



Template Method Statement to be used within a Great Crested Newt Development Licence Application

This template Method Statement is to be used to form part of your Licence Application for a European Protected Species Development Licence. It will be used to determine the impact of the application on the favourable conservation status of the species concerned (Regulation 55(9) (b) of the Conservation of Habitats and Species Regulations 2017). It must be prepared by a consultant ecologist or other suitably qualified person. You are strongly advised to refer to the **Great Crested Newt Mitigation Guidelines**¹. Please submit your Application and supporting Method Statement electronically to the contact details provided below.

Please note as of the 1st March 2018 the declaration box found at the end of this template must be included on any Method Statements submitted in support of a licence application, and must be signed and dated by the applicant and ecologist. Any application containing a Method Statement without this declaration will be rejected.

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Method Statement Title:	Proposed Solar Farm and Battery Store (P/2022/0541)
Method Statement Version Number:	1
Method Statement Issue Date:	26/09/2023
Site Address:	Little Llwyn Onn, Cefn Road, Wrexham, LL13 0NY

¹ Great Crested Newt Mitigation Guidelines (NEWT1) available from Natural England website

Background and Supporting Information

A Executive Summary.

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The site of:

- Little Llwyn Onn, Cefn Road, Wrexham

Has been granted full planning permission for:

- The erection of a solar farm and battery storage facility (P/2022/0541).

The following ecological surveys have been completed for the site:

- HSI and eDNA Survey - 28/06/2020 (Etive Ecology Ltd)
- Extended Phase 1 Habitat Survey – 05/08/2021 (Corylus Planning and Environment Ltd)
- Extended Phase 1 Habitat Survey – 15/11/2021 (Etive Ecology Ltd)

These surveys concluded the presence of Great Crested Newt (GCN) in the immediate vicinity of the development footprint.

The proposed scheme will result in the immediate disturbance to the existing semi-natural habitats on site. Any GCN present within these habitats will be subject to disturbance and likely harm.

B Introduction

B.1 Background to activity/development

Include a brief summary of what the proposed activity is and why it is necessary.

- The proposed scheme is for the erection of a solar farm and battery storage. The Environment Act (Wales) set a target of 70% of the country's electricity consumption to be sourced from renewable sources by 2030 as a response to the Paris Agreement which was signed by the UK in 2016, a global agreement to reduce global warming. This development will contribute to meeting the National Grid's renewable energy needs for producing green electricity and reducing reliance on fossil fuels which produce harmful greenhouse gases. Solar Technology is proven to be a source of safe, locally produced and sustainable power.
- The applicant has also signed a private wire to the Five Fords Water Treatment Works, operated by Dwr Cymru Welsh Water (DCWW), one of the largest energy users in Wales who has announced plans to be carbon neutral by 2040. The proposed solar farm will make a significant contribution towards DCWW decarbonising their organisation.

B.2 Full details of proposed works on site that are to be covered by the licence

Please ensure sufficient detail is provided on the proposed works e.g. construction of buildings, roads, fences etc. Include current status of planning permission or other consents (if applicable) and any outstanding conditions/reserved matters. Include timescales and order of work.

The development of the site has been granted for the erection of a solar farm and battery storage (planning permission no. P/2022/0541). This comprises of:

- The development of Compartment 1 (West) and Compartment 2 (East) as solar panel compartments with separate access gates;
- Installation of battery and ancillary infrastructure;
- Installation of perimeter fencing around the solar park and associated infrastructure, with CCTV security;
- Reduction of the 7m hedgerow from the south boundary to facilitate site access;
- Reduction of the height of the hedgerow on the south boundary to 0.6m.
- Enhancement of the existing eastern hedgerow by gap planting, and creating new woodland / scrub habitat.
- Creation of one hibernacula within each compartment.
- Creation of a new pond in Compartment 2 and an adjacent soil bund.

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- Conversion of existing arable land to the south of Compartment 1 into species-rich native grassland by over-sowing of suitable seed mix.
- Management of the retained, enhanced and newly created habitats for the duration of the operational period (anticipated to be 40 years) with monitoring and Site wardening.

The current timescale for the whole development is:

- The approved development is planned for commencement in 2024 and certainly before the expiration of five years from the date of the Decision Notice for application no. P/2022/0541 – dated 06th March 2023.
- It is intended to commence enabling works immediately upon grant of this GCN license.

The relevant planning conditions are that no development or phase of development hereby approved, shall commence until a Landscape Ecological Management Plan (LEMP) for the provision, management and monitoring of the landscape and ecological features at the site and measures to ensure Biodiversity Net Gain is achieved, has been submitted to and approved in writing by the Local Planning Authority. The LEMP shall include the following details:

- Submission of a long-term site management plan (for a duration of the construction and operation of the scheme) that includes:
 - Defined aims and objectives.
 - Target habitat conditions against which to measure condition.
 - Habitat management prescriptions for aquatic and terrestrial habitats.
 - Appropriate amphibian reasonable avoidance measures.
 - Contingency measures if fish or invasive non-native species (INNS) are detected.
 - Proposals that are capable of being implemented in the event of failure to undertake or to appropriately implement identified or contingency actions.
 - Site liaison and wardening; detail of the skills and competencies required by those undertaking the works or activities including whether they require European Protected Species licenses for the activities proposed.
 - Licensing requirements for undertaking habitat management and surveillance.
 - Current and proposed changes to tenure of the compensation area.
 - Tenure of the compensation area to be approved by LPA in accordance with NRW.
 - Persons or bodies responsible for undertaking management and surveillance together with the required skills and competencies.
 - Reporting requirements; and proposed dates for updating and revising the management plan.
 - A biosecurity risk assessment.
- Thereafter, the development shall be undertaken in accordance with the approved LEMP at all times during the duration and life of this permission.

It is intended that this planning condition will be discharged prior to submitting the GCN license. This MS will be submitted to Wrexham CC to address the need for a LEMP, along with a Habitat Management Plan (HMP), as it contains all of the necessary information.

B.3 Actions requiring licensing

E.g. disturb, capture, translocate, damage or destroy breeding site or resting place (terrestrial and/or aquatic), kill. Briefly explain why these actions are necessary.

The development of the site will involve the following licensable actions:

- Capture of GCN within the working area.
- Translocation of GCN from working area into the receptor sites (hedgerows and graded field margins immediately adjacent to the point of capture).

C Survey and site assessment

C.1 Existing information on great crested newts at the survey site.

Provide records from local environmental records centres, predictive modelling, local herpetile groups, previous survey work by the applicant or others. Include records from within 2km.

A COFNOD data search conducted by Etive Ecology Ltd identified 800 records of GCN within 2km of the site between 1976 and 2021. The closest records reported were 119m, 131m, 162m and 190m north of the site between 2007 - 2010. Furthermore, there is an abundance of records to the east of the site within the Wrexham Industrial Estate from 2016 – 2019, and to the south and southwest of the site.

C.2 Statutory sites notified for the species (SSSIs or SACs) within 10km

The following statutory sites (SSSI / SAC) within a 10km radius of the development site were checked for GCN notifications:

- Afon Dyfrdwy (SSSI)
- Berwyn a Mynyddoedd De Clwyd (SAC)
- Chwarel Singret (SSSI)
- Cloy Brook Pastures (SSSI)
- Coedwig Ffosil Brymbo Fossil Forest (SSSI)
- Dee Cliffs (SSSI)
- Gatewen Marsh (SSSI)
- Johnstown Newt Site (SAC)
- Llay Bog (SSSI)
- Marford Quarry (SSSI)
- Nant-y-Belan and Prynela Woods (SSSI)
- Old Pulford Brook Meadows (SSSI)
- River Dee and Bala Lake (England) (SAC)
- River Dee and Bala Lake (Wales) (SAC)
- Ruabon / Lantysilio Mountains and Minera (SSSI)
- Shell Brook Pastures (SSSI)
- Sontley Marsh (SSSI)
- Stryt Las a'r Hafod (SSSI)
- Vicarage Moss (SSSI)
- Well Rough and Long Plantation (SSSI)

Johnstown Newt Site (SAC) has been designated for supporting a breeding population of over 300 GCN which has been considered to be either stable or increasing.

Stryt Las a'r Hafod (SSSI) has been notified for supporting one of the largest known breeding populations of GCN in Great Britain, along with the presence of many other amphibian species.

All other sites noted above are not notified for any reason directly related to GCN.

C.3 Objectives of the survey

E.g. to determine presence/absence of all sub-populations of great crested newts likely to be affected, an estimate of population size and their usage of site (e.g. breeding, hibernation, and foraging).

To determine the presence / absence of all sub populations of GCN likely to be affected, and to estimate the size of the population and usage of the site.

C.4 Scaled plan/map of survey area

This should be of appropriate scale and orientation with integral or separate location map at 1:50,000 or 1:25,000 scale and aerial photographs.

C.4 Attached

C.5 Site/habitat description (relevant to great crested newts)

This should be based on day-time visits (to include description of site and habitat relevant to great crested newt ecology). Include annotated photographs if applicable.

The aquatic habitat within the Site boundary comprises a drainage ditch which divides Compartments 1 and 2. There are no ponds within the Site boundary or within 250m of the red line boundary. However, there were eight ponds identified within the survey area, six within 500m of the red line boundary all with direct habitat connectivity, with key features relatable to habitat suitability identified:

- Ponds 1 and 2 is heavily shaded.
- Pond 3 was recently infilled and is therefore negligible for GCN aquatic habitat.
- Ponds 4 and 5 provide good water quality and aquatic vegetation.
- Ponds 6 and 7 provide aquatic vegetation and are a considerable pond size.

Pond 8 was a considerable pond size and is absent of fish / fowl.

The terrestrial habitat within the Site boundaries comprises recently drilled arable land which is of low value to GCN as it lacks vegetation and cover. However, the Site boundaries of Compartment 2 comprise well-established hedgerows with graded field margins, offering wide corridors of high value terrestrial habitat to GCN as they provide shelter and protection. The field margins of Compartment 1 are narrow and ungraded, which did not offer the same level of suitability.

Overall, suitable GCN habitat was identified;

- Seven ponds within the survey area
- Hedgerows with graded field margins around Compartment 2 of the Site boundaries.

The terrestrial habitat within the site boundary is considered to be of moderate value to GCN offering wide corridors with Compartment 2 which provide shelter and protection. The Habitat Suitability Index (HSI) score of each pond was assessed during the survey efforts to determine the suitability of each pond within the survey area to support GCN.

Site photographs are presented in Table C.7.1.

C.6 Field survey(s).

Include survey method (night counts, bottle trapping, egg surveys, site inspections), timings (day/evening), weather conditions (wind, rain, air and water temperature – tabulated for multiple survey visits), personnel involved (provide individual licence numbers, if held) and details of experience/competence in this type of work, and equipment used (type and power of torch). Also record any occurrence of non-native invasive plant species or fish, and structures or features that may cause incidental capture or killing, e.g. gully pots. Also include any constraints and justifications for departures from best practice.

Survey methods included:

- HSI assessments of the eight identified ponds within the survey area (June 2020)
- eDNA testing (28th June 2020)
- Extended Phase 1 Habitat Survey (5th August 2021 and 15th November 2021)

The initial Extended Phase 1 Habitat Survey was carried out by Corylus Planning and Environmental Limited on the 5th August 2021. All other HSI assessments, water sample collection for eDNA analysis, and the updated Extended Phase 1 Habitat Survey was taken by Russell Grey (BSc, CEnv, MCIEEM) and Wendy O'Neill (BSc) of Eive Ecology Ltd. Water samples were sent to SureScreen Scientifics for eDNA analysis in accordance with the protocol stated by DEFRA WC10671.

HSI assessments

- All the ponds identified within the Study Area were assessed for their potential to support breeding populations of GCN using the Habitat Suitability Index (HSI) in accordance with standard methodology (Oldham et al, 2000). A total of eight ponds were identified and were accessible to the surveyor, six of which were within 500m of the red line boundary.
- The HSI assessment considers the following ten habitat attributes that are considered to influence the suitability of a pond for breeding GCN:
 - i. Location – within a UK wide context reflecting the differences in national distribution of this species;
 - ii. Area – water bodies between 100 and 300 m² in size are considered to represent the most suitable habitat for GCN;
 - iii. Permanence – the number of years in which a pond dries over a 10-year period. Occasionally drying kills fish which is beneficial for GCN, but the species tends to favour ponds that do not dry out every year;
 - iv. Water Quality – qualitative evidence-based assessment to infer good (diverse aquatic invertebrate assemblage), moderate (moderate invertebrate diversity), poor (low invertebrate diversity, few submerged plants), or bad (clearly polluted) water quality;
 - v. Shade – percentage of pond perimeter shaded to at least 1m from the shore. GCN favour lightly shaded water bodies;
 - vi. Waterfowl – qualitative evidence-based assessment of presence or absence and number is made. Large numbers of waterfowl can result in nutrient enrichment of the water and habitat damage, which is less favourable to GCN;

- vii. Fish – qualitative evidence-based assessment of likely presence or absence is made. GCN favour breeding ponds that do not support fish because their open-water swimming larvae are vulnerable to fish predation;
 - viii. Other ponds – GCN populations are typically best developed where they have access to a network of ponds, and therefore the species is more likely to be found where there are several ponds within 1km that are linked to suitable terrestrial habitat; and
 - ix. Macrophytes – percentage of pond surface area occupied by macrophyte cover. Female GCN require aquatic vegetation for egg-laying.
- eDNA testing
 - Ponds achieving a score in the HSI assessment which were indicative of suitable breeding habitat for GCN were subjected to further eDNA surveys.
 - Water bodies were not entered by surveyors during sample collection, and sterile equipment supplied by SureScreen Scientifics/FERA was used to collect each sample collection to prevent contamination between samples.
 - If eDNA was detected, then this provided confirmation of GCN presence within the relevant water bodies. If eDNA was not detected, then this provided with high confidence evidence that there is no reasonable likelihood of GCN present in the relevant water bodies.
 - Extended Phase 1 Habitat Surveys
 - The Extended Phase 1 Habitat Survey was undertaken by Corylus Planning and Environmental Ltd in August 2021, which was then updated by Ective Ecology Ltd in November 2021, to inform the Ecological Impact Assessment (EclA) to be submitted with the Planning Application (P/2022/0541). This considered the suitability of both the terrestrial and aquatic habitat on site for GCN so that the ecological impact of the development on the GCN population could be assessed, and appropriate mitigation and compensation strategies could be considered.

C.7 Survey Results.

Summarise findings in table form (if appropriate); provide clear, annotated, and cross-referenced maps/plans/photographs to show locations of breeding sites, and habitat maps. Raw data to be appended.

During the Phase 1 Habitat Survey, the majority of the terrestrial habitat comprised of recently drilled arable land, lacking vegetation and cover. However, the Site boundaries of Compartment 2 comprise well-established hedgerows with graded field margins, offering shelter and protection. The field margins in Compartment 1 were narrow and ungraded and did not offer the same level of shelter and protection.

A summary of the 8 ponds identified within the study area are detailed below in Table C.7.1 with attached photographs.

Table C.7.1 Pond Summaries

Pond	Description	Photograph
1	Too dry to sample, heavy shade.	

Pond	Description	Photograph
2	Too dry to sample, heavy shade.	
3	Recently in-filled.	
4	Good suitability for GCN due to good water quality and aquatic vegetation.	

Pond	Description	Photograph
5	Moderate suitability for GCN due to good water quality and aquatic vegetation.	
6	Moderate suitability for GCN due to aquatic vegetation and pond size.	
7	Good suitability for GCN due to aquatic vegetation and pond size.	

Pond	Description	Photograph
8	Moderate suitability for GCN due to pond size and absence of fish / fowl.	

The results of the HSI Assessment are detailed below in Table C.7.2.

Table C.7.2 HSI Results

Pond	Criteria										HSI
	1	2	3	4	5	6	7	8	9	10	
1	1	0.8	0.5	0.33	0.2	0.67	1	0.95	0.67	0.4	0.58
2	1	0.8	0.5	0.33	0.2	0.67	1	0.95	0.67	0.4	0.58
3	RECENTLY IN-FILLED										
4	1	0.6	0.5	0.67	1	0.67	1	0.95	0.33	0.8	0.71
5	1	0.2	0.5	0.67	1	1	1	0.95	0.33	0.9	0.67
6	1	0.8	0.9	0.67	0.8	0.67	0.33	0.95	0.33	0.5	0.65
7	1	0.8	0.9	0.67	0.8	0.67	0.33	0.95	0.67	0.5	0.70
8	1	0.8	1	0.33	0.2	1	1	0.95	0.67	0.3	0.66

The five ponds which had a HSI score indicative of a potential breeding pond (ponds 4 – 8) were subjected to eDNA testing. **eDNA testing was positive for Pond 7, and negative for all other ponds.**

C.8 Interpretation/evaluation of survey results (Great crested newt Mitigation Guidelines section 5.8)

Provide count/estimate of great crested newt numbers, status of site (e.g. breeding, foraging, resting or hibernating), population significance, constraints on survey (e.g. time of year, cold weather, access problems – justify as necessary).

The arable land is of low value to GCN as it lacks vegetation cover and structure. However, the Site boundaries of Compartment 2, comprising well established hedgerows with graded margins creating wide corridors, was considered to be of high value to GCN during their terrestrial phase as they offer shelter and protection. The field margins of Compartment 1 were narrow and ungraded and therefore did not offer the same level of suitability. Overall, the terrestrial habitat within the Site boundaries was considered to be of moderate value to GCN.

Five of the eight ponds were assessed using HSI scoring, which indicated that five out of the eight ponds were suitable for breeding GCN (Ponds 4-8). Ponds 1 and 2 were considered to have a poor water quality and too heavily shaded to be suitable and Pond 3 had been recently in filled. All ponds within the Survey Area are considered to have direct habitat connectivity to the Site boundaries.

Out of the five ponds which had been assessed as suitable for breeding GCN populations (Ponds 4-8), only Pond 7 returned results from the eDNA testing that was indicative of a positive presence of GCN.

Based on the HSI/eDNA findings and the suitability of the terrestrial habitat on Site (together with the historical data provided by COFNOD during the data search) it is concluded that GCN are potentially present within the development footprint, with the site being of **Local Value** to GCN.

Given the absence of up to date survey information and with no population surveys having been undertaken to date, it is assumed on a precautionary basis that the local area supports a **Large GCN population**.

D Impact assessment – potential impact of proposed works in absence of mitigation/compensation. See Great Crested Newt Mitigation Guidelines (section 6.2)

D.1 Short-term impacts: disturbance

E.g. artificial light, restricting access to feeding or breeding sites, sheltering habitats and dispersal corridors.

Without mitigation, the scheme will result in the immediate disturbance to the existing semi-natural habitat on Site, comprising arable, tall ruderal, scattered broadleaved trees, ditches and hedgerows. Any GCN present within these habitats will also be subject to disturbance and likely harm. These impacts would be significant at the local level given the assumed presence of GCN within the Site.

The Site would become temporarily fragmented during construction, with arable habitat subject to impacts from site vehicles and panel installation.

D.2 Long-term impacts: site modification

E.g. destruction or damage of part of breeding site or preferential sheltering/foraging habitats Note that impacts can be positive or negative as this is in absence of mitigation.

The proposed scheme will introduce grassland beneath the solar panels as a replacement to the existing arable habitat. The grassland would be grazed by sheep at the standard livestock density. Therefore, the long-term impact of the Site modification will be neutral on GCN as improved grassland pasture is similar value to GCN as the existing arable grassland.

D.3 Long-term impacts: site loss

Impact on different sub populations to be taken into account at 2km, 10km, local, regional, and national level.

The proposed development will result in the loss of an area approximately ~0.05ha of semi-natural habitat, where Site access roads and battery storage units will be installed. These impacts would be significant at the local level given the assumed presence of GCN within the Site.

D.4 Long-term impacts: fragmentation and isolation

E.g. loss of ponds or terrestrial habitat including stepping stones and linear features such as hedges, tree lines, severance of migration routes by roads.

There would be no significant fragmentation impacts due to the site being reverted to its pre-development arrangement. Furthermore, all security fences surrounding the solar panels would be permeable to GCN.

D.5 Post-development interference impacts

E.g. gully pots or other features that could effect incidental capture or killing, predation, disturbance, including those associated with recreation and human pressure,.

Routine maintenance could disturb GCN by tasks such as hedgerow cutting and grassland management. However, maintenance would normally be carried out over the winter period to avoid nesting bird impacts. The impact of post-development interference is therefore considered negligible.

D.6 Predicted scale of impact

Include impacts on species status at the site, 2km, 10km, local, county, regional and country levels.

The Conservation of Habitats and Species Regulations 2017

The assumed GCN presence within the Site would be subject to short-term disturbances, and the long-term site loss of approximately ~0.05ha of semi-natural habitat, resulting in a minor adverse impact that is significant at the site level only.

The short-term fragmentation within the site (during construction works) will also result in a minor adverse impact that is significant at the local level.

Delivery Information - Mitigation, compensation and monitoring

Description of how the impacts will be addressed in order to ensure no detriment to the maintenance of the population at a favourable conservation status.

E Works to be undertaken

Please identify which works will be undertaken or supervised by a licensed ecologist

E.1 Great Crested Newt capture and exclusion (if applicable).

Timings, effort, methods to be employed, reasonable avoidance schemes or measures for great crested newts (fencing, fence maintenance, logging captures, inspection and maintenance of fences), locations of receptor sites etc. Include diagrams to show locations of draft and exclusion fencing, pitfall trap design and trap density. State if site based weather stations are used to demonstrate appropriate trapping conditions

The capture and exclusion of GCN from the construction site will be carried out prior to the commencement of works.

A line of perimeter fencing will be installed, according to best practice standards, around the working area, as shown in Figure E.1. Fencing design will meet the industry standards detailed in the GCN Mitigation Guidelines (as shown below). All fencing will comprise upright temporary amphibian fencing (TAF) with alternating pitfall traps and refugia comprising of carpet tiles or felt installed every 10m along the inside of the fence line. The fencing will extend around the whole development footprint north of Cefn Road. Access points for construction vehicles will be provided by way of openings in the fence lines. These openings will be up to 10m wide and the TAF will be turned back to prevent GCN from re-entering the site after the completion of trapping.

The standard trapping period for a large-sized GCN population is a minimum of 90 consecutive days and a minimum of 5 consecutive days of non-capture at the end of that period. However, given the relatively low value of the arable land that forms the majority of the site area, it is proposed that a minimum of 30 days capture be undertaken, with 14 consecutive days of non-capture (of GCN) required to end the trapping effort.

Amphibians caught will be returned to suitable terrestrial habitat outside of the GCN fence and immediately adjacent to the location where they were found. Retained boundary corridors will be protected during the construction phase to ensure continued use by GCN and other amphibians.

Once the trapping period has been completed and no GCN are caught for a minimum of 5 consecutive days, the area will be deemed clear of GCN. Newt grids will be installed where Site access roads cross perimeter fencing areas.

All industry standard protocols as described in the GCN Mitigations Guidelines will be fully adhered to. These include checking of traps by GCN licensed ecologists or accredited agents, trapping only during suitable weather conditions and ensuring that traps are set-up to provide shelter for amphibians and a means of egress for small mammals. Trapping effort will be undertaken during the period March to October inclusive. Acceptable trapping nights will be those where the overnight low temperature does not fall below 5°C. Upon completion of trapping effort, weekly checks of the TAF will be undertaken by a competent ecologist until such time as the construction works are completed and the fence can be removed.

If the fence remains in place over the hibernation period (November to February inclusive) then the fence checks can drop to a monthly frequency. Any damage or issues with the fence will be recorded and will be fixed within 48 hours. The fencing will only be removed upon completion of all works and outside of the hibernation period. Fence removal will be supervised by a GCN-licensed ecologist.

E.2 Great Crested Newt habitat

E.2.1 Receptor site modification, enhancement or creation.

Include details of new breeding sites and resting places e.g. pond creation- design, layout, number, planting schemes, water supply and hydrology regimes, terrestrial habitat diversification or creation – design, habitat type, planting schemes, provenance of imported plants, consideration of biosecurity impacts.

All amphibians caught during the trapping effort will be translocated into hedgerows and graded field margins immediately adjacent to the point of capture. There will be a corridor of land controlled by the applicant between the GCN fence and the red-line site boundary, which will be suitable to act as a receptor site. The GCN exclusion fencing will prevent returns to the Site until all construction works have been completed.

The entirety of the red-line site boundary will form part of the mitigation / compensation package for the proposed scheme. The whole area north of Cefn Road will be subject to enhancement (as detailed below) and a long-term management plan (as detailed in Section F) to ensure the delivery of Net Benefit for Biodiversity (NBB) arising from the scheme. The site will be transformed from a high intensity agricultural regime to a low-input conservation-led management system.

Compartment 1 (west): a small area of woodland planting in the west corner, seeding of a species-rich grassland mix within the compartment, demarcation of tree root protection zones around existing mature trees, the creation of hibernacula and the planting of a woodland belt along the southern site boundary. The areas of arable grassland between the solar panels and the southern boundary will be converted from arable to species-rich grassland via overseeding of a suitable seed mix and long-term management.

Compartment 2 (east): enhancing the eastern site boundary hedgerow through gap planting, seeding of a species-rich grassland mix within the compartment, creation of two new ponds and associated soil bund, creation of hibernacula adjacent to each new pond and the demarcation of tree root protection zones.

South of Cefn Road: creation of an area of dense scrub just to the south of Cefn Road, to compensate for the loss of similar habitat to the footprint of the new substation.

E.2.2 Temporary loss of breeding sites, resting places

Provide details of all reasonable avoidance measures to be undertaken throughout the period of works

N/A. No breeding sites or resting places will be temporarily lost.

E.2.3 Destruction of existing breeding sites, resting places

Full project programme including dewatering schemes(including filter specifications), programmes of terrestrial searches, fencing location and construction, transport methodologies, void infilling.

A GCN-licensed ecologist will be present on site for the following activities that will result in the destruction of GCN habitat:

- Installation of GCN exclusion fencing
- Removal of any section of hedgerow
- Topsoil stripping or access track formation
- Removal of GCN fencing

Prior to the commencement of these activities, the licensed ecologist will undertake hand-searches of the working areas to search for GCN. Any animals found would be translocated to the identified receptor sites. It is acknowledged that even once trapping has been completed, there remains a residual risk of GCN being present within suitable habitat on site, thus the need for ecological supervision.

E.2.4 Scaled maps/plans

To show proposals for mitigation outlined above in relation to existing and proposed habitat features and in relation to the proposed development outline. A GIS data layer may be included with your application to illustrate locations of habitats in E.2.1 to E.2.3

See Figure E2.

E.3 Mechanisms for ensuring delivery of mitigation and compensation measures

E.3.1 Measures to ensure compliance with this method statement.

This may require appointment of an external auditing scheme including audit key performance indicators, for medium, large scale or long term schemes e.g. residential development, pipeline construction or maintenance, way leaves for utilities, quarrying and mineral extraction.

NRW and Wrexham CBC have indicated that an Ecological Compliance Audit will be required for this scheme, to ensure that the mitigation/compensation is delivered. A copy of the ECA template, detailing the ECA requirements, has been appended to this document.

Planning Condition 7 of the Decision Notice for Application no. P/2022/0541 means that it is a condition of planning to implement this GCN license in full. Failure to implement the mitigation and compensation measures detailed herein would represent a breach of planning consent.

The supervision of the work will be arranged immediately with the client on receipt of the GCN license. Etive Ecology Ltd will report any failure to implement the license to NRW.

E.3.2 Ensure that sufficient land has been acquired for compensation purposes

Provide scaled maps/plans

Compensation measures are detailed within the approved drawings and on Figure E2 attached. The measures include new ponds, scrapes or long-term grassland management. All of these features lie within the existing land-ownership boundary.

See Figure E.2 for details.

E.3.3 Ensure that designs of subsequent development are newt friendly

Do not include features likely to result in incidental capture or killing

No features of development are anticipated pose a risk to GCN during operational phase.

E.3.4 Provide sufficient resources

To ensure effective site management and associated wardening, and monitoring where relevant.

Planning Condition 7 of the Decision Notice for Application P/2022/0541 means that this is a condition of planning and to implement this GCN license in full. Failure to provide sufficient resources for site management, associated wardening, and monitoring would be a breach of the Decision Notice. Mindful of this, the applicant and license holder has allocated sufficient funds to implement the long-term habitat management of the site, as detailed within the planning application and the GCN License MS.

E.4 Mitigation contingencies

Describe any contingency proposals including circumstances when the contingencies will be instigated.

If more than 100 GCN (a large population) are captured during the pre-construction trapping efforts, NRW will be consulted, the license will be revised, and trapping efforts will be extended.

If 5 consecutive days of none-capture is not achieved at the end of the 60 days, then the trapping efforts will be extended until 5 days none-capture is achieved.

If there are delays to the proposed programme for delivery, NRW will be contacted and the license will be updated to reflect the necessary changes. The site will be secured in terms of GCN exclusion.

E.5 Biosecurity risk assessment

Consider presence of non-native species and disease on site and actions to be undertaken that will prevent their spread onto or off the site

No known biosecurity risks have been identified for the development.

Standard good practise in terms of biosecurity will be followed when handling and relocating GCN.

Himalayan balsam was identified within the southern site boundary during the initial site survey in August 2021. In November 2021, during a second site walkover Himalayan balsam was recorded 20m to the south of the Site within the woodland area adjacent to Cefn Road and the River Clywedog. There is a record of Japanese knotweed from 2012 located 30m from the south of the site, within Five Fords Water Treatment Works and there are records returned for Japanese knotweed, and Himalayan balsam within 2km of the Site, primarily located to the west of the Site.

Prior to mitigation, it is probable that the Proposed Development will result in a medium magnitude impact at the site scale due to the risk of spreading INNS. Mitigation will comprise a pre-commencement INNS survey, appropriate timing of works (during the Spring / Summer season) and the creation of a method statement detailing biosecurity arrangements and treatment options. INNS will be included within the Habitat Management Plan (HMP) including the future control of INNS within the site boundary. An INNS Risk Assessment will be completed as part of the GCN License MS.

F Post-development site safeguard

F.1 Habitat/site management and maintenance

Include ongoing land management proposals, details of who will be responsible for management and maintenance, on going running costs, site/structure ownership and monitoring development of new habitats.

- Manage the retained, enhanced and newly created habitats for their biodiversity value over the duration of the operational period of the solar park (anticipated to be 40 years) with monitoring and site wardening. Measure to be detailed within a HMP prepared for the GCN License. Management of these habitats and features is targeted at creating high quality breeding, foraging, dispersal and sheltering opportunities for GCN and other amphibians.
- Species-rich grassland (Compartments 1 & 2); land within Compartments 1 & 2 will be sown with an appropriate species-rich grassland seed mix and managed to provide suitable species-rich habitat for general biodiversity. The grassland will be subject to low-density grazing by sheep (3 LSU/ha) during the months of April, May, September and October.
- Species-rich grass (south of Compartment 1); this area of grassland will be un-grazed and will be managed by a twice annual cut – first week of July and again in September (if required). All cuttings will be collected and used to form grass heaps.
- Field margins; will be subject to management in the form of cutting to 150mm height in July and a follow-up cut in September/October if required. These corridors will not be grazed and will be managed to provide habitat corridors for a wide range of biodiversity interests, including GCN.
- Ponds; will be managed to control bankside, marginal, emergent and submerged vegetation coverage, to optimal levels for GCN breeding. All such activities would take place during the hibernation period and by suitably experienced contractors under the supervision of GCN-licensed ecologists.
- Hibernacula / grass heaps; would be managed to retain their presence, size and structure. The aim is to provide excellent shelter for over-wintering amphibians and to provide suitable egg-laying sites for grass snake.
- Hedgerows; will be managed to encourage species-richness through rotational management. Hedge-bottoms will be encouraged to widen whilst hedgerow height will be managed to prevent over-shading of the solar farm.

All of these habitat and site management actions will be the responsibility of the license holder. It is anticipated that they will appoint a suitably experienced ecological contractor to implement the ongoing management of the site, as

well as using the existing farmer to provide grazing livestock in accordance with the details of the HMP. The contractor will have previous experience of management of similar ecological/GCN sites. A contract arrangement will exist between the license holder and the ecological contractor, as well as between the license holder and the local farmer.

F.2 Population monitoring

Include details of monitoring effort and timing, personnel involved and equipment to be used.

As part of the licencing requirements, there will be a schedule of monitoring to assess the efficacy of habitat enhancement and management works. In accordance with NRW's requirements, monitoring will extend for the operational life of the solar park, anticipated to be 40 years. The on-site GCN ponds and all terrestrial habitats will be assessed annually for the five years post-development, and then every other year thereafter, unless fish or INNS are discovered, in which case the habitats will continue to be monitored annually. Any necessary alterations to the management regime will be advised and reported appropriately.

Population monitoring will take the form of egg-searches and 2 x torch surveys. These will be undertaken by a GCN-licensed ecologist during the period mid-March to mid-June, with at least two of the torch surveys undertaken in the period mid-April to mid-May..

F.3 Post-development mitigation contingencies

Describe the action that you will take if monitoring results are unfavourable.

If monitoring results are unfavourable, there will be a review of the habitat suitability of the site, including a review of operational activities. Where habitat is found to be in a sub-optimal condition, remedial actions will be undertaken immediately to return the habitat to optimal condition. Similarly, if site activities are identified to be the cause of low population results, a review of site activities will be undertaken.

NRW and WCBC will be consulted throughout this process.

F.4 Mechanism for ensuring delivery of post-development works

As appropriate e.g. Section 106 Agreement, to include details of who will undertake the work and reporting details, other covenants, contractual agreements or wardening schemes.

Planning Condition 7 of the Decision Notice for Application P/2022/0541 means that this is a condition of planning and to implement this GCN license in full. Failure to undertake post-development works detailed herein would represent a breach of planning consent.

Post-development monitoring will be undertaken by an experienced ecologist, who will also be a member of CIEEM and bound by their code of professional conduct. Monitoring will be reported annually to NRW/WCBC and any failure to report on the monitoring will immediately flag a failure to implement this GCN License and the associated planning condition.

A contract arrangement will exist between the license holder and the ecologist responsible for undertaking the monitoring.

F.5 Financial Arrangements

As appropriate e.g. Section 106 Agreement, to include details of who will undertake the work and reporting details, other covenants, contractual agreements or wardening schemes. State funding mechanism , eg commuted sum or index linked ground rent service charges

Have long term funding mechanisms been incorporated into the provisions of the overall scheme?	Yes
If Yes, state mechanism	The implementation of the management as detailed within this MS and within the HMP will be funded by the site owner(s). The management of the site will be funded through

	the revenues generated by the solar development. These funds will be used to employ a suitably experienced contractor to undertake the management described herein and within the HMP. The local farmer is also likely to be permitted to graze his livestock on site, as per the details of the HMP.
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F.5.1 Long Term Funding arrangements

Please confirm long term funding arrangements type of funding arrangements	
☒ Contract	☐ Management Agreement
☐ Bond	☐ Other: Please specify
Comments	

F.5.2 Duration of funding agreement

Please confirm projected duration of long-term funding agreements.

Duration of Funding agreement		
☐ One off Payment;	☐ 5 Years	☐ 10 Years
☐ 21 Years	☐ 25 Years	☒ Perpetuity
☒ Other: Please specify	Until decommissioning of the site in 40 years.	
Comments		

F.5.3 Financial Regulatory Framework

Please confirm the regulatory framework for financial matters.

Regulatory Framework for Payments	
☐ Planning Condition	☐ Planning Obligation If yes, state type ☐ Planning Obligation ☐ Planning Obligation
☒ Management Agreement	☐ Licence
☐ Community Infrastructure Levy	☐ Other: Please specify
Comments: payments will be made based on actions being undertaken in line with the HMP.	

G Timetable of works

Include timings of all capture, development activities and mitigation measures, monitoring and other post development works

Table G.1 Outline Programme of Works

Year	Activity	Responsibility
2023	Apply for GCN License from NRW	GCN-licensed ecologist.
2024	Installation of GCN fencing and pitfall traps on Site, including creation of newt friendly vehicle access point with newt grids.	Suitably experienced GCN fencing contractor.
	Minimum 90 days pitfall trapping. GCN License Report submitted to NRW.	GCN-licensed ecologist.
	Removal of internal drift fencing under ecological supervision.	Suitably experienced GCN fencing contractor. GCN-licensed ecologist.
	Construction Phase. Habitat creation and landscaping within GCN fencing.	Principal Contractor. Suitably experienced landscape contractor.
2025	Removal of GCN fencing under ecological supervision. GCN License Report submitted to NRW.	Suitably experienced GCN fencing contractor. GCN-licensed ecologist.
	2 x GCN monitoring surveys & habitat assessments.	GCN-licensed ecologist.
	GCN License Report submitted to NRW.	GCN-licensed ecologist.

H Land Ownership – Mitigation Site/Compensation Site

H.1 Mitigation Site/Compensation Site Ownership

If mitigation is to be undertaken at a location not owned by the applicant, you must provide the written consent of the relevant land owner(s). You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement, transfer of legal interest).

Site	Tenure / Legal Interest of mitigation land during construction	Type of Organisation	Timescales for completion of changes of legal interest of land
On site mitigation Site	☐ Freehold Owner ☐ Leasehold Owner ☐ Prospective Purchaser ☐ Tenant ☒ Licensee ☐ Other	☐ Local authority ☐ Specialist third Sector body ☐ Non specialist third sector body ☐ Other public body ☐ Utility ☒ Private Sector ☐ Other	N/A Land will remain in the ownership of the applicant/licensee for the foreseeable future. Any change to this situation and NRW will be notified.

H.2 Mitigation Site/Compensation Ownership post construction

If the ownership of the mitigation site will change after construction please confirm the identity of the prospective owners/occupiers together with timescales associated with transfer of occupancy or other forms of legal interest. You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement).

H.2.1 Ownership/occupancy of mitigation/compensation site on completion of development

Site	Legal interest in land post construction	Type of body	Timescale for completion of proposed changes of legal interest
On site Conservation Site	☐ Freehold Owner ☐ Leasehold Owner ☐ Prospective Purchaser ☐ Tenant ☒ Licencee ☐ Other	☐ Local authority ☐ Specialist third Sector body ☐ Non specialist third sector body ☐ Other public body ☐ Utility ☒ Private Sector ☐ Other	N/A Land will remain in the ownership of the applicant/licensee for the foreseeable future. Any change to this situation and NRW will be notified.

H.2.2 Timescales associated with transfer of legal interest of land including contingency arrangements if proposed timescale is not achieved.

N/A

H.2.4 Please confirm the body responsible for the long-term legal interest in the compensation land has the required skills, competencies and licences for carrying out land management. If not, how will these issues be addressed? Does the identified body have a suitable 'winding up' policy?
If so, please confirm the details of this policy.

Confirmation of skills and competencies of long-term owner / occupier	The Licensee does not personally have the required skills, competencies and licenses to implement the HMP and long-term monitoring. However, they intend to appoint a suitably experienced ecological contractor to undertake the management activities and a suitably licensed ecologist to undertake the monitoring. Thus, the necessary skills and competencies will be contracted into the project to meet this requirement.
'Winding Up' policy	☒ Yes ☐ No

H.2.6 How will long-term tenure and management issues be addressed in the event of closure, take over, bankruptcy or insolvency?

That situation is unlikely as the project will generate revenue for the next 40 years. In any case, the ongoing management would be a requirement of the project sale if required.

H.2.7 If you have no legal interest in the mitigation or compensation land, please state how you will be able to implement proposed species conservation measures?

N/A – all land will remain under the ownership of the Licensee for the foreseeable future.

Please state the body responsible for the compensation area in the long term. Please confirm their suitability and competencies required for surveillance and management including licensing requirements.

Details of the appointed contractor and ecologist will be provided to NRW following the grant of the GCN License.

H.3 Other Mitigation. Off-setting or Compensasion Mechanisms or Arrangements

If mitigation is to be undertaken at a location not owned by the applicant, you must provide the written consent of the relevant land owner(s). You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement, transfer of legal interest).

N/A – all mitigation will take place on land owned by the Licensee.

H.4 Duration of Compensation Area

If the ownership of the mitigation site will change after construction please confirm the identity of the prospective owners/occupiers together with timescales associated with transfer of occupancy or other forms of legal interest. You must also provide details of how the mitigation is to be maintained in the long term (e.g. a legal agreement).

N/A – there is no intention for the land ownership of any part of the site to be changed following the completion of construction works. If this situation changes, NRW will be informed by the licensee.

I Declaration

I declare that should a licence be granted, the work as proposed in this Method Statement will be strictly adhered to. I understand that any deviation from the works as proposed in this Method Statement without agreement from NRW would result in a breach of the licence. NB. Applicants should note that it is an offence under regulation 59 of the Conservation of Habitats and Species Regulations 2017 to knowingly or recklessly provide false information in order to obtain a licence.			
Signature of the Applicant	Heiko Geithner	Date	26/09/23
<i>For electronic submissions please insert an electronic signature above or place an x in the box opposite to confirm agreement with the declarations above.</i>			X
Full name in BLOCK LETTERS	HEIKO GEITHNER		
Signature of the Ecologist	Russell Edward Grey	Date	26/09/23
<i>For electronic submissions please insert an electronic signature above or place an x in the box opposite to confirm agreement with the declarations above.</i>			X
Full name in BLOCK LETTERS	RUSSELL EDWARD GREY		

J References

Credits for source information.

K Annexes

K.1 Pre-existing survey reports

K.2 Raw survey data

C.4 – Map of Survey Area



Key:

Pond - ●

C.5 – Site Photographs



Photograph 1 Pond 1 too dry to sample and heavily shaded



Photograph 2 Pond 2 too dry to sample and heavily shaded.



Photograph 3 Pond 3 recently infilled.



Photograph 4 Pond 4 good water quality and aquatic vegetation.



Photograph 5 Pond 5 good water quality and aquatic vegetation.



Photograph 6 Pond 6 good aquatic vegetation and large pond size.

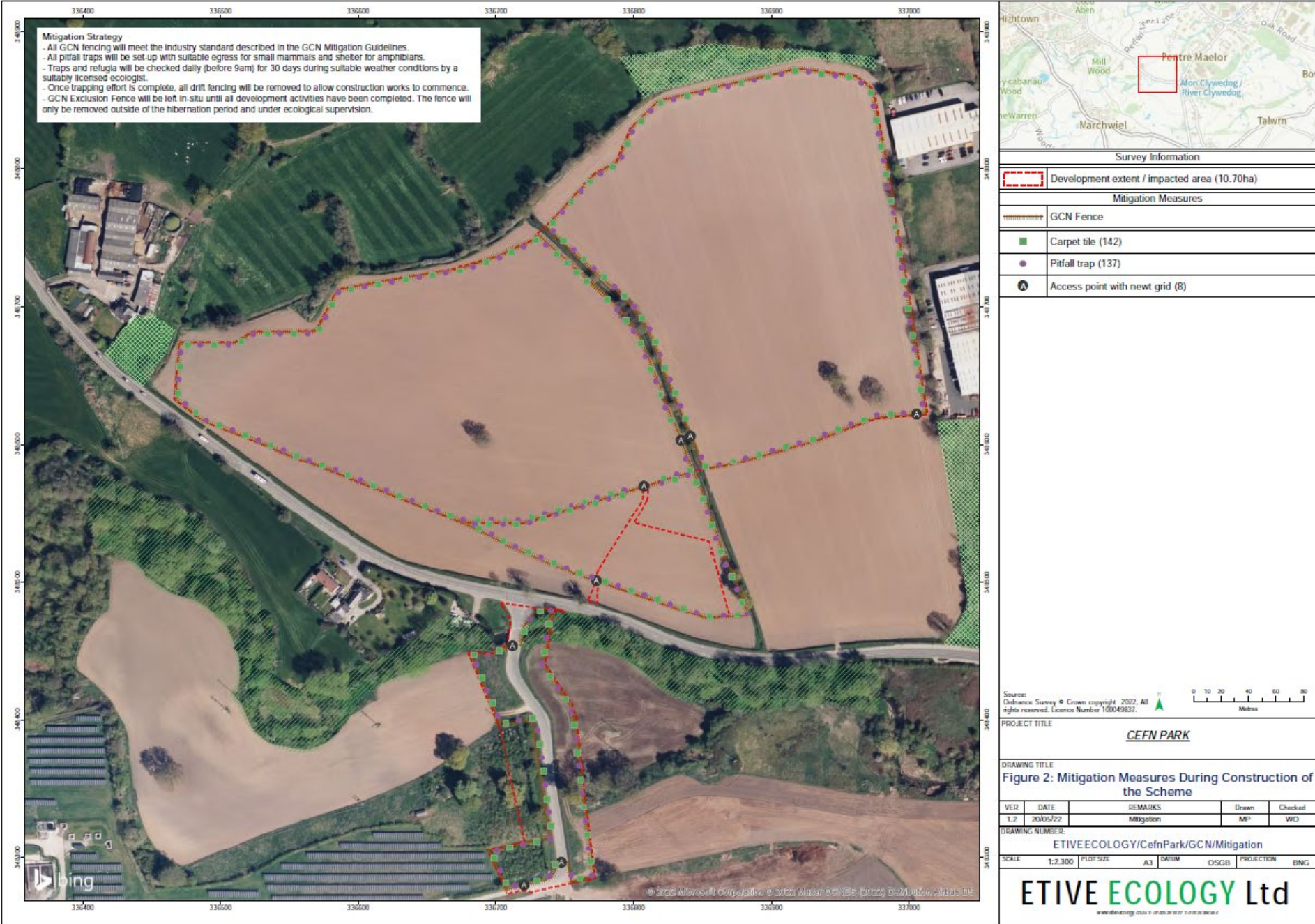


Photograph 7 Pond 7 good aquatic vegetation and large pond size.



Photograph 8 Pond 8 good aquatic vegetation and absent of wildfowl / fish.

E.1 – GCN Mitigation Measures During Construction of the Scheme



E.2.4 – Detailed Proposed Layout with Mitigation Measures

