British Garden Centres

Pulborough Garden Centre

Pulborough

West Sussex

Preliminary Ecological Appraisal for New Warehouse

BRITISH GARDEN CENTRES

VERSION 2

Final

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Contents

Executive Summary

BiOME Consulting Ltd was commissioned by British Garden Centres to undertake a Preliminary Ecological Appraisal (PEA) to inform proposed redevelopment works (new warehouse) of areas located within the British Garden Centres complex in Pulborough (the 'site').

The ecology surveys detailed within this report were completed in order to determine the baseline ecological conditions of the site, with particular attention given to the possible presence of protected, controlled or otherwise notable species.

The proximity of the Mens Special Area of Conservation (SAC), Ebernoe Common SAC and Arun Valley Special Protection Area (SPA) required an initial assessment to determine if the proposals would adversely impact upon the features for which these sites are designated, namely Bechstein's Bat, Barbastelle bat and wintering Bewick's Swans. It has been assessed that no adverse impacts to these sites qualifying species would occur as a consequence of the proposals. It should be ensured that appropriate environmental protection measures are employed during construction, which should be detailed within a Construction Environmental Management Plan (CEMP).

All buildings/trees that many be impacted by works are of negligible value to roosting bats and no further survey work is considered necessary. In the highly unlikely event that any bats are disturbed during works, works must cease and the advice of an ecologist should be sought.

Whilst Great Crested Newt (GCN) presence in the local area was confirmed from the desk study, there is an absence of any suitable GCN habitat in areas proposed for works. It is considered that no further survey work or mitigation in relation to GCN is necessary prior to works commencing. However, in the unlikely event that any GCN are disturbed during works, works must cease and he advice of an ecologist should be sought.

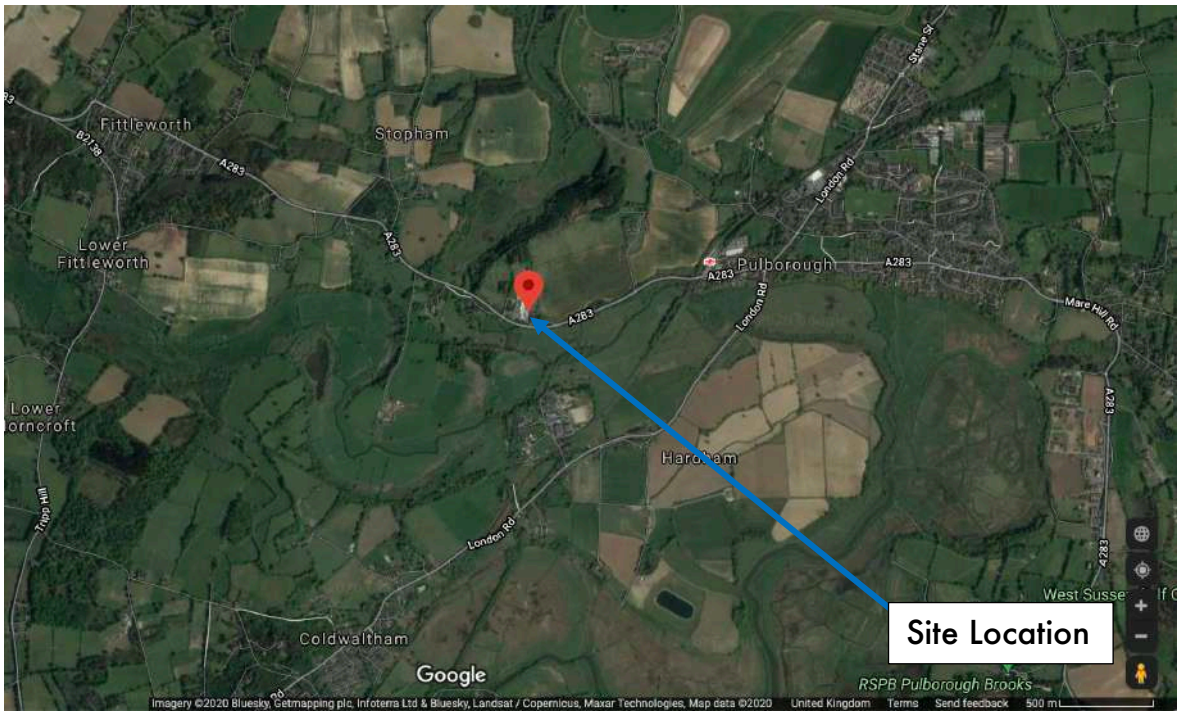
No other potential adverse impacts to protected/important species or habitats were identified.

1. Introduction

BiOME Consulting Ltd was commissioned by British Garden Centres in June 2021 to undertake a Preliminary Ecological Appraisal (PEA) to inform proposed redevelopment works of areas located within the British Garden Centres complex, in Pulborough, West Sussex (the 'site'). The site (**Figure 1**) is centred on National Grid Reference TQ 03288 18317.

A PEA of the survey area as shown on **Figure 2** was completed in November 2020[1]. This survey area incorporated two planning applications. This PEA report details survey findings from the red-line boundary as shown in **Figure 3**, where a new warehouse is proposed.

Figure 1. Site Location



The ecology surveys detailed within this report were completed in order to determine the baseline ecological conditions of the areas within the site to be impacted by the proposal, with particular attention given to the possible presence of protected, controlled or otherwise notable species. The results have been used

1 BiOME Consulting Ltd (2020). Pulborough Garden Centre – Preliminary Ecological Appraisal.

to identify further ecological work required to enable the proposed works at the site to proceed lawfully.

1.1. Site Description

The garden centre is located approximately 1km to the west of Pulborough. It was dominated by existing garden centre buildings, car parking and associated infrastructure (**Figure 2**). Arable farmland was present to the east, with woodland ca. 0.4km to the north, pasture to the west and the A283 to the south with meadows beyond. The River Arun was present forming a horseshoe around the site to the south, west and north, at its closest ca.100m from the site boundary.

Figure 2. Survey area (red line)

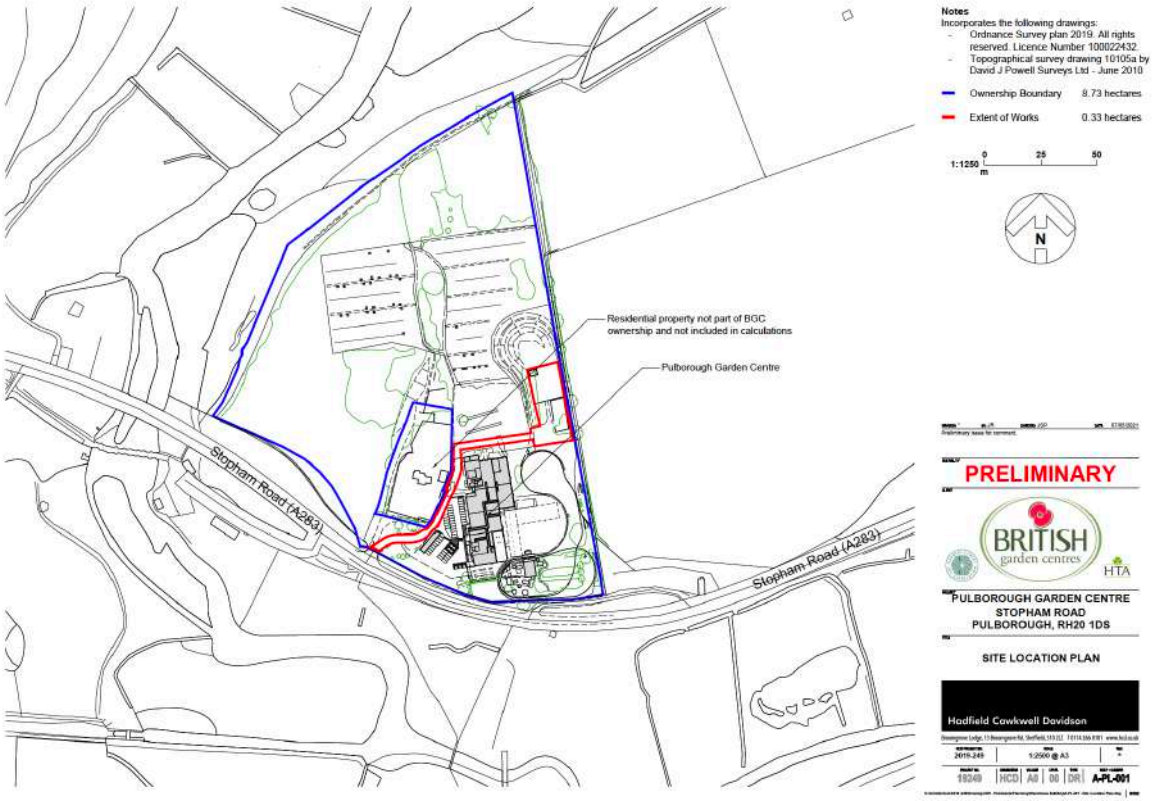


Figure 3. Site Location Plan – Red-line boundary

2. Methodologies

2.1. Desk Study

Details in relation to internationally statutory and non-statutorily designated sites and species records within 2km were obtained from Sussex Biodiversity Records Centre (SxBRC). Details of Natura 2000 sites within 20km was also obtained from Magic.gov.uk.

A search was also completed using the same database for the following, within 5km of the site:

- Granted European Protected Species (EPS) development licences.
- Great Crested Newt Class Survey Licence returns
- Pond surveys 2017-2019.

Habitats and Species of Principal Importance included within Section 41 of the Natural Environment and Rural Communities (NERC) Act and Local Biodiversity Action Plan (LBAP) [2] priority habitats and species were also reviewed to compare to those habitats and species recorded within the site during the survey or recorded as having potential to be present due to habitat suitability.

2.2. Preliminary Ecological Appraisal Survey

A PEA site survey[3],[4] was undertaken on 17 November 2020 by an experienced ecologist, Richard Moores BSc (Hons) MCIEEM. This survey was completed in suitable weather conditions (sunny and dry). Prior to the completion of the site survey, aerial imagery was reviewed[5] to provide an indication of habitat types present in the area.

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2 Sussex Wildlife Trust (undated) Biodiversity and Planning in Sussex [online] available at: https://assets.sussexwildlifetrust.org.uk/Files/swt-planning-guidance-2014.pdf (accessed 16 November 2020)

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

4 CIEEM (2017) *Guidelines for preliminary ecological appraisal* [online] available at: https://www.cieem.net/guidance-on-preliminary-ecological-appraisal-gpea- (accessed 4 November 2020)

5 Google Maps [online] available at: https://www.google.co.uk/maps (accessed 16 November 2020)

During the survey all areas within the site were walked and habitat types assessed. Signs of protected species, invasive species (*i.e.* those included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)) and other notable species were also searched for, as well as noting habitats considered to have the potential to support protected species.

The ultimate purpose of this PEA was to identify potentially valuable habitats and plant species assemblages, and to identify the presence and/or potential for protected/controlled species. This report presents an assessment of the ecological significance of the features present and discusses the potential for the site to support legally protected species and/or species of conservation interest which may be impacted by the project.

2.3. Bats

2.3.1. Preliminary Roost Assessment

A PRA survey of the building to be converted (**Appendix A**) was completed during the PEA. Richard holds a Natural England (NE) licence to survey bats (2015-10557-CLS-CLS), which derogates the law with regard to disturbance of these species.

To assess the potential for impacts to bat roosts (if present) within the site and in areas where disturbance could occur Preliminary Ground Level Inspections (PGLI) of trees within/adjacent to the site were completed to determine their potential suitability for roosting bats. This assessment involved the detailed inspection of the exterior of each tree from ground level using binoculars and a high-powered torch to identify and illuminate features that may support roosting bats (Potential Roost Features (PRFs)).

The inspection was facilitated by the use of ladders, a high-powered torch, endoscope and small dental mirrors to inspect accessible crevices considered likely to support bats. Weather conditions on the day of the survey were appropriate for undertaking ecological fieldwork (sunny and dry).

The potential suitability of the trees for roosting bats were assessed in line with in line with appropriate survey guidance[6] and allocated to one of the categories detailed within **Table 1**.

Table 1. Guidelines for assessing the potential suitability of proposed development sites for bats

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure/tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (*i.e.* unlikely to be suitable for maternity or hibernation).
Moderate	A structure/tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure/tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

2.3.2. Foraging and Commuting Habitat

Due to the nature of habitats surrounding the site and the requirement to consider potential impacts to Bechstein's Bat and Barbastelle bat (both of which are Annex II species that are qualifying features of relatively nearby Special Areas of Conservation (SACs) – see section **3.1.1**), an assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bats. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland and open water which are highly attractive to bats. Of potential importance is the presence of unlit (semi)-natural vegetation and habitat linkage between the site and the surrounding landscape.

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

The quality of bat foraging and commuting habitat has been assessed using the criteria detailed in **Table 2**.

Table 2. Valuing bat foraging and commuting habitat

Grading Criteria	Reason
Optimal Quality	Presence of optimal habitat features such as unlit woodland, scrub, hedgerows, grassland and open water with excellent linkage to similar habitats within the wider landscape. Presence of high potential buildings/trees and/or known roosts within immediate landscape. Sites are generally rural in character.
Moderate Quality	Presence of optimal habitat features such as woodland, scrub, hedgerows, grassland and open water with reasonable linkage to similar habitats within the wider landscape. Limiting factors may include size of site.
Low Quality	Presence of some limited habitat features such as scrub or hedgerows, with minimal linkage to suitable habitats within the wider landscape.
Poor Quality	No suitable habitat present or, if present, highly degraded/fragmented. Minimal unlit areas with no linkage to suitable habitat beyond site. Generally urban in character.

2.4. Limitations

The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of plants and animals, such as the time of year, migration patterns and behaviour.

PGLI to assess presence/likely absence of bat roosts in trees can be completed at any time of year, although dense foliage can be a limitation. Although all trees still possessed some leaves, the vast majority of deciduous trees surveyed had shed their foliage and visibility to assess the potential presence of roost features was adequate.

SxBRC were unable to provide Badger *Meles meles* or Otter *Lutra lutra* records during the desk study. Talking into account the results of the site survey this is not considered to represent a significant limitation.

Records of birds classed as confidential by the Sussex Ornithological Society (SOS) are not included within Sussex Biodiversity Records Centre. These records relate to a range of different species. One such record has been flagged up within

this search area for this project. During the site survey an assessment of habitat suitability for Schedule 1 nesting birds was completed and no suitable habitats were identified either within the site or in areas where disturbance could occur. This is not, therefore, considered to represent a significant limitation.

3. Results

The results of the desk study (**Section 3.1**) and the site survey (**Section 3.2**) are presented below.

3.1. Desk Study

The desk study data provided by Sussex Biodiversity Records Centre summarised in this section.

3.1.1. Designated Sites

There are three statutorily designated sites and three non-statutorily designated sites, designated for their biological importance (with two further sites designated for the geological importance) within the 2km search area. Details are provided within **Table 3.**

Table 3. Designated site details

Site	Approx. distance from site centre/direction	Description
Statutorily Designated Sites		
Arun Valley SAC	1.90km/SE	**Annex II species that are a primary reason for selection of this site:** 4056 Ramshorn Snail *Anisus vorticulus* *Anisus vorticulus* occurs across a range of sites in southern and eastern England. The Arun valley is one of the three main population centres for this species in the UK. This proposed site includes two of its core sites in the wash lands of the Arun floodplain (Pulborough Brooks and Amberley Wild Brooks SSSIs).

Site	Approx. distance from site centre/direction	Description
Arun Valley SPA	1.90km/SE	**Article 4.1 Qualification (79/409/EEC):** Over winter the area regularly supports: *Cygnus columbianus bewickii* (Western Siberia/North-eastern & North-western Europe) 1.6% of the population in Great Britain 5 year peak mean for 1992/93 to 1996/7 **Article 4.2 Qualification (79/409/EEC):** an internationally important assemblage of birds over winter the area regularly supports: 2724 waterfowl (5 year peak mean 1991/92-1995/96) Including: *Cygnus columbianus bewickii*
Arun Valley Ramsar	1.90km/SE	**Ramsar Criterion 2** The site holds seven wetland invertebrate species listed in the British Red Data Book as threatened. One of these, *Pseudamnicola confusa*, is considered to be endangered. The site also supports four nationally rare and four nationally scarce plant species. **Ramsar Criterion 3** In addition to the Red Data Book invertebrate and plant species, the ditches intersecting the site have a particularly diverse and rich flora. All five British duckweed *Lemna* spp., all five water-cress *Rorippa* spp., and all three British water milfoils *Myriophyllum* spp., all but one of the seven British water dropworts *Oenanthe* spp., and two-thirds of the British pondweeds *Potamogeton* spp. can be found on site. **Ramsar criterion 5** Assemblages of international importance: Species with peak counts in winter: 13,774 waterfowl (5-year peak mean 1998/99-2002/2003)
Pulborough Brooks SSSI	1.90km/SW	This site consists of a series of wet meadows on the floodplain of the River Arun between Pulborough and Greatham. The fields, which are subject to winter, and occasional summer flooding, are dissected by a network of wet ditches, several of which support a rich aquatic flora and invertebrate fauna. The area is of outstanding ornithological importance notably for wintering wildfowl and breeding waders.

Site	Approx. distance from site centre/direction	Description
Upper Arun SSSI	0.40km/NW	The Upper Arun consists of a 13km length of the River Arun, flowing south across the weald clay and lower greensand between New Bridge, Billingshurst and Stopham Bridge, Pulborough. It supports an outstanding assemblage of breeding dragonflies including a number of rare species. The Upper Arun is relatively unpolluted and supports a diverse riverine flora. This, together with a varied river structure caused by cattle trampling and other erosion, has resulted in an extremely complex habitat upon which the dragonflies depend for breeding, feeding and resting sites.
Non-Statutorily Designated Sites		
River Rother	0.10km/S	The site consists of the River Rother, several of its tributaries, and adjoining areas of woodland, carr, marshy grassland, fen and rough pasture. Local variations in the river and its vegetation occur as it flows east from the Hampshire border to its confluence with the Arun near Pulborough. This variation, and the quality of the adjoining habitats, makes the site extremely important for wildlife.
Coldwaltham Meadow	1.90km/SW	This small, unimproved meadow is of great botanical interest. Its species-rich flora includes a large population of Southern Marsh Orchids *Dactylorhiza praetermissa*, plus many other uncommon plants.
Middle Barn Farm Meadow	1.7km/NE	Middle Barn Farm meadow is a somewhat neglected example of unimproved, wet grassland, which still retains a very rich flora. It may once have contained ponds, which are now overgrown. A drier bank in the south-eastern corner supports a typical neutral meadow flora.

Natura 2000 sites

Natura 2000 is a network of protected areas covering Europe's most valuable and threatened species and habitats. The sites in the Natura 2000 network are designated under the 'Nature Directives', i.e. the Birds and Habitats Directives[7].

A Habitat Regulations Assessment (HRA) refers to the several distinct stages of assessment which must be undertaken in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended)[8] to determine if a plan or project may affect the protected features of a site. All plans and projects (including planning applications) which are not directly connected with, or necessary for, the conservation management of a habitat site, require consideration of whether the plan or project is likely to have significant effects on that site.

There are four European designated Natura 2000 sites within 20km of the site (**Table 4**).

Table 4. All Natura 2000 Sites within 20km of the site

Site	Approx. distance from site centre/direction	Reasons for designation
Arun Valley SAC, SPA, Ramsar	1.90km/SE	See **Table 3**.
The Mens SAC	5km/N	**Annex 1 habitat:** Atlantic beech forests with Ilex or sometimes *Taxus* in the shrub layer (*Quercion robori-petraeae* or *Ilici-Fagenion*)
Duncton to Bignor Escarpment SAC	6km/SW	**Annex I habitat**: *Asperulo-Fagetumn* beech forests
Ebernoe Common SAC	8km/NW	**Annex II species**: Barbastelle Bat *Barbastellus barbastellus*, Bechstein's Bat *Myotis bechsteinii* **Annex 1 habitat**: Atlantic beech forests with Ilex or sometimes *Taxus* in the shrub layer (*Quercion robori-petraeae* or *Ilici-Fagenion*)

7 https://ec.europa.eu/environment/nature/legislation/index_en.htm
8 https://www.legislation.gov.uk/uksi/2010/490/contents/made

The South Downs Local Plan (SDLP) (adopted 2 July 2019) includes Policy SD10 in relation to development and internationally designated sites. This policy sets out specific requirements for development in relation to the following international nature conservation designations: The Mens SAC, Ebernoe Common SAC, Singleton & Cocking Tunnels SAC, Arun Valley SPA, Wealden Heaths Phase II SPA, and the Solent Coast SPAs. The following is taken from the SDLP:

Strategic Policy SD10: International Sites

The Mens SAC, Ebernoe Common SAC and Singleton & Cocking Tunnels SAC

1. Development proposals on greenfield sites and sites that support or are in close proximity to suitable commuting and foraging habitat (including mature vegetative linear features such as woodlands, hedgerows riverine and wetland habitats) within the following ranges as shown on the Policies Map, should have due regard to the possibility that Barbastelle and Bechstein's Bats will be utilising the site. Such proposals will be required to incorporate necessary surveys and ensure that key features (foraging habitat and commuting routes) are retained, in addition to a suitable buffer to safeguard against disturbance[45].
    1. a) *6.5km: Key conservation area – all impacts to bats must be considered given that habitats within this zone are considered critical for sustaining the populations of bats within the SACs; and*
    2. b) *12km: Wider conservation area – significant impacts or severance to flightlines to be considered.*
2. Proposed use or development of the tunnels comprising the Singleton & Cocking Tunnels SAC will be required to demonstrate that there is no adverse effect on the interest features, including hibernation habitat for Barbastelle and Bechstein's Bats, or on the integrity of the site.

Arun Valley SPA

3. Development proposals on greenfield sites within 5km of the Arun Valley SPA, as shown on the Policies Map, will undertake an appraisal as to whether the land is suitable for wintering Bewick Swan. If it is suitable then surveys will be undertaken to determine whether the fields are of importance to the swan population. If so, appropriate alternative habitat would be required before development could proceed.

There would appear to be negligible connectivity between the site and the following three sites: Ebernoe Common SAC, The Mens SAC, and Duncton to Bignor Escarpment SAC, and the nature of the proposals means no potential

impacts are anticipated to these Natura 2000 sites. However, further details in relation to bats are provided in **Section 3.2.1.1**.

The Arun Valley SPA is designated due to the wintering population of Bewick's Swan. Discussion regarding this site/species are included in **Section 3.2.1.6**.

The River Arun flows towards the Arun Valley SAC/SPA/Ramsar to the west and south of the site, and is within ca.100m of the site at its closest point. It is recommended that all works are completed following best practice industry guidance detailed within a standalone Construction Environmental Management Plan (CEMP) to ensure no adverse impacts to the Arun Valley statutorily designated site occur (**Section 4.1**). Assuming industry best practice is followed, it is assessed that no adverse impacts to either Arun Valley site or any other Natura 2000 site will occur.

Taking into account the nature of the proposals, the site and the locations/qualifying features of the identified designated sites, no impacts in relation to any designated sites are anticipated and no further works are required.

3.1.2. Species

The biological records search yielded records of 437 species. Relevant records summarised on **Section 3.2**.

3.2. PEA/PRA Site Survey

3.2.1. Habitats

The area proposed for the new warehouse currently houses skips, numerous shipping containers and is in use for storage. On the east side of this area a north-south bank formed of spoil was present, with vegetation growth including Buddleia, Spear Thistle, Rosebay Willowherb, Nipplewort and Common Nettle *Urtica dioica*. A line of immature Silver Birches ran along the western side of this area.

Photograph 2. Main part of site

The biological records search returned records of 69 species of higher plants (**Appendix B**) none of which were identified in the site (subject to limitation due to the date of the survey) or are likely to occur on site given the nature of the habitats present.

None of the habitats present with the impact areas are considered to be of significant ecological value and no further survey work is deemed necessary.

3.2.2 Species

3.2.1.1. Bats

All bat species are European Protected Species (EPS) protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and they

receive national protection under the Wildlife and Countryside Act 1981 (as amended).

Desk Study

The desk study returned records of a number of bat species, as detailed within **Table 5**.

Table 5. Desk study results - bats

Species	Number of Records	Maximum Abundance	Most Recent Record	Roost Records?
Barbastelle sp. *Barbastella*	1	1	2017	N
Western Barbastelle *Barbastella barbastellus*	4	1	2019	Y
Bat sp.	7	25	2013	Y
Serotine *Eptesicus serotinus*	6	2	2019	Y
Myotis sp.	2	1	2019	Y
Daubenton's Bat *Myotis daubentonii*	6	5	2017	N
Whiskered Bat	3	1	2015	Y
Whiskered/Brandt's *Myotis mystacinus/brandtii*	1	2	1994	Y
Natterer's Bat *Myotis nattereri*	2	1	2018	Y
Noctule *Nyctalus noctula*	5	1	2019	Y
Pipistrelle Bat species	2	1	2016	N
Common Pipistrelle	19	86	2019	Y
Soprano Pipistrelle	49	428	2019	Y
Long-eared Bat species *Plecotus* sp.	4	2	2019	Y
Brown Long-eared Bat	10	14	2017	Y

Nine bat EPS licences have been granted within the 5km search area; details are summarised within **Table 6**.

Table 6. Granted EPS licence details, within 5km

Species	Approx. distance from site centre/ direction	Licence Start Date	Breeding Site?
Bats (Soprano Pipistrelle *Pipistrellus pygmaeus*)	1.05km/E	04/08/2016	N
Bats (Soprano Pipistrelle)	1.24km/E	12/09/2016	N
Bats (Common Pipistrelle *Pipistrellus pipistrellus,* Brown Long-eared Bat *Plecotus auritus,* Serotine *Eptesicus serotinus*)	1.84km/W	04/07/2017	N
Bats (Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat, Natterer's Bat *Myotis nattereri*)	3.69km/SW	01/03/2011	Y
Bats (Common Pipistrelle, Soprano Pipistrelle)	3.74km/SW	27/03/2015	Y
Bats (Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat, Serotine)	4.01km/N	20/11/2015	N
Bats (Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat, Whiskered Bat Myotis mystacinus)	4.45km/SE	25/04/2017	Y
Bats (Common Pipistrelle, Soprano Pipistrelle)	4.67km/N	08/09/2017	N
Bats (Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat)	5.00km/E	03/03/2010	Y

Trees

All trees that are proposed for removal or that maybe indirectly impacted by the proposals were assessed from ground level to consider the potential presence of roost features. No PRFs were identified and all were assessed to be of ***negligible*** value (**Table 1**) to roosting bats and no further survey work is considered necessary.

Foraging/Commuting Habitat

The site supports very little natural vegetation or habitat features of potential value to foraging/commuting bats. SACs that support Annex II species Barbastelle and Bechstein's Bat are present within 8km of the site and potential impacts to these species need to be considered[9]. Barbastelles preferentially select riparian zones

9 South Downs Local Plan (adopted 2 July 2020). South Downs National Park Authority

and broad-leaved woodland habitat for foraging[10]. Bechstein's Bat forage almost exclusively in woodland (usually mature/semi-mature)[11]. No such habitats are present within the site or in immediately adjacent areas. It is assessed that the proposals will not adversely impact any habitats used by either Barbastelle or Bechstein's Bat, and no impacts to these species (and consequently designated sites of which they are qualifying features) are predicted.

Overall, the site was assessed to provide *LOW* quality habitat (**Table 2**) for foraging/commuting bats. No further survey work is deemed necessary.

3.2.1.2. Badger

Badger are protected through the Protection of Badgers Act 1992, which makes it an offence to recklessly take, injure or kill a Badger or cause disturbance to its sett. Furthermore, Badgers are afforded protection from ill-treatment, which has been defined to include preventing a Badger accessing its sett, as well as causing the loss of significant foraging resources within a Badger territory. Badgers are also protected through this species' inclusion on Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), which prohibits their killing or taking by certain methods.

No evidence of Badger was present within the site/adjacent areas, and the potential presence of this species within the site is considered unlikely. Badger records were not available from SxBRC during the desk study. No impacts/breaches of legislation relevant to this species are anticipated, no further survey work is considered necessary and this species is not considered further within this report.

3.2.1.3. Other Section 41 Mammals

In England many of the rarest and most threatened species are included within Section 41 of the 2006 Natural Environment and Rural Communities Act. Although these species are afforded no additional legal protection, their rarity renders them an important consideration for planning applications. Section 40(1) of this Act imposes a duty to conserve biodiversity; '*Every public authority must, in exercising its function, have regard, so far as is consistent with the proper exercise of those*

10 Zeale M et al. Home Range and Habitat Use by Barbastelle bats: implications for conservation. Journal of Mammalogy 93 (4) 1110-1118.
11 https://www.bats.org.uk/about-bats/where-do-bats-live/bat-habitats/foraging-habitats

functions, to the purpose of conserving biodiversity'. Section 40(3) of the Act explains that *'Conserving biodiversity includes, in relation to living organism or type of habitat, restoring or enhancing a population or habitat'*.

It is likely that Hedgehogs *Erinaceus europaeus* are resident in the local area. Optimal habitats for other Section 41 mammal species are absent from the site and immediate surrounding area. Taking into account the abundance of similar habitats in the vicinity, the potential for impacts to Hedgehog, or any other Section 41 mammal species within the site, is considered highly unlikely.

The desk study returned records of a number of terrestrial Section 41 mammal species, as detailed within **Table 7**.

Table 7. Desk study results – Section 41 mammals

Species	Number of Records	Maximum Abundance	Most Recent Record
European Water Vole *Arvicola amphibius*	11	2	2019
Hedgehog	12	9	2018
Brown Hare *Lepus europaeus*	1	1	2008
Polecat *Mustela putorius*	3	1	2016

No further work in relation to other Section 41 mammals is considered necessary. Section 41 mammals are not considered further within this report.

3.2.1.4. Amphibians

A number of amphibian species are legally protected under Section 9 of the Wildlife and Countryside Act 1981, as listed under Schedule 5. Great Crested Newts and Natterjack Toads *Epidalea calamita* are also afforded additional protection as EPS, as defined under the EC Habitats and Species Directive 92/43/EEC.

Two GCN EPS licences have been granted within the 5km search area; details are summarised within **Table 8**.

Table 8. Granted EPS licence details, within 5km

Species	Approx. distance from site centre/ direction	Licence Start Date	Breeding Site?
GCN	0.54km/S	12/08/2013	N
GCN	4.40km/N	31/08/2020	N

Details of GCN pond survey (to inform district licencing) are provided within **Table 9** with details of GCN Class Licence Returns within **Table 10**.

Table 9. GCN pond survey results (to inform district licencing) within 5km

Species	Approx. distance from site centre/ direction	Year	Present/Absent
GCN	3.61km/NE	2019	Absent
GCN	4.95km/NE	2019	Absent

Table 10. GCN Class Licence Returns within 5km

Species	Approx. distance from site centre/ direction	Year	Present/Absent
GCN	0.54km/S	2014	Present
GCN	3.01km/SE	2018	Present
GCN	3.02km/SE	2018	Present

The SxBRC desk study returned records of a number of amphibian species, as detailed within **Table 11**.

Table 11. Desk study results – amphibians

Species	Number of Records	Maximum Abundance	Most Recent Record
Common Toad *Bufo bufo*	7	100	2017
Palmate Newt *Lissotriton helveticus*	1	Present	2002
Smooth Newt *Lissotriton vulgaris*	3	1	1999
Common Frog *Rana temporaria*	5	1	2002
GCN	4	4	2014

No ponds were present within the site. A single pond was shown as present on Ordnance Survey mapping within 0.25km (considered to be the typical ranging

distance from a breeding pond for the majority of a population of GCN[12]), this was located ca. 220m to the southeast, adjacent to the River Arun. However, the whole valley was flooded at the time of the survey and this pond was consequently not visible.

The extent of suitable terrestrial habitat for GCN within the site is extremely limited, and areas of proposed works are limited to areas considered to be unsuitable GCN terrestrial habitat. No further survey work is considered necessary. In the apparently unlikely event that GCN are encountered during site clearance works must cease and ecological advice sought.

3.2.1.5. Reptiles

Reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981. Section 9(1) of the Wildlife and Countryside Act 1981 prohibits the killing, injuring or taking by any method. All native reptiles are also S41 priority species.

Habitats favoured by reptiles tend to be sunny, well-drained and often south-facing. Typical habitats include grass and heather heathland, chalk downland, coppiced woodland, sand dunes, disused allotments, suburban wasteland, road/railway embankments, golf course roughs, rough grassland, open woodland and woodland edge, immature plantation forestry, sea cliffs, moorland, disused quarries, non-intensive farmland and wild gardens. In addition, Grass Snakes *Natrix helvetica* favour damp habitats[13].

Desk study results in relation to reptiles are summarised within **Table 12**.

Table 12. Desk study results – reptiles

Species	Number of Records	Maximum Abundance	Most Recent Record
Slow-worm *Anguis fragilis*	24	52	2017
Grass Snake *Natrix helvetica*	24	6	2017
Adder *Vipera berus*	4	1	1996
Common Lizard *Zootoca vivipara*	19	12	2018

12 English Nature (2001). *Great Crested Newt Mitigation Guidelines*
13 Froglife (1999). *Froglife Advice Sheet 10; Reptile Survey. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*

Areas of the site where works are proposed are considered sub-optimal for reptiles.

No further survey work is deemed necessary and no impacts/breaches of legislation are considered likely. In the apparently unlikely event that reptiles are encountered during site clearance works must cease and ecological advice sought.

3.2.1.6. Birds

All wild birds (defined as species which are resident or are visitors to the United Kingdom (UK), but generally not game birds) are protected by the Wildlife and Countryside Act 1981 (as amended). As far as planning and development is concerned, it is an offence to kill, injure or take any wild bird. Some species, listed in Schedule 1 of the Act, are protected by special provisions because of their rarity and it would constitute an offence to disturb them while nesting (which includes nest building). It is also an offence to disturb dependent young of a Schedule 1 bird.

A small number of bird species were recorded during the PEA site survey:

- Magpie *Pica pica*
- Wood Pigeon *Columba palumbus*
- Song Thrush *Turdus* philomelos
- Dunnock *Prunella modularis*
- Wren *Troglodytes troglodytes*
- Robin *Erithacus rubecula*
- Pied Wagtail *Motacilla alba*
- Blue Tit *Cyanistes caeruleus*
- Chaffinch *Fringilla coelebs*
- Meadow Pipit *Anthus pratensis*

No Schedule 1 (of the Wildlife & Countryside Act 1981 (as amended)) bird species were observed and no suitable breeding habitats/features for such species were present in areas to be impacted, either directly or indirectly.

Arun Valley SPA (ca. 1.9km to the southeast) has been designated due to its wintering population of Bewick's Swans. This species uses farmland (for feeding), coastal bays, wetlands and river valleys during winter. The site, and its immediate

surrounds, does not support any habitats used by this species. No adverse impacts to this species (and consequently Arun Valley SPA) are considered likely to occur due to the proposals.

The desk study returned records of a large number of bird species (**Appendix B**).

No potential habitats for any nesting bird species was noted in the survey area. No further survey work is deemed necessary and no impacts/breaches of legislation are considered likely. Breeding birds are not considered further in this assessment.

3.2.1.7. Invertebrates

A number of invertebrate species are afforded legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). These species are protected from intentional killing, injuring or taking, possession or control, intentional damage/destruction of any structure or place used for shelter or protection, intentional disturbance while occupying such a structure/place, selling or offering for sale or buying. Numerous species are also included on Section 41 of the NERC Act.

The desk study returned records of 11 species of Ant/bee/sawfly/wasp, 95 species of beetle, 11 species of butterfly, three species of dragonfly/damselfly, three species of grasshopper/cricket, eight species of mollusc, 25 species of moth, three species of spider, five species of true bug and five species of true fly.

Taking into account the nature of the habitats on-site/nearby it is considered highly unlikely that significant populations/species of invertebrates are present and no further works relating to invertebrates are considered necessary. Invertebrates are not considered further within this report.

3.2.1.8. Invasive Species

No non-native invasive species listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended) were observed during the survey.

The desk study returned records of variety of species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) (**Appendix B**):

- Birds – 14 species.

- Higher Plants – 12 species.
- Invertebrates – One species (Signal Crayfish *Pacifastacus leniusculus*)
- Mammals – Two species (American Mink *Neovison vison* and Grey Squirrel *Sciurus carolinensis*).

No further work in relation to invasive species is considered necessary. Invasive species are not considered further within this report.

4. Conclusions and Recommendations

A PEA (including PRA) site survey/complimentary desk study have been completed to inform planning application/s at Pulborough Garden Centre, Sussex. These surveys identified the below detailed ecological issues.

4.1. Sites

The proximity of the Mens SAC, Ebernoe Common SAC and Arun Valley SPA required an initial assessment to determine if the proposals would adversely impact upon the features for which these sites are designated, namely Bechstein's Bat, Barbastelle bat and wintering Bewick's Swans. It has been assessed that no adverse impacts to these sites qualifying species would occur as a consequence of the proposals.

It should be ensured that appropriate environmental protection measures are employed during construction, which should be detailed within a CEMP.

4.2. Bats

All trees that may be impacted by works are of negligible value to roosting bats and no further survey work is considered necessary.

In the highly unlikely event that any bats are disturbed during works, works must cease and the advice of an ecologist should be sought.

4.3. Great Crested Newt

Whilst GCN presence in the local area was confirmed during the desk study, there is an absence of any suitable GCN habitat in areas proposed for works. It is assessed that no further survey work or mitigation in relation to any amphibian species is necessary prior to works commencing. However, in the unlikely event that any GCN are disturbed during works, works must cease and he advice of an ecologist should be sought.

4.4. Opportunities for Enhancement

The National Planning Policy Framework (NPPF) sets out national planning policies for the protection of biodiversity (and geological) conservation through the planning system. A key principle of NPPF is that, '*Opportunities to incorporate biodiversity in and around developments should be encouraged*'. Taking the

requirements of NPPF into account, opportunities should be sought where possible for nature conservation enhancement at this site.

Opportunities may exist to create small habitat areas and to use native species in any landscape planting. Opportunities also exist to enhance the site for bat and bird species through the incorporation of bat/bird boxes into built structures or on retained trees. Section 41 priority species such as the House Sparrow could potentially benefit from the provision of appropriate boxes. Such measures would therefore be beneficial to nature conservation and show compliance with the policy guidance.