Silkstone Environmental Ltd

C.Soar and Sons, Barnsley

Ecological Assessment

December 2008

CONTENTS:

1.0 Introduction

2.0 Methodology

3.0 Results

4.0 Discussion and Recommendations

Figures:

1 Site Location Plan

2 Phase 1 Habitat Plan

Appendix:

A Botanical species list

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1.0 INTRODUCTION

1.1 This report has been prepared by Faulks Perry Culley and Rech (FPCR) on behalf of Silkstone Environmental Ltd to present the findings of an ecological appraisal survey on land adjoining Tank Row, Barnsley, South Yorkshire. The assessment site is centred approximately at Ordnance Survey Grid Reference SE 370 061 and as shown in Figure 1.

1.2 The survey was undertaken on the 1st December 2008 and included an Extended Phase 1 Habitat Survey with initial observations of any suitable habitats for or evidence of protected species.

1.3 The survey area comprised approximately 0.5ha of unmanaged mixed broadleaf plantation which appeared to be approximately ten to fifteen years old.

1.4 The proposed scheme seeks to partially replace a young broadleaf plantation with an area of hardstanding to be occupied by machinery and equipment storage. Whilst retaining some perimeter trees and shrubs as a green buffer, the central region will require levelling. Access to the proposed scheme will be sought through a new entrance from the existing C. Sour and Sons Units on the eastern edge of the plantation.

1.5 An area of approximately 0.2 ha of mixed plantation woodland would be lost in order to accommodate the proposals.

1.6 A separate arboricultural survey to *BS 5837:2005 Trees in Relation to Construction-Recommendations* has been prepared by FPCR (FPCR: October 2008).

2.0 METHODOLOGY

Flora

2.1 The site was surveyed in December 2008 using the standard extended Phase 1 Habitat Assessment Methodology (Joint Nature Conservation Committee, 2003), as recommended by Natural England. This involved a systematic walk over of the site to classify the habitat types present, marking them on a base map (Figure 2). Target notes were used to record features or habitats of particular interest, as well as any sightings or evidence of protected or notable species. Where habitats or features were of particular interest more detailed notes and species lists were taken. Whilst the plant species lists compiled should not be regarded as exhaustive, sufficient information was obtained to determine broad habitat types.

Fauna

Protected Species

2.2 During the survey of the site, observations, identification or signs of any species protected under the Wildlife and Countryside Act 1981 (as amended), the Conservation (Natural Habitats & c.) Regulations 1994 (as amended) and the Protection of Badgers Act 1992 were noted, particular attention being given to the presence of badger *Meles meles,* bats, reptiles and great crested newt *Triturus cristatus.*

Badger

2.3 The survey concentrated on locating field signs indicating badger presence or use. Surveys were undertaken in December 2008 using the standard methodology, as outlined by Harris, Creswell and Jefferies (1991). Evidence searched for included:

- Setts (including main, annexe, subsidiary and outlier);
- Latrines;
- Prints and trackways;
- Hairs caught on rough wood and fencing; and
- Snuffle holes, scratching posts and general feeding activity (not necessarily conclusive in isolation.

Bats

2.4 All species of bats are listed on Schedule 2 of the Conservation (Natural Habitats & C.) Regulations 1994 (as amended) and are afforded protection under Regulation 39. It is illegal under this regulation to deliberately disturb any such animal or damage or destroy a breeding site or nesting place of any such animal. Bats are also

afforded full legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and subsequent revisions. Under this legislation it is illegal to: -

- Recklessly or intentionally kill, injure or take a species of bat;
- Recklessly or intentionally damage or obstruct access to or destroy any place of shelter or protection or disturb any animal whilst they are occupying such a place of shelter or protection.

2.5 Trees on site were examined for cracks, fissures and rot holes that could provide suitable roost sites. Evidence of bat roosting in the potential roost sites sought included staining and the presence of bat droppings. The survey was undertaken from ground level, with the aid of binoculars. From this survey an assessment has been made on the likelihood of trees to support roosting bats. Trees have been classified into one of five categories: Confirmed, High, Medium, Low and no potential. The basis of this criterion is subjective and based upon the surveyor's experience and judgement as well as the context and location of the site in terms of geographical area and local habitats present.

Reptiles

2.6 In the UK, common reptiles are afforded protection from killing, injury and sale. Common lizard, grass snake and slow worm are widespread and as such, their potential on a site needs to be considered.

2.7 The survey for reptiles was undertaken based on the methodology detailed in the Herpetofauna Workers Manual (Gent and Gibson, 1998) and the Froglife Advice Sheet 10 – Reptile Survey (Froglife 1999). The approach involved a review of the sites habitat structure for the presence of areas of i.e. grassland with a more developed, varied structure and large tussocks, adjacent to areas that could provide shelter for reptiles such as areas of scrub and woodpiles etc.

Amphibians

2.8 Great crested newts and their sites or structures of breeding or shelter are afforded legal protection by Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats & c.) Regulations 1994 (as amended).

2.9 Any water-bodies present were noted and described to indicate their potential as suitable habitats for amphibians generally, but with particular consideration of the potential to support great crested newts. An assessment was also made of the

potential suitability of any terrestrial habitat present within the site to support such a population.

Other species

2.10 Throughout the survey consideration was also given to the existence and use of the site by other notable fauna such as Biodiversity Action Plan (BAP) or Red Data Book (RDB) species.

Desk study

2.11 Consultations for existing ecological data regarding statutory and non-statutory protected species and habitats/sites of interest to nature conservation were undertaken with relevant statutory and non-statutory nature conservation organisations including South Yorkshire Badger Group, Barnsley Biodiversity Trust, South Yorkshire Bat Group and Barnsley Metropolitan Council.

2.12 The Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk) website was consulted for information on statutory and non-statutory site designations in the area.

3.0 RESULTS (See Figure 2)

Flora

3.1 The assessment site comprised a young plantation block, approximately 15-20 years old. The trees had been planted at 1-2m spacings in a linear formation. The mixed broadleaf species included; common ash *Fraxinus excelsior* crack willow *Salix fragilis,* field maple *Acer campestre,* Italian alder *Alnus cordata,* hawthorn *Crataegus monogyna,* goat willow *Salix caprea*, dog rose *Rosa canina*, dogwood *Cornus sanguinea,* hazel *Corylus avellana,* silver birch *Betula pendula,* bird cherry *Prunus padus,* sycamore *Acer pseudoplatanus* and hornbeam *Carpinus betulus.* Their canopies were low and interlocking with frequent broken and dead branches along with occasional dead specimens.

3.2 The plantation was densely stocked and had not received any post-planting management, thus limiting the amount of light available for ground flora. The plantation floor was largely bare ground, interspersed with sparse patches of moss and short herbs. Typical for the age and structure of the plantation, the floristic diversity within the understorey was poor. Species that were growing successfully included bramble *Rubus fruticosus* agg., Ground Ivy *Glechoma hederacea,* Ribwort Plantain *Plantago lanceolata* and Common Mouse-ear *Cerastium fontanum.* Mosses included Common Feather Moss *Eurhynchium praelongum* and Springy Turf Moss *Rhytidiadelphus squarrosus.* Silver Birch *Betula pendula* saplings were successfully colonising the most open areas, especially around the site boundary.

3.3 Grasses and forbs were more frequent around the plantation edge, especially bordering the road and associated footpath. Species included; cock's foot *Dactylis glomerata*, creeping bent *Agrostis stolonifera*, red fescue *Festuca rubra*, creeping buttercup *Ranunculus repens*, rosebay willowherb *Chamerion angustifolium*, common nettle *Urtica dioica* and common ragwort *Senecio jacobaea*.

Fauna

Badgers

3.4 No evidence of badgers either in the form of setts, latrines, tracks, hairs or evidence of feeding was recorded on site.

Bats

3.5 Due to their young age and lack of features no trees on site provided features

suitable to support roosting bats.

3.6 The site provides an extension to the surrounding wider green corridor and therefore has potential to be used by commuting and foraging bats.

Reptiles

3.7 The habitats on site were largely unsuitable for use by reptile species due to the lack of varied vegetation cover that would provide suitable basking, foraging and feeding areas.

Amphibians

3.8 From the Ordinance survey plan and aerial photography of the local area no ponds were identified within 500m of the site. Furthermore, the terrestrial habitat was mainly bare and therefore deemed unsuitable for amphibians.

Desk Study

3.9 Results of consultation are still pending and will be included in a subsequent draft of this report.

4.0 DISCUSSION

4.1 In order to facilitate the proposed development a section of young unmanaged plantation would require removal. The triangular block of mixed broadleaved specimens were approximately fifteen to twenty years old and had not yet reached their full potential. The plantation provided some local value for nesting, sheltering and foraging fauna within an otherwise industrial area of Barnsley. Overall it is considered to provide only very local nature conservation value.

4.2 No sites of statutory or non-statutory designation are likely to be affected by the proposed development. No evidence of protected or notable species was observed at the time of the survey.

4.3 Any proposed development should seek to maintain and enhance the biodiversity of the site consistent with the aims of development planning. Woodlands provide connectivity through the landscape and provide potential foraging, nesting and roosting sites for a range of fauna. To comply with the objectives of development planning policy, a belt of existing trees are to be retained to serve as a wildlife corridor along part of the site periphery.

4.4 As illustrated on the Proposed Layout Plan and as discussed in the corresponding Tree Assessment Report (FPCR: October 2008), a strip of the existing plantation along the western periphery should be retained to give maturity to the replanting recommended to stabilise the re-formed bank. New planting of higher quality trees and shrubs should be incorporated into the design of the site to mitigate for the loss of an area of young plantation woodland. Enhancement of existing woodland can be achieved by selectively thinning the poorest specimens and under planting with appropriate native species such as hazel *Corylus avellana* and holly *Ilex aquifolium*. Further enhancement could be provided through the erection of bat and bird boxes in retained trees.

4.5 Breeding birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended), thus it is an offence to damage or destroy the nest of any wild bird while it is in use or being built. It is therefore recommended that vegetation s removed outside the bird breeding season (March to August). If development were to commence during the bird breeding season (March to September inclusive) it would be necessary for an ecologist to complete a thorough inspection of all vegetation that is to be removed to ensure that no nests are destroyed or disturbed.

In the event that any nests are found, the nest and vegetation within 5-10m of the nest would have to be retained until the chicks have fledged.