

21 July 2016

Our Ref: RSE_680_01-V1

Mrs T Hunter-Shaw
c/o Nick Baseley
IBA Planning Ltd

Re: Land East of Crease Drove, Crowlands, Peterborough – Ecological Constraints and Opportunities Assessment

RammSanderson Ecology Ltd were instructed by Mrs T Hunter-Shaw to carry out an ecological constraints assessment of land east of Crease Drove in Crowland, Peterborough.

This letter report is provided in order to identify any ecological constraints, further survey and mitigation requirements as well as potential for appropriate enhancement opportunities within the final developments. The purpose of the survey and document is also to inform whether a more in depth ecological appraisal such as an Extended Phase 1 habitat survey is necessary or proportionate and is useful tool is assessing small sites of this nature in urbanised environments. The surveys, reporting and Ecological Constraints Assessments are compiled in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013¹).

Where such additional surveys are not deemed necessary the information included within this report is intended to be submitted by the client in support of any subsequent planning application for development of the sites.

To aid with clear interpretation of the results an ECOP (Ecological Constraints and Opportunities Plan) has been produced for each site and have been appended to the report.

Background Information

The site was subject to a preliminary ecological appraisal in July 2014. This appraisal considered the site owned by Mrs Hunter-Shaw but also included the wider area south of the current application. The surveys undertaken by Green Environmental Consultants on behalf of Wheatley Homes and included a Phase 1 habitat assessment and desk study. The survey concluded the that site is 'ecologically very poor' although recommended that the use of lighting within the site be carefully considered with respect to foraging bats (Green Environmental Consultants 2014²).

Methodology

A site survey was carried out on the 1st July 2016 to assess the habitats making note of botanical species present, habitat types and any evidence or potential for protected and notable species. The survey also included a ground level inspection of the trees on site as well as assessing any buildings within the site for their potential to support

¹ BS 42020:2013 Biodiversity – Code of Practice for Planning and Development 2013: The British Standards Institution.

² Green Environmental Consultants Ltd 2014: Harvester Way Crowland Lincolnshire. Ecological Appraisal. A report to Wheatley Homes Ltd



roosting bats. The survey was carried out in order to assess the need for more detailed surveys and / or mitigation requirements.

Trees on the sites boundary were assessed against the Bat Conservation Trusts (Collins J, (eds) 2016³) survey guidance as being of negligible to high roost potential as identified in the table below.

Table 1: Bat roost classification

Roost Potential	Description	Surveys Required (Buildings)	Surveys Required (Trees)
Confirmed roost	Evidence of roosting bats found during initial daytime inspection.	3 – including 1 dawn as a minimum	3 – including 1 dawn as a minimum
High	Structures with one or more features suitable for bat roosting, with obvious suitability for larger numbers of bats.	3 – including 1 dawn as a minimum	3 – including 1 dawn as a minimum
Moderate	Structure with one or more potential roost sites that could be used due to size, shelter and protection but unlikely to support a roost of high conservation status.	2– including 1 dawn as a minimum	2– including 1 dawn as a minimum
Low	Structure with one or more potential roosting sites used by individual bats opportunistically. Insufficient space, shelter or protection to be used by large numbers of bats	1 Survey	Precautionary Mitigation Approach, some instances may require further survey
Negligible	No or negligible features identified that are likely to be used by roosting bats	None	None

The survey was carried out by Sam Smith BSc MSc grad.CIEEM who has been a professional ecologist for 3 years and holds survey licences for bats and great crested newts and is appropriately qualified to undertake this form of assessment.

Results

The Site is located off Crease Drove, south of a small rural town of Crowland, north of Peterborough and forms a section of an arable field (TF 237 095).

³ Collins, J. (eds), 2016. Bat Surveys: Good Practice Guidelines, 3rd Edition. London: Bat Conservation Trust.



Figure 1: Site Location



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Habitats

The site comprised entirely of an arable field without field margin. A dry ditch ran along the sites Eastern boundary (off site) and a mature hedgerow present parallel to the sites northern boundary which was also off site. The hedgerow was poorly managed, growing tall comprised of elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*) with an understory of bramble (*Rubus fruticosus*), nettle (*Urtica dioica*) and cleavers (*Galium aparine*).

Figure 2: Site 1



Amphibians

There were no standing water habitats on site and the site itself was formed of arable field considered to be of sub-optimal habitat for terrestrial phase amphibians. A single pond occurred 300m north west of the site which is considered to be poorly linked to the site with dispersal impeded by built environment in between the site and the pond. Additionally, no records for the specially protected great crested newt were returned within the desk study undertaken in 2014 by Green Environmental Consultants.



Badgers

No evidence of large mammal activity was recorded within the sites. The site provides some scope for foraging but it is limited in its capacity to provide sett digging opportunities.

Bats

There are no trees or buildings on site with the potential to support roosting bats. Overall the site was considered to be of negligible value for foraging bats. The hedgerow off site on the northern boundary could potentially provide scope for foraging and migration, however this feature is off site and not impacted by the proposals for the site. Additionally, none of the trees within the hedgerow were identified as containing features suitable for roosting bats.

Nesting Birds

The site provided limited scope for nesting birds and its current crop regime will limit this. Off-site hedgerows may provide scope for nesting birds but these are considered likely to be used by common farmland and garden bird species only.

Reptiles

The site comprises an arable field considered to be of limited value for reptiles should they occur locally. Off-site habitats may provide some improved scope for refuge but this is considered limited as a result of the site's poor connectivity to more optimal habitats.

Evaluation, Mitigation and Enhancement Recommendations

The site is considered to be of extremely low ecological value with no further survey considered necessary for the site. The proposals identified to RammSanderson included inclusion of new hedgerows along the site's boundaries and with new planting within the site. This is considered to provide a significant localised ecological enhancement by comparison to the site's current status as the hedgerows will form corridors for flora and fauna dispersal. Particularly these will benefit nesting birds and foraging bats.

Some consideration with regard to lighting within the site should be given with regard to foraging bats, both along the extant hedgerow north of the site and in relation to future use as the new hedgerows establish. This could follow the guidelines set out in *Bats and Lighting in the UK* (BCT, 2009). Therefore, associated site lighting proposals must consider the following:

- Avoid lighting where possible (in particular along the northern boundary);
- Street lamps should be installed at the lowest permissible density with light columns at the shortest permissible heights.
- Lamps could be fitted with light spill accessories directing light to the road and avoiding upward spill and spill onto the neighbouring trees and public open spaces;
- Use of low intensity bulbs to minimise light intensity and impacts to bats;
- The use of timers and dimmers to avoid lighting areas of the site all night is recommended.

Enhancements

Where new hedgerow and tree planting is proposed native species such as horse chestnut (*Aesculus hippocastanum*) and oak (*Quercus spp.*), silver birch (*Betula pendula*), rowan (*Sorbus aucuparia*) and whitebeam (*Sorbus aria*) holly (*Ilex aquifolium*), Hawthorn, blackthorn (*Prunus spinosa*). In particular rowan will provide a valuable source of berries late into the winter months and provide an important food source for native and migratory bird species. Ash and elm should currently be avoided due to the prevalence of 'Ash die-back' and 'Dutch elm disease', as stocks of these species cannot be guaranteed to be free from these afflictions.



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The development could also seek to enhance nesting bird opportunities on this site through installation of new bird boxes. The mature trees on site provide an ideal opportunity for installation of a range of bird boxes. Alternatively, integrated bird boxes could be incorporated into the design of the new buildings, providing long term nesting opportunities.

Conclusion

It is considered that the development of this site will provide an improved ecological resource locally through creation of new hedgerow boundaries and the loss of the arable field component is not considered to result in a negative ecological impact. No further surveys beyond this point are considered necessary or proportionate for the current application.

I trust this letter is satisfactory to your requirements. Should you have any queries regarding this survey please do not hesitate to contact me.

Yours sincerely

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