



Preliminary Ecological Appraisal

**Ashplatts House, Holtye Road
East Grinstead
West Sussex
RH19 3EZ**

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LIABILITIES:

Whilst every effort has been made to guarantee the accuracy of this report, it should be noted that living animals and plants are capable of migration/establishing and whilst such species may not have been located during the survey duration, their presence may be found on a site at a later date.

This report provides a snap shot of the species that were present at the time of the survey only and does not consider seasonal variation. Furthermore, where access is limited or the site supports habitats which are densely vegetated only dominant species maybe recorded.

The recommendations contained within this document are based on a reasonable timeframe between the completion of the survey and the commencement of any works. If there is any delay between the commencement of works that may conflict with timeframes laid out within this document, or have the potential to allow the ingress of protected species, a suitably qualified ecologist should be consulted.

It is the duty of care of the landowner/developer to act responsibly and comply with current environmental legislation if protected species are suspected or found prior to or during works.

1.0 Introduction

Background

- 1.1 The Ecology Partnership was commissioned by Mr and Mrs Bos to undertake an updated preliminary ecological appraisal of Ashplatts House, Holtye Road, East Grinstead, West Sussex RH19 3EZ.
- 1.2 This report presents a summary of a data search of the site and surrounding land and the results of The Ecology Partnership's survey which assesses the site's potential to support biodiversity interest that may be affected by the proposed development.
- 1.3 Section 2 of this report sets out the methodologies of the Ecology Partnership's assessment. In section 3 the results of the survey and data search are presented. Discussions and implications for development are found in section 4, including general site enhancements. Conclusions drawn from the report are presented in section 5.

Site Context and Status

- 1.4 The site is located to the east of East Grinstead, West Sussex (TQ 40837 39273). The site covers approximately c. 1.1ha and consists of five standing structures including a house and a bungalow. Within the red line boundary are areas of amenity grassland, hard standing ground, hedgerows, trees and shrubs. The immediate surroundings comprise largely of agricultural land, ancient & deciduous woodland, and a large scale residential-urban area to the west. There is one Site of Special Scientific Interest (SSSI) within 2km of the site, Mills Rocks.
- 1.5 The aerial photograph below (Figure 1) shows the site and its immediate surroundings. The red line depicts the approximate site boundary and survey area.



Figure 1: Approximate location of the red line boundary

Description of Proposed Development

- 1.6 The proposals for this site are for the demolition of the five standing structures, including the house and cottage and the erection of 30 new residential dwellings. A new access road will be constructed, bisecting the western hedgerow in the north-west corner.

Planning Policies

- 1.7 National and local planning policies may have an effect on the proposed development. The following paragraphs identify relevant planning policies and discuss these in the context of the site.
- 1.8 Under the Natural Environment and Rural Communities (NERC) Act 2006, *“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”*. In order to comply with this ‘Biodiversity Duty’, planning decisions must ensure that they adequately consider the potential ecological impacts of a proposed development.
- 1.9 In compliance with Section 41 of the NERC Act, the Secretary of State has published a list of species and habitats considered to be of principle importance for conserving biodiversity. These were known as BAP habitats and species. The UK BAP lists of priority species and habitats remain an important and valuable reference certainly at county levels. However, the UK Post 2010 Biodiversity Framework (published 2012) has succeeded BAP. It was produced by JNCC and Defra, on behalf of the Four Countries' Biodiversity Group (4CBG), through which the environment departments of all four governments in the UK work together to achieve the ‘Aichi Biodiversity Targets’ and the aims of the EU biodiversity strategy.
- 1.10 National policy guidance is provided by National Planning Policy Framework (NPPF) 2018, which sets out the Government's planning policies for England and how they should be applied. The section on **habitats and biodiversity** notes in section 174 (b) that plans should;

“promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”;

and that in determining planning applications, local planning authorities should follow certain principles, including that (section 175 (d));

“opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity”.

- 1.11 The site falls under the jurisdiction of Mid Sussex District Council. District Plan was adopted in 2014 and defines the vision of future development within the area over the period to 2031.

The District Plan includes policies focusing on the protection of biodiversity and the natural environment.

DP29 – Noise, Air and Light Pollution

“The impact on local amenity, intrinsically dark landscapes and nature conservation areas of artificial lighting proposals (including floodlighting) is minimised, in terms of intensity and number of fittings’....

DP37 – Trees, Woodland and Hedgerows

“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

“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.”*

1.12 Surveys were undertaken on the site to ensure compliance with local and national policy and to ensure that the nature conservation value of the site has been characterised. The report has been produced with reference to current guidelines for preliminary ecological appraisal (CIEEM 2013) and in accordance with BS 42020:2013 Biodiversity – Code of Practise for Planning and Development.

2.0 Methodology

Desktop Study

2.1 A desktop study search was completed using an internet-based mapping service (www.magic.gov.uk) for statutory designated sites and internet-based aerial mapping services (maps.google.co.uk) were used to understand the habitats present in and around the survey area and habitat linkages and features (ponds, woodlands etc.) within the wider landscape.

Preliminary Ecological Appraisal

2.2 An extended preliminary ecological appraisal was undertaken on the 8th January 2019 by Ecologists Natalie Kay BSc (Hons) MSc ACIEEM and George Caterer MSci (Hons). The surveyors identified the habitats present, following the standard 'Phase 1 habitat survey' auditing method developed by the Joint Nature Conservancy Council (JNCC). The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map (JNCC 2010). In addition, the dominant plant species in each habitat were recorded. The potential for the site to support protected species was also assessed.

Protected Species Assessment

2.3 The site was also assessed for the potential to support a range of protected species. The likelihood of occurrence of a particular species is ranked as follows and relies on the current survey:

- Unlikely – while presence cannot be absolutely discounted, the site includes very limited or poor quality habitat for a particular species or species group. The site may also be outside or peripheral to known national range for a species
- Low – on-site habitat of poor to moderate quality for a given species/species group. Presence cannot be discounted on the basis of national distribution, nature of surrounding habitats, habitat fragmentation, recent on-site disturbance etc
- Medium – on-site habitat of moderate quality, providing all of the known key-requirements of given species/species group. Factors limiting the likelihood of

occurrence may include small habitat area, habitat severance and fragmentation, disturbance

- High – on site habitat of high quality for a given species/species group. Good quality surrounding habitat and good connectivity
- Present – presence confirmed from the current survey or by recent, confirmed records

Building Assessment for Bats

2.4 An external investigation of the dwelling, as well as the three smaller structures, was undertaken in order to see if there were access points readily available for bats to utilise or crevices that bats could be roosting in. A building considered to have a higher potential to support roosting bats would include the following:

- Agricultural buildings (e.g. farmhouses, barns and out buildings) of traditional brick or stone construction and/or with exposed beams;
- Buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;
- Pre 1960s detached buildings and structures within 200m of woodland and/or water;
- Pre 1914 buildings within 400m of woodland and/or water;
- Pre 1914 buildings with gable ends or slate roofs regardless of location;
- Buildings which are located within or immediately adjacent to woodland and/or immediately adjacent to water;
- Dutch barns or livestock buildings with a single skin roof and board and gap or Yorkshire boarding if, following a preliminary roost assessment the site appears to be particularly suited to bats.

2.5 The surveyor assessed the buildings visually and searched for evidence such as:

- Staining beneath or around a hole caused by natural oils in bat fur.
- Bat droppings beneath a hole, roost or resting area.
- Bat droppings and/or insect remains beneath a feeding area.
- Audible squeaking from within a hole.
- Insects (especially flies) around a hole.
- Dead bats.

Tree Assessment for Bats

- 2.6 Bat roosts in trees may be identified from the following field signs:
- Black stains beneath cracks, splits and other features where bat droppings have fallen;
 - Dark marks at entrance points where bats have rubbed against the wood and left natural body oils;
 - Feeding remains beneath roosts, such as insect wings;
 - Chattering of bats;
 - Bat droppings under access points;
 - Scratch marks around a feature (cavity or split) caused by bat claws;
 - Urine stains below the entrance or end of split;
 - Large roosts or regularly used sites may produce an odour;
 - Flies around the entrance, attracted by the smell of guano.
- 2.7 The trees on site were assessed for their potential to support roosting bats. The trees were assessed visually for evidence of bats as well as for features that increase the likelihood of a roost being present such as:
- Woodpecker holes, natural cracks and rot holes in trunks and branches;
 - Frost cracks;
 - Trunk and branch splits;
 - Hollow sections of trunk and branches;
 - Loose bark;
 - Cavities beneath old root buttresses and coppice stools;
 - Dense epicormic growth;
 - Dense ivy cover.
- 2.8 Trees scheduled for arboricultural work should also be assessed and may be categorised (Table 1) to relate the value of their features to recommended actions. This approach allows trees to be graded according to their potential to support bat roosts. Trees may be assessed as having the potential to support bats (from an individual to a larger roost) even if no bats have been found.

**Table 1: Protocol for visual inspection of trees to assess their value to bats
(Bat Conservation Trust 2016)**

Suitability	Roosting habitat description
Negligible	Negligible habitat features on-site likely to be used by roosting bats.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A 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.
High	A 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.

Barn Owl Survey

2.9 The surveyor undertook an internal and external examination of the building for signs of barn owl activity. The surveyor visually inspected the buildings for potential barn owl nesting sites and searched for evidence of use by barn owls such as:

- Presence of adult feathers and downy juvenile feathers;
- Regurgitated undigested pellets below nest site locations (these are usually darker and more compact than other owl pellets and contain most of the prey's skeleton);
- White splashing, which arises from squirted faeces.

Badger Survey

2.10 A badger survey was undertaken at the site to assess if badgers were using the area and if any setts were located on the site and 30m away from the site that might constrain development. The evaluation of badger activity was based on methodology developed for the National Survey of Badgers (Creswell *et al.* 1990) and includes searching for badger field signs such as setts, badger pathways, tracks (pawprints), dung piles with latrines, badger hairs and feeding signs such as snuffle holes.

2.11 During the survey, all habitats potentially suitable for badgers were systematically examined for evidence of badger activity including:

- Setts: several sett types may be present within a social group territory, ranging from a single hole to numerous interconnecting tunnels. Setts can be categorised into main, annexe, subsidiary and outlier (Wilson *et al.* 1997).
- Latrine sites: badgers characteristically deposit dung in pits, which may be located along the boundaries and within the social group territory. These sites serve as means of inter- and intra-group communication.
- Paths and runs: well used routes between setts and/or foraging areas. Often used by generations of badgers.
- Snuffle holes: areas of disturbed vegetation often formed by badgers foraging for ground dwelling invertebrates such as earthworms and larvae and the underground storage organs of plants.
- Hair: often found among spoil and bedding outside entrances to setts or snagged on fences (such as barbwire) along well-used runs.
- Footprints: easily distinguishable from other large mammal species. Often found along paths and runs or in spoil outside sett entrances.

Habitat Suitability for Reptiles

2.12 Habitat surveys were carried out to assess the potential of the site to hold populations of reptile species. This involved looking for the presence of factors that would increase the suitability of the site for reptiles such as:

- Scrub and grassland (long sward) mosaic across the site;
- Features that can be potential hibernation sites for common reptiles such as log piles;
- Grass tussocks within the grassland that can act as shelter and burrowing sites;
- Water bodies or damp places on site (grass snakes);
- Compost heaps or decaying vegetation (slow worms);
- Features that can act as refugia on the ground such as disused roofing felt.

Other Protected Species

2.13 The site was also inspected for indications of the presence of other protected species, such as:

- Suitable habitat for dormice such as dense deciduous woodland, coppice and thick shrubbery;
- Ponds and associated habitat suitable to support great crested newts;
- The presence of ditches for water voles;
- The presence of fresh water streams/rivers for otters;
- Suitable nesting places for birds;
- Other potential protected species.

Limitations

2.14 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. . The site was visited over the period of one site visit, as such seasonal variations cannot be observed and potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of potential nature conservation value of the site and does not include a definitive plant species list.

2.15 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on the suitability of the habitat and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group. The assessment is only valid for the time when the survey was carried out. Additional surveys may be recommended if, on the basis of this assessment it is considered reasonably likely that protected species may be present.

3.0 Results

Desktop Study

Statutory sites

- 3.1 There is one statutory site within 2km of the site, Mills Rocks (SSSI) 1.9km (S). Mills Rocks contains an outcropping of Tunbridge Wells sandstone with a number of rare plant species, including Wood Fescue (*Festuca altissima*).
- 3.2 There is one internationally designated site within 10km of the red line boundary, Ashdown Forest (SPA, SAC) 5.2km SE. Ashdown Forest contains one of the largest continuous blocks of lowland heath in South-East England.

Priority Habitats

- 3.3 The habitats surrounding the red line boundary consist largely of agricultural land and urban development to the west. Areas of Ancient & Semi-natural woodland, a Section 41 Priority Habitat (NERC Act 2006, as amended), as well as Ancient Replanted woodland are located within 2km of the site. The closest patch of ancient woodland is 120m to the south-west of the red line boundary. Other protected habitats located within 2km of the site include: Woodpasture & Parkland (BAP priority habitat) 900m N & SW and multiple patches of deciduous woodland. A satellite image search and OS maps revealed one pond and one drainage ditch system within 250m of the site.

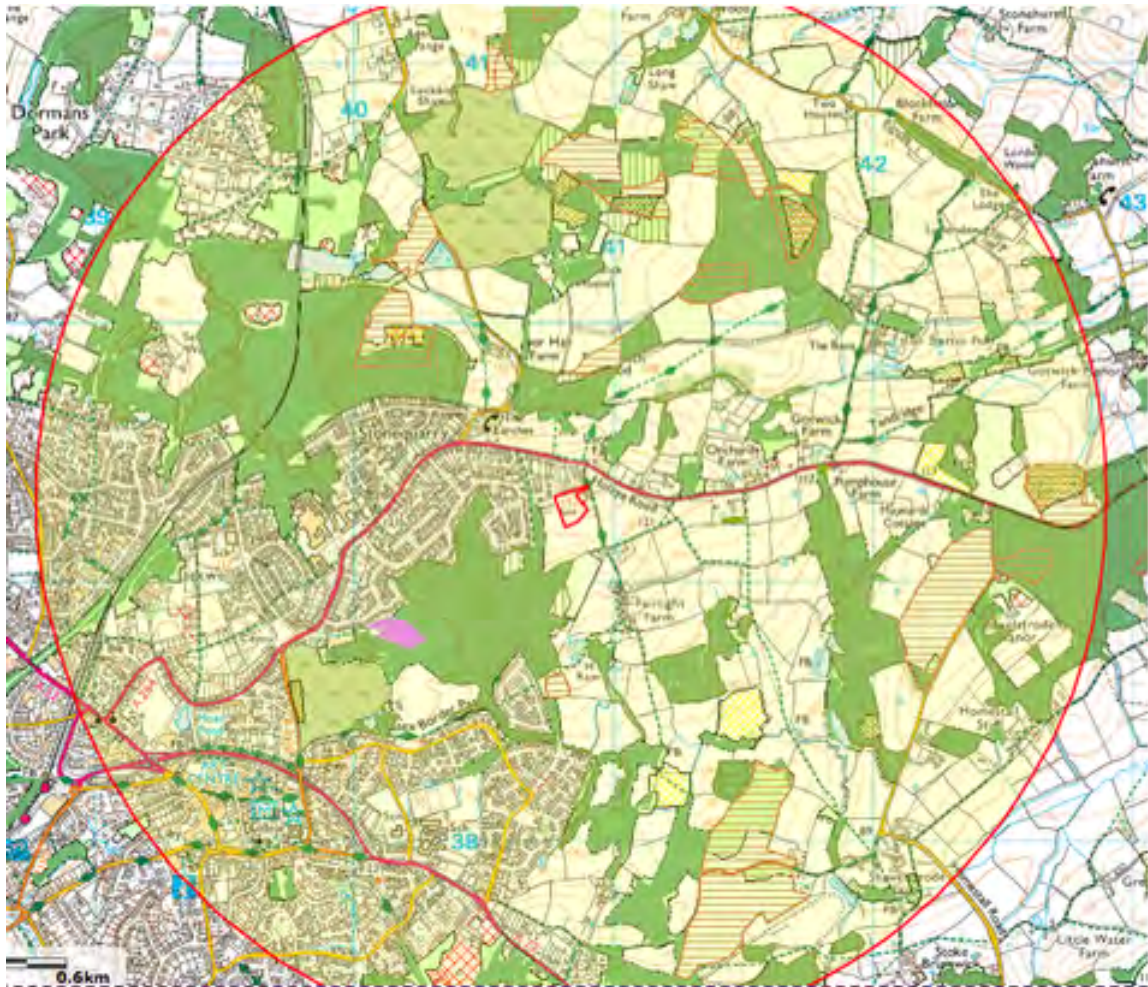


Figure 2: Habitats found within the wider landscape in relation to the site (shown in red). Deciduous woodland is shown in dark green, ancient replanted woodland in brown horizontal hatching, ancient & semi-natural woodland in brown vertical hatching, and woodpasture & parkland in lime green with vegetative icons.

Protected and other notable species

- 3.4 A 2km radius data search was requested from the Sussex Biodiversity Record Centre (SxBRC) during the previous ecological assessment. Notable protected species from this search are outlined below (Table 2). Only records from within the last ten years, closest to site and relevant to the habitats on site have been included. Magic.gov also showed the presence of a Dormouse licence from 2013-2015, 160m south-west of the red line boundary within the development plot adjacent to the site.

Table 2: Notable species recorded within 2km of the site over the last 10 years.

Species	Status	Record Year
Slow Worm <i>Anguis fragilis</i>	Schedule 5 WCA, UKBAP	2017
Grass Snake <i>Natrix natrix</i>	Schedule 5 WCA, UKBAP	2013
Great Crested Newt <i>Tritus cristatus</i>	Habs Regs Schedule 2, Schedule 5 WCA, UK BAP	2012
Skylark <i>Alauda arvensis</i>	Red List BoCC, UK BAP	2011
Lesser Redpoll <i>Carduelis cabaret</i>	Red List BoCC, UK BAP	2014
Linnet <i>carduelis cannabina</i>	Red List BoCC, UK BAP	2014
Peregrine <i>Falco peregrinus</i>	Schedule 1 WCA, Annex 1	2015
Redwing <i>Turdus iliacus</i>	Schedule 1 WCA, Red List BoCC	2016
Purple Emperor <i>Apatura iris</i>	Schedule 5 WCA	2013
Brown Long Eared <i>Plecotus auritus</i>	Hab&Spp Dir Anx 4 Cons Regs 2010 Sch2 W&CA Sch5 Sec 9.4b W&CA Sch5 Sec 9.4c BAP Priority	2017
Daubenton's Bat <i>Myotis daubentoniid</i>	Hab&Spp Dir Anx 4 Cons Regs 2010 Sch2 W&CA Sch5 Sec 9.4b W&CA Sch5 Sec 9.4c BAP Priority	2013
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	Hab&Spp Dir Anx 4 Cons Regs 2010 Sch2 W&CA Sch5 Sec 9.4b W&CA Sch5 Sec 9.4c BAP Priority	2017
Nathusius Pipistrelle <i>(Pipistrellus nathusii)</i>	Hab&Spp Dir Anx 4 Cons Regs 2010 Sch2 W&CA Sch5 Sec 9.4b W&CA Sch5 Sec 9.4c BAP Priority	2011
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	Hab&Spp Dir Anx 4 Cons Regs 2010 Sch2 W&CA Sch5 Sec 9.4b W&CA Sch5 Sec 9.4c NERC Act Section 41 UKBAP	2009
Hazel Dormouse <i>Muscardinus avellanarius</i>	Habs Regs Schedule 2, Schedule 5 WCA, UK BAP	2015
Eurasian Red Squirrel <i>Sciurus vulgaris</i>	Habs Regs Schedule 2, Schedule 5 WCA, UK BAP	2013

Phase 1 Habitat Survey

- 3.5 The site comprises of two residential dwellings with three smaller structures, a derelict tennis court, areas of ornamental planting and neutral semi-improved grassland. The majority of the surrounding gardens is made up of managed semi-improved grassland. A bordering hedgerow surrounds a large proportion of the site, including mature and juvenile trees and a mixture of natural and ornamental shrubbery. It should be noted that at the time of year the survey was conducted many species are deceased and as such it is not possible to categorise all species which may be present within the area. The survey has aimed to identify those species in a recognisable condition during the winter months and those that are important in defining the habitat types present on site.
- 3.6 The hedgerow and trees that border the site include the species: sycamore (*Acer Pseudoplatanus*), holly (*Ilex aquifolium*), cherry laurel (*Prunus laurocerasus*), oak (*Quercus robur*), beech (*Fagus sylvatica*), silver birch (*Betula pendula*), yew (*Taxus baccata*), hazel (*Corylus avellana*), wayfaring tree (*Viburnum lantana*), Douglas fir (*Pseudotsuga menziesii*), European larch (*Larix decidua*), magnolia (*Magnolia grandiflora*), cherry tree (*Prunus avium*), dogwood (*Cornus sanguinea*), guelder rose (*Viburnum opulus*), apple (*Malus domestica*), elder (*Sambucus nigra*), common ivy (*Hedera helix*), weeping willow (*Salix babylonica*), bramble (*Rubus fruticosus*), ash (*Fraxinus excelsior*) and cypress (*Cupressaceae sp.*).
- 3.7 The patches of garden divided by the access road and sections of ornamental planting are comprised of highly managed, species poor semi-improved grassland. Species include: red fescue (*Festuca rubra*), perennial ryegrass (*Lolium perenne*), creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), daisy (*Bellis perennis*), dandelion (*Taraxacum officinale*) and annual meadow grass (*Poa annua*).
- 3.8 Located within the north-eastern corner of the site is a hard-standing area, formally used as a tennis court. This area now supports a number of ruderal species including: herb Robert (*Geranium robertianum*), common mouse ear (*Cerastium fontanum*), buddleia (*Buddleja sp.*), spear thistle (*Cirsium vulgare*), cleavers (*Galium aparine*), cats ear (*Hypochaeris radicata*), oxeye daisy (*Leucanthemum vulgare*), broad leaved dock (*Rumex obtusifolius*),

ragwort (*Jacobaea vulgaris*), Yorkshire fog (*Holcus lanatus*), willow herb (*Epilobium sp.*), common fleabane (*Pulicaria dysenterica*), wild strawberry (*Fragaria vesca*), bramble (*Rubus fruticosus*) and petty spurge (*Euphorbia peplus*).

- 3.9 Within the south-eastern section of the plot an area of ornamental planting is bordered by a maintained yew hedge. Within this area species include: primrose (*Primula vulgaris*), hebe (*Hebe sp.*), anemone (*Anemone sp.*), olive tree (*Olea europaea*), heather (*Calluna sp.*) and cherry tree (*Prunus avium*).

Bat Assessment

- 3.10 There were five standing structures on site present on site, two residential dwellings, one detached office and two sheds (Figure 3). All of the buildings were surveyed internally & externally for evidence of bats and the potential for the buildings to support bats.
- 3.11 Ashplatts house (B1) was surveyed internally & externally to check for signs of roosting bats or any crack or crevices bats could use to roost. Externally the building showed some potential features that could be exploited by roosting bats. There were a number of slipped and missing roof tiles, also with damaged sections of guttering creating further gaps in the roof.
- 3.12 Internally, a small number of bat droppings were observed within the void located at the eastern aspect of the house. Based on the appearance and location of the droppings it is suspected that the bats present are brown long eared bats (*Plecotus auratus*.) A sample of the droppings were collected and have been submitted for DNA analysis to confirm the species present. The void itself appeared well-sealed and we were unable to determine the possible point of entry. The void was also of a warm temperature, favourable to roosting bats with only light cobwebbing present.
- 3.13 Also present within Ashplatts house were two more void sections. The first was located towards the western aspect of the house and although this shared similar conditions to the void described above, no bat droppings were observed within. The final void located

between the loft conversions dropped ceiling and the roof appeared well-sealed and clear of any observable droppings.



Figure 3: Location of the structures assessed for bat roost potential (B1-B5)

3.14 The cottage (B2) was similar in its external condition to the dwelling. The roof contained a number of missing and lifted tiles with a number of gaps surrounding each of the windows that could potentially be exploited by roosting bats. The cottage contained one roof void that was internally inspected. This void had a window present meaning the interior was very bright, reducing the suitability for roosting bats. The temperature within this void was also much lower, with large amounts of cobwebbing present and no droppings observed.

- 3.15 The third structure (B3) was a detached wooden shed used as a home office. The structure comprised of weather boarded walls with a wooden roof, covered in a layer of roofing felt. The weather boarding appeared well sealed and the only gaps present were observed between the roofing felt and the wooden roof. Upon inspection of the void within there appeared to be no entry points to the interior. This structure has been deemed as having 'negligible' potential for supporting roosting bats.
- 3.16 Structures B4 & B5 were both wooden sheds, one used as a potting shed (B4) and the other for storage (B5). Both were in a slightly dilapidated condition meaning there were numerous openings that would allow the cold and damp to enter. Also, each structure contained windows that resulted in high light levels entering. This, coupled with the lack of any droppings or urine stains observed within the structures has deemed them both as having 'negligible' potential for supporting roosting bats.
- 3.17 It is assumed that the mature trees around the edges of the site will be retained in situ. There are scattered mature trees within the garden. It is recommended that once these trees are identified for removal / retention that they are surveyed prior to removal to assess their potential for roosting bats.

Other Protected Species

Great Crested Newts

- 3.18 One pond and a drainage ditch network were identified within 250m of the site (P1, D1). The location of the pond and ditch network are shown in figure 4.
- 3.19 The pond (P1) was located within private property and was inaccessible at the time of the survey. The ditch network (D1) identified on the OS maps was also inaccessible as it is now located within the newly developed site to the south of the red line boundary.



Figure 4: Location of the ponds from OS Mapping.

- 3.20 The pond is located to the north-east of the red line boundary, approximately 134m from the access point to the site, on the edge of a patch of woodland. The habitat immediately surrounding the pond is believed to be of high quality for great crested newts, with woodland and a high degree of landscape connectivity.
- 3.21 The habitats present on site are dominated by maintained grassland and ornamental planting, which is considered to be sub optimal for GCNs in their terrestrial form. Furthermore, the main road leading through East Grinstead, isolating the two sites from one and other, fragmenting the habitats and reducing the potential for GCN movement.

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- 3.22 The ditch (D1) to the south of the red line boundary is located on the boundary of the Ashplatts ancient woodland and isolated from the survey area by the newly developed site. This ditch was inaccessible at the time of the survey so we could not assess its current condition. Based on the ecological report produced for the new developments planning application no suitable GCN habitat was observed on site. As such it is considered the drain was not considered to be suitable for GCNs. The development of the adjacent site was not constrained by the presence of GCNs.

Reptiles

- 3.23 The majority of the site consisted of short, highly maintained grassland. This habitat is not suitable for reptiles and considered to have negligible potential to support such species.
- 3.24 A single log pile was present on the south-western edge of the site which may have limited potential to act as a refugia for reptiles, albeit their success is dependent on surrounding habitats.

Badgers

- 3.25 No setts were observed during the survey and no evidence of badgers using the site for foraging were recorded. Due to the nature of the wider landscape it is likely that badgers are present off site, albeit their ability to access the site is reduced due to the presence of the newly developed area to the south and west of the redline boundary.

Dormice

- 3.26 A European protected species (EPS) license was granted for dormice between 2013-2015, 150m south-west of the red line boundary. The area under license is a newly developed residential site which currently divides the red line boundary from Ashplatts Wood, an ancient & semi-natural woodland.
- 3.27 The bordering hedgerows, located on the boundaries of the red line and the new development, consist largely of cypress, with a small number of woody species included.

On site there is a small number of species which may be utilised by commuting and foraging dormice such as yew and hazel.

- 3.28 The habitats present within the redline boundary are dominated by managed grassland and amenity shrubs. These features are not considered suitable for dormice. As such these are considered to have negligible value for dormice. The edge habitats, which support a range of species, do have some suitability for dormice, albeit the areas of habitats which are suitable are limited in extent. These features have been fragmented by the new development which extends to the south and west, reducing connectivity and isolating the current edge features.

Other Species

- 3.29 Breeding birds are likely to utilise the trees and shrubs on site for nesting.
- 3.30 Owing to a lack of suitable habitat, no potential for any other protected species, such as barn owls, water voles or otters, was identified within the site.

4.0 Discussion

Designated Sites / Priority Habitats

- 4.1 There is one statutory designated site within 2km of the site, Mills Rocks (SSSI) 1.9km (S). Mills Rocks contains an outcropping of Tunbridge Wells sandstone with a number of rare plant species, including Wood Fescue (*Festuca altissima*). Due to the distance between this development and the protected site it is considered unlikely to directly impact from land take, land squeeze or the isolation or fragmentation of linked habitats and ecological corridors. The development includes the demolition of the two dwellings currently present and the erection of 30 new dwellings, resulting in a net increase of 28 dwellings on site. The indirect impacts predicted from this change in the number of dwellings is not considered to be significant in comparison to those created by the larger development to the south and its isolation from any areas of ecologically important habitat.

- 4.2 The woodland located to the south-west of the red line boundary is considered to offer ecological value due to its designation as ancient & semi-natural woodland. The National Planning Practice Guidance sets out the Government's guidance to support the NPPF 2018. The Natural Environment guidance includes guidance on ancient woodland and veteran trees. The guidance states:

“development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists”

- 4.3 With regards to this development proposal there will be no direct impacts as a result of the development on the nearby ancient woodland. Furthermore, it is considered that there will be no habitat fragmentation or isolation as a result of the proposals. As such there are no impacts predicted on the ecological integrity of the ancient woodland.

- 4.4 Indirect impacts such as lighting is discussed in the section relating to bats. However, a lighting scheme will be developed to ensure that dark corridors are maintained along the hedgerow boundary features of the site. Lighting is also considered to have potential impacts on other species including small mammals, such as dormice. Due to the isolation of this site from the woodland however, this is considered as an issue for commuting animals as opposed to those occupying the woodland directly. Consideration of lighting is also a requirement under local plan policy DP29 and as such recommendations for dark corridors and low level lighting are in line with policy requirements.

Site

- 4.5 The habitats present on site are common and widespread. The dominant habitat is managed grassland for amenity purposes and as such the grassland is kept short and species poor. The ornamental species and shrubs are also considered to be of value at site level only.
- 4.6 The edge habitats, formed of both native and ornamental species, are considered to be the most significant in terms of the habitat they provide and the species that they have the

potential to support. It is recommended that these are retained within the scheme and subject to a range of enhancements. These tree lines provide some landscape connectivity, provide some maturity to the landscape and provide suitable habitats for a range of species, including common species often associated with garden habitats as well as the potential to support European protected species, such as foraging bats.

- 4.7 The proposals include the loss of some semi-improved grassland on site. This is not considered to be ecologically significant. There may be a loss of ornamental and ruderal vegetation as well. It is not considered that the loss of these habitats on such a small scale will have a negative impact on the ecological value of the site if the boundary features and trees are to be retained and enhanced.
- 4.8 With regards to recommendations, the maintenance of mature trees around the site is in line with policy DP37 which seeks to support the protected and enhancement of trees and hedgerows. Recommendations for the retention of the edge habitats, including recommendations for enhancements of such features is therefore in line with local policy.
- 4.9 Local plan policy DP38 Biodiversity, aims to seek protection for features of ecological interest and aims to see a biodiversity gain from development. The protection of ecological corridors and the provision of enhancements within development sites is also set within this policy. Recommendations for maintaining the mature trees along the edges of the site are therefore in line with local policy. These features are the most ecologically significant.
- 4.10 It is considered that the redevelopment of the site will not result in the alteration of the ecological functionality of the landscape. It is considered that with recommendations in place that impacts on protected species and habitats would be reduced to negligible and opportunities for enhancements are achievable. It is considered that the redevelopment would not impact upon the nature conservation value of the site or indeed the local landscape.

Protected Species

- 4.11 Protected species potential for this site is confined primarily to bats roosting within the two dwellings. It is considered unlikely that development would result in impacts upon great crested newts (GCNs), reptiles, dormice and badgers.

Bats

- 4.12 The five structures on site were externally & internally assessed for the potential to support roosting bats. Structures B3-5 showed no signs internally or externally of supporting roosting bats and are considered to have negligible potential. As such these buildings can be demolished and no further surveys of these buildings are recommended.
- 4.13 Externally, Ashplatts house (B1) showed a number of noticeable entry points with lifted and missing tiles, as well as damaged guttering. Internally a small number of droppings were observed indicating a bat presence within the western void above the house. With droppings present a full bat survey is recommended to assess the population size and species present. Two dusk surveys were conducted in 2018 which observed the emergence of two common pipistrelles from beneath loose tiles on Ashplatts house. Two further visits to site are required, one at dusk to assess emergence and one at dawn to assess re-entry. Due to the observed presence of droppings and emerging bats within the house, and the presence of roosting features within the cottage, two further surveys are also recommended for this structure to occur alongside. These surveys coupled with the data previously collected will ensure the safeguarding of protected species in line with legislation as well as local **policy (DP38)**.
- 4.14 The surveys should occur between May – August. Surveys are required to be two weeks apart. Remote recording within the roof void is also recommended to help characterise the roost within. Dependent on the results of the survey, works may require a licence from Natural England to proceed as the house is to be impacted and the roost lost.

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- 4.15 It is considered that any mitigation which may be required to support a licence, is easily achieved within the red line boundary due to the habitats present within the edges of the site and that there is space and opportunities to develop mitigation within the design.
- 4.16 Under the Bat Mitigation Guidelines, the level of mitigation required will depend upon the nature of the roosts identified during the emergence/re-entry surveys. In the event of a larger roost, such as a maternity roost, being identified then a like for like replacement will be required. A such roost provision can be made in new dwellings and within bat boxes within the boundaries of the site. In the event of further surveys indicating only individual or low number of bats to be using the site then mitigation required will be less than that of the opportunities to re create a replacement roost and could comprise the provision of bat boxes across the site.
- 4.17 It is recommended that any trees which have been identified for removal are assessed from ground level to assess their potential to support roosting bats. It is recommended that the removal of mature trees is avoided if possible to ensure the protection of native bat and bird species and to ensure the development is in keeping with the local **policy DP37**.
- 4.18 With a bat roost present and in keeping with local **policy DP29**, sensitive lighting would need to be incorporated into the planning to ensure these habitats are not altered for foraging bats. Any proposed lighting scheme as part of the development will also have to take into account bats in the surrounding area as well as site. All bat species are nocturnal, resting in dark conditions in the day and emerging at night to feed. Bats are known to be affected by light levels, which can affect both their roosting and foraging behaviour. This needs to be considered with a sympathetic lighting scheme for the development. Recommendations include:
- Installing lighting only if there is a significant need;
 - Using sodium lamps instead of mercury or metal halide lamps where glass glazing is preferred due to its UV filtration characteristics;
 - Directing lighting to where it is needed and avoiding light spillage;
 - Using baffled lighting where light is directed towards the ground;

- Avoid putting lighting near tree lines or hedgerows and angling light away from these linear features which are used by commuting and foraging bats;
- Planting a barrier or using man-made features required within the scheme to form a barrier.

4.19 Additional roosting opportunities can be provided by hanging bat boxes on mature trees along the boundary of the wider site or on external walls on new builds. Schwegler boxes have been recommended as these are long-lasting and require no maintenance. The following are examples of boxes which can be used on site:

- Schwegler 2F Bat Box – These boxes are attractive to small bats such as pipistrelles and long-eared bats and can be hung on trees (Figure 5).
- Schwegler 2FN Bat Box – This is slightly larger than the 2F and provides opportunities for the larger bats such as noctules. These should be hung on mature trees.
- Schwegler 1FD Bat Box - This box has been designed specifically for smaller bats and provides opportunities as a maternity roost (Figure 5).
- Schwegler Improved Cavity Bat Box – this is designed for cavity-dwelling species such as brown long-eared bats.



Figure 5: Schwegler 2F (left) and 1FD (right) bat boxes

4.20 The siting of bat boxes is important, bat boxes are best located, and have the best rate of occupancy, when they are situated within or adjacent to bat-friendly features, such as hedgerows or woodland, providing connectivity to the wider landscape. The bat boxes should be situated where they are sheltered from strong winds, and should be exposed to

the sun for most of the day, therefore southern aspects are favourable. Multiple boxes may be hung on one large tree, facing different aspects. Bat boxes should be hung as high as possible, preferably around 5m high, although lower boxes may also be used by brown long-eared bats.

Badgers

- 4.21 No badger setts were located within the red line boundary and no signs of foraging badgers or badger use was recorded on the site. It is considered unlikely that the redevelopment of the plot will impact badgers foraging or commuting habitats, however, there are safety measures that can be taken to ensure that no badgers are harmed during the development process.
- 4.22 It is recommended that any excavations and trenches associated with construction are either covered at night or supplemented with a means of escape for any badgers that may fall into the excavation whilst foraging. Any open pipes or conduits laid should be blocked off each night to prevent badgers from entering them. If possible, construction work should only take place between dawn and dusk with no late evening work to reduce possible disturbance.

Reptiles

- 4.23 The majority of the site consists of low-level grassland and ornamental plants which are unsuitable to support reptiles. The site is deemed as having negligible potential to support reptiles and no further surveys are recommended. There is a single log pile located on the south-western boundary of the site. These features may act as a refugia for reptile and amphibians and as such its removal should be undertaken by hand. In the unlikely event of protected species using this feature they will not be harmed by the process. It is recommended that log piles and habitat piles are recreated within the site boundaries to provide some site level interest for a range of species including reptiles, amphibians and invertebrates.

Great Crested Newts

- 4.24 There is a single pond located within 250m of site and a drainage ditch network to the south. The drainage ditch has been discounted due to the adjacent development. The habitat found on site is considered unfavourable for GCN and unlikely to encourage GCN to commute from the more suitable habitats in the surrounding area.
- 4.25 The pond located to the north east of the site is approximately 134m from the site edges. Where present, great crested newts tend to remain in close proximity to their breeding pond and whilst a maximum routine migratory range has been estimated as approximately 250m from a breeding pond (Franklin, 1993; Oldham and Nicholson, 1986; Jehle, 2000), one study by Robert Jehle, (2000) demonstrated a 'terrestrial zone' of 63m, within which 95% of summer refuges were located. A further study (Jehle, R & Arntzen, JW. 2000) showed that after the breeding season 64% of newts were recorded within 20m of the pond edge.
- 4.26 Research has also found that newts can travel varying distances. Movement and activity of newts from ponds depends on the surrounding habitat. If local refuges and food are abundant in habitats close to the pond, then newts are likely to remain in this area exploiting such resources. In terms of the off-site pond, it is considered likely that any GCNs that might be present would use the wooded areas and hedgerows surrounding the pond as opposed to crossing a road and utilising largely sub optimal managed grassland.
- 4.27 In addition to this, English Nature (now Natural England) published findings of a research report into the efficiency of capture techniques and the value of different habitats for great crested newts, which stated that *'The most comprehensive mitigation, in relation to avoiding disturbance, killing or injury is appropriate within 50m of a breeding pond. It will also almost always be necessary to actively capture newts 50-100m away. However, at distances greater than 100m, there should be careful consideration as to whether attempts to capture newts are necessary or the most effective option to avoid incidental mortality. At distances greater than 200-250m, capture operations will hardly ever be appropriate.'* This report also identified clear correlations between the number of newts captured and certain habitats where four habitats (woodland, arable land, post-industrial habitats and hedgerows) were found regularly to predict the number

of newts captured. It can therefore be surmised that greater densities of great crested newts will be found within or in close proximity to areas of favourable terrestrial habitat such as woodland and boundary features, such as hedgerows. Aerial photographs show that the pond is located within or in close proximity to areas of suitable terrestrial habitat, such as hedgerows, tree-lines and/or woodland.

- 4.28 Taking this into consideration, it is considered that no further surveys are necessary so long as the grassland habitats are kept short and managed (to remain unsuitable) for GCNs.
- 4.29 It is understood all trees and hedgerows located on the edges of the site are to be protected using tree protection fencing. As such it is considered that measures are in place to ensure the protection of the most significant ecological features of the site.
- 4.30 The development will not result in the loss of any suitable breeding ponds, or any ponds within the landscape. Nor will the development result in the loss of significant ecological features linking off site ponds. Indeed, it is considered that the development will not impact upon the ecological functionality of the site or the local landscape.

Dormice

- 4.31 There is a green corridor connecting the woodland to the survey area. This is fragmented by the road to the new development on the northwest aspect. Whilst this is not a significant barrier to dispersal, road networks can impact upon commuting corridors of dormice. Connectivity to the on site habitats is maintained along the eastern aspect of the new development linking to the on site habitats in the south eastern corner.
- 4.32 However, the habitats on site are not considered of high quality for dormice. The bordering hedgerows consist largely of cypress, with only a small number of woody species within which can be utilised by dormice such as yew and hazel. Certainly, the quantity of species present and the quality of habitat present on site is not considered to provide suitability to support a dormouse population all year around.

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- 4.33 The surrounding area supports a large ancient woodland block which offers the greatest potential habitat for dormice. It is believed that with the new development site between the red line boundary and the woodland, dormice are unlikely to commute through the development site to utilise the sub optimal habitats present on site.
- 4.34 A dormouse population is unlikely to be found on site and no further surveys are recommended at this time. It is considered that if the edge habitat features are retained and enhanced within the scheme than no further survey work would be required. It is understood that a small section of the tree line will be removed to allow for access from the new development to the site. Consideration to keep the removal of vegetation to a minimum is therefore required. A method statement of works would be recommended.
- 4.35 The point at which the new access road bisects the western tree line should be kept to a minimum width, with a dropped curb and understorey shrubbery placed either side in order to allow potential dormice to cross the gap. The removal of vegetation to form this access road should be undertaken under the supervision of a trained ecologist with the use of hand tools. It is recommended that all other boundary features are retained to ensure a well connected habitat. Internal features, including the managed yew hedges that border the ornamental planting to the rear of the cottage can be removed but should also be done under supervision of a trained ecologist in the unlikely event of a dormouse being found.
- 4.36 During development perimeter harris fencing is required to protect the retained hedgerows and tree lines from construction works and a buffer zone of 10m enforced. No machinery or spoil should be placed within the buffer zone.
- 4.37 It is recommended that the boundary features remain untouched during development, excluding the access road, and that enhancements are included that create a more diverse hedgerow network, creating more favourable conditions for dormice commuting from the ancient woodland. The thickness of the current hedgerows should be increased with the planting of natural species such as hazel, hawthorn, blackthorn, crab apple, ivy, honeysuckle and yew.

- 4.38 It is also recommended that the design of the development is such that tree lines around the site are kept outside private ownership. This is recommended due to the lack of control over the long term management of such features, especially when recommended to be retained for reasons relating to protected species use.

Other Protected Species

- 4.20 Birds are likely to use the hedgerows and mature trees located on-site for breeding. It is recommended that any vegetation clearance be undertaken outside the breeding bird season (March-September inclusive) or immediately after a nesting bird check by a suitably qualified ecologist. If an active nest is identified, works in the vicinity of the nest must cease until the birds have fledged the nest.
- 4.21 The site was considered to have negligible potential to support other protected species, such as water voles and otters due to the lack of suitable habitats on site.

General Site Enhancements

- 4.22 Site enhancements have been recommended to improve the site quality for protected species and to ensure the development works in conjunction with the District Council **policy DP38**. Examples of relevant ecological enhancements can be found below.
- 4.23 To mitigate for the potential loss of the existing grassland and ruderal species on site, planting garden plots with herbaceous plants and bulbs will attract bees, butterflies and other insects as well as providing ground cover for small animals. Appropriate seed mixes can be purchased from native species stockists but usually include the following species:
- Yarrow (*Achillea millefolium*)
 - Common bent (*Agrostis capillaris*)
 - Sweet vernal-grass (*Anthoxanthum odoratum*)
 - Betony (*Betonica officianalis*)
 - Common knapweed (*Centaurea nigra*)
 - Greater knapweed (*Centaurea scabiosa*)
 - Wild carrot (*Daucus carota*)

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- Foxglove (*Digitalis purpurea*)
 - Red fescue (*Festuca rubra*)
 - Lady's bedstraw (*Galium verum*)
 - Perforate St John's-wort (*Hypericum perforatum*)
 - Oxeye daisy (*Leucanthemum vulgare*)
 - Common bird's-foot-trefoil (*Lotus corniculatus*)
 - Musk mallow (*Malva moschata*)
 - Black medick (*Medicago lupulina*)
 - Field forget-me-not (*Myosotis arvensis*)
 - Ribwort plantain (*Plantago lanceolata*)
 - Hoary plantain (*Plantago media*)
 - Smooth meadow-grass (*Poa pratensis*)
 - Tormentil (*Potentilla erecta*)
 - Salad burnet (*Poterium sanguisorba*)
 - Cowslip (*Primula veris*)
 - Selfheal (*Prunella vulgaris*)
 - Bulbous buttercup (*Ranunculus bulbosus*)
 - Common sorrel (*Rumex acetosa*)
 - Wild clary (*Salvia verbenaca*)
 - Red campion (*Silene dioica*)
 - White campion (*Silene latifolia*)
 - Night-flowering catchfly (*Silene noctiflora*)
 - Devil's-bit scabious (*Succisa pratensis*)
 - Goat's-beard (*Tragopogon pratensis*)

4.24 If new trees are to be planted throughout the site. These should be native species of value to wildlife and can include:

- Oak (*Quercus sp.*)
- Hazel (*Coryllus avellana*)
- Beech (*Fagus sylvatica*)
- Cherry (*Prunus sp.*)
- Hornbeam (*Carpinus betulus*)

- Rowan (*Sorbus aucuparia*)
- Spindle (*Eunoymas europaea*)
- Box (*Buxus sempervirens*)
- Wayfaring tree (*Viburnum lantana*)

4.25 Nest boxes should be installed in order to provide new nesting opportunities for birds. These can be hung on the external walls of the new building, within the hedgerow or on surrounding mature trees post-development. Recommended boxes include:

- Schwegler Swallow Nest 10 – A specially designed nest box system to attract swallows and house martins.
- Schwegler 1B Bird Box – This box will attract a wide range of garden birds and is made from woodcrete to ensure that it lasts for decades. Different entrance holes can cater for different species.
- Schwegler 1N Deep Nest Box – This box gives added nest protection from predators.

4.26 Shrubs planting in the newly landscaped gardens should use native species where possible, such as elder (*Sambucus nigra*), spindle (*Eunoymas europaea*), privet (*Ligustrum vulgare*), box (*Buxus sempervirens*), wayfaring tree (*Viburnum lantana*), bilberry (*Vaccinium myrtillus*), buckthorn (*Rhamnus baccata*) and yew (*Taxus baccata*).

4.27 Herbs can also be incorporated into the garden and should include species which provide nectar opportunities for invertebrates such as lavender, jasmine, chamomile, fennel, oregano, evening primrose, thyme, mint and heather.

4.28 Log piles should be built to provide hibernacula habitats for potential species such as common amphibian and reptile species. It is recommended that one be created close to the retained pond. Planting around log piles with such species as honeysuckle or clematis can also add value. Such refugia can attract reptiles, small mammals, and invertebrates.

4.29 It is considered that light levels should be minimised along the site boundaries and close to the mature trees in on-site. Changes to light levels in such areas can impact upon wildlife using these features. It is therefore recommended that a lighting scheme along edges are

reduced, buffered, or low-level lighting used to ensure that the dark and its ecological function is maintained.

5.0 Impact Assessment

5.1 This section of the report forms an EcIA (Ecological Impact Assessment) and is designed to quantify and evaluate the potential impacts of the development on habitats and species present on site, or within the local area.

Methodology

5.2 This assessment has been carried out with reference the CIEEM *Guidelines for Ecological Impact Assessment (EcIA)* (CIEEM, 2018). The guidelines help in the determination of the baseline conditions, what features are important, what impacts significant and how to apply the mitigation hierarchy. Important ecological features are those for which the decision maker (LPA or other regulator) needs the EcIA, to help to make an assessment of the effects (negative, neutral or positive) and to guide the determination of the planning application. Important features are therefore generally defined by whether legislation or policy requires their consideration.

Assessment

5.3 The site is not designated for its nature conservation value and does not lie adjacent to any statutory designated sites. The closest statutory site is located approximately 2km from the red line boundary and due to the small scale of this development no impacts to this site is expected.

5.4 The majority of habitats on site offer limited opportunities for wildlife due to the maintained short nature of the grassland and lack of connectivity with the nearby woodland. The most significant feature is the hedgerow edges of the site which provide some landscape interest for connectivity and provide some on site opportunities for a range of species.

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- 5.5 The dwelling however has been confirmed as a bat roost with droppings observed within and the emergence of two common pipistrelles documented in a previous survey. Potential roost features were also observed within the adjacent cottage. Two further bat surveys have been recommended, one dusk and one dawn between the months of May - August. Dependent on the surveys, mitigation / compensation will be developed to ensure that the favourable conservation status of the species will be retained. As such impacts would be reduced to negligible.
- 5.6 A gap within the western hedgerow is to be made in the north-west corner to allow for the access road onto site. This gap will fragment the bordering hedgerow and has the potential to impact commuting species such as dormice and bats. The gap size is to be kept to a minimum with shrubbery planting either side of the new road put in place to provide cover for crossing animals such as dormice. It is considered that as long as the habitat edges are retained and enhanced and only a small area removed for access, then further survey work would not be required.
- 5.7 Due to a lack of suitable habitats on site, the site has limited potential to support a range of other protected species. It is considered that there will be no significant impacts predicted as a result of the development, with works leading to short-term temporary disturbance only.
- 5.8 In terms of the zone of influence, this is considered to be restricted to the immediate surroundings of the development. Given the small scale of the proposals and their nature, it is considered that there will be no significant impacts on surrounding protected areas or habitats. Therefore, it is considered that overall the ecological impacts of the development will be negligible.
- 6.0 Conclusions**
- 6.1 The site consists mostly of low-level grassland and ornamental planting, with five existing structures present. The site is mainly surrounded by agricultural land and low-level urban dwellings with patches of ancient woodland present. It is considered that there would be no direct impacts on the integrity of the habitats, no land loss, isolation or fragmentation

of habitats in the surrounding area. It is considered that the redevelopment of the site would not result in any indirect impacts which would be considered significant.

- 6.2 The buildings on site have been assessed for roosting bat potential. The house has been confirmed as a bat roost, with the adjacent cottage having high potential and the three smaller structures as having negligible potential. A full bat survey is recommended for the house and cottage with two further visits, one at dusk and one at dawn, in addition to the two that were conducted in 2018. These surveys should be conducted between the months of May – August. No further surveys are recommended for the three smaller structures on site.
- 6.3 No mature trees are planned to be removed under the current plans, however if the plans change then a qualified ecologist must be contacted to assess the trees marked for removal for potential roost features.
- 6.4 A lighting strategy is also recommended to minimise light spill. It is considered that if recommendations are followed in the conditions no impacts would be predicted on the surrounding habitats.
- 6.5 The habitats on site were not considered as having high suitability for dormice, despite their presence within the surrounding area. A small gap is planned to be made within the western hedgerow to allow for construction of the access road. This gap is to be kept to a minimum size with a dropped curb and low-level shrubbery put in place to provide a crossing point for potential commuting dormice.
- 6.6 It is recommended that the remaining boundary features are retained and hedgerows enhanced to ensure there are no impacts on any potential dormouse populations and to improve their commuting pathways. No further surveys are recommended.
- 6.7 An assessment was conducted to assess the presence of badger setts, although no evidence was found at the time of the survey it cannot be guaranteed that badgers sets are not present. If during the development works a badger sett is located on site then works must cease immediately and a qualified ecologist must be contacted to assess potential activity.

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- 6.8 Owing to a lack of any other suitable habitat, the site is not considered to be constrained by other protected species that could feasibly occur, namely GCN and reptiles.
- 6.9 Recommendations for enhancements have been made within this report, aimed at improving the ecological value of the site post-development.

7.0 References

Bat Conservation Trust (2016) *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.

Joint Nature Conservation Committee (2010) *Handbook for Phase 1 habitat survey – a techniques for environmental audit*. JNCC, Peterborough.

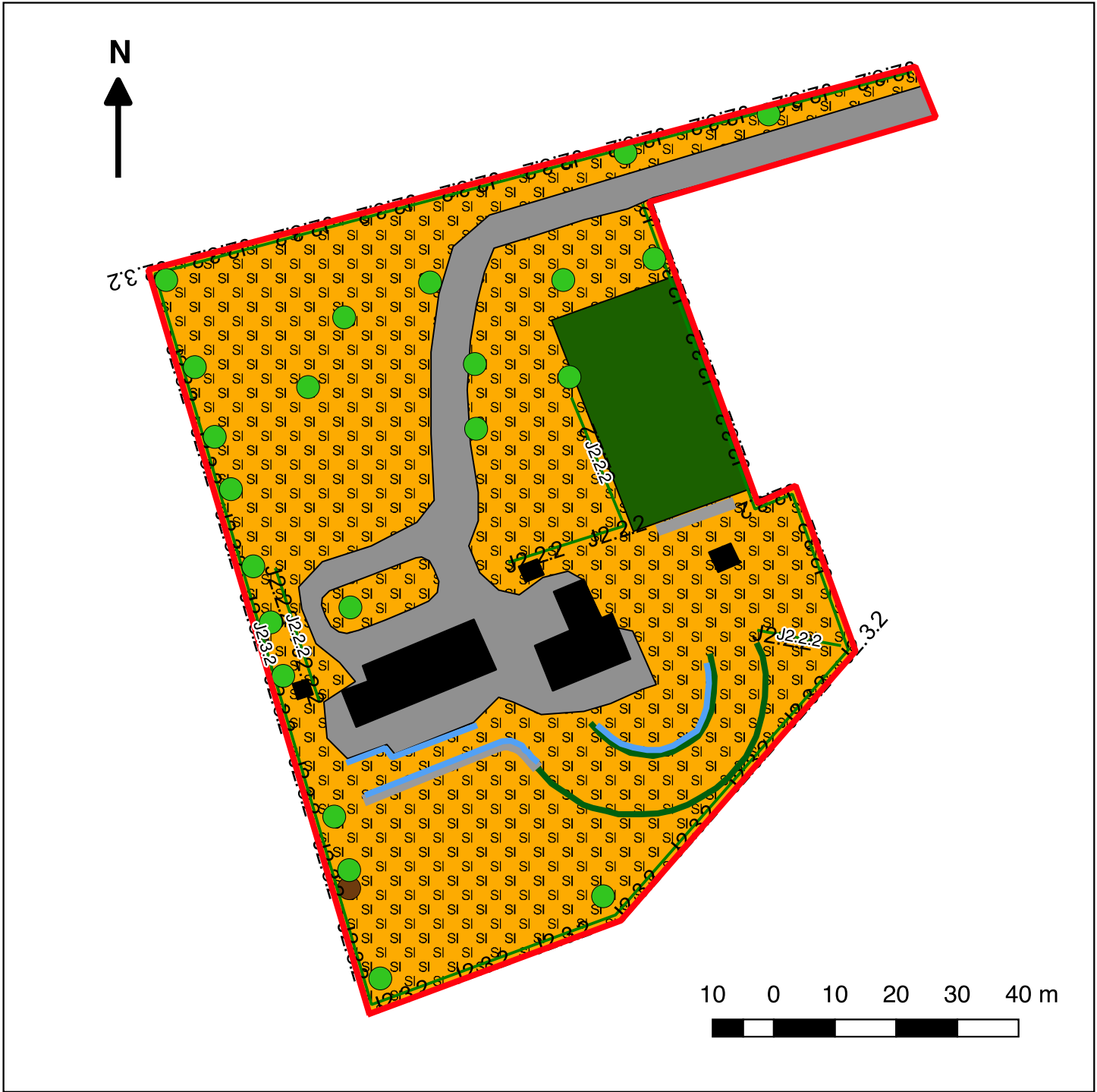
Stroh, P.A. et al. 2014. *A Vascular Red Plant List for England*. Botanical Society of the British Isles.

Internet resources:

Google Maps: www.google.co.uk/maps

Magic Interactive Map: www.magic.gov.uk

Appendix 1: Phase 1 Habitat Map



Legend

- Red Line Boundary
- Buildings
- Ornamental Planting
- Mature Trees
- Neutral grassland - semi-improved
- Hard Standing
- J2.2.2 Defunct hedge - species-poor
- Wall
- Yew Hedgerow
- J2.3.2 Hedge with trees - species-poor
- Bare Ground - Emergent Vegetation
- Log Pile

Site: Ashplatts House, Holyte Road, East Grinstead

Survey Date: 8th January 2019

Surveyor: Natalie Kay & George Caterer

Client: DMH Stallard

the
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Appendix 2: Photos

Photograph 1:
Front aspect of
Ashplatts house
(B1).



Photograph 2:
Front aspect of
Ashplatts house
showing missing
& lifted tiles and
damaged
guttering that can
be exploited by
roosting bats.



Photograph 3:
Western void space within Ashplatts house in which bat droppings were found.



Photograph 4:
Void space within Ashplatts house located between roof and dropped ceiling, no evidence of roosting bats observed.



Photograph 5:
Rear aspect of the
cottage (B2).



Photograph 6:
Rear aspect of the
cottage showing
lifted tiles and
gaps in the lead
flashing that can
be exploited by
roosting bats.



Photograph 7:
Void space located within the cottage showed no signs of roosting bats.



Photograph 8:
Exterior office (B3) showed no potential roost features or signs of roosting bats.



Photograph 9:
Shed (B4) showed no potential roost features or signs of roosting bats.



Photograph 10:
Shed (B5) showed no potential roost features or signs of roosting bats.



Photograph 11:
Semi-improved
grassland located
on the north side
of the property.



Photograph 12:
Semi-improved
grassland and
ornamental
planting located
on the south side
of the property.



Photograph 13:
Log pile located
along the site
boundary to the
south-west.



Photograph 14:
Example of
cypress
hedgerows found
bordering the
majority of the
site.



Photograph 15:
Old tennis court now supporting emergent vegetation, located in the north-east section of the site.



Photograph 17:
Semi-improved grassland and ornamental planting with yew hedges located to the rear of the cottage.



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