

Lapstone Playing Fields, Fair Oak, Eastleigh, Hampshire, SO50 7PS

Great Crested Newt Survey Report

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Great Crested Newt Survey Report
Lapstone Playing Fields, Fair Oak, Eastleigh, Hampshire, SO50 7PS
for
Eastleigh Borough Council

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This report represents sound industry practice; reports and recommends correctly, truthfully and objectively; is appropriate given the local site conditions, scope of works proposed and resources allocated to us by the client; and avoids invalid, biased, and exaggerated statements.

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EXECUTIVE SUMMARY

1. This report provides information from great crested newt surveys carried out by Hampshire Ecological Services Ltd for Eastleigh Borough Council in connection with a proposal to create two cricket pitches at Lapstone Playing Fields, Fair Oak, Eastleigh, Hampshire, SO50 7PS (approximate Ordnance Survey Grid Reference SU494178). The site location is shown in *Figures 1 and 2* (see *Section 6*).
2. The site was initially assessed as containing habitat suitable for great crested newt on the 9th December 2020 by Nicola Pyle MCIEEM of Hampshire Ecological Services Ltd.
3. According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps there are two ponds within 500m of the site. These are as follows:
 - A pond c.130m to the west of the site (within school grounds); and
 - Quobleigh pond, c.350m west of the site.Both ponds are known to contain great crested newts. The locations of these ponds are shown in *Figure 4* in *Section 6*.
4. The majority of the site is short mown grassland used as sports pitches, with no cover from predation for amphibians. This is unsuitable terrestrial habitat for great crested newt. However, the hedges on the site boundaries, the tussocky grassland and the woodland over the culvert are suitable terrestrial habitat for amphibians, including great crested newt.
5. Surveys to gather information on the presence or absence of great crested newts were carried out on four suitable evenings between the 15th April and 21st May 2021. The survey methods used included: egg-searching and torching. The raw data is given in *Appendix A* and a Phase 1 Habitat Survey Map showing the locations of the ponds surveyed is given in *Figure 3* in *Section 6*.
6. No great crested newts were found in the culvert/ditch during the torching surveys and no great crested newt eggs were found during the egg-search. In addition, no other amphibian species were recorded during the surveys.
7. However, there are two known great crested newt ponds within 500m of the site (c.130m and c.350m, to the west). In addition, suitable terrestrial habitat on (wooded culvert, rough grassland and hedges) and adjacent to the site (woodland and rough grassland). Therefore, even though the majority of the site is unsuitable terrestrial habitat for great crested newt, a great crested newt mitigation licence or Great Crested Newt Low Impact Class Licence (GCN LICL, if qualifying) from Natural England will be needed before work can take place on the culvert. This is because suitable terrestrial habitat will be lost. Existing data from previous surveys of the two proximate ponds will be used to provide the necessary information to apply for a licence.
8. All vegetation clearance and topsoil stripping will be undertaken using a site-specific Natural England licence, or a GCN LICL (if qualifying). An ecological clerk-of-works (the licensee

ecologist or an accredited agent) will be appointed to oversee hand and destructive searching during the site clearance.

9. The mitigation, compensation and enhancements for great crested newts will include the following:
- The retained boundaries of the wider site will be enhanced through the retention of rough grassland at the base of the boundary hedges;
 - To mitigate the loss of the culvert woodland and to enhance the site, a new area of wet woodland will be planted on the west boundary of the site (see *Section 5.3*)
 - To further enhance the site tree planting, shrub planting and new rough grassland will be created across the site (see *Section 5.3*);
 - The further enhance the new and retained rough grassland for reptiles and amphibians, log pile and turf piles will be created to provide cover and basking opportunities.

INTRODUCTION

2.1 Purpose of this report

This report provides information from great crested newt surveys carried out by Hampshire Ecological Services Ltd for Eastleigh Borough Council in connection with a proposal to create two cricket pitches at Lapstone Playing Fields, Fair Oak, Eastleigh, Hampshire, SO50 7PS (approximate Ordnance Survey Grid Reference SU494178).

Surveys aimed to:

- identify if great crested newts are present in a culvert; and
- estimate population size (if present).

2.2 Site description

The site is a playing field consisting of one cricket pitch, training nets, tennis courts and a football pitch. There are trees and hedges on the boundaries, and a wooded drainage culvert on the west side of the site. A site plan showing the habitats on site is given in *Figure 3* in *Section 6*.

The site is to the west of Botley Road, between the villages of Fair oak and Horton Heath. The immediate surroundings consist of Wyvern College, Fair Oak Infant and Junior schools to the north; residential housing to the east; and fields and woodland to the west and south-west. In the wider landscape, Fair Oak and Horton Heath are to the north and south respectively; and there are extensive agricultural fields and woodlands to the east and west. The River Itchen is c.1,983m west of the site.

2.3 Proposed activities

The surveys were carried out in connection with a proposal to create two cricket pitches on Lapstone Playing Fields. The work will include the removal of a wooded culvert.

2.4 Legal protection

Great crested newt (*Triturus cristatus*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended) and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation Habitats & Species (Amendment) Regulations 2017* which gives it full protection under *Regulation 39*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;

- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The great crested newt is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRow Act.

2.5 *Structure of this report*

The report is structured as follows:

- *Section 1* contains the executive summary;
- *Section 2* contains an introduction;
- *Section 3* describes the survey methods;
- *Section 4* describes the results;
- *Section 5* evaluates the findings;
- *Section 6* provides figures including:
 - *Figure 1* gives aerial photographs showing the site location;
 - *Figure 2* gives an Ordnance Survey map showing the location of the site;
 - *Figure 3* gives a Phase 1 Habitat Survey Map showing the location of the culvert surveyed;
 - *Figure 4* gives the locations of ponds within 500m of the site boundary; and
 - *Figure 5* gives a plan of the proposed mitigation, compensation and enhancement measures for amphibians on the site.
- *Section 7* provides photos of the culvert;
- *Section 8* provides references; and
- *Appendix A* gives the data from the great crested newt surveys.

3 **METHODOLOGY**

3.1 **Dates, times and weather**

An Phase 1 Habitat Survey was carried out during the daytime on the 9th December 2020. The weather was 4°C and dry with 100% cloud cover and calm (Beaufort scale 0).

The great crested newt surveys were carried out on four suitable evenings between the 15th April and 21st May 2021. The dates and weather conditions for the surveys are given in *Table 3.1.1*.

Table 3.1.1. Weather conditions during the great crested newt surveys.

Date	Method	Air Temp (°C)	Water Temp (°C)	General weather
15/04/21	Torching & egg-search	8.0	9.0	Calm (Beaufort scale 0)
26/04/21	Torching & egg-search	6.4	9.3	Dry with 20% cloud cover and calm (Beaufort scale 0)
03/05/21	Torching & egg-search	10.0	10.0	Heavy rain all day
21/05/21	Torching & egg-search	11.0	11.2	Rain on and off all day with strong breeze

3.2 **Personnel**

The habitat was initially assessed by Nicola Pyle MCIEEM who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). She has over 13 years of experience in ecological consultancy and is a highly competent ecologist trained in Phase 1 Habitat Survey and protected species surveys. She is a multi-species licence holder.

The great crested newt surveys were led by Nicola Pyle MCIEEM who holds a Natural England licence allowing the disturbance and capture of great crested newt for the purposes of survey in all counties of England (survey licence number 2016-19591-CLS-CLS).

She was assisted by Chloe Mockridge MSc, Andy Lomas MSci and Darla Brown who are experienced in carrying out great crested newt surveys and accredited under survey licence number 2020-50835-SCI-SCI. The personnel carrying out the great crested newt surveys are given in *Table 3.2.1*.

This report was reviewed by John Poland CEnv MCIEEM CBiol MSB, who is a full member of the CIEEM, a Chartered Environmentalist (CEnv), a Chartered Biologist (CBiol) and multi-species licence holder with 20 years of experience in ecological consultancy and Victoria Russell MCIEEM who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) with over 23 years of experience in ecological consultancy.

All staff adhere to the Chartered Institute of Ecology and Environmental Management's (CIEEM) *Code of Professional Conduct*.

Table 3.2.1. Personnel carrying out the great crested newt surveys.

15/04/21	26/04/21	03/05/21	21/05/21
Nicola Pyle MCIEEM	Chloe Mockridge MSc	Darla Brown	Darla Brown
Chloe Mockridge MSc	Andy Lomas MSci	Andy Lomas MSci	Andy Lomas MSci

3.3 Survey

3.3.1 General

All waterbodies on the site that could be used as breeding locations for great crested newt were identified, and the suitability of terrestrial habitat for this species was considered. Great crested newts can travel up to 500m from pond to pond, and between ponds and terrestrial habitat. Suitability of terrestrial habitat was assessed with this in mind.

3.3.2 Presence/ absence surveys

Surveys to prove the presence or absence of great crested newts were carried out the culvert. The surveys were carried out according to Natural England (formerly English Nature) survey guidelines (*English Nature, 2001*), which outline the survey standards. A minimum of four survey visits were carried out on the culvert in suitable weather conditions, using two methods: egg-searching and torching.

Egg-search

Submerged vegetation was searched for the distinctive eggs of great crested newt. This is very effective for detecting presence, but can be difficult in deep water or heavily vegetated ponds with small newt populations. The eggs are characteristically laid in a leaf, which is then folded over, and the large size and yellowish/white coloration readily distinguishes the eggs of great crested newts from those of smooth and palmate newts.

Torching

This technique is carried out at night, when newts are most active. Negative results are only meaningful when surveys are carried out under suitable weather conditions. Ideal weather conditions are a night-time air temperature of more than 5°C, little or no wind, and no rain. Surveys involve walking slowly around the edge of the pond and scanning the water with a torch (1,000,000 candlepower Clulite™ CB2) where access and safety permitted. Great crested newts can be easily identified and counted in clear water. The technique is less successful in thick weed or turbid water, but can still be used. Bright light may cause newts to seek cover where they will be undetected, but the technique is appropriate to establish presence and for estimating populations. The species, sex (if possible), number of newts, and survey times are recorded.

4 RESULTS

4.1 Habitat suitability

4.1.1 Nearby ponds

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps there are two ponds within 500m of the site. These are as follows:

- A pond c.130m to the west of the site (within school grounds); and
- Quobleigh pond, c.350m west of the site.

Both ponds are known to contain great crested newts. The locations of these ponds are shown in *Figure 4* in *Section 6*.

4.1.2 Terrestrial habitat

The majority of the site is short, mown grassland used as sports pitches, with no cover from predation for amphibians. This is unsuitable terrestrial habitat for great crested newt. However, the hedges on the site boundaries, the tussocky grassland and the woodland over the culvert are suitable terrestrial habitat for amphibians, including great crested newt.

4.2 Presence/ absence surveys

No great crested newts were found in the culvert during the torching surveys and no great crested newt eggs were found during the egg-search.

In addition, no other amphibian species were recorded during the surveys.

The data from these surveys are given in *Appendix A*.

5 INTERPRETATION AND EVALUATION

5.1 Constraints on surveys

The water levels in the culvert were too low for effective netting to be carried out.

The low water levels also meant that it was not possible to carry out surveys using bottle traps.

5.2 Potential impacts of the proposed works on great crested newt

Although there is suitable terrestrial habitat for great crested newts on the site, no great crested newts were found using the culvert during the surveys.

However, there are two known great crested newt ponds within 500m of the site (c.130m and c.350m, to the west). In addition, there is suitable terrestrial habitat on (wooded culvert, rough grassland and hedges) and adjacent to the site (woodland and rough grassland). Therefore, even though the majority of the site is unsuitable terrestrial habitat for great crested newt, a great crested newt licence or Great Crested Newt Low Impact Class Licence (GCN LICL, if qualifying) from Natural England will be needed before work can take place on the culvert. This is because suitable terrestrial habitat will be lost.

5.3 Outline mitigation and enhancement measures

All vegetation clearance and topsoil stripping will be undertaken using a GCN LICL (if qualifying) or a site-specific Natural England licence. An ecological clerk-of-works (the licensee ecologist or an accredited agent) will be appointed to oversee hand and destructive searching during the site clearance.

To replace the loss of the vegetation around the culvert, grey willow and other species already present on or adjacent to the site or native species will be planted in a strip parallel to the west boundary of the site. The woody vegetation will be along the edge of a scrap so that water can pool in the area to replace the open water in the culvert. The vegetation will also be under-sown with Emorsgate seed mix EH1 Hedgerow mixture (or equivalent supplier). This will provide cover for wildlife such as hedgehogs as well as providing an attractive feature while the new vegetation become established.

There will be a gap between the areas of woody vegetation so that the west boundary does not lose its ecological value. Between the new wet woodland and the west boundary woodland and the woody vegetation and the sports fields will be bands of rough grassland or wild flowers, such as Emorsgate seed mix EL1.

The grassland and planting areas will be further enhanced with log pile and turf piles to provide cover and basking opportunities for amphibians and reptiles. These will be placed on all suitable boundaries.

The full mitigation, compensation and enhancement measures are in *Lapstone Playing Fields: Ecological Appraisal Report* (HES, 2022).

5.4 Requirement for Habitats Regulations licence

Due to the proximity of the site to two ponds with great crested newts, a Great Crested Newt Low Impact Class Licence (GCN LICL, if qualifying) or a site-specific great crested newt European Protected Species (EPS) licence from Natural England is required before work to clear the culvert commences. Existing data from previous surveys of the two nearby great crested newt ponds will be used to provide the necessary information to apply for a licence.

A GCN licence from Natural England permits activities that may otherwise be offences under the *Conservation of Habitats & Species Regulations 2010*, such as destruction of ponds or terrestrial habitat.

Survey data supporting licence applications must be up-to-date *i.e.* have been conducted within the current or most recent optimal survey season. Therefore, if licensable work is delayed until, during or after the next survey season, updated survey(s) will be required to support an application.

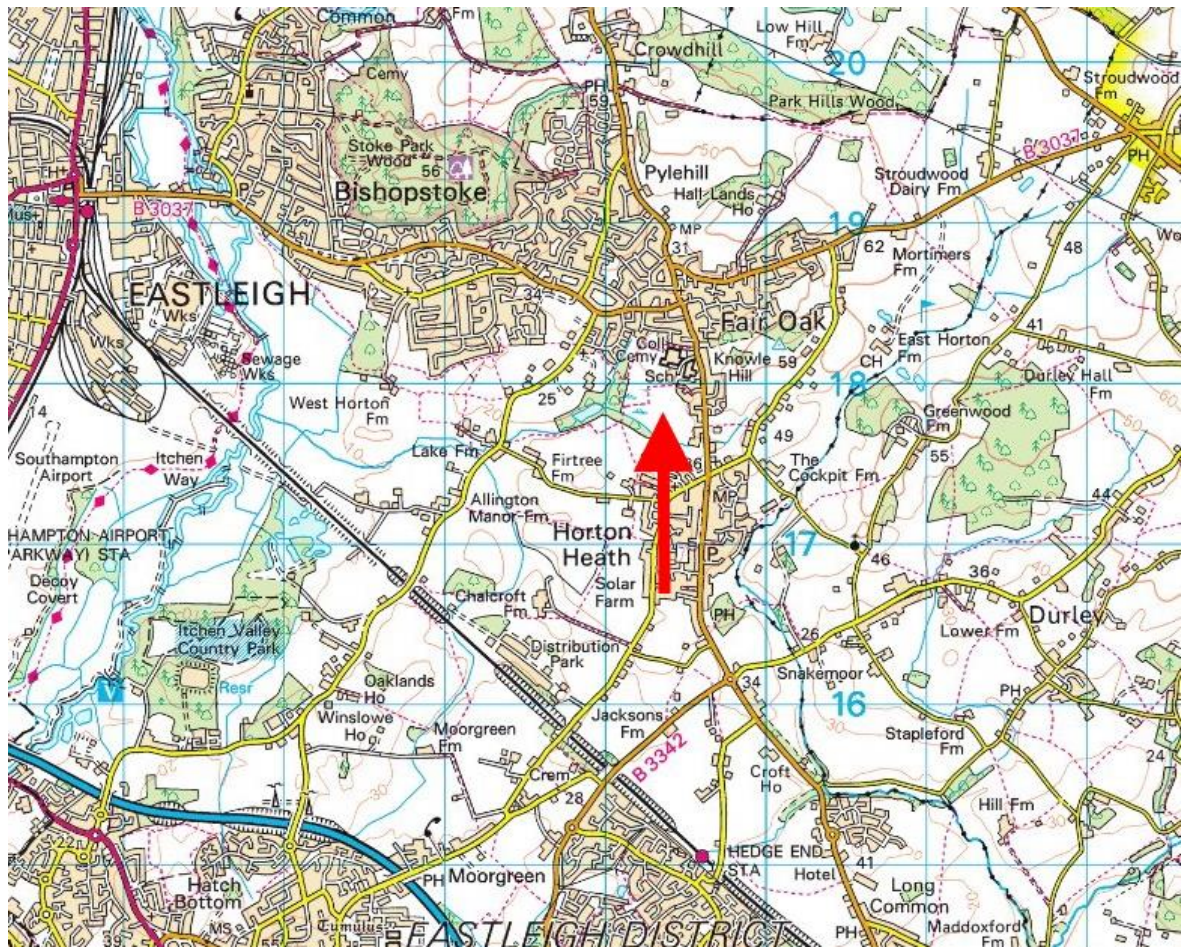
Natural England takes a minimum 30-60 working days to process licence applications following receipt of all the relevant documentation. This includes an application form and a Method Statement. The latter includes a detailed mitigation strategy to eliminate or reduce impacts on great crested newts.

It is not possible to apply for a licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

Figure 1. Aerial photographs showing the location of the site.



Figure 2. An Ordnance Survey map showing the location of the site, as indicated by red arrow.



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Figure 3. A Phase 1 Habitat Survey map showing the location of the culvert surveyed on the site.



Figure 4. Aerial photograph showing the location of ponds within 250m (orange) and 500m (blue) radii of the site boundary.

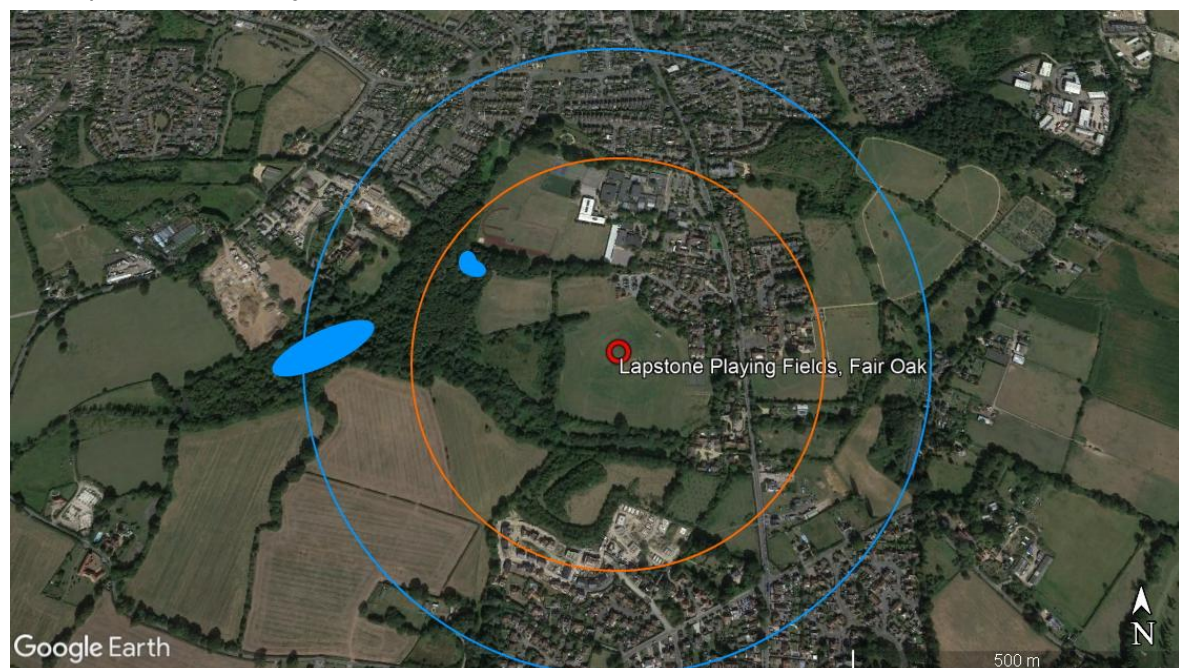
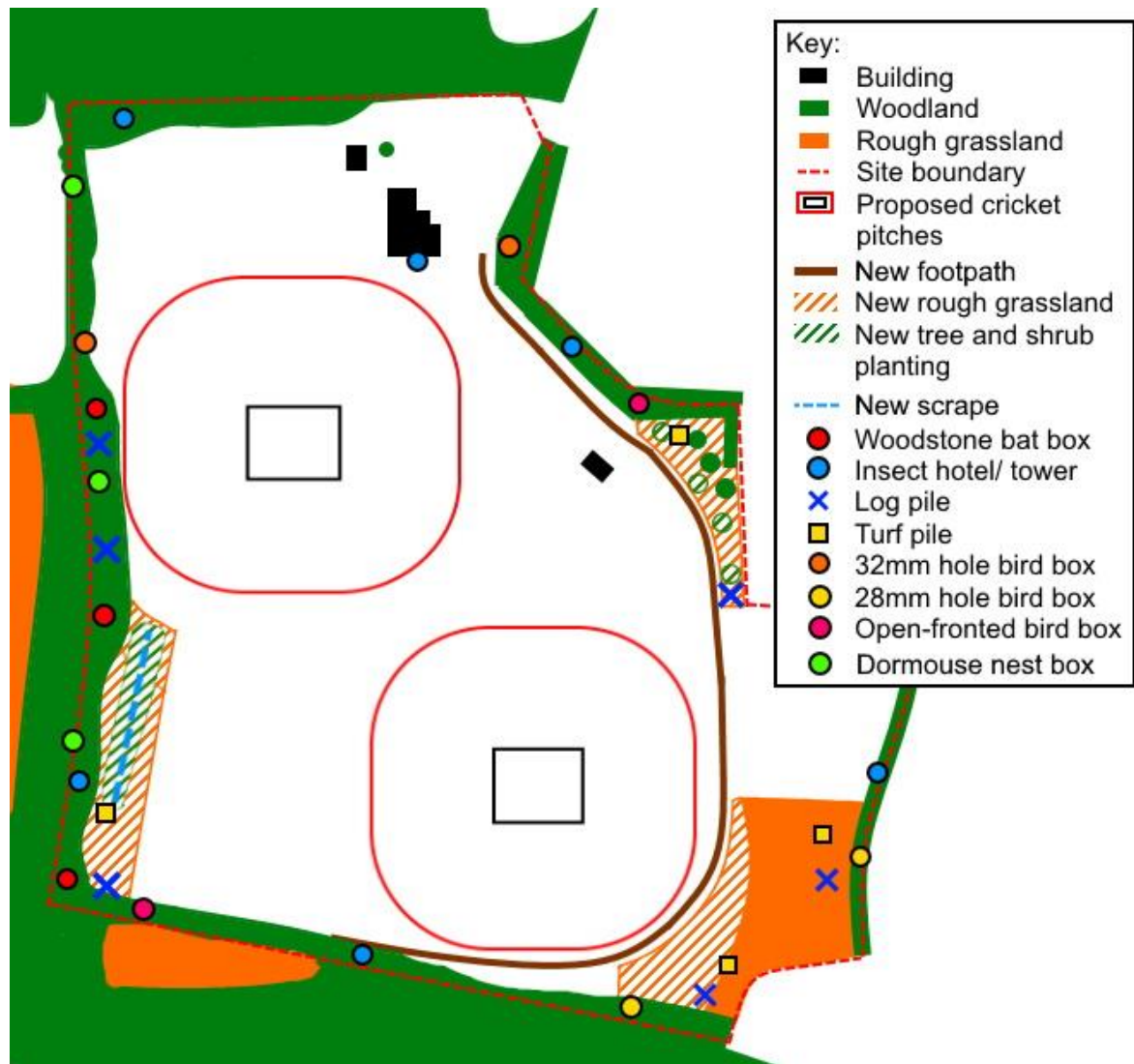


Figure 5. Proposed plan showing the indicative locations of proposed mitigation, compensation and enhancement measures (not to scale).



PHOTOGRAPHS

Photo 1. Culvert with woodland on the banks - area to be removed. (Taken 09/12/20)



Photo 2. Rough grassland in the south-east corner of the site. (Taken 09/12/20)



REFERENCES

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APPENDIX A - GREAT CRESTED NEWT SURVEY DATA

Visit number		1			
Air temperature (°C)		8.0	Water temperature (°C)		9
General weather		Calm (Beaufort scale 0)			
Rainfall		0			
Water clarity		1			
Vegetation cover		0			
Torching					
Date	15/04/2021	Surveyors:	Nicola Pyle & Chloe Mockridge		
Species	Adult male	Adult Female	Adult Unknown	Total Adults	Larva
<i>T. cristatus</i>	-	-	-	0	-
<i>L. vulgaris</i>	-	-	-	0	-
<i>L. helveticus</i>	-	-	-	0	-
<i>Lissotriton</i> sp.	-	-	-	0	-
<i>R. temporaria</i>	-	-	-	0	-
<i>B. bufo</i>	-	-	-	0	-
Notes:	Too shallow to net				
Visit number		2			
Air temperature (°C)		6.4	Water temperature (°C)		9.3
General weather		Dry with 20% cloud cover and calm (Beaufort scale0)			
Rainfall		0			
Water clarity		2			
Vegetation cover		1			
Torching					
Date	27/04/2021	Surveyors:	Chloe Mockridge & Andy Lomas		
Species	Adult male	Adult Female	Adult Unknown	Total Adults	Larva
<i>T. cristatus</i>	-	-	-	0	-
<i>L. vulgaris</i>	-	-	-	0	-
<i>L. helveticus</i>	-	-	-	0	-
<i>Lissotriton</i> sp.	-	-	-	0	-
<i>R. temporaria</i>	-	-	-	0	-
<i>B. bufo</i>	-	-	-	0	-
Notes:	Too shallow to net				
Visit number		3			
Air temperature (°C)		10	Water temperature (°C)		10
General weather		Heavy rain all day			
Rainfall		Heavy			
Water clarity		3			
Vegetation cover		1			
Torching					

Date	03/05/2021	Surveyors:	Darla Brown & Andy Lomas		
Species	Adult male	Adult Female	Adult Unknown	Total Adults	Larva
<i>T. cristatus</i>	-	-	-	0	-
<i>L. vulgaris</i>	-	-	-	0	-
<i>L. helveticus</i>	-	-	-	0	-
<i>Lissotriton</i> sp.	-	-	-	0	-
<i>R. temporaria</i>	-	-	-	0	-
<i>B. bufo</i>	-	-	-	0	-
Notes:	Too shallow to net				
Visit number		4			
Air temperature (°C)		11	Water temperature (°C)		11.2
General weather		Rain on and off all day with strong breeze			
Rainfall		0			
Water clarity		1			
Vegetation cover		1			
Torching					
Date	21/05/2021	Surveyors:	Darla Brown & Andy Lomas		
Species	Adult male	Adult Female	Adult Unknown	Total Adults	Larva
<i>T. cristatus</i>	-	-	-	0	-
<i>L. vulgaris</i>	-	-	-	0	-
<i>L. helveticus</i>	-	-	-	0	-
<i>Lissotriton</i> sp.	-	-	-	0	-
<i>R. temporaria</i>	-	-	-	0	-
<i>B. bufo</i>	-	-	-	0	-
Notes:	Too shallow to net				