Preliminary Ecological Appraisal: Including a protected species assessment

Conversion of barn to 2no residential dwellings at Cherry Lodge Farm, Puddock Road, Warboys.

This report is required to accompany a planning permission for the conversion of a barn to 2no residential dwellings at Cherry Lodge Farm, Paddock Road, Warboys. The site consists of existing residential barn conversions and a yard area surrounding the proposed barn conversion.

Wildlife such as nesting birds, bats, reptiles and great crested newts *Triturus cristatus* are protected by law. Protected and priority species and habitats, are also a material consideration for individual planning decisions under the National Planning Policy Framework 2019.

This study and report complies with the Chartered Institute for Ecology and Environmental Management (CIEEM) 2017 guidelines for Preliminary Ecological Appraisals.

A local biological data search was obtained through Cambridgeshire & Peterborough Environmental Records Centre to search our records of protected, priority and rare species and local wildlife sites.

A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) was also conducted, to check for statutory nature conservation sites.

These results were the combined with the findings of the site survey, to assess the risk of ecological issues, relevant to planning, occurring onsite.

The site is positioned in a semi-rural location with residential housing and surrounding farmland.

The nearest local pond is (surface area 265m²) located 225m south-west of the site. Arable land and lawn grass was present between the site and the pond. Open ditches were present within the property boundary – approximately 70m south-east (at nearest point)

The closest statutory designated nature conservation site is Warboys Clay Pits Site of Special Scientific Interest (SSSI) located approximately 1 km south-west and designated for its geology and Jurassic Fossils. Warboys Clay Pits (SSSI) is connected to Warboys and Wistow Woods SSSI to the west for its designated woodland habitats.

Table1: Summary of Local Records

Species	Approximate Location	Year
Mammals		
Eurasian Badger	1.9km south-west	2014
Birds		
Barn Owl	900m south-east	2013
Grey Partridge	1km north-east	2013
House Sparrow	Within 2km	2013
Invertebrates & Herpetofauna		
Grass snake	130m north-east	2014
Common lizard	0.5km south-west	2014
Common toad	1.98km south-west	2018
Great crested newt	0.4km south-west	2020

Protected, Priority and Rare Species

Vegetation & Habitats

Habitats onsite include horse grazed land, scrub, yard (mainly hardstanding), occasional scattered fruit trees and boundary trees.

Vegetation found on the site included:

Shingle hard standing: hairy bittercress *Cardamine hirsuta*, annual meadow grass *Poa annua*, petty spurge *Euphorbia peplus*, rosebay willowherb *Chamaenerion angustifolium*, shepherds purse *Capsella bursa-pastoris*, self heal *Prunella vulgaris*, fat hen *Chenopodium album*, scentless mayweed *Tripleurospermum inodorum*, opium poppy *Papaver somniferum,* groundsel *Senecio vulgaris.*

No Schedule 9 invasive plants were observed. No protected, priority or other rare plants were observed.

Bats

The building was inspected for bats as part of the survey.

The building lacked suitable gaps, nooks etc that could be used by roosting bats. No mature trees were present within the construction zone.

No individual bats, bat droppings or urine stains were present internally or externally associated with any areas of the buildings. Evidence of bat activity was not observed internally or externally.

The immediate surrounding habitats were likely, at best, to produce low quantities of flying insects for feeding bats and shelter for commuting bats.

Other Protected or Priority Mammals

The site was considered low in suitability or potential for many other protected and priority mammals such as badgers *Meles males,* harvest mouse *Micromys minutus,* and brown hare *Lepus europaeus,* though occasional crossing/foraging by hedgehog *Erinaceus europaeus* could not be discounted.

Signs or evidence of such species were not observed on or adjacent to the site.

Reptiles

The site is negligible in suitability for reptiles of any species with little safe basking, foraging and breeding habitat present. The surround habitats were also low in suitability or potential to reptiles though the lakes could provide foreign habitat for grass snakes.

Great Crested Newts & Other Amphibians

The site is negligible in suitability or potential as terrestrial habitat for amphibians of any species, although grass would allow dispersal.

The ground between nearby ditches and the proposed site was fine cut grass and unlikely ro provide suitable cover for great crested newts should they be present. The closest pond was separated from the site on neighbouring property with arable land, then Finley cut grass in between the pond and the proposed site. Nearby ditches lacked suitable egg laying plants.

Amphibians were not observed during the site visit.

Birds

Birds observed or heard on or close to the site during the survey included; wood pigeon *Columba palumbus,* pheasant *Phasianus colchicus,* Jackdaw *Corvus monedula,* blackbird *turdus merula,* robin *Erithacus rubecula,* swallow *Hirundo rustrica* magpie *Pica pica,* and house sparrow *passer domesticus.*

House sparrow *Passer domesticus* are red-listed BoCC species. All other birds recorded were common widespread species and green-listed Birds of Conservation Concern.

The trees and buildings on the site were suitable for low numbers of common nesting birds, though unlikely to be utilised by protected or priority birds for nesting. No signs or evidence of such species were recorded during the survey.

The site generally was considered low in suitability for foraging by protected, priority or rare birds, thought it is unlikely that boundary habitats are occasionally visited by widespread protected and priority birds such as starling, song thrush and fieldfare etc.

Invertebrates

The site was considered negligible in ecological value for invertebrates of conservation concern with common and widespread habitats present with low botanical diversity.

Protected, priority or rare invertebrates were not observed during the survey.

Other Protected, Priority or Rare Species

No signs or evidence of any other protected or priority species were observed on the site, nor were there any particularly suitable habitats present for such species.

Recommendations

Precautionary Measure and Inclusions

Bats

To minimise any residual risk of impacts to bats, the following precautionary measure should be undertaken:

- Any new proposed external lighting should be minimised. Where external lighting is required it should be warm white LED lamps with glass glazing, rather than plastic, as these produce the least amount of UV light possible, minimising the attraction effects on insects and minimising disturbance to local bats;

- Any external lighting proposed for the development should be aimed carefully, to minimise the illumination of boundary habitats and avoid light spillage into the sky, or horizontally out from any buildings, by using hoods or directional lighting;

- External security lighting should be set on short timers and be sensitive to large moving objects only, to prevent any passing bats switching them on.

Birds

Removal of any parts of the building and reduction of any trees or shrubs should commence outside of the main bird nesting season. If this is not possible or practical, an ecologist should survey for active bird nests and provide advice accordingly.

If an active bird nest was found, it would be necessary to protect the nest from harm or disturbance until the bird had finished nesting.

To compensate for habitat loss, if any tree is required to be removed, it is recommended that it is replaced on a one-for-one basis using only native broadleaved trees.

To compensate for loss of house sparrow nesting habitat the below boxes should be installed:

2x Schwegler 1SP Sparrow terraces.

The boxes should be installed high on the building facing a northerly direction.

Amphibians & Hedgehogs

The risk of impact to hedgehogs and amphibians was considered low. However, to minimise any residual risk of impact or harm, the following precautionary measures should be undertaken;

- Ground vegetation should be maintained short by regular mowing to prevent habitats improving for wildlife.
- During development, construction materials should be stored on hardstanding or off the ground pallets, to prevent wildlife from sheltering in the materials and being harmed by movement of the materials.

- The site should be well drained and ground vegetation maintained throughout the development to prevent attracting wildlife.

- Any excavations for the development should be covered at night or have a roughly sawn off plank placed I them to facilitate escape for any wildlife which may fall in.

- No works at night when amphibians and hedgehogs are most active

- In the unlikely event that a hedgehog or amphibian is observed on the site during the development, activated in that area should cease and the animal should be allowed to disperse of its own accord if rescuing is required and ecologist should be called for advice.

Enhancements

By following the below biodiversity enhancements, the development will improve the site for local wildlife and provide net-gain in line with the NPPF.

The addition of bat boxes and bird boxes on the newly constructed building will increase the potential roosting and nesting sites for local bats and birds.

Specifically the following boxes should be used:

- 3 x Schwelger swallow nesting cups

- 2 x Ibstock swift bricks

- 1 x eco integrated bat box

Bird boxes should be positioned high and facing north just below the eaves. The bat box should be positioned high on the building ideally facing south.

Any new or restored lawn areas following development will be creased using a wildflower meadow mixture such as Emorsgate EM1 seeds.

Any other soft landscaping will be native and wildlife attracting.

Conclusion

The construction zone is small in area and supported common widespread habitats low in ecological value. No signs or evidence of protected, priority or rare species were identified. The risk of presence or significant to such was considered very low.

Therefore, further ecological surveys or mitigation are considered unnecessary.

The recommendations to minimise residual risk to birds, amphibians, hedgehogs and bats are included and should be followed.