Lowans Ecology & Associates

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Ecological Impact Assessment (EcIA) for The White Hart Inn, Main Road, Bishop's Caundle, Sherborne, Dorset DT9 5ND

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1 Executive summary

Survey dates: 11/08/2022 & 17/08/2022

Grid reference: ST 69699 13214

Protected sites:

The site lies within a 1km radius of Deciduous woodland Priority Habitat and Bishops Caundle Wood Ancient Replanted Woodland. The site lies within 5km of the following designated sites Holnest Sites of Special Scientific Interest (SSSI), Blackmore Vale Commons and Moors SSSI, Holnest Special Areas of Conservation (SAC) and Rooksmoor SAC. The site lies within 1km of six existing ecological networks and within 1km of seven higher potential ecological networks. The site does not lies within the Bryanston Consultation Zone.

Data search:

Dorset Environmental Records Centre hold no records for the site. The following records are held within a 1km radius of the site. Reptiles, mammals (bats and badger), birds, invertebrates (butterflies) and higher plants (ferns and flowering plants).

Habitats:

The White Hart Inn is set in 0.25 ha of ground, comprising of garden and car park. The northeast boundary is lined with a wire fence and hedgerow (blackthorn and bramble). The southeast boundary is lined with a fence and hedgerow (blackthorn and bramble). The southwest boundary is lined with a stone wall. The northwest boundary is partially open and partially lined with a wooden fence. No notable species were found to be present. The hedgerows do no fall under the Hedgerow Regulations Act.

Rats:

No evidence of bats were found within the skittle alley. No bats emerged from the skittle alley. Common pipistrelle, Soprano pipistrelle bats are commuting and foraging within the site. Serotine and brown longeared bats are commuting over the site. No further activity surveys are recommended. The site falls within the Zone of Influence of the known bat roosts within a 1km radius of the site.

Preventative mitigation measures and enhancements will be required to ensure no adverse effects/long-term impact on bats due to this development.

Nesting birds

No evidence of nesting birds were found on the skittle alley. The hedgerows within the site will be used by nesting birds. Preventative mitigation measures and enhancements will be required to ensure no adverse effects/long-term impact on nesting birds due to this development.

Badger

No evidence of badger (commuting paths, snuffle holes, latrines, holes or setts) were found. Badger are considered to be absent from the site, there will be no adverse impacts on badger.

Reptiles

The site comprises of a tarmac carpark and grass that is maintained as short sward, providing a sub-optimal habitat for reptiles. Reptiles are therefore considered absent from the site, there will be no adverse impacts on reptiles due to the proposed work.

Amphibians

MAGIC, OS and Google maps show two ponds within a 500m radius of the site, at 290m northwest and 460m northeast. There are no ponds within the site. The site comprises of car park and garden maintained as short sward, providing a sub-optimal habitat for amphibians. Amphibians are therefore considered absent from the site, there will be no adverse impacts on amphibians due to the proposed work.

Dormouse

The hedgerows within the site have no connectivity to the wider environment. Dormice are considered absent from the site, there will be no adverse impact of dormice, due to the proposed development.

Enhancements/mitigation:

The recommendations in section 6 will be conditioned as part of the planning application and will be adhered to.

Surveyor:

Louise Lowans (Natural England Licences: Bat 2015-16733-CLS-CLS. Barn Owl CL29/00005. Dormouse 2016-21322-CLS-CLS.

2 Introduction

2.1 Background

Lowans Ecology & Associates were commissioned in August 2022, to carry out an EcIA of the site prior to the proposed planning application.

2.2 Field survey

The aim of the ecology surveys (Phase 1 and Phase 2 Habitat Surveys) were to confirm the presence/ absence of; any protected/notable plant or animal species, any suitable habitats for protected species, such as bats, badgers, reptiles, nesting birds, amphibians, barn owl, dormouse and/or any protected habitats on the site and provide mitigation and/or enhancement as appropriate.

The site was assessed for species and/or habitats protected by the Wildlife and Countryside Act 1981 (as amended), The Protection of Badgers Act 1996, The Hedgerow Regulations Act 2007, The CROW Act 2000 and the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019. Species and habitats of principal importance and general biodiversity interest of the site (Natural Environment and Rural Communities Act 2006) were also considered. Surveys were carried out following all relevant guidelines (refer to Section 7 References).

Local Planning Authorities are required to take into account nature conservation issues, incl. species and habitats protected under the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 and The Wildlife and Countryside Act 1981 (as amended) when making planning decisions. Local Planning Authorities also aim to conserve and enhance biodiversity (National Policy Planning Framework 2019 (NPPF)) and to have regard to conserving biodiversity, which includes restoring and enhancing a population or habitat under the Natural Environment and Communities Act 2006 (NERC 2006)).

The remit of the ecologist is to recommend a course of action that; a) protects the interest of the European Protected Species and other protected species, b) protects the owners and their agents from committing an offence under the legislation and is the best course of action for primarily the welfare of the protected species, but with some regard to the implementation of the owners' project.

2.3 Report

The aim of the report is to clearly set out the results of the survey, highlighting any effects of the proposed development may have on any protected species or habitats suitable for protected species on or adjacent to the site and provide mitigation and/or enhancement as appropriate.

2.4 Site location

The site is situated within Bishop's Caundle, OS Grid Reference ST 69699 13214. Appendix A - Plan 1.

2.5 Site description

The White Hart Inn is set in 0.25 ha of ground, comprising of garden and tarmac car park. The northeast boundary is lined with a wire fence and hedgerow. The southeast boundary is lined with a fence and hedgerow. The southwest boundary is lined with a stone wall. The northwest boundary is partially open and partially lined with a wooden fence. Appendix B - Figures 1 to 7.

The northeast and northwest boundaries lie adjacent to A3030. The southeast boundary lies adjacent to agricultural land and the southwest boundary lies adjacent to the neighbouring property.

This report refers to the skittle alley and pub garden only.

<u>Skittle Alley</u>

The skittle alley is constructed of wooden boarding and has a pitched asbestos roof, lined with wooden sarking. The window and door frames are wooden. The loft void runs the length of the building. The loft is insulated but not boarded out.

2.6 Description of proposal

It is proposed to apply for full planning permission to remove the skittle alley and build three dwellings within the site. The White Hart Inn and associated buildings will be retained. Appendix A - Plans 2 and 3.

3 Method

3.1 Desk study

3.1.1 Protected and other notable sites

The location was checked for habitats protected under the Wildlife and Countryside Act 1981 (as amended), and other habitats that could be County Wildlife sites or Biodiversity Action Plan habitats using the Multi-Agency Geographic Information for the Countryside (MAGIC) Defra website.

3.1.2 Data search

A data search has been requested from Dorset Environmental Records Centre.

3.1.3 Zone of Influence

The study area encompassed the Zone of Influence of the project. The Zone of Influence is defined as "... the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities" (CIEEM, 2018).

The Zone of Influence of the project encompasses different areas in respect of each important ecological feature depending on its location and sensitivity, and the spatial extent of the relevant biophysical change (e.g. light, noise, habitat loss).

However, the majority of the activities and resultant biophysical changes are unlikely to have an effect beyond the site and the immediate surrounding area. The exceptions to this include birds and bats due to their highly mobile nature, potentially 5-7km for birds and up to 6km for bats (based on Bat Conservation Trust Core Sustenance Zones, 2020), and activities such as uncontrolled discharges of pollutants, changes to ground and surface water drainage, air pollution and the increased demand for recreational activities when the site is occupied, which might extend beyond the immediate surroundings of the site in some instances; for the majority of designated sites in the area this is up to 5km.

Therefore, the Zone of Influence, and the study area, is broadly considered to extend across the site or just beyond the site boundary in most cases and potentially up to or exceeding 5km with regards to designated sites.

3.2 Date of surveys

The date and time of the surveys were recorded.

3.3 Weather conditions

The weather conditions were recorded.

3.4 Limitations of survey

Limitations that may affect the overall survey result were recorded.

3.5 Survey scope

This report includes surveys for the wildlife detailed below (as habitats were not present, or were not deemed suitable, for other species):

Survey Scope: Bats, nesting birds, badger, reptiles, amphibians and dormice

3.5.1 Habitats

The site was surveyed for important vegetation communities such as unimproved grassland, ancient woodland or hedges (that might be protected under the Hedgerow Regulations Act) and water features.

Hedgerow Regulations

Hedges were surveyed for features cited in the Hedgerow Regulations Act, namely features such as up to 7 woody species, presence of woodland plants, a ditch, bank, links to other hedges etc.

3.5.2 Bats

3.5.2.1 Daytime building survey

A building survey was conducted, it investigated the status of bats by assessing the building's suitability for bat roosts and places of rest for bats.

This was achieved by:

Checking external walls, soffits, roof coverings, internal spaces, lofts, beams, ledges, window sills, floors, holes and cavities etc. that display use by bats - regular use is demonstrated by staining, droppings and worn surfaces.

3.5.2.2 Daytime survey trees

The trees within the development area were assessed for potential roost features (PRF's). PRF's that may be used by bats include: woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks and splits (such as frosting cracks) in stems or branches, partially detached platey bark, knot holes arising from naturally shed branches or branches previously pruned back to the branch collar, man made holes or cavities created by branches tearing out from parent stems, cankers (caused by localised bark death) in which cavities have developed, other hollows or cavities including butt-rots, double leaders forming compression forks with included bark and potential cavities, gaps between overlapping stems and branches, partially detached ivy with stem diameters in excess of 50mm, bat, bird or dormice boxes.

3.5.2.3 Dusk emergence survey

A dusk emergence survey was conducted to ascertain if bats were roosting within the skittle alley. Bats were located visually using a surveyor, rayTEC VAR2i81 Long Range InfraRed Illuminator lights and Panasonic HC-VXF990 4K Camcorders. Echolocation signals were identified using a Wildlife Acoustics Echo Meter Touch Pro bat detector and Wildlife Acoustics Song Meter Mini Bat detectors. Two lights were deployed per camcorder to illuminate the building, a Song Meter Mini Bat detector was attached to each camcorder.

The videos were reviewed using QuickTime Player and VLC Media Player. Kaleidoscope was used to analyse the data recorded on the bat detectors.

Surveyors, IR lights, camcorders and bat detectors

Surveyor 1 (Louise Lowans) stood on southeast side of the site in view of the southeast and southwest elevations of the skittle alley.

Camcorder 1 was positioned to view the gaps in the wooden boarding on the southeast elevation of the skittle alley.

Camcorder 2 was positioned to view the northwest gable end of the skittle alley.

Song Meter Mini Bat detector 1 was attached to camcorder 1. Song Meter Mini Bat detector 2 was attached to camcorder 2.

3.5.3 Nesting birds

The building and site were surveyed for signs of nests of swallows, house sparrows and other birds as building works should not conflict with bird breeding seasons.

3.5.4 Badger

The site was searched for the following signs of badger *Meles meles:* tracks, hair on fences, feeding holes, latrines, scratching posts and setts.

3.5.5 Reptiles

The site was assessed for its potential to support fully protected reptiles and common reptiles, positive features being open undisturbed habitats, sandy banks, tall sward grassland and permanent scrubby areas.

3.5.6 Amphibians

The site was assessed for ponds and ditches that could be used by amphibians.

3.5.7 Dormouse

The site was assessed for its potential to support hazel dormouse *Muscardinus avellanarius*.

3.6 Field equipment

Equipment available for use during the survey included. Maglite (LED bulb) torch, ladders, Snap-On endoscope, binoculars, compass, notebook, pen, chest waders, Echo Meter Touch Pro, Wildlife Acoustics Song Meter Mini Bat detectors, rayTEC VAR2i81 Long Range InfraRed Illuminator lights and Panasonic HC-VXF990 4K Camcorders. Kaleidoscope software was used to analyse the data recorded on the bat detectors. The videos were reviewed using QuickTime Player and VLC Media Player. Kaleidoscope software was used to analyse the data recorded on the bat detectors.

3.7 Details of surveyors

Daytime survey (11/08/2022) & Dusk emergence survey (17/08/2022)

Louise Lowans BSc. (Hons), MCIEEM. Director and Principal Ecologist of Lowans Ecology & Associates. Ecologist for over 20 years. Natural England Licences held Bat Licence 2015-16733-CLS-CLS. Dormouse 2016-21322-CLS-CLS. Barn Owl CL29/00005.

4 Results and discussion

4.1 Protected and other notable sites

The site lies within a 1km radius of:-

- Deciduous woodland Priority Habitat
- Bishops Caundle Wood Ancient Replanted Woodland

The site lies within 5km of the following designated sites:-

- Holnest Sites of Special Scientific Interest (SSSI)
- Blackmore Vale Commons and Moors SSSI
- Holnest Special Areas of Conservation (SAC)
- Rooksmoor SAC
- Coastal and floodplain grazing marsh Priority Habitat
- Good quality semi-improved grassland Priority Habitat
- Lowland meadows Priority Habitat
- Purple moor grass and rush pastures Priority Habitat
- Lowland fens Priority Habitat
- · Deciduous woodland Priority Habitat
- Traditional orchard Priority Habitat
- Wood-pasture and Parkland Priority Habitat

The site lies within 1km of six existing ecological networks and within 1km of seven higher potential ecological networks.

The site does not lies within the Bryanston Consultation Zone.

4.1.2 Data search

Dorset Environmental Records Centre hold no records for the site. The following records are held within a 1km radius of the site. Reptiles, mammals (bats and badger), birds, invertebrates (butterflies) and higher plants (ferns and flowering plants).

4.2 Date of survey

Daytime survey

11/08/2022 at 06.45 hours.

<u>Dusk emergence survey</u>

17/08/2022 commenced at 20:10 hours and ended at 22:00. Sunset was at 20:27 hours.

4.3 Weather conditions

11/08/2022

The weather conditions were dry with no cloud cover. The air temperature was 18°C. There was no wind.

17/08/2022

The weather conditions at the start of the survey were dry with 30% cloud cover. The air temperature was 20°C. The humidity was 81%. The wind measured 3 on the Beaufort scale. The weather conditions at the end of the survey were dry with no cloud cover. The air temperature was 18°C. The humidity was 80%. The wind measured 2 on the Beaufort scale.

4.4 Limitations of survey

There were no limitations to the survey.

4.5 Survey scope

4.5.1 Habitats

The White Hart Inn is set in 0.25 ha of ground, comprising of garden and car park. The northeast boundary is lined with a wire fence and hedgerow (blackthorn and bramble). The southeast boundary is lined with a fence and hedgerow (blackthorn and bramble). The southwest boundary is lined with a stone wall. The northwest boundary is partially open and partially lined with a wooden fence. No notable species were found to be present. The hedgerows do no fall under the Hedgerow Regulations Act.

4.5.2 Bats

4.5.2.1 Daytime building survey

Dorset Environmental Records Centre hold no records for the site. Records of four roosts are held within a 1km radius of the site (the records do not specify the types of roost):-

- Common pipistrelle Pipistrellus pipistrellus and serotine Eptesicus serotinus recorded in 2015
- Serotine recorded in 2001
- Long-eared Plecotus sp. recorded in 1997

11/08/2022

Skittle alley

The loft space was covered with thick cobwebs. No evidence of bats (bat droppings, live or dead bats, feeding remains or staining) were found. Externally the wooden boarding was raised on the southeast elevation. Pipistrelle *Pipistrellus sp.* bat droppings were found on top of the bins at the southeast end of the skittle alley. No bat droppings were found stuck to the wooden panels on the skittle alley, the window sills or window panes. Appendix B - Figures 8 to 10.

17/08/2022

No bat droppings were found stuck to the wooden panels on the skittle alley. Two bat droppings were found on top of the bins at the southeast end of the skittle alley.

4.5.2.2 Daytime survey trees

There are no trees within the site.

4.5.2.3 Dusk emergence survey

17/08/2022

Surveyor 1 observed the following:-

- No bats emerged from the skittle alley
- Noctule Nyctalus noctula were heard but not seen.
- Common pipistrelle bats were observed commuting northeast to southwest on the southeast side of the skittle alley and southeast to northeast and northwest to northeast across the site.
- Common pipistrelle and Soprano pipistrelle *Pipistrellus pygmaeus* bats are foraging within the site.
- Serotine and brown long-eared Plecotus auritus bats were observed commuting over the site.

Cameras

- Camera 1 recorded no bats emerging from the skittle alley.
- Camera 2 recorded no bats emerging from the skittle alley.

Song Meter Mini Bat detectors

- Detector 1 recorded common pipistrelle, Soprano pipistrelle, noctule and brown long-eared bats.
- Detector 2 recorded common pipistrelle, Soprano pipistrelle and serotine bats.

4.5.2.4 Interpretation of survey results

- No evidence of bats were found within the skittle alley.
- No bats emerged from the skittle alley.
- Common pipistrelle. Soprano pipistrelle bats are commuting and foraging within the site.
- Serotine and brown long-eared bats are commuting over the site.
- No further activity surveys are recommended.

Preventative mitigation measures and enhancements will be required to ensure no adverse effects/long-term impact on bats due to this development.

4.5.3 Nesting birds

DERC hold no records for the site. Records are held for collared dove *Streptopelia decaocto*, house sparrow *Passer domesticus*, dunnock *Prunella modularis* and barn owl *Tyto alba*, within a 1km radius of the site, recorded in 2015.

No evidence of nesting birds were found on the skittle alley. The hedgerows within the site will be used by nesting birds. Preventative mitigation measures and enhancements will be required to ensure no adverse effects/long-term impact on nesting birds due to this development.

4.5.4 Badger

DERC holds no records for the site. Seven records of badger are held within a 1km radius of the site, recorded between 2015 and 2018. No evidence of badger (commuting paths, snuffle holes, latrines, holes or setts) were found. Badger are considered to be absent from the site, there will be no adverse impacts on badger.

4.5.5 Reptiles

DERC hold no records for the site. Four records of reptiles, slow worm *Anguis fragilis* and grass snake *Natrix natrix*, recorded in 2015, are held within a 1km radius of the site. There is no connectivity between the records and the site, due to the A3030. The site comprises of a tarmac carpark and grass that is maintained as short sward, providing a sub-optimal habitat for reptiles. Reptiles are therefore considered absent from the site, there will be no adverse impacts on reptiles due to the proposed work.

4.5.6 Amphibians

DERC holds no records for the site or within a 1km radius of the site. MAGIC, OS and Google maps show two ponds within a 500m radius of the site, at 290m northwest and 460m northeast. There are no ponds within the site. The site comprises of car park and garden maintained as short sward, providing a suboptimal habitat for amphibians. Amphibians are therefore considered absent from the site, there will be no adverse impacts on amphibians due to the proposed work.

4.5.7 Dormouse

DERC hold no records for the site or within a 1km radius of the site. The hedgerows within the site have no connectivity to the wider environment. Dormice are considered absent from the site, there will be no adverse impact of dormice, due to the proposed development.

5 Legislation

5.1 Bats

Bats and their places of rest are fully protected under UK and European Law. Within the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019, it is stated that it is illegal to intentionally damage, destroy or obstruct access to any place that a bat uses for shelter, including during the process of a development, unless a Natural England European Protected Species Licence (EPSL) has been granted.

Advice from Natural England is that a licence **is** needed if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is **reasonably likely** to result in an offence under <u>Regulation 41</u>; or

If the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is **reasonably unlikely** to result in an offence under <u>Regulation 41</u> then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to minimise the effect on European protected species should they be found during the course of the activity. If they are found then work should cease and an application be made to Natural England.

Regulation 41 states that

- (1) A person commits an offence if he—
- (a) deliberately captures, injures or kills any wild animal of a European protected species,
 - (b) deliberately disturbs wild animals of any such species,
 - (c) deliberately takes or destroys the eggs of such an animal, or
 - (d) damages or destroys a breeding site or resting place of such an animal,

For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

- (a) to impair their ability—
 - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate

or migrate;

(b) to affect significantly the local distribution or abundance of the species to which they belong.

- (2) It is an offence for any person—
 - (a) to be in possession of, or to control,
 - (b) to transport,
 - (c) to sell or exchange, or
 - (d) to offer for sale or exchange.

5.2 Nesting birds

All birds, their nest and eggs are protected by the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird. It is an offence to intentionally take, damage or destroy the eggs, young or nest whilst it is being built or in use or prevent parent birds access to their nests.

5.3 Badgers

Badgers are protected under the Protection of Badgers Act 1992. It is illegal to: willfully kill, injure, take, possess or cruelly ill-treat a badger, or attempt to do so; to intentionally or recklessly interfere with a badger sett by damaging or destroying it; to obstruct access, or any entrance of, a badger sett and to disturb a badger when it is occupying a sett.

5.4 Reptiles

Reptiles are protected under Schedule 2 of the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 and Schedule 5 and 6 of the Wildlife and Countryside Act 1981 (as amended).

5.5 Amphibians

Great Crested Newt Triturus cristatus and Natterjack Toad Bufo calamita

The Great Crested Newt and Natterjack Toad and their respective habitats are fully protected under Schedule 5 (Section 9) of the Wildlife and Countryside Act 1981 (as amended) and under the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019. It is illegal to kill, injure, capture, handle or disturb them, and the places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed. They are both UK Biodiversity Action Plan priority species.

Great crested newts are also protected by the Protection of Animals Act 1911 and under the Abandonment of Animals Act 1960.

Common amphibians

The more common British amphibians, i.e. common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *Lissotriton helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981. This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy, and is not relevant to this situation.

Common toad is now a UK Biodiversity Action Plan Priority Species and Species of Principle Importance in England (Section 41 of the Natural Environmental and Rural Communities Act 2006 (NERC)).

5.6 Dormice

Dormice are fully-protected against killing, capture, injury and disturbance, and their habitats are protected against damage, destruction or obstruction, under the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended). Without a licence it is an offence for anyone to deliberately disturb, capture, injure or kill them. It is an offence to damage or destroy their breeding or resting places, to disturb or obstruct access to any place used by them for shelter. It is also an offence to posses, or sell a wild dormouse.

5.7 Western European Hedgehog

The hedgehog is a Priority Species for conservation action under the UK Biodiversity Action Plan and protected from harm in the UK under Schedule 6 of the Wildlife and Countryside Act 1981 and the NERC Act 2006, the hedgehog is categorised as a 'Species of Principal Importance' for biodiversity.

6 Recommendations, precautionary mitigation measures and enhancements

National Planning Policy Framework sets out national planning policies on the protection of biodiversity and geological conservation. Circular 06/05 (DEFRA 01/05): Biodiversity and Geological Conservation: Statutory Obligations and Their Impact within The Planning System provides administrative guidance on application of the law in England relating to planning and nature conservation.

The following recommendations will be conditioned as part of the planning application and will be adhered to.

6.1 Bats

- 1. There are no timing constraints to when the proposed work is carried out.
- 2. As an enhancement to the site an integrated bat box will be built into each plot. Appendix A Plans 4 to 6.
- 3. Plot 1 southeast elevation. Appendix A Plan 4.
- 4. Plots 2 & 3 southwest elevations. Appendix A Plans 5 and 6.
- 5. PRO UK Build-in WoodStone Bat Box Appendix B Figure 11.
- 6. No security lighting will be placed above or below the bat box. Any security lighting will be low level and will be on timers so that the level of light pollution is kept to a minimum.

6.2 Nesting birds

- 1. Vegetation will be cut back between 1st September and 28th February, so as to avoid the bird nesting season.
- 2. As an enhancement to the site 2 x swift boxes (that are also suitable for sparrows and starlings) will be built into the proposed plots. Ideally the boxes will be at least 5 metres above the ground (a lower elevation is acceptable), with a clear flight path to the entrance.
- 3. Plots 1, 2 and 3 northeast elevations. Appendix A Plans 4, 5 and 6.
- 4. WoodStone Build-in Swift Nest Box B Appendix B Figure 12.

6.3 Badgers

1. If badgers or signs are badgers are found during the proposed development work. Work in the local vicinity will stop and Lowans Ecology and Associates (07983 664173) contacted immediately for advice.

6.4 Reptiles

1. Vegetation (grass) within the site will be maintained as short sward up (less than 10cm) until and during the proposed work.

6.5 Amphibians

1. Vegetation (grass) within the site will be maintained as short sward up (less than 10cm) until and during the proposed work.

6.6 Bees

- 1. As an enhancement to the site 2 x bee bricks will be built into the proposed plots. The bricks will be at least a metre high with no vegetation in front of them.
- 2. Plot 1 southeast elevation. Appendix A Plan 4.
- 3. Plots 2 and 3 southwest elevations. Appendix A Plans 5 and 6.
- 4. Bee bricks Appendix B Figure 13.

6.7 Western European Hedgehog

1. Hedgehogs roam between 1 to 2km each night during their active season. It is therefore critical that they can access a wide range of gardens. If the proposed gardens are to be fenced/walled a 13cm by 13cm gap will be left at the base of each fence/wall to allow hedgehogs to pass through the gardens. Appendix B - Figure 14.

6.8 Planting

- 1. 6 native species trees will be planted within the site, at least three of the trees will be fruit trees. Appendix A Plan 3.
- 2. If space is limited it is recommended that a 'cordon' trees are used. Cordon Fruit Trees
- 3. 20m of mixed species hedgerow will be planted on the northeast and 55m northwest boundaries of the site, as listed below.
- 4. Any gaps in the existing hedgerows will be planted up with at least five species listed below.

Hedging/hedge trees
Beech Fagus sylvatica
Blackthorn Prunus spinosa
Common hazel Corylus avellana
Dog rose Rosa canina
Dogwood Cornus sanguinea
Elderflower Sambucus nigra
Field maple Acer campestre
Hawthorn Crataegus monogyna
Guelder rose Viburnum opulus
Hawthorn Crataegus monogyna
Spindle Euonymus europaea
Wild privet Ligustrum vulgare
Wild crabapple Malus sylvestris
Wild plum Prunus domestica

- 5. The whips will be planted between November and March, ideally on an overcast day, avoid sun and wind. 5 hedge plants will be planted per metre in two rows.
- 6. If the protective guards are required only a biodegradable Spiral Guard will be used.
- 7. Cut mixed hedging back to 15-20cm immediately after planting. This will make each plant create 3-4 side shoots, when it starts to grow in spring. Reduce the new shoots by 50% in the autumn/winter following planting.
- 8. The trees will be watered at least once or twice a week, unless there has been heavy rain, from planting time for a year. Any plants that fail will be replaced.

7 References

Barn Owl Trust, Barn Owl Conservation Handbook: A comprehensive guide for ecologists, surveyors, land managers and ornithologists. Pelagic Publishing. 2012

Bats and Trees. Bat Conservation Trust www.bats.org.uk/data/files/publications/Bats Trees.pdf

Bright, P., Morris, P., and Mitchell-Jones, T. (2006). The dormouse conservation handbook; Second Edition. English Nature, Peterborough.

BS 42020:2013 Biodiversity. Code of practice for planning and development (2013).

Chanin, P. & Woods, M. (2003). Surveying dormice using nest tubes. Results and experiences from the South West Dormouse Project. English Nature Research Report No. 524.

Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust, London.

Dietz, C., Helversen (von) O. and Nill, D. Bats of Britain, Europe and Northwest Africa, English Edition, A & C Black Publishers Ltd., 2009.

Eden, S. (2009). Living with dormice. The common dormouse: Real rodent or Phantom of the ancient wood? Papadakis, Berkshire.

Forestry Commission (England) and Natural England (2007). Guidance on managing woodlands with dormice in England. Interim Guidance Version 2.

Froglife. (2001). Great Crested Newt Conservation Handbook. Froglife, Halesworth.

Froglife. (2001). Surveying for Great Crested Newt Conservation. Advice Sheet 11. Froglife, Halesworth.

Gent, A.H. and Gibson, S.D. eds. (1998). Herpetofauna Workers Manual. Joint Nature Conservation Committee, Peterborough.

Hedgelink leaflet 'How to manage your hedgerows for hairstreak butterflies'

Institution of lighting professionals and Bat Conservation Trust. Guidance Note 08/18 Bats and artificial lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018)

Mitchell-Jones, A.J. Bat mitigation guidelines. English Nature. 2004.

National Bat Monitoring Programme Annual Report 2018, BCT/JNCC, 2018.

Natural England. Great crested newts: surveys and mitigation for development projects. https://www.gov.uk/guidance/great-crested-newts-surveys-and-mitigation-for-development-projects 24 December 2015.

Natural England. December 2011. Interim Natural England Advice Note - Dormouse surveys for mitigation licensing – best practice and common misconceptions.

Natural England. Standing Advice Species Sheet: Hazel dormouse

Oldham, R.S., Keeble, J., Swan, M.J.S., and Jeffcote, M. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal, Vol. 10, pp. 143-155.

Royal Horticultural Society Perfect for Pollinators https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators

Schofield, H. W. and Mitchell-Jones, A.J. The bats of Britain and Ireland. 2nd Edition. Vincent Wildlife Trust. 2003.

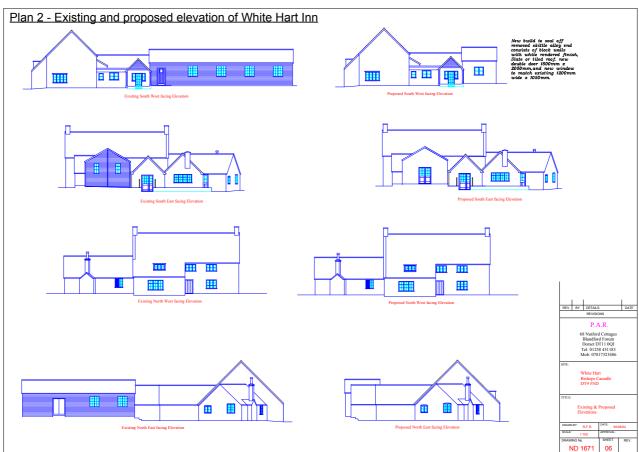
Stebbings, R.E., Yalden, D.W. and Herman, J.S. Which bat is it? 3rd Edition. Mammal Society. 2007. Strachan, R., Moorhouse, T. and Gelling, M. Water vole Conservation Handbook. 3rd Edition. Wildcru. 2011. Swift, S. M. Long-eared bats. Poyser Natural History. 1998.

8 Appendices

8.1 Appendix A - Plans

Plan 1 - Location plan and existing site plan





Plan 3 - Proposed site plan



Plan 4 - Proposed enhancements Plot 1

- 1 x bat box to be built into the southeast elevation of plot 1
- 2 x swift bricks to be built into the northeast elevation of plot 1 2 x bee bricks to be built into southeast elevation of plot 1



SW facing



NE facing

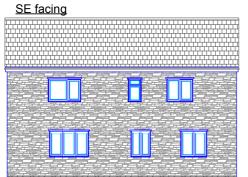




- Plan 5 Proposed enhancements Plot 2
 1 x bat box to be built into the southwest elevation of plot 2
 ■
- 2 x swift bricks to be built into the northeast elevation of plot 2
- 2 x bee bricks to be built into southwest elevation of plot 2

Plot 2





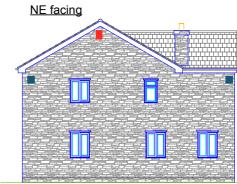
NW facing

- Plan 6 Proposed enhancements Plot 3
 1 x bat box to be built into the southwest elevation of plot 3 ■
- 2 x swift bricks to be built into the northeast elevation of plot 3 2 x bee bricks to be built into southwest elevation of plot 3









SW facing



NE facing

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8 Appendices8.2 Appendix B - Figures

Figure 1 - Northeast elevation



Figure 3 - Beer garden looking



Figure 5 - Beer garden



Figure 2 - Southwest and southeast elevations



Figure 4 - Beer garden



Figure 6 - Beer garden



Figure 7 - Car park



Figure 8 - Cobwebs in loft space

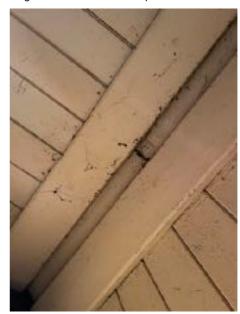


Figure 9 - Gaps between wooden panels SE elevation



Figure 10 - Bins at southeast elevation of skittle alley



Figure 11 - Example of Vivara Pro build-in woodstone bat box



Figure 12 - Example of swift brick



Figure 13 - Example of bee bricks



Figure 14 - Example of hedgehog access

