

GREAT CRESTED NEWT ASSESSMENT & NON-LICENSED METHOD STATEMENT:

SPRINGFIELDS TROWES LANE SWALLOWFIELD RG7 1RN

Client: ET Planning

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1.0 Introduction

Background

- 1.1 A planning application has been submitted to Wokingham Borough Council, described as follows:
“Householder application for the erection of a single storey annexe following the demolition of the existing annexe.”
- 1.2 At Springfields, Trowes Lane, Swallowfield, Wokingham, RG7 1RN
- 1.3 The planning application number is 223699.
- 1.4 Wokingham’s Development Management & Compliance department has made the following comment:
“The application site is within an area of Great Crested Newts. Please provide a Great Crested Newt (GCN) survey completed by a registered Ecologist.”
- 1.5 This document details the findings of an ecological survey and GCN assessment for the site, and, provides a “Non-licenced Method Statement” to be implemented during the works.
- 1.6 The assessment was informed by a site survey undertaken on 27 January 2023.

Application site

- 1.7 Springfields is located midway along Trowe’s Lane, a rural road situated to the south of Swallowfield (National Grid Reference SU72556399, Figure 1).
- 1.8 The application site comprises a detached house, detached double garage, detached annex, two shipping containers, driveway and surrounding gardens.
- 1.9 The total area of the application site is approximately 0.2ha.
- 1.10 Only the existing annex will be affected by the proposed works, with a construction zone of approximately 0.01ha (100m²).

Details of proposed works

- 1.11 It is proposed to demolish the existing annex building and erect a new annex on a similar development-footprint (see Figure 2).

Figure 1 – Site location

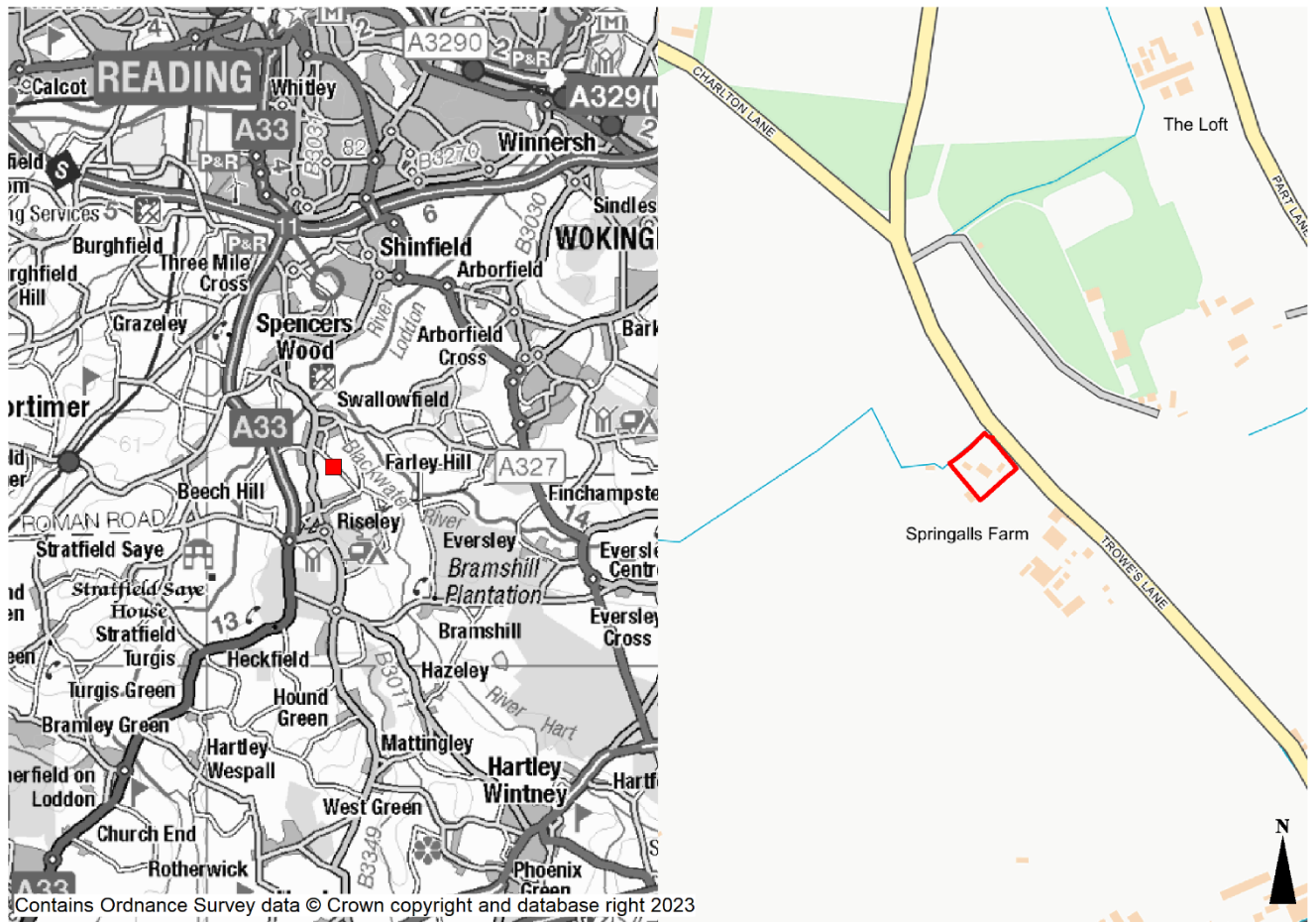
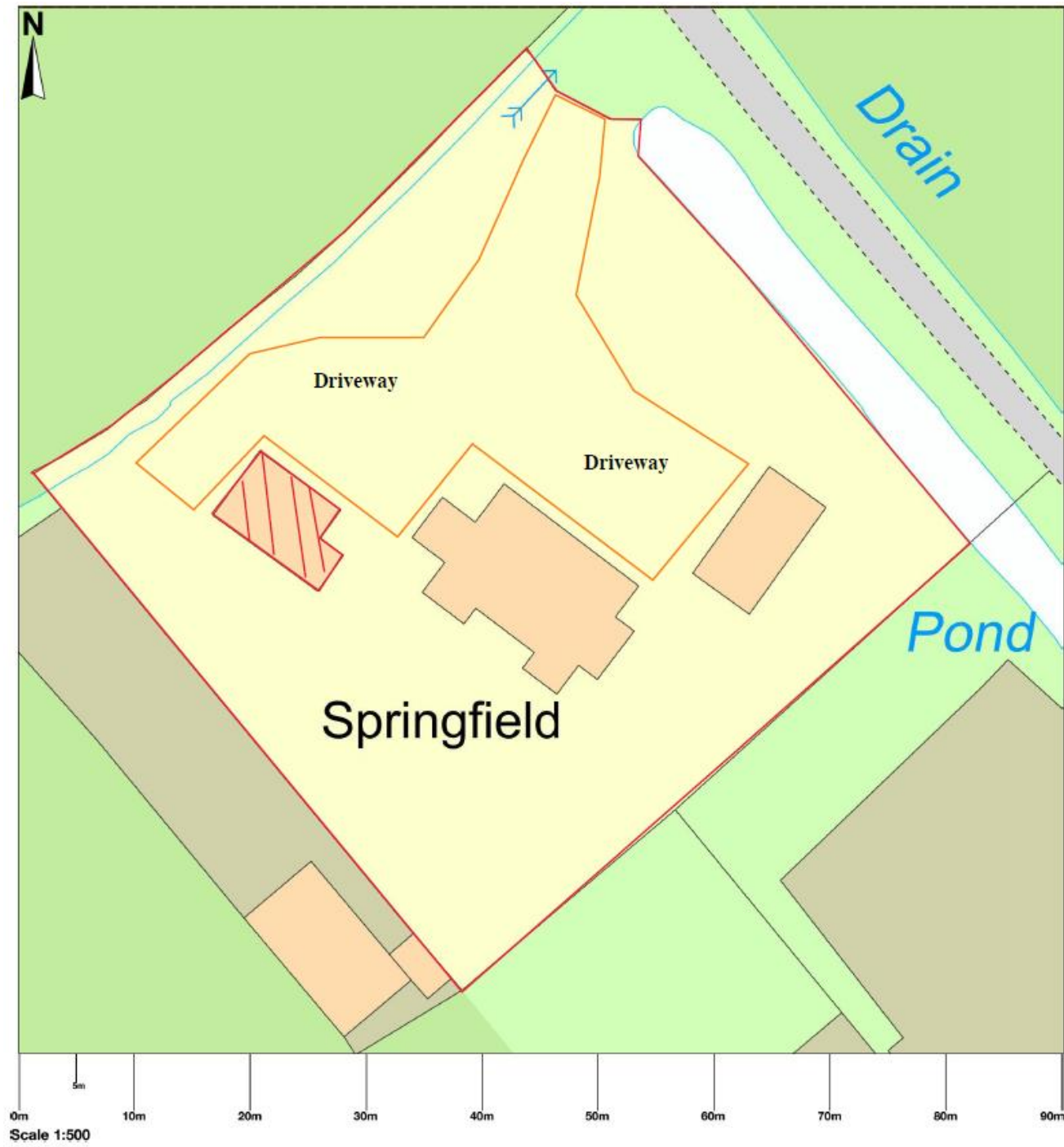


Figure 2 – Proposed site layout (new annex shown hatched)



2.0 Methodology

Desk study

- 2.1 A desk study data search was undertaken. This involved reviewing publicly available datasets and citations of statutory designated sites of importance for nature conservation, Natural England's Priority Habitat Inventory GIS dataset for England, and Natural England's Ancient Woodland Inventory for sites within the zone of influence of the survey area (considered to be a maximum of 500m in this case).
- 2.2 In addition, species records (on Natural England's MAGIC website¹) were accessed, and aerial photographs and Ordnance Survey maps were studied for features of interest. The site was checked against the NatureSpace "Impact Risk Map"².

Extended Phase 1 Habitat Survey

- 2.3 An Extended Phase 1 Habitat and Protected Species Scoping Survey was undertaken. This comprised a walkover survey of the application site and the classification of habitats following the descriptions provided within the Joint Nature Conservancy Council 'Handbook for Phase 1 Habitat Survey' (NCC 1990, JNCC 1993).

Habitat suitability index appraisal for great crested newts (GCN)

- 2.4 There is a pond which abuts the north eastern site boundary. This pond was visited during the survey and its Habitat Suitability Index (HSI) was calculated.
- 2.5 HSI scoring systems were originally developed by the US Fish and Wildlife Service as a means of evaluating habitat quality and quantity for fish.
- 2.6 In the UK a HSI for GCN has been developed (Oldham *et al.*, 2000³). The HSI incorporates ten suitability indices, such as waterbody area, water quality, presence of fish, presence of waterfowl etc. These are multiplied to give a score of between 0 and 1. The higher the score the more likely a pond is to host GCN (for example a study of 248 ponds in southern England found that 93% of ponds with a HSI score of greater than 0.8 hosted GCN).

Surveyor details

- 2.7 The survey was undertaken by Ryan Davies BSc (hons) ACIEEM (senior ecologist) and Justine Whitehead BSc (hons) (assistant ecologist) of GS Ecology Ltd. Ryan is an associate member of the Chartered Institute of Ecology and Environmental Management and holds a Natural England great crested newt survey licence (WML-CLo8).

¹ <https://magic.defra.gov.uk/>

² The "Impact Risk Map" is the accepted statutory guidance that Local Planning Authorities must take into account when considering the risk of development for great crested newts. naturespaceuk.com/the-scheme/impact-map/

³ Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10 (4), 143-155.

3.0 Results

Constraints

- 3.1 The survey was carried out over the winter months and when the macrophyte cover of the pond (one of the factors in the HSI calculation) would have been less than it would have been over the summer months. As such an estimate of the likely cover had to be made.
- 3.2 There were no other constraints to the survey.

Weather conditions

- 3.3 Weather conditions during the survey were temperature 5 degrees C, cloud cover 6/8th, wind at Beaufort scale 2 and no rain.

Desk study

Statutory Sites of Importance for Nature Conservation and ancient woodland

- 3.4 There are no statutory sites of importance for nature conservation or areas of woodland listed on Natural England's Ancient Woodland Inventory within 500m of the application site.
- 3.5 The nearest such site – Swallowfield Meadow Local Nature Reserve – is located approximately 650m north of the application site.

Nearby ponds

- 3.6 There are no ponds shown on ordnance survey (1:25,000 scale) maps within 500m of the application site (or construction zone).
- 3.7 However, there is a single pond – which is sub-divided by a concrete wall – which abuts the north eastern boundary of the site.

Protected and notable species records

- 3.8 Within 1km of the site there is a single record of a license issued by Natural England for works affecting great crested newts on The MAGIC website – located approximately 1km to the north east of the site (issued in 2015 for works affecting a GCN breeding pond).

Great crested newt survey records

- 3.9 The MAGIC map application has a layer which shows “presence only” records for great crested newts (GCN) determined through class licence surveys.
- 3.10 There is a record of GCN presence located approximately 0.9km to the north of the application site.
- 3.11 There is also a layer which shows the results of great crested newt (GCN) eDNA surveys and HSI appraisals of ponds, carried out between 2017 - 2019⁴.
- 3.12 A HSI appraisal and eDNA survey of a pond located approximately 0.7km to the north east was carried out in 2018. This pond was assessed as having a HSI score of “Average” and eDNA samples taken from the pond determined that GCN were absent.

Great crested newt District Licence Zone

- 3.13 The NatureSpace “Impact Risk Map”⁵ shows the site as being located within the “Amber Zone”, defined as “*suitable habitat – great crested newts are likely to be present*”.

⁴ Great Crested Newt eDNA and Habitat Suitability Index Survey results for Ponds surveyed for District Level Licensing.

⁵ The “Impact Risk Map” is the accepted statutory guidance that Local Planning Authorities must take into account when considering the risk of development for great crested newts. naturespaceuk.com/the-scheme/impact-map/

Habitats adjacent to the site

- 3.14 The application site is located midway along Trowe's Lane, a predominantly rural road situated to the south of Swallowfield. Directly beyond Trowes Lane to the north east is a ditch and a line of trees which continue along the roadside.
- 3.15 Adjacent to the south western boundary is a small builders yard, directly beyond which is an area of grassland and scrub. To the south east are a series of light industrial units, several residential properties and their associated gardens.
- 3.16 Directly to the north, east and south west, and further in all directions, are agricultural fields (predominantly arable) with hedges and some scattered trees at their peripheries. Approximately 120m east – and further north – is a block of broadleaved woodland.

Habitats within the application site

- 3.17 The application site comprises a detached house, detached double garage, detached annex, two shipping containers, driveway and surrounding gardens.
- 3.18 A replacement dwelling was constructed in circa 2011 and works to the new house are ongoing. Google streetview images show that the adjacent pond has been significantly modified in that time, with the willow trees which formerly lined the banks removed and a bitumen liner installed.
- 3.19 A Phase 1 habitat map and target notes are provided in Appendix 1, and photographs provided in Appendix 2. A brief description of each habitat is given below:
- 3.20 **Buildings** – The following buildings are located within the application site:
- (1) Main house (unaffected by the proposals) – Two-storey house with cavity brick walls and a pitched, clay-tiled roof.
 - (2) Garage (unaffected by the proposals) – A detached double garage with cavity brick walls and a pitched, clay-tiled roof.
 - (3) Annex – Detached outbuilding with rendered brick walls. The roof is pitched and clad with clay tiles. On the south-eastern elevation is a wooden lean-to, with a flat, felt clad roof.
 - (4) 2x shipping containers – located at the south western boundary.
- 3.21 **Hardstanding** – Leading in from Trowe's Lane at the northern corner of the site is a concrete driveway which continues south west and forks to the east – leading to the front of the house and double garage - and west to the side of the annex.
- 3.22 **Amenity grassland** – The surrounding gardens consist almost entirely of very short cut amenity grassland lawn with patches of bare ground in places.
- 3.23 **Scattered trees** – Along the south western site boundary is a line of Leyland cypress trees.
- 3.24 There is also a single small conifer tree adjacent to the south eastern elevation of the annex.
- 3.25 **Species poor hedge** – Along the north-western site boundary is a species poor hedge, dominated by blackthorn. A number of small mammal holes – almost certain rabbit burrows – were observed in the hedgerow.
- 3.26 **Culverted ditch** – Running parallel to the hedge line at the north west of the site is a culverted ditch which is open at its western end.

GCN Habitat suitability index appraisal

- 3.27 There is a large pond which abut the north eastern site boundary, and lies between the site and Trowe's Lane. The pond is divided by a concrete wall that runs north-east to south west. As such, for the purpose of the HSI appraisal the pond was split into two and assessed separately as Ponds 1a and 1b.

Pond 1a

- 3.28 Pond 1a has been lined with a bitumen liner. It appears to have been attached to the ground and there appears to be water underneath it with the liner floating on top. The water on top of the liner is turbid, appears to be poor quality and is not very deep (probably less than 300mm).
- 3.29 The pond is fed by a ditch (which has been culverted) which runs along the north-western boundary of the site and then turns south-west under the driveway into the pond. It is likely to dry out each year.
- 3.30 There is some marginal vegetation at the bankside – including reed mace – but no macrophytes were observed within the pond.
- 3.31 Pond 1A is assessed as having a HSI score of 0.49 (“Poor”)⁶.

Pond 1b

- 3.32 Pond 1b does not appear to have an artificial liner and is being colonised by small willow trees and common reed and is likely to dry out each year.. Several mallard ducks were seen in the pond at the time of the survey.
- 3.33 Pond 1b is assessed as having a HSI score of 0.47 (“Poor”).
- 3.34 The HSI calculations and photos of the ponds are given in Appendix 3.

⁶ Oldham *et al*'s study of 248 ponds in South Eastern England found GCN in 79% of ponds with a score of “Good”, 55% of ponds with a score of “Average” and 3% of ponds with a score of “Poor”.

4.0 Assessment and GCN Non-licensed Method Statement

Legislation and ecology

- 4.1 GCN receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations) to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or harm them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).
- 4.2 GCN spend most of their lives on land, within up to 500m of a breeding pond. The most important terrestrial habitat is within 100m, where most of the population are likely to be located foraging, resting, sheltering and hibernating relatively close to their breeding site. However, a proportion of the population is also likely to forage for food and shelter in suitable habitats up to 250m from a breeding pond and juvenile animals have been known to disperse up to 500m from it in a single season.
- 4.3 GCN are likely to be disturbed by any work that involves altering their breeding pond (e.g. by introducing fish or deepening or altering its size) or works that involve clearing land up to 500m around ponds, where such land has been managed and maintained in such a way that it is likely to support GCN. In such cases a licence for derogation from the provisions of the habitat regulations may need to be obtained.
- 4.4 In addition, GCN are a species of principal importance for the conservation of biodiversity in England under Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act (these are the “priority species” as per the NPPF).

Site status

- 4.5 The NatureSpace “Impact Risk Map”⁷ shows the site as being located within the “Amber Zone”, defined as “*suitable habitat – great crested newts are likely to be present*”.
- 4.6 There is a large pond at the north-eastern boundary of the site (located approximately 35m from the annex building – to be demolished). The pond is subdivided by a concrete wall and was assessed as two ponds (Ponds 1a and 1b).
- 4.7 Pond 1a and Pond 1b both have a HSI score of “Poor”. It is therefore considered very unlikely that either pond will host GCN.
- 4.8 Furthermore, the application site comprises short cut amenity grassland, a gravel driveway, buildings and hardstanding, all habitats that are very unlikely to be used by GCN for foraging.
- 4.9 The pond has also been modified, with the willow trees which formerly lined the banks having been cut down and a new liner installed and building and landscaping works have occurred regularly on the site over the past 13 years. It is likely that this disturbance has lessened the likelihood that GCN will use the pond, or the application site.

Impacts of the proposals on GCN

- 4.10 Given: 1) the small amount of land within the works footprint – no more than 100m² (2) the poor suitability of the habitats to be affected by the proposals – building and hardstanding and 3)

⁷ The “Impact Risk Map” is the accepted statutory guidance that Local Planning Authorities must take into account when considering the risk of development for great crested newts. naturespaceuk.com/the-scheme/impact-map/

the fact that the nearby pond(s) are unlikely to host GCN,- it is considered highly unlikely that GCN will be affected by the proposals.

- 4.11 Furthermore, when applying Natural England's risk assessment given in their GCN licence method statement template⁸ an offence under the Habitat Regulations is considered to be "highly unlikely" (see Table 1).

Table 1 – Risk assessment for great crested newts as per Natural England's Great Crested Newt method statement in the event that Ponds 1a and/or 1b were to be a great crested newt breeding pond(s)

Component	Likely effect	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.05
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
Maximum:		0.05
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

Non-licensed Method Statement

- 4.12 For the reasons detailed above great crested newts are unlikely to be a constraint to the proposals. This will be further reduced if the following method statement is adhered to:

Site clearance and preparation

- (1) The vegetation directly adjacent to the building (i.e. the conifer shrub, scattered bramble and lawn areas) will be cut to a height of less than 100mm with a strimmer and the arisings raked off/ lifted off by hand. Any remaining vegetation will be maintained at a height of 50 to 100mm until works in the area commence.

During construction

- (2) All building materials will be kept off the ground and stored on pallets.
- (3) Any bulk materials such as sand which cannot be stored off the ground will be covered with a tarpaulin overnight to prevent GCN from sheltering within it.
- (4) All excavations will be checked for animals at the start of each morning by the contractor.
- (5) In the highly unlikely situation that a GCN is encountered during works, all works will stop immediately, GS Ecology will be contacted (GCN will be moved to a nearby safe place) and works will not continue until any requisite licence has been obtained from Natural England.

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879595/gcn-method-statement.xlsm

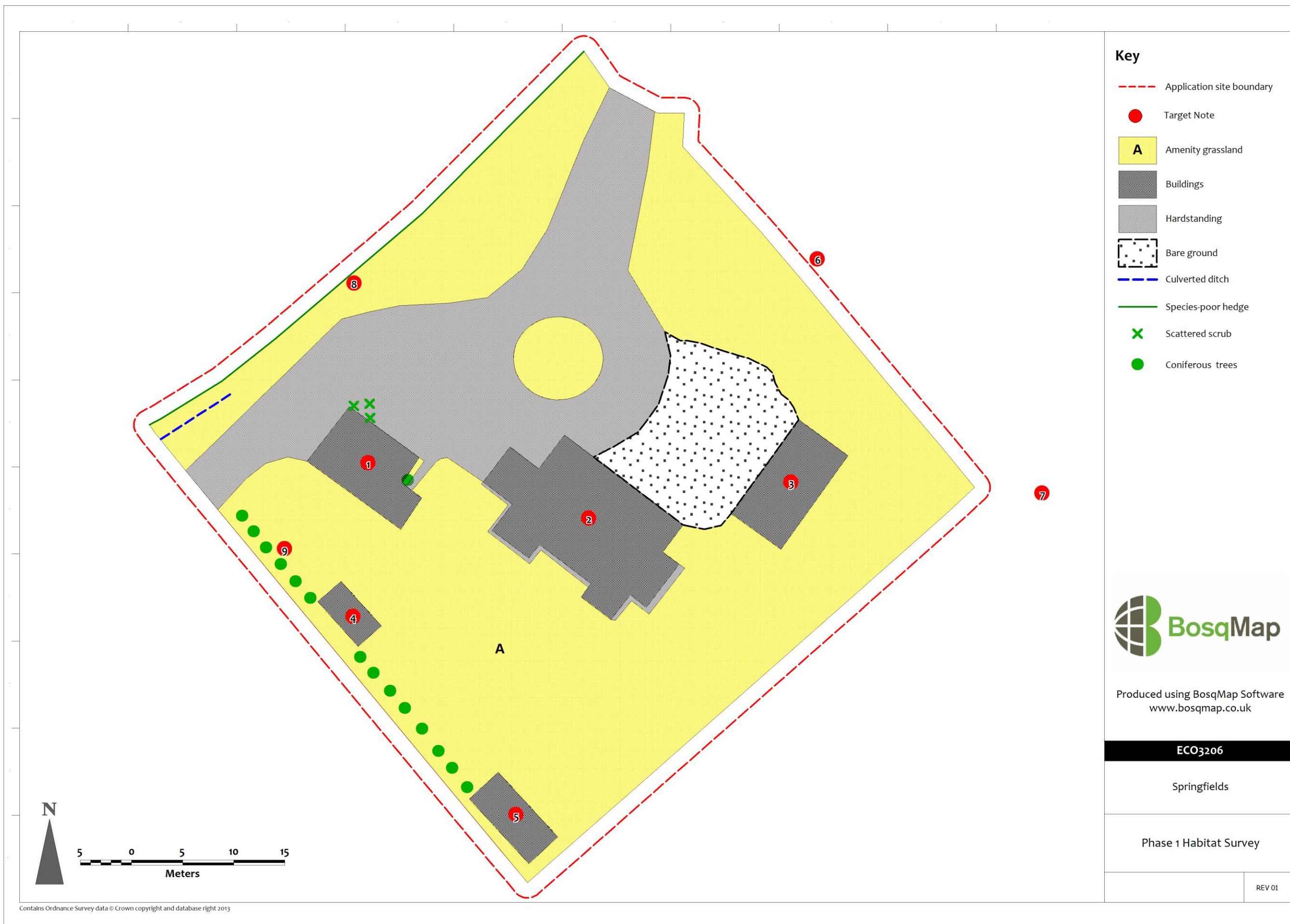
5.0 Summary

- 5.1 There is a large pond at the north eastern boundary of the site - located approximately 35m from the annex building to be demolished - The pond is subdivided by a concrete wall and was assessed as two ponds (Ponds 1a and 1b).
- 5.2 The pond has a HSI score of “Poor” and it very unlikely that it will host GCN.
- 5.3 Given: 1) the small amount of land of land within the works footprint – no more than 100m² (2) the poor suitability of the habitats to be affected by the proposals – building and hardstanding and 3) the fact that the nearby pond(s) are unlikely to host GCN,- it is considered highly unlikely that GCN will be affected by the proposals. The site will therefore not need to be registered under the Naturespace District Licence or a conventional licence.
- 5.4 If the method statement detailed in this report is followed this impact will be reduced further.

Appendix 1 – Extended Phase 1 Habitat Map and Target Notes

Target notes

- (1) Annex. A single-storey outbuilding with rendered brick walls. The roof is pitched, half-hipped and clad with clay tiles.
At the south eastern elevation there is a small conifer shrub and at the north eastern and south western elevations there is some scattered bramble scrub (*Rubus fruticosus*).
- (2) Springfields. A two-storey, cavity brick wall house with a pitched and hipped, clay-tiled roof.
- (3) A detached, double garage with cavity brick walls and a pitched clay-tiled roof.
- (4) Metal shipping container.
- (5) Metal shipping container.
- (6) Pond 1a. A large pond with an artificial liner which has been incorrectly installed and now partially floats at the surface of the pond. The pond is fed by a culverted ditch which runs along the north western boundary of the site. There is some marginal vegetation at the bankside – including Reed mace (*Typha latifolia*), sedge (*Carex spp.*), soft rush (*Juncus effusus*) – but no macrophytes were observed within the pond (these would likely be shadowed by the artificial liner). Pond 1A is assessed as having a HSI score of “Poor”.
- (7) Pond 1b. Pond 1b does not appear to have an artificial liner and was becoming overgrown by small willow trees (*Salix spp.*) and common reed (*Phragmites australis*) at the time of the survey. Several ducks were observed in the pond at the time of the survey. Pond 1b is assessed as having a HSI score of “Poor”.
- (8) A species-poor hedge along the north western boundary of the application site, dominated by blackthorn (*Prunus spinosa*), with patches of bramble, and nettle (*Urtica dioica*). At the base of the hedge are number of small mammal holes – almost certain rabbit burrows.
Running parallel to the hedge line is culverted ditch which opens up at its western end.
- (9) A line of cypress (*Cypress x leylandii*) trees along the south-western boundary, with an average height of approximately 7m.



Appendix 2 - Photographs

Photos 1 and 2 – The annex building outbuilding viewed from the south-west and west



Photos 3 – The annex viewed from the north and north east



Photos 5 and 6 – The main house and double-garage



Photos 7 and 8 – The predominantly blackthorn hedge with a culverted ditch towards the northern end



Photo 9 – Line of Leyland cypress trees at the south western boundary



Appendix 3 – Habitat Suitability Index

Pond 1a

HSI Score = 0.49

HSI Index = Poor

Factor 1. Geographic location (S11)	1	Factor 6. Waterfowl	0.67
Zone A, location is optimal, SI = 1		Absent - No evidence of waterfowl impact (moorhens may be present) - 1	
Zone B, location is marginal, SI = 0.5		Minor - waterfowl present, but little indication of impact on pond vegetation. Pond still supports submerged plants and banks are not denuded of vegetation - 0.67	
Zone C, location is unsuitable, SI = 0.01.		Major - severe impact of waterfowl. Little or no evidence of submerged plants, water turbid, pond banks showing patches where vegetation removed, evidence of provisioning waterfowl - 0.01	
Factor 2. Pond area	0.48	Factor 7. Fish	1
Enter value in m2: 240		Absent - no records of fish stocking and no fish revealed by netting or observed by torchlight - 1	
		Possible - no evidence of fish, but local conditions suggest that they may be present. - 0.67	
Factor 3. Permanence	0.1	Minor - small numbers of crucian carp, goldfish or stickleback known to be present - 0.33	
Never dries = 0.9		Major - dense populations of fish known to be present - 0.01	
Rarely dries (dries no more than two years in ten or only in drought) = 1.0			
Sometimes dries (dries between three years in ten to most years) = 0.5		Factor 8. Pond count	0.6
Dries annually - 0.1		Enter the number of ponds within 1km of site from OS maps here, exclude those behind major barriers	2
Factor 4. Water quality	0.33	Factor 9. Terrestrial habitat	0.33
Good - Water supports an abundant and diverse invertebrate community. Netting reveals handfuls of diverse invertebrates, including groups such as mayfly larvae and water shrimps - 1.0		Good - habitat that offers good opportunities for foraging and shelter (e.g. most semi-natural environments, such as rough grassland, scrub or woodland, also brownfield sites and low intensity farmland) covers more than 75% of available area - 1	
Moderate - moderate invertebrate diversity - 0.67		Moderate habitat offers opportunities for foraging and shelter but may not be extensive (25-75%) of available area - 0.67	
Poor - low invertebrate diversity (e.g. species such as midge and mosquito larvae). Few submerged plants. - 0.33		Poor - habitat with poor structure (e.g. amenity grassland, improved pasture and arable) that offers limited opportunities (less than 25% of available area) for foraging and shelter - 0.33	
Bad - clearly polluted, only pollution-tolerant invertebrates (such as rat-tailed maggots), no submerged plants - 0.01		None - no suitable habitat around pond (e.g. centre of arable field or large expanse of bare habitat) = 0.01	
Factor 5. Shade	1	Factor 10. Macrophytes	0.35
Estimate percentage pond perimeter shaded, to at least 1m from the shore. Shading is usually from trees, but can include buildings. Shading should not include emergent pond vegetation. The estimate should be made during the period from May to the end of September.		Estimate the percentage of the pond surface area occupied by macrophyte cover. This includes emergents, floating plants (excluding duckweed) and submerged plants reaching the surface. Make an estimate between March and the end of September. Read off the SI value from graph	5



Pond 1b

HSI Score = 0.47

HSI Index = Poor

Factor 1. Geographic location (SI1)	1	Factor 6. Waterfowl	0.67
Zone A, location is optimal, SI = 1		Absent - No evidence of waterfowl impact (moorhens may be present) - 1	
Zone B, location is marginal, SI = 0.5		Minor - waterfowl present, but little indication of impact on pond vegetation. Pond still supports submerged plants and banks are not denuded of vegetation - 0.67	
Zone C, location is unsuitable, SI = 0.01.		Major - severe impact of waterfowl. Little or no evidence of submerged plants, water turbid, pond banks showing patches where vegetation removed, evidence of provisioning waterfowl - 0.01	
Factor 2. Pond area	0.36	Factor 7. Fish	1
Enter value in m2: 180		Absent - no records of fish stocking and no fish revealed by netting or observed by torchlight - 1	
		Possible - no evidence of fish, but local conditions suggest that they may be present. - 0.67	
Factor 3. Permanence	0.1	Minor - small numbers of crucian carp, goldfish or stickleback known to be present - 0.33	
Never dries = 0.9		Major - dense populations of fish known to be present - 0.01	
Rarely dries (dries no more than two years in ten or only in drought) = 1.0			
Sometimes dries (dries between three years in ten to most years) = 0.5		Factor 8. Pond count	0.6
Dries annually - 0.1		Enter the number of ponds within 1km of site from OS maps here, exclude those behind major barriers	2
Factor 4. Water quality	0.33	Factor 9. Terrestrial habitat	0.33
Good - Water supports an abundant and diverse invertebrate community. Netting reveals handfuls of diverse invertebrates, including groups such as mayfly larvae and water shrimps - 1.0		Good - habitat that offers good opportunities for foraging and shelter (e.g. most semi-natural environments, such as rough grassland, scrub or woodland, also brownfield sites and low intensity farmland) covers more than 75% of available area - 1	
Moderate - moderate invertebrate diversity - 0.67		Moderate habitat offers opportunities for foraging and shelter but may not be extensive (25-75%) of available area - 0.67	
Poor - low invertebrate diversity (e.g. species such as midge and mosquito larvae). Few submerged plants. - 0.33		Poor - habitat with poor structure (e.g. amenity grassland, improved pasture and arable) that offers limited opportunities (less than 25% of available area) for foraging and shelter - 0.33	
Bad - clearly polluted, only pollution-tolerant invertebrates (such as rat-tailed maggots), no submerged plants - 0.01		None - no suitable habitat around pond (e.g. centre of arable field or large expanse of bare habitat) = 0.01	
Factor 5. Shade	0.4	Factor 10. Macrophytes	0.9
Estimate percentage pond perimeter shaded, to at least 1m from the shore. Shading is usually from trees, but can include buildings. Shading should not include emergent pond vegetation. The estimate should be made during the period from May to the end of September.	90	Estimate the percentage of the pond surface area occupied by macrophyte cover. This includes emergents, floating plants (excluding duckweed) and submerged plants reaching the surface. Make an estimate between March and the end of September. Read off the SI value from graph	90



Appendix 4 - Legislation and planning policy

Planning Authorities have a legal duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning application might affect important protected sites, species or habitats, information on the species, habitat or site likely to be affected, together with an assessment of the impacts of the proposals, will almost certainly be required.

The legal duty for Planning Authorities to have regard to the conservation of biodiversity was introduced in the 2006 Natural Environment and Rural Communities Act (The NERC Act). This act clarified existing commitments with regard to biodiversity, raised the profile of biodiversity and aimed to make the consideration of biodiversity a natural and integral part of policy and decision making.

In addition to the NERC Act there is also national and international biodiversity legislation. This includes legislation in relation to protected species and sites which operates outside of the planning system. Local Authorities and developers have a duty to comply with this legislation.

National planning policy

Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (this document has not been revoked by the recently published National Planning Policy Framework) states that:

'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.'

As such, in line with national planning policy, most planning authorities will ask for this information to be provided before a planning decision is made and in many cases before it is registered.

Local planning policy

In addition to national planning policy, most councils have planning policies to protect biodiversity, and to enhance it where practicable within and adjacent to development sites.

European protected species

The United Kingdom hosts a number of European Protected Species (EPS) of animals (table 1) and plants (table 2). These species receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017, to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or injure the species without first having obtained the relevant licence from Natural England.

Planning Authorities have a statutory duty under these regulations to have regard to the requirements of the Habitats Directive and need to be satisfied that the development is likely to receive a licence from Natural England, and therefore comply with the Habitats Directive, before granting planning permission.

Table 1 – European Protected Species of Animal found in the UK

Common name	Scientific name
Bats, Horseshoe (all species)	<i>Rhinolophidae</i>
Bats, Typical (all species)	<i>Vespertilionidae</i>
Butterfly, Large Blue	<i>Maculinea arion</i>
Cat, Wild	<i>Felis silvestris</i>
Dolphins, porpoises and whales (all species)	<i>Cetacea</i>
Dormouse	<i>Muscardinus avellanarius</i>
Frog, Pool	<i>Rana lessonae</i>
Lizard, Sand	<i>Lacerta agilis</i>
Moth, Fisher's Estuarine	<i>Gortyna borelii lunata</i>
Newt, Great Crested (or Warty)	<i>Triturus cristatus</i>
Otter, Common	<i>Lutra lutra</i>
Snail, Lesser Whirlpool Ram's-horn	<i>Anisus vorticulus</i>
Snake, Smooth	<i>Coronella austriaca</i>
Sturgeon	<i>Acipenser sturio</i>
Toad, Natterjack	<i>Bufo calamita</i>
Turtles, Marine	<i>Caretta caretta</i> <i>Chelonia mydas</i> <i>Lepidochelys kempi</i> <i>Eretmochelys imbricata</i> <i>Dermochelys coriacea</i>

Table 2 – European Protected Species of Plant found in the UK

Common name	Scientific name
Dock, Shore	<i>Rumex rupestris</i>
Fern, Killarney	<i>Trichomanes speciosum</i>
Gentian, Early	<i>Gentianella anglica</i>
Lady's-slipper	<i>Cypripedium calceolus</i>
Marshwort, Creeping	<i>Apium repens</i>
Naiad, Slender	<i>Najas flexilis</i>
Orchid, Fen	<i>Liparis loeselii</i>
Plantain, Floating-leaved water	<i>Luronium natans</i>
Saxifrage, Yellow Marsh	<i>Saxifraga hirculus</i>

Nationally protected species

Many species of animal are protected under the 1981 Wildlife and Countryside Act (as amended). 'Full protection' applies to EPS and some non EPS species such as the water vole. This prohibits the intentional killing, injuring or taking (capture. etc); possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or to buy. Many species, such as common species of reptile and amphibian, are protected from intentional killing and injuring and trading.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), whilst they are actively nesting or roosting. Section 1 of this Act makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

In addition, bird species listed under Schedule 1 of the Act receive extra protection. The Act states that ‘it is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird’.

In practice this means that in areas where birds are likely to be nesting works should not be undertaken during the nesting season, which is generally considered to be March to September, although this very much depends on weather conditions, habitats and the species involved. If works cannot be avoided then areas should first be checked for nesting birds. Habitats likely to host nesting birds include trees, hedgerows and dense scrub, buildings, reedbeds and riverine habitats and open areas with tussocky vegetation.

Appendix 5 – Great crested newts: ecology and legislation

The great crested newt (*Triturus cristatus*) can grow up to 18cm in size. It is Britain's largest newt. The body can have a warty appearance and the skin is normally dark brown or black, the belly is predominantly bright orange with black markings. During the breeding season the males develop a crest on their back and tail which they use to attract a mate.

The species is widely distributed in Britain but is absent from Cornwall, Devon, and parts of Wales. It is uncommon but locally abundant. The population has undergone a severe decline in the last 50 years due to the loss of breeding ponds and a decline in the quality of foraging habitat.

The species can be found in northern Europe part of West Siberia. The edge of the northern range extends from northern France, Great Britain, southern Scandinavia to the north of Russia, and the southern edge from central France to south-western Romania into central European Russia. Britain is one of the last strongholds for the species.

Great crested newts spend the majority of their lives on land, returning within up to 500m, but more usually 250m, of their breeding ponds. The mainstay of their diet is invertebrates.

They return to waterbodies, usually ponds, in the spring to breed. Adults enter the ponds from February onwards with the courtship and egg-laying period being from mid-March to mid-June. Eggs are laid in the folds of debris or the leaves of submerged aquatic plants. A female lays up to 200 eggs per season.

Eggs take 3 weeks to hatch and the larvae take 2 to 3 months to develop. Adults begin to leave breeding ponds gradually from late May. However they can over-winter in ponds and also sometimes return to feed. Young start to emerge from the pond in August and will not normally return until they have reached sexual maturity 2 – 4 years later.

Great crested newts receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations) to deliberately or recklessly, to destroy or damage their habitat, or to disturb, kill or them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).

In order to obtain such a licence the SNCO must apply the requirements of Regulation 535 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b)6. These are as follows:

- (1) Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.
- (2) Regulation 53(9)(a) states: the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied “that there is no satisfactory alternative”.
- (3) Regulation 53(9)(b) states: the appropriate authority (the SNCO) shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.”

Newts are likely to be disturbed by any work that involves altering their breeding ponds (e.g. by introducing fish, deepening or altering its size) or works that involve clearing land up to 500m around

ponds, and in such cases a licence for derogation from the provisions of the habitat regulations may need to be obtained.

Appendix 6 - About GS Ecology

Established in 2009, GS Ecology is an independent ecological consultancy in Berkshire. We carry-out surveys and ecological consultancy services for public and private sector clients including in Berkshire, Oxfordshire and Hampshire, London and the south of England. We can advise you on cost effective sustainable solutions for your project, whether it be a bat survey to inform a planning application, the ecology chapter of an Environmental Statement or a Woodland Management Plan.

Our work is undertaken by experienced and qualified ecologists, who are members of the Chartered Institute of Ecology and Environmental Managers. Our services include:

- Ecology surveying and reporting to inform planning applications, e.g.
 - Preliminary Ecological Appraisal
 - Extended Phase 1 Habitat Survey
 - Protected species surveys, e.g. [REDACTED] dormouse, great crested newts
 - Bat surveys in Oxfordshire, Berkshire, Hampshire, London and Southern England
- BREEAM ecology assessments – to demonstrate the sustainability of a new building
- Protected species licensing such as bat and great crested newt licences for development sites after planning permission has been obtained
- Providing advice to land managers and writing ecological management plans, such as woodland management plans and farm environmental plans for England woodland Grant Scheme and Environmental Stewardship applications
- Providing ecology advice to Local Authorities and Local Planning Authorities