



**Ecological survey:
Protected species and habitats.**

**Agricultural Buildings,
Foxes Lane,
Mendham,
Suffolk.**

Final report: 26th September 2019

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Natural England Licence: Licence No's :

2016-20270-CLS-CLS (GCN),
2015-14697-CLS-CLS (Bats)

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1.0: Executive Summary:

Protected species and habitats legislation is not a consideration when determining planning permission for the proposed development at Agricultural buildings off, Foxes Lane, Mendham, Suffolk.

The site was surveyed on 29th August 2019 by John Parden of JP ecology. The planning application is for a Class Q (b) change of use of the agricultural buildings only, consequently the application applies to the agricultural buildings only at this stage and as such is entirely built environment, occupied by agricultural buildings and hard standing areas.

There was a single pond within 100m shown on the OS maps, this was dry at the time of the survey and there was no indication that it had recently held water recently. A full Great crested newt habitat suitability assessment was not possible due to its state at the time of the survey however all indications suggest that it will be unfavourable due to its seasonal nature and the potential impacts that change of use will have on Great crested newts will be minor.

A comprehensive survey of the buildings was conducted for bats which found no evidence to suggest the buildings were being used by bats or had been visited by bats in the recent past. The buildings were all of low favourability for roosting bats.

Evidence suggested that a barn owl had visited one of the buildings during a period when the doors had been left open. There was no evidence to suggest barn owls had used the building to raise young. The building has recently been secured.

Mitigation.

General mitigation – all species.

- The contact details of a suitably licenced ecologist should be made available to the development contractors.
- Advice must be sought from an ecologist if any protected species are inadvertently disturbed.

Obligatory mitigation.

- Nesting birds –
 - Nesting birds should not be disturbed during the nesting season typically 1st March to 31st July (species dependant).
 - It is recommended that the site should be cleared outside of the nesting bird season.
 - Should it be necessary to strip the site during the nesting season the site should be searched by a suitably qualified ecologist and any nests protected until the young have fledged.

Precautionary mitigation.

- To avoid the risk of causing injury or harm to small mammals, amphibians and reptiles during the construction process and to promote best practice, the generic method statement attached in appendix 1 should be made available to all contractors.

Ecological Enhancement.

- At least one of the following:
 - 1 x Schwegler FE2 bat box should be built into the property.
 - or
 - 2 x Schwegler bird box and 2 x swift box, to be mounted in appropriate locations on the property.
- All permanent fences that might be erected around the site should include gaps of 200mm x 150mm at ground level on each run to enable small mammals and vertebrates to migrate through the site and prevent entrapment.
- A barn owl box should be installed on a neighbouring tree or on one of the buildings on site.

Clients responsibility towards protected species.

The site owner has a responsibility to ensure that protected species or their resting places are not killed, injured or disturbed as a consequence of their actions.

Whilst the results of the survey are considered to be conclusive at the time that the survey was conducted, there is always a possibility that protected species might occupy the site between the period of the survey and the commencement of any works on the site. If any protected species are discovered during any construction works a qualified ecologist should be contacted for advice or assistance.

Contact details of suitably qualified and licenced ecologist:

**John Parden, Natural England licenced ecologist (Licence no. 2016-20270-CLS-CLS, 2015-14697-CLS-CLS)
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If conditions within the development site / buildings or the development proposals are significantly altered prior to the planning application being submitted then further advice should be sought from an ecologist to ensure that the conclusions of the ecological survey remains valid.

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Appendix 1. Generic Method Statement to avoid injury or harm to small mammals, reptiles & amphibians.

2.0: Contact details:

Architect:

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Natural England Protected Species Licence No:

2016-20270-CLS-CLS (GCN),
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3.0 Introduction:

3.1 Brief:

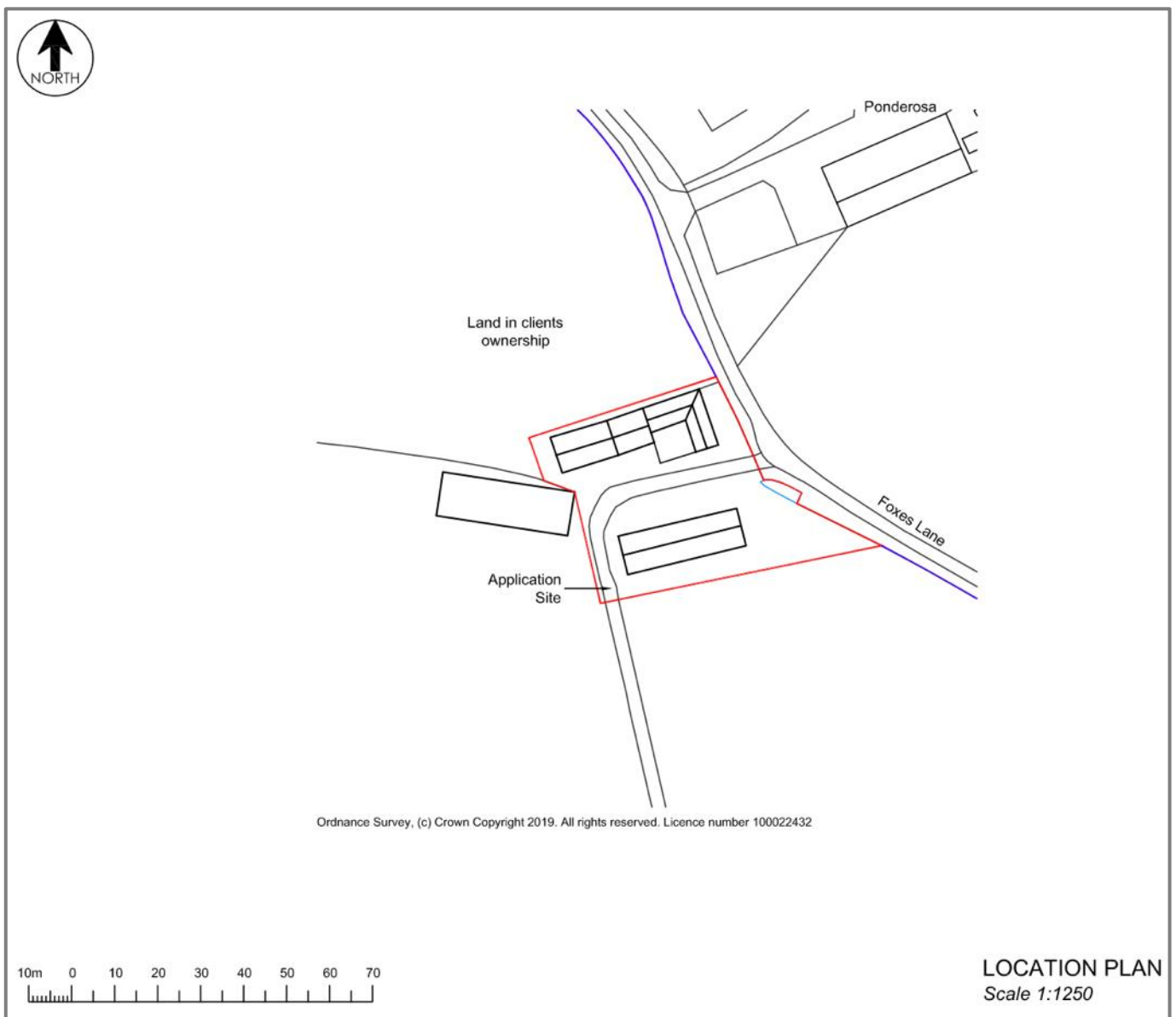
John Parden (Licensed ecologist) of JP ecology was commissioned by Durrants, (Instructing Architects) to undertake a protected species and habitat survey in and around the proposed development at Agricultural buildings off Foxes Lane, Mendham, Suffolk (see plan 1 below).

The survey is required for inclusion with a planning application for the site to enable the planning authority (Mid Suffolk District Council) to determine whether the proposals satisfy legislative considerations with regard to biodiversity and protected species.

The planning application is for a Class Q (b) application for conversion of agricultural buildings to domestic dwellings.

3.2 Site development proposals:

Plan 1. Site location plan showing proposed development site. (Illustrative, do not scale)



The property is subject to a planning application including:

- Conversion of an existing agricultural building into domestic residences.

For the purposes of the ecological survey it is assumed that:

- No new entrance will be created to access the site.
- No temporary access points or temporary hard standing areas outside the development area will be used for site access, construction traffic or storage of building materials.
- No natural or semi natural habitats exist on the development site.
- No natural or semi natural habitats outside the development area (as illustrated in plan 1) will be affected by the proposed development.
- No ponds or permanent watercourses will be disturbed by the development works.
- There will be no loss of mature or established trees or hedgerows on or surrounding the site.

3.3 Scope of the survey:

The survey includes:

- A desktop search for designated sites that may be impacted by the development using publically available DEFRA data (<http://www.natureonthemap.naturalengland.org.uk/magicmap.aspx>)
- Using the Suffolk Biodiversity Partnership planning validation guidelines (2015). The site is less than 0.5Ha or 11 properties therefore is classified as 'minor'.
Protected species triggered.
 - All Agricultural Buildings
 - Bats,
 - Barn owl,
 - Nesting birds
 - Developments within 100m of a pond.
 - Great crested newts.
- Consideration was given to nesting birds.

Desktop survey: Consideration was given to obtaining a local records search however a local records search was not considered appropriate on this occasion based upon:

- The application is for change of use only.
- The nature of the site and its location.
- The lack of ecological interest on the site.
- The conclusive outcome of the scoping survey.

3.4 Survey objectives:

The survey aimed to establish:

- Whether protected species or habitats were present on the site and would be impacted upon by the development.
- Whether the development was likely to have any long-term impact upon the local biodiversity.

3.5 Site & location:

Within the wider landscape: The site is located within a wider landscape that is of medium to low interest for biodiversity based upon:

- The surrounding landscape is dominated by agricultural land and used mainly for intensive arable crop production which is of low ecological interest.
- The features of ecological interest within the immediate landscape is restricted to hedgerows, woodland, tree lines and field ditches.
- The site is approx. 3km from the towns of Harleston to the north west.

Sites designated for their ecological interest:

- The nearest nationally designated sites are Metfield Meadow SSSI located 3km to the south east of the site.
- The nearest County Wildlife Site are the gravel pits at Shotford (Waybred) 2km to the west.
- No continuous ecological corridors connect the development site to any locally or nationally designated sites of ecological interest.

Within the immediate vicinity of the site (see plan 1 above): The development site is currently three agricultural buildings surrounded by agricultural land.

The minor road, Foxes Lane, passes to the north.

The habitats that immediately adjoin the site include:

- North - Public highway beyond which is cultivated land, arable.
- West - Cultivated land, arable.
- South - Cultivated land, arable.
- East - Cultivated land, arable.

Aquatic habitats - Ponds within 100m of the site, and water courses within 200m of the site.

The nearest aquatic habitat shown on the OS maps, and within 100m of the site is a small roadside pond shown on plans @ OS grid ref: TM27768177.

There are no other ponds within 100m

There are no significant or named watercourses within 200m of the site.

3.6 Desktop Survey (see 3.3 above)

Given the conclusive outcome of the survey a local records search was not considered necessary on this occasion.

4.0 Wildlife and the law

4.1 UK legislation:

LEGISLATIVE FRAMEWORK

Bat Legislation

All bat species are protected under Annex IV of the Conservation of Habitats and Species Regulations (2017) (The Habitats Directive), and have further protection in the UK by the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). This legislation offers protection to both the species, roost sites and feeding perches. It is an offence to kill, injure, capture, possess or otherwise disturb bats. Bat roosts are protected throughout the year (making it an offence to damage, destroy or obstruct access to bat roosts), regardless of whether bats are present at the time.

Licenses are issued to allow developments to commence once the level of bat usage has been determined. There are currently two main levels of licensing, the European Protected Species license (EPS) and the Bat Mitigation Class License (BMCL)

Great Crested Newt Legislation

The Great Crested Newt (GCN) is protected through the Wildlife and Countryside Act (1981), Habitat Regulations (1994) and Countryside Rights of Way Act (2000). In essence this legislation prohibits the following:

- *Intentional disturbance or harm.*
- *Reckless damage to a breeding site or resting place or a place used for shelter and protection.*
- *Intentionally obstructing a place used as shelter.*

Should suitable habitats be present then further surveys in line with the present guidelines may be necessary.

Bird Legislation

Most species of bird are protected under the Wildlife and Countryside Act 1981 (as amended) whilst at the nest against destruction of the nest and eggs. However, certain species such as Barn Owl achieve greater protection under Schedule 1 of the above act and species such as Spotted Flycatcher have attracted a Norfolk Biological Action Plan.

NERC Act 2006

Under the Natural Environment and Rural Communities Act 2006 biodiversity has to be taken into consideration at all levels of planning and this has been interpreted as a series of wildlife enhancements to protect or restore species or habitats. Reference has been made to S41 species such as hedgehogs under the above act.

5.0 Surveys.

The site was surveyed by John Parden of JP ecology on 29th August 2019. The conditions were suitable to conduct a conclusive survey.

5.1 Methodologies

Consideration was given to conducting an assessment of the habitats using the JNCC phase one habitat classification system.

The site was entirely built environment or hard standing at the time of the survey consequently a Phase 1 habitat survey was not considered appropriate.

Pond Survey - The pond survey would typically following standard survey methodologies appropriate for Great crested newts, specifically the Great Crested Newt Habitat Suitability Index Assessment (HSI) (Oldham *et al.* 2000) and Natural England Standing Advice Sheet: Great crested newts. The results were interpreted in accordance with Natural England Guidance.

Given the conditions on the ground at the time of the survey it was not possible to follow standard surveying methodologies and a subjective assessment as to the ponds suitability for breeding newts was conducted.

Bat Survey – the bat survey was conducted in accordance with the guidance described in 'Bat Survey Good Practice Guidelines 3rd edition 2016.

Other species were surveyed by looking for tracks, droppings, feeding evidence and field signs.

5.2 Scoping Survey Results.

5.2.1 Habitats.

Consideration was given to conducting an assessment of the habitats using the JNCC phase one habitat classification system.

The application is for change of use only and consequently relates to the buildings only at this stage.

The site was entirely built environment at the time of the survey, buildings, hard standing and concrete service areas, consequently a Phase 1 habitat survey was not considered appropriate.

5.2.2 Great crested newts.

The only pond within 100m of the site shown on maps at TM27768177. The pond existed as a depression within the ground and was part of the roadside ditch system. It was dry at the time of the survey (August). A water line on the tree suggests that the pond / ditch has held water at some time in the past however the extensive accumulation of dried leaf litter and other debris suggestion that it had not held water at any time in the recent past (see photo 1 below).

There was insufficient information to conduct a conclusive Great crested newt Habitat Suitability Index (HSI) assessment on the pond however significant shading, the absence of aquatic vegetation and assumed early drying suggest that the pond would have low favourability score for Great crested newts.

Given that the application is currently for change of use only and assumed future conversion of the buildings on their existing footprints, it reasonable to suggest that the potential impact on Great crested newts will be minimal given that no aquatic or terrestrial habitats will be disturbed as a result of granting approval for change of use.

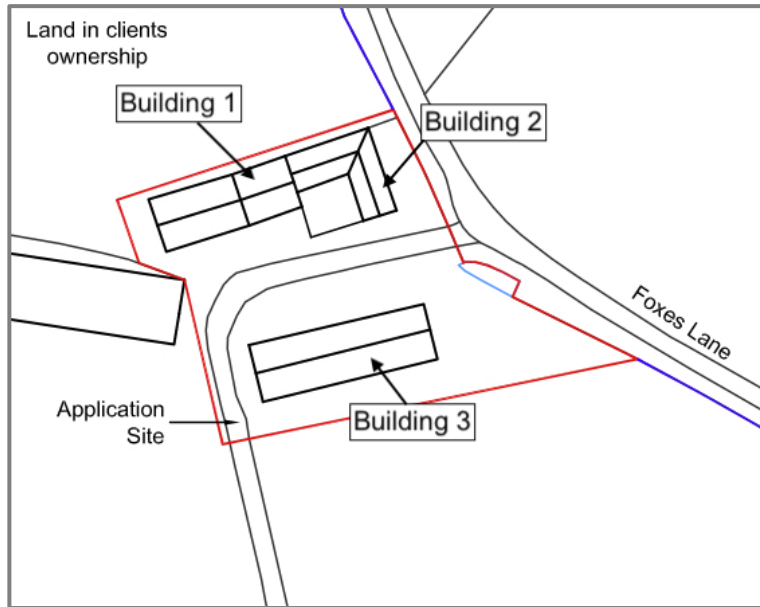
No further surveys were considered necessary.

Photo 1. Illustrating the condition of the pond shown on maps.



5.2.3 Bats. - Survey results.

Plan 2. Illustrating the locations of buildings 1 to 3.



5.2.3.1 Building 1.

A simple building constructed with solid concrete block walls with windows to the north facing wall. The roof was clad with a cement fiber roof supported on metal trusses. The floor was concrete. The building was being used as a garage / workshop and had a strong smell of lubricants and solvents at the time of the survey.

The building had no internal cavities or loft spaces favoured by roosting bats. The walls were constructed using solid concrete blocks and did not have any cavities within which bats could roost.


The building had a concrete floor and was a dry internal environment.

The building was of low favourability to bats.

A thorough search of the building found no bats or evidence of bats in the form of bat droppings, scratch marks, polishing or urine splashes.

Table 1: Building 1. Illustrating survey results. Refer to plan 2 above.

Photo No.	Image.	Notes.
Photo 2		Image to show the general construction of building 1 showing the simple construction with concrete blocks and the cement fibre clad roof.

Table 1: Building 1. Illustrating survey results. Refer to plan 2 above.		
Photo No.	Image.	Notes.
Photo 3		Image to show the interior of the building showing concrete block walls, cement fibre roof and metal trusses. Also showing windows in the walls creating a light internal environment.

5.2.3.2 Building 2.

A brick built 'L' shaped structure that is a combination of open cart lodge, stables and enclosed outbuilding / barn, all roofed with clay pantiles with a combination of earth and concrete floors.

The cart lodge and outbuilding / barn are open on the south facing aspect and have a light and draughty internal environment which is unfavourable to bats.

The roof is supported on a timber frame that has closed joints on the trusses without any open joints or bat roosting opportunities within the timberwork.

The roof is clad with clay tiles which are unlined below and consequently without a void below the tiles that could be used by roosting bats.

The building includes one enclosed section, possibly a former stable, which was heavily cobwebbed suggesting that bats had not flown within that section of the building.

The buildings do have cracks in the brickwork and voids around the doorway and facing timbers that could potentially be occupied by roosting bats.

A thorough search of the building using a torch and endoscope found no bats or evidence of bats in the form of bat droppings, scratches, polishing, urine splashes.





Table 2: Building 2. Illustrating survey results. Refer to plan 2 above.		
Photo No.	Photo No.	Photo No.
Photo 4		General image of building 2 showing the open cart lodge and outbuilding, also showing the general state of the building which was recently unmanaged and in a state of disrepair.

Table 2: Building 2. Illustrating survey results. Refer to plan 2 above.		
Photo No.	Photo No.	Photo No.
Photo 5		Showing the outbuilding / barn, open on the southern aspect. Also showing the timbers around the doors with gaps around.
Photo 6		Photo showing crack in the internal wall. A thorough search found no occupying bats or evidence of bats in the form of bat droppings scratching or polishing to suggest that bats had used it for roosting.
Photo 7		Photo showing the roof trusses which were close jointed without any open joints or voids which could be used by roosting bats, the roof trusses were the same throughout the building. Also showing the roof which is unlined below.

5.2.3.3 Building 3. A grain store.

An agricultural building constructed from solid concrete blocks up to eaves with cement fiber sheeting above. The walls include windows along the north and south facing walls, which create a light internal environment which is unfavourable for bats.

The roof is clad with cement fiber sheeting supported on metal trusses.

The internal roof space does not have any voids or loft spaces that could potentially be used by bats.




At the time of the survey the building was secured however the end doors had recently been left open.

The building is used for storing and drying grain.

Associated with its function, the building is well sealed against vermin to enable a controlled internal environment for the purpose of drying grain, consequently it had no obvious entry points that can be used by bats.

The structure does not have any timber soffits, barge boards, or external cladding or cavities that are favourable for roosting bats.

A thorough search of the building found no evidence of bats in the form of bat droppings polishing marks, scratches or urine splashing.

Table 3: Building 3. Illustrating survey results. Refer to plan 2 above.		
Photo No.	Image.	Notes.
Photo 8		General image of building 3 illustrating the size of the building and its general construction using concrete blocks up to eaves and cement fibre sheeting above and as a roof cladding.
Photo 9		Image showing the interior of building 2 showing the metal frame roof trusses, the concrete walls, the windows to the south facing aspect creating a light internal environment.
Photo 10		Image showing the locked metal doors closed and locked at the time of the survey, and showing the general internal construction.

Discussion and conclusions.

Bats are not a consideration based upon.


- A comprehensive survey was conducted.
- The buildings are of a construction that is unfavourable to bats.
- Buildings 1 & 3 were assessed as being of low suitability for roosting bats.
- Building 2 did have some bat roosting opportunities associated with the buildings age and condition, specifically in cracks within the brickwork and around timberwork, (doorframes).
- The survey found no bats or any evidence to suggest any of the properties were being occupied by bats or had been visited by bats in the recent pass.

5.2.4 Barn Owls.

Evidence existed that indicated a Barn Owl had been perching on a ladder stored on the roof trusses (see photo 11 & 12 table 5 below) during a period when the doors were left open. The building is now secure and there is no longer any means of access for barn owls.

There was no evidence to suggest that barn owls have used the building to raise young.

Note: The development site includes other buildings not subject to the planning application which could potentially be used by Barn Owls.

Table 4: Building 3. Illustrating survey results. Refer to plan 2 above.		
Photo No.	Photo No.	Photo No.
Photo 11 & 12		Photo showing streaking from barn owl which had perched on the ladder above during a period when the doors had been left open. Note the building is now and has recently been secured preventing further access for barn owl.

5.2.5 Other protected species.

Nesting birds. In common with all developments, birds can nest in the most unlikely of places, the possibility always exists that birds could nest within the buildings or on the site, consequently attention is drawn to nesting bird legislation.

Small mammals, amphibians and reptiles. In common with all development sites, terrestrial vertebrates e.g. hedgehogs, hares, common amphibians, may pass through the site consequently a method statement is attached and should be made available to all contractors working on the site to help prevent possible injury or harm to terrestrial vertebrates and to promote best practice.

No other protected species are a consideration on the site.

6.0 Mitigation.

6.1 General mitigation – all species.

- The contact details of a suitably licenced ecologist should be made available to the development contractors.
- Advice must be sought from an ecologist if any protected species are inadvertently disturbed.

6.2 Obligatory mitigation.

- Nesting birds –
 - Nesting birds should not be disturbed during the nesting season typically 1st March to 31st July (species dependant).
 - It is recommended that the site should be cleared outside of the nesting bird season.
 - Should it be necessary to strip the site during the nesting season the site should be searched by a suitably qualified ecologist and any nests protected until the young have fledged.

6.3 Precautionary mitigation.

- To avoid the risk of causing injury or harm to small mammals, amphibians and reptiles during the construction process the generic method statement attached in appendix 1 should be made available to all contractors.

6.4 Ecological Enhancement.

- At least one of the following:
 - 1 x Schwegler FE2 bat box should be built into each of the property.
 - or
 - 2 x Schwegler bird box and 2 x swift box, to be mounted in appropriate locations on each of the property.
- All permanent fences that might be erected around the site should include gaps of 200mm x 150mm at ground level on each run to enable small mammals and vertebrates to migrate through the site and prevent entrapment.
- A barn owl box should be erected on a tree, pole or one of the buildings on the site.

6.5 Clients responsibility towards protected species.

The site owner has a responsibility to ensure that protected species or their resting places are not killed, injured or disturbed as a consequence of their actions.

Whilst the results of the survey are considered to be conclusive at the time that the survey was conducted, there is always a possibility that protected species might occupy the site between the period of the survey and the commencement of any works on the site. If any protected species are discovered during any construction works a qualified ecologist should be contacted for advice or assistance.

Contact details of suitably qualified and licenced ecologist:

John Parden, Natural England licenced ecologist (Licence no. 2016-20270-CLS-CLS, 2015-14697-CLS-CLS)

JP ecology – Office: 01379 586830 Mobile:07908 748079

If conditions within the development site / buildings or the development proposals are significantly altered prior to the planning application being submitted then further advice should be sought from an ecologist to ensure that the conclusions of the ecological survey remains valid.

Appendix 1.

Generic method statement to avoid harm to reptiles, amphibians and small mammals including hedgehogs and brown hare.

Timing:

- (a) Restrict works to the winter period (when amphibians are rarely active above ground) if the site is close to aquatic habitats or Amphibians are relevant to the site.
- (b) Keep duration of groundworks as short as possible.

Construction methods and special precautions:

- (a) Backfill trenches and other excavations before nightfall, or leave a ramp to allow newts to easily exit.
- (b) All open trenches, footings, and pipe runs should be covered with shuttering ply overnight and the edges sealed with damp sand.
- (c) Raise stored materials (that might act as temporary resting places) off the ground, eg on pallets.
- (c) For pipelines, use directional drilling to cross areas of core habitat and newt dispersal routes.
- (d) All caustic materials (cement, lime plaster etc) should be mixed on tarpaulin and folded at night or mixed on the floor of a sealed building.
- (c) No caustic material should be allowed to contaminate the adjacent ground or allowed to form run-off that may contaminate ponds or watercourses.
- (d) All piles of rubble and spoil should be removed from site and not left during late summer / winter to form hibernacula for Amphibians and reptiles.
- (e) All waste materials should be stored in skips resting on areas of shingle/bare or hard standing.
- (f) Keep vegetation around the developed site should be kept short to discourage use by reptiles and amphibians.
- (g) Fire sites should be in a designated area on shingle/bare ground and well away from the ponds/water bodies and should be burnt daily, they should always be checked for sheltering mammals eg. Hedgehogs.
- (f) Avoid installing structures that act as barriers close to ponds, or include gaps at ground level where walls or fences are unavoidable to prevent entrapment of reptiles, amphibians or small mammals within the construction area.
- (g) If any protected species (e.g. bats, great crested newts) are discovered during the redevelopment then work should stop immediately and advice sought from an ecological consultant.
- (h) If in any doubt contact a Natural England Licenced ecologist:
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