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# Great Crested Newt (GCN) Surveys

July 2023

**Larkins Farm**  
Gellings Lane  
Knowsley  
L34 9EN

**National Grid Ref: SJ414962**



|                |                                   |
|----------------|-----------------------------------|
| Document Title | Great Crested Newt (GCN) Surveys  |
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| Prepared for   | Mr. Mike Carr                     |
| Prepared by    | Tyrer Ecological Consultants Ltd. |

|               |                                                                                                                                       |               |               |               |
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| Survey Dates  | 1. 11/05/2023                                                                                                                         | 2. 23/05/2023 | 3. 14/06/2023 | 4. 27/06/2023 |
| Reviewed by   | Mr. M. Pritchard ACIEEM                                                                                                               |               |               |               |
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| Approved by   | Mrs. K. Wilding CEnv MIEMA ACIEEM                                                                                                     |               |               |               |
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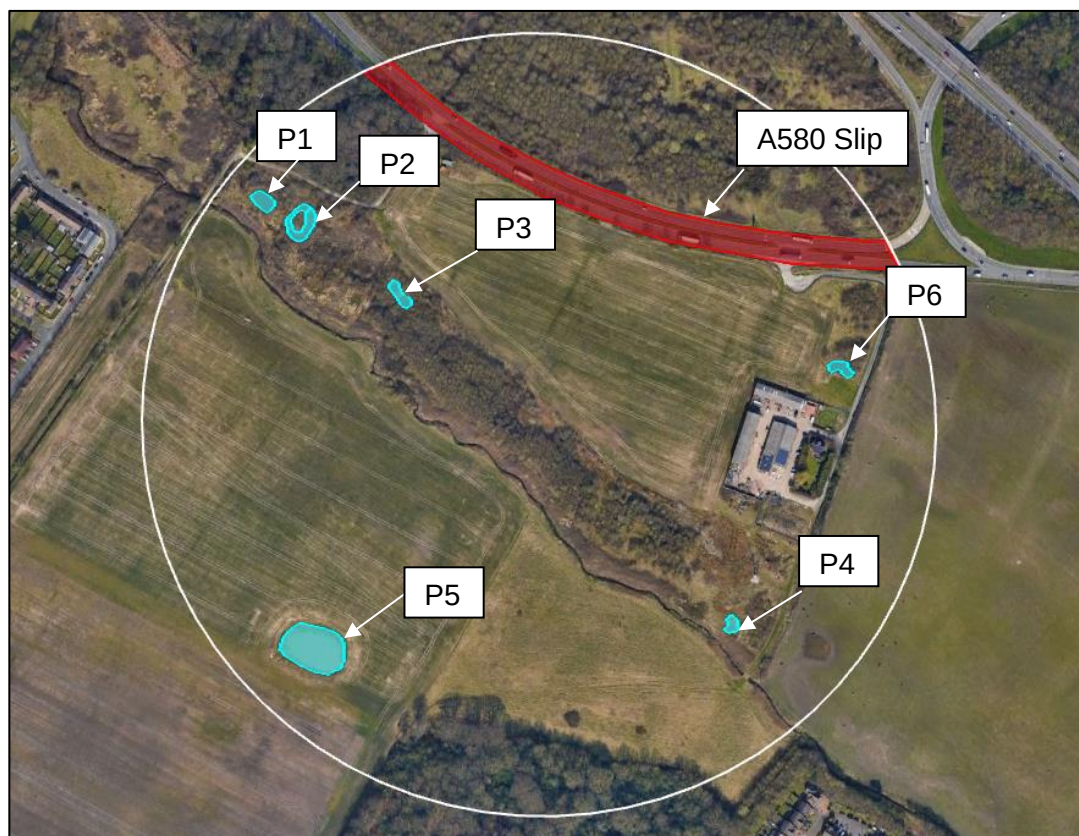
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**Appendix I:** *Larkins Farm – Preliminary Ecological Appraisal* (Tyrer Ecological Consultants Ltd, April 2023)

## 1.0 Background & Introduction

- 1.1 As part of a planning application in relation to Larkins Farm, Knowsley, Tyrer Ecological Consultants Ltd carried out a Preliminary Ecological Appraisal (PEA) in March 2023 – (see **Appendix I**).
- 1.2 The proposals are for a solar farm installation on arable land.
- 1.3 As part of the PEA, a great crested newt (*Triturus cristatus*) habitat suitability index (HSI) scoring assessment of **Ponds 1 – 6 (P1-P6)** was carried out (see **Figure 1.1** overleaf for pond locations); the ponds varied in suitability, **P3 & P5 = Poor, P4 = Below Average, P6 = Good, P1 & P2 = Excellent**.
- 1.4 Following up recommendations within the PEA, Tyrer Ecological Consultants Ltd were commissioned by Mr. Mike Carr on behalf of the landowner to undertake presence/absence surveys of **Ponds 1 – 6** during a suitable time of the year to detect great crested newts in open water (March 1<sup>st</sup> to June 30<sup>th</sup>).
- 1.5 The surveys aimed to determine presence or reasonably conclude absence of great crested newts at the ponds respectively. This report details the methodology used in accordance with best practice, will outline the survey results and present conclusions derived from the survey efforts. This report will present any further recommendations, including any avoidance, mitigation or intervention measures required to protect the favourable conservation status of great crested newts, where applicable.
- 1.6 This report should be read, understood and presented to the local authority as an addendum document to **Appendix I** (see contents page).
- 1.7 **Figure 1.1** overleaf shows the six ponds within the 250m boundary and provides a visual aid for perceived significant barriers within the surrounding landscape that would affect dispersal of terrestrial amphibians.



| Key                                                                                 |                                         |
|-------------------------------------------------------------------------------------|-----------------------------------------|
|  | Significant barrier to dispersal – high |
|  | Wider ponds                             |

**Figure 1.1** – A visual aid showing pond location and perceived significant barriers within the surrounding landscape that would affect dispersal of terrestrial amphibians from the ponds within a 250m radius.

## 2.0 Great Crested Newt (GCN) – Legislation & Policy

2.1 GCN are fully protected in all life stages by Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579) and the Wildlife and Countryside Act (1981) (as amended). They are listed a priority species under section 41 (s.41) of the Natural Environment Rural Communities Act 2006 (NERC Act) and are also listed on the Merseyside Biodiversity Action Plan. The legislation makes it a punishable offence to:

- Deliberately, intentionally or recklessly kill, injure or take a GCN,
- Deliberately, intentionally or recklessly take or destroy GCN eggs,
- Possess or control any live or dead specimen, or anything derived from a GCN,
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a GCN,
- Deliberately, intentionally or recklessly disturb a GCN while it is occupying a structure or place which it uses for that purpose

2.2 GCN are also protected by the Protection of Animals Act (1911), which prohibits any acts of cruelty or mistreatment.

2.3 In summary, GCN are protected from disturbance, killing, injuring or possession at any life stage, whilst confirmed breeding ponds and resting places are afforded the same protection once identified. Habitat for this species is protected when within certain range of a breeding pond. This places an obligation on local authorities to fully assess the impacts of development on this species prior to determining a planning application.

2.4 GCN populations have declined within the UK over recent years due to destruction and fragmentation of breeding ponds and terrestrial habitat. They spend a high percentage of their adult life in terrestrial habitat such as woodland, and shelter in environments with piles of rubble, log piles, tree roots, miscellaneous other for safety, refuge and hibernation. In Merseyside, GCN's are known to be present within the landscape, however populations are noted to be under pressure from significant fragmentation; nonetheless, this species can be found where favourable habitat coincides with connectivity to breeding pools.

**NB:** *Research presented by Natural England provides evidence that GCN are most likely to use terrestrial habitat within 100 metres of their breeding ponds, whilst the Great Crested Newt Method Statement for EPSML (Natural England) describes terrestrial habitat zones - the 50 metres range of any GCN pond is the 'Core' habitat zone and the area most likely to support newts in a lifetime; the area between 51-250m is the 'Intermediate' zone and 250m+ is the 'Distant' zone; impacts to these zones, from individual ponds, are considered by the ecologist; both permanent and temporary impacts are taken into account.*

2.5 Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

*180. When determining planning applications, local planning authorities should apply the following principles:*

*a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

*b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that*

*make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

*c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and,*

*d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

- 2.6 The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation:

*“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 planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.”*

- 2.7 The Knowsley Local Plan Core Strategy (2016) stipulates:

*“...the design of development will be expected to support and integrate biodiversity enhancements, flood risk mitigation, energy/resource efficiency and waste recycling requirements, to accord with Policy CS8: Green Infrastructure, Policy CS24: Managing Flood Risk and Policy CS26: Waste Management.*

*and in section 5.91:*

*“In some circumstances, adequate mitigation and/or compensation for biodiversity loss may be acceptable but incapable of being provided within the site. In such cases where appropriate, priority will be given to equivalent off site opportunities for such mitigation or, as a last resort, compensation. Such opportunities shall be prioritised in the following order:*

- Firstly sites in the immediate locality of and/or within any Core Biodiversity Area near to the application site,*
- Secondly, sites in a Nature Improvement Area identified within the borough,*
- Lastly, sites in a Nature Improvement Area identified outside the borough.*

### 3.0 Survey Results

#### Methodology

- 3.1 Presence / absence surveys were carried out on 11<sup>th</sup> May, 23<sup>rd</sup> May, 14<sup>th</sup> June and 27<sup>th</sup> June 2023.
- 3.2 Due to delayed timing of commission, just one survey was able to be completed during the optimum period, April 15<sup>th</sup> – May 15<sup>th</sup>.
- 3.3 **P5** is within the 250m boundary of the Site although indirectly connected, divided by suboptimal open intensively managed arable land and the Knowsley Brook running watercourse, a potential dispersal barrier; due to these factors and the low HSI score, **P5** was discounted from the surveys. Additionally, **P4** was not subject to surveys due to being dried out at the time that the surveys took place. Surveys therefore focused on **P1**, **P2**, **P3** and **P6** as per **Figure 1.1** previous.
- 3.4 Typically, three survey methods are carried out during traditional GCN surveying in accordance with the guidelines outlined in English Nature: *Great Crested Newt Guidelines* (2001); the following techniques were adopted during the survey effort at Larkins Farm:
- **Torchlight Survey:** This technique involves a visual search for individual newts inhabiting each water body and was employed at all four water bodies surveyed. A high-powered torch, in this case a Clu-Lite Deluxe CB2 with strength of 1,000,000 candlepower (c/p), was utilised to search any areas of water within which newts could feasibly be present, after nightfall. Pond perimeters were walked carefully and methodically taking care to count all animals seen, constraints of varying degrees were encountered whilst torching **P1**, **P2**, **P3**, and **P6** which are detailed in **Table 3.3**. To maximise the reliability of this technique, all torch surveys were conducted on evenings where the air temperature exceeded 5°C, when newts are generally considered being most active.
  - **Egg Search:** GCN eggs were searched for amongst submerged, floating and other aquatic vegetation where present, during both daytime and night-time hours. When laying their eggs, female GCN fold leaves of aquatic/semi-aquatic plants around the egg, although dead leaves and a variety of artificial materials are also known to be used. This behaviour is exploited by the surveyor to demonstrate that GCN are breeding in a particular waterbody, however egg numbers cannot be used to estimate population size due to predation and high mortality rates, therefore, in order to limit disturbance and avoid any unnecessary impacts, this method is ceased as soon as any eggs have been positively identified in aquatic habitat.
  - **Bottle Trap:** Plastic bottle traps were set around the margins of **P1**, **P2**, **P3**, and **P6** where access allowed, shortly before dusk. In all four surveys, at **P1** and **P2**, 20 bottle traps were set. In **P6**, 15 traps were deployed on survey 1 & 2, in survey 3 & 4 the decrease in water level would not allow deployment of traps. The water level was also a variable dependant at **P3**, on survey 1, a total of 5 bottle traps were set, although on survey 2, 3, & 4, the decrease in water level would not permit the feasible deployment of bottle traps. Where traps were set they were left in-situ overnight, checked & removed the following morning between 6.00am – 8.00am and never left longer than 10 hours.
  - **Refuge Search:** GCN are known to seek refuge and rest beneath areas such as rocks, logs, bark, tires, cones, debris itemised rubble etc. With relevance to this particular site, local tussock vegetation and various discarded waste was searched, and no artificial

refuge was employed by the surveyors. This technique is typically applied only to supplement other techniques.

## Results

- 3.5 See **Table 3.1** below for surveyor information and credentials, **Table 3.2** for climatic conditions on the dates of each survey, and **Table 3.3** for survey results and constraints encountered during the survey.

**Table 3.1 – Surveyor names / credentials for survey visits**

| Name                                       | Description of most relevant credentials                                                                                                                                                                                                                              |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mr. J. Pescod</b><br>Qualifying CIEEM   | MRes Advanced Biological Sciences, BSc (Hons) Senior Ecologist, with extensive training and experience,<br>Holder of a Natural England Great Crested Newt: CL08 Class 1 licence 2022-10653-CL08-GCN                                                                   |
| <b>Mr. H. Mulligan</b><br>Qualifying CIEEM | Junior Ecologist with a range of training and experience. MBiolSci in Biological Sciences (Zoology),<br>Accredited agent on the Natural England Great Crested Newt: CL08 Class 1 licence (2018-34062-CLS-CLS) of Mr. M. Pritchard.                                    |
| <b>Mr. D. Burrows</b><br>Qualifying CIEEM  | 3 years as a professional ecologist, with a multitude of training and experience,<br>BSc in Wildlife Conservation and MSc in Conservation & Biodiversity,<br>Holds a Natural England Great Crested Newt: CL08 Class 1 license 2022-106040-CL08-GCN.                   |
| <b>Miss. K. Judson</b><br>Qualifying CIEEM | 3 years as a professional ecologist, with a multitude of training and experience,<br>BSc (Hons.) Biology and MSc Conservation Management (a CIEEM accredited course).                                                                                                 |
| <b>Mr. B. Richards</b><br>Qualifying CIEEM | 1½ years as a professional ecologist, with a range of training and experience,<br>MBiolSci in Biological Sciences (Zoology),<br>Accredited agent on the Natural England Great Crested Newt: CL08 Class 1 licence (2018-34062-CLS-CLS) of Mr. M. Pritchard.            |
| <b>Miss. T. Hesketh</b>                    | An experienced Consultant Ecologist with 3 years professional training and experience; graduating with a BSc in Biology and MSc in Conservation Management (a course accredited by CIEEM), and is certified in River Condition Assessment methodology (MoRPh Rivers). |
| <b>Miss. C. Rimmer</b>                     | Trainee Ecologist with one year training and experience, currently undergoing extensive survey training - BSc Hons in Wildlife and Conservation                                                                                                                       |

**Table 3.2 – Survey dates, times and weather conditions**

| Survey                               | Date/Times                | Weather Conditions                                                                                         |
|--------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------|
| <b>Survey 1</b><br>Ponds 1, 2, 3 & 6 | 11/05/2023<br>Start: 2038 | <b>Sunset: 2058:</b> Light rain, Calm, 100% cloud cover<br>Start temp: 10.0 °C<br>End temp: 9.0 °C         |
| <b>Survey 2</b><br>Ponds 1, 2, 3 & 6 | 23/05/2023<br>Start: 2059 | <b>Sunset: 2119:</b> Dry, Clear, Light breeze, 10% cloud cover<br>Start temp: 16.0 °C<br>End temp: 13.0 °C |
| <b>Survey 3</b><br>Ponds 1, 2, 3 & 6 | 14/06/2023<br>Start: 2123 | <b>Sunset: 2143:</b> Dry, Clear, Gentle breeze, 0% cloud cover<br>Start temp: 19.0 °C<br>End temp: 16.0 °C |
| <b>Survey 4</b><br>Ponds 1, 2, 3 & 6 | 27/06/2023<br>Start: 2125 | <b>Sunset: 2145:</b> Light rain, humid, 100% cloud cover<br>Start temp: 17.0 °C<br>End temp: 16.0 °C       |

**Table 3.3 – Summary data from the surveys with constraints**

| Pond 1                                                                                                                                                                                                                                                                                                                                                                 |                                    |                   |                                                                                      |                                    |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------|--------------------------------------------------------------------------------------|------------------------------------|----------------------|
| Techniques                                                                                                                                                                                                                                                                                                                                                             |                                    |                   |                                                                                      |                                    |                      |
| Survey 1                                                                                                                                                                                                                                                                                                                                                               | Survey 2                           |                   | Survey 3                                                                             | Survey 4                           |                      |
| Bottle Trap x20, Torch, Egg Search                                                                                                                                                                                                                                                                                                                                     | Bottle Trap x20, Torch, Egg Search |                   | Bottle Trap x20, Torch, Egg Search                                                   | Bottle Trap x20, Torch, Egg Search |                      |
| Results                                                                                                                                                                                                                                                                                                                                                                |                                    |                   |                                                                                      |                                    |                      |
| Great Crested Newt (GCN)                                                                                                                                                                                                                                                                                                                                               | Smooth Newt (SN)                   | Palmate Newt (PN) | SN / PN Egg(s)                                                                       | GCN Egg(s)                         | GCN Present / Absent |
| 0                                                                                                                                                                                                                                                                                                                                                                      | 0                                  | 0                 | 1                                                                                    | 0                                  | Absent               |
| Constraints / Incidental Observations                                                                                                                                                                                                                                                                                                                                  |                                    |                   |                                                                                      |                                    |                      |
| <p>P1 was bordered by dense willow trees to the north margin, as a result, only 70% of the pond was able to be torched.</p> <p>No adult or juvenile amphibian species were identified within this pond, Medium-sized fish and diving beetles were present, potential predators of amphibians.</p> <p>An egg search yielded discovery of a smooth/palmate newt egg.</p> |                                    |                   |  |                                    |                      |

| Pond 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                    |                   |                                                                                     |                                    |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------|-------------------------------------------------------------------------------------|------------------------------------|----------------------|
| Techniques                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                    |                   |                                                                                     |                                    |                      |
| Survey 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Survey 2                           |                   | Survey 3                                                                            | Survey 4                           |                      |
| Bottle Trap x20, Torch, Egg Search                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Bottle Trap x20, Torch, Egg Search |                   | Bottle Trap x20, Torch, Egg Search                                                  | Bottle Trap x20, Torch, Egg Search |                      |
| Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |                   |                                                                                     |                                    |                      |
| Great Crested Newt (GCN)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Smooth Newt (SN)                   | Palmate Newt (PN) | SN / PN Egg(s)                                                                      | GCN Egg(s)                         | GCN Present / Absent |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1                                  | 0                 | 0                                                                                   | 0                                  | Absent               |
| Constraints / Incidental Observations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                    |                   |                                                                                     |                                    |                      |
| <p>Similar to P1, P2 was surrounded by dense willow trees, due to this approximately 50% of the pond was able to be accessed on all surveys.</p> <p>No other amphibian species were identified within this pond, despite the surveyors utilising a torchlight survey, an egg search and a refuge search of suitable terrestrial habitats in close proximity.</p> <p>Incidentally two adult European eels (<i>Anguila anguila</i>) were found, a protected species listed as 'Critically Endangered' on the IUCN red list, this is shown in the adjacent image and is addressed further in <b>Section 5</b>.</p> <p>Additional species found within this waterbody include medium-sized fish, mosquito larvae and diving beetles.</p> |                                    |                   |  |                                    |                      |

| Pond 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                   |                                                                                     |                   |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------------------------------------------------------------------|-------------------|----------------------|
| Techniques                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                   |                                                                                     |                   |                      |
| Survey 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Survey 2          |                   | Survey 3                                                                            | Survey 4          |                      |
| Bottle Trap x5,<br>Torch, Egg Search                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Torch, Egg Search |                   | Torch, Egg Search                                                                   | Torch, Egg Search |                      |
| Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |                   |                                                                                     |                   |                      |
| Great Crested Newt (GCN)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Smooth Newt (SN)  | Palmate Newt (PN) | SN / PN Egg(s)                                                                      | GCN Egg(s)        | GCN Present / Absent |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0                 | 0                 | 0                                                                                   | 0                 | Absent               |
| Constraints / Incidental Observations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                   |                                                                                     |                   |                      |
| <p>Whilst surveying pond 3, constraints were encountered such as masses of dense leaf litter and high turbidity which resulted in reduced visibility whilst torching. Additionally, the receding water levels prevented the deployment of bottle traps in surveys 1, 2 &amp; 3 although all outer edges of the pond were accessible to torch.</p> <p>A single adult frog (<i>Rana temporaria</i>) was found within this pond as well diving beetles were numerous within.</p> <p>Two grey partridges (<i>Perdix perdix</i>) seen nearby.</p> |                   |                   |  |                   |                      |

| Pond 6                                                                                                                                                                                                                                                                                                                                                                             |                                        |                      |                                                                                     |                   |                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------|-------------------------------------------------------------------------------------|-------------------|-------------------------|
| Techniques                                                                                                                                                                                                                                                                                                                                                                         |                                        |                      |                                                                                     |                   |                         |
| Survey 1                                                                                                                                                                                                                                                                                                                                                                           | Survey 2                               |                      | Survey 3                                                                            | Survey 4          |                         |
| Torch, Egg Search,<br>Bottle Traps x15                                                                                                                                                                                                                                                                                                                                             | Torch, Egg Search,<br>Bottle Traps x15 |                      | Torch, Egg Search                                                                   | Torch, Egg Search |                         |
| Results                                                                                                                                                                                                                                                                                                                                                                            |                                        |                      |                                                                                     |                   |                         |
| Great Crested Newt<br>(GCN)                                                                                                                                                                                                                                                                                                                                                        | Smooth<br>Newt<br>(SN)                 | Palmate<br>Newt (PN) | SN / PN Egg(s)                                                                      | GCN<br>Egg(s)     | GCN Present<br>/ Absent |
| 0                                                                                                                                                                                                                                                                                                                                                                                  | 7                                      | 0                    | 0                                                                                   | 0                 | Absent                  |
| Constraints / Incidental Observations                                                                                                                                                                                                                                                                                                                                              |                                        |                      |                                                                                     |                   |                         |
| <p>In the latter two surveys, pond 6 had entirely dried up and as a result was not surveyed. Although present, in survey 1 and 2, an abundance of emergent vegetation decreased the visibility of the water to surveyors.</p> <p>Within the waterbody, a total of four common frogs were encountered whilst torching, additionally an abundance of diving beetles was present.</p> |                                        |                      |  |                   |                         |

#### 4.0 Impact Assessment

- 4.1 The combined survey effort has found no evidence of great crested newt in any of the four ponds surveyed using traditional survey methods.
- 4.2 Given the results derived from the surveys, great crested newts have been reasonably determined as absent from **P1, P2, P3 & P6**, which are the four most suitable ponds in proximity to the Site.
- 4.3 **P4** was dried up during all visits as a result discounting it as a GCN breeding pond; **P5** is indirectly connected to the Site, separated by suboptimal intensive arable land and Knowsley Brook; due to this and the low HSI score that it achieved during the preliminary ecological appraisal, it is considered unsuitable for GCN.
- 4.4 Based on the results it can be determined that no breeding ponds are present within 250m of the Site if significant barriers (busy roads, high impenetrable construction fencing) are being taken into account. See **Figure 1.1** for details on the significant barriers, however in summary it is considered that the parcel of land on which the Site is situated is effectively isolated from the larger number of ponds in the wider landscape via these barriers.

## 5.0 Conclusions & Recommendations

- 5.1 Following the surveys no licence requirements or specific intervention measures for great crested newts are recommended.
- 5.2 Whilst great crested newt absence has been reasonably determined, the surveys did identify breeding by smooth newts (*Lissotriton vulgaris*) (low population) and common frogs (*Rana temporaria*) in the local pond network. Common frog breeding was recorded in **P1**, **P2** and **P4** during the PEA with adults also observed during the newt surveys. There is a reasonable likelihood of common toad also being present. Common amphibians may be found sheltering, commuting or feeding around site boundaries. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of EPS is ruled out. Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as local wildlife sites, or a similar equivalent, for sites of local importance. As such, a precautionary approach should be adopted during the construction phase. To this effect it is recommended reasonable precautions be followed with details outlined by a Method Statement (non-licenced reasonable avoidance measures) (RAMs) for common amphibians.
- 5.3 Any RAMs drafted should be subject to the approval of the local planning authority acting on the professional judgement of their ecological advisors - following approval, adherence to the terms of the RAMs would be a requirement of the named authority and the applicant would be the liable party, with the Ecologist / ECoW acting for and on behalf of the applicant.
- 5.4 The applicant and all contractors would be aware that if at any stage great crested newt (GCN) are encountered during works, or at any other stage of the work programme, works would be required to immediately cease and the Ecologist / ECoW be made aware as to provide further guidance if an Ecologist is not already present.

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**Appendix I:** *Larkins Farm – Preliminary Ecological Appraisal*

(Tyrer Ecological Consultants Ltd, April 2023)