Biodiversity Method Statement and Enhancement Strategy

Change of use of redundant agricultural barn and associated land to residential dwelling house and garden

Fenby Farm Fen Lane Stilton Peterborough PE7 3SA

August 2024.

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01 Introduction

Planning permission (application reference 24/00096/FUL) was granted by HDC on 29th April 2024 for the Change of use of redundant agricultural barn and associated land to residential dwelling house and garden on land at Fenby Farm Fen Lane Stilton Peterborough PE7 3SA. Amongst the conditions associated with the granting of planning permission, condition 6 states:

No development above slab level shall take place until a Biodiversity Method Statement which provides details of how the recommendations contained in the Chapters 5 of the Preliminary Ecological Appraisal (dated September 2023) and Chapter 4 of the Preliminary Roost Assessment (dated 11/12/2023) will be carried out has been submitted to and approved in writing by the Local Planning Authority. The details shall include but not be limited to; specification, location, timing, an implementation programme, maintenance, and monitoring. The development shall be carried out in accordance with the approved details.

02 Scope

This document outlines requirements and good practice working methods which if implemented will avoid and reduce ecological impacts, together with compensation and enhancement measures, as specified within supporting documentation submitted with the planning application. It will enable the LPA to demonstrate its compliance with its statutory duties including its biodiversity duty under S.40 of the NERC Act 2006.

It is based up proposals and text within

- 1017_Ecology Report (PEA)
- 1017_PRA
- 1017_Planning
- 1017_DAS

If any variations to scheme design are subsequently agreed with the LPA, this document should be revised and amended as appropriate. The content of this document should be read in conjunction with and referred to by documents produced in relation to the following planning condition 6.

03 Biodiversity Interest

The proposed construction zone is approximately 0.1ha and consists of a Dutch barn on hardstanding, with disturbed improved grassland and ruderal herbaceous plants (south). A pond was also present approximately 80m south west of the proposed construction zone.

The PEA concluded that the site was considered low in ecological value with common and widespread habitats present. The risk of presence and significant impact to protected, priority or rare species or notable habitats was very low/negligible. Further ecological surveys or mitigation were considered unnecessary for the development to proceed.

04 Purpose and Conservation Objectives

The purpose of this document is to outline measures to: i) avoid and mitigate impacts upon existing habitats and features of ecological value on or near to the site, ii) where necessary compensate for significant losses of biodiversity value, and iii) provide enhancements to offset residual losses and provide biodiversity gains where possible.

Specific (construction phase) mitigation and compensation measures will include (Figure 1):

- Good working practices to protect any retained habitats on or adjacent to the site;
- Good working practices (methods and timings) to minimise and avoid impacts on any protected species.
- Lighting and roof structure/cladding (membrane) design to minimise and avoid impacts on wildlife including roosting, foraging and commuting bats;
- Relocation of any log and brash piles by hand.
- Provision of bird and bat boxes.

Mitigation, compensation and enhancement measures (to be completed prior to occupation) will include (Figure 1):

- Compensatory native species rich hedgerow and tree planting including native trees;
- Provision of species rich, flowering lawns;
- Provision of bat and bird boxes;
- Planting of native and nectar rich climbers along the hedgerow.

05 Detailed Design

Detailed guidance to inform avoidance, mitigation, compensation and enhancement measures are provided in the text below and summarised in Appendix 1.

Timely and effective implementation is the responsibility of the landowner/developer and their contractor(s) unless specified otherwise.

5.1 Avoidance, mitigation and compensation (site clearance and construction phase)

Habitats

- There is no existing hedgerow, trees or plantation woodland on site. Therefore temporary (e.g. Heras) fencing and RPAs are not relevant.
- There PEA recorded no protected species on the site. However, any log and brash piles must be dismantled and moved by hand to minimise harm to any sheltering wildlife. Large piles (>1m footprint) should be relocated outside of the period November to February inclusive to avoid harming hibernating animals).
- Any soft landscaping post development should include the use of only native and/or wildlife attracting species.
- A new hedgerow will be planted. The new hedgerow will be planted in double staggered row sections, preferably 5 whips per linear metre, with spiral tree guards and include: 60% Hawthorn (Crataegus monogyna) 20% Field maple (Acer campestre), 10% Hazel (Corylus Avellana), 5% wild cherry (Prunusavium), 5% guelder rose (Viburnum opulus).

Species

- There are no existing hedgerows or trees within the site or within 26m of the site and therefore nesting birds will not be impacted by the site compound.
- There are no hedgerows or trees present within the site or within 26m of the site. There will be no removal of hedgerows or trees from the site. Therefore, breeding season, exclusion zone and the marking of nesting sites are not be impacted by the proposals.
- Brash generated during any vegetation removal must be removed from the works area as soon as possible and should be used to create dedicated hedgehog overwintering refuges / nesting sites.

1. Bird and Bat nesting opportunities should be enhances by the provision of 1no. Beaumaris Woodstone Bat Box, 1no. 1SP Schwelger Sparrow Terrace and 1no. Schewegler 3S Starling Box and 1no. Schwegler No 17 Swift Nest Box as per the PEA and PRA recommendations. The sparrow terrace and bat box should be integrated into the cladding of the converted building. The boxes should be installed high on the building with the sparrow terrace facing north and bat box facing south. The starling box should be installed on a nearby mature tree facing a northerly direction prior to works commencing.
2. Security lighting levels must be as low as possible, preferably using warm white LEDs, with mercury or metal halide lamps avoided. Movement sensors must be used to minimise the lit time.
3. Lighting to be positioned so as to avoid illumination of retained habitats including nearby hedgerows and trees.

Good practice measures will be employed to avoid impacts upon protected species including:

1. Temporary fencing of retained habitats, and translocation of log/brash piles.
2. Proposed short lawn should continue to be mown to maintain an unfavourable short sward;
3. When longer vegetation is removed, this should be carried out in two stages:
    a. The first cut should be to a height of no less than 150mm above ground level;
    b. After at least 1-hour (or after leaving overnight), remaining vegetation may be cut to ground level.

4. Movement of log piles should be undertaken sensitively by hand.
5. During the construction phase, trenches and excavations must be filled on the same day as excavation where possible to prevent animals falling in. Where this is not possible the trenches should be covered overnight with ply/OSB sheets and damp sand used to fill any gaps. Larger excavations should have mammal ladders (e.g. rough planks securely placed at an angle to allow safe egress) installed;
6. Open excavations will be inspected for the presence of protected species including amphibians, reptiles and small mammals immediately prior to filling with any aggregates or concrete;
7. Concrete pours will be undertaken in the morning to allow them to harden prior to the evening when amphibians become active, or must be covered overnight;
8. Excess cement/concrete must be disposed of in such a way as to prevent contact with animals e.g. poured into a concrete skip and covered;
9. Any caustic materials (e.g. concrete) to be hand mixed must be on ply boarding over a tarpaulin which is folded over the boarding at the end of each day's use to prevent animals coming into contact;
10. All building materials and waste will be stored on areas of hard standing (e.g. gravel) or stored off the ground on pallets, and not on areas of vegetated ground; and
11. Any demolition waste should be removed as promptly as possible to prevent animals seeking refuge. However, any waste that must be stored on site temporarily to be stored within skips which must rest of areas of hard standing to prevent animals from seeking refuge.
    - If, at any stage during vegetation clearance or construction, great crested newt (GCNs) are observed by any worker, work must immediately cease and a qualified EcoW be contacted

Appendix 1 provides a record of the environmental objectives and actions, further information available, responsible parties and relevant timing for mitigation/compensation of impacts during the construction phase. It enables progress to be recorded during works progression.

5.2 Avoidance, mitigation, compensation and enhancement measures (operational phase)

The following measures should be implemented upon construction of the new residences, but prior to occupation.

Habitats

Compensatory native species hedgerow and tree planting, together with species rich lawns will be provided prior to occupation. Additional bird and bat nesting boxes will be provided. The following recommendations are based on the content of the Ecology Report submitted with the planning application and should be referred to within the Landscaping Scheme for the site to be prepared to discharge planning condition 4. Any changes to on-site provision should be agree with the authors of this document or the LPA/their ecologist before progression on site.

The following list provides suitable native broadleaved species for use in landscape planting on the site.

1. Pedunculate Oak (Quercus robur)
2. Hazel (Corylus avellana)
3. Field Maple (Acer campestre)
4. Hawthorn (Crataegus monogyna)
5. Alder (Alnus glutinosa)
6. Silver Birch (Betula pendula)
7. Rowan (Sorbus aucuparia)
8. Hornbeam (Carpinus betulus)
9. Wild Cherry (Prunus avium)

Hedgerow planting and maintenance

Site landscaping will provide species-rich hedgerow planting along the fence line to the adjacent driveway. At least 6 native hedging plant species per 30m length, selected from the above list, should be planted in groups of 2 to 3 conspecifics.

Hedgerow standard trees will be planted, ideally every 10 to 15m, in the boundary hedgerow to create some vertical structure over time for songbirds. Species to be planted should be native and suitable for the underlying soils. Native honeysuckle (*Lonicera periclymenum*) and/or traveller's joy (*Clematis vitalba*) will be planted along existing and new hedgerows at a rate of one plant per 5-10m.

The landscape plan (condition 4) must include planting specifications and management recommendations to maximise the biodiversity benefit of the habitats created. Any variations to suggested species should be agreed with a suitably experienced ecologist in writing.

Lawns

New or re-instated lawn areas will be managed as wildflower habitat and/or seeded, over-seeded or turfed with a suitable seed mixture (see condition 4) or turf respectively, following supplier guidance on creation and long-term management.

Species

- Details of the required biodiversity mitigation and compensation measures for individual taxa are provided below:
- Downpipes taking water off the roofs should discharge into a sealed downpipe gulley pot (ttps://www.wickes.co.uk/FloPlast-D94-Leaf-Debris-Interceptor-Gully---Black/p/158828) or discharge into a hopper with a small diameter grate (holes <6mm) to avoid entrapment of amphibians. If bigger diameter grates are required, then the gulley pot should be raised off the ground by 150mm to prevent amphibians climbing into the gulley pot.

- Lighting during the operational phase must be as per the recommendations in the PEA and PRA.
- Bat and bird boxes to be installed as per the recommendations in the PEA and PRA.

Appendix 1 provides a record of the environmental objectives and actions, further information available, responsible parties and relevant timing for mitigation/compensation of impacts during the construction phase. It enables progress to be recorded during works progression.

06 Timetable

Section 5 identifies whether measures relate to the construction or operational phases of the scheme and provides information on e.g. seasonal timing constraints. Further information is included in Appendix 1.

07 Monitoring

The applicant will make suitable checks for protected species and ensure the installation of bat and bird boxes as required.

08 Responsibilities and Communication

The relevant parties responsible for individual roles in the delivery of the environmental mitigation and compensation measures on site are outlined in Appendix 1. The tables can be printed hard copy and retained on-site to be used to document the measures implemented during the project.

It is the responsibility of the client and their contractor(s) to ensure that the measures identified in this document are implemented. Any deviation from the recommendations made to discharge planning condition 6 may result in an offence under the Wildlife and Countryside Act (1981), as amended, and may constitute a breach of planning condition.

Appendix 1 – Environment Objectives and Actions

Table 1: Biodiversity mitigation and compensation – site clearance and construction phase

Objective	Action	Further Information	Responsible Party	Timing	Progress
Safeguard the ecological interests of on and off-site ecological receptors.	Biodiversity Method Statement to be submitted to and approved in writing by LPA prior to site clearance or construction works commencing.	Planning Condition 6	Client/Agent	Pre-commencement	
Protect existing hedgerows, trees and plantation woodland to be retained on and adjacent to site.	There are no retained habitats or retained trees on site – therefore Heras fencing and RPA areas are not applicable. Move lag /brash piles by hand to prevent harm to sheltering animals.	Section 05 Figure 1 PEA	Client and principal contractor	Prior to clearance/earth works commencing and maintained throughout and ongoing.	
Avoid impacts upon breeding birds.	There are no retained habitats or retained trees on site. There is no proposed scrub, hedgerows or trees removal.	Section 05 Figure 1 PEA Appendix 2	Client and principal contractor	Prior to clearance/earth works commencing and maintained throughout and ongoing.	
Avoid impacts on roosting, commuting or foraging bats	There are no retained habitats on site. Temporary security light lighting to avoid illumination of adjacent maternity roost as well as boundary and woodland habitats. Light levels to be as low as possible, preferably using warm white LEDs, with mercury or metal halide lamps avoided. Movement sensors to be used to minimise the lit time. Woven Breathable Roofing Membranes (BRM) to be avoided in new roofing to avoid the risk of entanglement. Instead traditional bitumastic Type 1F roofing felt or breathable wood fibre sarking boards such the Hunton Sarket or Pavatex Isolair to be used. Modern BRMs can be used where no gaps >5mm in size are created.	Section 05 PRA	Client and principal contractor	Prior to clearance/earth works commencing and maintained throughout and ongoing.	
Avoid impacts on amphibians and reptiles and hedgehog	There are no retained habitats on site. Movement of log piles should be undertaken sensitively by hand. Ground vegetation should be cut short or maintained short by regular strimming to prevent habitats improving for wildlife; The site should be well drained to prevent attracting wildlife into harm's way;		Client and principal contractor	Prior to clearance/earth works commencing and maintained throughout and ongoing.	

	No significant vegetation clearance to be progressed during winter. Any localised removal between November and March inclusive, when temperatures are regularly recorded below 6°C within a 24-hour period, must not be cut below 300mm in height to avoid injuring or killing nesting hedgehogs. Trenches and excavations to be filled on the same day as excavation where possible to prevent animals falling in, otherwise trenches should be covered overnight with ply/OSB sheets and damp sand used to fill any gaps. Larger excavations to have mammal ladders (e.g. rough planks securely placed at an angle to allow safe egress) installed. Open excavations to be inspected for the presence of amphibians and small mammals immediately prior to filling with any aggregates or concrete. Concrete pours to be undertaken in the morning to allow them to harden prior to the evening when amphibians become active. Excess cement/concrete to be disposed of in such a way as to prevent contact with animals e.g. poured into a concrete skip and covered to prevent rain entering. Any caustic materials (e.g. concrete) to be hand mixed must be on ply boarding over a tarpaulin which is folded over the boarding at the end of each day's use to prevent animals coming into contact with any cement. All building materials to be stored on areas of hard standing (e.g. gravel) or stored off the ground on pallets, and not on areas of vegetated ground. Any demolition waste that must be stored on site temporarily to be stored within skips which must rest on areas of hard standing to prevent animals from seeking refuge; waste should be removed as promptly as possible to prevent animals seeking refuge. In the unlikely event that a hedgehog or amphibian is observed on the site during development, activities in that area should cease and the animal should be allowed to disperse of its own accord. If rescuing is required an ecologist should be called for advice.				

Table 2 Biodiversity mitigation, compensation and enhancement - operational Phase

Compensate loss of habitats	Compensatory hedgerow, tree and climber planting as per the list and the guidance in section 5.2. Establishment of wildflower lawn.	Section 5 See separate planning conditions plan	Client and principal contractor	Prior to slab level and during occupational phase.	
Provide enhancements for bats	Exterior lighting design as per DAS, planning conditions, PEA and PRA. Provision of bat roosting opportunities as per PEA and PRA. I.e. 1 x Beaumaris Woodstone Bat Box. The above bat box should be integrated into the cladding of the converted building. The boxes should be installed high on the building with the bat box facing south.	Section 5 See separate planning conditions plan Appendix 2	Client, Architect and principal contractor	During construction and/or prior to occupation.	
Avoid impacts upon hedgehogs and amphibians	To avoid entrapment, downpipe gully pots are to be sealed/have fine mesh covers or be raised at least 30mm above ground level to avoid amphibians becoming trapped.	Section 5 Appendix 3	Principal contractor	During construction.	
Provide enhancement for nesting birds	The following new bird, and bat boxes will be installed on the site: • 1 x 1SP Schwegler Sparrow Terrace • 1 x Schwegler 3S Starling Box The above sparrow terrace should be integrated into the cladding of the converted building. The boxes should be installed high on the building with the sparrow terrace facing north and bat box facing south. The Starling box should be installed on a nearby mature tree facing a northerly direction.	Figure 1 PEA and PRA	Principal contractor	During construction.	

Appendix 2 – Bat and Bird Boxes

1 x Beaumaris Woodstone Bat Box



1 x 1SP Schwegler Sparrow Terrace



1 x Schwegler 3S Starling Box



Appendix 3 – Great Crested Newt Signage

Great Crested Newt

If seen by any employee, works must cease immediately and an ecologist be contacted for advice

It is an offence to intentionally or recklessly disturb, injure or kill great crested newts

Further information can be found at www.arguk.org





