# REASONABLE AVOIDANCE MEASURES FOR GREAT CRESTED NEWT



LAND OFF CHURNET VIEW ROAD, OAKAMOOR, STAFFORDSHIRE ST10 3AE (GR: SK 04844 45053)

Prepared by Charnia Ecology for:

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Issue 1: Ref: SR/Oakamoor/RAM/01



## REASONABLE AVOIDANCE MEASURES FOR GREAT CRESTED NEWT

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Site:	Land off Churnet View Road, Oakamoor, ST10 3AE
Client:	Mr. Steve Robinson c/o Knights LLP
Report Reference:	SR/Oakamoor/RAM/01
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## 1.0 BACKGROUND

- 1.1 A full planning application for the re-development of land off Churnet View Road, Oakamoor, Staffordshire ST10 3AE (OS grid reference SK 04844 45053) is to be submitted to Staffordshire moorlands District Council by Knights LLP. It is anticipated that the development will take approximately 18months to complete and proposes to undertake the following:
  - clearance of the remaining vegetation;
  - · potential demolition of the remaining outbuildings;
  - landscaping of the area;
  - and creation of a six unit residential dwellings and associated access/drive road.



Figure 1. Application area proposed for redevelopment.

1.2 The proposed application area off Churnet view road is approximately 1.1 hectares in area, with the northern bank of the River Churnet forming its southern boundary, this elongated site consists of flat, recently cleared, naturally regenerating woodland (including several semi-mature and mature trees) and scrub. The northern boundary of the site is formed by the leeward, wooded valley side comprising of broadleaf with mixed conifer plantation. A disused railway line with a few associated outbuildings sits against the western boundary and domestic housing lies to the eastern boundary.

## 2.0 DESKTOP SURVEY

2.1 Desktop survey returns six locally protected sites lying within 1km of the survey area. A high number of protected species have been recorded within 1km of this survey area over the past ten years, including Great crested newt (GCN) *Triturus cristatus*. A Preliminary ecological appraisal (PEA) of the application area was undertaken by Solum Environmental (see CD Appendix) in 2013. Although No GCNs or evidence of GCNs was found during this initial scoping survey, further presence/absence surveys for GCN were recommended based on habitat suitability and one historic data record, recorded 75m to the west of the site in 2008.



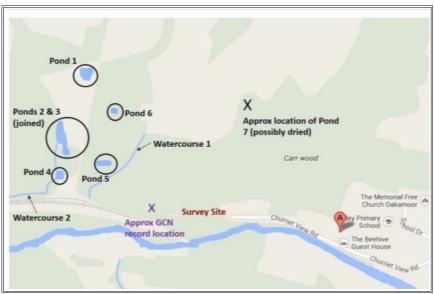


Figure 2. Location of GCN potential water-bodies and desktop record in relation to the proposed development site

## 3.0 ACCESS RESTRICTIONS

- 3.1 Although no immediate ponds reside within the planning application area itself, there are five waterbodies present within a 500m radius. The closest of these water bodies to the site boundary is approximately 150m away, with others around 225m distant. These ponds are situated on land belonging to the former Moneystone Quarry (now owned by Laver Leisure).
- 3.2 Charnia Ecology was consulted in February 2014 to undertake a scoping survey of the development area in order to corroborate the findings of the PEA, and to determine the necessary survey effort required. Access onto land of the former Moneystone Quarry to evaluate the ponds was denied by the landowner, albeit a brief assessment to four of the five ponds was made possible from a distance. It is of the understanding that permission to access these ponds for any future surveying purposes would not be granted by the current landowner due to Health and Safety issues onsite (see letter attached).

## 4.0 HABITAT ASSESSMENT / SURVEYING TECHNIQUES

4.1 These ponds were found to be over-flow, settling pools from the former quarry workings and appeared to be deep in excavation and high in sediment accumulation and overall turbidity. The majority of pond margins were seen to be unstable with dense vegetation surrounding the perimeter edges. As such these conditions would severely limit best practice methodologies for GCN (i.e. torching, netting, egg search and bottle trapping), even if access permission could be obtained in the future.



## 5.0 ADDITIONAL PRE-SURVEY DATA

5.1 Conversely, the client has been able to obtain a GCN presence/absence surveys undertaken in 2010 in relation to the decommissioning of Moneystone Quarry. Despite being out of date, the report is still relatively current and provides an assessment of ponds using selected indices of the Habitat Suitability Index (HSI) and presence/absence of GCN populations. In total, eighteen ponds were surveyed during this period by Bowland Ecology (see CD Appendix), whereby four ponds were found to support small to medium populations of GCN and smooth newts. These ponds reside within the central compartment of the former quarry workings and are located approximately 150m outside the 500m search radius of the current, proposed planning application area at Churnet View Road.

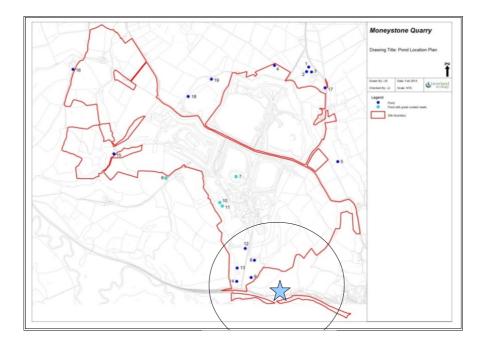
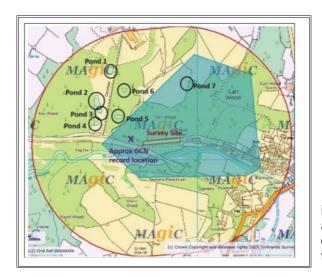


Figure 3. Location of GCN potential water-bodies marked in light blue, showing approximate position of 500m search radius in relation to proposed development area (star).



**Figure 4.** Location of water-bodies within a 500m search radius of the proposed development area (NB. Pond 7 is believed to be ephemeral).



## 6.0 HABITAT SUITABILITY INDEX (HSI)

6.1 Two of the five ponds that reside within the 500m radius of the current planning application were only partially surveyed due to unstable, steep bank-edges and potential quick sand (pond 8 and 9). Although both ponds are assessed as having excellent habitat suitability (HSI 0.83, 0.81 respectively), no GCN were recorded throughout the survey period.



Figure 5. Pond 5 located in woodland area.

6.2

The other three ponds (12,13 and 14) were not included in the survey criteria and assessed as offering poor to low value habitat for great crested newts in current state due to heavy silt/water management system (HSI 0.46, 0.52, 0.50 respectively). These ponds interconnect with each other via pipe outlets, and it is stated that approximately 100,000 - 2 million gallons (depending on rainfall) of water flows through the pond system each day and is significantly fast flowing. The ponds vary in colour due to calcium sulphate contamination and are dredged every 2-7 years. The dredged sand has in-turn been dumped next to the pond which forms an unstable bank margin. All of the five ponds and connecting drainage ditches reside on the leeward side of woodland which provides excellent terrestrial habitat for all amphibians.



**Figure 6.** Pond 2 showing typical highlevel sediment build up and access limitations.



## 7.0 IMPACT ASSESSMENT

- 7.1 Pre-survey data research subsequently finds no records of GCN within a 500m radius other than one recording of a single GCN tentatively placed approximately 75m to the west of the application area. Small to medium populations of GCN are however recorded in four ponds ca. 650m north-west of the application area. The development area is an isolated strip of flat, exposed ground that resides to the south-east of all ponds within 500m. In its current state the majority of this site has relatively low ecological value. However, it does sit within a landscape with a significantly higher value for wildlife, and is connected to by good habitat corridors. Thus no alteration to these ponds or to surrounding (and more favourable terrestrial habitat) is considered for localized GCN meta populations. It is therefore proposed that the development proceeds without a licence provided that Reasonable Avoidance Measures are implemented prior to and during the works.
  - Access has been denied by the landowner of the former Moneystone Quarry to undertake presence/absence surveys.
  - Health and Safety issues apply to all five ponds within a 500m radius of the proposed application, preventing optimal conditions to undertake best practice survey methodology.
  - Low HSI values assigned to three of the five ponds resulting in survey exclusion in 2010 by Bowland Ecology.
  - No GCN populations recorded in any of the five ponds within a 500m radius of the application area during 2010 survey.
  - Only one local record of a single GCN recorded within a 500m radius of the application area.
  - The planning application concerns a small development of 6 housing units with no impact predicted to any ponds or more favourable terrestrial habitat in a 500m radius.

## 8.0 REASONABLE AVOIDANCE MEASURES (RAMs)

8.1 As a precautionary approach RAMs will be adopted in order to avoid and/or minimize any unforeseen disturbance impacts on local GCN populations:

#### ADDITIONAL SURVEYING TO ASSESS FOR GCN TERRESTRIAL HABITAT POTENTIAL

8.2 Prior to planning application approval and predicted works, a number of reptile surveys have been commissioned onsite. Common lizard has been recorded 369m from the western site boundary along the disused railway line adjacent to the site. In addition grass snake has been recorded within 1km of the site and habitat within the survey area has potential to support slow worm. Surveying for reptiles will encompass best practice guidelines using two methods: visual search for basking reptiles and the checking of artificial refugia laid down specifically to attract reptiles. Seven surveys will be undertaken during April to June inclusive. As such, these surveys will encompass survey of potential GCN refugia in order to establish absence prior to development.



#### SITE INDUCTION

- 8.3 As part of the site induction process, all staff working on site will be made aware of the potential presence of GCN within the immediate landscape, and their status as a UK and European Protected Species. Great Crested Newts are protected in the UK under Schedule 5 of the Wildlife and Countryside Act 1981 and under Regulation 40 of the Habitats Regulations 2010. Legal legislation and an illustration of this species will be displayed in the site office for immediate reference (see Appendix).
- 8.4 Great Crested Newts are protected in the UK under Schedule 5 of the Wildlife and Countryside Act 1981 and under Regulation 40 of the Habitats Regulations 2010. It is an offence to handle these animals without either a survey licence or a development licence obtained from Natural England.

#### TIMING OF CLEARANCE WORKS

- 8.5 Despite there being more favourable terrestrial habitat immediately adjacent to out-reaching ponds within the 500m radius, all works to prepare the land onsite for development will be undertaken during the spring/summer season (April to mid June) when GCN enter into / around aquatic habitat to breed, and outside the hibernation period (avoiding November to February, inclusive).
- 8.6 For the initial stages of the development, vegetation clearance will be undertaken in a phased manner under the supervision of an ecologist holding a Natural England Great Crested Newt Survey Licence. Ground vegetation, rubble and debris clearance will encompass a finger-tip search around all potential refugia in a careful and controlled manner, with constant vigilance for any sheltering newts and/or any other potential species.
- 8.7 Areas of tall, rough grassland and scrub will be strimmed to a height of 150mm under supervision of the ecologist. All arisings will be removed and these areas will then be left undisturbed for at least 48 hours. Thereafter, areas which have been strimmed will be hand searched by the ecologist.
- 8.8 For areas of the development site that are already close mown grassland, the Ecological Clerk of Works will hand search these areas prior to vegetation/soil stripping. Soil stripping works will progress in a systematic fashion from east to west within the application area. This will encourage any potential amphibians/reptiles present to disperse to more favourable habitat to the north-west. An ecologist will be present during soil stripping works to ensure the working procedure is adhered to and to relocate any amphibians/reptiles encountered during works. Soil stripping will only be undertaken during the active season, between March to October and in suitable weather conditions.
- 8.9 In the unlikely event that any individual GCN is found during development, then all works must cease immediately and advice sought from an ecologist holding a Natural England Great Crested Newt Survey Licence.



8.10 Although considered as being of negligible potential; should a significant impact to GCN population(s) be determined during phased development, then all works must cease immediately and a European Protected Species Licence will be required from Natural England, in order to allow works to proceed further.

#### SITE SAFEGUARD FOR AMPHIBIANS

8.11 There is moderate to high potential that amphibians other than GCN may be encountered during finger-tip search phases of the initial development. These will be carefully translocated to a safeguard area in the north-west compartment of woodland by the Ecological Clerk of Works.

#### WORK PROTOCOL

- 8.12 In addition, care should be taken that all works, plant and materials remain on existing open areas of hard-standing; avoiding the surrounding boundaries and woodland margins.
- 8.13 Building materials should be stored only within existing areas of hard-standing and should be raised above ground level using pallets in order to prevent amphibians from seeking shelter underneath.
  Waste materials should be removed from site immediately or placed in skips.
- 8.14 No piles of rubbish or waste should be allowed to remain on site as this could create a potential shelter for amphibians which could then be disturbed in their removal. This is a precautionary measure only, and the chance of significant numbers of newt moving to shelter under stored materials is considered to be very low.

#### HABITAT ENHANCEMENT

- 8.15 It is recommended that any new garden planting should aim to provide cover for great crested newts and other amphibians. Any new planting should aim to provide ground cover and so low-growing shrubs and herbaceous plants cover should be favoured. Native species such as bugle, ivy and periwinkle could be used for this purpose, or ornamental species such as lady's mantle, elephant's ears or perennial geraniums may also be suitable. A diversity of structure should also be encouraged through the planting of small trees, with dense shrubs and herbaceous plants below.
- 8.16 Dead wood habitats should be integrated within the application along the boundary ecotone where possible.



## 9.0 SUMMARY

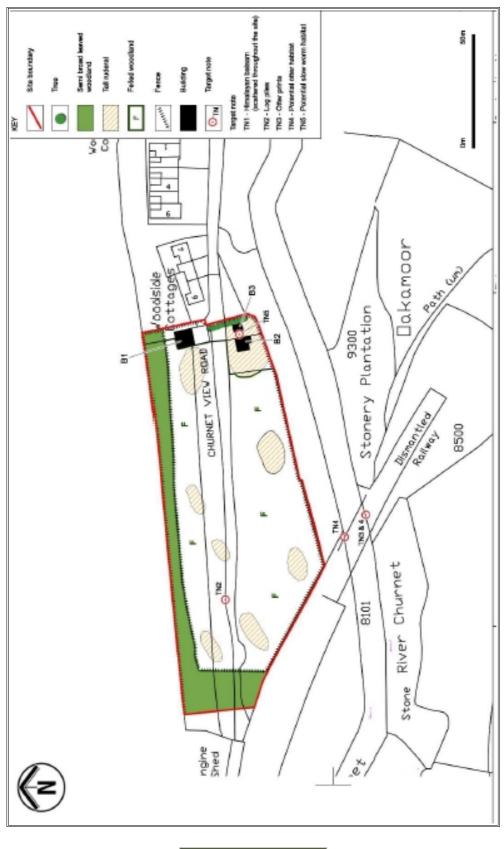
- 9.1 The following is a summary of the proposed RAMs strategy:
  - Removal of potential refugia and stripping back of vegetation to be undertaken during Spring/ Summer and outside the hibernation period for GCN and other amphibians (avoiding November to February, inclusive);
  - Soil stripping works will progress in a systematic fashion from east to west within the application area.
  - Supervision of ground preparation by an experienced and licensed ecologist;
  - Careful storage of building materials onsite;
  - All works, plant and materials remain on existing open areas of hard-standing; avoiding the surrounding boundaries and woodland margins.
  - Immediate removal of waste and appropriate storage of waste materials;
  - · Creation of refugia habitat (i.e. log piles) during restoration around the proposed development;
  - New garden planting to maintain additional refugia habitat for amphibians.

## **10.0 REFERENCES**

- \*Bowland Ecology (2010) Moneystone Quarry GCN/amphibian survey results.
- \*Castle, R. (2013) Ecological Scoping Report: Land off Churnet View Road. Solum Environmental Limited
- Langton, T., Beckett, C. & Foster, J. (2001). Great Crested Newt Conservation Handbook .
  Froglife. Halesworth, UK.
- Natural England. (2001) Great Crested Newts Mitigation Guidelines. Natural England.
- Oldham, R.S., Keeble, J., Swan, M.J., & Jeffcote, M. (2000), *Evaluating the suitability of habitat for the great crested newt (Triturus cristatus)*. Herpetological Journal 10 (4) 143-155.
- The Conservation (Natural Habitats, &c.) Regulations 1994. HMSO, London.
- The Conservation and Habitats Regulations 2010. HMSO London
  - \* (see CD for electronic .pdf version)



## 11.0 APPENDIX



Extended Phase 1 Habitat Map (Taken from Solum Environmental Scoping Report 2013)

Charnia Ecology

• Letter from client regarding denied access permission onto former Moneystone quarry land.

Mark,

Thank you for the site meeting held at the oakamoor site, it was a shame that we was ordered off the quarry site for the pond searches.

I actually went back to the quarry using the back of the engine shed area, but once again I was told to leave the site and that if I was to return again they would call the police.

I do understand that for health and safety reasons due to the quarry being in the middle of major restoration work that they would want to keep people out of the area. The pond that I did get to see looked very steep sided,more of a hole than a pond!

What is the situation now due to the fact that we are not able to get on the quarry, I am happy to do what is needed to protect any amphibians from harm during my potential development.

I look forward to a response from you.

Regards,

Steve Robinson.

10 Woodside Cottage Oakamoor Staffordshire ST10 3AE TEL-07976214909



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### WORK SITE GCN FACT SHEET & LEGISLATION



- Common Name: Great Crested Newt
  - Latin Name: Tritusus cristatus
  - Other names: Warty Newt & GCN

Adult great crested newts are approximately 100mm to 130mm in length. Both sexes have a dark brown warty body and yellowish-orange belly with black blotches. Mature males have a white stripe along the tail.

## EU & UK LEGISLATION

Great Crested Newt is a European Protected Species by virtue of being listed under Annex IVa to the EU Habitats and Species Directive 1992.

Under UK law, Great crested newt and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981.

It is an offence for anyone intentionally to kill, injure or disturb a great crested newt, to possess one (whether live or dead), or sell or offer for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by great crested newt for shelter.

In the event that Great Crested Newt may be found during development, then all works must cease immediately until further consultation with the Ecological Clerk of Works is consulted:

Mark Weston BSc (Hons), MCIEEM, AMSB Tel: 07881 908 263



## **12.0 CONDITIONS AND DISCLAIMERS**

12.1 This statement has been prepared with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site and during the production of the report were undertaken in accordance with the Code of Professional Conduct of the Chartered Institute of Ecology and Environmental Management (www.cieem.org.uk). No part of this document may be reproduced without the prior written approval of:

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- 12.5 Every attempt has been made to provide an accurate ecological assessment under the current wildlife legislations at the time of surveying. The author cannot be made accountable for stochastic events over space and time.
- 12.6 The author remains impartial to any decision making and attempts only to make recommendations in the interests of conserving protected species and biodiversity, whilst acknowledging sustainable development.

