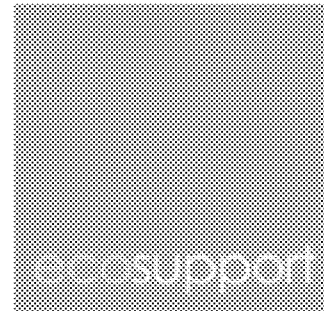


*ecological support,  
management and solutions*



**26 Downview Road**  
**Barnham**  
***Initial Ecological Assessment***

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**Client:** Ms Vanessa Barker

**Date:** September 2018

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## 1.0 INTRODUCTION

### 1.1 Brief

Ecosupport Ltd was commissioned by Ms Vanessa Barker to carry out a IEA of 26 Downview Road and associated grounds. This assessment was required to identify any ecological impacts that may arise from the proposed development within the site. The main objectives of this survey were as follows:

- Identify current land use distribution of broad habitat types including plant communities of ecological importance.
- Identify and classify any priority habitats.
- Identify signs of suitable habitat features for protected species.

**NB** If the development does not take place within 24 months of this report then the findings of this survey will no longer be considered valid and should be repeated.

### 1.2 Site Description and Location

The site comprises of the 26 Downview Road main building, garage and associated grounds located off Downview Road, Barnham PO22 0EG (centred on grid reference SU 95445 05455) (**Fig 1**). The site is bounded by detached residential dwellings and associated grounds on all sides with Downview Road to the east and Ewens Gardens bounded the north and north west of the site. The immediate surrounding environ is semi-rural with the site residing on the edge of Barnham village.

**Figure 1.** Google aerial image of the site with immediate surrounding environs.



### 1.3 Proposed Works

It is understood the proposals involve the demolition of both the dwelling and garage in preparation for a new dwelling.

## 1.4 Relevant Legislation and Policy

### 1.4.1 Relevant legislation

The Wildlife & Countryside Act 1981 (as amended) (HMSO, 1981) is the primary piece of legislation by which biodiversity in the UK is protected. The most relevant areas of the Act to development related activities are:

- The identification and subsequent protection of Sites of Special Scientific Interest (SSSIs), which prohibits damaging activities.
- The protection of certain species listed in Schedule 5, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale (it should be noted that all parts of this protection do not apply to all Scheduled species).
- The protection of wild birds and their nests, which prohibits damage or destruction of nests whilst in use.

The Conservation of Habitats and Species Regulations 2010 (known as the 'Habitats Regulations') (HMSO, 2010), pass two EEC Directives into UK law. The Regulations protect sites and species deemed to be of conservation importance across Europe. The most relevant parts of the Regulations to development related activities are:

- The protection of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)
- The protection of species listed within Schedule 2 of the Regulations, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale, this confers some level of habitat protection.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the *UK Post – 2010 Biodiversity Framework*.

### 1.4.2 National Planning Policy

The development would seek to comply with relevant Planning Policy, at a local, regional and national level.

Planning Policy Statement 9 (PPS9) was superseded by the National Planning Policy Framework (NPPF) in March 2012. The development seeks to comply with relevant Planning Policy. The National Planning Policy and Framework (NPPF) 2018 supersedes the previous national policy and sets out the Government's vision for biodiversity in England in line with the country's 25 Year Environment Plan. Chapter 15 of this policy outlines key principles related to the natural environment and states that plans should take a strategic approach to maintaining and enhancing networks of habitats and green

infrastructure and should provide net gains for biodiversity. Plans should promote the conservation, restoration and enhancement of priority habitats and ecological networks and the protection and recovery of priority species. The NPPF states that the planning system should contribute to and enhance the natural and local environment by:

- Recognising the wider benefits of ecosystem services.
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- The conservation of International and National statutorily designated sites.
- Protection of ancient woodland and veteran trees.
- The creation, protection, enhancement and management of networks of biodiversity and green infrastructure.
- The preservation, restoration and recreation of priority habitats and ecological networks.
- The recovery of priority species populations.

#### 1.4.3 Local

Policies ENV SP1, ENV DM1, ENV DM3 and ENV DM5 (Natural Environment, Designated Sites of Biodiversity or Geological Importance, Biodiversity Opportunity Areas, and Development and Biodiversity) of the Arun Local Plan 2011-2031 include a requirement to protect habitats important to the biodiversity of the district, including statutory (such as SPAs) and non-statutory (such as Sites of Importance for Nature Conservation SINCs) designated sites. It also states that:

*'Arun District Council will encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment through the development process and particularly through policies for the protection of both designated and non-designated sites. Where possible it shall also promote the creation of new areas for habitats and species. In relation to designated sites, development will be permitted where it protects sites listed in Tables 17.1-17.6 that are recognised for the species and habitats contained within them.'*

*'a. Proposed development likely to have an adverse effect on land with the designated features of any Site of Biodiversity or Geological Importance as listed in Tables 17.1 - 17.7 or any subsequently designated sites (either individually or in combination with other developments), will not normally be permitted. Consideration will be given to the exact designated features present on the site, their scarcity/rarity and recognition of the protection offered by their existing status. Exceptions will only be made for those with the highest value where the following can be demonstrated:*

- i. There is no alternative solution (which shall be adequately demonstrated by the developer).*
- ii. There are reasons of public health or public safety or*
- iii. There are benefits of primary importance to the environment or*
- iv. There are imperative reasons of overriding public interest.*

*Notwithstanding the above however, the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined.*

2. *In determining any planning application affecting Sites of Biodiversity or Geological Importance the Council will ensure that the intrinsic natural features of particular interest are safeguarded or enhanced having regard to;*
  - i. *The European, National or Local status and designation of the site;*
  - ii. *The nature and quality of the site's features, including its rarity value;*
  - iii. *The extent of any adverse impacts on the notified features of interest;*
  - iv. *The need for compensatory measures in order to re-create remaining features of habitats on or off the site.*
3. *Where appropriate the Council will ensure the effective management of designated sites through the imposition of planning conditions or Section 106 agreements as appropriate.'*

*'Development shall:*

1. *Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones*
2. *Be designed in order to minimise disturbance to habitats*

*Development proposals that do not reasonably address opportunities for enhancing these through their design, layout and landscaping or access/management shall not be permitted. Where a development scheme would result in a habitat loss, mitigation measures will be proposed as part of the proposed scheme and such measures agreed with the Local Planning Authority prior to the determination of any planning application. Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA.'*

*'Development schemes shall, in the first instance, seek to achieve a net gain in biodiversity and protect existing habitats on site. They shall also however incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not). Development schemes shall also be appropriately designed to facilitate the emergence of new habitats through the creation of links between habitat areas and open spaces. Together, these provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement.*

*Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. This involves consideration of any impacts that will affect the species directly or indirectly, whether within the application site or in an area outside of the site, which may be indirectly affected by the proposals. All surveys shall be carried out at an appropriate time of year and shall be undertaken by a qualified and, where appropriate, suitably licensed person.*

*All developments shall have regard to Natural England's standing advice for protected species.'*

## 2.0 METHODS

### 2.1 IEA Methodology

The IEA was carried out by Lyndsey McBean BSc (Hons) PGCert GradCIEEM during September 2018. The survey consisted of a site walkover (loosely based on the “Phase 1” methodology (JNCC, 2010), modified to suit the situation) with all accessible areas of the site and adjacent land (where relevant) covered. The habitats present were generally described with particular attention paid to their potential to support protected species. In addition, a general search for evidence of protected species was undertaken.

#### 2.1.1 Preliminary Roost Assessment

A PRA was conducted of the dwelling and associated outbuildings by Lyndsey McBean. This comprised of a methodical external and internal inspection for Potential Roost Features (PRFs) (i.e. loose tiles, gaps under soffits and lead flashing), signs of bats (scratch marks, urine staining, droppings) or bats themselves. The exteriors of the buildings were examined using close focus 8 x 42 binoculars whilst the internals (i.e. loft space) were assessed using a high-powered torch to examine for signs of (i.e. droppings, feeding remains) and/or bats themselves.

The survey was carried out in accordance with the guidance and recommendations made in *Bat Surveys for Professional Ecologists: Good Practice Guidance 3<sup>rd</sup> Edition* (Collins (ed) 2016).

### 2.2 Limitations

The species list provided is not considered to be exhaustive, instead a record of those identified during the Phase I survey. Similarly, this survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Fallopia japonica*), but no such species were found during the time on site.

Due to health and safety concerns (recent loft insulation and electricals work) the loft space was not accessible during the PRA meaning evidence of roosting bats may have been missed.

## 3.0 RESULTS

### 3.1 Vegetation Survey Results

The vegetation within the site has been described below using the broad Phase I habitat classification terminology as described within JNCC (2010). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area.

In summary the following habitat types / broad communities were recorded on site:

- Amenity grassland
- Ornamental
- Hedgerow
- Scattered trees
- Ruderal
- Hard standing
- Buildings

#### 3.1.1 Amenity grassland

The majority of the garden area both east and west of the dwelling comprises managed amenity grassland of low botanical diversity (made more difficult to determine owing to the low sward height) (Fig 2). As well as common grass species other species noted included: Dandelion (*Taraxacum spp*), Common Daisy (*Bellis perennis*), Buttercup (*Ranunculus spp*), Yarrow (*Achillea millefolium*), Broadleaved Plantain (*Plantago major*), Self-heal (*Prunella vulgaris*) and Hawkbit (*Leontodon spp*).

**Figure 2.** Managed amenity lawn to the east of the dwelling with bordering defunct hedgerow.



#### 3.1.2 Ornamental shrubs/trees

Ornamental shrubs and trees are scattered throughout and bordering both the east and west gardens. Species include Honeysuckle (*Lonicera spp*), Rose species (*Rosa spp*) and *Acer* species.

#### 3.1.3 Hedgerow

Hedges of various management and species surround the site. The hedgerow surrounding the western garden is managed and intact containing a mixture of Hawthorn (*Crataegus monogyna*), Common Box

(*Buxus sempervirens*) and ornamental species (**Fig 3**). The understory included Nettle (*Urtica dioic*, Garlic Mustard (*Alliaria petiolata*) and Cinquefoil (*Potentilla reptans*). The hedgerow surrounding the eastern garden is unmanaged, and defunct in places, with the species included Hawthorn, Ivy (*Hedera helix*), Silver Birch (*Betula pendula*), Cherry Laurel (*Prunus laurocerasus*), and occasional Bramble (*Rubus fruticosus*) and ornamental species.

**Figure 3.** Unmanaged, intact hedgerow bordering the north of the site.



#### 3.1.4 Scattered trees

A number of scattered trees are located throughout the amenity grassland to the west and east of the dwelling. Many of these are non-native ornamental *Acer* species and Cherry Laurel but occasional natives include Hazel (*Corylus avellana*), Oak (*Quercus robur*) Silver Birch, Elder (*Sambucus nigra*) and Holly (*Ilex aquifolium*) saplings.

### 3.1.5 Ruderal

Areas of unmanaged ruderal have developed at the edges of the western extent of the garden dominated by Bramble and Nettle but with occasional species including Common Ragwort (*Senecio jacobaea*), Hogweed (*Heracleum sphondylium*), Dock (*Rumex* spp), Bindweed (*Calystegia* spp), Spear Thistle (*Cirsium vulgare*), Dandelion, Buttercup, Rosebay Willowherb (*Chamerion angustifolium*), Nipplewort (*Lapsana communis*), Garlic Mustard and Wild Garlic (*Allium ursinum*) (Fig 4).

**Figure 4.** Area of unmanaged ruderal vegetation to the west of the site.



### 3.1.5 Hard standing

Hard standing on site is formed of a concrete driveway leading from the south east of the site around the east of the dwelling and to the north of the site.

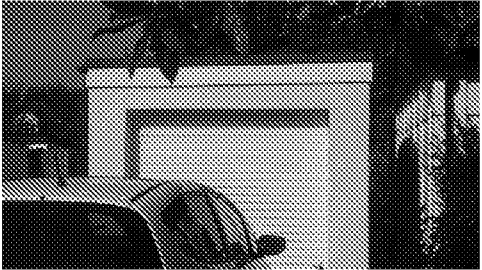
### 3.1.6 Buildings

There are two built structures present on site that have been described in greater detail below with respect to their bat roosting potential.

## 3.2 Preliminary Roost Assessment

There are two buildings on site that were assessed for any bat roosting potential. The results of this are provided in **Table 1**.

**Table 1.** Bat roost potential assessment of buildings on site.

| Building                  | Figure                                                                                                                                               | Description of construction                                                                                                                                                                                                                                                      | Suitable features / evidence                                                                                                                                                                                                                                 | Assessment                                                                                                                     |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 26 Downview Road dwelling | <p><b>Figure 5.</b> East side of 26 Downview Road dwelling.</p>     | 1950s white washed wall bungalow with 1 chimney and a porch to the north ( <b>Fig 5</b> ). The roof is a formed from corrugated concrete roof tile with bitumen felt underlining. The porch has a roof of bitumen felt. The gable ends to the north and south have wooden slats. | Potential Roost Features (PRFs) recorded include gaps under tiles, large gaps in lead flashing around chimney and roof cowl, small gaps (>2cm) in barge boarding and between wooden slats on gable end and large gaps into loft space on edge of gable ends. | Considering the PRFs present and the surrounding environ, the dwelling was considered to be of <b>Moderate</b> roost potential |
| Garage                    | <p><b>Figure 6.</b> Garage associated with 26 Downview Road.</p>  | Single white washed garage with double skinned playboard/ bitumen felt roof. Roof recently replaced and in good repair ( <b>Fig 6</b> ).                                                                                                                                         | No PRFs noted.                                                                                                                                                                                                                                               | <b>Negligible</b>                                                                                                              |

### 3.3 Breeding and Nesting Birds

The scattered trees, ornamentals and hedgerow provide suitable habitat for breeding and nesting birds.

## 4.0 EVALUATION, IMPACTS & RECOMMENDATIONS

### 4.1 Site Evaluation

Overall, the site is considered to be of **Low** ecological value with the habitats wide spread and generally of value at the **Site** level of significance however with a building considered to be of **Moderate** potential for roosting bats and mature shrubs of value to breeding and nesting birds.

### 4.2 Potential Impacts of the Proposals

The proposals to demolish the building could result in the disturbance of roosting bats and the eventual loss of a bat roost. At this stage in the development of detailed proposals, the extent in which scattered trees will be impacted has been undecided, however if trees are removed this could result in the disturbance of breeding and nesting birds. In the absence of mitigation these impacts would have a certain negative impact at site level.

### 4.3 Recommendations

#### 4.3.1 Bats

As it is considered the dwelling is of **Moderate** roost potential, a dusk emergence and a dawn re-entry survey over two survey visits will be required in line with best practice guidance (**Table 2**).

**Table 2.** Recommended minimum number of survey visits (from Table 7.3 (BCT, 2016).

| Low Roost Suitability                                         | Moderate Roost Suitability                                                           | High Roost Suitability                                                                                                                 |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| One survey visit. One dusk emergence or dawn re-entry survey. | Two separate survey visits. One dusk emergence and a separate dawn re-entry survey*. | Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third could be either dusk or dawn. |

These surveys can only be undertaken **between May – September (one survey before the end of August)** and will help inform a more detailed mitigation and compensation strategy should any roosts be identified.

#### 4.3.2 Breeding and nesting birds

To avoid disturbance of nesting birds or damage to their nests, clearance of the trees and shrub should be undertaken outside of the bird-nesting season (typically March – August, dependant on weather). If this is not possible, the area to be cleared should be thoroughly checked by an ecologist immediately prior to clearance. If any active nests are found they should be left undisturbed with a suitable buffer of undisturbed vegetation (ca. 3m) until nestlings have fledged.

#### 4.3.3 Enhancements

##### 4.3.3.1 Hedgerows and trees

Any existing hedgerows and trees that are going to be removed must be compensated elsewhere. As a general enhancement, any landscape planting should aim for a 70:30 ratio in favour of native species over non-natives and ornamentals (in line with the IEEM guidance outlined within Smith & Day (2012).

Species that can be considered within any planting include: Rowan (*Sorbus aucuparia*), Alder (*Alnus glutinosa*), Hazel (*Corylus avellana*), Holly (*Illex aquifolium*), Silver Birch (*Betula pendula*), Small-leaved Lime (*Tilia cordata*), Willow (*Salix* spp.). Non-natives and ornamentals should only be given a bias in formal locations where aesthetics are a priority.

#### 4.3.3.2 Bird boxes

To provide an increase in the potential for birds on site and to help in offsetting potential loss of scattered trees, bird boxes will be erected onto the new residential buildings. Specific details for these can be determined once the details of the proposed development are determined.

#### 4.3.3.3 Further enhancements

The full recommendations for ecological enhancements will be made after the additional surveys recommended have been undertaken when a clearer idea of the opportunities for enhancements will be better understood.

## 5.0 REFERENCES

Arun District Council Local Plan 2011-2031 (Adopted July 2018)

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