



**MKA**  
ECOLOGY

# **Construction Ecological Management Plan**

Arnolds Farm, Ickleford

|                       |                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------|
| Site                  | Arnolds Farm, Ickleford                                                                       |
| Project number        | 110921                                                                                        |
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#### Declaration of compliance

This Construction Ecological Management Plan has been undertaken in accordance with British Standard 42020:2013 "Biodiversity, Code of practice for planning and development". The information which we have provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.



MKA Ecology Ltd is a CIEEM Registered Practice. This means that MKA Ecology Ltd are formally recognised for high professional standards, working at the forefront of our profession.

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# 1. EXECUTIVE SUMMARY

In February 2025 MKA Ecology Ltd was commissioned to produce a Construction Ecological Management Plan (CEcMP) for the proposed development at Arnolds Farm, Ickleford.

Previous ecological surveys at the Site identified constraints relating to nesting birds, mammals, hedgehogs, reptiles, bats, existing scrub, hedgerows, and trees, and amphibians (MKA Ecology Ltd, 2023). The key actions to be undertaken to avoid adverse impacts upon these protected species groups are as follows:

- **On-site habitats:** All retained trees and scrub must be protected with either temporary chestnut paling or chain link fencing prior to works commencing to prevent accidental damage to ecological features of importance.
- **Invasive non-native plants:** Spanish bluebell is present on-site; this is an invasive non-native species this should be removed and disposed of appropriately from the Site to minimise the risk of this species spreading into the wild.
- **Reptiles:** Vegetation clearance of the scrub and rubble piles/log piles onsite will be supervised by an Ecological Clerk of Works (ECoW)
- **Amphibians:** Vegetation clearance of the scrub and rubble piles/log piles on-site will be supervised by an Ecological Clerk of Works (ECoW).
- **Invertebrates:** Clearance of the deadwood and log piles on-site will be supervised by an Ecological Clerk of Works (ECoW).
- **Birds:** Vegetation clearance works undertaken between the months of March and August inclusive will require an experienced ornithologist to conduct a nesting bird check beforehand.
- **Bats:** A sensitive lighting scheme will be required if lighting is to be included within the construction plans.
- **Mammals:** Pre-commencement check for badger setts and current usage of fox earth, and precautionary mammal safeguards for hedgehog, rabbits and foxes. The fox earth may need to be hand dug between September and February, inclusive).

## 2. INTRODUCTION

### 2.1. Aims and scope

A development project will be undertaken at Arnolds Farm, Ickleford. The project concerns the removal of scrub and development of nine residential dwellings with associated garages and gardens.

MKA Ecology Ltd have undertaken a suite of ecological assessment at Arnolds Farm, Ickleford, which have identified a number of ecological features that will require consideration during the construction phase. The purpose of this CEcMP is to put in place measures to ensure that ecological features are protected for the during of the construction period, or where impacts are anticipated, appropriate measures are proposed to minimise these impacts.

### 2.2. Management responsibility

Adherence to this CEcMP at Arnolds Farm, Ickleford, will be the responsibility of the allocated on-site contractors during construction works. They will be supported, in parts, by the Ecological Clerk of Works, MKA Ecology Ltd, for particularly sensitive activities, or where specialist experience is required. Where this support is required, it is clearly set out in this Construction Ecological Management Plan. The Ecological Clerk of Works will be available to discuss any matters arising with the main contractor.

### 2.3. Timescales for implementation

The exact timescales for construction are not known at this stage, but it is anticipated that site clearance will begin in March 2025.

### 2.4. Planning context

Permission was granted for the project at Arnolds Farm, Ickleford on appeal (ref: 22/02205/FP). Condition 16 of the permission relates to the Construction Ecological Management Plan. In addition to ensuring the protection of key ecological features at Arnolds Farm, Ickleford, this document will also serve the purpose of discharging this condition. Condition 16 states;

*'No development shall take place (including demolition, ground works, vegetation clearance) until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall be informed by an up-to-date ecological appraisal and include the following;*

*a) Risk assessment of potentially damaging construction activities.*

- b) Identification of "biodiversity protection zones".*
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).*
- d) The location and timing of sensitive works to harm to biodiversity features.*
- e) The times during construction when specialist ecologists need to be present on site to oversee works.*
- f) Responsible persons and lines of communication.*
- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.*
- h) Use of protective fences, exclusion barriers and warning signs.*

*The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority Reason: To safeguard local biodiversity and to comply with Policy NE4 of the Local Plan'.*

## **2.5. Background and existing site ecology**

A suite of ecological surveys was undertaken at the Site in 2021-2023. These surveys informed the following ecological reports that have been submitted with the planning application:

- Preliminary Ecological Appraisal (MKA Ecology Ltd, 2021)
- Preliminary Ecological Appraisal (MKA Ecology Ltd, 2023)

Arnolds Farm is located in Ickleford, Hertfordshire (centred on OS grid reference TL 18192 31812) and falls under the authority of North Hertfordshire District Council. The Site comprises mixed and bramble scrub, grassland habitat, areas of tall ruderal vegetation, native hedgerow, and scattered early mature trees which can be seen in Figure 1 (MKA Ecology Ltd, 2023).

The Preliminary Ecological Appraisal (PEA) (MKA Ecology Ltd, 2023) had initially recommended reptile surveys to determine likely presence/absence should be undertaken. A Site walkover was completed in February 2025 to confirm whether or not the existing recommendations are still valid based on the current habitats on-site. The succession of bramble and blackthorn scrub onto pockets of grassland have reduced potential for foraging. However, a more considered evaluation of the ground conditions within the prevailing grassland revealed evidence of historical disturbance to the ground layer due to soil and debris depositing, possibly related to neighbouring developments. Given the extent of ground level disturbance, and the absence of suitable contiguous habitat, it is thus considered very unlikely that a relict population of reptiles could persist in such circumstances. However, precautionary working measures are required, due to the lack of conclusive evidence of absence of this species group.

No evidence of badger setts or signs of badger and hedgehog activity were recorded during the Site visits, although suitable habitat is present on-site, especially for hedgehog. No bat roosts were identified

although an early mature ash tree is present on-site covered in dense ivy which can obscure potential roosting features. As the tree is being retained, a sensitive lighting scheme has been recommended for the scattered trees on-site during and after construction. The earth and log mounds and rubble piles provide suitable refugia for amphibians as well as reptiles and stag beetles. The dense scrub habitat and early mature trees are suitable for breeding and nesting birds, and the abundant elm scrub could support white letter hairstreak butterflies.

The ecological features identified as requiring protection measures include:

- On-site habitats – the scrub and trees that is to be retained along the perimeter of the Site must be protected during construction works;
- Invasive non-native plant species – the Spanish bluebells present onsite are to be removed and disposed of properly to minimise the risk of spreading into the wild;
- Reptiles and amphibians – clearance of earth and log mounds and rubble piles to be supervised by an Ecological Clerk of Works (EcoW);
- Invertebrates – clearance of deadwood and log piles to be supervised under an Ecological Clerk of Works;
- Birds – sensitive timing of works or nesting bird check;
- Bats – sensitive lighting scheme; and,
- Mammals – pre-commencement check of potential refugia and fox earth, and safe working methods.

Figure 1: Habitats at Arnolds Farm, Ickleford



**Target notes for Figure 1**

| Target Note   | Details                                                         |
|---------------|-----------------------------------------------------------------|
| Target Note 1 | Earthen mound                                                   |
| Target Note 2 | Semi-mature ash tree with bat roost potential – dense ivy cover |
| Target Note 3 | Spanish bluebells                                               |
| Target Note 4 | Fox earth                                                       |
| Target Note 5 | Earth and logs mound                                            |
| Target Note 6 | Rubble pile from demolished building                            |
| Target Note 7 | Earth and rubble pile                                           |

## 3. PROTECTION OF ECOLOGICAL FEATURES DURING CONSTRUCTION

### 3.1. Risk assessment of potentially harmful construction activities

The proposed development is for the creation of nine to ten residential dwellings and associated hardstanding and landscaping. The development will result in the loss of modified grassland, and mixed and bramble scrub.

The development will directly impact areas of the grassland, trees, and scrub. Given the potential presence of various species of mammal, reptiles, amphibians and breeding birds, Site clearance, and general construction activities all have a risk of causing harm to wildlife in the absence of appropriate controls.

Sensitive control measures and mitigation have been outlined in detail in the following sections. These measures will minimise the risk of any harmful construction activities accordingly.

### 3.2. Habitats

The trees together with patches of scrub that are to be retained all have ecological value and must be protected from harm during works.

Prior to the clearance of scrub all trees and the perimeter of the scrub to be retained will be demarked using a stream of warning tape along the edge of the retained scrub. The Ecological Clerk of Works (ECoW) supervising the scrub removal will work with contractors to ensure such areas are protected. Vegetation that is to be removed adjacent to the retained scrub and trees should be cut back utilising hand tools in order to minimise any accidental damage.

Following scrub clearance, retained trees and scrub will be protected from the construction works through the implementation of a buffer zone around the boundary, this will form a biodiversity protection zone. The buffer zone and subsequent biodiversity protection zone will be maintained through the installation of Heras fencing, the location of this fencing during development is shown in Figure 1. The Heras fencing should undergo routine maintenance to ensure the fencing remains adequate and any damage or general wear is fixed. The extent of all fencing should be agreed with the ECoW.

### 3.3. Invasive non-native plants

Spanish bluebell *Hyacinthoides hispanica* was identified on the southern and eastern perimeters of the Site during the Preliminary Ecological Appraisal in 2023 (Target Note 3, Figure 1). Spanish bluebell is an invasive non-native species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The Spanish bluebells, along with all bulbs will be removed during construction.

Works to control invasive species should be undertaken by suitably trained and qualified operatives. All areas of the invasive species should be marked and should be undisturbed until any treatment or eradication works. Stockpiles of contaminated soil and vegetative material should be clearly marked and isolated.

Physical removal is achieved by the mechanical excavation of surrounding soil of the Spanish bluebell. It is important to ensure that all plant matter and seeds are removed completely. The plants should be fully excavated, including 500cm of earth surrounding the plants to ensure all the roots have been removed. Plant parts should be disposed of responsibly as these can resprout if left on the ground. It is easiest to dig up the bulbs and roots when the soil is moist. After removal, make sure to monitor the area for any additional bulbs.

Disposal of all plant material and associated soil via an appropriately licenced waste handler and/or waste facility will ensure that contamination offsite is prevented.

### 3.4. Reptiles

Common reptile species are protected from injuring and killing under the Wildlife and Countryside Act (1981), as amended. They are also listed as Species of Principal Importance on the Natural Environment and Rural Communities Act (2006). Although it there is considered to be a very low chance of reptiles being present, the disturbed nature of the ground has created suitable hibernacula for reptiles, amphibians and hedgehog, in the form of log piles, earth mounds, and debris piles and should be hand-checked by an ecologist.

The following measures should be undertaken during works:

#### *Toolbox talk*

All on-site contractors will be made aware of the potential for reptiles to be present during development on-site. A copy of this CEcMP should be available on-site at all times. A guide to identifying reptile species is provided in Appendix 1: Species identification and ecology. All contractors must be familiar with this identification guide prior to works.

#### *Sensitive timing of works*

Works would be best undertaken in late winter and early spring to minimise risk of harm to extant reptiles and amphibians. This would also avoid the breeding bird period from March to August which at this site will be critical to avoid given the large area of inaccessible disturbed scrub.

#### *Habitat manipulation and clearance works*

A supervised two-stage cutting regime will be undertaken to expose the ground layer of the site, this will need to be supervised by an ECoW. Vegetation in these areas will be reduced in height to ground level through habitat manipulation, during which the clearance of vegetation is undertaken in a staged and directional manner. Initially, the vegetation height should be reduced to approximately 30cm minimising disturbance to the ground layer. Once completed the ground layer will be checked by the ECoW for the presence of reptiles, amphibians and hedgehogs. A second supervised cut will reduce vegetation down to ground level. The surface of the soil should then be slowly stripped by mechanical means under supervision of the ecologist.

#### *Hand search*

A destructive search of hibernacula should be conducted under an ecological watching brief. This will involve hand searches of vegetation and rubble and log piles before they are destroyed to ensure that no reptiles or amphibians are present. Any rubble piles or log piles should be deconstructed by hand by the Ecological Clerk of Works to ensure no reptiles are sheltering beneath these structures.

#### *Protocol to follow if reptiles are found*

A licence is not required to capture or disturb certain reptiles such as adder *Vipera berus*, grass snake *Natrix helvetica*, slow-worm *Anguis fragilis* and common lizard *Zootoca vivipara*. However, these species are protected from killing or injuring, so there is a risk of committing an offence if damaging the habitats causes harm to reptiles under Schedule 5 of the Wildlife and Countryside Act (Schedule 5, WCA 1981). If reptiles are found on Site, then a suitable receptor will have to be identified to translocate the reptiles.

### **3.5. Amphibians**

Great crested newts are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under these legislations the following actions to great crested newt are offences:

- Intentionally or deliberately capture or kill, or intentionally injure;
- Deliberately disturb or intentionally or recklessly disturb them in a place used for shelter or protection;
- Damage or destroy a breeding site or resting place; or

- Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.

Great crested newts are also listed on Section 41 (Species of Principal Importance) of the NERC Act (2006).

While two ponds were identified within 500m of the Site, the Site was considered isolated from these due to the River Purwell and high-density residential dwellings acting as significant physical barriers to dispersal for amphibians. The PEA (MKA Ecology Ltd, 2023) considered that great crested newt presence was unlikely due to an absence of nearby records and largely unsuitable surrounding habitats. The Site is also located within a green impact risk zone for great crested newts within the GCN DLL scheme (Natural England, 2023), there is limited suitable breeding habitat for great crested newt in the surrounding area, so there is a low risk of presence. The earth mounds, log piles, and debris piles may provide some suitable refuge habitat for amphibians. However, considering the barriers to dispersal from the ponds and the limited terrestrial habitat present the risk to great crested newts is considered to be low.

In order to minimise impacts on amphibians, the working measures implemented for the protection of reptiles in section 3.4 will also enable the risk of harm to amphibians to be minimised.

**In the unlikely event a great crested newt is found during works on the site, works must immediately cease and a licence sought from Natural England. MKA Ecology Ltd (01763 262211) or Natural England (0300 060 3900) must be contacted.**

### 3.6. Invertebrates

Stag beetles *Lucanus cervus* are protected from sale under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also listed on Section 41 (Species of Principal Importance) of the NERC Act (2006).

The log piles and deadwood features onsite provide suitable egg laying habitat for stag beetles.

The following measures should be undertaken during works:

#### *Sensitive timing of works*

Adult stag beetles emerge from the soil beneath deadwood from May to September (inclusive), and this time period is highly important in their life cycle as they reach sexual maturity and reproduce. Clearance of any deadwood and log piles should be undertaken outside of this time period and removed between October and April inclusive.

### *Habitat manipulation*

It is recommended that the destructive searches that are to be undertaken on the log piles for reptiles, amphibians and hedgehogs are also vigilant for the presence of stag beetle. Any deadwood onsite should also be subject to a destructive search under the direction of the ECoW. Care should be taken if any tree stumps are to be excavated in order to avoid harming any stag beetle larvae which may be present within the root system.

### *Protocol if stag beetles are found*

Should any stag beetle larvae be found within the deadwood and the log piles onsite during the clearance works, works should stop and the larvae should be carefully moved by the ECoW into a nearby area of suitable deadwood, making sure that they are covered and in a cool, moist location. This should either be onsite or within Ickleford Playpark adjacent to the western boundary.

## **3.7. Nesting birds**

All wild birds, their active nests, and eggs are protected under the Wildlife and Countryside Act (1981), as amended. This makes it an offence to deliberately, or recklessly kill or injure any wild bird or damage or destroy any active nest or eggs of a wild bird. Some bird species are listed under Schedule 1 of the Wildlife and Countryside Act (1981) as amended and it is an offence to wilfully or recklessly disturb an active nest site of these species or disturb adults when they are with dependant young.

The breeding bird season is between the months of March and August inclusive. This site is likely to support a high density of common breeding birds given its undisturbed and inaccessible nature, as such, there is the possibility that breeding species could be present across the whole of the breeding season

If any vegetation clearance and demolition works are required during the breeding bird season, such works can only proceed following the completion of a nesting bird check undertaken by an experienced ornithologist. Any active birds' nest identified during this check must be protected from harm until the nesting attempt is complete. This will require a buffer to be left around the nest, the size of which will depend upon the species involved (as a guide, this will be 10m of vegetation in all directions around the nest). Any vegetation buffers established as a result of the initial nesting bird check must be subjected to a second check after the original nesting attempt is completed before such areas can be removed during the breeding bird season.

The likelihood that this site will support a high density of common breeding birds highlights **the need to try and complete clearance of habitat prior to the breeding season commencing**. Whilst there

may be limited breeding at the start and the end of the season, the risk of breeding birds through the season is very high given the nature of this site.

### 3.8. Bats

All bat species are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Bats are also a Species of Principal Importance listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). It is an offence to deliberately disturb a bat, damage or destroy a bat roost, intentionally or recklessly disturb a bat at a roost, or obstruct access to a roost.

The early mature ash tree at the north of the Site (Target Note 2, Figure 1) may support roosting bats. This tree is due to be retained and will be protected from harm during development through the implementation of Heras fencing, as shown in Figure 1.

Lighting is known to adversely affect bat foraging behaviour, along with negatively affecting other wildlife (including birds) which have the potential to use the Site.

Construction lighting should be avoided where it is not absolutely necessary to carry out the required functional construction activities. However, the lighting design during construction works, where required, will be developed in line with the following principles:

- Minimise the lighting levels across the site;
- Minimise upward spill of light with the use of directional luminaires, shields, baffles, and louvers to direct light where it is needed and prevent light being directed over and around the feature concerned;
- Avoid light spill onto surrounding trees or foraging areas; and
- Consider the timings of lighting required, where possible avoiding lighting in the hours immediately after dusk and before dawn when bats are most active.

The early mature ash tree in the north of the Site may support roosting bats and should remain unlit, as well as the scattered trees and perimeter scrubland have all been highlighted as important foraging and commuting features for bat populations in the local landscape and the Site. Construction work taking place in proximity to these areas should take particular care in applying the principles outlined above. Further information on the impacts of artificial lighting on bats is available from the Bat Conservation Trust (ILP/BCT, 2023).

### 3.9. Mammals

T [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

It is important to maintain habitat connectivity for hedgehogs onsite and post-development through holes in fences on residential gardens. Hedgehogs are a rapidly declining species; they are listed as a Species of Principal Importance under the NERC Act 2006 and are protected under the Wild Mammals Protection Act (1996) which makes it an offence to impale, stab, burn, stone, crush or asphyxiate any wild mammal with intent to inflict unnecessary suffering. Rabbits and foxes are protected from the intention to cause unnecessary suffering to any wild mammal under the Wild Mammals Protection Act (1996). This makes their welfare a material consideration during the planning and development process.

In order to safeguard mammals, the following measures will be implemented:

- A pre-commencement badger check is to be conducted immediately prior to construction works. During this check for [REDACTED] the fox earth hole will be inspected to determine current usage by foxes.
- During the hand search the fox earth should be dug out by hand under supervision of the ECoW, this should be sensitively timed to avoid potentially disturbing fox cubs which may occupy the den between mid-March to August (inclusive).
- Any trenches or pits that are left open overnight will require a ramp to the surface to allow mammals to climb out safely.
- The storage of topsoil or other building materials will be given careful consideration. Mounds of topsoil will be kept to a minimum to prevent mammals such as badger utilising them for sett building.
- Unsecured food, litter or chemicals will not be left within the working area overnight.
- Stacks of pallets and other building materials may offer resting places and should be inspected daily prior to works commencing.

If a badger sett is found on-site or within the 30m zone of influence during any of the searches then construction works will have to cease and a licence from Natural England may need to be obtained.

A licence is not required to capture or disturb hedgehogs. If a hedgehog is found during the search, it should be translocated to a suitable area of the Site outside of the construction footprint. Under the Wild Mammal Protection Act (1996) and the National Planning Policy Framework there is a welfare concern regarding rabbits and foxes, to ensure that no unnecessary harm is inflicted on these species. If the fox earth is discovered to be active during the walkover, this should be left undisturbed until it is determined to be vacant of animals and then it should be hand dug under the supervision of the ECoW. If during the hand digging process foxes are discovered within the earth then works to demolish the earth must cease until it is determined to be vacant to minimise harm.

### 3.10. Ecological Clerk of Works (ECoW)

The nature and complexity of the ECoW role varies considerably between sites but often involves:

- Supervising the implementation of planning conditions, licences and best practice guidance through the construction and operational phases of developments.
- Ensuring that works on-site comply with legislation regarding protected species. Non-compliance with environmental and ecological legislation, licences or consents can result in delays to a project, heavy fines and even custodial sentences in some circumstances. The role of the ECoW can add significant value to a project, not just by avoiding fines and delays, but through enhancing the reputation of clients and their projects through good publicity.
- Providing guidance and advice on how to avoid or minimise on-site ecological impacts through, for example, the design and supervision of ecological mitigation and compensation measures.

Before any work can proceed on-site, the ECoW must ensure that any ecological issues have been identified and that adequate protection measures are put into place. These have been outlined within this document. The primary roles for the ECoW at Arnolds Farm, Ickleford will be providing a pre-commencement toolbox talk to contractors, undertaking nesting bird checks if required, and supervising vegetation removal for reptiles, amphibians, [REDACTED] and hedgehogs.

#### *On-site induction*

The ECoW will provide a brief induction for contractors on-site prior to commencement of works, detailing the contents of this document. A copy of this CEcMP should be available onsite at all times. Any new contractors starting at the Site will be made familiar with the contents of this document before starting any works at the Site. The key messages in this CEcMP should be included in the general Site induction for new contractors.

#### *Communication*

Good communication and close liaison with other contractors, project managers and designers are an essential part of this type of work. The ECoW should not 'police' the Site or give instruction but must

ensure that sensitive ecological issues are identified early and managed according to Best Practice. During site operations that may impact upon the ecology of the Site, the ECoW will work closely with site operatives and operators of machinery to provide advice and be at hand in case any issues arise during works.

The ECoW and site manager should agree a procedure of work before any works commence with regard to avoiding harm, damage or destruction to any species and habitats protected by law and/or relevant planning guidance.

Agreements should be put into document form and all Site operatives should be briefed and sign the document to confirm that they agree to adhere to the procedures and methodologies outlined. An example of a written formal agreement would be a CEcMP such as this, outlining the methods and constraints that Site operatives must adhere to so that the work on-site complies with planning conditions, licenses and best practice guidance.

#### *Close-down report*

Where an ECoW is required a brief letter report summarising the outcome of the clerk of work actions will be issued to detail the actions that were taken.

### 3.11. Construction phase management timings

An indication of the timings for the construction phase management actions to be undertaken is shown in Table 1. These should be used to inform the scheduling of development works at the site.

**Table 1: Construction phase management timings**

| Activity                                                                                              | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Vegetation clearance (outside of breeding bird season)                                                |     |     |     |     |     |     |     |     |     |     |     |     |
| Vegetation clearance (requiring nesting bird check)                                                   |     |     |     |     |     |     |     |     |     |     |     |     |
| Removal of Spanish bluebell                                                                           |     |     |     |     |     |     |     |     |     |     |     |     |
| Reptile and amphibian hand search, supervised removal of potential refuges, clearance to ground level |     |     |     |     |     |     |     |     |     |     |     |     |
| Invertebrate destructive search of deadwood and log piles                                             |     |     |     |     |     |     |     |     |     |     |     |     |
| Badger sett check                                                                                     |     |     |     |     |     |     |     |     |     |     |     |     |
| Hand digging fox earth                                                                                |     |     |     |     |     |     |     |     |     |     |     |     |
| Erection of protective fencing to retained perimeter scrub and trees                                  |     |     |     |     |     |     |     |     |     |     |     |     |
| Safe working practices regarding [REDACTED] hedgehogs and rabbits.                                    |     |     |     |     |     |     |     |     |     |     |     |     |

Key

|                             |  |
|-----------------------------|--|
| Optimal timing of works     |  |
| Sub-optimal timing of works |  |

### 3.12. Construction phase protection measures summary

**Table 2: Construction phase protection measures**

| Species                           | Construction phase mitigation                                                                                                                                                                                                                                                                                                                                                                               | Timing                                               | Responsibility                          |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------|
| Habitats                          | Follow guidance on protecting vegetative features – using warning tape to mark retained perimeter scrub and trees prior to scrub removal and protective fencing to protect retained perimeter scrub and trees on-site following scrub removal.<br>Toolbox talk for contractors to prevent accidental harm to trees and retained scrub.<br>Routine checks and maintenance of fencing to ensure functionality | Pre-construction and throughout construction period. | Site manager/ All contractors.          |
| Invasive non-native plant species | Mark out all stands of Spanish bluebells<br>Removal of non-native invasive plants from the Site by suitably trained and qualified contractors                                                                                                                                                                                                                                                               | April to early May                                   | Site manager/ All contractors           |
| Reptiles and amphibians           | Toolbox talk, hand searches and supervised clearance of habitats.                                                                                                                                                                                                                                                                                                                                           | November – February inclusive                        | ECoW and Site manager/ All contractors. |
| Invertebrates                     | Supervised clearance of deadwood and log piles.                                                                                                                                                                                                                                                                                                                                                             | Any time of year                                     | ECoW and Site manager/ All contractors. |

| Species | Construction phase mitigation                                                                                                                             | Timing                                                                                                                                     | Responsibility                          |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Birds   | Sensitive timing of works OR Nesting bird check.                                                                                                          | September to February inclusive<br>OR<br>Preceded by a nesting bird check<br>March to August inclusive                                     | ECoW and Site manager/ All contractors. |
| Bats    | Minimise construction lighting.<br>Protective fencing to be installed around retained tree, especially early mature ash tree in north of Site.            | Implement throughout construction.                                                                                                         | Site manager and all contractors.       |
| Mammals | Toolbox talk, hand searches and supervised clearance of habitats and hand dig of fox earth.<br><br>Mammal safeguards, badger sett check, fox earth check. | During reptile hand searches and supervised site clearance.<br>November – February inclusive<br><br>Immediately prior to works commencing. | ECoW and Site manager/ All contractors. |

## 4. REFERENCES

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

Froglife (1999) Reptile Survey; an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife Advice Sheet 10. Froglife, Halesworth.

ILP/BCT (2023). *Bats and artificial lighting at night*. Bats and the Built Environment series, Guidance Note 08/23 Bat Conservation Trust (BCT) and Institute of Lighting Professionals (ILP).

MKA Ecology Ltd. (2023). *Arnolds Farm, Ickleford - Preliminary Ecological Appraisal*. MKA Ecology Ltd: Cambridge.

Natural England (2023). *Great crested newt risk zones – Hertfordshire*. Accessed at: <https://naturalengland-defra.opendata.arcgis.com/search?q=gcn>

## 5. Appendices

### 5.1. Appendix 1: Species identification and ecology

#### *Great Crested Newts*

Great Crested Newts are the UK's largest newt species with adult males measuring between 85 and 150mm in overall length and adult females usually measuring between 90 and 170mm but can be larger (Langton *et al*, 2001). Both sexes have black coloured backs, white speckled flanks and rough warty skin. Their underside is bright orange with irregular black spots and their throat is dark with white speckling.

Breeding males have a large ragged crest running the length of their body with a gap between their lower back and the base of their tail. Breeding males also have a bright silvery white/blue flash along the length of the tail. Breeding females do not have a crest and have an orange stripe along the base of their tails.

Once they move away from their ponds into terrestrial habitat after mid-summer and throughout winter the male loses its crest and white stripe but the female retains her orange stripe on the underside of her tail. In their terrestrial phase both sexes have black granular/warty moist skin.

Great Crested Newt hibernate on land and return to ponds to breed. Movements start between February and April but some adults do not reach their breeding ponds until May. The adults remain in aquatic habitat up until July but may leave earlier. Juveniles will leave the ponds around August on the year they were born. When Great Crested Newt leave their breeding ponds, they will find damp habitats close to their breeding pond.

**Figure 2: Left: GCN in terrestrial phase, showing dark, warty damp skin. Right: GCN in breeding phase, with a white tail flash indicating a male.**



### *Common lizard*

Common lizards are long-bodied and short legged with a pointed snout and can measure up to 140mm in length. They are variable in colouration, with predominately green or brown shades but occasionally can be black, grey, blue or yellowish. Dark markings, often bordered with white, line and spot their backs creating an array of patterns. The belly is lighter with shades from white to red and dark spots in males in particular. They predominately occupy habitats consisting of grassland and heathland.

### *Slow-worm*

Slow-worms are a widespread legless lizard that can grow up to 50cm in length. They are typically much smaller than UK snake species and have much smoother skin. They are golden-grey in colour. Males are typically paler whereas females may have darker flanks and a dark stripe down their backs. They can be found in heathland, tussocky grassland and woodland edges, but are also found in gardens and allotments, particularly around compost heaps.

### *Grass snake*

This species can grow up to 1m in length and are the longest snake in Britain. They are also variable in colour and pattern with varying shades of green, brown or grey, but with a distinct 'collar' behind their heads of a light-yellow colouration. Black markings also run along the sides of the snake in regular patterns.

**Figure 3: Top: Common lizard. Middle: Slow worm. Bottom: Grass snake (left, male; right, female).**



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