering will be required. Bare rooted trees should be planted November- March before coming into leaf, however like larger trees planting should be avoided during hard frosts (most likely January and February) or particular cold and windy periods. Late autumn/ early winter is generally the best time to plant as the soil still holds warmth which allows the trees to become established prior to spring.

Through the first 3 years circle of 1m should be kept clear around each tree to ensure limited competition for water and nutrient. This can be done through a range of methods, however for this site mulching is recommended due to readily accessible composted manure. The first five years of planting requires careful and active management to ensure the success of established orchard. After 1-2 years the roots should be strong enough to support stem and tree for the

stake to be removed. To test if the stake can be removed the tie should be cut and the tree pushed gently to the side, if the tree returns to upright position the stake can be removed gently or alternatively cut at soil level. If removed the hole should be filled in with soil. Guards should protect trees from disturbance for at least 10 years and requires regular checks to ensure efficient protection.

8.1.2 Grassland

It is advised to leave areas of grassland to allow to grow wilder and act as buffer areas for wildlife. Furthermore, to create microclimates for invertebrates and increase soil health a wildflower mix is to be over sown in retained and created grass areas. A local wildflower mix is to be used.

8.2 Bats

Enhancement measure post development includes installing at least one bat box on proposed building. A bat box is to be installed as close to eaves as possible to avoid predators (at least 4m above ground), sheltered from strong winds and partly exposed to the sun daily. A bat box should be facing away from any artificial light sources. Bat boxes suitable for the site are Schwegler 1FF and Schwegler 1FTH.

Furthermore, the scheme is to not illuminate hedgerow and trees present on site by more than 0.5 lux. The light scheme is to be created and approved prior to any work commencing. If trees deemed to have low or moderate bat roost potential are to be removed further bat activity surveys are required. Any tree with low bat roost potential requires one bat activity survey between May-September and any tree deemed to have moderate bat roost potential require two bat activity surveys between May- September, with at least one bat activity survey being performed between May- August.

8.3 Birds

Post development enhancement includes installing at least one bird box on proposed building. Bird boxes suggested are Schwegler No 17 Swift Nest Box, Schwegler 1SP Sparrow Terrace, Schwegler 1B Nest Boxes, Schwegler 2H Robin Boxes or Woodstone Nest Box. If swift and sparrow boxes are installed these should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction. If tree boxes are installed these should be positioned approximately 3m above ground, sheltered from prevailing wind, rain and strong sunlight. Bird boxes for passerine birds are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. In proposed garages it is advised to install swallow cups. Swallow cups are to be installed high inside an external building where birds can launch and fly away safely and comfortably.

8.4 Amphibians & Great Crested Newts (*Triturus cristatus*)

No further mitigation measures are required for *great crested newt* (*Triturus cristatus*). As tadpoles were identified during the daytime survey it is advised to plan different stages affecting the pond and terrestrial habitat to ensure minimal risk of animals being harmed. It is advised that work on terrestrial habitat away from the pond is planned for late spring when amphibians are expected to be in the pond and work affecting the aquatic habitat is planned for late autumn when amphibians are likely to be on land.

8.5 Reptiles

When clearing vegetation this is to be performed in two stages, the first stage is to cut vegetation to 30cm from the ground, leave for at least 24 hours (48 hours is ideal) prior to performing the second cut as close to ground as possible. When cutting this is to be done from one direction to the other in a systematic way. When the second cutting has been performed

the grass sward is to be kept short and if it is allowed to grow taller same procedure when cutting the vegetation is to be performed. This will allow for any animals present to disperse naturally and ensure no reptile species are harmed.

8.6 Other protected species

Creating a sunken garden with water features and planting of native trees and scrub will create microhabitats for invertebrates and through further plant biodiversity enhance soil health. A bee brick on proposed building is to be installed which will create further provisions for bees to nest and proposed shrub will ensure feeding source.

To ensure animals can move through the site holes for wildlife are to be implemented in any fences installed (at least 13cm x 13cm). Furthermore, native scrub and trees will further create foraging, sheltering and nesting opportunities for a range of species. *European hedgehog (Erinaceus europaeus)* is an identified species with potential presence on site and a hedgehog refugia is to be installed along the north boundary hedgerow to further provide sheltering and nesting opportunities.

Figure 7: Mitigation/Enhancements



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Appendix A

Result of *Great Crested Newt (Triturus cristatus)* eDNA analysis.

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus*, inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN25 0005	Green Acres	ST 9969 5817	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Amy Bermudez

Approved by: Lauryn Jewkes