



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 of 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.

Contact Details

Natural Resources Wales
Species Permitting Team
Maes Y Ffynnon
Penrhosgarnedd
Bangor
LL57 2DW

03000 654974 / 03000 654921

specieslicence@naturalresourceswales.gov.uk

trwyddedrhywogaeth@cyfoethnaturiolcymru.gov.uk

Method Statement Title:	Five Fords Glasshouses
Method Statement Version Number:	001
Method Statement Issue Date:	22/03/21 Final
Site Address:	Five Fords Proposed Glasshouses, Sesswick Way, Marchwiel, Wrexham. The site centre is at NGR SJ3688847980.

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

Background and Supporting Information

A Executive Summary.

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The development will consist of two 7.56ha commercial glasshouses for growing salad and vegetable produce, comprised of structural steelwork and high specification glass designed for maximum light transmission. There will be a packing facility and energy centre. The development is off Sesswick Way, Wrexham, LL13 0TF

Ground source heat pumps will be located in an energy centre and connected to the nearby sewage treatment works through underground pipes. In addition to the heat pumps, gas combined heat and power units will be installed to provide supplementary high temperature water for heating, carbon dioxide and electricity.

Two reservoirs are proposed to attenuate rainwater from the glasshouse roof.

'Large scale glasshouse developments of this type can make a make a major contribution towards the production of UK grown food, national food security and at the same time significantly reduce carbon dioxide levels associated with food miles. The socio-economic benefits of such projects to the local communities can also be substantial; the proposed facility is expected to create approximately 150 additional full-time jobs once operational, and significantly enhance the local economy.'

'Currently the adjacent WwTW is venting CO₂ into the atmosphere as a waste product. This CO₂ will be captured, cleaned and transferred via an HDPE pipe buried underground to the glasshouse. It is estimated this captured CO₂ will amount to approximately 5,000 tonnes per annum'. Planning Design and Access Statement July 2020, Low Carbon farming Limited, Oasthouse Ventures.

A European Protected Species Licence application is required to permit the exclusion of great crested newts (GCN) from the proposed development areas.

Four mitigation sites totalling 19.82ha are proposed to mitigate and compensate for the loss of the land to development (19.38ha of land permanently lost and 1.95ha of land temporarily lost and reinstated).

This document should be considered alongside the **Five Fords Glasshouse GCN Mitigation Strategy March 2021.**

Drawings List

Five Fords Glasshouses Phase 1 Habitat Plan SC/FFG/001RevC dated March 15th 2021 illustrating the Locations and Numbering of Waterbodies

Five Fords Glasshouses Ecological Mitigation Site Layout Revised 26/08/20 SC/FFG/006 RevG dated March 16th 2021

Five Fords Glasshouses Ecological Mitigation Sites Habitat Creation SC/FFG/007RevB dated March 16th 2021

Five Fords Glasshouses Indicative Proposed GCN Fence Layout and Trapping Strategy SC/FFG/008RevB 15th March 2021.

B Introduction

B.1 Background to activity/development

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

As set out above.

The development will result in the permanent loss of **19.38ha** of land (excluding the reservoirs which have a further land take of **2.33ha**) and also **1.95ha** of land temporarily lost and reinstated for the construction of commercial glasshouses and associated buildings and infrastructure as described above. There will be no loss of aquatic habitat.

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.

Planning Application has been submitted and not yet determined.

The development will consist of two 7.56ha commercial glasshouses, comprised of structural steelwork and high specification glass designed for maximum light transmission. There will be a packing facility and energy centre. Two reservoirs of an area of 23,399m² will be constructed.

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 will result in the permanent loss of 19.38ha of land and 1.95ha of land temporarily disturbed and then reinstated, for the construction of commercial glasshouses and associated buildings, reservoirs and infrastructure including trenching of pipework.

GCN records at the development site suggest that they may be present in terrestrial habitats, and terrestrial GCN records exist from 2020 reptile surveys. Therefore, to avoid accidental injuring, killing, disturbing of GCN and loss of or disturbance to their habitat for resting, foraging, sheltering or hibernating or interference with their migration routes, exclusion and mitigation/compensation is necessary. This will ensure protection, long term survival and maintenance of favourable conservation status.

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 herptile groups, previous survey work by the applicant or others. Include records from within 2km.

Refer to Greenlight Environmental Five Fords Glasshouses EcIA March 2021, Greenlight Environmental Five Fords Great Crested Newt Survey Report March 2021 and SCALES Consultancy GCN Mitigation Strategy March 2021 for more comprehensive information.

There are no ponds or waterbodies within the red line boundary. However, there are twenty-seven ponds within 250m of the red line boundary.

Refer to **Table 1** and Five Fords GCN Strategy March 2021 for a summary of the status of the ponds surrounding the proposed development site.

Refer to **Five Fords Glasshouses Phase 1 Habitat Plan SC/FFG/001RevC dated March 15th 2021 illustrating the Locations and Numbering of Waterbodies**

Some of the ponds are mitigation ponds (2, 3, 4, 8, 9 & 14) constructed approximately 10 years ago as compensation for the construction of Sesswick Road. Ponds 3, 7, 20, 17, 18 & 19, are old. Ponds 22 and 23 were 'functional' lagoons within the Welsh Water Site with ponds 25 and 26 understood to be mitigation ponds within the Welsh Water site.

Wrexham is considered to be of national importance for Great crested newt. There are numerous records for great crested newt within 1km of the site and several for the individual ponds within 250m of the site. In addition, there is a terrestrial record from 2016 for a sub-adult on the southern edge of the track. It is considered that due to the proximity of the water-bodies to each other that there is a reasonable certainty of animal interchange between them and therefore a meta-population of great crested newts exists to the south of the site, possibly spread across two main population centres. There are also numerous records for common amphibians.

There were two additional ponds identified on the boundary of the 250 buffer zone but separated from the site by barriers. One was present to the south west of Pond 21 on the 250m buffer line border which was south of the A525 road and the other to the east of Pond 7 east of Bedfield Road at Grid Reference SJ37444771 which held records of GCN adults, eggs and larvae from 1999 - 2005. Pond 27 is situated 170m to the south east of the proposed development and was discovered in 2021.

The reptile surveys undertaken in July and August 2020 found GCN to be present in the on the southern field margin of the northern arable maize field, in the south west on the arable barley field margin and on the mid-east of the arable maize field margin demonstrating that there are existing pathways, corridors and habitat linkages and that the margins of these habitats are capable of supporting amphibians.

The proposed development areas comprise the main agricultural fields and the temporary disturbance areas; one each to the north, centre and west (pipelines). The main arable field compartment to the east of the track will involve permanent habitat loss by construction of commercial scale glasshouses and a reservoir. The arable compartment to the west of the track and habitats in the north west will be retained with the exception of the construction of a reservoir.

The mosaic of terrestrial habitats across and around the site including mature woodland, grassland and tall ruderal vegetation and to a lesser extent the arable land, were considered suitable for great crested newts.

The current full population status of GCN in ponds around the site is not known. The GCN status in Wrexham is accepted to be of National Importance and of European Importance within North East Wales. In devising the mitigation strategy, the approach of considering the population to fall into the category of 'high' has been adopted. The measures proposed aim to fulfil the requirement of ensuring that the proposed development would not be likely to be detrimental to the maintenance of the population of GCN at a favourable conservation status in its natural range.

Table 1 – Pond Status Summary. See Habitat Drawing for Pond Locations

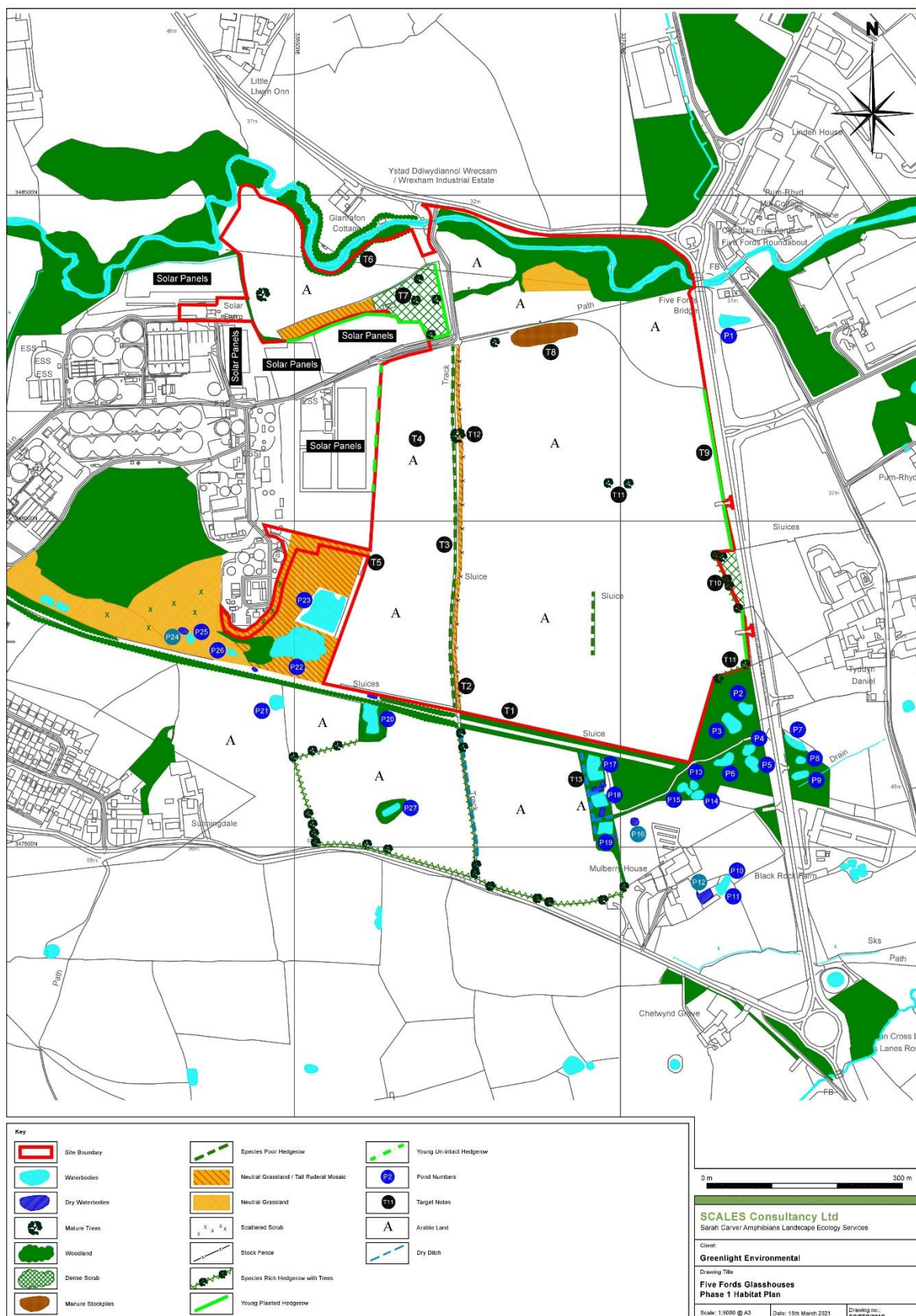
Pond	HSI Value	Pond Suitability for GCN	GCN Present 2020 eDNA result	GCN Present Historically (Cofnod records)
1	No Access	No Access	No Access	No records Identified
2	0.93	Excellent	Positive	Adults and Larvae between 2005-2015
3	0.83	Excellent	Positive	3 males in 2017
4	0.90	Excellent	Positive	Adults between 2017-2019
5	0.94	Excellent	Negative	Adults and larvae between 2014-2019
6	0.89	Excellent	Positive	Adults 2015

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7	0.92	Excellent	Positive	Adults 2015
8	0.78	Good	Positive	Adults and larvae between 2014-2017
9	0.83	Excellent	Positive	Adults and larvae between 2014-2017
10 & 11	No Access	No Access	No Access	Adults, larvae and eggs in 2000 Adults between 2001 and 2009
12 Dry	No Access	No Access	No Access	Present 2000 Adults and eggs between 1999-2000
13	No Access	No Access	No Access	The following are possible records for Pond 13 or nearby. Possible Adults and larvae in 2014-2015 Possibly present in 2013
14	No Access	No Access	No Access	Adults and juveniles 2014-2017
15	No Access	No Access	No Access	Adults 2014-2015
16 Dry	-	-	-	-
17	0.92	Excellent	Positive	Male in 2017 Male and female 2000 and 2017
18	0.86	Excellent	Positive	The following are possible records for Pond 18 or nearby. Present 1992-2000
19	0.84	Excellent	Negative	Adults 2014-2015 and before 2003
20	0.90	Excellent	Negative	-
21	No Access	No Access	No Access	-
22	0.85	Excellent	Negative	Adult 2002
23	0.72	Good	Positive	-
24 Dry	-	-	-	-
25	0.59	Below Average	Positive	-
26	0.74	Good	Positive	-
27	0.85	Excellent	Not Tested	-
Pond east of Bedfield Road on 250m buffer radius from development Grid Ref SJ3744247716	-	Not Assessed	Not Assessed	Adults, eggs, larvae – 30 records from 1999-2005

Although a full population assessment has not been undertaken within ponds surrounding the proposed development, but the ponds to the south are accepted in the very least as supporting or capable of supporting a breeding population and should be evaluated in the very least, collectively as large size class and of **European Importance**. Based on using section 5.8.5 of NE GCN Mitigation Guidelines, 'Site Status Assessment' it would qualify as of **High Importance** in terms of **quantitative assessment** in accordance with Natural England (NE) guidance. **Qualitatively**, it is categorised as of **moderate importance** because although breeding is occurring, habitats are common in the county of Wrexham and the locality of North East Wales. **Functionally**, because there is dispersal to and from other nearby populations and the site plays an important role for nearby populations, this would qualify it as of **major importance**. From a **contextual** view point, the population is not fully assessed but is thought to be either typical of that in the local area and so of **moderate importance**.

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Five Fords Glasshouses Phase 1 Habitat Plan SC/FFG/001C dated March 15th 2021 illustrating the Locations and Numbering of Waterbodies

Development licence – Method Statement – Great crested newts – Amended July 2020 NRW (Draft) Five Fords Glasshouses Wrexham drafted by SCALES Consultancy Ltd march 2021

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

The EclA found that there are two statutory protected sites located within 2km – one Sites of Special Scientific Interest (“SSSI”) and one Special Conservation Area (“SAC”). Please refer to Appendix B for the full citation.

i. River Dee SSSI, approximately 2km southeast.

*“The River Dee is notified for its nationally important transition through a range of river types from mesotrophic to eutrophic. It is also notified for Atlantic salmon *Salmo salar*, otter *Lutra lutra*, club-tailed dragonfly *Gomphus vulgatissimus* and fluvial geomorphology.”*

ii. River Dee & Bala Lake SAC, approximately 2km southeast.

“The River dee has its source in Snowdonia at the outflow of Llyn Tegid and it includes the Ceiriog Meloch, Tryweryn and Mynach tributaries. Its catchment contains a wide spectrum of landscape from high mountains around Bala, rugged peaks near Llangollen, steep sided wooded valleys, and the plains of Cheshire, Flintshire, north Shropshire and Wrexham.”

The proposed development falls outside of all SSSI Impact Risk Zones.

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).

The current full population status of GCN in ponds around the site is not known. The GCN status in Wrexham is accepted to be of National Importance and of European Importance within North East Wales. In devising the mitigation strategy, the approach of considering the population to fall into the category of ‘high’ has been adopted. The measures proposed aim to fulfil the requirement of ensuring that the proposed development would not be likely to be detrimental to the maintenance of the population of GCN at a favourable conservation status in its natural range.

Wrexham is considered to be of national importance for Great crested newt. There are numerous records for great crested newt within 1km of the site and several for the individual ponds within 250m of the site. In addition, there is a terrestrial record from 2016 for a sub-adult on the southern edge of the track. It is considered that due to the proximity of the water-bodies to each other that there is a reasonable certainty of animal interchange between them and therefore a meta-population of great crested newts exists to the south of the site, possibly spread across two main population centres. There are also numerous records for common amphibians.

Two areas of temporary disturbance for the purposes of pipeline installation will be affected. These are 1.95ha in total. They are situated to the west in primary core habitat <50m from known GCN ponds and more distantly to the north approximately 450m from GCN ponds; most of which is in primary habitat and a proportion of which is in more distant sub-optimal habitat and a grassland track (0.319ha) and footpath in the centre. These primary good quality GCN habitats are classified as such because they comprise grassland, scrub and tall ruderal vegetation. Those classified as sub-optimal comprise arable intensively managed farmland.

Both the 2020 eDNA results and the historic Cofnod records show that a GCN population or populations exist to south, south east and south west of the proposed development site. The habitats within the landscape are likely to facilitate good interchange between the ponds and general dispersal where continuity exists and where no major barriers are present. Ponds that do not currently support GCN could feasibly do so in the future based on the results of the H.S.I. Assessment.

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Some of the ponds to the south east of the development were constructed in 2010 as part of the mitigation and compensation measures for the development of Sesswick Road and are under monitoring and management for the purposes for great crested newt conservation.

The majority of the proposed development area is likely to constitute sub-optimal terrestrial habitat for GCN with, however, some good quality corridors of dispersal. The arable compartments are less favourable than grassland, hedgerows and woodland. The peripheral margins and the grassy track dividing the arable compartments could provide habitat linkages and foraging opportunities.

In terms of its suitability as terrestrial habitat for GCN, although it is accepted that intensively managed arable land is not a barrier to dispersal, it can regulate migration and dispersal, (Great crested newt conservation handbook NE, 2001). The arable field itself when in intensive use and depending upon the crops sown, offers little opportunities for refuge (daytime, summer or winter), few foraging opportunities and some dispersal though limited. The field margins and hedgerows do however provide habitat linkages and corridors.

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.

See Phase 1 Habitat Map with pond numbers dated 15th march 2021.

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.

Refer to EcIA March 2021 and GCN strategy March 2021. See Section C1 above.

The development site comprises a large arable field divided into two separate compartments separated by a track bordered by a hedgerow and public right of way. Surrounding the site are a number of woodlands including mature woodland, ponds, river, mature trees and hedgerows.

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. gulley pots. Also include any constraints and justifications for departures from best practice.

Refer to C.1 and Table 1.

The surveys were based on H.S.I assessments, eDNA analysis and interrogation of historic records.

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.

See Section C1 above.

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).

See Section C1 above.

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.

Pre and mid development short term impacts

There is perceived to be a general increased disturbance to habitats and species during the construction period. Site clearance, regrading, drainage work and degradation of habitats, including potential pollution of off-site nearby ponds are likely to be the main effects. There is the potential for killing, injuring or disturbing GCN.

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.

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.

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.

Long-term impacts

Permanent loss and modification of terrestrial habitat, comprising foraging, refuge/hibernation and dispersal routes are considered to be the primary impacts. Even when ponds are unaffected directly, GCN populations can become less viable through terrestrial habitat loss and fragmentation and isolation.

Other impacts could be deemed as alteration in runoff volumes and water chemistry, changes to water quality, alteration in other amphibian and invertebrate assemblage and effects relating to biosecurity including non-native plant and fish introductions.

D.5 Post-development interference impacts

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

Post-development interference impacts

Alteration in lighting, hydrology and traffic and noise could be considered as potential impacts.

D.6 Predicted scale of impact

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

Cumulative Influences

Cumulative influences on existing ponds must be considered and assessed in the context. These include past, present and future potential developments, for example both the construction of Sesswick Way Road, developments at Welsh Water and the proposed new glasshouse development.

Positive Impacts

Positive impacts that have been identified include increased dispersal opportunities for newts from the south to the new mitigation site in the north. This could lead to a higher more viable metapopulation less prone to future threats. Furthermore, the long-term management of a site designed for the benefits of GCN is considered to have more conservation and biodiversity value than that of a large intensively farmed arable compartment.

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

Habitat Provision

Habitats within the **4 Mitigation Areas** will be created and established prior to the trapping of newts from the development site.

It is anticipated that a newt friendly drainage system will be designed and installed at the development.

Filtration systems in the reservoirs will ensure that there are no impacts on newts entering the water.

Refer to the species protection section 4, habitat provision section 5 and management section 6 in the GCN strategy March 2021.

Trapping and Exclusion Regime

Refer to Appendix D of Five Fords GCN Strategy March 2021. Refer to Drawing SC/FFG/008RevB 'Indicative Proposed GCN Fence Layout and Trapping Strategy 15th March 2021'.

Vegetation within the areas to be trapped and along proposed fence lines will be cut/trimmed following searches by the ecologist with cuttings removed prior to fence and trap installation.

All fencing, trap installation, trapping, mitigation site creation, newt searches will be supervised by the licenced ecologist. Tool box talks will be given to all contractors. Details of the tool box talks to include, legislation, protection, protocol and significance of GCN as an EPS will be provided to all staff and contractors/personnel and the site by the appointed ecologist. Records will be kept for NRW.

The NE 2001 guidelines specify an industry standard trapping density of 100 traps/ha for a large population. The trapping design is bespoke and based on an assessment of the quality of the habitat across the various parts of the site. The density shall be set at 130 traps/ha where increased effort is to be made in areas of primary habitat such as field margins, grassland and scrub with pitfall traps concentrated justifiably on the inside of the perimeter GCN fence in arable habitat spaced at 5m intervals and bolstered by the use of alternately placed carpet refugia for increased capture effort.

Exclusion and drift fence/pitfall trap installation will be by an experience contractor supervised and directed by the ecologist along lines cleared of vegetation. The traps will be checked by the licenced ecologist daily before 11.00 a.m. An accurate capture record will be kept by the ecologist and details including location,

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sex, life-stage will be maintained throughout the capture period. The trapping period will be for 60 suitable nights where temperatures are above 5°C and moisture/rainfall is regular. Weather data will be recorded at the site.

Carpets shall be interspersed between the traps to maximise capture effort.

Traps will be furnished with refugia and a mammal escape route.

Traps will be spaced every 5m intervals on the one-way fences encompassing the main arable areas and at a density of 130 traps/ha within the drift fence areas where habitat is considered higher quality than in the arable compartments. The majority of the arable compartments are considered sub-optimal for GCN and increased effort in the higher quality habitats aims to ensure all reasonable effort to exclude all amphibians (and reptiles) from development areas.

The integrity of the fence shall be maintained throughout as advised by the ecologist.

Following the 60 days trapping period, areas will be hand searched by the ecologist prior to supervised habitat destruction/disturbance.

There will be a period of 5 nights of zero captures at the end of the 60 days to indicate that every effort has been made to capture of amphibians.

Fence and trap removal will be supervised by the ecologist.

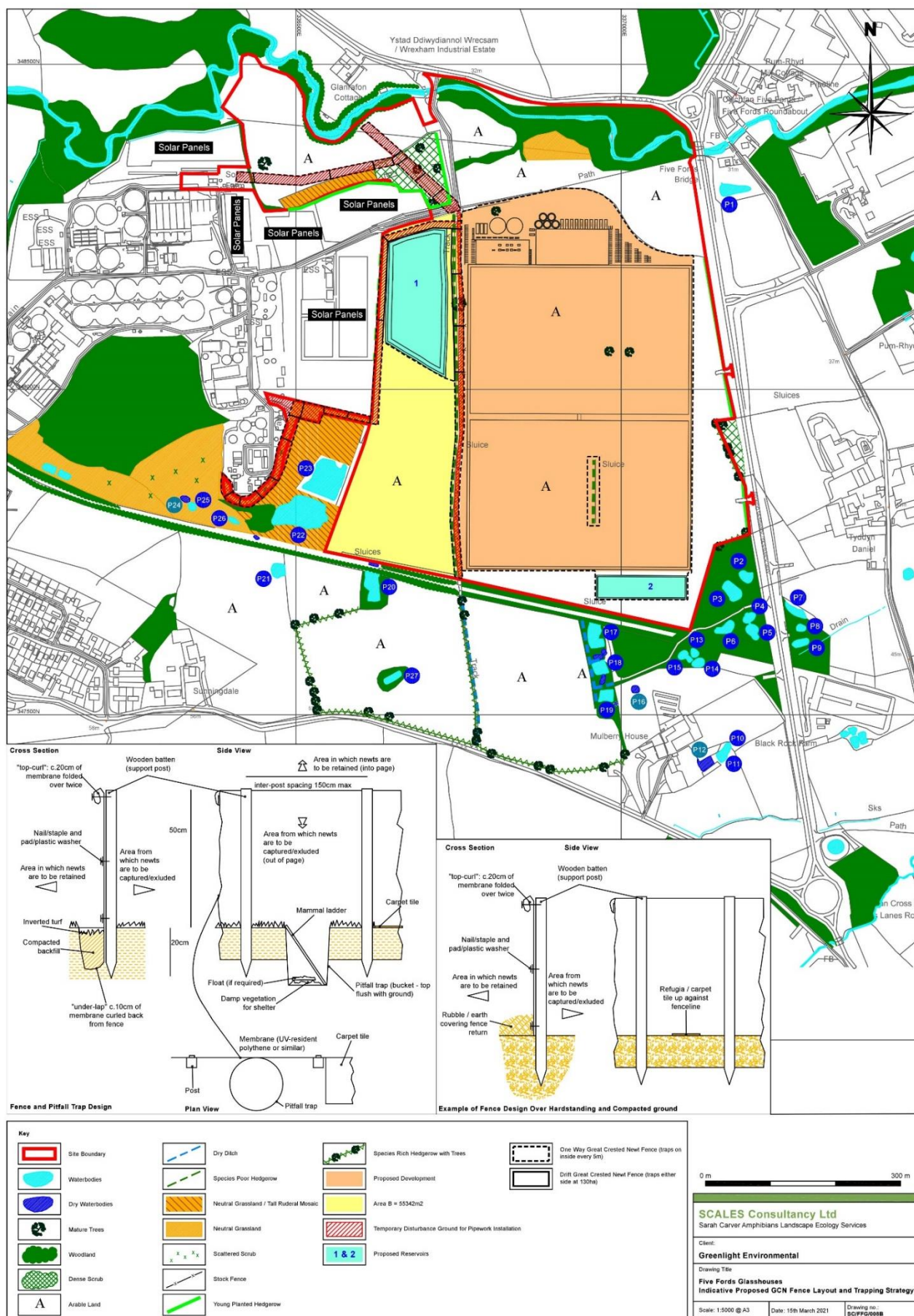
Trapping will be supplemented by 5 nights of searches for amphibians by the ecologist using high powered torches.

Amphibians will be transported in appropriate labelled receptacles with animal welfare as a priority and released in a timely manner in appropriate habitat at the receptor site where suitable conditions must be available to support them.

A full capture log will be kept by the ecologist and information provided to NRW in the licence return.

Five Fords Glasshouses Indicative Proposed GCN Fence Layout and Trapping Strategy SC/FFG/008RevB 15th March 2021.

The Conservation of Habitats and Species Regulations 2017 (as amended)



Development licence – Method Statement – Great crested newts – Amended July 2020 NRW (Draft) Five Fords Glasshouses Wrexham drafted by SCALES Consultancy Ltd march 2021

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.

It is proposed that four mitigation areas with a combined size of **19.82ha** will be created and managed and monitored for a period of 25 years. Mitigation Area 1 to the north west is **3.17ha**, Mitigation Area 2 is **4.33ha**, Mitigation Area 3 is **9.53ha** and Mitigation Area 4 is **2.79ha**.

See Drawing **Five Fords Glasshouses Ecological Mitigation Sites Habitat Creation SC/FFG/007RevG dated March 16th 2021**

Refer to Five Fords GCN Mitigation Strategy report 22nd March 2021.

Table 2 Summary of Habitat Losses, Temporary Disturbance and Creation

Habitat Type	Permanent Losses to Development (ha)	Temporary Disturbance & Reinstatement	Created Mitigation Area 1 (3.17ha)	Created Mitigation Area 2 (4.33ha)	Created Mitigation Area 3 (9.53ha)	Created Mitigation Area 4 (2.79ha)
Aquatic Habitat (excluding reservoirs)						
(ha & number of created newt ponds)	0	0	0.08 (total of 4 ponds)	0.23 (total of 8 ponds)	0.23 (total of 8 ponds)	0.03 (total of 1 pond)
Terrestrial Habitat						
Grassland/ruderal mosaic (ha)	0	0.88	2.55 species rich grassland	3.69 species rich grassland	8.55 species rich grassland	2.74 species rich grassland
New Proposed Woodland (ha)	0	0	0.21	0.41	0.54	
Arable (ha) (excluding arable lost to new mitigation areas)	21.75	0.87	0	0	0	
Hedgerow (m)	95 (remnant isolated in centre of arable field)	30	-	565 (outside Mitigation area) 1657 trees and shrubs	0	
Scrub (ha)	0	0.2	0.33	0	0	
Woodland Belt (m)	0	0	-	325 (36 trees)	0	
Mature Trees	2 (or possibly 3)	0	-	See Woodland Belt	0	
Existing woodland to be managed	-	-	-	-	0.18 to be managed	
Existing neutral grassland to be managed	-	-	-	-	-	
Existing River Corridor	-	-	-	-	-	
Existing Ponds					0.03 (one pond)	0.015 (one pond)

Key

Mitigation Area 1 is a total area of 3.17ha made up of	Ponds, grassland, woodland and scrub
Mitigation Area 2 is a total area of 4.33ha made up of	Ponds, grassland and woodland
Mitigation Area 3 is a total area of 9.53ha made up of	Ponds (new and existing), grassland and woodland (new and existing)
Mitigation Area 4 is a total area of 2.79ha made up of	Ponds (new and existing), grassland
Temporary Disturbance losses	1.95 ha
Total Permanent Losses (excluding reservoirs)	19.38ha
Total Habitat Creation / Enhancement for Great crested newts In Mitigation Areas 1, 2,3 & 4	19.82ha

Appropriate areas to the north west and two areas to the south and an area to the east of the proposed development have been carefully selected as GCN mitigation habitat sites named Mitigation Area 1 (north), Mitigation Area 2 (directly south and east), Mitigation Area 3 (to the south and south of the former railway) and Mitigation Area 4 (further to the south and south of the A525 road). They are currently intensively managed arable farmland. They are bordered by mature woodland, river corridor, grassland, scrub and ponds. Mitigations Areas 3 and 4 both comprise one existing pond each (GCN status unknown).

Ponds of approximately 150-300m² each will be established (ponds of 100-300m² are considered to be preferable for GCN). A total of **4 ponds** in a cluster to the north (Mitigation Area 1), **8 ponds** in the east and south (Mitigation Area 2), **8 ponds** in the south (Mitigation Area 3) and **1 pond** in the far south (Mitigation Area 4) will be created. Terrestrial habitat creation will include woodland establishment, native species rich hedgerows, species diverse grassland of varying structure, species diverse wet grasslands on the pond margins and hibernacula and refuges.

Habitat corridors will be maintained to encourage dispersal from the south and east to the north. A track of 565m in length and about 5m wide (0.32ha) consisting of a modified tall ruderal grassland mosaic and a hedgerow will be temporarily disturbed and reinstated and protected. Links will also be maintained between Mitigation Areas 1 and 2 on the north east with woodland belt and species rich grassland establishment.

Habitat creation also includes the planting of a new hedgerow of 565m in length and native woodland and scrub establishment.

Management will be implemented to achieve long term habitat sustainability and appropriate condition for newt conservation and capable of supporting reptiles and a range of other priority species of principle importance.

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

Refer to Appendix D of Five Fords GCN Strategy March 2021.

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.

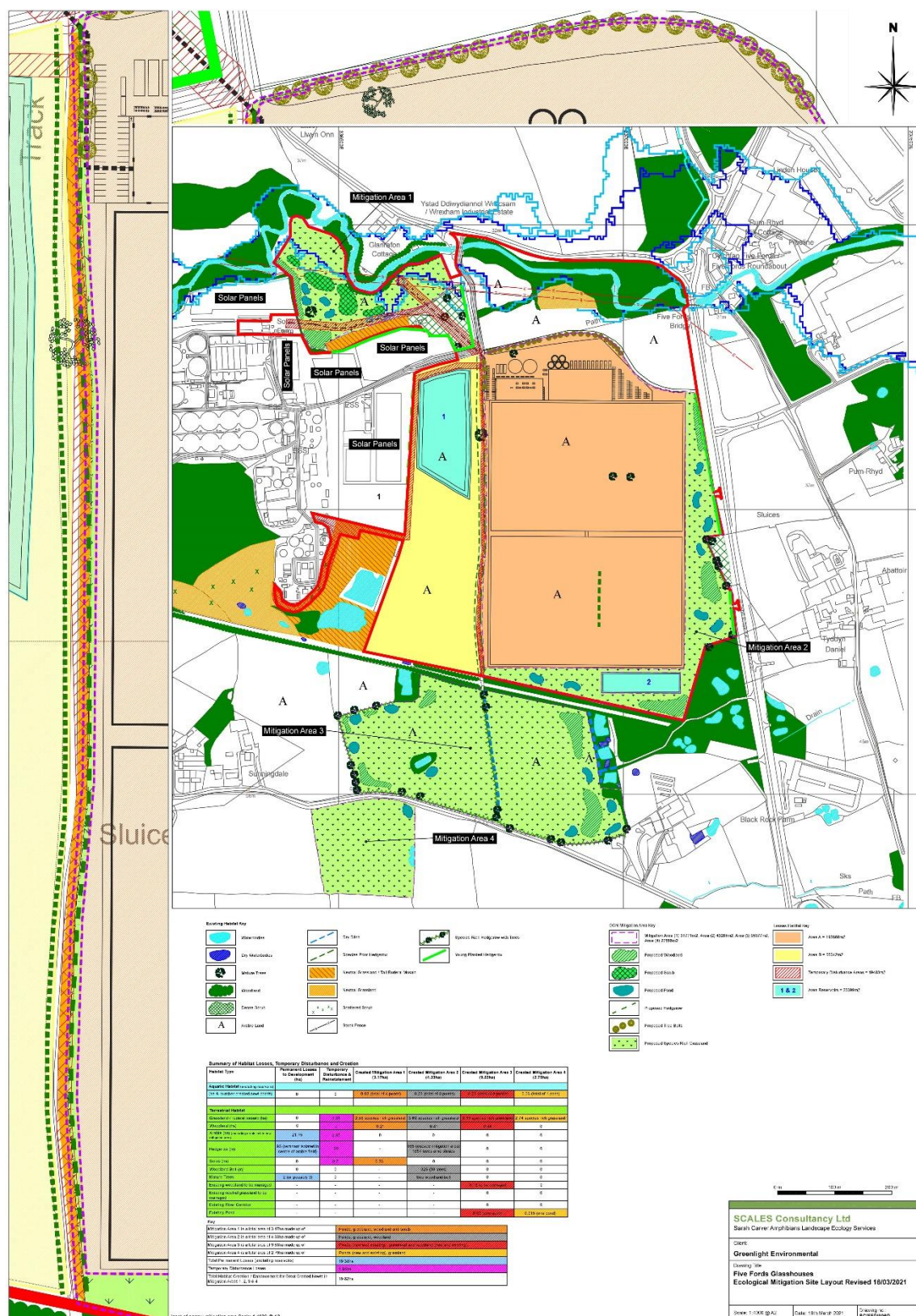
Refer to E.1 Trapping and Exclusion Regime above. Refer to Timetable in section G.

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.

Five Fords Glasshouses Ecological Mitigation Site Layout Revised 16/03/21 SC/FFG/006RevG dated March 16th 2021

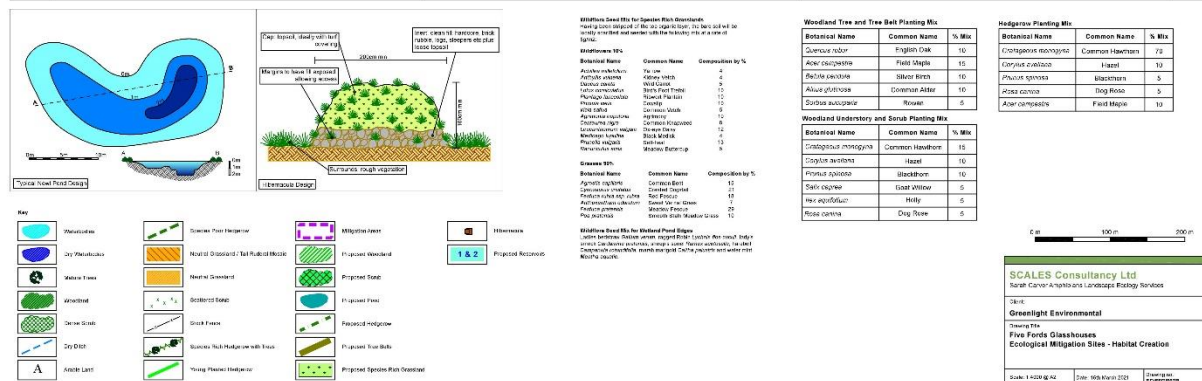
The Conservation of Habitats and Species Regulations 2017 (as amended)



Five Fords Glasshouses Ecological Mitigation Site Layout Revised 26/08/20 SC/FFG/006 RevG dated March 16th 2021

Five Fords Glasshouses Ecological Mitigation Sites Habitat Creation SC/FFG/007RevB dated March 16th 2021

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Please confirm if

(A) GIS data layer illustrating the location is included with your application to illustrate locations of existing and proposed habitats in E.2.1 to E.2.3

Refer to mapping available in the GCN Mitigation Strategy March 2021.

(B) Timescales for submitting GIS data to be submitted to NRW

Refer to mapping available in the GCN Mitigation Strategy March 2021.

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 higher sensitivity or risk, complex, large scale or long-term schemes e.g. residential development, pipeline construction or maintenance, way leaves for utilities, quarrying and mineral extraction.

Ecological Compliance Audit Tier	Audit Type	Key Performance Indicators Attached	If no proposed date for submission to NRW
1	Not required	Not applicable	Not applicable
2	Internal	☐ Yes ☐ No	
3	External	☒ Yes ☐ No	

External Auditing will be appointed. Refer to GCN Mitigation Strategy September 2020 Appendix B.

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

Provide scaled maps/plans

Refer to Drawing Five Fords Glasshouses Ecological Mitigation Site 006 RevG Layout 16th March 2021.

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 subsequent development planned.

E.3.4 Provide sufficient resources

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

Refer to section F.

E.4 Mitigation contingencies

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

Refer to F3.

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.

Refer to GCN Mitigation Strategy March 2021 Appendix C Biosecurity Risk Assessment.

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, ongoing running costs, site/structure ownership and monitoring development of new habitats.

Refer to Refer to GCN Mitigation Strategy March 2021 Section 6.0 Habitat Management and Monitoring.

F.2 Population monitoring

Include details of those responsible for commissioning, undertaking and reporting monitoring, methodology, the equipment to be used, and the management and dissemination of records.

Refer to Refer to GCN Mitigation Strategy March 2021 Section 6.0 Habitat Management and Monitoring.

- Monitoring of the GCN population in the 12 new mitigation ponds will be carried out annually for the management and monitoring duration of 25 years.
- Monitoring will consist of egg searches and two GCN torch count visits annually.
- Common species of amphibian and reptile will also be recorded.
- Invasive species will be recorded and control/eradication measures implemented accordingly.
- An annual assessment of pond aquatic/marginal vegetation cover, fish, wildfowl and invasive species will be carried out.
- An annual inspection of terrestrial habitats will be undertaken and records kept to determine management prescriptions.
- The results will be entered onto the Cofnod online Wales recording system.

F.3 Post-development mitigation contingencies

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

- An assessment of the habitats during the monitoring will determine the action required. A report summarising the management and results of the monitoring undertaken in the preceding year will be submitted annually to WCBC and NRW in December.
- An annual meeting will be held with the management organisation, WCBC and NRW.

The Conservation of Habitats and Species Regulations 2017 (as amended)

- Management and monitoring will be reviewed every 5 years and appropriate corrective action and adjustments will be made in liaison with WCBC and NRW.
- For all new Glasshouses Mitigation Ponds the HSI score should be aim to be between Good and Excellent (0.7+);

For example, should invasive plants colonise the mitigation ponds and reach levels that impede the optimum considered suitable for GCN, the mechanism for control is within GCN Mitigation Strategy September 2020 Section 6.0 Habitat Management and Monitoring.

F.4 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 ☒ No
If Yes, state mechanism	The scheme is a high tech, LED lit greenhouse, capable of all year round production of crops. It is a £60m investment by UK pension funds who have a long term horizon on their deployed capital and the greenhouse has a projected life of greater than 40 years.
If No. Why is long term funding not required?	

F.4.1 Long Term Funding arrangements

Please confirm long term funding arrangements type of funding arrangements	
☐ Commuted sum	☐ Index linked ground rent service charge
☐ Contract	☒ Management Agreement
☐ Bond	☐ Other: Please specify
Comments Management Agreement between landowner Low Carbon Farming 2 Limited with the land under leased to the operator of the glasshouses. The GCN mitigation management will be under a maintenance contract commissioned by Low Carbon Farming 2 Limited.	

F.4.2 Duration of funding arrangement

Please confirm projected duration of long term funding arrangements.

Duration of Funding arrangement
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The Conservation of Habitats and Species Regulations 2017 (as amended)

☐ One off Payment;	☐ 5 Years	☐ 10 Years
☐ 21 Years	☒ 25 Years	☐ Perpetuity
☐ Other: Please specify		
Comments The greenhouse is a significant investment by UK pensions funds who seek long term returns, and in this instance through the construction of an asset with a projected lifespan of greater than 40 years.		

F.4.3 Financial Regulatory Framework

Please confirm the regulatory framework for financial matters.

Regulatory Framework for Payments	
☐ Planning Condition	☐ Planning Obligation
☒ Management Agreement	☐ Licence
☐ Community Infrastructure Levy	☐ Other: Please specify _____
Comments	

G Timetable of works

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

Provisional Timetable – Details to be revised and dependent upon issue of planning consent

Activity	Timing	Comments
Toolbox talks	Pre-commencement of any work	Undertaken by ecologist to all site personnel
Mitigation site pond construction	2021-2022	
Receptor site terrestrial habitat works (e.g. hibernacula, refuges)	Wildflower meadows and hibernacula Autumn 2021	Woodland and scrub planting Winter 2021- 2022
Newt fence installation (perimeter fence and cross trap fencing)	October 2021	
Newt capture (pitfall trapping)	October 2021 – November 2021	
Destructive searches (following completion of all other capture efforts)	November 2021	After trapping has been completed

The Conservation of Habitats and Species Regulations 2017 (as amended)

Development Construction period	December 21 – July 2022	
Site checks and maintenance during construction	December 2021 – August 2022	
Newt drift fence removal	November 2021	
Perimeter New Fence removal	August 2022	
Monitoring	Mar – Jun 2022 Mar – Jun 2023 Mar – Jun 2024 Mar – Jun 2025 Mar – Jun 2026	2 torch visits and egg searches per year – frequency to be reviewed after 5 years.
Mitigation Site Management	2022-2047	

H Land Ownership and Use – Mitigation Site/Compensation Site

H.1 Mitigation Site/Compensation Site Ownership during construction/development phase

If mitigation is to be undertaken at a location not owned by the applicant, please confirm timescales for completion 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, transfer of legal interest).

Site	Tenure Interest /Legal during construction	Tenure Interest /Legal Post construction	Timescales for completion of changes of legal interest
Development site	☐ Freehold Owner ☒ Leasehold Owner Low Carbon Farming 2 ☐ Prospective Purchaser ☒ Tenant ☐ Licencee ☐ Other	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser ☒ Tenant ☐ Licencee ☐ Other	Low Carbon Farming 2 Limited to execute the lease at a time of its choosing, which would be prior to construction commencement. Further details to be provided via discharge of a planning condition.
Mitigation Compensation Site or	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser ☒ Tenant ☐ Licencee ☐ Other	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser ☒ Tenant ☐ Licencee ☐ Other	Low Carbon Farming 2 Limited to execute the lease at a time of its choosing, which would be prior to construction commencement. Further details to be provided via

			discharge of a planning condition.
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If you have no legal interest in the mitigation or compensation land, please state how you will be able to implement proposed species specific conservation measures	
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The land will be under leased to the operator of the glasshouses. The GCN management will be under a maintenance contract commissioned by Low Carbon Farming 2 Limited who hold the headlease.

H.2 Mitigation Site/Compensation Ownership post construction

Does the overall scheme include the provision of a dedicated mitigation or compensation area?

☐ Yes ✓	☐ No
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H.2.1 Please indicate ownership/occupancy of the mitigation/compensation site on completion of a development.

Site	Licencee Tenure /Legal Interest during construction	Specialist Management body Tenure /Legal Post construction	Timescales for completion of changes of legal interest
Development site	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser ☒ Tenant ☐ Licencee ☐ Other	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser ☒ Tenant ☐ Licencee ☐ Other	Low Carbon Farming 2 Limited to execute the lease at a time of its choosing, which would be prior to construction commencement. Further details to be provided via discharge of a planning condition.
Mitigation Compensation Site or	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser ☒ Tenant	☐ Freehold Owner ☒ Leasehold Owner ☐ Prospective Purchaser	Low Carbon Farming 2 Limited to execute the lease at a time of its choosing, which would be prior to construction commencement.

The Conservation of Habitats and Species Regulations 2017 (as amended)

	☐ Licencee ☐ Other	☒ Tenant ☐ Licencee ☐ Other	Further details to be provided via discharge of a planning condition.
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H.2.2 Please confirm timescales associated with transfer of legal interest including contingency arrangements if proposed timescales are not achieved.

An option to lease between Low Carbon Farming 2 Limited and the Landowner has been exchanged. This allows Low Carbon Farming 2 Limited to execute the lease at a time of its choosing which is expected to be prior to construction commencement.

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	Proposed to be The Amphibian and Reptile Conservation Trust . This organisation is a well-established charity founded in 2009 with a history of specialising the conservation of amphibians and reptiles. They manage 80 reserves. ARC expressed a renewed interest in management and monitoring of the mitigation areas in a letter dated 16/03/21.
'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.

These issues are addressed in the decommissioning bond provision which provides the Landowner protection in the above-mentioned circumstances, the bond covers ongoing management.

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

N/A

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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.

Proposed to be **The Amphibian and Reptile Conservation Trust**. This organisation is a well established charity founded in 2009 with a history of specialising the conservation of amphibians and reptiles. They manage 80 reserves. ARC expressed a renewed interest in management and monitoring of the mitigation areas in a letter dated 16/03/21. Refer to letter from Mandy Cartright. The management and monitoring of the habitats and GCN population is set out in the March 2021 GCN strategy.

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

If a mitigation or compensation area is not proposed, what are your alternative proposals to address short and long term impacts

N/A

H.4 Duration of Compensation Area

What is the Duration of the Compensation Area		
☐ 5 Years	☐ 10 Years	☐ 21 Years
☒ 25 Years ✓	☐ Perpetuity	☐ Other: Please specify
If not perpetuity, what happens after the identified duration?		
Comments It is proposed that the compensation area will be managed or leased to a conservation organisation during the 25 year period. Further detail to be submitted via discharge of a planning condition. The primary aim is to ensure that there is no detriment to conservation status of GCN. The implementation of the 25 year management period aims to encourage a sustainable population of GCN in its natural range at the site in accordance with the targets and objectives set out in the March 2021 GCN Strategy.		

Following the proposed 25 year management/monitoring period, any change in agricultural practices or land use would be subject to any relevant legislation, planning regulations and policies in place at that time. At present, the Great Crested Newts and their habitat are protected by British and European law which makes it an offence to: kill, injure, capture or disturb them; damage or destroy their habitat.

H.5 Access and Wider Benefits

H5.1 Public Access

Is the mitigation/compensation site publically accessible?		
☒ No public access	☐ Restricted public access	☐ Unrestricted public access
Does the provision of public access have any implications for the delivery of targeted conservation measures ?		
N/A		
☐ Yes		☐ No
If yes, state how any potential conflicts will be resolved :		
Although public rights of way exist on the boundaries of the mitigation sites, there is proposed to be no public access on the mitigation sites and therefore perceived to be minimal interference impacts.		

H.5.2 Ecosystem Services

Does the proposed mitigation/compensation measures contribute to the Sustainable Management of Natural Resources and/or provide any ecosystem services or green infrastructure benefits?	
☒ Yes	☐ No
If Yes, please state projected or planned ecosystem service, sustainable management of natural resources and/or green infrastructure benefits	
If Yes, if applicable, how will any potential conflicts will be resolved?	

Comments	
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'Large scale glasshouse developments of this type can make a make a major contribution towards the production of UK grown food, national food security and at the same time significantly reduce carbon dioxide levels associated with food miles. The socio-economic benefits of such projects to the local communities can also be substantial; the proposed facility is expected to create approximately 150 additional full-time jobs once operational, and significantly enhance the local economy.'

'Currently the adjacent WwTW is venting CO2 into the atmosphere as a waste product. This CO2 will be captured, cleaned and transferred via an HDPE pipe buried underground to the glasshouse. It is estimated this captured CO2 will amount to approximately 5,000 tonnes per annum'. Planning Design and Access Statement July 2020, Low Carbon farming Limited, Oasthouse Ventures.

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		Date	
<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>			☐
Full name in BLOCK LETTERS			
Signature of the Ecologist	Sarah Carver	Date	22/03/21
<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>			☐ ✓
Full name in BLOCK LETTERS	SARAH MARIE CARVER of SCALES Consultancy Limited for Greenlight Environmental on behalf of Low Carbon Farming 2 Limited		

J References

Credits for source information.

The Conservation of Habitats and Species Regulations 2017 (as amended)

Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F 2014. Analytical and methodological development for improved surveillance of Great Crested Newt. Appendix 5 Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Freshwater Habitats Trust, Oxford

Edgar, P., Foster, J. and Baker, J. (2010) *Reptile Habitat Management Handbook*, Amphibian and Reptile Conservation: Bournemouth

English Nature (2001) *Great Crested Newt Mitigation Guidelines*, Peterborough.

Froglife (1999), *Reptile survey: an introduction* to planning, conducting and interpreting surveys for snakes and lizard conservation, Froglife advice sheet 10.

Griffiths, R.A., Raper, S.J., Brady, L.D. (1996). Evaluation of a standard method for surveying common frogs (*Rana temporaria*) and newts (*Triturus cristatus*, *T. helveticus*, and *T. vulgaris*). Joint Nature Conservation Committee Report No. 259.

JNCC (1993), *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*, England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

Langton, T., Beckett, C. and Foster, J. (2001) GCN Conservation handbook. Froglife.

Mitchell-Jones (2004), *Bat mitigation guidelines*, English Nature: Peterborough

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

Greenlight Environmental, EclA 22nd March 2021, Five Fords Sesswick Way for Low Carbon farming 2 Limited and Five Fords GCN survey Greenlight Environmental 22nd March 2021

Five Fords GCN Mitigation Strategy 22nd March 2021 SCALES Consultancy Limited for Greenlight Environmental

Cofnod North Wales Environmental Information Service Records Search 15/05/2020

Wrexham Borough Council, Local Planning Guidance Great Crested Newt Mitigation Requirements – Johnstown Newt Site SAC and the Wider Countryside Planning Document

Spatial Action Plan for Great Crested Newts in Wrexham Report Number 77 Natural Resources Wales Modelling NRW March 2017 - A Manual for Achieving Favourable Conservation Status. Liam Russell, Thomas Starnes & John Wilkinson Amphibian & Reptile Conservation

Middlemarch Environmental - Wrexham Industrial Estate Access Road, Great Crested Newt Monitoring 2014, November 2014

Middlemarch Environmental - Wrexham Industrial Estate Access Roads Scheme, Handover Management Plan, February 2018.

Wildlife and Countryside Act 1981

The Countryside and Rights of Way Act 2000

The Conservation of Habitats and Species Regulations 2017

The Natural Environment and Rural Communities Act 2006

Development licence – Method Statement – Great crested newts – Amended July 2020 NRW (Draft) Five Fords Glasshouses Wrexham drafted by SCALES Consultancy Ltd march 2021

British Standard 'Biodiversity – Code of Practice for Planning and Development BS 42020, August 2013

Countryside Council for Wales DRAFT Provisional Ecological Compliance Audit Guidance Note, Version 7, November 2012

Planning Design and Access Statement July 2020, Low Carbon farming Limited, Oasthouse Ventures.

K Annexes

K.1 Pre-existing survey reports

K.2 Raw survey data

L: GIS Data

L.1 GIS data provided with the application

☐ Yes ✓	☐ No
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L.2 If no . please state date when data will be supplied

M: Ecological Compliance Audit templates

External Auditing will be appointed. Refer to GCN Mitigation Strategy March 2021 Appendix B.