

**Whitcher Wildlife Ltd.  
Ecological Consultants.**

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**COBBLESTONES, ROSSETT.**

**OS REF: SJ 37258 57862**

**PRELIMINARY ECOLOGICAL APPRAISAL.**

**Ref No: 221147.**

**Date: 9<sup>th</sup> December 2022.**

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# **1. INTRODUCTION.**

1.1. There are plans to demolish the existing dwelling on the Cobblestones site and to replace with a new dwelling.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a Preliminary Ecological Appraisal of the site in support of a planning application for the development.

1.3. The site survey was carried out on 5<sup>th</sup> December 2022. This report outlines the results of that survey.

1.4. Appendices I and II of this report provide additional information on specific species and are designed to assist the reader in understanding the contents of this report.

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## **2. SURVEY METHODOLOGY.**

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the JNCC Handbook for Phase 1 Habitat surveys.

2.3. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). Surveying Badgers. Mammal

Society: -

- \* Badger setts.
- \* Badger latrines or dung pits.
- \* Badger snuffle holes and evidence of foraging.
- \* Badger paths.
- \* Badger prints in areas of soft mud.
- \* Badger hairs caught on fencing.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Rob Strachan, Tom Moorhouse and Merryl Gelling (2011). Water Vole Handbook: Third Edition: -

- \* Water vole burrows.
- \* Water vole faeces and latrines.
- \* Water vole feeding stations.
- \* Water vole runs.
- \* Water vole prints in areas of soft mud.
- \* Water vole lawns.
- \* Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). Monitoring the Otter and Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines: -

- \* Otter prints in soft mud.
- \* Otter spraints.
- \* Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish.

2.7. The survey area was searched for mature trees and derelict buildings and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition) by looking for the following signs: -

- \* Holes, cracks or crevices.
- \* Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.11. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line with P Bright, P Morris and T Mitchell-Jones *The Dormouse Conservation Handbook* 2nd Edition.

2.12. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.13. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.14. This document is prepared in line with The National Planning Policy Framework (NPPF). This sets out the government policy on biodiversity and nature conservation and places a duty on Planning Authorities to give material consideration to the effect of a development on legally protected species when considering planning applications. The NPPF and the Planning Practice Guidance on “Natural Environment” also promote sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

2.15. The UK Biodiversity Action Plan (UKBAP) (Anon 1995), designed to fulfil the Convention on Biological Diversity in 1992, to which the UK is a signatory, has produced a national priority species list with all species and habitats included having Species and Habitat Action Plans. Regional and local BAPs have also been designed to develop plans for species and habitats of nature conservation importance at regional and local levels.

2.16. The survey was undertaken by Derek Whitcher who has over twenty years’ experience of surveying for wildlife and has run his own wildlife consultancy since 1998. He has extensive experience of a wide variety of survey techniques for a variety of species of protected wildlife supplemented by attendance on a wide range of training courses through CIEEM, FSC and BCT. As a member of CIEEM he is committed to continuous professional development, a continual process of learning

and career development, a condition of CIEEM membership. He holds current Natural England survey licences for barn owl, bat, great crested newt and white clawed crayfish.

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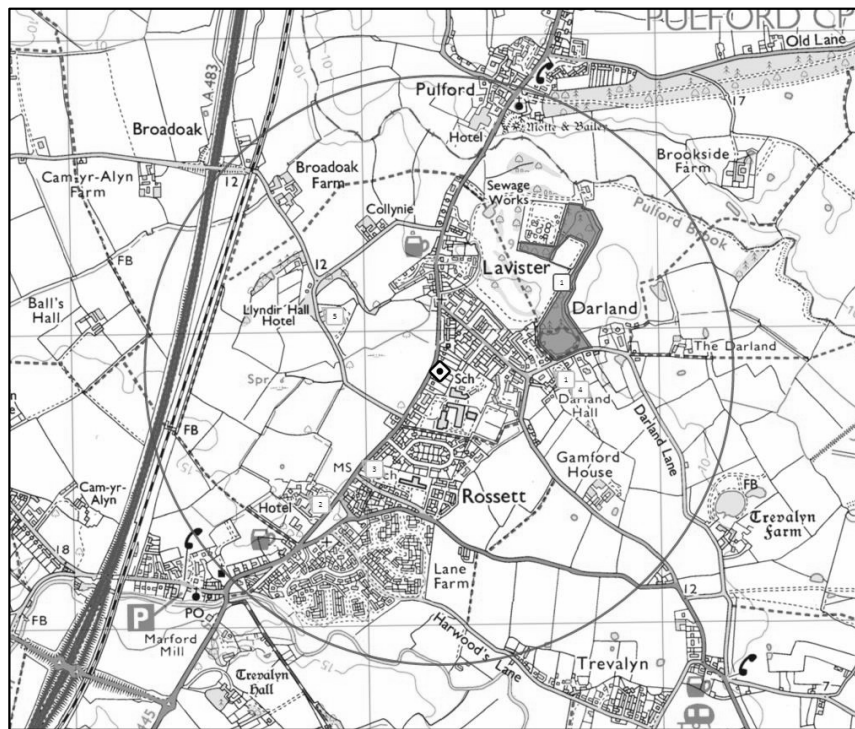
### 3. SURVEY RESULTS.

#### 3.1. Data Search Results.

3.1.1. A desktop data search for existing records of protected species and designated sites within 2km of the surveyed area was submitted to COFNOD.

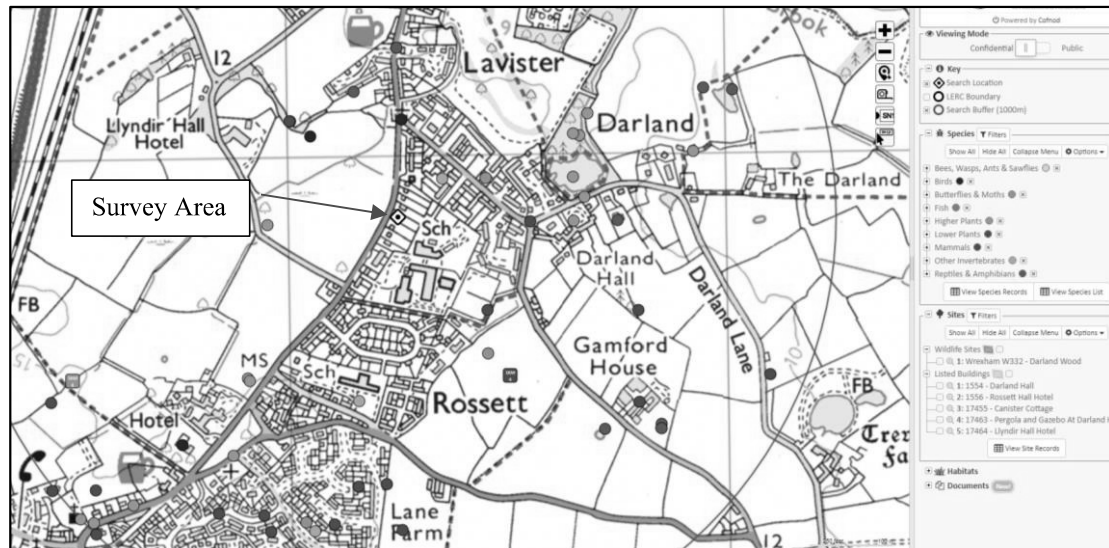
3.1.2. There are no International or National designated sites within 2km of the survey area.

3.1.3. There is one Local Wildlife Site to the northeast of the survey area shown shaded in brown on the map below. That site is called Darland Wood.



3.1.4. The data search results included no records relevant to the survey area. There were a number of records of invertebrates, birds, plants and mammals in the area surrounding the site but no records directly relevant to the survey area.

3.1.5. There is a record of a grass snake at the pond in Darland Wood and the closest amphibian record is a record of a great crested newt 850 m to the northeast of the survey area, beyond Darland Wood.



3.1.6. The data search results cannot be placed in the public domain but will be available to the client on request.

## 3.2. The Surveyed Area.

3.2.1. The aerial photograph below shows the location of the site, marked with a red pin, and the surrounding area. The site is located on the edge of a busy residential area with open farmland beyond.



3.2.2. The survey area is the building in the centre of the aerial photograph below along with the associated garden.



### **3.3. Description of Habitats.**

Appendix III of this report contains an annotated map marked up with the varying habitats that are cross referenced to target notes in Appendix IV of this report. The habitats on and adjacent to the site are:

- Amenity grassland
- Scattered Trees
- Native Species Poor Hedgerow
- Introduced Species Hedgerow
- Ornamental Shrubs
- Building
- Fence
- Bare Ground

#### ***3.3.1. Amenity grassland.***

3.3.1.1. The back garden of the existing dwelling is a large lawned area classed as amenity grassland. Species present include annual meadow grass (*Poa annua*),

perennial ryegrass (*Lolium perenne*), false oat grass (*Arrhenatherum elatius*) plus white clover (*Trifolium repens*), ragwort (*Senecio jacobaea*), creeping buttercup (*Ranunculus repens*), dock (*Rumex sp.*), cow parsley (*Anthriscus sylvestris*), cleavers (*Galium aparine*) and dandelion (*Taraxacum officinale*).



### **3.3.2. Scattered Trees.**

3.3.2.1. There are a few scattered trees in the garden, two are apple trees and there is one sycamore (*Acer pseudoplatanus*) and one ash (*Fraxinus excelsior*) at the bottom of the existing garden.





### 3.3.3. Native Species Poor Hedgerow.

3.3.3.1. There are species poor hedgerows around the site boundaries comprising Hawthorn (*Crataegus monogyna*), privet (*Ligustrum vulgare*), holly (*Ilex aquifolium*), laurel, hazel (*Corylus avellana*), Firethorn (*pyracantha Sp*), beech (*Fagus sylvatica*), Spindle (*Euonymus japonica*), buddleia (*Buddleia davidii*) and ivy (*Hedera helix*).



#### 3.3.4. Introduced Species Poor Hedgerow.

The northern boundary hedgerow comprises a laurel and conifer hedgerow between the front yard and the neighbouring dwelling.



#### 3.3.5. Introduced Species.

There are areas of ornamental planting within the garden including the border shown below at the front corner of the property. Species present include spiraea (*Spiraea japonica*), Spindle (*Euonymus japonica*), hydrangea (*Hydrangea Sp*), conifer, holly (*Ilex aquifolium*) and fan palm.



### **3.3.6. Buildings.**

There is the main dwelling present on the site with a large sun lounge to the rear along with a separate block comprising double garage to the front and an office to the rear. These are dealt with in more detail later in this report.



### **3.3.7. Fence.**

There has been some recent development of the site to the north. Part of that development included the removal of an overgrown conifer hedgerow between the two properties and replacement with a substantial fence as shown below.



### **3.3.8. Bare Ground.**

There is an area in front of the dwelling and garage for access from the road, turning and parking. This area is covered with hard packed gravel and has been classed as bare ground.

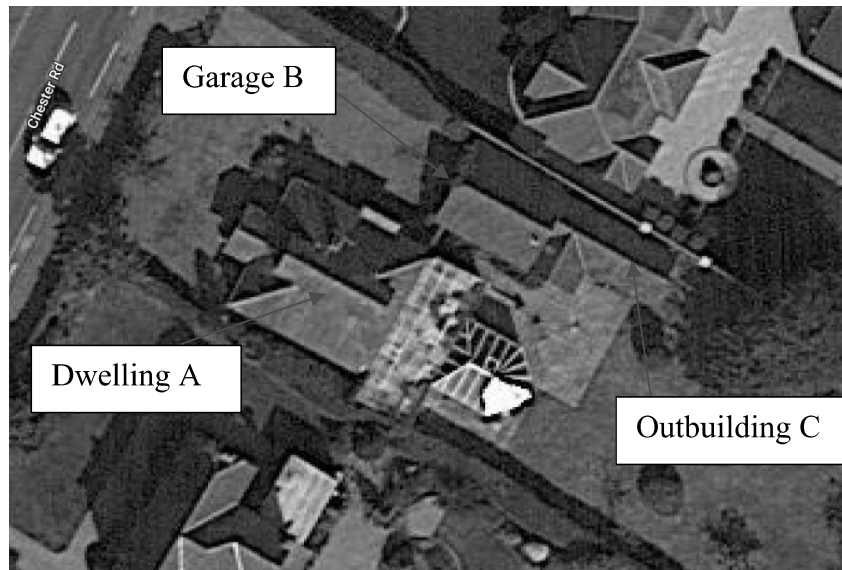


### **3.4. Description of Fauna.**

3.4.1. No badger setts or badger field signs were found in the survey area.

3.4.2. There are no watercourses present on or near the survey area to provide habitat for water voles, otters or white clawed crayfish.

3.4.3. There are three buildings present on the site, the dwelling (A), the garage (B) and an external outbuilding (C). The latter is used as office/storage area. These are shown on the aerial photograph below and are each dealt with below.



### 3.4.3.1. *Dwelling A.*

3.4.3.1.1. The house is predominantly a single storey dwelling with a spiral staircase leading up to a single bedroom on the floor above that extends to the underside of the roof space.



3.4.3.1.2. The walls are cavity walls rendered externally and painted white. These are in good condition with well-sealed window and door frames and fascia boards that provide no access points for bats.

3.4.3.1.3. The roof is covered with thin slates that are close fitting and provide no access for bats and with well-sealed ridge tiles. There was one slate missing low down that leaves a void into the roof, but this was low down and could be inspected for potential bat access. No bat field signs were found and the opening was covered with fresh cobwebs. This slate was replaced immediately after the inspection to ensure no bats were trapped as a result.

3.4.3.1.4. The internal bedroom extends under the roof leaving no loft space suitable for loft dwelling species.

3.4.3.1.5. To the rear of the dwelling there is a flat roofed extension area and then a large and modern plastic and glass sun lounge. These are both of a design that is unsuitable for roosting bats.

3.4.3.1.6. The dwelling was assessed to have negligible potential for roosting bats in line with the Bat Conservation Trust Good Practice Guidelines.

### **3.4.3.2. *Garage B.***

3.4.3.2.1. The garage is a single storey block built with solid brick walls that are rendered and painted white to match the house. They have a pitched roof supported by a timber frame covered with thin slates.



3.4.3.2.2. There is a dense clump of ivy growing up the front of the building and over the back side of the roof.

3.4.3.2.3. Internally the garages are used for storage purposes accessible through a side pedestrian door only. These are open to the underside of the roof slates.

3.4.3.2.4. The garage was assessed to have negligible potential for roosting bats in line with the Bat Conservation Trust Good Practice Guidelines.

### **3.4.3.3. Outbuilding C.**

3.4.3.3.1. The outbuilding is a single storey block built with brick cavity walls that are rendered and painted white to match the house. They have a pitched roof supported by a timber frame covered with thin slates.



3.4.3.3.2. The walls are in good condition with well-sealed window and door frames and fascia boards that provide no access points for bats.

3.4.3.3.3. The roof is covered with thin slates that are close fitting and provide no access for bats and with well-sealed ridge tiles. There is no accessible loft space.

3.4.3.3.4. The outbuilding was assessed to have negligible potential for roosting bats in line with the Bat Conservation Trust Good Practice Guidelines.

#### **3.4.3.4. Garden Sheds.**

There are two timber garden sheds at the eastern end of the plot that are unsuitable for roosting bats and will be retained within the existing garden.



3.4.4. There are no trees on site of sufficient maturity to contain features that may provide habitat for roosting bats that will be affected by the proposed development. All trees in the rear garden will be retained.

3.4.5. The habitat around the site is assessed to have a low potential for foraging bats. The proposed development will be the replacement of the existing building with a new one.

3.4.6. There are no ponds on the site or in the immediate surrounding area. There is one pond located 420m to the northeast of the site beyond a residential area with busy roads to cross between the pond and the site. The data search results contain no amphibian records for this pond. Therefore there is no habitat in the surrounding area for breeding great crested newts and amphibians.

3.4.7. The hedgerows and trees on the site provide opportunities for nesting birds during the nesting season, which extends from March to September each year.

3.4.8. The site is assessed to be unsuitable habitat for reptiles as it is essentially a large garden in a residential area.

3.4.9. The site is assessed to be totally unsuitable habitat for hazel dormouse and is located outside the natural range for the species.

3.4.10. The site is assessed to be totally unsuitable habitat for red squirrels and lies outside the natural range of the species.

3.4.11. There are no alien invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981) present on the site.

3.4.12. There are no hedgehog records in the surrounding area, but it is possible they live in the surrounding area. No signs of their presence were found during the survey.

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## **4. EVALUATION OF FINDINGS.**

4.1. There are no statutory designated sites on or close to the site. The proposed development will have No Negative Impact on such sites.

4.2. There are no Local Wildlife Sites close to the site and the closest SINC is sufficiently distant to be unaffected by the proposals.

4.3. There are no Priority Habitats as listed under the NERC Act 2006 present on the site and therefore the proposed development will have No Negative Impact on such habitats.

4.4. The area of habitat to be affected by the proposed development is almost entirely the footprint of the existing dwelling. The large area of garden and associated hedges and trees will be retained. There are also opportunities for enhancement of the site by replacing the conifer hedgerow that was removed for the new fence with a native species rich hedgerow of mixed native plant species and enhancement of the hedgerow across the bottom of the garden.

4.5. No badger setts or badger field signs were found on the site and therefore there will be No Negative Impact on the species.

4.6. There are no watercourses present on or near the survey area to provide habitat for water voles, otters or white clawed crayfish and therefore, there will be No Negative Impact on such species.

4.7. The buildings on the site were all assessed to have negligible potential to provide habitat for roosting bats and there will therefore be no impact on bats roosting in buildings.

4.8. There are no trees on site of sufficient maturity to contain features that may provide habitat for roosting bats. The trees in the existing garden will be retained.

4.9. The habitat around the site is assessed to have a low potential for foraging bats. The proposed development will be the replacement of the existing building with a new one and will therefore have no impact on foraging habitat.

4.10. There are no ponds on the site or in the immediate surrounding area. There is one pond located 420m to the northeast of the site beyond a residential area with busy roads to cross between the pond and the site. The data search results contain no amphibian records for this pond. Therefore there are no habitat in the surrounding area for breeding great crested newts and amphibians and the proposed development will have no negative impact on great crested newts.

4.11. The hedgerows and trees on the site provide opportunities for nesting birds during the nesting season, which extends from March to September each year. The proposed development will have no impact on nesting birds if any vegetation clearance is undertaken outside the nesting bird season.

4.12. The site is assessed to be unsuitable habitat for reptiles as it is essentially a large garden in a residential area. The proposed development will have no impact on reptiles.

4.13. The site is assessed to be totally unsuitable habitat for hazel dormouse and is located outside the natural range for the species. The proposed development will have no impact on hazel dormouse.

4.14. The site is assessed to be totally unsuitable habitat for red squirrels and lies outside the natural range of the species. The proposed development will have no impact on red squirrels.

4.15. There are no alien invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981) present on the site.

4.16. There are no hedgehog records in the immediate surrounding area, but there are a number of records to the south of the site. As the proposed development is largely confined to the existing building footprint, there is unlikely to be any impact on hedgehogs.

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## 5. RECOMMENDATIONS.

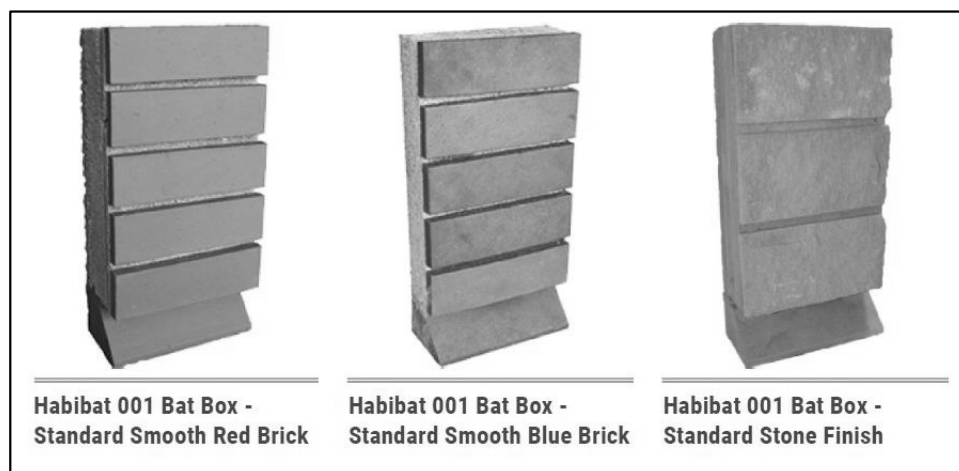
5.1. It is recommended that the hedgerows along the southern and eastern site boundaries are retained and that a new, native, species rich hedgerow is planted inside the new site boundary fence along the northern site boundary. Along with the retention of the existing garden habitat and trees, this will ensure a beneficial level of biodiversity for the development.

5.2. It is recommended that any vegetation clearance is carried out outside the nesting bird season, which extends from March to September each year. Any vegetation clearance during the nesting season should be preceded by a nesting bird survey and any active nests identified must remain undisturbed until the young have fledged.

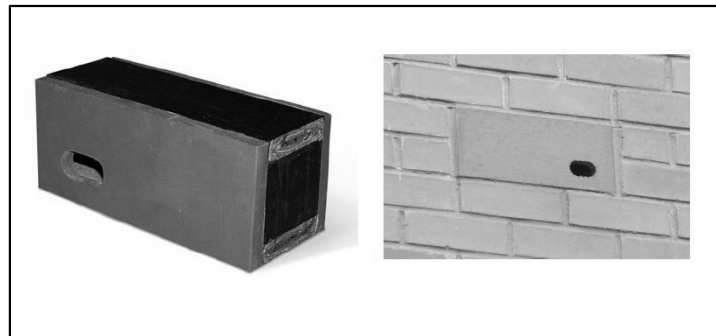
5.3. It is recommended that the existing buildings be demolished with due care. The buildings have been assessed to have negligible potential for roosting bats but individual bats can seek temporary shelter almost anywhere. In the unlikely event that a bat is found, it is recommended that it be covered and protected from harm, work should cease at that location and Whitcher Wildlife Ltd contacted for further advice.

5.4. It is recommended that biodiversity enhancements are provided within the development in line with the requirements of the NPPF. In this case these should include-

- Incorporation of one integrated bat brick into the new dwelling as the design shown below or equivalent to match the external surface of the walls.



- Incorporation of two new integrated swift boxes into the new dwelling as the designs below or equivalent.



5.5. Hedgehog access points are not necessary. To the north of the site there is an existing neighbour's fence that is a barrier to movement and the site boundaries to the south and east are hedgerows that the hedgehogs can access.

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|-----------------------------------|---------------------------------------|
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| Ruth Georgiou. BSc, MCIEEM.       | Date: 14 <sup>th</sup> December 2022. |

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## **Appendix I. NESTING BIRD INFORMATION.**

### ***Ecology***

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub but others are ground nesting or prefer man-made structures or buildings.

### ***Surveys***

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

### ***Legislation***

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

## **Appendix II. BAT INFORMATION.**

### ***Ecology***

There are currently 18 species of bat residing in Britain, 17 of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

### ***Surveys***

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window cills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

### ***Legislation***

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species Regulations (2010) and EUROBATS agreement. Numerous species are

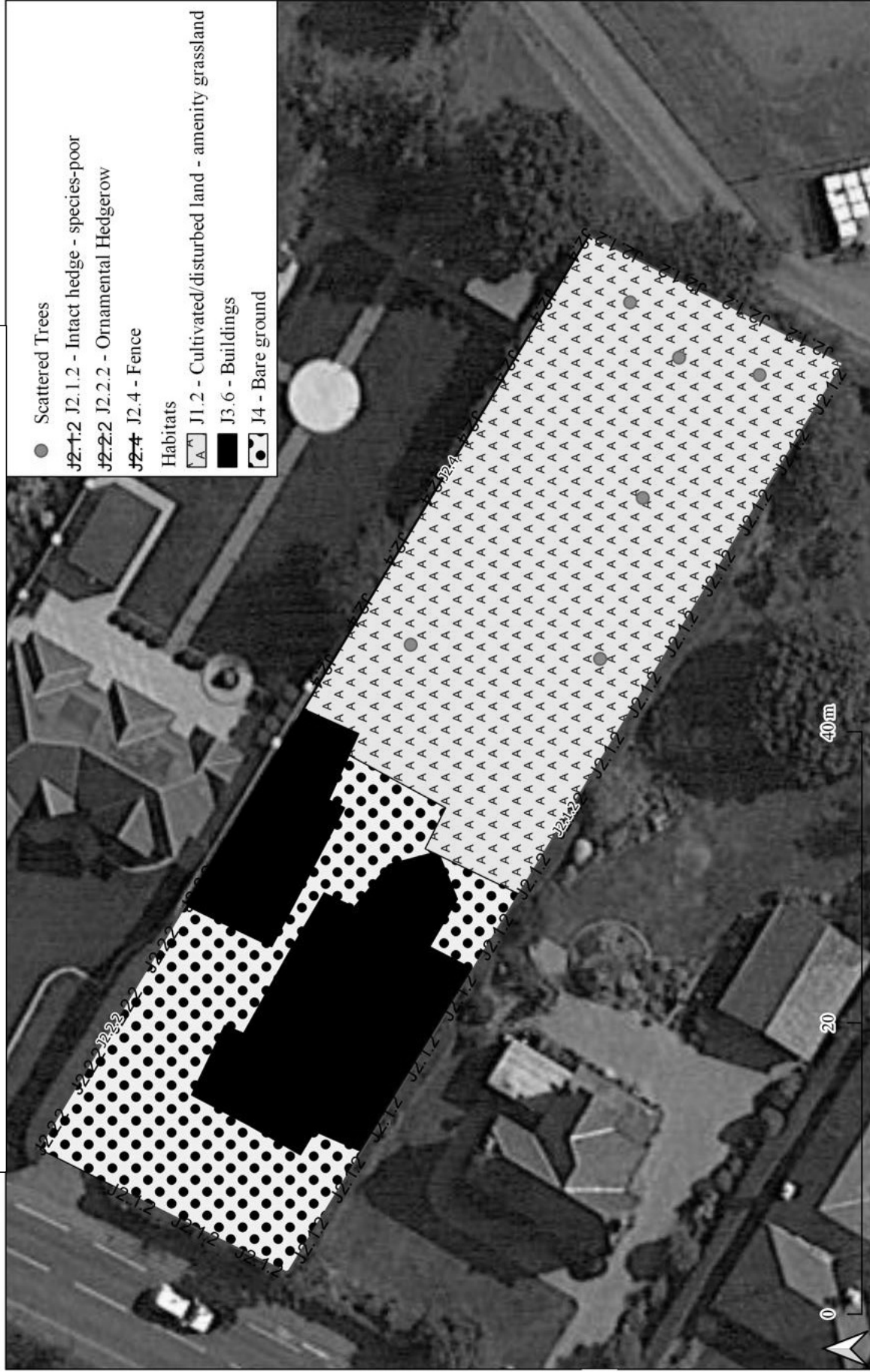
also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SAC's) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number of bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

# Appendix III. ANNOTATED MAP OF THE SURVEY



Appendix IV. DEVELOPMENT PLAN.

