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GREAT CRESTED NEWT METHOD STATEMENT & POND SPECIFICATION

At

Plot 3A – Ecological Compensation & Enhancement Area

Wrexham Industrial Estate
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NGR: SJ 39675 50371

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1 INTRODUCTION

1.1 Author and qualifications

This report is written and compiled by Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist. Tom is licensed by Natural Resources Wales to disturb, take and handle great crested newts (GCNs) *Triturus cristatus* under licence number S092335/1.

The report has been verified by Toby Hart BSc MCIEEM PIEMA, UES Managing Director. Toby is licensed by Natural Resources Wales to disturb, take and handle GCNs under licence number S086784/1.

1.2 Proposed development and previous survey information

The proposed development is for ecological enabling works on land in connection with a proposed adjacent employment development known as 'Kingmoor', for which a separate planning application has been submitted, which is hereby referred to as the "Main Application" in this document.

The site for the enabling works is in the area referred to as the "Eastern Field" but the application boundary also includes track access from the west and through the Main Application site as there is no vehicular access to the field from the east. Most of the course of the access track is along an existing route and hardstanding within the site and an existing bridge over a watercourse, with only minor works required to create a stable surface required in isolated areas to reach the Eastern Field.

The proposed enabling works are all contained within the Eastern Field and are for:

- 13no. new ponds to be created and retention of one existing pond (14no. total)
- 2no. new ditches to be created

GCN presence / absence, population size class assessment and eDNA surveys were undertaken of the Main Application site and surrounding ponds by UES across March to June 2022 (see report reference UES03448/09).

During the surveys a medium population of GCNs was recorded across three of the onsite ponds, the pond due to be retained within the Eastern Field and two additional offsite ponds (combined peak adult count of forty-nine). However, access was not granted to several pond, therefore it is likely the GCN population in the area will be higher.

The peak count of adult GCNs onsite was thirty-three individuals which infers that the development site hosts a "medium" GCN population. Of the ponds found to contain GCNs, only one is due to be removed to facilitate the proposals on the Main Application site.

As GCNs are known to be present within the Eastern Field where the enabling works will take place, a European protected species (EPS) licence will need to be granted by Natural Resources Wales to allow the works to commence. This EPS licence can only be granted once planning permission has been secured and will need to be in place prior to the start of any works on site. Natural Resources Wales aim to process licence applications within 30 working days.



1.3 Report objectives and structure

This document sets out all of the necessary procedures and mitigation measures to avoid and reduce impacts on GCNs, and other common amphibians, and to avoid any potential breaches of protected species legislation. This report should be read in conjunction with Appendices 1 – 2.



2 IMPACT ASSESSMENT

2.1 Impacts without mitigation

GCN population size class assessment surveys showed that the Main Application site supports a medium-sized population and the single pond within the Eastern Field was found to support a max count of six individuals. However, it is considered that the GCNs using the site are part of a wider meta-population within the industrial estate and the surrounding landscape.

The proposals for this application solely relate to habitat creation, however there remains some, albeit limited potential, to adversely impact individual GCNs. These works will be localised to a small area of hedgerow removal and excavation works for the creation of ponds and ditches. There will be no loss of GCN habitat as a result of the proposals, which are solely being undertaken for the creation of GCN breeding habitat, which will be managed long term with an emphasis on its suitability to support GCNs.

Without mitigation, the development could have the following impacts on GCNs and their associated habitats:

- Killing or direct harm
- Disturbance

2.2 European Protected Species mitigation licence

Due to the potential impacts on GCNs without mitigation, works will need to proceed under the mitigation measures detailed in Section 3 of this report. Works will not commence until an EPS licence has been obtained from Natural Resources Wales.

The information provided below will be used by Natural Resources Wales to determine whether the proposed activity affecting the European protected species meets the requirements of Regulations 55(2)(e), 55(9)(a) and 55(9)(b) within The Conservation of Habitats and Species Regulations 2017. These are known as the 'purpose', 'no satisfactory alternatives' and 'favourable conservation status' tests.

2.2.1 Consideration of Regulation 55(2)(e): The 'Purpose' Test

Regulation 55(2)(e) "in the interests of preserving public health or public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment".

Whilst the proposals are linked to the Main Application, this planning application and EPS licence application should be considered in isolation as the proposed works are solely being undertaken for the purpose of habitat creation and enhancement. The approval of this application and a subsequent EPS licence does not provide approval for any other works associated with the Main Application, which could have an adverse impact on GCNs or their habitat. As this application is only for the creation and enhancement of habitat, it is considered to pass this licencing test for imperative reasons of overriding public interest with beneficial consequences of primary importance for the environment.



2.2.2 Consideration of Regulation 55(9)(a): The ‘No Satisfactory Alternative’ Test

Regulation 55(9)(a) “that there is no satisfactory alternative.”

There is considered to be no satisfactory alternative as there is no other land within the developer’s ownership that could be used for the creation of such a large area of habitat and the large number of proposed ponds. Additionally, the site needs to be in close proximity to the Main Application site as it will act as the receptor site for the translocation of GCNs and other amphibians.

2.2.3 Consideration of Regulation 55(9)(b): The ‘Favourable Conservation Status’ Test

Regulation 55(9)(b) “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.”

The mitigation measures detailed in this document will ensure that GCNs are safeguarded throughout the proposed works. The proposed works that have the potential to adversely impact individual GCNs will be localised to a small areas of hedgerow removal and excavation works for the creation of ponds and ditches. There will be no loss of GCN habitat as a result of the proposals, which are solely being undertaken for the creation of GCN breeding habitat, which will be managed long term with an emphasis on its suitability to support GCNs. There will be no fragmentation or isolation as a result of the proposed development, so the movement of GCNs within the local area will not be detrimentally affected.



3 MITIGATION MEASURES

As GCNs are known to be present on site, an EPS mitigation licence will need to be granted by Natural Resources Wales to allow the works to commence. This EPS licence can only be granted once planning permission has been secured and will need to be in place prior to the start of any works on site. Natural Resources Wales aim to process licence applications within 30 working days.

It is considered that fencing and trapping of the proposed working area is not necessary given that the associated works will not involve large scale habitat destruction or removal and clearance and excavation works will be localised and will solely involve habitat creation and enhancement works, with no construction related activities. The installation of fencing around the site boundaries would isolate these areas from use by GCNs (and other amphibians) within the wider meta population within the surrounding landscape and would act as barriers to the movement of amphibians which may be commuting across the site. It is considered that the potential adverse impacts of trapping and translocating individuals, reducing availability of foraging and breeding opportunities and the severance of commuting corridors associated with the installation of fencing is significantly greater than the potential risks to individual GCNs due to the low likelihood of amphibians being present within the localised areas at the time of the works. Despite this, there remains some residual risk of individual GCNs being impacted by the works. As such, the following mitigation measures will be implemented to protect amphibians in the unlikely event that they are present within the working areas at the time of the works:

- Prior to the start of any works or access by any vehicles (other than to mow / cut the grass), a toolbox talk will be given to all staff and contractors. The talk will include species identification, ecology and legal protection of UK amphibians.
- Prior to the use of any plant or heavy machinery on site, a licenced ecologist will fingertip search any suitable habitat along the proposed access route on to site to search for cavities or burrows that could be used by sheltering amphibians.
- The removal of the small section of hedgerow to allow access by machinery and all excavation works associated with pond or ditch creation will be overseen by an appropriately licenced and experienced ecological clerk of works. The ecological clerk of works will also undertake a fingertip search of all proposed excavation areas and any proposed temporary spoil storage areas.
- Prior to the removal of the small section of hedgerow, an appropriately licenced ecologist will undertake a fingertip search of the area to be removed.
- All areas of grassland on site will be mown or stumped to a height of 10cm at least 24 hours prior to the start of any excavation or ground clearance works. This is to encourage amphibians (and other wildlife) to disperse from the working area prior to the commencement of works. The mown / cleared area will then be maintained with a short sward until the works on site have been completed. Any grass cuttings will be collected or removed from the site prior to the start of works. If cuttings cannot be removed from site, they can be stored in piles at the boundaries of the site and outside of the proposed working areas.
- If any excavations are left open overnight (e.g. ponds deep ponds that have not yet filled with water) they will either be designed and shaped so that amphibians (and other



wildlife) can escape if they fall in, or a plank of wood will be provided at a 45° angle to allow wildlife to escape.

Any GCNs or other amphibians observed within the proposed working will be translocated by hand to an area of suitable habitat (the base of hedgerows and areas of dense scrub) at the site boundaries.

The above measures will also ensure the protection of all common amphibian species using the site.



4 COMPENSATION MEASURES AND MONITORING

4.1 Compensation

Whilst the proposals are linked to the Main Application, this planning application and EPS licence application should be considered in isolation as the proposed works are solely being undertaken for the purpose of habitat creation and enhancement. The approval of this application and a subsequent EPS licence does not provide approval for any works associated with the Main Application, which could have an adverse impact on GCN habitat. As such, there will be no overall loss of GCN habitat as a result of the works proposed within this application, which will have a significant positive outcome on the availability of GCN habitat on site and on the local population of GCNs.

Full details of the proposed aquatic habitats that are to be created are detailed below in section 5. In summary, a total of thirteen ponds and two ditches are to be created, many of which are being created to provide breeding opportunities for GCNs. Full details of all other habitat creation (terrestrial habitats such as hibernacula, wildflower grassland, hedgerow and scrub planting) and any future management will be detailed within a Landscape and Ecology Management Plan (LEMP), submitted as part of the Main Application and can be secured through a suitability worded planning condition. The proposed aquatic habitat creation and management will also form part of the EPS mitigation licence application and will therefore be agreed with Natural Resources Wales.

4.2 Monitoring

As there will be no large-scale translocation of GCNs or the destruction of GCN habitat, no monitoring surveys will be undertaken as part of this specific licence application. However, monitoring surveys of the newly created ponds will be undertaken as part of the separate GCN EPS mitigation licence that will be secured to allow the trapping and translocation of GCNs from the adjacent development site: following the completion of the trapping and translocation exercise, the retained and newly created ponds will be subject to monitoring surveys to assess whether the GCN population has responded favourably to the mitigation, and to inform ongoing habitat management. As the impacts of the proposed development are considered to be 'high' and the site supports a medium population, the monitoring will need to take place over a six-year period, starting the next available survey period following the completion of the trapping and translocation exercise. Monitoring will involve population size class assessment surveys, utilising the industry standard bottle trapping, netting and torching methodology, for all retained and newly created ponds, involving six survey visits each year across mid-March and June (inclusive).

The results of the monitoring will be submitted annually to Natural Resources Wales and the local ecological records centre COFNOD. The results will also be used to identify the need for remedial measures and changes to the management plan to benefit GCNs.



5 POND AND DITCH SPECIFICATION

A total of thirteen ponds will be created as part of the proposals. In addition, the single pond that is currently present within the north-western section of the site will be retained.

The ponds are primarily being designed and created to provide suitable breeding opportunities for GCNs, however some of the ponds will be designed and managed to target other species.

The ponds currently present within the proposed development are in different stages of succession and provide different niches and conditions, supporting a greater diversity of species than they would if they were all of the same age, size and depth. The existing pond within the Eastern Field is currently in a late stage of succession and is largely dry, with a small area of standing water and significant cover from willow *Salix spp.* scrub. Ephemeral, late-stage ponds provide optimal conditions for many aquatic invertebrate species, a nationally scarce example is the mud snail *Omphiscola glabra*. This pond will largely be retained and subject to minimal management. Some selective scrub clearance however will be undertaken every three years, to ensure that no more than 75% of the ponds margins are heavily shaded, preventing the pond from drying completely and failing to function as an aquatic habitat.

As the primary purpose of the proposals is to provide breeding opportunities for GCNs, the proposed ponds will largely share key design features, however some will be designed to provide different conditions and ecological niches, targeting a range of species. Most ponds will have a maximum depth of 1m to provide optimum conditions for GCNs. However, some deeper and shallower ponds will be created to maximise the variety of ecological niches and provide a range of micro habitats:

Ponds 1 & 2 – Maximum depth 2m

Pond 5 – Maximum depth 0.75m

Ponds 6-9 – Maximum depth – 0.5m

Ponds that hold water until late summer to allow GCN larvae to metamorphose and leave the water, but dry annually or every few years, are of the greatest value to GCNs as the regular drying ensures that fish cannot survive. However, during periods of extended dry weather, shallow ponds can rapidly lose water and dry up completely, potentially killing all newt larvae before they can metamorphose. This isn't considered to be a significant issue if a standalone event as GCNs can have long-life spans and one year of breeding failure should not be catastrophic to the survival of the population. However, due to a trend in increasing annual temperatures, the scheme has been designed to include a range in ponds depths that will ensure suitable breeding habitat remains at all times. This will give the GCNs present a greater resilience to changing environmental conditions. Shallower ponds and deeper ponds are to be created as these are preferred by common frog *Rana temporaria* and common toad *Bufo bufo*, which prefer to breed in water at a depth of less than 0.5m and more than 1.5m, respectively. In addition, a range of pond depths will ensure the site can support a greater range of aquatic and marginal plants and aquatic invertebrates, many of which specialise in shallow water habitats, or those that are more susceptible to drying.

All proposed ponds will be lined with puddling clay to ensure that they retain water throughout the year, or throughout most of the year in the case of the shallower ponds. If at the time of creation, the ground conditions are found to already be clay-rich, it may be possible to allow the ponds to fill up naturally without lining with clay. This will be informed by the contractor responsible for the pond creation works.



Most ponds will be designed to have a shallow edge that slopes down at a 15° angle or less into a 15cm deep shelf. This shelf will extend for 50cm before dropping into a 50cm deep and 50cm wide shelf. This will then grade as gently as possible so that the centre of the pond reaches the maximum depth detailed above. Ponds with a different design to this are as follows:

Pond 5 – There will be a 20cm deep and 1m wide shelf that gently slopes into the centre of the pond which will have a depth of 0.75m. The northern margin of the pond will have a shallow slope of less than 15° which will form the drawdown zone. All other margins of the pond will have steeper sides dropping into the 20cm shelf. Ponds 6-9 will not have shelved margins and will instead have gradually sloping margins leading into the centre of the ponds at a depth of 0.5m.

Pond 6-9 – These ponds will not have shelved margins and instead will have gradually sloping margins leading into the centre of the pond at a depth of 0.5m, forming shallow pools.

Pond 10 – There will be a 20cm deep shelf with a width of 0.75m along the entire margin of the pond, which will then slowly grade into the centre of the pond. The north-eastern margin of the pond will have a shallow slope of less than 15° which will form the drawdown zone and lead into the 20cm deep shelf. All other margins of the pond will have steeper sides dropping into the 20cm shelf.

To ensure structural diversity and sufficient egg-laying material for breeding GCNs are immediately available, the drawdown zone and the shelves within Ponds 1, 2, 5, 10, will be planted with the following marginal and emergent species:

- Water mint – *Mentha aquatica*
- Water forget-me-not – *Myositis scorpioides*
- Brooklime – *Veronica beccabunga*
- Watercress - *Nasturtium officinale*
- Yellow iris - *Iris pseudacorus*
- Reed sweet-grass - *Glyceria maxima*
- Greater pond sedge - *Carex riparia*
- Cypress sedge - *Carex pseudocyperus*

In the longer term the newly created ponds will also support many other plant species as part of a process of natural succession.

In addition to the ponds, two ditches will also be created as part of the proposals. At this stage, it cannot be determined if these ditches will hold sufficient water to provide suitable breeding opportunities for GCNs, however there remains some potential and they will still increase the ecological niches present on site, increasing the availability of plants and invertebrate species and increasing the overall value.

The southernmost ditch will be a standalone feature that does not connect to any other waterbodies. The northernmost ditch will connect to Pond 1 and is more likely to hold standing water suitable to support breeding GCNs and other amphibians.

To further vary the ecological niches present, the ditches will vary in their depth and the gradient of the banks. The northern ditch will have a depth of 1m and will generally have steep banks with a gradient of approximately 60°. This ditch will have a channel width (between the top of each bank) of 1.5m. The southern ditch will be shallower and whilst having the same width it will have a maximum depth of 0.5m with shallow sided banks.



The ditches will not be planted and will instead be allowed to be naturally colonised by emergent, marginal and aquatic plant species.

Full details of the future management of the aquatic and terrestrial habitats on site will be detailed within the LEMP submitted as part of the Main Application.



6 CONCLUSION

GCN population size class assessment surveys showed that the Main Application site supports a medium-sized population and the single pond within the Eastern Field was found to support a max count of six individuals. However, it is considered that the GCNs using the site are part of a wider meta-population within the industrial estate and the surrounding landscape.

The proposals for this application solely relate to habitat creation and will involve the creation of two ditches and thirteen ponds. The single pond currently present on site will be retained and subject to enhancement measures.

Due to the presence of GCNs on site and within the local area, there remains some, albeit limited potential for the proposed works to adversely impact individual GCNs. These works will be localised to a small area of hedgerow removal and excavation works for the creation of ponds and ditches. There will be no loss of GCN habitat as a result of the proposals, which are solely being undertaken for the creation of GCN breeding habitat, which will be managed long term with an emphasis on its suitability to support GCNs.

The measures detailed in this document will reduce the risk of harm to GCNs and other amphibians to negligible levels. They ensure that site staff have the knowledge and processes required to avoid breaches of legislation. No works will take place until an EPS mitigation licence is obtained from Natural Resources Wales.

The creation of these ponds and ditches will provide an increased availability of potential breeding opportunities, enhancing the sites suitability and carrying capacity to support GCNs. There will be no fragmentation, isolation or long-term impacts on amphibians in the local areas a result of the proposed development. As such, it is considered that the proposals will have a significant positive benefit on GCNs and other amphibians.



APPENDICES

Appendix 1 – Proposed pond and ditch creation plan



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Drawing Number
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Drawing Title
ECOLOGICAL AREA LANDSCAPE STRATEGY

Scale
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Revision
-

Date
FEB 2023



Appendix 2 – Statutory and planning context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Habitats

Section 7 of the Environment Act (Wales) places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists, and encourage others to take such steps.

Amphibians

Great crested newts

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 7 of the Environment (Wales) Act 2016.

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural Resources Wales (NRW) team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by NRW is required for the legal implementation of a mitigation scheme.

An NRW mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack and common toad are also listed under Section 7 of the Environment (Wales) Act 2016.

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2018). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online