

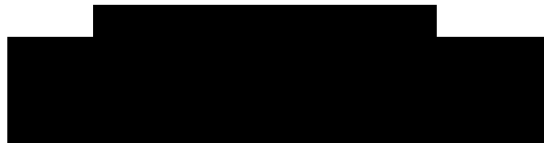
# Preliminary Bat Survey Report

**Site:** Rear of 115 North Bersted Street

**Client:** Terry Wilbraham

Version 001

Issued By:  
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| Report                              | This report remains valid for 12 months from date of first issue.<br>The report, conclusions and recommendations are valid for current development plans only. If these plans are changed, it will be necessary to review this report in the context of those changes, to assess whether further desk study and survey work will be required. |                |                   |
| Survey Data                         | Survey data are valid for 12 months from the date the survey was undertaken.                                                                                                                                                                                                                                                                  |                |                   |

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## 1 Summary

This is a brief summary of findings and recommendations of the Preliminary Bat Survey carried out on buildings located to the rear of 115 North Bersted Street, Bognor Regis PO22 9AG. Please read the report in its entirety for full details.

1. Gray's Ecology were commissioned by Stephen Jupp, to undertake a Preliminary bat Survey of buildings at the above property, which was required to inform a planning proposal for the demolition of these buildings and the construction of a new house within the site.
2. A Preliminary Bat Survey, comprising a desk study and a site visit was conducted to assess the potential impact of the proposed works upon bats and other protected species and habitats, in accordance with Bat Conservation Trust statutory guidance for bat surveys (Collins 2016).
3. A search of on-line mapping resources was undertaken to identify the location of any features of potential ecological interest, including connectivity between habitats (such as woodland, scrub, and hedgerow networks relevant to bats) and to check for activities carried out under European Protected Species Licence within the wider landscape around the site.
4. The site inspection was carried out on the 27th January 2020 by ecologist Nick Gray, licenced under Natural England bat survey Class Licence WMLCL18.
5. A thorough inspection found no evidence of bats and concluded that the buildings within the site have negligible potential for occupation by bats but were accessible to nesting birds.
6. If the recommendations made within this report are adopted, the proposed development should not have a negative impact upon bats or other protected species and no further survey for these should be required.
7. The avoidance of the use of artificial lighting within the site is proposed, to minimize disturbance to nocturnal wildlife.
8. The use of non-bitumen coated roofing membranes within the new building should be avoided, artificial lighting should be minimised within the site.
9. An arborist should be engaged to assess potential impacts of the proposed development upon nearby trees.
10. Further advice is given to ensure that nesting birds and European hedgehogs will not be adversely affected by the proposed works.
11. It is recommended that ecological enhancements are made in accordance with national and local planning policy, which should include bat roosting features within or upon the replacement buildings or upon a nearby mature tree.

## 2 Introduction

### 2.1 Background and Proposed Development

Gray's Ecology were commissioned by Stephen Jupp, acting for and on behalf of Terry Wilbraham to undertake a Preliminary Bat Survey of farm buildings, located to the rear of 115 North Bersted Street, Bognor Regis PO22 9AG (OS grid reference: SU 925 013) (hereafter referred to as 'the site').

The proposed development requires the demolition of the existing buildings, to make way for a new house within the site.

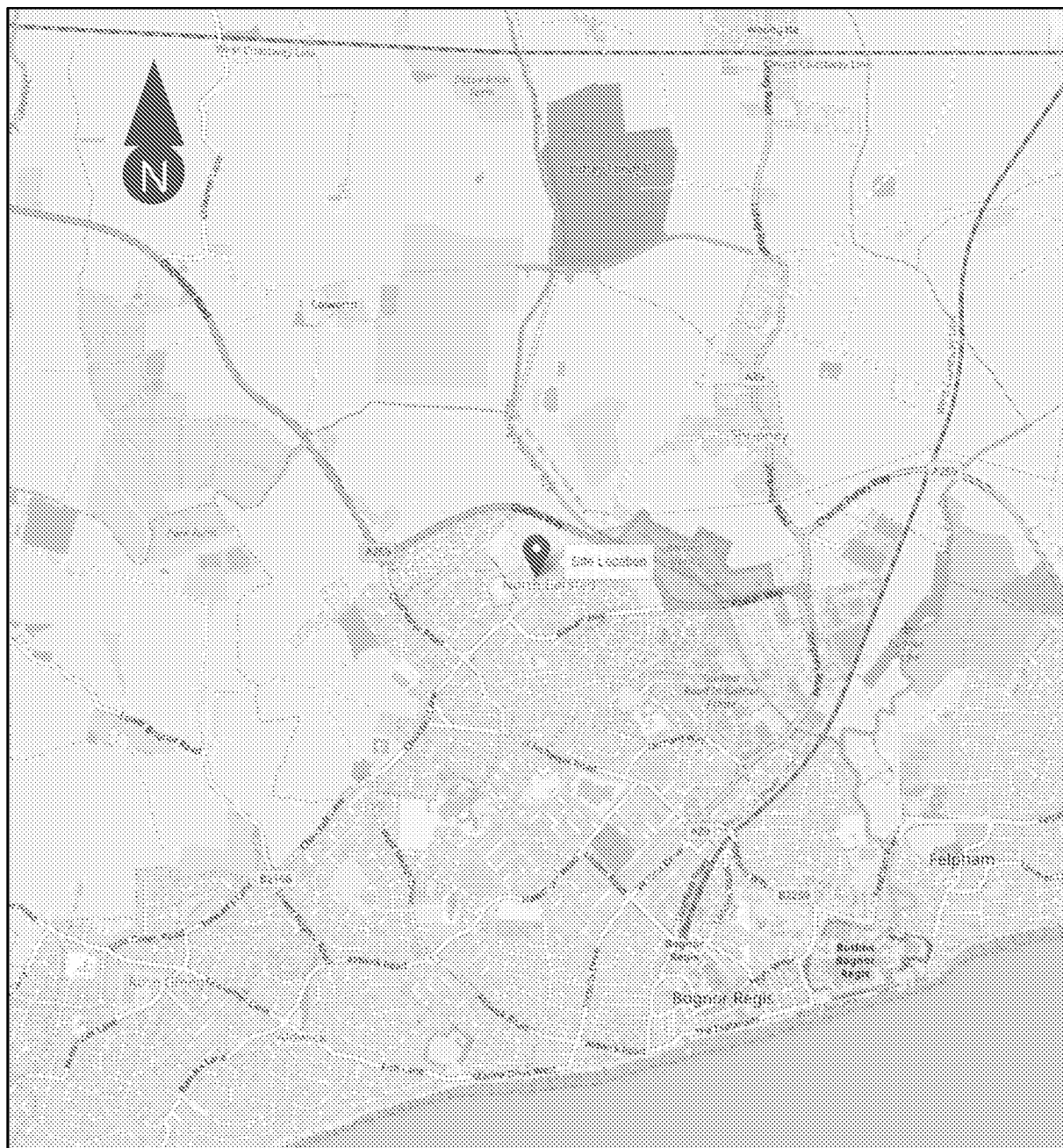
### 2.2 Purpose of the Report

This report presents the findings of an ecological assessment of the site, which considered the impact of the proposed development upon bats and other protected species that may be present within or near to the site. The report seeks to identify any potential ecological constraints to the proposed development and to provide appropriate recommendations for further ecological survey, avoidance, mitigation and enhancements.

### 2.3 Site Description

The site is located within a farmyard, on the northern edge of North Bersted (see Figure 1). The habitat to the north of the site is comprised mainly of open fields of amenity grassland, pasture and arable crops, which are divided by hedgerows. The site is bordered to the south, east and west by urban housing, small domestic gardens and scattered trees. There is narrow strip of mixed woodland adjacent to the east of the site, which extends approximately 230 m north-east. The site itself comprises dilapidated single-storey sheds and scattered trees, set within an area of hard standing.

**Figure 1.** Map showing the geographical location of the site.



(Map data © [OpenStreetMap contributors](#) 2020. Licenced under the [Creative Commons Attribution-ShareAlike 2.0 licence](#) (CC BY-SA)).

### 3 Summary of Relevant Legislation and Planning Policy

Details of planning policy and legal protection applying to all UK bats and other relevant protected species are outlined in Appendix 1 of this report.

The results of this survey will be used to determine if there is a need for further ecological surveys and to advise on impact avoidance measures and/or an appropriate mitigation strategy, that ensures compliance with UK and EU wildlife legislation. All British bat species and their roosts are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and the Habitats Regulations 2017. This means that it is a criminal offence to:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.

Local authorities in England are required to consider biodiversity and protected wildlife under their obligation to Section 40 of the NERC Act 2006.

The following National and Local Planning Policies apply in respect to ecology:

National Planning Policy Framework (2019), Section 2 (8c) and Section 15 (174b and 175a).  
Chapter 17 of the Adoption Arun Local Plan 2011-2031 (July 2018).

### 4 Methods

This report has been produced with reference to the following current guidelines:

- BS42020:2013: Biodiversity – Code of Practice for Planning and Development.
- Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Ecological Report Writing, Second Edition*. Technical Guidance Series. CIEEM.
- Chartered Institute of Ecology and Environmental Management (2017). *Guidelines for Preliminary Ecological Appraisal, Second Edition. Technical Guidance Series*. CIEEM.
- Collins, J. (2016). *Bat Surveys for Professional Ecologists. Good Practice Guidelines (3rd edition)*. Bat Conservation Trust, London.

The Buildings were surveyed both externally and internally to assess their potential for use by bats and other protected species. The survey was undertaken by ecologist Nick Gray BSc (Hons) – licenced under Natural England bat survey Class Licence WMLCL18 (licence number 2017-32546-CLS-CLS) – on 27th January 2020, commencing at 11:00 hrs.

The weather conditions were as follows: Temperature - 8° C; Wind speed - Force 2 (Beaufort scale); 80% cloud cover; dry.

#### 4.1 Desk Study

A search of on-line mapping resources, including the MAGIC website resource ([www.magic.gov.uk](http://www.magic.gov.uk)) was undertaken to identify the location of any features of potential ecological interest, including connectivity of habitat (such as woodland, scrub, watercourses and hedgerow networks etc) and to check for any activities carried out under a European Protected Species Licence (EPSL) within the wider landscape around the site.

## 4.2 Field Survey

As this survey focussed on bats, no specific searches were made with respect to other protected species. However, observations of any important plant communities, bird assemblages or other potentially valuable ecological features were recorded. Special attention was paid to notable species, such as reptiles and red-listed Birds of Conservation Concern (Eaton et al. 2015), as well as other species afforded special protection under the Wildlife and Countryside Act 1981 (as amended), along with important habitats within or near to the site.

### Structures

An inspection of the buildings within the site was undertaken during daylight hours from ground level, using an endoscope, binoculars, telescopic inspection mirror and a high-powered torch. The following evidence was sought:

The presence of access and exit routes for bats into and out of any potential roosting features and evidence of the use of such features by bats, such as urine staining or scratch marks around entrances, feeding remains, bat faeces (droppings) and any other signs indicative of bats, including the presence of bats themselves was sought. Where possible, samples of bat droppings and other evidence were collected for laboratory analysis. An assessment of likely commuting routes and nearby habitat was also undertaken to determine their potential to support bats. Any evidence was documented and supported by photographs.

Bats regularly utilise specific areas, such as cracks, joints, gaps and cavities within structures, and which are commonly found within building. These were searched as a priority for any bat field signs. Roosting bats and signs of their presence are not easy to find and are not always visible, so any potential bat roosting locations were also noted during the survey.

Where relevant, evidence of other wildlife found to be using the buildings was also noted.

Following inspection, all structures were categorised as having either 'negligible,' 'low,' 'moderate' or 'high' potential to support bats or as a 'confirmed bat roost.' These categories were based on observations in the context of the information set out in Table 1.

**Table 1.** Categorisation of Bat Roosting Potential of structures (adapted from Collins J, 2016. Table 4.1, p.35).

| Level of Bat Roosting Potential  | Rationale                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Negligible                       | Structure with no or very limited roosting opportunities for bats and/or where the structure is isolated from foraging habitat and there is no evidence of use by bats.                                                                                                                                                                                                                                                         |
| Low                              | Structure with a low number of roosting opportunities, which could be used opportunistically by individual bats, but are unlikely to be used on a regular basis by larger numbers of bats (e.g. gaps under fascia boards, under roof tiles, or under lifted lead flashing), with limited connectivity to foraging or commuting habitat (e.g. within an urban setting), but no evidence of current use by bats.                  |
| Moderate                         | Structure with features present that are suitable for moderate numbers of roosting bats and with connectivity to foraging habitat, but no evidence of current use by bats.<br><br>Examples of features include cracks in walls and presence of a wooden soffit box with access points, gaps under fascia boards, under lifted roof tiles, or under lifted lead flashing in a suburban or rural setting.                         |
| High                             | Structure with features that are highly suitable for large numbers of roosting bats on a regular basis and potentially for longer periods of time, with good connectivity to quality foraging habitat, such as woodland or lakes.<br><br>Structure has no evidence of current use by bats.<br><br>Examples include large uncluttered, draft-free loft spaces with access points or gaps under hanging tiles in a rural setting. |
| Confirmed Roost or Resting Place | Presence of bats or evidence of use by bats.                                                                                                                                                                                                                                                                                                                                                                                    |

### 4.3 Survey and Assessment Limitations

An initial site assessment such as this represents a 'snapshot' in time, it is therefore possible that some species may not have been present during the survey but may be evident at other times of the year. For this reason, habitats are assessed for their potential to support some species, even where no direct evidence (such as droppings) has been found.

All areas of the buildings inspected were fully accessible.

There were no limitations to the survey in terms of the following:

- Available specialist survey equipment.
- Time of year.
- Weather conditions (dry and sunny).
- Personal competence (qualifications, training, skills and experience).
- Time spent surveying.
- Access.

## 5 Baseline Ecological Conditions

### 5.1 Desk Study – Results

A search of on-line mapping resources was undertaken to identify the location of any features of potential ecological interest and connectivity to woodland, scrub, watercourses and hedgerow networks relevant to bats and other protected species in the wider landscape around the site.

The MAGIC website resource ([www.magic.gov.uk](http://www.magic.gov.uk)) was used to identify the location of designated sites for nature conservation, Priority Habitats (Habitats of Principal Importance) and for EPSLs granted within a 2 km radius of the survey site.

#### 5.1.1 Designated Sites

The site is not located within any statutory or non-statutory designated sites.

The site is located within the Impact Risk Zone for Pagham Harbour Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar Site which lies 5.6 km to the south-west of the site.

Bognor Reef SSSI, lies 2.7 km to the south of the site.

Regard must be given to Paragraph 175b of the NPPF, which states that “... proposed development on land within or outside a Site of Special Scientific Interest, likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted.”

Solent And Dorset Coast Potential Special Protection Area (PSPA), lies 2.7 km to the south of the site.

Regard must therefore, also be given to Paragraph 176 of the NPPF, which states that “...The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”

The Brooks Local Wildlife Site (LWS) is located 427m to the east of the site.

Regard should also be given to Chapter 17 in the Adoption Arun Local Plan 2011-2031 (July 2018).

#### 5.1.2 Habitats of Principal Importance (Priority Habitats and Ancient Woodland)

The site does not contain any Habitats of Principal Importance. However, the following Habitats of Principal Importance are located within 2 km of the site:

- Coastal and Floodplain Grazing Marsh (the nearest is 230 m to the north).
- Deciduous Woodland (the nearest is 41 m to the south-east of the site).
- Traditional orchard (the nearest is 1.8 km to the north-west of the site).
- Hedgerows (the nearest is 42 m to the north-west of the site).
- Ponds (the nearest is 175 m to the south-west of the site).

Habitats of Principal Importance are listed in Section 41 of the NERC Act, 2006. Section 40 of this act places a duty on Local Planning Authorities to have due regard to biodiversity.

Further regard should also be given to Chapter 17 in the Adoption Arun Local Plan 2011-2031 (July 2018).

### 5.1.3 Bats

The following EPSLs were granted by Natural England for a mitigation project concerning bats within 2 km of the site:

- EPSL reference 2014-4435-EPS-MIT for the destruction of a resting place for common pipistrelle *Pipistrellus pipistrellus* bats was granted in 2014, approximately 1.0 km to the north-east of the site.

### 5.1.4 Other protected and/or notable species

No EPSLs granted by Natural England for a mitigation project concerning other protected species were identified within 2 km of the site.

## 5.2 Field Survey – Results

The site was found to comprise seven buildings and a shipping container (Figure 2), surrounded by hard standing and building materials, with patches of amenity grassland and ephemeral/short perennial herbs, together with occasional immature sycamore *Acer pseudoplatanus* trees. The buildings were grouped together. All the buildings were constructed with sheet asbestos, which was formed over timber framework and were estimated to have been erected around the mid-twentieth century, to serve as sheds for the former farm.

### 5.2.1 Structures

The buildings within the site were all inspected for evidence of their occupation or suitability for bats and other protected species and the results presented in Table 2 below.

**Table 2.** Assessment results of the buildings within the site.

| <b>Building</b> | <b>Assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Potential for Bats (see Table 1)</b> |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Building 1      | Not accessible for inspection. It is understood that this building is to be retained and does not form part of the proposed development plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Not applicable                          |
| Building 2      | An open-fronted shed constructed with asbestos sheeting over a wooden frame. The flat roof of this building had partially collapsed. The building was in use for the storage of building materials (Photo 1).                                                                                                                                                                                                                                                                                                                                                                                                              | Negligible                              |
| Building 3      | This shed was constructed with asbestos sheeting over a wooden frame. The roof was a shallow apex design. The building was accessed via double doors on the northern elevation. Internally, the building was spacious but full of stored items. A smaller annex room was present, which was accessed from the main room only. There was artificial lighting within this building, which retained the trappings of past light industrial activity. There was no roof void present. However, the roof was leaking badly in several areas and polythene sheeting had been suspended from the roof in places (Photos 2 and 3). | Negligible                              |
| Building 4      | This shed was constructed with asbestos sheeting over a wooden frame. The roof was a shallow apex design. The eastern elevation of this building was open. Windows were present on the southern and northern elevations. Remnants of a former fibreboard suspended ceiling are present. The building is full of assorted objects, including farm machinery (Photo 4).                                                                                                                                                                                                                                                      | Negligible                              |
| Building 5      | This building was a well-sealed shipping container (Photo 5).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Negligible                              |
| Building 6      | This shed was constructed with asbestos sheeting over a wooden frame. The roof was a shallow sloping design. The building was accessed via double doors on the northern elevation. The building had been used as a tool shed/workshop. There was no roof void present. However, polythene sheeting had been suspended from the roof in places (Photos 6 and 7).                                                                                                                                                                                                                                                            | Negligible                              |
| Building 7      | This shed was similar in design and construction to Building 6. The building was open along part of the western elevation. The interior of the building was used for storing building materials. The roof was unlined (Photos 6 and 8).                                                                                                                                                                                                                                                                                                                                                                                    | Negligible                              |
| Building 8      | This building was constructed with asbestos sheeting over a wooden frame, to form a small porch over a disused doorway on the southern elevation of Building 3. The roof was a shallow sloping design. The building was accessed via an open doorway on the western elevation. There was no roof void present (Photo 9).                                                                                                                                                                                                                                                                                                   | Negligible                              |

No evidence of the use of these buildings by bats was found during their inspection. Buildings 2 – 8 have all been rated in accordance with Collins J, 2016 to have 'negligible potential' for bats (see Table 1).

**Figure 2.** Showing location of the buildings surveyed.

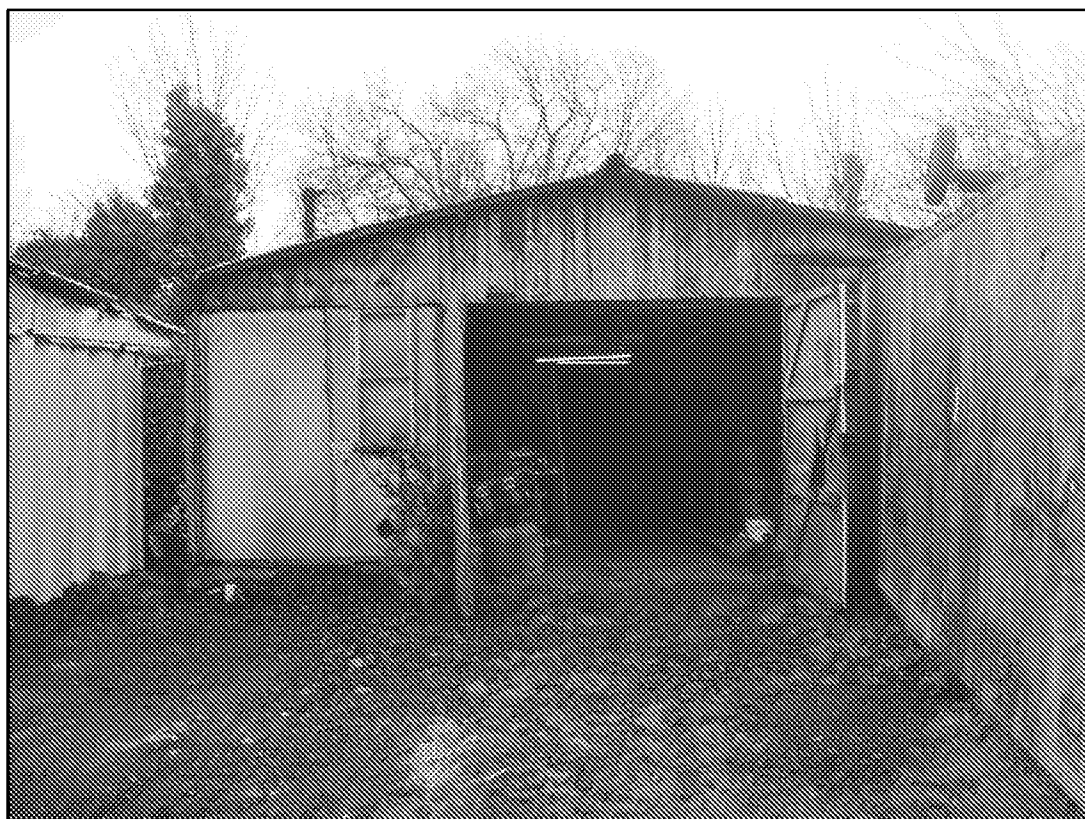


## 5.2.2 Site Photographs

**Photo 1.** Building 2, showing some of the items stored within.



**Photo 2.** Building 3 looking south, showing the double entry doors on the north side of the building.



**Photo 3.** Building 3, showing the interior of the annex room.



**Photo 4.** Building 4 looking west, showing the open front on the east side of the building.



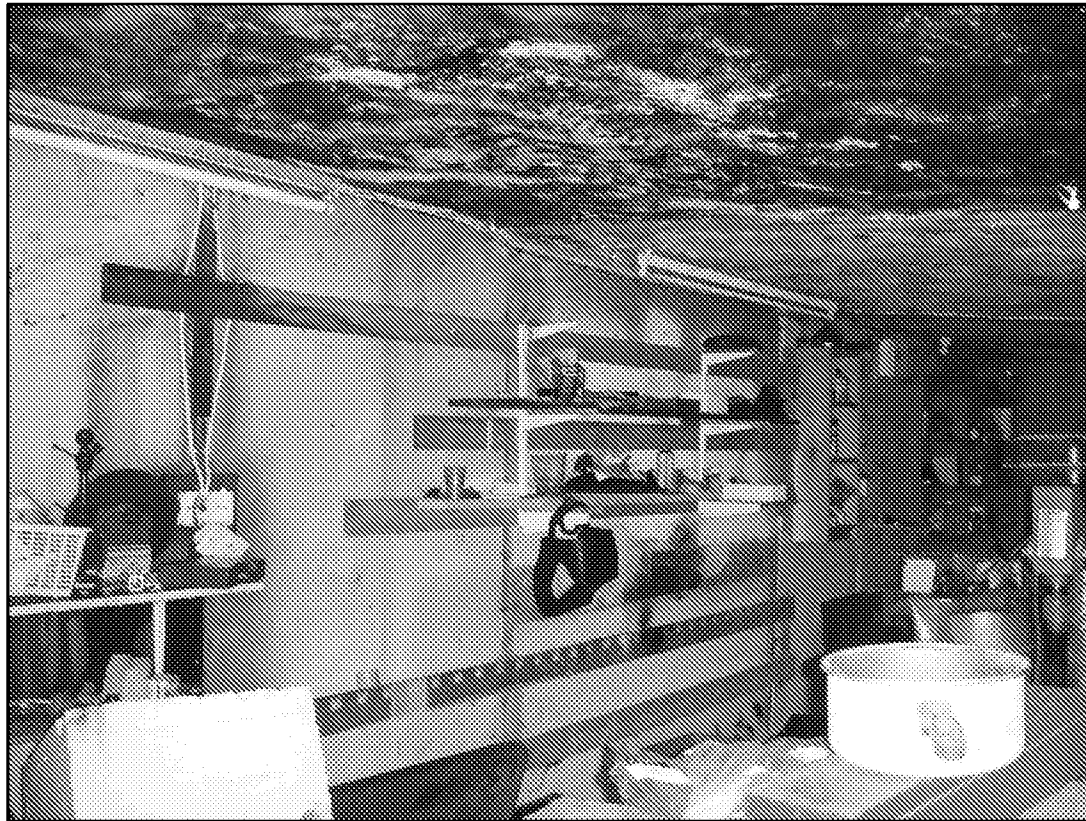
**Photo 5.** Tightly sealed shipping container located to the north of Building 3.



**Photo 6.** Looking south, showing the entry doors on the northern elevation of building 6 and the west side of Building 7.



**Photo 7.** Showing the interior of Building 6.



**Photo 8.** Showing the interior of Building 7.



**Photo 9.** Showing the entry porch on the southern elevation of building 3.



### 5.2.3 Other protected and/or notable species

No protected and/or notable species were recorded on the site during the survey.

No evidence of European hedgehog was observed within the site during the survey. However, the site does have moderate potential to support European hedgehog, which is a species of principal importance, as listed under Section 41 of the NERC Act 2006.

No non-native invasive species listed under Schedule 9, Section 2 of the Wildlife and Countryside Act, 1981 (as amended) were observed on site during the survey.

## 6 Ecological Constraints and Opportunities

### 6.1 Bats

In accordance with the Bat Conservation Trust guidelines (Collins, J., 2016), the overall potential for the buildings inspected within the site to support bats is rated to be 'negligible' for summer roosting and for winter hibernating bats. **Bats should not be impacted by the proposed development and no further survey for bats will be required at this time.**

It is important that the potential for disturbance from artificial lighting is thoroughly considered. The plans proposed for the new building should include an 'ecologically sensitive lighting scheme' in accordance with guidance produced by the Bat Conservation Trust (2018) and the Institute of Lighting Professionals (summarised in Appendix 2). Careful consideration of this should be made to avoid the increased use of external lighting and to ensure that lighting does not illuminate nearby trees and hedgerows.

Care must be taken during construction, to avoid using non-bitumen coated roofing membranes e.g. breathable roofing membranes, such as 'Tyvec,' along with other modern types of bitumen felt that contain polypropylene filaments (for example type 5U), which can cause serious harm to bats through entanglement and by creating unfavourable climatic conditions within a roosting area. All roof spaces may potentially become available to bats and therefore, should be lined with 1F traditional hessian-backed bitumen felt, which complies with BS EN 13707:2013 and BS 5250:2011 (as amended). The use of certain wood preservative and pesticide treatments can also be harmful to bats.

## 6.2 Designated Sites and Priority Habitats

Provided that the advice given within this report is followed, the proposed development should not have a negative impact upon the designated Sites and Priority Habitats identified in Section 5.1.

## 6.3 Other protected and/or notable species

Construction activities have the potential to harm nearby trees. An arborist should be engaged to assess the potential impact upon these trees before works proceed, as tree canopy and/or root protection measures may be required. Consideration should also be given to the storage location of any construction materials, together with any associated plant or other vehicles, to prevent compaction damage to tree roots within the vicinity of the site.

The buildings do have the potential to support nesting birds. It is illegal to destroy, damage, take, obstruct or interfere with any wild bird nest while it is being built or in use, under the Wildlife and Countryside Act 1981 (as amended). Nests are considered 'in use' from the moment nest-building begins. The proposed works on the site should be timed to take place outside of the main nesting bird season, i.e. works should not take place between 1st March and the 31st August (or later if birds are still nesting within the buildings). However, if it is not possible to avoid this period, the buildings should be subject to a nesting bird check by a suitably qualified ecologist, immediately (not more than 24 hours) before work is begun, as is appropriate to the works proposed. If an active nest is identified, a minimum exclusion zone for all works within a 5 m radius of the nest must be established to protect it from disturbance until the young have fledged. Further consideration should be given to minimise excessive noise within the site and for restricting the use of artificial lighting during construction (see also Section 6.1 and Appendix 2).

It is recommended that habitats within the impact zone are carefully searched each day, before works begin, to ensure that any small mammals, such as European hedgehogs, which might be present can be safely relocated away from the area or allowed to move away into surrounding habitats of their own accord (the European hedgehog is a Species of Principal Importance, listed under Section 41 of the NERC Act 2006). Care should be taken to cover any temporary ground holes when left unattended, especially at night to ensure that these and other ground dwelling animals do not become accidentally trapped.

Providing that the precautions outlined above are strictly observed, the risk of impact from the proposed development on protected and/or notable species, such as invertebrates, reptiles, birds, hedgehogs will be negligible.

## 6.4 Biodiversity Enhancement Opportunities

The proposed development represents an opportunity for habitat enhancements to benefit insects, birds and bats. Any proposed landscaping or planting scheme should include a mixture of native shrub and flowering species typically found within the area of the site and known to encourage insect diversity.

It is recommended that three multi-chamber bat boxes, such as the woodstone bat box available at <https://www.nhbs.com/large-multi-chamber-woodstone-bat-box> are installed on nearby buildings or

mature trees. Detailed designs of any new buildings should also seek to incorporate bat roosting features, such as deep crevices, gaps under tiles and cavities in excess of 10 mm wide and 100 mm depth. Purpose-built prefabricated bat access and roost features are commercially available and some recommended examples of these are shown at: <https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes/wall-integrated.html>.

Such enhancement measures are in line with the recommendations of the NPPF (2019) and are also imbedded within East Hampshire Local Plan: Joint Core Strategy (2014) Policies CP21.

**If any protected species are found during the project, all work must be stopped immediately, and an ecologist should be contacted for further advice.**

## 7 Conclusion

A Preliminary Bat Survey was conducted by ecologists Nick Gray on buildings located to the rear of 115 North Bersted Street, Bognor Regis PO22 9AG, in support of a proposed plan to build a new house within the site.

It was concluded that existing buildings had negligible potential to support roosting bats and that therefore, **bats should not be impacted by the proposed development. No further survey for bats will be required at this time.**

Mitigation has been recommended for bats, birds, trees and European hedgehog. Providing recommendations given within this report are followed, the risk of impact from the proposed development on other protected and/or notable species will be negligible.

It is recommended that bat roosting features are incorporated into the new building and a minimum of three additional bat roosting boxes are placed into nearby mature trees.

**If any protected species are found during the proposed work, all activities within the site should cease and an ecologist must be contacted immediately for advice.**

Should you need further advice or clarification of the information provided above, please do not hesitate to contact Gray's Ecology at [nickg@clara.co.uk](mailto:nickg@clara.co.uk).

## 8 References

- Adopted Arun Local Plan 2011-2031 (July 2018) Available at <https://www.arun.gov.uk/adopted-local-plan/> (Accessed 10<sup>th</sup> February 2020).
- Bat Conservation Trust (2018) Guidance Note 08/18. *Bats and artificial lighting in the UK*. Bats and the Built Environment series (Online). Available at <https://www.theibp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/> (accessed 30th July 2019).
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## 9 Appendix 1 - Wildlife Legislation and Planning Policy

### 9.1 Bats

The following text provides guidance in the form of a summary of the current legal protection afforded to bats.

All bat species in the UK are included in Schedule II of the Conservation of Habitats and Species Regulations 2017 (available online at: <http://www.legislation.gov.uk/uksi/2017/1012/contents/made>), which transpose Annex IV of the European Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) (available online at: <http://inco.defra.gov.uk/page-1374>). As such all bat species found naturally in the UK are defined as 'European Protected Species'.

Five species of bat, Bechstein's *Myotis bechsteinii*, western Barbastelle *Barbastella barbastellus*, greater mouse-eared *Myotis myotis*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe R. *hipposideros* are also listed on Annex II of the EC Habitats Directive. This requires the designation of a series of sites, which contain important populations of these species as Special Areas of Conservation (SACs).

All species of British bat are also fully protected under the Wildlife and Countryside Act 1981 (as amended), through inclusion in Schedule 5 (available online at: <http://www.legislation.gov.uk/ukpga/1981/69>).

As a signatory to The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) (available online at: <https://inco.gov.uk/our-work/the-convention-on-the-conservation-of-migratory-species-of-wild-animals/>), the UK is also required to protect their habitats, requiring the identification and protection from damage or disturbance of important feeding areas.

In this interpretation, a bat roost is "*any structure or place which any bat uses for shelter or protection*". Because bats tend to reuse the same roosts, legal opinion is that the protection of bat roosts are considered to apply regardless of whether bats are present or not. There is currently no guidance on when a roost ceases to be protected if it is not used by bats.

Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) (available online at: <http://www.legislation.gov.uk/ukpga/2006/15/contents>) lists the habitats and species of principle importance. Seven species of bat (western barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, noctule *Nyctalus noctule*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auratus*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe *Rhinolophus hipposideros*) are listed under Section 41. Section 40 of the NERC Act (2006) places a statutory duty on all public bodies, including planning authorities to take, or promote, steps to further the conservation of habitats and species of principal importance for the conservation of biodiversity in England (commonly referred to as the 'Biodiversity Duty'). This duty extends to all public bodies, requiring them to have regard to Section 74 of the Countryside and Rights of Way (CROW) Act 2000 (available online at: <http://www.legislation.gov.uk/ukpga/2000/37/contents>).

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The legislation outlined above makes it an offence to:

- Kill, injure or take any individual bat of any species.
- Possess any part of an individual bat, either alive or dead.

- Intentionally or recklessly damage, destroy or obstruct access to any place or structure used by bats for shelter, rest, protection, or breeding.
- Intentionally or recklessly disturb these species whilst using any place of shelter or protection.
- Deliberately disturb bats in such a way as to be likely to impair their ability to survive, breed or reproduce, rear or nurture their young, hibernate or migrate, or to significantly affect the local distribution or abundance of the species to which they belong.
- Keep (possess), transport, sell or exchange, or offer for sale or exchange, any live or dead bat, or any part of, or anything derived from a bat.

It is also an offence to set and use articles capable of catching, injuring, or killing bats (for example a trap or poison), or knowingly cause or permit such an action. Further protection is provided under Schedule 6 of The Wildlife and Countryside Act 1981 (as amended), relating specifically to trapping and direct pursuit of bats.

If planned works would constitute an offence, they may only be carried out under licence from Natural England. Works or mitigation activities involving interference with bats or bat shelters must be carried out by a licensed bat worker, who is registered with a Natural England bat survey class licence for this Purpose.

A European Protected Species 'Derogation' Licence in relation to bats is also required from Natural England for any work that would result in an otherwise unlawful activity (e.g. damage to a bat roost). A license can only be issued for this purpose if Natural England are satisfied that all of the following three tests are met:

- The proposal is for 'preserving public health or public safety, or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment:
- There is no satisfactory alternative; and
- The action authorised by the license will not be detrimental to the maintenance of bat populations at a favourable conservation status in their natural range.

A bat roost is defined by the Bat Conservation Trust's Bat Surveys—Good Practice Guidelines 3rd Edition as "the resting place of a bat". In general, the word roost is interpreted as "any structure or place, which any wild bat uses for shelter or protection."

Bats tend to re-use the same roosts. Therefore, legal opinion is guided by recent case law precedents, that a roost is protected, regardless of whether the bats are present at the time. This includes summer roosts used for breeding; or winter roosts used for hibernating.

## 9.2 Birds

Under Schedule 1 of the Wildlife and Countryside Act (1981) as amended, all wild birds (with the exception of those listed on Schedule 2), their eggs and nests are protected by law and it is an offence to:

- Take, damage or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.
- Disturb any bird listed on Schedule 1, while it is nest building, or at a nest with eggs or young, or disturb the dependant young of any such bird.

In 1996, the UK's leading non-governmental bird conservation organisations listed the conservation status of all bird species in the UK against a series of criteria relating to their population size, trends and relative importance to global conservation, in order to identify Birds of Conservation Concern (BoCC) (Eaton et al (2015). Available online at:

<https://britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf>). The lists, known as the 'Red', 'Amber' and 'Green' lists (in order of decreasing concern) are used to inform key conservation policy and decisions. The lists are reviewed every 5 years and are a useful reference for determining the current importance of a particular site for birds. The most recent review was undertaken in 2015 (Eaton et al, 2015), which provides an up to date assessment of the conservation status of birds in the UK.

The Council Directive 79/409/EEC on the Conservation of Wild Birds ("the Birds Directive") European Council Directive 79/409/EEC on the Conservation of Wild Birds ("the Birds Directive") (available online at: <http://incc.defra.gov.uk/page-1373>) sets a framework for the protection of wild birds. Under the directive, several provisions are made including the designation and protection of 'Special Protection Areas' (SPAs) – areas which support important bird populations – to assist with the legal protection of rare or vulnerable species.

### 9.3 Natural Environment and Rural Communities (NERC) Act (2006)

The NERC Act (2006) created the statutory nature conservation body Natural England, and places a statutory duty on all public bodies, including planning authorities, under Section 40, to take, or promote the taking by others, of steps to further the conservation of *habitats and Species of Principal Importance for the conservation of biodiversity* in England (commonly referred to as the 'Biodiversity Duty'). This duty extends to all public bodies the biodiversity duty of Section 74 of the Countryside and Rights of Way (CROW) Act 2000, which placed a duty only on Government and Ministers. Section 41 of the NERC Act (2006) lists the habitats and species of principle importance. This includes a wide range of species from mosses, vascular plants, invertebrates through to mammals and birds. It originates from the priority species listed under the UK Biodiversity Action Plan (UK BAP) with some omissions and additions.

### 9.4 National Planning Policy Framework

The National Planning Policy Framework (2019) (NPPF), Section 2 (8c) and Section 15 (174b and 175a) (available online at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/610197/NPPF\\_Feb\\_2019\\_revised.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/610197/NPPF_Feb_2019_revised.pdf)) set out government policy on biodiversity in planning decisions. Under the NPPF, the presence of a protected species is a material consideration when a planning authority is considering a development proposal (Circular 06/2005, 2005) (available online at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7692/147570.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf)).

The NPPF also states that the wider benefits of an ecosystem should be recognised. In accordance with this it is important that developments should contribute to and enhance the natural and local environment by:

- Minimising impacts on existing biodiversity and habitats,
- Providing net gains in biodiversity and habitats, wherever possible,
- establishing coherent ecological networks that are more resilient to current and future pressures.

The NPPF is implemented through local planning under the Adopted Arun Local Plan 2011-2031 (July 2018) <https://www.arun.gov.uk/adopted-local-plan/>.

## 10 Appendix 2 – Reducing Impacts of Artificial Light

Bright external lighting can have a detrimental impact upon wildlife, particularly foraging and commuting bat flight paths, but more importantly can also cause bats to remain in their roosts for longer. Artificial lighting can also cause significant impacts on other nocturnal species, most notably moths and other nocturnal insects. It can also result in disruption of the circadian rhythms of birds, reducing their fitness. Guidelines issued by the Bat Conservation Trust (2018) <https://www.thebtp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/> and HM Government (2019). Ministry of Housing, Communities & Local Government (Online). *Light pollution* Available online at: <https://www.gov.uk/guidance/light-pollution> should be considered while designing the lighting scheme. This includes the following measures:

### **Do not:**

- provide excessive lighting. Use only the minimum amount of light needed for the task.
- directly illuminate bat roosts or important areas for nesting birds.

### **Avoid:**

- installing lighting in ecologically sensitive areas such as: near ponds, lakes, rivers, areas of high conservation value; sites supporting particularly light-sensitive species of conservation significance (e.g. glow worms, rare moths, slow-flying bats) and habitat used by protected species.
- using reflective surfaces under lights.

### **Do:**

- consider employing a competent lighting designer who will apply the principals of providing the right light, in the right place, at the right time and controlled by the right system.
- minimise the spread of light to at, or near horizontal and ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required.
- consider the height of lighting columns. It should be noted that a lower mounting height is not always better. A lower mounting height can create more light-spill or require more columns. Column height should be carefully considered to balance task and mitigation measures.
- consider no lighting solutions where possible such as white lining, good signage, and LED cats-eyes. For example, light only high-risk stretches of roads, such as crossings and junctions, allowing headlights to provide any necessary illumination at other times.
- use temporary close-boarded fencing until vegetation matures, to shield sensitive areas from lighting.
- limit the times that lights are on to provide some dark periods. The task being lit often varies, for example roads are less used after 23.00hrs and car parks are empty. A lighting designer can vary the lighting levels as the use of the area changes reducing lighting levels or perhaps even switching installations off after certain times. This use of adaptive lighting can tailor the installation to suit human health and safety as well as wildlife needs.

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