



**Preliminary Ecological  
Appraisal**

Highfields, East Grinstead

December 2022

# Preliminary Ecological Appraisal

## Highfields, East Grinstead

22/12/2022

Brundell Property

12 Hay Hill

Mayfair

London

W1J 8NR

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### Phlorum Limited

Southern Office: Unit 12, Hunns Mere Way, Brighton, BN2 6AH

T: 01273 307 1670 E: [info@phlorum.com](mailto:info@phlorum.com) W: [www.phlorum.com](http://www.phlorum.com)

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# Non-technical Summary

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Phlorum Ltd was commissioned by Brundell Property to undertake a Preliminary Ecological Appraisal which was carried out at Highfields, East Grinstead on the 6<sup>th</sup> June 2022, in order to determine whether any ecological constraints could affect the proposed works for the site.

Current proposals are for a Care Home (C2 Use Class). The survey area extended over approximately 1.2 hectares (ha).

The main findings of the surveys are as follows:

- The site is not subject to any statutory or non-statutory designations. The closest statutory designated site is High Weald AONB, located 240m to the southeast.
- The site comprised buildings, hardstanding, amenity grassland, broad-leaved semi-natural woodland, a swimming pool, scattered trees, introduced shrub, ornamental hedge, a line of trees, and individual trees.
- Due to evidence of sett-building by badgers on the site, a badger survey was carried out concurrently with the Preliminary Ecological Appraisal which found badgers to be present. Full details of this can be found in the Badger Survey Report (Phlorum, 2022).
- If any mature trees are to be removed from the site boundaries, it is recommended that a Preliminary Tree Roost Assessment is carried out to determine whether these trees have potential to support roosting bats.
- In addition, a precautionary approach to site clearance in respect to reptiles, breeding birds, hazel dormice, hedgehogs, and stag beetles is recommended to minimise any adverse impacts on these species groups.

Further information on precautionary working practices and additional surveys together with recommended mitigation and enhancement measures are discussed in Section 5.

# 1. Introduction

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## Background

- 1.1 Phlorum Ltd has been commissioned by Brundell Property to undertake a Preliminary Ecological Appraisal, to inform the potential ecological constraints of proposed future development of Land at 1 & 2 Highfields, West Hill, East Grinstead, RH19 4DL (hereafter referred to as “the site”).
- 1.2 The purpose of the Preliminary Ecological Appraisal was:
  - 🌿 to identify the major habitats present;
  - 🌿 to identify the potential for any legally protected species to be present; and
  - 🌿 to recommend any additional ecological surveys, if required.
- 1.3 As part of the assessment, a desktop review and a site visit were carried out. The results of which were used to assess the nature conservation importance of the site and the potential of the site to support protected species.
- 1.4 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and CIEEM, 2017 and 2018).
- 1.5 It is understood that the proposed development is for a Care Home (C2 Use Class).

## Site Location

- 1.6 The site is situated in a semi-urban location off West Hill in East Grinstead, approximately 350m south of the A22. The site is surrounded predominantly by residential properties with associated private gardens. Brooklands Park, an area of grassland and scattered trees, is less than 100m to the north. The wider surrounds are built-up to the north and east, with agricultural land and small blocks of woodland to the south and west.
- 1.7 The National Grid Reference for the centre of the site is TQ 38999 37797. The survey area extended over approximately 1.2 hectares (ha).

## 2. Methodology

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### Desk Study & Consultations

#### Database and Map Search

- 2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within a 2km radius of the site. The database and map search was based on available information provided by the following sources:
- 🌿 Sussex Biodiversity Record Centre (SxBRC, 2022);
  - 🌿 Multi-Agency Geographical Information for the Countryside (MAGIC, 2022);
  - 🌿 Ordnance Survey mapping;
  - 🌿 Aerial photography; and
  - 🌿 The Woodland Trust online Ancient Tree Inventory.

### Habitat Survey and Assessment

- 2.2 Phlorum Limited carried out an ecological survey of the site on the 6<sup>th</sup> June 2022. The survey was carried out by a suitably qualified ecologist, Natalie Arscott, who has over 3 years' professional experience of undertaking ecological surveys. The weather conditions during the survey were dry and overcast.
- 2.3 The field survey comprised a walkover inspection of the land and habitats present. The survey followed standard Phase 1 survey methodology (JNCC, 2010) and covered all accessible parts of the site, including boundary features. Habitats were described and mapped (Figure 1: Appendix A). A list of plant species was compiled, together with an estimate of abundance made according to the DAFOR scale (Appendix D).
- 2.4 This assessment provides information on the habitats in the survey area and identifies actual or potential presence of legally protected or otherwise notable species/habitats in or immediately adjacent to the site.
- 2.5 Target notes highlighting a particular feature of ecological interest are provided in Appendix B, with associated photographs.
- 2.6 Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2010) for vascular plant species.

## Protected Species Assessment

- 2.7 The potential for the site to provide habitat for protected species was assessed from field observations in conjunction with results of the desk study. The site was inspected for indications of the presence of protected species including:
- Habitat considered suitable to support widespread reptile species including areas with a scrub/grassland mosaic and potential hibernation sites;
  - On-site ponds offering potential breeding opportunities for great crested newts (*Triturus cristatus*) and the presence of suitable terrestrial habitat including hedgerows and rough grassland;
  - The presence of features in and on trees indicating potential for roosting bats (Chiroptera), including knot and rot holes and loose bark. Secondary evidence of bats including staining, droppings, and feeding remains were also looked for;
  - The presence of nesting habitat for breeding birds, including mature trees, dense scrub, and hedgerows, and direct evidence of bird nesting including bird song, old nests etc.;
  - Habitats considered suitable to support badger (*Meles meles*) setts, and evidence in the form of hair, pathways, and latrines;
  - Presence of woodland and/or hedgerows providing suitable habitat to support hazel dormice (*Muscardinus avellanarius*);
  - Riparian habitat supporting suitable features for water voles (*Arvicola amphibius*) and otters (*Lutra lutra*); and the
  - Presence of nationally protected and/or invasive plants.
- 2.8 The potential presence for protected species is categorised as **Negligible, Low, Moderate, High, or Present**, based on the findings of the field survey and on the evaluation of existing data.
- 2.9 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species or mitigation should be recommended.

## Caveat

### Data Search Constraints

- 2.10 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

### **Survey Constraints**

- 2.11 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.
- 2.12 The survey was carried out during the peak growing season and most species would be expected to be visible and identifiable, however this does not apply to all species.
- 2.13 The appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. This survey provides a preliminary view of the likelihood of protected species occurring on the site based on the suitability of the habitat, known distribution of the species in the local area, and any direct evidence on the site. It is therefore used as a tool to recommend further protected species surveys (or other species of significant nature conservation interest) if on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present.
- 2.14 It is however considered that the survey was sufficiently rigorous to assess the ecological value of the site.

### **Limitations**

- 2.15 This appraisal also does not constitute as a full invasive species survey. All surveys are subject to the conditions on site at the time of the survey. Site surveys are non-intrusive and rely on the visual identification of aboveground growth. If parts of a site are inaccessible, then these areas can often not be surveyed unless they can be viewed from other areas. If any aboveground growth is being managed or has been disturbed or covered, or the below ground growth is dormant, then it may be impossible for us to identify invasive plants in these areas during our non-intrusive survey.
- 2.16 It should be noted that a small section of the 2km data search area falls outside of the area covered by Sussex Biodiversity Record Centre, with the boundary being 1.8km to the northeast of the site. Given the small size of this excluded area and the fact that a 1km data search is considered sufficient for a Preliminary Ecological Appraisal, a data search was not ordered from the neighbouring Surrey Biodiversity Information Centre to cover this area. As such any designated sites within or records from this area will not feature in the desk study carried out below.

## 3. Baseline Conditions

### Aerial Photography and OS Maps

- 3.1 Aerial photographs and OS maps show the site to consist of a large residential building and an outbuilding, a swimming pool, hardstanding, grassland, and trees around the boundaries. The site is bound by residential properties in all directions except to the north, where the site borders West Hill. The wider surrounds are predominantly residential, with small public parks and private gardens. There is agricultural land and small blocks of woodland further afield to the south and west. There appear to be four ponds and a stream within 500m of the site, all located to the south.

### Statutory and Non-Statutory Designated Sites

#### Statutory Sites

- 3.2 The closest statutory designated site is High Weald Area of Outstanding Natural Beauty (AONB), located 240m to the southwest. Table 1 provides a list of statutory sites within 2km of the site.

**Table 1: Statutory sites within 2km of the site**

Site Name	Reason for Designation	Area (ha)	Distance from the Site
<b>High Weald AONB</b>	An attractive landscape with a mosaic of small farms and woodlands, historic parks, sunken lanes and ridge-top villages.	145,000	240m to the southwest
<b>Worth Way Country Park</b>	A disused railway which runs through East Grinstead and then west towards Crawley Down. The track supports woodland, scrub and open grassland, and adjoins several areas of ancient woodland, ponds and unimproved meadow.	25	485m to the northwest
<b>Forest Way Country Park</b>	A disused railway bordered by young native woodland providing a 'green corridor' of importance for wildlife.	29.24	1km to the east

### Non-Statutory Sites

- 3.3 The closest non-statutory designated site is Worth Way Local Wildlife Site (LWS), located 485m to the northwest. Table 2 provides a list of non-statutory sites within 2km of the site.

**Table 2: Non-statutory sites within 2km of the site**

Site Name	Reason for Designation	Area (ha)	Distance from the Site
<b>Worth Way LWS</b>	A disused railway which runs through East Grinstead and then west towards Crawley Down. The track supports woodland, scrub and open grassland, and adjoins several areas of ancient woodland, ponds and unimproved meadow.	28.1	485m to the northwest
<b>Ashplatts Wood LWS</b>	The site lies on clays and sands to the east of East Grinstead. It comprises a mixture of Sweet Chestnut coppice together with Oak with Ash and Hazel coppice. The ground flora is dominated in places by Bluebells ( <i>Hyacinthoides non-scripta</i> ) and there are a number of wet flushes where sedges and rushes grow.	25.3	1.38km to the northeast

### Ancient Woodland

- 3.4 There is no ancient woodland covering any part of the site or immediately adjacent to the site. No trees on or adjacent to the site are listed on the Woodland Trusts' Ancient Tree Inventory.
- 3.5 The closest area of ancient woodland is situated 360m to the west.
- 3.6 The closest ancient tree is situated 750m to the east.

## Habitats

### Site Summary

- 3.7 The site comprised buildings, hardstanding, amenity grassland, broad-leaved semi-natural woodland, a swimming pool, scattered trees, introduced shrub, ornamental hedge, a line of trees, and individual trees.
- 3.8 The main habitats recorded within the site are described below. Additional details are shown on the habitat survey plan in Appendix A, and the target notes are listed in Appendix B.

## **Buildings**

- 3.9 There were four buildings on the site. Buildings B1 and B2 were inspected externally and internally, including all accessible loft spaces. Buildings B3 and B4 were inspected externally only.

### *Building 1 (B1)*

- 3.10 Building B1 was a large residential dwelling with concrete rendered exterior walls, situated within the central portion of the site. The larger, north-western section of the building had a hipped roof whilst the adjoining south-eastern section had a gable roof. The roofs were composed of slate tiles. Internally, rooms had been built into the roof space, therefore the only separate roof voids were around the perimeter of the building.

- 3.11 The building was in excellent condition. No potential roosting features or potential routes of bat ingress were seen. No secondary evidence of bats was seen internally or externally.

### *Building 2 (B2)*

- 3.12 Building B2 was a garage with concrete rendered exterior walls, situated on the site's north-eastern boundary. The building had a gable roof with slate tiles. There was an internal roof void that was used for storage.

- 3.13 The building was in excellent condition. No potential roosting features or potential routes of bat ingress were seen. No secondary evidence of bats was seen internally or externally.

### *Building 3 (B3)*

- 3.14 Building B3 was a small timber shed, situated near the site's eastern boundary. The building had a gable roof composed of bitumen felt.

- 3.15 The building was in excellent condition. No potential roosting features or potential routes of bat ingress were seen. No secondary evidence of bats was seen externally.

### *Building 4 (B4)*

- 3.16 Building B4 was a small timber shed, situated on the site's eastern boundary. The building had a gable roof composed of bitumen felt.

- 3.17 The building was in excellent condition. No potential roosting features or potential routes of bat ingress were seen. No secondary evidence of bats was seen externally.

## **Hardstanding**

- 3.18 A single-track tarmac road led from West Hill onto the main part of the site. To the north of Building B1 was a shingle area for car parking. To the south and west of building B1 was a patio area composed of paving slabs.

### **Amenity Grassland**

- 3.19 The main central portion of the site was covered by amenity grassland. This was heavily managed to maintain a very short sward length and was considered to be of low ecological value.
- 3.20 Species noted include white clover (*Trifolium repens*), common dandelion (*Taraxacum officinale*), and common daisy (*Bellis perennis*).

### **Broad-Leaved Semi-Natural Woodland**

- 3.21 Along the north-western site boundary was a strip of broad-leaved semi-natural woodland. This was on a steeply sloping bank and included predominantly young and semi-mature trees, with mature trees found on the perimeter of the habitat. No ground flora was seen. Beneath the trees was bare ground, leaf litter and fallen branches
- 3.22 Species noted include sycamore (*Acer pseudoplatanus*), hazel (*Corylus avellana*), horse chestnut (*Aesculus hippocastanum*), ash (*Fraxinus excelsior*), pedunculate oak (*Quercus robur*), ivy (*Hedera helix*), and cherry laurel (*Prunus laurocerasus*).

### **Swimming Pool**

- 3.23 There was a swimming pool within the patio area to the west of the house. This contained no vegetation and was unsuitable for use by fauna, therefore was considered to be of negligible ecological significance.

### **Scattered Trees**

- 3.24 Along the eastern and south-western site boundaries were scattered trees, including both coniferous and deciduous species. These were mostly large, mature trees. Beneath the trees was bare ground and leaf litter.
- 3.25 Species noted include holly (*Ilex aquifolium*), sweet chestnut (*Castanea sativa*), foxglove (*Digitalis purpurea*), sycamore, hazel, and horse chestnut.

### **Introduced Shrub**

- 3.26 Shrubs had been planted in several areas around the site. The shrubs were mostly spaced out within areas of bare ground or bark. A small amount of native vegetation grew in the same areas.
- 3.27 Species noted include honeysuckle (*Lonicera* sp.), rhododendron (*Rhododendron* sp.), Japanese spindle (*Euonymus japonicus*), Mediterranean spurge (*Euphorbia characias*), and Mexican orange (*Choisya ternata*).

### **Ornamental Hedge**

- 3.28 There was a short length of cherry laurel hedge on the site's north-eastern boundary.

### Line of Trees

- 3.29 A length of the site's south-western boundary was lined by trees, situated on the fence line.
- 3.30 Species noted include holly, hazel, and cherry laurel.

### Individual Trees

- 3.31 There were several isolated, ornamental trees scattered around the amenity grassland area.
- 3.32 Species noted include willow (*Salix* sp.), cherry plum (*Prunus cerasifera*), and sweet chestnut.

### Target Note (TN)

- 3.33 The following features of interest were noted during the survey and have been marked on Figure 1:
- 📍 **TN1** – specimens of cherry laurel were seen on the site, a species that appears on the Non Native Species Secretariat (NNS, 2022)<sup>1</sup> register of species that are of concern.
  - 📍 **TN2** – there were many specimens of a rhododendron on the site. *Rhododendron ponticum* is listed in Schedule 9 of the Wildlife and Countryside Act (1981 amended).
  - 📍 **TN3** – a large badger sett with signs of recent activity was found within the scattered trees on the south-western boundary. There were further potential sett entrances seen around the site peripheries.

## Protected Species

- 3.34 Legislation relating to the protected species referred to in this section is included in Appendix C.
- 3.35 The following paragraphs detail the suitability of the on-site habitats to support protected species and include information from the data search for protected, rare and otherwise notable species returned within a 2km radius.

### Bats

- 3.36 The data search showed records of bats from the genera pipistrelle (*Pipistrellus*), long eared (*Plecotus*), myotis (*Myotis*), and serotine (*Eptesicus*) occurring within the 2km search area in the past 15 years.
- 3.37 During the survey no potential bat roosting features were seen in any of the on-site buildings.

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<sup>1</sup> GB Non Native Species Secretariate (NNS) (2022). Accessed from [www.nonnativespecies.org](http://www.nonnativespecies.org)

- 3.38 There were a large number of mature trees around the site boundaries of a suitable stature to potentially host bat roosts. Potential roosting features including cracks and crevices were noted in some trees. However, the trees were not individually assessed for roosting potential during this survey as it was unknown which, if any, were to be removed.
- 3.39 Overall it was considered that the on-site buildings offered **negligible** potential for roosting bats. Some of the on-site trees may have potential to support roosting bats, but this has yet to be formally assessed.

### Birds

- 3.40 Several Red or Amber listed Birds of Conservation Concern<sup>2</sup> (BoCC), and notable<sup>3</sup> bird species were returned by the data search that may utilise habitats within the site. Species include starling (*Sturnus vulgaris*), song thrush (*Turdus philomelos*), and redwing (*Turdus iliacus*).
- 3.41 During the survey it was noted that the onsite trees provided suitable habitat for nesting birds.
- 3.42 Overall it was considered that the site offered **high** potential for breeding birds.

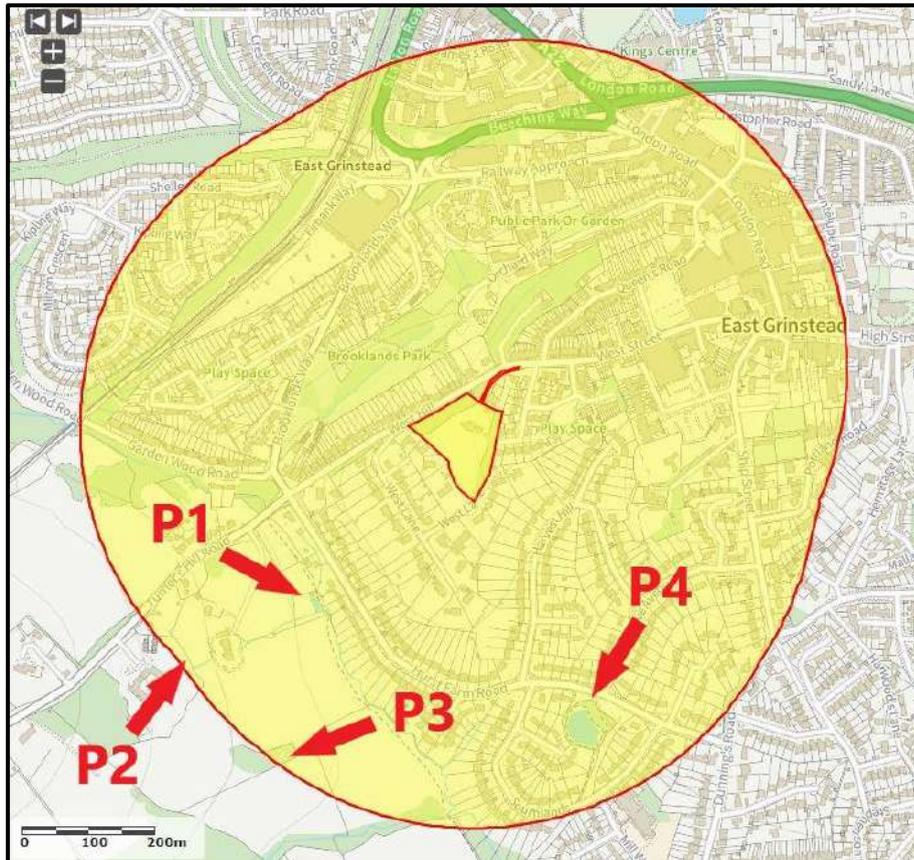
### Amphibians

- 3.43 The data search showed records of great crested newt within 2km of the site within the past 15 years. Aerial photographs and maps show 4 ponds within 500m of the site, but none within 250m (see Drawings 1 & 2 below).
- 3.44 There was no suitable water on the site to support breeding newts. Most of the terrestrial area was unsuitable for newts due to the sparsity of the vegetation. The only areas that could be potentially suitable were within the broad-leaved semi-natural woodland and scattered trees, however these were sub-optimal due to the absence of ground flora or scrub. Given that there are no ponds within 250m and the site is surrounded by a network of roads, it is considered to be highly unlikely that great crested newts would forage or commute across the site.
- 3.45 It was considered that the site offered **negligible** potential for breeding newts and **negligible** potential for foraging and commuting newts.

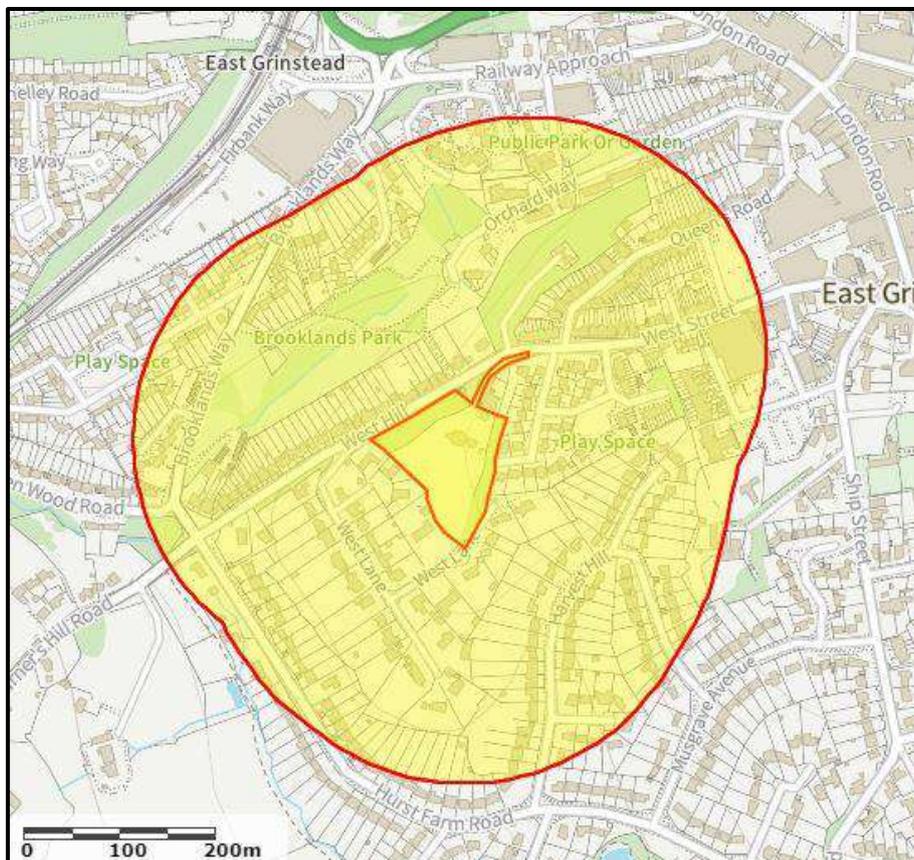
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<sup>2</sup> Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton et al, 2009). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and have not shown a substantial recent recovery. Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfil none of the criteria.

<sup>3</sup> Notable Birds are based on a list of birds that are particularly scarce or vulnerable either at national or a regional level. The majority of these bird species are designated as Schedule 1 species, under the Wildlife and Countryside Act 1981 (as amended), or listed as red or amber-listed BoCC.



Drawing 1: Ponds within 500m of the site.



Drawing 2: Ponds within 250m of the site (no ponds).

### Reptiles

- 3.46 The data search showed records of slow-worm (*Anguis fragilis*), grass snake (*Natrix helvetica*), and common lizard (*Zootoca vivipara*) within 2km of the site within the past 15 years.
- 3.47 Most of the terrestrial area was unsuitable for reptiles due to the sparsity of the vegetation. The only areas that could be potentially suitable were within the broad-leaved semi-natural woodland and scattered trees, however these were sub-optimal due to the absence of ground flora or scrub.
- 3.48 Overall the site was assessed as having **low** potential to support reptiles.

### Badgers

- 3.49 Records for this species are kept confidentially and were not returned by the data search.
- 3.50 There was considerable evidence for the presence of badgers on the site, including several setts, a latrine with fresh droppings, and snuffle holes. A badger survey was carried out concurrently with the initial site survey which confirmed the presence of badgers on the site. More details can be found in the Badger Survey Report (Phlorum, 2022).
- 3.51 Overall, it was concluded that sett-building and foraging badgers were **present** within the site.

### Hazel Dormice

- 3.52 The data search showed three records of dormice within 2km of the site within the past 15 years.
- 3.53 The broad-leaved semi-natural woodland on the site would potentially be suitable for dormice, however it is sub-optimal due to its isolation from other areas of suitable habitat.
- 3.54 Overall it was considered that the site offered **low** potential to support breeding dormice and **low** potential to support commuting dormice.

### Water Voles

- 3.55 The data search showed no records of water vole within the 2km search area in the past 15 years.
- 3.56 The site did not contain the aquatic habitat and vegetation types that would support breeding, foraging or commuting water vole.
- 3.57 Overall it was considered that the site offered **negligible** potential to support breeding water voles and **negligible** potential to support commuting and foraging water voles.

### Otters

- 3.58 Reports of otter are not returned by the record centre in this area.

- 3.59 The site did not contain the aquatic habitat and vegetation types that would support breeding, foraging or commuting otters.
- 3.60 Overall it was considered that the site offered **negligible** potential to support breeding otter and **negligible** potential to support foraging and commuting otter.

### Hedgehogs

- 3.61 The data search showed records of hedgehogs (*Erinaceus europaeus*) within 2km of the site within the past 15 years.
- 3.62 Although no direct evidence of hedgehogs was seen during the survey, the habitats on site, such as the short grassland and woodland seen on site would provide suitable habitat for them to forage and/or hibernate.
- 3.63 Overall, the site offered **moderate** potential for hedgehogs.

### Stag Beetles

- 3.64 The data search showed no records of stag beetle (*Lucanus cervus*) within 2km of the site within the past 15 years.
- 3.65 No direct evidence of stag beetles was seen on the site. However, the presence of dense vegetation could have provided the dead wood required for this species.
- 3.66 Overall, the site offered **low** potential for stag beetle.

### Invasive Plants

- 3.67 The data search showed records of plant species including Japanese knotweed (*Reynoutria japonica*), three-cornered garlic (*Allium triquetrum*), and cotoneaster (*Cotoneaster* sp.) occurring within the 2km search area in the past 15 years. These plants are listed as invasive in Schedule 9 of the Wildlife and Countryside Act (1981 amended).
- 3.68 During the survey multiple specimens of rhododendron were seen (See Target Note 2 and Photograph 2 in Appendices A & B). *Rhododendron ponticum* is listed as invasive in Schedule 9 of the Wildlife and Countryside Act (1981 amended).
- 3.69 During the survey specimens of cherry laurel were seen (See Target Note 1 and Photograph 1 in Appendices A & B). While not listed in Schedule 9 of the Wildlife and Countryside Act (1981 amended), it appears on the Non-Native Species Secretariat (NNSS, 2022) register of species that are of concern.

## 4. Evaluation

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- 4.1 On the basis of the information available from the habitat survey and desk study, the site has been evaluated in terms of its potential for biodiversity, support of protected species and habitats, and the contribution the area makes as part of the wider landscape. The nature conservation value of the site has been assessed following standard criteria developed by CIEEM (2017 and 2018) and in accordance with BS 24040:2013 Biodiversity – code of practice for planning and development. This is provided below.
- 4.2 The biodiversity value of protected species within the site is a preliminary evaluation based upon the desk study records, habitat suitability, and the conservation status of the species in question. It should be noted that where European Protected Species (EPS) or species of Principle Importance for the Conservation of Biodiversity are present on-site they may be valued at a lower level/scale where it is considered likely that populations would not be of sufficient importance to justify designation at a higher level. However, regardless of their biodiversity value, such species are still subject to national and/or European legislation.
- 4.3 Key aspects of relevant planning policy regarding conservation, including an explanation of species referred to as being of 'Principal Importance for Conservation of Biodiversity' and European Protected Species and habitats, are provided in the Legislation section in Appendix C.

### Geographic Evaluation

#### Features of International Importance

- 4.4 Features of International Importance are principally sites covered by international legislation or conventions. The Conservation of Habitats and Species Regulations 2017 (as amended) implements the Natural Habitats and Wild Fauna and Flora (92/43/EC) (Habitats Directive) in England and Wales. The Regulations mainly deal with the protection of sites with certain habitats and populations of species that are important for nature conservation in a European context, i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
- 4.5 The site is not subject to any international statutory nature conservation designations. The closest site of International Importance is Ashdown Forest SPA & SAC located 4.2km to the southeast. The designated features of this SAC & SPA are Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths, great crested newt, Dartford warbler (*Sylvia undata*), and nightjar (*Caprimulgus europaeus*). The site does not provide any supporting habitat for this designated site or its qualifying species.

### **Features of National Importance**

- 4.6 Features of national importance include Sites of Special Scientific Interest (SSSIs) which are designated under the Wildlife and Countryside Act 1981 (as amended). The site is not subject to any national statutory nature conservation designations and it is not considered that any habitats or populations or assemblages of species within the site would meet the criteria for the designation of SSSIs at an appropriate geographic level<sup>4</sup>.
- 4.7 The closest designated site of national importance for nature conservation is Mills Rocks SSSI located 2.4km to the east. The site does not provide any supporting habitat for this SSSI.
- 4.8 The site is also located within the 3km Impact Risk Zone of Weir Wood Reservoir SSSI and the 5km Impact Risk Zone of Ashdown Forest SSSI, but the site does not have any supporting habitat for these SSSIs.

### **Features of Regional (i.e. Sussex) Importance**

- 4.9 The site does not include any features of value at this level neither is it likely to be selected as a SINCC based on the results of the current survey.

### **Features of District (i.e. Mid Sussex) Importance**

- 4.10 The site is relatively small and does not support any features that were considered to be of value at this level.

### **Features of Local (i.e. East Grinstead) Importance**

- 4.11 The site contains a small amount of woodland and several mature trees which are considered to be of value at this level.

### **Features of Value Immediate Vicinity (c. 250m) of the Project**

- 4.12 The on-site vegetation is of value within the immediate vicinity and provides suitable habitat to support protected species including bats, reptiles, breeding birds, badgers, hazel dormice, hedgehogs, and stag beetles. It also forms part of the wider ecological network of habitats in the locality, providing wildlife corridors for mobile species to move through the landscape.

### **Summary**

- 4.13 Overall on the basis of the survey results and the above criteria, habitats within the site are considered largely to be of ecological value within the local area and immediate vicinity only. The site provides suitable habitat to support several protected species and groups including bats, reptiles, breeding birds, badgers, hazel dormice, hedgehogs, and stag beetles. However, populations of these are unlikely to be locally significant.

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<sup>4</sup>JNCC Guidelines for selection of biological SSSIs (see <http://jncc.defra.gov.uk/page-2303#download>).

## Local Plan Evaluation

- 4.14 It is considered that the statutory Mid Sussex District Plan 2014-2031 (Adopted 2018) contains the following nature conservation policies relevant to the site. A list of the policies is provided below. The full text of the relevant policies is contained in the Legislation section in Appendix C and this should also be referred to.

### **Mid Sussex District Plan 2014-2031 (2018)**

-  DP37: Trees, Woodland and Hedgerows.
-  DP38: Biodiversity.

## 5. Discussion and Recommendations

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### Discussion

- 5.1 The survey site is located at Land at 1 & 2 Highfields, West Hill, East Grinstead, RH19 4DL. The survey area extended over approximately 1.2 hectares (ha). Habitats to be impacted by the development proposals include buildings, hardstanding, amenity grassland, broad-leaved semi-natural woodland, a swimming pool, scattered trees, introduced shrub, ornamental hedge, a line of trees, and individual trees.
- 5.2 It is understood that the proposed development is for a Care Home (C2 Use Class).
- 5.3 The desk study has shown that the site is situated in a semi-urban location, surrounded predominantly by further residential properties. The site is not subject to any statutory or non-statutory designations. The closest statutory site is High Weald AONB, located 240m to the southeast, and the closest non-statutory site is Worth Way LWS, located 485m to the northwest.
- 5.4 Habitats within the proposed development area were assessed as being of value to wildlife within the local vicinity with potential to support bats, reptiles, breeding birds, badgers, hazel dormice, hedgehogs, and stag beetles, and these species may pose a constraint to works.
- 5.5 A badger survey was carried out concurrently with the Preliminary Ecological Appraisal. Full details of this can be found in the Badger Survey Report (Phlorum, 2022).
- 5.6 If any mature trees are to be removed from the site boundaries, it is recommended that a Preliminary Tree Roost Assessment is carried out to determine whether these trees have potential to support roosting bats.
- 5.7 In addition, a precautionary approach to site clearance in respect to reptiles, breeding birds, hazel dormice, hedgehogs, and stag beetles is recommended to minimise any adverse impacts on these species groups.
- 5.8 Details regarding specific mitigation, including further surveys and precautionary working practices together with habitat enhancement measures are provided below.

### Recommendations

#### Bats

- 5.9 Bats receive protection under The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended).
- 5.10 Whilst the on-site buildings had negligible potential to support roosting bats, the mature trees around the site boundaries could contain potential roosting features.

- 5.11 If any mature trees are to be removed from around the site boundaries, it is recommended that a Preliminary Tree Roost Assessment is carried out to determine whether these trees contain potential roosting features. If it is considered that any of these trees have potential to support roosting bats, it may be necessary to carry out further bat activity surveys or an aerial tree climbing survey.
- 5.12 The results of the bat survey(s) can then be used to inform specific mitigation and enhancement measures for this species group to include a lighting scheme that is sympathetic to bats.
- 5.13 Where a roost is likely to be impacted by the works, and where avoidance is not possible, it may be necessary to obtain a European Protected Species Mitigation (EPSM) Licence before the works can proceed and to complete any necessary mitigation.
- 5.14 Such a licence would need to be obtained from Natural England once full planning permission is in place. The application will require the drafting of a detailed mitigation strategy including timing and construction methods in addition to the mitigation measures proposed. Natural England currently require 30 working days to determine a licence application.
- 5.15 If a bat roost is found for a common bat species and the roost is of low conservation value, then a Low Impact Class Licence may be obtained for the site instead. This type of licence is typically obtained within 15 days.

### **Badgers**

- 5.16 Badgers receive protection under The Protection of Badgers Act 1992.
- 5.17 Due to evidence of sett-building badgers on the site, a badger survey was carried out concurrently with the Preliminary Ecological Appraisal. This determined that there were active badger setts around the site boundaries. Full details of this survey, including recommended licensing and mitigation measures, can be found in the Badger Survey Report (Phlorum, 2022).

### **Breeding Birds**

- 5.18 The on-site trees provide suitable nesting habitat for a range of bird species. All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.19 In order to avoid any potential impact on breeding birds, the clearance of any trees should be undertaken outside the main bird nesting season which runs from March to August inclusive<sup>5</sup>, with clearance works possible between September and February. Where this is not possible, an ecologist would need to check the vegetation for active nests and signs of bird breeding activity.

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<sup>5</sup> It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- 5.20 In the event that a nest is found, an exclusion zone around the nest would be established. Works would have to cease within this buffer area until the young birds have fledged.

### **Reptiles**

- 5.21 All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.22 The proposed development is considered to have a relatively low impact on any potential reptile populations that may be present. It is therefore felt that a precautionary approach to vegetation clearance should be sufficient to safeguard this protected species group. This would involve vegetation clearance to be carried out in stages in order to avoid any potential impacts on reptiles. This work should be supervised by a suitably experienced ecologist.

### **Hazel Dormice**

- 5.23 The hazel dormouse is protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 5.24 Although there was a small amount of habitat on site that was considered suitable for supporting dormice, it is not felt that this will be significantly impacted by the proposed development. Therefore, a precautionary approach to the clearance of the site should be sufficient for protecting any dormice present.
- 5.25 It is recommended that all clearance work is undertaken in the presence of a suitably qualified ecologist, who will guide the schedule of works.

### **Stag Beetles**

- 5.26 Stag beetles are a Species of Principle Importance for the UK and are also listed on the Sussex Rare Species inventory, therefore a precautionary approach to the clearance of all dead wood should be taken during works. Where possible the any standing dead wood should be retained as part of the works. Where the dead trees pose a health and safety risk, the above ground section should be felled and the arisings stacked on the ground. The tree base and root system of these trees should be retained where possible.
- 5.27 Where it is not possible to retain these areas, the root system of the dead trees should be removed under an ecological watching brief and any larvae encountered should be removed to suitable retained deadwood habitat elsewhere around the site boundaries.

### **Hedgehogs**

- 5.28 Hedgehogs are listed on the Natural Environment and Rural Communities (NERC) Act 2006 Section 41 as a Species of Principal Importance. They are a rapidly declining species.

- 5.29 Hedgehogs need short grass areas to search for invertebrate prey. Log piles and decaying vegetation are used to forage and hibernate in. Areas of leaf litter can be collected and used in nests. Dense scrub areas are also useful to build hibernation nests during winter. Wildlife friendly corridors allow hedgehogs and other wildlife to migrate across a site. These are discussed in the Wildlife Friendly Pathways Section below.

#### **Habitat Retention**

- 5.30 All retained trees, including all adjacent off-site trees should be protected in accordance with British Standards (BS 2012) 5837:2012 Trees in Relation to Design, Demolition and Construction. The root protection areas of any retained trees must be left free from excavation and disturbance, and protected during any proposed works. Protection should be in the form of fencing and signs installed for the duration of the works.

#### **Habitat Enhancement**

- 5.31 New development offers the opportunity for habitat enhancement in accordance with national and local planning policy and some recommendations are included below.

#### Control of Invasive Non-Native Species (INNS)

- 5.32 Although it is not illegal to have species listed under the Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), it is illegal to permit these species to spread and grow in the wild.
- 5.33 We recommend that a member for the Property Care Association Invasive Weed Control Group (PCA IWCG) is contacted to manage the cherry laurel and rhododendron.

#### Bird and Bat Boxes and Bricks

- 5.34 Additional bird nesting and bat roosting provision could be incorporated into new design proposals. These could either be installed on trees or incorporated into the new building design. Some recommendations are made below as a guide.
- 5.35 Bat roosting opportunities could be provided through the installation of boxes on the outside of the walls or remaining trees, such as the Schwegler 2F, or other makes of a similar design, such as Chavenage Bat box. There are a range of bat boxes available and these can be selected to suit the development and bat species in the locality.
- 5.36 Bird boxes could be installed on the walls of the new building or in the remaining trees which could include the following Schwegler bird house or 1B makes, or similar designs from alternative suppliers. If the client is happy for bird boxes to be installed on the walls of the new building then a Schwegler sparrow terrace 1SP could also be used.
- 5.37 Further details of the bird and bat boxes are provided in Appendix F.

- 5.38 Bat boxes should be installed at appropriate locations ideally with south-east, south, or south-west facing aspects at least 3m from ground level. Ideally they need to be exposed to 6-8 hours of direct sunlight, but sheltered from strong winds. If installed on the building, these should ideally be positioned directly below the eaves.
- 5.39 Bird Boxes should be located out of prevailing wind, rain, and strong sunlight, ideally with a clear flight path to the entrance. Ideally they should be installed two to four metres from the ground facing north or north-east.

#### Wildlife Friendly Pathways

- 5.40 The increase in building can result in ecological areas which are unconnected. Effectively these are ecological islands, and often there is no way for wildlife to migrate to and from these areas. One way to reduce the impact and allow wildlife, including hedgehogs, to migrate across sites is to install wildlife friendly pathways across a site. This can include a range of things such as wildlife corridors, such as hedgerows and scrub or rough grassland corridors, but also installing holes in fences. Wildlife holes, often referred to as hedgehog holes, help wildlife migrate through areas. The holes need to be at least 13cm by 13cm, at ground level.

#### Compensatory Planting

- 5.41 Additional tree and shrub planting could be incorporated into the landscape proposals to compensate for any removal to facilitate the works. Planting should include a high proportion of native species and be of local provenance where possible. These should be carefully selected to ensure they contain species suitable for the area. Some species of known wildlife value are listed in Appendix E.

## 6. Conclusions

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- 6.1 The site survey revealed the following habitats:
- 🌿 Buildings;
  - 🌿 hardstanding;
  - 🌿 amenity grassland;
  - 🌿 broad-leaved semi-natural woodland;
  - 🌿 a swimming pool;
  - 🌿 scattered trees;
  - 🌿 introduced shrub;
  - 🌿 ornamental hedge;
  - 🌿 a line of trees; and
  - 🌿 individual trees.
- 6.2 The site is not subject to any statutory or non-statutory designations. The closest statutory designated site is High Weald AONB, located 240m to the southeast at its closest point and the survey area does not support any features that contribute to the designation of this site.
- 6.3 Due to evidence of sett-building badgers on the site, a badger survey was carried out concurrently with the Preliminary Ecological Appraisal which found badgers to be present. Full details of this can be found in the Badger Survey Report (Phlorum, 2022).
- 6.4 If any mature trees are to be removed from the site boundaries, it is recommended that a Preliminary Tree Roost Assessment is carried out to determine whether these trees have potential to support roosting bats.
- 6.5 In addition, a precautionary approach to site clearance in respect to reptiles, breeding birds, hazel dormice, hedgehogs, and stag beetles is recommended to minimise any adverse impacts on these species groups.
- 6.6 It has been recommended that the site is enhanced by introducing some compensatory planting and installing bat and bird boxes.

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## 8. Glossary of Terms

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<b>BAP</b>	Biodiversity Action Plan
<b>BRC</b>	Biological Records Centre
<b>CIEEM</b>	Chartered Institute of Ecology and Environmental Management
<b>Habitats Directive</b>	Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
<b>LNR</b>	Local Nature Reserve
<b>LWS</b>	Local Wildlife Site
<b>MAGIC</b>	Multi-Agency Geographical Information for the Countryside
<b>NNR</b>	National Nature Reserve
<b>Nomenclature</b>	The system of devising of names for plants
<b>NPPF</b>	National Planning Policy Framework
<b>PEA</b>	Preliminary Ecological Appraisal- formerly referred to as a Phase 1 Habitat Survey
<b>SAC</b>	Special Area of Conservation
<b>SINC</b>	Site of Importance for Nature Conservation
<b>SPA</b>	Special Protection Area
<b>SSSI</b>	Site of Special Scientific Interest

## Figures and Appendices

## Appendix A

### Habitat Map

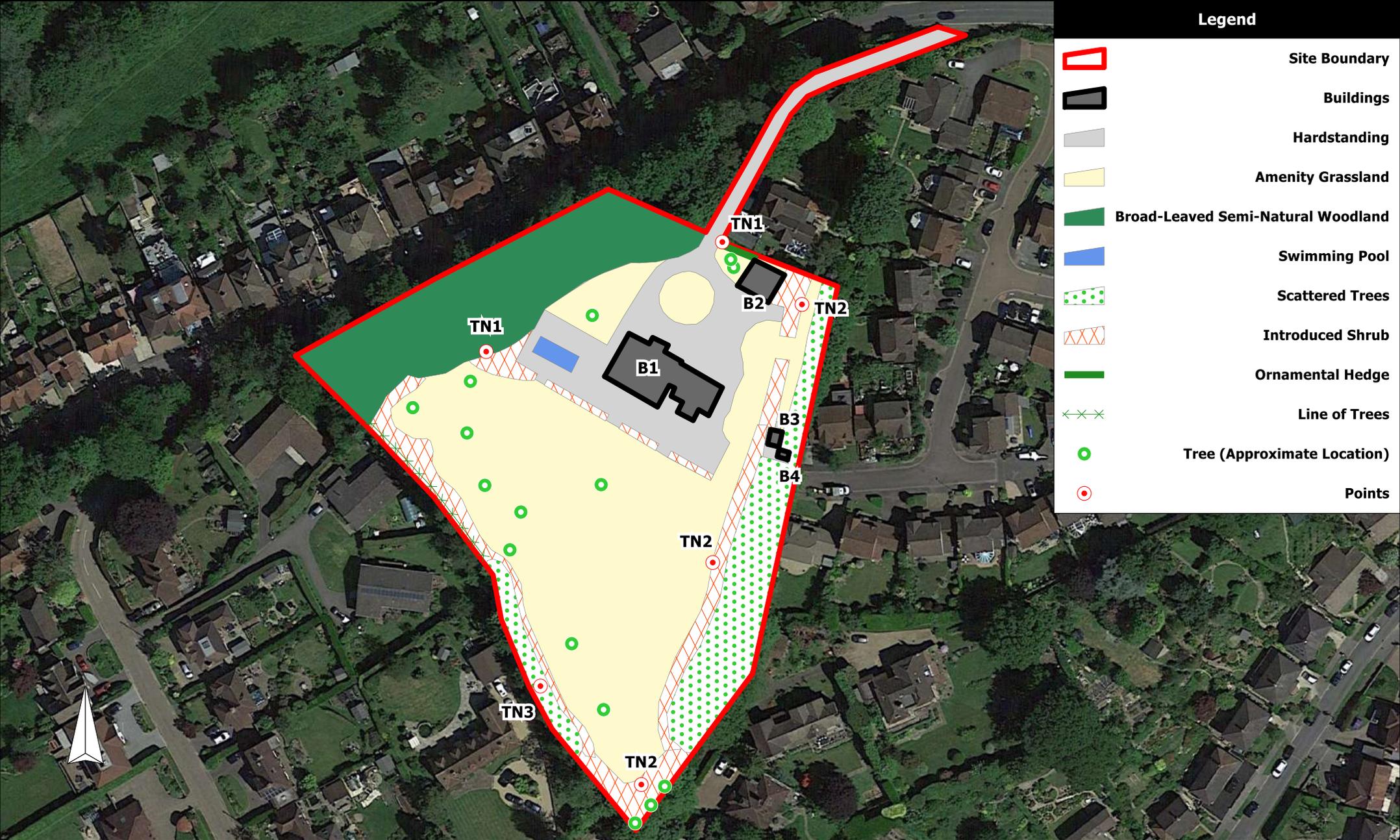


Figure 1: Highfields, East Grinstead Habitat Survey Map

Drawn by: NA  
 On the: 20-June-2022  
 Not to Scale  
 Ref: 11125



Phlorum Limited, 12 Hunns Mere Way,  
 Woodingdean, Brighton, East Sussex,  
 BN2 6AH  
 Tel: +44(0)1273 307167  
 Web: [www.phlorum.com](http://www.phlorum.com)  
 Email: [info@phlorum.com](mailto:info@phlorum.com)

## Appendix B

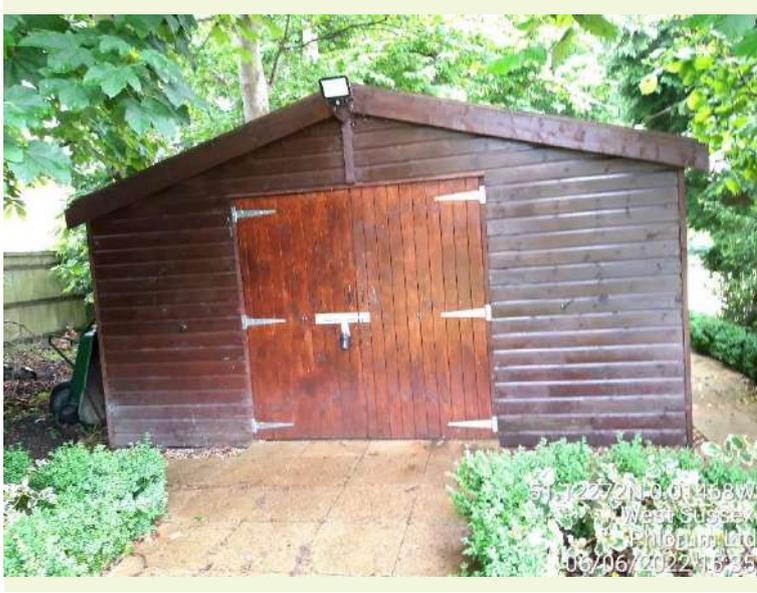
### Photographs and Target Notes

## Photographs and Target Notes

Photo No.	Feature (Target Note No.)	Photograph of Feature
1	TN1 - cherry laurel.	 <p>51.12280N 0.01572W West Sussex Phlorum Ltd 06/06/2022 17:10</p>
2	TN2 - rhododendron.	 <p>51.12270N 0.01602W West Sussex Phlorum Ltd 06/06/2022 17:08</p>

<p><b>3</b></p>	<p>TN3 – badger sett.</p>	 <p>51.12216N 0.01545W West Sussex Phlorum Ltd 06/06/2022 16:57</p>
<p><b>4</b></p>	<p>TN3 – badger latrine with fresh droppings.</p>	 <p>51.12216N 0.01544W West Sussex Phlorum Ltd 06/06/2022 16:57</p>
<p><b>5</b></p>	<p>Building B1.</p>	 <p>51.12297N 0.01469W West Sussex Phlorum Ltd 06/06/2022 16:13</p>

<p>6</p>	<p>Building B1 – internal roof space.</p>	 <p>51.12298N 0.01498W West Sussex Phlorum Ltd 06/06/2022 15:56</p>
<p>7</p>	<p>Building B2.</p>	 <p>51.12294N 0.01474W West Sussex Phlorum Ltd 06/06/2022 16:13</p>
<p>8</p>	<p>Building B2 – internal roof space.</p>	 <p>51.12306N 0.01465W West Sussex Phlorum Ltd 06/06/2022 16:16</p>

<p>9</p>	<p>Building B3.</p>	 <p>51.12272N 0.01468W West Sussex Phlorum Ltd 06/06/2022 15:25</p>
<p>10</p>	<p>Building B4.</p>	 <p>51.12271N 0.01469W West Sussex Phlorum Ltd 06/06/2022 16:36</p>
<p>11</p>	<p>Hardstanding.</p>	 <p>51.12287N 0.01474W West Sussex Phlorum Ltd 06/06/2022 17:14</p>

<p><b>12</b></p>	<p>Amenity grassland.</p>	 <p>51.12222N 0.01500W West Sussex Phlorum Ltd 06/06/2022 16:49</p>
<p><b>13</b></p>	<p>Broad-leaved semi-natural woodland.</p>	 <p>51.12292N 0.01566W West Sussex Phlorum Ltd 06/06/2022 17:24</p>
<p><b>14</b></p>	<p>Swimming pool.</p>	 <p>51.12292N 0.01547W West Sussex Phlorum Ltd 06/06/2022 17:11</p>

<p><b>15</b></p>	<p>Scattered trees.</p>	 <p>51 12222N 0 011500W West Sussex Phlorum Ltd 06/06/2022 16:49</p>
<p><b>16</b></p>	<p>Introduced shrub.</p>	 <p>51 12297N 0 01465W West Sussex Phlorum Ltd 06/06/2022 16:28</p>
<p><b>17</b></p>	<p>Ornamental hedge (behind the trees).</p>	 <p>51 12303N 0 01485W West Sussex Phlorum Ltd 06/06/2022 17:15</p>

<p><b>18</b></p>	<p>Line of trees.</p>	 <p>51.12255N 0.01582W West Sussex Phlorum Ltd 06/06/2022 17:03</p>
<p><b>19</b></p>	<p>Individual trees</p>	 <p>51.12219N 0.01544W West Sussex Phlorum Ltd 06/06/2022 17:00</p>

## Appendix C

### Legislation

## Legislation

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This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

### Species

The objective of the EC Habitats Directive<sup>6</sup> is to conserve plants and animals which are considered to be rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: [www.opsi.gov.uk](http://www.opsi.gov.uk). Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include:

-  Countryside and Rights of Way (CRoW) Act 2000;
-  Deer Act 1991;
-  Natural Environment & Rural Communities (NERC) Act 2006;
-  Protection of Badgers Act 1992; and
-  Wild Mammals (Protection) Act 1996.

### Badgers

Badgers and their setts are protected under the Protection of Badgers Act (1992), which consolidated and added to the previous Badger Acts of 1973 and 1991. Under this legislation it is an offence to:

-  cruelly ill-treat a badger, including use of tongs and digging;

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<sup>6</sup> Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

- ☘ intentionally or recklessly cause a dog to enter a badger sett;
- ☘ intentionally or recklessly damage, destroy or obstruct access to a badger sett<sup>7</sup> or any part thereof;
- ☘ intentionally or recklessly disturb<sup>8</sup> a badger when it is occupying a badger sett;
- ☘ possess or control a dead badger or any part of a badger;
- ☘ sell or offers for sale, possesses, or has under his control, a live badger; and
- ☘ wilfully kill, injure, take, or attempt to kill, injure, or take a badger.

A Development Licence will be required from Natural England for any development works affecting an active badger sett, or to disturb badgers while individuals are occupying the sett. Depending on the nature of the works and the specifics of the sett, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. Natural England has issued guidelines on what constitutes a licensable activity. There is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

## Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- ☘ intentional or reckless disturbance (at any level);
- ☘ intentional or reckless obstruction of access to any place of shelter or protection; and
- ☘ selling, offering, or exposing for sale, possession or transporting for purpose of sale.

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- ☘ deliberate killing, injuring, or capturing of Schedule 2 species (all bats);
- ☘ deliberate disturbance of bat species as to impair their ability:
  - (i) to survive, breed, or reproduce, or to rear or nurture young; and
  - (ii) to hibernate or migrate.

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<sup>7</sup> A badger sett is defined in the legislation as "any structure or place which displays signs indicating current use by a badger". This includes seasonally used setts. Natural England (2009) have issued guidance on what is likely to constitute current use of a badger sett: [www.naturalengland.org.uk/Images/WMLG17\\_tcm6-11815.pdf](http://www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf)

<sup>8</sup> For guidance on what constitutes disturbance and other licensing queries, see Natural England (2007) Badgers & Development: A Guide to Best Practice and Licensing. [www.naturalengland.org.uk/Images/badgers-dev-guidance\\_tcm6-4057.pdf](http://www.naturalengland.org.uk/Images/badgers-dev-guidance_tcm6-4057.pdf), Natural England (2009) Interpretation of 'Disturbance' in relation to badgers occupying a sett [www.naturalengland.org.uk/Images/WMLG16\\_tcm6-11814.pdf](http://www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf), Scottish Natural Heritage (2002) Badgers & Development. [www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp](http://www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp) and Countryside Council for Wales (undated) Badgers: A Guide for Developers. [www.ccw.gov.uk](http://www.ccw.gov.uk).

- deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part thereof.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

### **Breeding Birds**

Under the Wildlife & Countryside Act, 1981 (as amended), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.

Under the Wildlife & Countryside Act, 1981 (as amended), all birds, their nests and eggs are protected under Sections 1-8 of the Act and it is an offence, with certain exceptions, to:

- intentionally (or recklessly in Scotland) kill, injure, or take any wild bird;
- intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act;
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act;
- use traps or similar items to kill, injure or take wild birds;
- have in one's possession or control any bird (dead or alive) unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations; and
- in Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest.

Certain rare species receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;
- intentional or reckless disturbance of dependent young of such a bird;

- in Scotland only, intentional or reckless disturbance whilst lekking; and
- in Scotland only, intentional or reckless harassment.

The British Trust for Ornithology (BTO) has a list of birds that are Species of Conservation Concern. These birds are not legally protected but where they are found on site they should be given planning consideration. The criteria for birds listed as amber (medium conservation concern) include:

- historical population decline during 1800-1995, but recovering: population has more than doubled over last 25 years;
- moderate (25-49%) decline in UK breeding population over last 25 years;
- moderate (25-49%) contraction of UK breeding range over last 25 years;
- moderate (25-49%) decline in UK non-breeding population over last 25 years;
- species with unfavourable conservation status in Europe (Species of conservation Concern);
- five year mean of breeding pairs in the UK;
- ≥50% of UK breeding population in 10 or fewer sites;
- ≥50% of UK non-breeding population in 10 or fewer sites;
- ≥20% of European breeding population in UK; and
- ≥20% of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in UK.

### Hazel Dormice

The hazel dormouse (*Muscardinus avellanarius*) is fully protected under The Conservation of Habitats and Species Regulations 2017 through its inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring, or capturing;
- deliberate disturbance as to impair its ability:
  - (i) to survive, breed, or reproduce, or to rear or nurture young; and
  - (ii) to hibernate or migrate.
- deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of this species.

The hazel dormouse is also currently protected under the Wildlife and Countryside Act 1981 (as amended) through its inclusion on Schedule 5. Under this Act, this species is additionally protected from:

- intentional or reckless disturbance;

- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence will allow derogation from the relevant legislation but will also to enable appropriate mitigation measures to be put in place and monitored.

### Herpetofauna (Reptiles and Amphibians)

The following species receive full protection under the Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

- sand lizard (*Lacerta agilis*);
- smooth snake (*Coronella austriaca*);
- natterjack toad (*Epidalea calamita*);
- great crested newt (*Triturus cristatus*); and
- pool frog (*Pelophylax lessonae*).

Under this legislation, Regulation 41 prohibits:

- deliberate killing, injuring or capturing of species listed on Schedule 2;
- deliberate disturbance of any Schedule 2 species as to impair their ability:
  - (i) to survive, breed, or reproduce, or to rear or nurture young; and
  - (ii) to hibernate or migrate.
- deliberate disturbance of any Schedule 2 species as to affect significantly the local distribution or abundance of the species;
- deliberate taking or destroying of the eggs of a Schedule 2 species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of a species.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- intentional or reckless disturbance (at any level);
- intentional or reckless obstruction of access to any place of shelter or protection; and

- selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). These species include:

- adder (*Vipera berus*);
- grass snake (*Natrix natrix*);
- common lizard (*Zootoca vivipara*); and
- slow-worm (*Anguis fragilis*).

Under this legislation, for these species it is prohibited under Section 9(1) & (5) to:

- intentionally (or recklessly in Scotland) kill or injure these species; or
- sell, offer, or expose for sale, possess, or transport for purpose of sale these species, or any part thereof.

The following species are listed in respect to Section 9(5) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) which only affords them protection against sale, offering or exposing for sale, possession, or transport for the purpose of sale:

- common frog (*Rana temporaria*);
- common toad (*Bufo bufo*);
- smooth newt (*Lissotriton vulgaris*); and
- palmate newt (*L. helveticus*).

### Water Voles

The water vole (*Arvicola amphibius*) (= *terrestris*) is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- intentionally kill, injure, or take (capture) this species;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection; and
- sell, offer, or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead water vole or part of this species.

Where development works are liable to affect habitats known to support water voles, Natural England must be consulted. All alternative design options must have been explored and communicated to Natural England in order to demonstrate that works have tried to avoid contravening the legislation e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable etc. Conservation licences for the capture and translocation of water voles may be issued by Natural England for the purpose of development activities if it can be shown that the

activity has been properly planned and executed and thereby contributes to the conservation of the population.

## Otters

Otters (*Lutra lutra*) are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring, or capturing of otters;
- deliberate disturbance as to impair their ability:
  - (i) to survive, breed, or reproduce, or to rear or nurture young; and
  - (ii) to hibernate or migrate.
- deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of this species.

Otters also receive protection under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- intentional or reckless disturbance (at any level);
- intentional or reckless obstruction of access to any place of shelter or protection; and
- selling, offering, or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect breeding or resting places or for activities likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

## Wild Mammals

All wild mammals are protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996. Under this legislation it is an offence to:

- mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention of this legislation, due care and attention should be taken when carrying out works that have the potential to impact any wild mammal as described above.

## Plants

Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Some rare plant species also receive full protection under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits:

- intentionally (or recklessly in Scotland) picking, uprooting, or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only); and
- selling, offering, or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or parts.

In addition to the legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017. Regulation 45 makes it an offence to:

- deliberately pick, collect, or destroy a wild Schedule 5 species; and
- be in possession of, or control, transport, sell, or exchange any wild live or dead Schedule 5 species or anything derived from it.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect species of plant listed under The Conservation of Habitat and Species Regulations 2017.

## Invasive Plant Species

Certain plants are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Species include:

- Japanese knotweed (*Reynoutria japonica*);
- giant hogweed (*Heracleum mantegazzianum*);
- Himalayan balsam (*Impatiens glandulifera*);
- certain species of rhododendron (*Rhododendron* sp.); and
- certain species of cotoneaster (*Cotoneaster* sp.).

Species listed are non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to:

- plant or otherwise cause these species to grow in the wild.

This legislation makes it is an offence to cause species listed to grow in the wild. Therefore, if they are present on site and development activities have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this.

## Habitats

### International Statutory Designations

- Special Protection Areas (SPAs): Terrestrial SPAs are afforded protection by The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and offshore SPAs are afforded protection under The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). SPAs are designated under the EC Birds Directive (Council Directive 2009/147/EC on the Conservation of Wild Birds). SPAs are areas recognised as important habitat for rare and migratory birds within the European Union (rare birds as listed on Annex I of the Directive).
- Special Areas of Conservation (SACs): These areas are designated under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora), designated for the habitats and (non-bird) species listed on Annexes I and II to the Directive under the same regulations as detailed for SPAs.
- Ramsar sites: These areas are wetlands designated under the Convention on Wetlands of International Importance (1971). Wetlands can include areas of marsh, fen, water, or peatland and may be natural or artificial, permanent, or temporary. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000.

### National Statutory Designations

- Sites of Special Scientific Interest (SSSIs): These sites are designated by the countryside agencies (for example Natural England) under the Wildlife & Countryside Act 1981 (as amended). Prior to 1981 these were designated under the National Parks and Access to the Countryside Act 1949. Improved mechanisms for the protection of SSSIs have also been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).
- National Nature Reserves: These sites are also designated by the countryside agencies under the Wildlife & Countryside Act 1981 (as amended).

### Local Statutory Designations

- 1949 Local Nature Reserves (LNRs): These sites are designated by local authorities under the National Parks and Access to the Countryside Act 1949. These are sites recognised for their wildlife or geological interest at a local level and are managed for nature conservation.

## Non-Statutory Designations

- Local Wildlife Sites: Areas of local conservation interest may be designated by local authorities. The terminology for these sites varies depending on the county. They can be called Sites of Nature Conservation Importance (SNCI's), Sites of Importance for Nature Conservation (SINCs), County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), and Sites of Biological Importance (SBIs). The designation criteria may vary between counties. Local Wildlife Sites are of material consideration when planning applications are being determined.
- The Hedgerow Regulations 1997: These have been compiled to protect 'important' countryside hedgerows from damage or removal. A hedgerow is considered important if it (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Hedgerows covered by these regulations include those on or adjacent to common land, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry, and land used for the keeping or breeding of horses, ponies, or donkeys.

## National Planning Policy

- The National Planning Policy Framework (NPPF) (2021) replaces the former NPPF 2019, 2018 and 2012, and the former PPS9 document and emphasises the need for sustainable development. The Framework specifies the need to protect and enhance biodiversity and geodiversity, identify and safeguard components of local wildlife-rich habitats and wider ecological networks including the hierarchy of international, national, and locally designated sites of importance for biodiversity; wildlife corridors; and stepping that connect them. Plus partnerships for habitat management, enhancement, restoration, or creation. The Framework aims to promote the conservation, restoration, and enhancement of priority habitats, ecological networks, and the protection and recovery of priority species. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; appropriate mitigation or compensation measures are in place where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

## Local Planning Policy

### Mid Sussex District Plan 2014-2031 (2018)

#### DP37: Trees, Woodland and Hedgerows

Strategic Objectives: 3) To protect valued landscapes for their visual, historical and biodiversity qualities; 4) To protect valued characteristics of the built environment for their historical and visual qualities; and 5) To create and maintain easily accessible green infrastructure, green corridors and spaces around and within the towns and villages to act as wildlife corridors, sustainable transport links and leisure and recreational routes.

Evidence Base: Green Infrastructure mapping; Mid Sussex Ancient Woodland Survey, Tree and Woodland Management Guidelines, Tree Preservation Order records.

The District Council will support the protection and enhancement of trees, woodland and hedgerows, and encourage new planting. In particular, ancient woodland and aged or veteran trees will be protected.

Development that will damage or lead to the loss of trees, woodland or hedgerows that contribute, either individually or as part of a group, to the visual amenity value or character of an area, and/ or that have landscape, historic or wildlife importance, will not normally be permitted.

Proposals for new trees, woodland and hedgerows should be of suitable species, usually native, and where required for visual, noise or light screening purposes, trees, woodland and hedgerows should be of a size and species that will achieve this purpose.

Trees, woodland and hedgerows will be protected and enhanced by ensuring development:

- incorporates existing important trees, woodland and hedgerows into the design of new development and its landscape scheme; and
- prevents damage to root systems and takes account of expected future growth; and
- where possible, incorporates retained trees, woodland and hedgerows within public open space rather than private space to safeguard their long-term management; and
- has appropriate protection measures throughout the development process; and
- takes opportunities to plant new trees, woodland and hedgerows within the new development to enhance on-site green infrastructure and increase resilience to the effects of climate change; and
- does not sever ecological corridors created by these assets.

Proposals for works to trees will be considered taking into account:

- the condition and health of the trees; and
- the contribution of the trees to the character and visual amenity of the local area; and
- the amenity and nature conservation value of the trees; and
- the extent and impact of the works; and
- any replanting proposals.

The felling of protected trees will only be permitted if there is no appropriate alternative. Where a protected tree or group of trees is felled, a replacement tree or group of trees, on a minimum of a 1:1 basis and of an appropriate size and type, will normally be required. The replanting should take place as close to the felled tree or trees as possible having regard to the proximity of adjacent properties.

Development should be positioned as far as possible from ancient woodland with a minimum buffer of 15 metres maintained between ancient woodland and the development boundary.

#### DP38: Biodiversity

Strategic Objectives: 3) To protect valued landscapes for their visual, historical and biodiversity qualities; and 5) To create and maintain easily accessible green infrastructure, green corridors and spaces around and within the towns and villages to act as wildlife corridors, sustainable transport links and leisure and recreational routes.

Evidence Base: Biodiversity 2020; Biodiversity Action Plan; Biodiversity Opportunity Areas; Green Infrastructure mapping; Habitats and Species Records; Mid Sussex Ancient Woodland Survey; Mid Sussex Infrastructure Delivery Plan; The Natural Choice: Securing the Value of Nature; West Sussex SSCI Register.

Biodiversity will be protected and enhanced by ensuring development:

- Contributes and takes opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity, including through creating new designated sites and locally relevant habitats, and incorporating biodiversity features within developments; and
- Protects existing biodiversity, so that there is no net loss of biodiversity. Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances); and
- Minimises habitat and species fragmentation and maximises opportunities to enhance and restore ecological corridors to connect natural habitats and increase coherence and resilience; and
- Promotes the restoration, management and expansion of priority habitats in the District; and
- Avoids damage to, protects and enhances the special characteristics of internationally designated Special Protection Areas, Special Areas of Conservation; nationally designated Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty; and locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland or to other areas identified as being of nature conservation or geological interest, including wildlife corridors, aged or veteran trees, Biodiversity Opportunity Areas, and Nature Improvement Areas.

Designated sites will be given protection and appropriate weight according to their importance and the contribution they make to wider ecological networks.

Valued soils will be protected and enhanced, including the best and most versatile agricultural land, and development should not contribute to unacceptable levels of soil pollution.

Geodiversity will be protected by ensuring development prevents harm to geological conservation interests, and where possible, enhances such interests. Geological conservation interests include Regionally Important Geological and Geomorphological Sites.

## Appendix D

### Plant Species List

## Plant Species List

Scientific nomenclature follows Stace (2010) for vascular plant species and British Bryological Society (BBS) Special Volume No. 5 *English Names for British Bryophytes* for bryophyte species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, [www.bsbi.org.uk](http://www.bsbi.org.uk). The plant species list was generated as part of a Phase 1 Habitat survey and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally

Key to qualifiers: G=garden origin, P=planted, Y = young, S=seedling or sucker, T=tree, H=hedge, W=water, ? = identification uncertain.

Scientific Name	Common Name	Abundance	Qualifier
<i>Acer pseudoplatanus</i>	Sycamore	F	T
<i>Aesculus hippocastanum</i>	Horse chestnut	O	T
<i>Bellis perennis</i>	Common daisy	F	
<i>Castanea sativa</i>	Sweet chestnut	O	T
<i>Choisya ternata</i>	Mexican orange	O	P
<i>Corylus avellana</i>	Hazel	F	T
<i>Digitalis purpurea</i>	Foxglove	O	
<i>Euonymus japonicus</i>	Japanese spindle	O	P
<i>Euphorbia characias L.</i>	Mediterranean spurge	O	P
<i>Fraxinus excelsior</i>	Ash	F	T
<i>Hedera helix</i>	Ivy	A	
<i>Ilex aquifolium</i>	Holly	F	T
<i>Lonicera sp.</i>	Honeysuckle	O	P
<i>Prunus cerasifera</i>	Cherry plum	R	T
<i>Prunus laurocerasus</i>	Cherry laurel	F	

<b><i>Quercus robur</i></b>	Pedunculate oak	O	T
<b><i>Rhododendron sp.</i></b>	Rhododendron	O	P
<b><i>Salix sp.</i></b>	Willow	R	T
<b><i>Taraxacum officinale</i></b>	Common dandelion	F	
<b><i>Trifolium repens</i></b>	White clover	F	

## Appendix E

### Suggested Compensatory Planting

## Suggested Compensatory Planting

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This section provides a list of plants which are of proven value to wildlife. The list is not exhaustive and merely provides a guide for suggested planting for wildlife value. Planting should be tailored on a site by site basis. The list includes some native and ornamental species however the emphasis should always be on the use of predominantly native species.

N = Native, NN = Non-native.

This list includes species that may be harmful if handled or ingested. Schedule 9 (Part 2) of the Wildlife and Countryside Act, 1981 (as amended) includes a list of invasive plants, including aquatic species, that should always be avoided in planting schemes.

### Large Shrubs

Hedge veronica/Hebe (*Veronica* spp.) NN

Hawthorn (*Crataegus monogyna*) N

Blackthorn (*Prunus spinosa*) N

Rose: dog rose (*Rosa canina*), field rose (*R. arvensis*), burnet rose (*R. pimpinellifolia*) N

California lilac (*Ceanothus* spp.): (*C. arborea*) NN

Wild privet (*Ligustrum vulgare*) N

Common holly (*Ilex aquifolium*) N

Barberry (*Berberis* spp.): (*B. darwinii*), (*B. thunbergii*), (*B. x stenophylla*) NN

Daisy Bush (*Olearia* spp.): (*O. x hastii*), (*O. macrodonta*), (*O. traversii*) NN

Firethorn (*Pyracantha coccinea*) NN

Hazel: (*Corylus avellana*) N, (*C. maxima*) NN

Viburnum (*Viburnum* spp.): wayfaring tree (*V. lantana*) N, guelder rose (*V. opulus*) N, laurustinus (*V. tinus*) NN. Note: *V. lantana* can become invasive in more open habitats.

Dogwood (*Cornus sanguinea*) N

Broom (*Cytisus scoparius*) N

Escallonia (*Escallonia macrantha*) NN

Hardy fuchsia (*Fuchsia magellanica*) NN

Buckthorn (*Rhamnus cathartica*) N

Spindle (*Euonymus europaeus*) N

Tutsan (*Hypericum androsaemum*) N

Yew (*Taxus baccata*) N

### Trees

Cherry (*Prunus* spp.): wild cherry (*P. avium*), bird cherry (*P. padus*), domestic plum (*P. domestica*) N, or cherry plum (*P. cerasifera*) NN

Ash (*Fraxinus excelsior*) N

Apple (*Malus* spp.): edible apple (*M. domestica*), crab apple (*M. sylvestris*) N

Pear (*Pyrus* spp.): edible pear (*P. communis*) NN

Small-leaved lime (*Tilia cordata*) N

Silver birch (*Betula pendula*) N

Yew (*Taxus baccata*) N

Black poplar (*Populus nigra*) N

Foxglove tree (*Paulownia tomentosa*) NN

Beech (*Fagus sylvatica*) N

### Climbers

Jasmine (*Jasminum* spp.): summer jasmine (*J. officinale*), winter jasmine (*J. nodiflorum*) NN

Ivy (*Hedera helix*) N

Climbing hydrangea (*Hydrangea anomala* ssp. *petiolaris*) NN

Honeysuckle (*Lonicera* spp.): (*L. periclymenum*) N

Clematis (*Clematis* spp.) NN

Hop (*Humulus lupulus*) N

Firethorn (*Pyracantha atalantioides*) NN

### Bulbs

English bluebell (*Hyacinthoides non-scripta*) N

Squill species (*Scilla* spp.) N/NN

Snowdrop (*Galanthus nivalis*) N

Winter aconite (*Eranthis hyemalis*) E

Crocus species (*Crocus* spp.) NN

Wild Daffodil (*Narcissus pseudonarcissus*) N

Onion species (*Allium* spp.) N/NN. Note: *Allium triquetrum* (three cornered leek) and *Allium paradoxum* (few-flowered leek) are Schedule 9 invasive plant species.

Wood anemone (*Anemone nemorosa*) N

Lesser celandine (*Ficaria verna*) N

## Appendix F

### Bird and Bat Box Designs

# Bird and Bat Box Designs

## Bird Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	<b>Schwegler Nest Box 1B</b>  Hole-fronted 26mm entrance hole	16 x 16 x 23	Multi-purpose, including: blue-, marsh-, coal-, and crested tit, and possibly wren. All other species are prevented from using the nest box due to the smaller entrance hole.	Suitable walls or semi-mature/mature trees and shrubs; attached to a tree trunk or hung from branches. Ideal points include discrete areas away from predators, such as against walls, plant, and metal supports.
	<b>Schwegler Bird House</b>  32mm entrance hole	15 x 21 x 33	Multi-purpose, including: great-, blue-, marsh-, and coal tit, redstart, nuthatch, pied flycatcher, and sparrows.	Fixed to a semi-mature/mature tree trunk, wall or fence using the hanging bracket on the back.  Between 1.5 m and 3 m high, and should be sited higher if area has a particularly high cat population.

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	<p><b>Schwegler Sparrow Terrace 1SP</b></p>	<p>20 x 43 x 24.5</p>	<p>House sparrow. It may also occasionally attract tits, redstarts, and spotted flycatchers.</p>	<p>In an elevated position such as on post/platform within dense shrub/tree planting or on top of lighting columns. Alternatively, they could be attached to the side of a building.</p> <p>The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds, and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall using the plugs and screws provided or install directly into the wall. Cleaning is not necessary. The front panel can be removed by turning the screw hook.</p>

## Bat Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	<b>2F Schwegler Bat Box (General Purpose) with or without Double Front Panel</b>	16 x 16 x 33	<p>Without panel: Particularly successful with brown long-eared bat. Also used by noctule.</p> <p>With panel: Ideal for crevice-dwelling species: pipistrelles, Myotis species (particularly Daubenton's), Leisler's, and serotine.</p>	<p>On trees or buildings and at a height of 3 to 6m.</p> <p>In open sunny positions and in groups of 3 to 5 facing different directions.</p> <p>Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.</p>
	<b>Chavenage Bat Box</b>	10 x 18 x 38	<p>Small crevice-dwelling bats: e.g. pipistrelles.</p>	<p>On trees in gardens or woodland and also on house walls. 2.5 - 5m high on a building, mature tree, or vegetation line (trees/tall hedge) or on a feeding/flight route in partial daytime sun.</p> <p>Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.</p>

## Phlorum Limited

### Head Office & Registered Office:

Unit 12  
Hunns Mere Way  
Woodingdean  
Brighton  
East Sussex  
BN2 6AH  
T: 01273 307 167

### Northern Office:

Ground Floor  
Adamson House  
Towers Business Park  
Wilmslow Road  
Didsbury  
Manchester  
M20 2YY  
T: 0161 955 4250

### Western Office:

One Caspian Point  
Pierhead Street  
Cardiff Bay  
Cardiff  
CF10 4DQ  
T: 029 2092 0820