

**THE CROFT MEDICAL CENTRE, BARNHAM ROAD,
EASTERGATE, WEST SUSSEX**

PRELIMINARY ECOLOGICAL APPRAISAL

Final Document

May 2021

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EcIA • HRA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

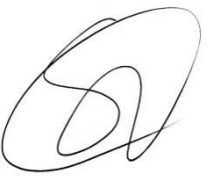
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The Preliminary Ecological Appraisal has been undertaken with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). This report has been produced in accordance with the CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2018).

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by PHP Primary Care Developments to undertake a Preliminary Ecological Appraisal of The Croft Medical Centre Site in Eastergate, West Sussex. The purpose of the appraisal is to assess the site's ecological baseline and identify constraints and opportunities associated with development at the site, to inform a future planning application. The site is located in Eastergate, within the Arun district of West Sussex and comprises an undeveloped field. The development will entail the construction of a new medical centre with associated facilities, car parking and landscaping.

The main findings of the Preliminary Ecological Appraisal are:

- The site lies within the 12-kilometre consultation zone of the Singleton and Cocking Tunnels SAC which is designated for supporting hibernating barbastelle and Bechstein's bats. This means that the development will need to demonstrate no severance or disturbance to the flight lines of these species.
- The most notable habitats recorded on the site comprise the bramble scrub and hedgerow with trees present along the eastern site boundary.
- The site is assessed as having suitability for supporting foraging and commuting bats, badger, hazel dormouse, nesting birds, reptiles and European hedgehog.
- Potential ecological constraints to the development have been identified and further surveys recommended for reptiles.
- Initial recommendations for mitigation, compensation and enhancement measures have been made, however these recommendations will need to be reviewed on completion of the further survey work and once proposals are finalised.
- Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by PHP Primary Care Developments to undertake a Preliminary Ecological Appraisal to identify the ecological constraints and opportunities associated with the development of The Croft Medical Centre, Barnham Road, Eastergate, West Sussex PO20 3RP (hereafter referred to as the site).

In 2017 planning approval was granted for a medical centre with pharmacy retail unit and other ancillary uses together with access onto Barnham Road and associated car parking (planning reference EG/57/16/PL). This application was supported by an Ecology Report and Reptile Survey Report produced by Applied Ecology Ltd (Applied Ecology, 2016a; Applied Ecology, 2016b). The design of the new medical centre has been developed from the 2017 approval to provide new up-to-date layouts for the surgery that more closely follow how primary healthcare facilities currently function. As such, a Preliminary Ecological Appraisal (PEA) has been undertaken to inform the future planning application for the site.

Pre-application advice was sought from Arun District Council in August 2020. The feedback from the council highlighted the need for an ecological report setting out the biodiversity that is present, how biodiversity impacts can be avoided and appropriate mitigation and compensation measures. The council also stated that a Biodiversity Enhancement Plan should be provided showing biodiversity enhancement measures.

1.2 The Site

The site is located in Eastergate, with the Arun district of West Sussex, centred on National Grid Reference (NGR) SU 9467 0571 (**Map 1**). The Phase 1 habitat map (**Map 2**) depicts the boundary of the site.

The site covers approximately 0.71 hectares and comprises an open field bounded by trees to the east. The site is rural in nature but lies adjacent to residential development to the south and west associated with Collins Close and Cherry Tree Drive. To the north and east lies an area of grassland, open parkland and farmland. The A27 lies some 1.6 kilometres to the north while the centre of Chichester lies eight kilometres west.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study carried out during January and February 2021. The objectives of the appraisal are:

- To provide preliminary baseline information on the current habitats, the suitability of the site to support notable and protected species, and evidence of notable and

protected species both on site and in the immediate vicinity of the site, where relevant;

- To identify the proximity of any statutory sites designated for nature conservation importance;
- To identify the likely ecological constraints associated with the proposals;
- To identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy'¹;
- To identify any additional surveys that may be required to inform an Ecological Impact Assessment (EclA); and
- To identify the opportunities offered by the proposals to deliver ecological enhancement

1.4 Site Proposals

The proposals entail the construction of a new medical centre with associated facilities, carparking, access and landscaping.

The appraisal is based on the Proposed Site Plan produced by Simpson Hilder Associates, dated June 2020 (Drawing No. 9226-P004) (**Appendix 1**).

It is anticipated that planning permission will be sought in spring 2021 with construction commencing soon after permission has been granted.

¹ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

2.0 PLANNING POLICY CONTEXT

2.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the Arun District Council administrative area. This information is then used to make necessary recommendations for mitigation and enhancements in order to ensure any future planning application accords with relevant planning policy.

2.2 Planning Policy

2.2.1 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with a revised NPPF published in February 2019. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF *"Plans and decisions should apply a presumption in favour of sustainable development"*. However, Paragraph 177 goes on to state that *"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."*

The NPPF sets out that development proposals should not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that the planning system should contribute to and enhance the natural environment by *"...minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures..."*.

A number of principles are set out in Paragraph 175, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats², including ancient woodland³. Where loss to irreplaceable habitats occurs planning permission would normally be refused unless there are wholly

² The NPPF defines irreplaceable habitats as *"Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."*

³ Natural England defines ancient woodland as *"An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)."*

exceptional reasons and an adequate compensation strategy is in place. Paragraph 175 also states *“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity”*. Protection of sites proposed as SPAs, SACs and Ramsar sites or acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states *“the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat”*. Paragraph 99 states *“it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the Proposed Project Development, is established before planning permission is granted”*.

2.2.2 Local Policy

Local planning policy within Arun District is provided by the saved policies within the Arun District Local Plan 2011-2031. These are summarised below:

- **Policy ENV SP1: Natural Environment**

Development will be permitted where it protects the following sites that are recognised for the species and habitats contained within them: Pagham Harbour Ramsar site, SPA and SSSI, Arun Valley SAC and SPA, Solent and Dorset Coast SPA, Bognor Reef SSSI, Felpham SSSI and Climping Beach SSSI.

- **Policy ENV DM1: Designated Sites of Biodiversity or Geological Importance**

Proposed development likely to have adverse effects on the designated sites mentioned above, will not normally be permitted, unless:

- There is no alternative solution;
- There are reasons of public health or public safety;
- There are benefits of primary importance to the environment; or
- There are imperative reasons of overriding public interest.

- **Policy ENV DM2: Pagham Harbour**

Development within 0-400 metres of the site will only be permitted in exceptional circumstances where the developer is able to demonstrate there will be no detrimental effects on Pagham Harbour. New residential development within 0-5 kilometres of the site will be required to make developer contributions towards the

agreed strategic approach, and/or create easily accessible new green spaces for recreation.

- **Policy ENV DM3: Biodiversity Opportunity Areas**

Development shall retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones, and be designed in order to minimise disturbance to habitats. Where a development scheme would result in habitat loss, mitigation measures will be proposed and agreed with the LPA prior to determination of any planning application.

- **Policy ENV DM5: Development and Biodiversity**

Development schemes shall, in the first instance, seek to achieve a net gain in diversity and protect existing habitats on site. They shall also incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features. Where there is evidence of a protected species on a proposed development site, planning applications shall include a detailed survey of the subject species and consideration of potential impacts.

3.0 METHODS

3.1 Introduction

This section details the methods employed during the Preliminary Ecological Appraisal. Any significant limitations to the survey methods are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this appraisal (Zone of Influence⁴), the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected. The appropriate survey radii for the various elements of the appraisal (i.e. desktop study and field survey) have been defined in the relevant sections below. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to appraisal, its surroundings and the nature and scope of the proposals (if known when the appraisal was undertaken). Determination of the Zone of Influence is an iterative process and will be regularly reviewed and amended as the project evolves.

3.3 Scoping

Protected species considered within this appraisal are those species/species groups considered likely to be encountered given the geographical location and context of the site. These are discussed within the results section (Section 4.0) of the current report. Where such a species is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the potential ecological constraints and mitigation measures section (Section 5.0) of this report.

3.4 Desk Study

3.4.1 Biological Records Centre

Sussex Biodiversity Records Centre (SxBRC) was consulted on 28th January 2021 for the following data:

- Records of non-statutory designated sites (Local Wildlife Sites (LWSs and Designated Road Verges (DRVs)), within one kilometre of the site boundary;
- Records of legally protected and notable species (flora and fauna) within one kilometre of the site boundary, including Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the Natural

⁴ The Zone of Influence, as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities.

Environment and Rural Communities (NERC) Act 2006 and as listed in the England Biodiversity List (**Appendix 5**); and

- Records of bats within two kilometres of the site boundary. Bat species are highly mobile and therefore the search radius is increased for this species group.

3.4.2 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2021) was reviewed on 1st February 2021 to establish the location of statutory designated sites located within the vicinity of the site. This included a search for all internationally and nationally designated sites such as Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Wetlands of International Importance (Ramsar sites), Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs) within one kilometre of the site. Where appropriate, the desk study search area has been extended to take account of any appropriate statutory designated sites which need consideration in terms of potential in-direct effects and which support particularly mobile species, particularly those specifically mentioned in local planning policy. The Impact Risk Zones (IRZ) were also obtained from MAGIC, which are used to help guide and assess planning applications for likely effects on SSSIs.

Sites within two kilometres of the site boundary where European Protected Species Mitigation (EPSM) licences have been granted were reviewed. This information allows a greater understanding of the potential for European Protected Species to be present in the local area.

3.4.3 Other Sources of Information

Online mapping resources, at an appropriate scale, were used to identify the presence of habitats such as woodland blocks, ponds, watercourses and hedgerows, in the vicinity of the site. These habitats may offer resources and connectivity between the site and suitable habitat in the local area, which may be exploited by local species populations.

The presence of ponds or other waterbodies within a 500 metre radius of the site in particular are noted in relation to great crested newt. The 500 metre radius is a standardised search radius to assist in the assessment of the suitability of a site and its surrounding habitat to support this species, based on current Natural England guidance (English Nature, 2001).

The previous ecology reports produced by Applied Ecology (Applied Ecology, 2016a) (Applied Ecology, 2016b) in relation to the site are referred to where necessary.

3.5 Field Survey

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and comprised/included a search for evidence of, and an assessment of the site's suitability to support, protected and notable species as recommended by CIEEM (CIEEM, 2017). The field survey covered all accessible areas of the site, including boundary features. Habitats described in Section 4.0, have been mapped (**Map 2**) and photographs provided, where relevant. For ease of reference, Target Notes (TN) depict locations of particular ecological interest or features which are too small to map.

3.5.1 Phase 1 Habitat Survey

An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 habitat survey methodology (JNCC, 2010). This involved identification of broad vegetation types, which were then classified against Phase 1 habitat types, where appropriate. A list of characteristic plant species for each vegetation type was compiled and any invasive species⁵ encountered as an incidental result of the survey recorded.

3.5.2 Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. The following species/species groups were considered during the appraisal.

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of trees on the site and immediately on the site boundary to support roosting bats based on the presence of Potential Roosting Features such as holes, cracks, splits, loose bark and ivy cladding.

An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bat species. The assessment of the suitability of the site to support roosting, foraging and commuting bats is based on a four-point scale as detailed in **Appendix 4**.

Otter

The otter appraisal was based on an assessment of the suitability of the habitat present within the site to support otter by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), proximity of the site to freshwater and potential important feeding resources (such as fisheries), presence of

⁵ Plant species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). The survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

habitat features which could provide opportunities for resting places and/or holts (such as tunnels, hollows at the base of trees and presence of dense, undisturbed habitat). During the survey attention was paid to the presence of evidence such as spraints, feeding remains, footprints and slides.

Badger

The survey involved an assessment of the suitability of the site to support badger. Evidence of the species was recorded as an incidental result of the Phase 1 habitat survey and included locating badger setts, paths, and signs of territorial activity such as latrine sites.

Hazel Dormouse

The appraisal for the suitability of the site to support hazel dormouse was based on an assessment of habitat features that may indicate that the species is present. This includes the presence of key food sources such as hazel and bramble, or plants used as nesting material such as honeysuckle and clematis. Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features in determining the suitability of the site for hazel dormouse.

Water Vole

The water vole appraisal was based on an assessment of the suitability of the habitat present within the site to support water vole by reference to habitat type (such as rivers, streams, ditches, wetlands, reed beds, lakes, ponds and reservoirs), bank structure and the bank side vegetation. Water voles generally require sloping banks in which to burrow and well-developed bank side vegetation to provide shelter and food. During the survey attention was paid to the presence of burrows, latrines, feeding remains, trails and footprints.

Birds

The appraisal of breeding birds on the site was based on the suitability of habitat present to support nesting bird communities, the presence of bird species that may potentially nest within the available habitat and evidence of nesting such as old or currently active nests.

The assessment of wintering birds was based on an assessment of the suitability of the habitat on site to support important wintering bird species and populations. Particular attention was paid to the suitability for the site to support wintering farmland bird species, waders and wildfowl.

Reptiles

The reptile appraisal was based on an assessment of the suitability of the habitat present within the site to support a population of reptiles. Reptiles particularly favour scrub and rough grassland interfaces and the presence of these is a good indication that reptiles may be present on site. In addition, reptiles may utilise features such as bare ground for basking, tussocky grassland for shelter and compost heaps and rubble piles for breeding and/or hibernating.

Great Crested Newt

The appraisal of the site to support great crested newt included establishing the presence of suitable aquatic habitats such as ponds, lakes or other waterbodies within or adjacent to the site and the presence of suitable terrestrial habitat. Waterbodies that are densely shaded, highly eutrophic or that contain fish are likely to be less suitable for this species. The suitability of on-site ponds and terrestrial habitat is considered in relation to the presence of ponds within the wider area, as identified within the desktop study (Paragraph 3.4.3), and their suitability to be used as a network.

Invertebrates

An assessment was made of the suitability of the site to support diverse communities of invertebrates. The assessment was based on the presence of habitat features which may support important invertebrate communities. These features include, for example, an abundance of dead wood, the presence of diverse plant communities, varied woodland structure, sunny woodland edges with a diverse flora, waterbodies and water courses and areas of free draining soil exposures. During the field survey there was no attempt made to identify species present as this is a more specialist area of ecological assessment reserved for targeted surveys.

Other Relevant Species

An assessment was made of site suitability for other notable species such as more rarely encountered protected species, Species of Principal Importance for the Conservation of diversity in England notified under Section 41 of the NERC Act 2006 and as listed in the England Biodiversity List, and Local Biodiversity Action Plan (LBAP) species⁶, specific to the study region.

Invasive Species

During the field survey any incidental records of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded. However, it

⁶ LBAPs identify local priorities for biodiversity conservation by translating national targets for species into effective action at the local level and identifying targets for species important to the local area.

should be considered that the survey was not specifically aimed at assessing the presence of these species and further specialist advice may need to be sought.

3.6 Field Survey Details

The field survey was carried out by Helen Butt, Ecologist of ECOSA on 27th January 2021. The weather conditions included rain with 100% cloud cover, an ambient temperature of 8°C and a gentle breeze.

During the survey, the surveyor was equipped with 10x40 binoculars, a high powered torch and a digital camera.

3.7 Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. The field survey has therefore not produced a complete list of plants and animals and in the absence of evidence of any particular species should not be taken as conclusive proof that the species is absent or that it will not occur in the future.

Online mapping resources provide an indication of habitat features present in the wider area, but do not provide a detailed assessment of habitat types.

Not all potential bat roosting features are accessible to the surveyor, e.g. holes or cracks in trees, and therefore assessments are based upon the potential for these features to provide suitable roosting opportunities.

It is not always possible to provide definitive assessments of a species' presence/likely absence at a site and so in the absence of direct evidence, assessments and recommendations are based on the presence of suitable habitat within/adjacent to a site and the results of species records within the desk study data.

The survey was undertaken at a time of year when many species of plant and animal are either dormant, not visible above ground or simply not present in the UK (such as migratory birds). Therefore, the survey was based upon an assessment of the habitat present on site and the suitability of this habitat to support protected species.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Introduction

This section details the results of the Preliminary Ecological Appraisal undertaken for the site. It assesses the baseline ecological conditions of the site at the time the desktop study was completed and based on the ecological features recorded during the field survey.

4.2 Statutory and Non-statutory Designated Sites

Details of designated sites are provided in the paragraphs below.

4.2.1 Statutory Designated Sites

There are no statutory designated sites of nature conservation interest situated within one kilometre of the site boundary. However, the site lies within the 12-kilometre buffer of the Singleton and Cocking Tunnels SAC (South Downs National Park Authority, 2018). The SAC is located approximately 11 kilometres north-west of the site and supports important hibernation sites for barbastelle *Barbastella barbastellus* and Bechstein's bat *Myotis bechsteinii*. The Zone of Influence in this instance has been extended to include the SAC as the site lies within the 12-kilometre 'wider conservation area' within which significant impacts or severance to bat flight lines need to be considered.

4.2.2 Non-Statutory Designated Sites

There is one non-statutory designated site of nature conservation interest situated within one kilometre of the site boundary. This is the Fontwell Park Racecourse LWS. The LWS is located 700 metres north of the site and comprises areas of grassland with rich swards, managed as hay meadow. Most of the grassland is unimproved and species-rich containing a large colony of green winged orchid *Orchis morio* and adder's tongue *Ophioglossum vulgatum*. SxBRC desktop study data also identifies the presence of a designated road verge located 50 metres west along Barnham Road from the entrance of the site. The road verge is designated for supporting wild clary *Salvia verbenaca* and is managed with a late cut regime.

Further information on sites designated for nature conservation are provided in **Appendix 3**.

4.3 Habitats

4.3.1 Desktop Study Results

A review of MAGIC revealed the presence small areas of broadleaved woodland and traditional orchards within one kilometre of the site boundary. The closest of these are located immediately east of the site. Consultation with SxBRC also produced records

of traditional orchards located across land to the east of the site. The desktop study also identifies the presence of a chalk stream approximately 330 metres west of the site and 450 metres south. The MAGIC database identifies these streams as drains which eventually flow into the Lidsey Rife some three kilometres south of the site. MAGIC also identified the presence of a small waterbody on site however this was not recorded during the survey and is not present.

4.3.2 **Field Survey Results**

Habitats within the site are shown on the Phase 1 Habitat Map (**Map 2**), Target Notes and photographs have been provided as appropriate, Target Notes are cross referenced to **Map 2**. Habitats are described in general terms using standard Phase 1 habitat survey terminology. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Scattered Trees

There are a small number of scattered trees present across the site. At the northern site boundary there are a collection of five cypress trees *Cupressus* species (**TN1**) (**Figure 1** and **Figure 2**) as well as a small number of immature oaks *Quercus* species (some of which are located just off-site). There are also a hawthorn *Crataegus monogyna* (**TN2**) and field maple *Acer campestre* (**TN3**) located at the southern end of the site adjacent to the car park.



Figure 1: Collection of cypress trees at northern boundary



Figure 2: Scattered cypress tree

Scattered Scrub

Areas of scattered scrub dominated by bramble *Rubus fruticosus* aggregate are present along the eastern site boundary (**Figure 3**). Occasional dog rose *Rosa canina*, common nettle *Urtica dioica*, creeping thistle *Cirsium arvense* and ivy *Hedera helix* are also present. At the time of the survey, some scrub clearance had taken place along the eastern boundary.



Figure 3: Scattered bramble scrub at eastern boundary

Semi-Improved Grassland

The majority of the site is dominated by an open field comprising semi-improved grassland (**Figure 4**). At the time of the survey, some recent grassland management had taken place leaving a short sward. However, some areas remain tussocky particularly around bunds that are present adjacent beneath the collection of cypress trees and the north-eastern corner of the site (**Figure 5**). There is also a small patch of mown semi-improved grassland at the southern end of the site adjacent to the car park. Frequent grass species include perennial rye-grass *Lolium perenne*, fescue *Festuca* species and cock's foot *Dactylis glomerata*. A range of herbaceous species was also recorded including ground ivy *Glechoma hederacea*, nettle, clover *Trifolium* species, lords and ladies *Arum maculatus*, snow drop *Galanthus nivalis*, creeping thistle and teasel *Dipsacus fullonum*.



Figure 4: Site dominated by mown semi-improved grassland



Figure 5: Grassy bund at north-eastern corner of the site

Hedgerow with Trees

The eastern site boundary is formed by a hedgerow comprising hawthorn *Crataegus monogyna*, bramble and ivy interspersed with oaks and poplar *Populus* species trees ranging from immature to mature (**Figure 6**). The hedgerow is well connected to linear habitats in wider area comprising a network of hedgerows and treelines that extend

eastwards. There is a particularly large oak tree with the hedgerow (TN4) located at the south-western corner of the field.



Figure 6: Eastern hedgerow with trees

Other Habitats

The southern-most part of the site comprises a tarmac carpark with gated access into the wider open field which dominates the site and there is a small area of tarmac hardstanding in the south-western corner of the field marking the footprint of a former building or structure. The western site boundary is formed by close board fencing separating the site from residential development to the west. There are also some log and brash piles scattered across the site where woody vegetation clearance has taken place (TN5). The red line boundary does not include any road verges at the entrance of the site.

4.3.3 Summary

The habitats on site comprise scattered trees, scattered scrub, semi-improved grassland, hedgerow with trees and hardstanding. The habitats of greatest ecological value within the context of the site are the scattered scrub and hedgerow with trees that form the eastern site boundary as these features connect the site to habitats in the wider area forming a habitat corridor.

4.4 Notable and Legally Protected Species

4.4.1 Bats

Desktop Study Results

A review of MAGIC revealed the presence of a single granted EPSM licence in respect of bats within one kilometre of the site boundary. The licence was granted in 2016 and covers the destruction of a resting place of common pipistrelle *Pipistrellus pipistrellus* located approximately 950 metres south-east of the site.

Consultation with SxBRC produced records of eight species of bat within one kilometre of the site boundary: barbastelle, serotine *Eptesicus serotinus*, whiskered bat *Myotis mystacinus*, noctule *Nyctalus noctula*, Nathusius' pipistrelle *Pipistrellus nathusii*, common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared bat *Plecotus auritus*. The records included maternity roosts of both barbastelle and brown long-eared bat located within trees approximately 1.8 kilometres north-east of the site in 2014, likely associated with Slindon Wood. Roosts of common pipistrelle, soprano pipistrelle were also recorded, most recently in 2018 approximately one kilometre west.

Tree Assessment

The trees within the site and along site boundaries were assessed from ground level for their suitability to support roosting bats. None of the trees contained Potential Bat Roosting features such as rot holes, callous rolls or woodpecker holes therefore the trees are assessed as having negligible suitability for supporting roosting bats.

Foraging and Commuting Habitat

The site provides suitability for commuting bats in the form of the eastern boundary hedgerow with trees which is well-connected to habitats in the wider area. In particular, on-site habitats are linked to a network of hedgerows and treelines within open green space to the east and bounding fields in the wider area. Bats may utilise these features to commute to foraging areas further afield such as Slindon Wood some 1.6 kilometres north. Overall, the site is assessed as having moderate suitability for foraging and commuting bats.

4.4.2 Otter

Desktop Study Results

SxBRC does not include otter *Lutra lutra* records within their data searches as the information is confidential. As such, it is unknown whether otter has been recorded within the local area. A review of online OS mapping and aerial imagery reveals the presence of a network of drainage ditches located to the south and east of the site (330 metres west at its closest point) that eventually flow into the Lidsey Rife some three kilometres south. There are also two waterbodies located 745 metres south-east of the site associated with a sewage station.

Field Survey Results

The habitats present within the site are not suitable for supporting otter as there are no rivers, streams, wetlands or waterbodies. The network of drainage ditches to the west and south are separated from the site by residential development of Eastergate with no hydrological or terrestrial connectivity suitable for otter between them. The site does

not provide opportunities for resting places or holts. As such, otter is likely absent from the site and the species is not considered further in this report.

4.4.3 Badger

Desktop Study Results

SxBRC does not include badger *Meles meles* records within their data searches as the information is confidential. As such, it is unknown whether badger has been recorded within the local area.

Field Survey Results

No evidence of badger was recorded during the survey such as setts, latrines or pathways. The site does provide some suitable foraging habitat for badger in the form of scattered scrub, grassland and bases of hedgerows. The site is well-connected to fields bounded by hedgerows and treelines to the east which may support badger setts.

4.4.4 Hazel Dormouse

Desktop Study Results

Consultation with SxBRC did not return any records of hazel dormouse within one kilometre of the site boundary. However, a review of MAGIC revealed the presence of a single granted EPSM licence of hazel dormouse *Muscardinus avellanarius* within two kilometres of the site boundary. The licence was granted in 2017 and is located 550 metres west of the site. The licence is likely to be associated with a new housing development situated in the same location. Ecological survey work associated with the housing development (planning reference AL/3/19/PL) carried out in 2017 confirmed presence of hazel dormouse within the hedgerow west of Northfield Lane (760 metres west of the site). As such, the species is known the presence within the local area.

Field Survey Results

The site supports some key food sources for hazel dormouse including bramble and hawthorn. Additionally, the boundary hedgerow to the east offers a continuum of habitat that is bushy enough to provide cover for hazel dormouse and suitable well-connected to hedgerows and treelines in the wider area. Furthermore, hazel dormouse was confirmed to be present within the local area in 2017. As such, it is assumed that the species is still present within the vicinity of the site and may utilise boundary vegetation to the east.

4.4.5 Water Vole

Desktop Study Results

Consultation with SxBRC did not produce any records of water vole *Arvicola amphibius* within one kilometre of the site boundary, however this does not confirm the absence of the species in the local area. A review of online OS mapping and aerial imagery reveals the presence of a network of drainage ditches located to the south and east of the site (330 metres west at its closest point) that eventually flow into the Lidsey Rife some three kilometres south where water vole may be present. There are also two waterbodies located 745 metres south-east of the site associated with a sewage station.

Field Survey Results

The habitats on site are not suitable for water vole as there are no rivers, streams, waterbodies or wetlands present. The site is isolated from the network of drainage ditches and waterbodies identified within the desktop study by residential development and the site does not offer any hydrological or terrestrial connectivity between areas of suitable water vole habitat. As such, water vole is considered absent from the site and is not considered further in this report.

4.4.6 Birds

Desktop Study Results

Consultation with SxBRC produced records of 92 species of bird within one kilometre of the site boundary. Of these, dunnoek *Prunella modularis*, house sparrow *Passer domesticus*, goldfinch *Carduelis carduelis*, goldcrest *Regulus regulus* and other common and widespread species are likely to nest within on-site trees and boundary hedgerows. The waders and waterfowl identified within the desktop study are unlikely to be present due to the lack of suitable habitat.

Field Survey Results

During the survey, the following species were recorded on site or flying over: robin *Erithacus rubecula*, house sparrow, blackbird *Turdus merula*, blue tit *Cyanistes caeruleus*, carrion crow *Corvus corone* and magpie *Pica pica*. The site offers suitable nesting habitat for a range of bird species in the form of the scattered trees and boundary hedgerow.

It is possible that overwintering species identified within the desktop study are present on occasion, however the site lacks the open space that is present within larger open fields in the wider area likely to be utilised by gulls for feeding. As such, the site is unlikely to represent an important habitat resource for overwintering birds and therefore these species are not considered further in this report.

4.4.7 Reptiles

Desktop Study Results

Previous reptile surveys undertaken at the site by Applied Ecology in 2017 did not record any reptiles on site (Applied Ecology, 2016b). However, consultation with SxBRC produced records of slow-worm *Anguis fragilis*, grass snake *Natrix natrix* and common lizard *Zootoca vivipara* within one kilometre of the site boundary. The most recent record for slow-worm is from 2019 within a residential garden some 320 metres south-east of the site. Common lizard has been recorded some 880 metres south-west within fields in 2016 while grass snake was last recorded in 2010 at Brooks Nursery approximately 860 metres south-east of the site.

Field Survey Results

The site supports a range of habitats generally favoured by reptiles including scrub and grassland interfaces as well as bunds, hedgerow bases and brash piles that may be used for breeding and/or hibernating. There are also suitable habitat types present within the wider area such as a network of hedgerow bases at field margins to the east, with no dispersal barriers between the site and the surrounding area.

4.4.8 Great Crested Newt

Desktop Study Results

A review of MAGIC revealed the presence of a number of drainage ditches within 500 metres of the site, the closest being located 330 metres west. No other waterbodies are present within a 500-metre radius of the site. Consultation with SxBRC produced a single record of great crested newt *Triturus cristatus* located approximately one kilometre south-west of the site, however the record is from 1992.

Field Survey Results

There are no suitable aquatic habitats on site that would support breeding great crested newt such as ponds, lakes or other waterbodies. There is suitable terrestrial habitat for great crested newt on site in the form of tussocky grassland, scrub, bunds and brash piles that would be suitable for foraging, shelter and hibernation. However, given that the species is unlikely to breed within the vicinity of the site due to the lack of suitable waterbodies, the species is likely absent from the site and is not considered further in this report.

4.4.9 Invertebrates

Desktop Study Results

Consultation with SxBRC produced records of a number of notable invertebrate species within one kilometre of the site boundary including stag beetle *Lucanus cervus*,

most recently recorded in 2020 some 380 metres south-east and purple emperor butterfly *Apatura iris* recorded in 2003 approximately one kilometre south-west of the site.

Field Survey Results

The site lacks an abundance of deadwood suitable for stag beetle and does not support blocks of woodland favoured by the purple emperor butterfly nor does it support willow *Salix* species, the food plant of the caterpillar. As such, the species identified within the desktop study are unlikely to be present. The habitats on site are likely to only support common and widespread invertebrate species and assemblages due to the habitats present, therefore this species group is not considered further in this report.

4.4.10 Other Relevant Species

Desktop Study Results

Consultation with SxBRC produced records of common frog *Rana temporaria*, European hedgehog *Erinaceus europaeus* and European rabbit *Oryctolagus cuniculus* within one kilometre of the site boundary within the last ten years.

Field Survey Results

Extensive evidence of European rabbit was recorded on site during the survey including warren entrances and droppings. The site also supports habitat suitable for European hedgehog which are likely to commute and forage across the grassland, along hedgerow bases and into residential gardens within the vicinity of the site. The site does not support any habitat suitable for breeding common frog, nor does the surrounding area. As such, this species is not considered further in this report.

4.5 Summary of Key Ecological Features

The following features are those with greatest ecological value that lie within the site's Zone of Influence:

- The site lies within the 12-kilometre buffer zone of the Singleton and Cocking Tunnels SAC while the Fontwell Park Racecourse LWS is located 700 metres north.
- The habitats of greatest ecological value on site are the scattered scrub and hedgerow with trees forming the eastern boundary.
- The habitats on site are suitable for supporting foraging and commuting bats, badger, hazel dormouse, nesting birds, reptiles, European rabbit and European hedgehog.

5.0 POTENTIAL ECOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

5.1 Introduction

This section identifies potential constraints to the proposed development scheme based on the key ecological features as identified in Section 4.0 and summarised in Paragraph 4.5. Recommendations are included for mitigation and compensation based on the identified ecological constraints, and opportunities for enhancement are discussed.

5.2 Further Survey

Further ecological survey work will need to be undertaken prior to the submission of any planning application in order to allow the Local Planning Authority to fully assess the potential effects of the proposals on protected species. At this stage, it is therefore not possible to confirm that the proposals for the site meet the requirements of NPPF and Arun District Local Plan (refer to Section 2.0). The full detail of mitigation measures cannot be established without the results of more detailed survey work. The results of the additional survey work will be incorporated into an Ecological Impact Assessment (EclA) report, which will provide an updated assessment of the ecological effects of the proposal and detailed mitigation, compensation and enhancement recommendations in light of the survey findings. The more detailed survey work recommended for the site are reptile surveys (see Paragraph 5.9.2).

Details of the survey requirements including survey effort and timings are provided in the relevant sections below.

5.3 Designated Sites

5.3.1 Potential Constraints

The presence of the Singleton and Coking Tunnels SAC 11 kilometres to the north-west has been identified as an ecological constraint to the development due to the presence of suitable commuting and foraging habitat for bats that may be used by barbastelle and Bechstein's bat which are designating features of the SAC.

The presence of the Singleton and Cocking Tunnels SAC was highlighted within the pre-application response provided by Arun District Council:

“The site is in the 12km buffer of the Singleton and Coking Tunnels Species Area of Conservation. ALP Policy ENV DM1 is of general relevance but policy SD10 of the South Downs National Park Local Plan provides more specific policy and advises that in the 12km buffer, significant impacts on bats or severance of flight lines should be considered...we will consult our Ecologist and the National Park Authority at application state to determine compliance with these policies.”

The Strategic Policy SD10: International Sites within the South Downs National Park Authority Local Plan states that developments within 12 kilometres of the Singleton and Cocking SAC could lead to significant impacts or severance to flight lines used by foraging and commuting barbastelle and Bechstein's bat known to hibernate within the tunnels.

In accordance with Policy ENV DM1 of the Arun District Local Plan, it will be important to demonstrate that there will be no impact on the bats designated under the Singleton and Cocking Tunnels SAC. For the purposes of this report, it is assumed the hedgerow along the eastern boundary will be retained, therefore causing no habitat severance for bats. In the absence of mitigation, however, it is possible that lighting used during construction and new external lighting installed as part of the scheme may illuminate this hedgerow and cause disturbance to foraging and commuting barbastelle and Bechstein's bat (and other bat species), if present.

No impacts on the Fontwell Park Racecourse LWS are anticipated during the construction phase or operational phase due to the distance between the development site and the LWS.

5.3.2 Potential Mitigation and Compensation Measures

It is recommended that the hedgerow along the eastern site boundary is retained to avoid any severance of flight lines possible used by bat species designated under the Singleton and Cocking Tunnels SAC. In addition, construction related activities should be carried out within daylight hours to avoid the need for construction lighting which may illuminate foraging and commuting routes. Finally, care should be taken to retain the eastern site boundary vegetation as a dark corridor for these (and other) species of bat in the long-term. There should be no external lighting that illuminates this hedgerow. Lighting that will be necessary across the rest of the site should be sensitively designed so that disturbance to foraging and commuting bats is minimised as much as possible.

5.3.3 Enhancement Opportunities

Opportunities for enhancing the site in relation to bats such as those that are designating features of the Singleton and Cocking Tunnels SAC are described in Paragraph 5.5.3.

5.4 Habitats

5.4.1 Potential Constraints

On-site and boundary habitats have been identified as posing a potential ecological constraint to the development as their loss, in the absence of compensation, would

result in a net loss of biodiversity at the site, which would not accord with national and local policy.

Based on the current proposals plan, it is likely that the majority of the semi-improved grassland habitat will need to be cleared and the cypress trees at the northern boundary of the site will need to be removed. The vegetation at the eastern boundary comprising scrub, hedgerow and trees is due to be retained, however there is a possibility that this boundary vegetation may become damaged degraded during the construction phase through use of machinery within the vicinity and root compaction. It will be particularly important to ensure that the large oak tree (TN1) and its roots are be protected.

5.4.2 Potential Mitigation and Compensation Measures

To address the potential constraints posed by the habitats present, it is recommended that all boundary vegetation along the eastern site boundary is retained in the long-term and sufficiently protected during the construction phase. It is recommended that all works follow protective measures in line with BS 5837:2012 *Trees in Relation to Design, Demolition and Construction* (BSI, 2012). This document outlines the use of tree protection barriers to be used for the duration of the construction phase. These barriers are proposed to shield boundary vegetation along the eastern boundary including, in particular the large oak (TN1) from damage during construction.

To compensate for the loss of semi-improved grassland on site, communal amenity areas should be sown with a native species lawn mix such as Emorsgate EL1 flowering lawn mixture that contains a range of grasses and wildflowers that respond well to regular mowing. Based on the current proposals plan, there is an area in the north-western corner of the site that could be utilised as a wildlife area where a species-rich grassland is created with carrying grass heights. This area should be sown with Emorsgate EM1 general purpose meadow mixture (or a similar mix) that contains a diversity of grasses and wildflowers and should be managed with selective cutting to provide habitat suitable for a range of protected species.

The loss of scattered cypress trees can be compensated for through the planting of new trees, which will also result in an enhancement for the site overall.

5.4.3 Enhancement Opportunities

Approximately 30 new trees are due to be planted across the site. These should be native species such as oak, willow, silver birch *Betula pendula* and beech *Fagus sylvatica* and not cultivars.

Native species planting will also enhance the site. Low level planting should include a mixture of flowering plants and shrubs. Flowers should vary in colour to attract a wide variety of insects such as small scabious *Scabiosa columbaria*, red campion *Silene*

dioecian, pansy *Viola tricolor* and valerian *Valeriana* species amongst others. Some non-native species can also be beneficial such as verbena *Verbena bonariensis*, lavender *Lavandula* species and *Salvia* species.

Lastly, there is an opportunity to enhance the eastern boundary hedgerow which could be bolstered via additional planting to plug gaps in the vegetation and hedgerow planting could also take place along the western, southern and northern site boundaries. Species such as hawthorn, field maple *Acer campestre*, hazel *Corylus avellana* and dogwood *Cornus sanguinea* would produce a bushy structure and improve habitat connectivity around the site and into the wider landscape.

The pre-application response received from Arun District Council highlighted the request for a Biodiversity Enhancement Plan in relation to this scheme. Habitat enhancements suggested above including wildflower planting and carefully managed grassland would be included within this Biodiversity Enhancement Plan.

5.5 Bats

5.5.1 Potential Constraints

The suitability of the site to support foraging and commuting bats has been identified as a potential constraint to the development, particularly the possible use of the site by barbastelle and Bechstein's bat (designating features of the Singleton and Cocking Tunnels SAC – see Paragraph 5.3.1). In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017. Refer to **Appendix 5** for details.

For the purposes of this report, it is assumed the hedgerow along the eastern boundary will be retained, therefore there will be no habitat severance for bats. In the absence of mitigation, however, it is possible that lighting used during construction and new external lighting installed as part of the scheme may illuminate boundary vegetation and cause disturbance to foraging and commuting bats including barbastelle and Bechstein's bat, if present.

5.5.2 Potential Mitigation and Compensation Measures

As the eastern hedgerow is due to be retained, no further surveys in relation to bats are considered necessary. Instead, mitigation measures should be implemented at the site to ensure impacts on bats are avoided in accordance with the mitigation hierarchy.

Construction related activities should be carried out within daylight hours to avoid the need for construction lighting which may illuminate foraging and commuting routes. The eastern hedgerow should be maintained as a dark corridor for bats in the long-term by

ensuring that no external lighting installed as part of the scheme illuminates this hedgerow. Lighting that will be necessary across the rest of the site should be sensitively designed so that disturbance to foraging and commuting bats is minimised as much as possible.

To achieve this, guidance on bats and artificial lighting will be followed (Bat Conservation Trust, 2018). External lighting should comprise hooded luminaires directed away from vegetation, ideally with bulbs being LED and at the warmer end of the spectrum (e.g. avoiding blue or white light). The lighting on the outside of the new medical centre building should be motion-activated and task related, associated with specific entrance/exit points. The lux level should be as low as possible to allow the task to be carried out safely and effectively. Guidance on task related lighting levels published by the Chartered Institution of Building Services Engineers (CIBSE) (CIBSE, 2002) should be followed.

5.5.3 Enhancement Opportunities

There will be opportunities for enhancement via provision of bat boxes installed on retained trees within the eastern hedgerow and artificial bat roost units and/or modified roof tiles within the newly constructed medical centre building, depending on the design of the new structure. Bolster planting within the eastern hedgerow as well as new hedgerow planting along the other site boundary would also result in an enhancement for bats at the site. New landscaping should be designed with bats in mind, for example flowering shrubs to attract insect prey and native tree species. These enhancement measures would be included within the aforementioned Biodiversity Enhancement Plan.

5.6 Badger

5.6.1 Potential Constraints

There are no badger setts present on site therefore the proposals will not result in killing/injury of badger or damage to setts which are protected under the Protection of Badgers Act 1992. If any barriers such as close board fencing is to be installed on any of the site boundaries (aside from the western boundary which is already fenced), this could result in habitat fragmentation for badger, preventing individuals from entering the site to forage.

5.6.2 Potential Mitigation and Compensation Measures

It is recommended that the eastern boundary remains permeable to badger and other animals. Where fencing is required, this should be post and rail fencing to ensure that badger can access the site in the long-term.

5.6.3 Enhancement Opportunities

No enhancement measures in relation to badger are proposed at this stage.

5.7 Hazel Dormouse

5.7.1 Potential Constraints

The presence of habitat suitable for hazel dormouse and the fact that the species was recorded as present within the local area in 2017 have been identified as potential constraints to the development.

In England, hazel dormouse and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, this species is protected under the Conservation of Habitats and Species Regulations 2017 (refer to **Appendix 5** for details). As such, any damage/degradation to the eastern boundary hedgerow has the potential to lead to harm/killing of individual dormouse (if present). Based on the current proposals, it is assumed that the eastern boundary hedgerow is being retained, therefore no habitat severance for hazel dormouse is anticipated.

5.7.2 Potential Mitigation and Compensation Measures

As the eastern boundary hedgerow suitable for dormouse is due to be retained, no further surveys are considered necessary. Instead, mitigation measures should be implemented at the site to ensure impacts on hazel dormouse are avoided in accordance with the mitigation hierarchy.

The hedgerow should be protected for the duration of the construction phase via protective fencing, as described in Paragraph 5.4.2. This will ensure that habitat suitable for hazel dormouse and any individuals that may be present are not harmed/disturbed during the construction phase.

5.7.3 Enhancement Opportunities

The site can be enhanced for hazel dormouse through the provision of bolster planting along the eastern hedgerow and new hedgerow planting along the other site boundaries (as described in Paragraph 5.4.3). This would improve habitat connectivity for the species and provide an additional foraging resource. These enhancement measures would be included within the aforementioned Biodiversity Enhancement Plan.

5.8 Birds

5.8.1 Potential Constraints

The presence of habitat suitable for breeding birds within the site has been identified as a potential constraint to the development as all birds, their nests, eggs and young are legally protected, with certain exceptions, under the Wildlife and Countryside Act

1981 (refer to **Appendix 5** for details). If tree removal is carried out during the breeding season of March to August inclusive, it is possible that nesting birds and their eggs/young may become harmed or injured, causing an offence.

5.8.2 Potential Mitigation and Compensation Measures

In order to avoid the potential constraints outlined above, tree removal should be undertaken outside of the breeding season of March to August inclusive. If this is not possible, an ecologist should be present immediately prior to removal to check the trees. Any active nests should be left with a suitable buffer until nesting ends naturally to avoid harm to nesting birds and their young and to prevent an offence from being committed.

5.8.3 Enhancement Opportunities

New hedgerow and tree planting as described in Paragraph 5.4.3 will result in an enhancement for birds at the site. In addition, it is recommended that artificial nest boxes are installed on retained trees within the eastern boundary hedgerow or incorporated into the newly constructed medical centre building. These could comprise a combination of Vivara Pro Seville/Barcelona Woodstone nest boxes, swift bricks and sparrow terrace boxes. These enhancement measures would be included within the aforementioned Biodiversity Enhancement Plan.

5.9 Reptiles

5.9.1 Potential Constraints

The possible presence of reptiles on the site has been identified as a potential constraint to the development. Widespread reptile species (slow-worm, common lizard *Zootoca vivipara*, grass snake *Natrix natrix* and adder *Vipera berus*) are protected under the Wildlife and Countryside Act 1981 against harm (see **Appendix 5** for details). As the site provides suitable habitat for reptiles, it will be important to determine the presence/likely absence of the species group prior to any works commencing.

If reptiles are present, clearance of any suitable reptile habitat and any related ground works may result in harm/injury to individual reptiles, causing an offence.

There would also be a net loss in habitat suitable for reptiles. It is possible that off-site compensatory habitat may be required if a significant population of reptiles is recorded. Maintaining habitat connectivity for the species will be an important consideration for the development.

5.9.2 Further Survey

Further reptile surveys are recommended in order to identify the presence/likely absence of reptiles at the site and determine likely population sizes. The further reptile

surveys would involve the distribution of approximately 50 reptile refugia in areas of suitable habitat at the site, followed by seven survey visits at least three days apart to check refugia for reptiles. The methodology will follow best practice guidelines currently available for this species (Froglife, 2015).

5.9.3 *Potential Mitigation and Compensation Measures*

Detailed mitigation and compensation measures would be devised on completion of the further survey work. However, depending on the results of the surveys, mitigation measures recommended may range from a full translocation exercise involving the installation of exclusion fencing and the systematic removal of animals to a receptor site, to a precautionary method of works involving supervision of habitat removal under the supervision of an ecologist. In the event that a full translocation exercise is required, it is possible that the land immediately north of the site which lies within the wider ownership boundary of the client could be utilised as a receptor site.

5.9.4 *Enhancement Opportunities*

Detailed enhancement measures would be recommended on completion of the further survey work. However, felled cypress trees could be stacked at the eastern site boundary and existing brash piles could be relocated to provide additional hibernacula for reptiles. These enhancement measures would be included within the aforementioned Biodiversity Enhancement Plan.

5.10 Other Relevant Species

5.10.1 *Potential Constraints*

The presence of habitat suitable for European hedgehog has been identified as a possible constraint to the development. If barriers such as close board fencing is installed this would prevent European hedgehog and other animals from accessing the site in the long term. European hedgehog is recognised as Species of Principal Importance under the NERC Act 2006 (refer to **Appendix 5** for details). The eastern hedgerow is due to be retained so will continue to provide suitable foraging and commuting habitat for the species in the long-term.

5.10.2 *Potential Mitigation and Compensation Measures*

It is recommended that the eastern boundary remains permeable to European hedgehog and other animals. Where fencing is required, this should be post and rail fencing to ensure that European hedgehog can access the site in the long-term.

5.10.3 *Enhancement Opportunities*

Hibernacula created from felled tree limbs suggested as a possible enhancement measure for reptiles would also result in additional suitable habitat for European hedgehog and other small animals on the site.

6.0 CONCLUSION

6.1 Conclusion

The site lies within the 12-kilometre consultation zone of the Singleton and Cocking Tunnels SAC which is designated for supporting hibernating barbastelle and Bechstein's bats. This means that the development will need to demonstrate no severance or disturbance to the flight lines of these species.

The most notable habitats recorded on the site comprise the bramble scrub and hedgerow with trees present along the eastern site boundary. The site is also assessed as having suitability for supporting foraging and commuting bats, badger, hazel dormouse, nesting birds, reptiles and European hedgehog.

Potential ecological constraints to the development have been identified and further surveys recommended for reptiles. Initial recommendations for mitigation, compensation and enhancement measures have been made, however these recommendations will need to be reviewed on completion of the further survey work and once proposals are finalised. This being said, it is considered that the proposals have the potential to accord with all relevant local and national planning policy.

6.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

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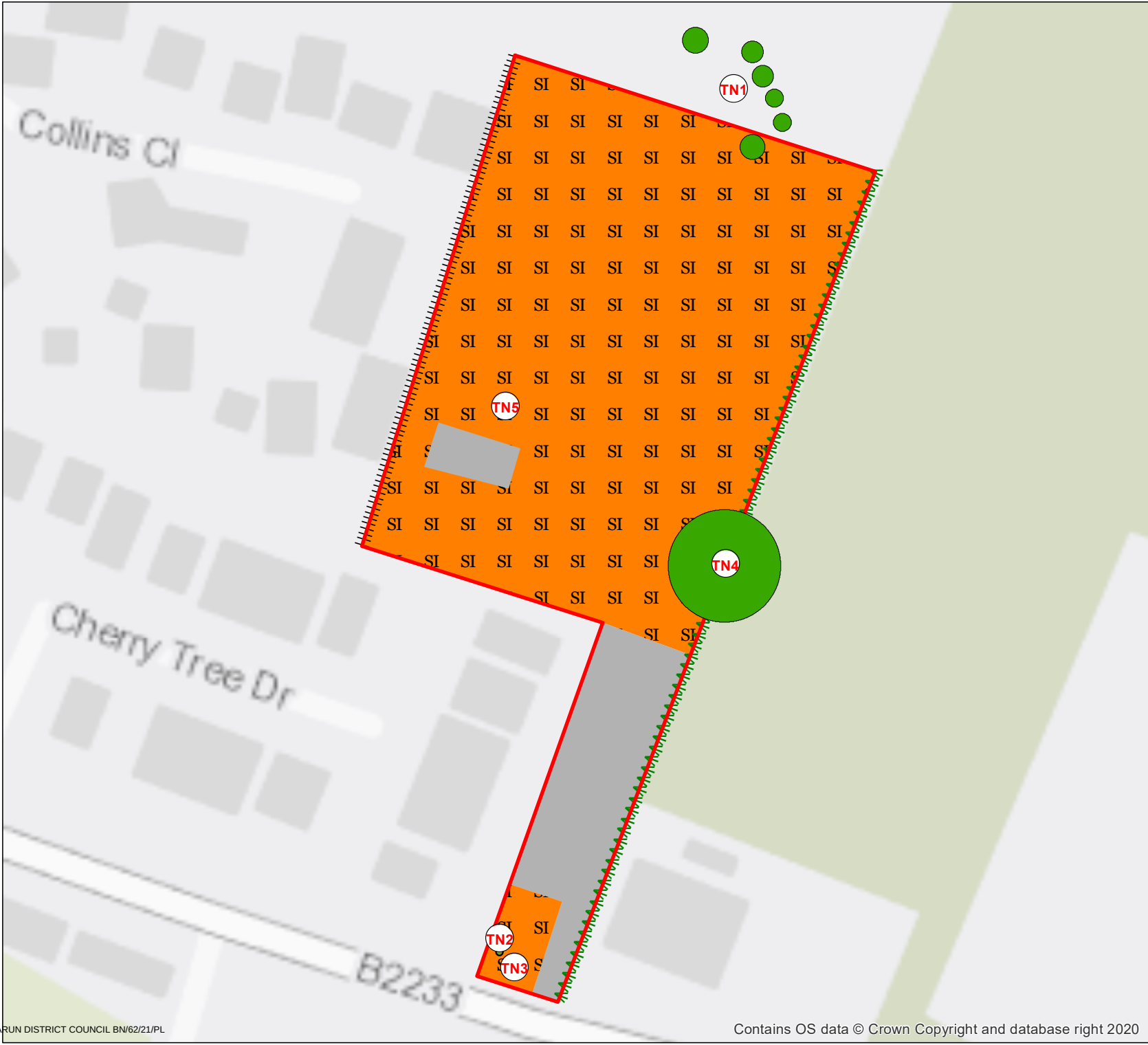
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Map 1 Site Location Plan

Map 2 Phase 1 Habitat Map



**THE CROFT MEDICAL CENTRE,
BARNHAM ROAD, EASTERGATE
WEST SUSSEX**

PRELIMINARY ECOLOGICAL APPRAISAL

Map 2 - Phase I Habitat Map

Client:	PHP Primary Care Developments
Date:	May 2021
Status:	Final

KEY

- Site Boundary
- Target Notes
- Scattered Trees
- Semi-Improved Grassland
- Hardstanding
- Hedgerow with Trees
- Fence Line

Scale at A4: 1:950
0 5 10 20 Metres



Prepared by:	Date:
Last amended by:	Date:



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Appendix 1 Site Proposals Plan



Proposed Site Plan

1:200



NOTES:

OTHER THAN FOR THE PURPOSES OF PLANNING, DO NOT SCALE THESE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORK.

THIS DRAWING IS THE COPYRIGHT OF SIMPSON HILDER ASSOCIATES LIMITED AND MAY NOT BE REPRODUCED, COPIED OR ALTERED IN ANY WAY WITHOUT WRITTEN AUTHORITY.

(ITEMS CLOUDED WITH A DASHED LINE ARE TO BE COVERED. SUBJECT TO DETAIL DESIGN AND CAN BE EXPECTED TO CHANGE.)

REVISION CLOUD

Parking:

- 08 Accessible spaces
- 38 Public spaces
- 24 Staff spaces
- 70 Total Parking Spaces

*Allowance for ambulance space

Notes:

Drawing is based on information on information by others provided by Hampshire Land Survey Ltd Ref. HLS 1142_08_04_01.

Boundary line is indicative and subject to confirmation.

This drawing is indicative with regards to site landscaping and is subject to design development. The proposals indicated are for planning purposes only & are subject to all relevant statutory approvals, including building regulations.

Rev	Date	Description	By	Chk
Drawing Status				
PRELIMINARY				
Client				
Principal contractor				
Design Consultant				
 67A HIGH STREET LYNDHURST HAMPSHIRE SO43 7RE T: 023 80 283798 F: 023 80 283688 E: sh@simpsonhilder.co.uk				
Project Title				
THE CROFT MEDICAL CENTRE BARNHAM ROAD EASTERGATE WEST SUSSEX PO20 3RP				
Drawing Title				
PROPOSED SITE PLAN				
Scale (B1 020)				
1:200				
Drawn				
Date				
June 2020				
Checked				
MR				
Date				
June 2020				
Revision				
9226-P004				

Appendix 2 Statutory Designated Sites within the Desktop Study Area

Details of statutory designated sites within the desktop study area, as listed in Paragraph 4.2.1, are provided in **Table 1**.

Table 1: Statutory Designated Sites Located Within the Desktop Study Area

Site Name	Singleton and Cocking Tunnels
Site Designation	SAC
Approximate Relative Location	11 kilometres north-west of the site
Reasons for Designation:	
The designating features of the SAC are the barbastelle bat <i>Barbastella barbastellus</i> and the Bechstein's bat <i>Myotis bechsteinii</i>. The Tunnels constitute the most important site for hibernating bats in the south-east of England and are the fifth most important in Britain. The two disused brick railway tunnels, located in rural Sussex, once formed part of the Chichester to Midhurst railway line. They now support, during the winter months, large numbers of hibernating bats. Eight species have been found in total including Natterer's bat <i>Myotis nattereri</i>, Daubenton's bat <i>Myotis daubentonii</i>, brown long-eared bat <i>Plecotus auritus</i> and Brandt's bat <i>Myotis brandtii</i>/whiskered bat <i>Myotis mystacinus</i>. Other species regularly occur in small numbers.	

Appendix 3 Sites Designated for Nature Conservation

Statutory Sites

Internationally Designated Sites - Ramsar Sites, Special Areas of Conservation and Special Protection Areas

Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) form a network of protected sites across the European Union and United Kingdom. In the United Kingdom the primary legislative protection is afforded to these sites under the Conservation of Habitats and Species Regulations 2017 (as amended).

Ramsar sites are designated as wetlands of international importance which are afforded similar legislative protection to SPAs and SACs.

SACs are sites which support internationally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds. SACs, SPAs and Ramsar sites are generally also designated as Sites of Special Scientific Interest.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) there is a legal requirement that competent authorities, such as local planning authorities, need to consider whether plans or projects are likely to have a significant adverse effect on SPAs, SACs or Ramsar sites, either alone, or in combination with other plans or projects. In the event that a likely significant effect cannot be ruled out, on the basis of objective information, then the competent authority must undertake an “Appropriate Assessment” to fully assess the plan or project against the site’s conservation objectives. Unless certain defined derogation tests can be met, the competent authority may not authorise nor undertake any plan or project which adversely affects the integrity of a SPA, SAC or Ramsar site.

Nationally Designated Sites – Sites of Special Scientific Interest and National Nature Reserves

Sites of Special Scientific Interest (SSSIs) receive legal protection under the Wildlife and Countryside Act 1981 (as amended). Such sites are designated to protect specific areas of biological or geological interest of national importance. Such sites also generally receive strict protection through the planning system.

National Nature Reserves (NNRs) are also usually designated as SSSIs and are specifically managed for their wildlife value. They receive legal protection through the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 (as amended). As with SSSIs, these sites generally receive strict protection through the planning system.

Locally Designated Sites – Local Nature Reserves

Local Nature Reserves (LNRs) are designated by local authorities under the National Park and Access to the Countryside Act 1949. These are generally designated not only for their local wildlife value but also for education, scientific and recreational purposes. These sites generally receive protection from development through the planning system.

Non-Statutory Sites

Locally Designated Sites

In addition to statutory designations, local authorities often designate sites of nature conservation importance at the local level. Such designations are named differently by each local authority and may be referred to as Local Wildlife Sites (LWSs), Sites of Importance for Nature Conservation (SINCs) or Sites of Nature Conservation Importance (SNCIs), amongst others. The exact level of protection afforded to these sites varies and is normally defined through local planning policy.

Appendix 4 Appraisal Criteria for Bats

The criteria used to assess the suitability of roosting and foraging/commuting habitat for bats is based on industry guidelines and outlined in **Table 2**⁷.

Table 2: Criteria used to Assess Suitability of Roosting and Foraging/Commuting Habitat for Bats

Suitability	Description of roosting habitats	Commuting and foraging habitats
High	A structure or 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.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
Moderate	A structure of 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.	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerows or un-vegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by other habitat). Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch or scrub.
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.

⁷ Table adapted from (Collins, 2016)

Appendix 5 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Hazel Dormouse

This species is listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely, to impair its ability to survive, breed, or rear or nurture their young, to impair its ability to hibernate or migrate;
- To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any one of these species uses for shelter or protection.

Breeding Birds

With certain exceptions, all wild birds, their nests and eggs are protected by Section 1 of the Wildlife and Countryside Act 1981 (as amended). Therefore, it is an offence, to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- Intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls. Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- Intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- Intentionally or recklessly disturb the dependent young of any such bird.

Reptiles

The four widespread species of reptile that are native to Britain, namely common or viviparous lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, adder *Vipera berus* and grass snake *Natrix*

natrix, are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence to:

- Intentionally kill or injure any of these species.

The remaining native species of British reptile (sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*) receive a higher level of protection via inclusion under Schedule 2 of the Conservation of Habitats and Species Regulations 2017. They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations (in England and Wales only) and the Wildlife and Countryside Act 1981 (as amended). The distribution of these species are restricted to only a few sites in England.

Species and Habitats of Principal Importance in England

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The England Biodiversity List is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. There are currently 943 species of principal importance and 41 habitats of principal importance included on the England Biodiversity List.