Ecology - Water Attenuation Pond & Great Crested Newt

Rockingham 1

Harworth Estates

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Field Investigations and Data

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ROCKINGHAM PHASE 1 DEVELOPMENT – SURFACE WATER ATTENUATION POND. ECOLOGY & GREAT CRESTED NEWT

To deliver the Rockingham Phase 1 Development Site (the site) it has been identified that an offsite water attenuation feature is required in an area of land close to Pond 3 situated to the east of the site. Pond 3, Located at SE 352 010 is a large well established pond situated close to the A6195, measuring 40m x 14m. The ponds depth was over 1 metre centrally and has well established reedmace (*Typha latifolia)* and Common reed beds on each side of the pond and that cover most of the surface area. Pond 3 was found to support one individual great crested newt in 2014, other amphibian species present included smooth newt.

The proposal is to construct a surface water attenuation feature in the area of rough semi – improved grassland whilst retaining Pond 3 *in situ*. The water attenuation feature will not form a permanent pond but will instead be periodically inundated thereby creating a marshy / damp grassland / woodland area that will have a higher biodiversity value than the grassland which the area currently supports.

The landscape architects (Vector Design) have worked alongside the ecologists (AES – LTD) to prepare a package of ecological enhancement measures to substantially increase the value of Pond 3 and its immediate surroundings. Measures proposed include the planting of new woodland and scrub, management of existing woodland and scrub, installation of amphibian hibernacula, deadwood habitats, bat boxes, hedgehog hibernation boxes and the sowing and management of species rich grassland and substrate opportunities for the self-establishment / partially sown neutral grassland areas.

Habitats situated around Pond 3 offer relatively high value habitats in a local context but they remain unmanaged and with the potential to reduce in their value in the near future without enhancement and / or management. Habitats situated around Pond 3 were described as rough semi – improved grassland and species composition was: cocksfoot *Dactylis glomerata*, meadow foxtail *Alopecurus pratensis*, annual meadow grass, Yorkshire fog *Holcus lanatus* and common bent *Agrostis stolonifera*. In less nutrient rich areas the grassland also supported glaucous sedge *Carex flacca*, crested dog's tail *Cynosurus cristatus* (locally frequent), red fescue *Festuca rubra* and sweet vernal grass *Anthoxanthum odoratum*. All species present were frequent, locally common and / or widespread. The wider area supported immature woodland and hawthorn scrub. One great crested newt was

recorded during the 2014 surveys; Pond 3 did support smooth newt which were reported upon previously.
Results obtained from previous surveys indicate that Pond 3 is not a breeding pond, but it is most likely located at the edge of a range used by a small population of GCN which are located elsewhere in the wider area. Pond 3 and its surrounding area would benefit from the proposed enhancement works.

Pond 3 is becoming choked with reeds, the pond area is relatively large but the only the central portion supports open water in this regard the pond will benefit from a reduction in vegetation cover which will restrict the area available to newts for display and egg laying and it will reduce shading in the pond. The landscape / ecological enhancement works will greatly benefit the immediate area around and near to Pond 3 whilst having an influence in the wider area. The proposals offer habitats and habitat improvements for a range of **Local Action Plan Target Species and Habitats**.

We have proposed that the creation of the water attenuation feature is undertaken on a risk assessment basis using Reasonable Avoidance Measures in relation to all amphibian species. We have used this approach successfully in other parts of the country which has resulted in a development license not being required, an approach actively promoted by Natural England in such situations. Reasonable Avoidance Measures and offsite mitigation are proposed for managing the amphibian species that are resident near to the site. The Risk Assessment will be implemented through the Outline Method Statement presented within this report. The objective of the Method Statement will to affect a strategy to safeguard great crested newt and all other amphibian species that might be present in peripheral habitats without causing harm or disturbance to any species.

Such an approach is not regarded as a cheaper or quicker option as the developer will adopt all risks including the risk that if protected / notable species are discovered during any process then all works will be halted immediately and the appropriate actions will be implemented.

Separately, Harworth Estates has agreed to undertake ongoing season long surveys in the wider area around the site in an attempt to determine where the main breeding pond is for the small population. The survey area is anticipated to include all suitable land within Harworth Estates' ownership and within 500m of the pond and adjacent development land.

SUMMARY OF KEY LEGISLATION FOR AMPHIBIAN SPECIES

Great crested newts and all places they use for shelter (aquatic and terrestrial) are afforded full protection by the *Wildlife and Countryside Act 1981* (as amended) (Section 9, Schedule 5). In addition to the above protection, great crested newts are also protected under European legislation which is implemented in England via the Conservation of Habitats and Species Regulations 2010. If both national and international legislation are combined, the legislative protection afforded to the species makes it an offence to:

- Intentionally/deliberately kill, disturb, injure or capture a great crested newt.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt.
- Possess or control any live or dead specimen or anything derived from a great crested newt.
- Deliberately take or destroy the eggs of a great crested newt.
- Damage or destroy a breeding site or resting place of a great crested newt.

The method statement will also apply to all other amphibian species present in and / or adjacent to the site including common toad is a UKBAP species.

RISK ASSESSMENT METHODOLOGY

In order for the developer to comply with the above legislative requirements in relation to great crested newts, the following actions will be undertaken, immediately prior to, and during the commencement of the development. Site areas to be effected by the pond creation and associated works will be thoroughly searched by hand by a suitably qualified ecologist for the presence of any amphibian species. Particular attention will be given to the undersides of any litter which has blown into the site, discarded fence posts, stones/boulders and any grass tussocks. When grasslands have been checked they will then be mown short to prevent / deter ingress by any animals, grasslands will remain mown short until they are developed.

A comprehensive written record of the Risk Assessment will be maintained and made available for inspection by the Local Planning Authority. If any amphibian species are detected in the search area then they will be removed and relocated into suitable habitat off site by a licensed ecologist. The Risk Assessment will then be signed off by the ecologist to allow commencement of works in accordance with the Method Statement.

The ecologist will then give a comprehensive briefing (toolbox talk) to contractors who will undertake the works.

If the presiding ecologist considers the findings of the Risk Assessment to indicate a high risk of works constituting an offence and that localised relocation does not form satisfactory mitigation, then the Risk Assessment will not be signed off and works will not commence until satisfactory mitigation is in place, potentially including application to Natural England for a licence to undertake the works.

Should a period of more than 48 hours elapse from completion of the Risk Assessment to commencement of the works, then the Risk Assessment must be repeated prior to works commencing.

GCN METHOD STATEMENT FOR POND/LANDSCAPE AREA

The method statement set out below applies to works in the pond expansion and landscaping area only. If GCN are subsequently detected in the search area all works will be halted immediately, the situation will be referred to the project ecologist for review and appropriate action. This work will be undertaken by and / or under the direct supervision of a suitably licensed CIEEM accredited ecologist.

Any building / development materials to be kept in the pond / landscape area will be stored in a manner so as not to attract amphibian species. This will involve storing construction materials on pallets also all site rubbish will be placed directly into a suitable receptor for disposal. Storage areas will be searched daily throughout the active season (March – September) prior to construction and weekly during the inactive season when weather conditions are suitable as a part of the onsite checking surveys. Any woody vegetation felled or cleared from within or adjacent to the site will be removed from the site area and used to create deadwood habitats in retained wooded habitats. No felled or cleared woody vegetation will be stored in the site at any time. Any temporary waterbodies which occur in the site will be checked for the presence of amphibian species prior to being drained.

Carpet tiles or other similar temporary refugia will be placed around the site at high densities; these will be checked daily by a suitably appointed person to establish if amphibian species have taken cover under them. These will remain in situ throughout the period of works to create the pond and they will be checked daily.

Where possible, ditches will not be left open overnight or if they need to remain open then a suitable ramp will be constructed at one end of the ditch to provide any animals which fall in the ditch with a means of escape. Where it is not possible to build a ramp within an open ditch then a wooden batten will be used to form a temporary ramp. Any ditches left open overnight will be checked for the presence of animals prior to works recommencing the following morning.

If, at any time during the implementation of the works (undertaken in conformity to the method statement) GCN are discovered as present in or near to the site then all works will be halted and referred to the project ecologist to allow the appropriate actions to be undertaken. Appropriate actions will include safeguarding any individual GCN and making a licence application to continue with the works as necessary.

Searches will also be undertaken for small mammals and other smaller terrestrial animals in the development area during the construction period. If necessary fencing will be used if small mammals are found in large numbers. This will be erected around the perimeter of the water attenuation feature site.

The key constituent parts of the works Method Statement are appended to this statement for ease of reference.

APPENDIX - GCN METHOD STATEMENT SUMMARY

The following lists of actions relating to any works within the pond expansion and landscaping area are mandatory requirements to be implemented to safeguard local amphibian populations:

PRIOR TO CONSTRUCTION

- All construction / site staff will be briefed about on and off site issues through the provision of a Toolbox Talk.
- All land within the development site that will support the attenuation feature (including the site and related access routes) will be subjected to walkover surveys prior to the commencement of the development.
- Weekly walkover surveys within the site and along access roads will continue throughout the active amphibian season in 2015 and during the construction period.
- Prior to any vegetation removal tall areas of grass / scrub / woody vegetation / hedgerow will be hand searched at their base and when declared free of animal species they will be strimmed prior to being mechanically removed.
- The ground below wooded areas, scrub habitat, hedgerow and any stored piles of dead and / or cut wood will be searched by hand and when declared free of animals any vegetation located within or around them will be strimmed prior to mechanical removal.
- Dead / cut timber will be retained on site and used to create hibernacula. These will be constructed under supervision of the site ecologist.
- Vegetation stand checks will remain valid for 24 hours after which time if the vegetation has not been removed further hand searches will be required.
- Temporary refugia in the form of carpet tiles and / or bitumen tiles will be placed along the boundaries of Pond 3 at intervals not exceeding three metres and these will be checked daily throughout the construction period.
- The grassland located in the area to support the attenuation feature will be strimmed manually in 20 – 30m strips, moving south to north, temporary refugia will be placed along the south edge of the strimmed grassland and they will be checked as instructed by the project ecologist. The purpose of this is to give any animals located in that area a chance of vacating the area prior to its removal.

- Temporary refugia will be checked twice daily for the presence of animals.

DURING CONSTRUCTION

- Daily checks will continue during the construction period.
- Any materials to be stored within the pond extension / landscape area will be stored off the ground on pallets to prevent attracting amphibian species and other animals.
- No trenches, footings or other construction related voids will be left open overnight.
- Where a trench / void or hole cannot be in filled overnight then a plank or other length of timber will be placed at each end of the structure to create an escape structure for any animals that could fall in during the night.
- All site rubbish especially plastic wraps, polythene, polystyrene and full and / or parts of insulation sheets will be placed into suitable receptors and removed from the site immediately and not stockpiled in the site.
- No Fuel, oil and any other potentially harmful or polluting fluids / chemicals will be stored in pond expansion / landscape works area.
- If any animals are discovered in the site the site ecologist will be notified immediately.