

**7 SELSMORE AVENUE, HAYLING ISLAND,
HAMPSHIRE**

ECOLOGICAL IMPACT ASSESSMENT

Final Document

September 2018

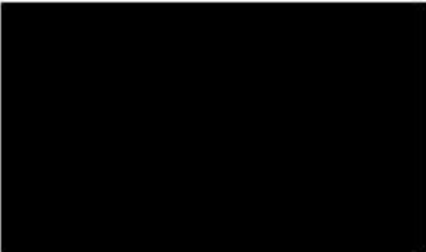
Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EclA • Management Plans
Habitats • Badger • Bats • Hazel Dormouse • Birds • Reptiles • Amphibians • Invertebrates • Riparian and Aquatic Species

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by Prestige Homes South to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of 7 Selsmore Avenue, Hayling Island. The site is located in the south of Hayling Island, Hampshire and comprises a bungalow with a detached garage, a small dilapidated shed and garden landscaping. The proposals entail redevelopment of the site for three new residential dwellings.

The main findings of the Ecological Impact Assessment are:

- The site is located 230 metres to the south of Chichester and Langstone Harbours Ramsar and SPA, Solent Maritime SAC and Chichester Harbour SSSI;
- The site supports small areas of poor semi-improved grassland, scattered trees, scrub and a defunct species-poor hedgerow;
- No bats were recorded roosting within the building during the dusk emergence survey. The site supports a low number of foraging and commuting bats and has suitability for breeding birds;
- The proposals have potential to impact on designated sites, habitats, foraging and commuting bats and breeding birds through habitat loss, additional external light spill and anthropogenic effects as a result of an increase in residents;
- Mitigation and compensation measures have been recommended including financial contributions to off-site mitigation for designated sites, additional planting, a sensitive lighting scheme for bat and sensitive timings of works for breeding birds;
- Enhancement measures have been recommended in the form of diverse planting of native plants, additional roosting opportunities for bats and additional nesting opportunities for breeding birds;
- Given the impacts identified, and the mitigation, compensation and enhancement measures proposed it is considered that the proposals accord with all relevant local and national planning policy; and
- 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 12 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 Prestige Homes South to undertake an Ecological Impact Assessment to support a planning application for the redevelopment of 7 Selsmore Avenue, Hayling Island, Hampshire PO11 9PB (hereafter referred to as the site).

1.2 The Site

The site is located in Hayling Island, Hampshire, centred on National Grid Reference (NGR) SZ 7341 9911 (**Map 1**).

The site comprises a flat roofed bungalow with a detached garage and associated garden. The site is bounded to the north, south and east by residential development and to the west by Selsmore Avenue.

In the wider area, the immediate landscape is dominated by residential development associated with Hayling Island. Beyond this lies the Chichester and Langstone Harbours and the Solent, approximately 230 metres to the north-east of site.

1.3 Aims and Scope of Report

The information within this report is based on a field survey and desktop study and relevant species-specific surveys carried out between 10th August 2018 and 30th August 2018. The report describes the habitats and species (hereafter referred to as ecological features) within the site's Zone of Influence (Paragraph 3.2), and provides a detailed assessment of potential ecological effects of the proposed development of the site. It identifies the need for any measures to avoid, mitigate or compensate for significant adverse effects¹ on habitats and species and outlines enhancements to the site's ecology to be implemented as part of the development. The objectives of the assessment are:

- To provide baseline information on ecological features within the site's Zone of Influence and determine the importance of these features;
- To assess, characterise and quantify the effects on ecological features, including cumulative effects, and identify significant effects in the absence of any mitigation;

¹ For the purposes of this assessment a 'significant' adverse effect is one which will have an adverse effect on the ecological feature at the site level or higher.

- To set out measures to avoid, mitigate and compensate for significant ecological effects in accordance with the 'mitigation hierarchy'²;
- To provide an assessment of the significance of any residual effects;
- To outline opportunities for enhancement in order to achieve a net gain for biodiversity; and
- To set out the requirements for any post-construction monitoring.

1.4 Site Proposals

The proposals entail the demolition of the buildings on site and subsequent construction of three new residential dwellings. New access will enter along the north-western corner of the site from Selsmore Avenue.

The Ecological Impact Assessment is based on the proposals plan produced by Prestige Homes South (**Appendix 1**).

Planning permission is being sought during 2018 with construction proposed to commence soon after permission has been granted.

² In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2016) 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 Havant Borough Council administrative area. This information is then used to assess the compliance of the scheme in relation to relevant planning policy and where necessary make recommendations for mitigation, compensation and enhancements (see Section 5.0).

2.2 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 the revised NPPF published in July 2018. 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 development requiring appropriate assessment because of its potential impact on a habitats site³ is being planned or determined"*.

The general impetus of the NPPF in relation to ecology and biodiversity is for development proposals to 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 biodiversity and providing net gains in 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 habitats⁴. Where loss to irreplaceable habitats occur planning permission would normally be refused unless there are wholly 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*

³ The NPPF defines a habitats site as *"Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 for the purpose of those regulations, including candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation, Special Protection Areas and any relevant Marine Sites."*

⁴ 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."*

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 Special Protection Areas (SPAs), Special Areas of Conservation (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"*. Whilst 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 development, is established before planning permission is granted"*.

2.3 Local Policy

Local planning policy within Havant Borough is provided by the Havant Borough Core Strategy March 2011 with two policies referring in part ecology and biodiversity:

Policy CS11: Protecting and Enhancing the Special Environment and Heritage of Havant Borough.

This policy refers in part to biodiversity stating that planning permission will be granted for development that protects and where possible enhances the borough's statutory and non-statutory designated habitats and features of biological interest through appropriate adaptation and mitigation measures, has particular regard for nature conservation designations with international designations given the highest regard, protects wildlife habitats and corridors to prevent fragmentation and to allow species to adapt to climate change and acknowledges the emerging evidence from the Solent Disturbance and Mitigation Project and published recommendations and further research.

Policy DM9: Development in the Coastal Zone.

This policy refers to the protection of the coastal zone. The relevant part of the policy with regards to ecology states that permission will only be granted in the coastal zone where it can be demonstrated that there will be no harmful effects on nature conservation within the Chichester and Langstone Harbour SSSIs and SPA, Solent Maritime SAC and Ramsar site, or any SINC and Local Nature Reserves;

3.0 METHODS

3.1 Introduction

This section details the methods employed during the Ecological Impact Assessment. Any significant limitations to the assessment are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this assessment, the proposed scheme was reviewed to establish the spatial scale at which ecological features could be affected⁵. The appropriate survey radii for the various elements of the assessment (i.e. desktop study, field survey and species-specific surveys) 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 assessment, its surroundings and the nature of the proposals.

3.3 Scoping

Protected species considered within the Ecological Impact Assessment are those species/species groups considered likely to be encountered given the geographical location and context of the site. Where the site was found to be suitable to support these species/species groups, and adverse effects cannot be avoided from the outset, further species-specific surveys are undertaken. 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 assessment of ecological effects and mitigation/compensation measures section (Section 5.0) of this report.

3.4 Desk Study

A full biological record centre desktop study was not undertaken as part of this assessment. This was not considered necessary given the limited scale of impacts and the nature of on-site and surrounding habitats.

3.4.1 Multi-Agency Geographic Information for the Countryside

The Multi-Agency Geographic Information for the Countryside (MAGIC) database (DEFRA, 2017) was reviewed on 30th August 2018 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. See

⁵ The Zone of Influence (Zoi), 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 (CIEEM, 2016).

Appendix 2 for details. 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 one kilometre of the site boundary where European Protected Species Mitigation (EPSM) licences or Bat Low Impact Class Licences (BLICLs) 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.

3.4.2 **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).

3.5 **Field Survey**

3.5.1 **Survey Methods**

The field survey broadly followed standard Phase 1 habitat survey methodology (JNCC, 2010) and 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.

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)⁶. 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

⁶ The standard JNCC Phase 1 habitat survey methodology involves the production of a Phase 1 map showing the location and extent of habitat types, however, given the limited size and complexity of the site surveyed a Phase 1 habitat map has not been produced in this instance.

vegetation type was compiled and any invasive species⁷ encountered as an incidental result of the survey recorded.

Protected and Notable Species Appraisal

A preliminary appraisal of the site's suitability to support legally protected and notable species was carried out. Specific methods for species/species groups considered during the appraisal are provided in **Appendix 3**.

3.5.2 Survey Details

The field survey was carried out by Hugh Turner, Ecologist of ECOSA on 10th August 2018. The weather conditions were overcast with approximately 80% cloud cover, an ambient temperature of 17°C and a gentle breeze.

During the survey, the surveyor was equipped with a digital camera.

3.5.3 Field Survey 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.

3.6 Bat Survey

3.6.1 Survey Methods

Bat Emergence Survey

The bat emergence survey was undertaken in line with current best practice guidelines (Collins, 2016). In accordance with the guidelines for a building assessed as having low suitability to support roosting bats a single dusk emergence survey was undertaken in order to ascertain the presence/likely absence of roosting bats from within the building.

The dusk emergence survey commenced approximately 15 minutes before sunset until approximately an hour and a half after sunset.

The surveys were carried out by three experienced ECOSA surveyors, positioned at previously identified vantage points around the building, at the north-eastern corner,

⁷ 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.

south-eastern corner and north-western corner. These vantage point locations allowed a sufficient coverage of the Potential Roosting Features identified on the building impacted by the proposals.

During the surveys surveyors recorded the time, species, location and direction of flight for each bat encountered, with particular attention paid to establishing bat access/egress locations to any roosts within the building.

3.6.2 Survey Details

Bat Emergence Survey

The bat emergence surveys were undertaken on 22nd August 2018. **Table 1** provides details of each emergence/re-entry survey.

Table 1: Bat emergence survey details

Survey Date	Survey Type	Duration	Weather Conditions	Sunset/ Sunrise Time
22 nd August 2018	Dusk	19:56 – 21:41	General conditions: Overcast and mild Start temp: 19.3°C End temp: 18.5°C Cloud Cover: 100% Wind Speed: A light wind	20:11

During the bat emergence surveys the surveyors were equipped with Pettersson D240x time expansion bat detectors. The Pettersson detectors were connected to Edirol R-05 recorders for the full duration of the survey. Recordings made with the detectors were later analysed using Sonobat® (v2.9.7) to confirm the identity of any species encountered.

The bat emergence/re-entry surveys were coordinated by Hugh Turner, Ecologist of ECOSA (Natural England Bat Licence 2017-32632-CLS-CLS) assisted by suitably qualified and experienced ECOSA surveyors Georgina Timmis (Natural England Bat Licence 2016-26971-CLS-CLS), Jennifer Dowling and Jade Lemm.

3.6.3 Survey Limitations

Some bat species, e.g. long-eared bats *Plecotus* species, generally emerge from their roosts in total darkness and do not produce strong echolocations, and therefore these

⁸ There are two species of long-eared bat, the brown long-eared bat *Plecotus auritus* and the grey long-eared bat *Plecotus austriacus*. These species can only be separated by examination of physical characteristics and Phylogenetic Analysis Identification of bat droppings. Unless confirmation of identification has been made by visual identification the two species shall be referred to in this report as long-eared bat. The brown long-eared bat is the commonest of the two species typically being found roosting within large roof voids although small voids and trees are also utilised. The grey long-eared bat is rare and confined to southern England and like the brown long-eared typically roosts in roof voids.

bats can be difficult to observe and record during bat surveys, leading to under-recording.

The use of bat detectors is likely to result in the under-recording of a percentage of bats present, such as those flying at height (Collins & Jones, 2009), which would be out of the recording range for the detectors.

3.7 Criteria used to Assess Ecological Value

The evaluation criteria used in this report are based on ECOSA's professional judgement and publicly available publications, survey data and other sources as referenced in the main text. The evaluation is based on a sliding scale of importance as follows; international and European, national, regional, county, local and site. There are a wide range of characteristics which contribute to the importance of ecological features, and these may justify an increase or reduction in the value of an ecological feature. Where deviations occur, these will be explained in the evaluation section of this report (Section 4.0). Current published relevant guidance, including information sources such as A Nature Conservation Review (Ratcliffe, 1977) and Guidelines for Ecological Impact Assessment in the United Kingdom (CIEEM, 2016) have also been used to inform the assessment.

4.0 BASELINE ECOLOGICAL CONDITIONS AND EVALUATION

4.1 Introduction

This section details the results of the Ecological Impact Assessment 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 findings of the field survey and subsequent protected species surveys. This section also provides an assessment of the ecological value of ecological features present at the site.

4.2 Statutory Designated Sites

4.2.1 *Baseline Ecological Conditions*

There are four statutory designated sites of nature conservation interest situated within one kilometres of the site boundary. These are:

- Chichester and Langstone Harbours (Ramsar site) – Located 230 metres to the north of the site and designated for supporting notable intertidal and wetland habitats, wintering bird populations, invertebrate assemblages and higher plant species.
- Chichester and Langstone Harbours (SPA) - Located 230 metres to the north of the site and designated for supporting notable bird populations;
- Solent Maritime (SAC) - Located 230 metres to the north of the site and designated for supporting notable estuaries, *Spartina* swards and Atlantic salt meadow habitats; and
- Chichester Harbour (SSSI) - Located 230 metres to the north of the site and designated for supporting notable intertidal and wetland habitats, wintering bird populations, invertebrate assemblages and higher plant species.

Further details of the statutory designations listed above are provided in **Appendix 5**.

4.2.2 *Evaluation*

The Chichester and Langstone Ramsar site, Chichester and Langstone Harbours SPA and Solent Maritime SAC are of international value. The Chichester and Langstone Harbours SSSI is of national value. These sites are mentioned in Policy DM9 of the Local Plan (see Paragraph 2.3)

4.3 Habitats

4.3.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of notable habitats adjacent to or on site.

Field Survey Results

Habitats are described in general terms using standard Phase 1 habitat survey terminology, with reference to dominant, characteristic and notable species in each vegetation type. The main habitats recorded on site during the Phase 1 habitat survey were as follows:

Scattered Trees

A number of trees, ranging in age from immature to mature, are present across the site. Tree species recorded include pedunculate oak *Quercus robur* (**Figure 1**), holly *Ilex aquifolium*, hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, elder *Sambucus nigra*, silver birch *Betula pendula*, cherry laurel *Prunus laurocerasus*, rowan *Sorbus aucuparia* and yew *Taxus baccata*.



Figure 1: Mature pedunculate oak present to east of site

Dense Scrub

Areas of dense bramble *Rubus fruticosus* aggregate scrub are present to the east of the site (**Figure 2**). Other scrub species recorded in the area include holly, hedge bindweed *Calystegia sepium*, sycamore *Acer pseudoplatanus* saplings, hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*. Species recorded in the understorey include hogweed *Heracleum sphondylium*, ivy *Hedera helix*, herb Robert *Geranium robertianum*, buddleia *Buddleja davidi*, pendulous sedge *Carex pendula*, common sorrel *Rumex acetosa*, wood avens *Geum urbanum*, dandelion *Taraxacum officinale* aggregate and common nettle *Urtica dioica*.



Figure 2: Dense scrub present to the east of the site

Scattered Scrub

Small areas of scattered scrub are present to the west of the site (**Figure 3**). Species recorded in these areas include bramble, hogweed, buddleia, lords and ladies *Arum maculatum*, rose *Rosa* species, common nettle and cleavers *Galium aparine*.



Figure 3: Scattered scrub to the west of the site

Semi-improved Grassland

Areas of semi-improved grassland are present to the west of the site and at the edges of the dense scrub habitats (**Figure 4**). Grass species recorded on site include Yorkshire fog *Holcus lanatus*, annual meadow grass *Poa annua*, common bent *Agrostis capillaris* and perennial rye-grass *Lolium perenne*, barren brome *Anisantha sterilis* and false oat grass *Arrhenatherum elatius*. Herbaceous species recorded include dandelion, white clover *Trifolium repens* and ribwort plantain *Plantago lanceolata*.



Figure 4: Semi-improved grassland between scattered scrub to the west of the site

Species-poor Intact Hedgerow

Species-poor intact hedgerows are present along the western and northern boundaries of the site (**Figure 5**). The hedgerows are currently unmanaged, standing at approximately 2.5 metres tall and 1 – 1.5 metres wide. The hedgerows comprise sycamore, elder, rhododendron *Rhododendron* species and Leyland cypress *Cupressocyparis leylandii*.



Figure 5: Hedgerows along northern and western site boundary

Other Habitats

Other habitats present on site include hardstanding gravel driveway and paving tile pathways.

4.3.2 Evaluation

The site comprises common and widespread habitats that are largely present throughout the local area. Therefore, the habitats on site are considered to be of site value.

4.4 Bats

4.4.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of granted EPSMs with respect to bats within the desktop study area, however, this does not confirm the absence of the species group in the local area.

Field Survey Results

Building Assessment

There are three buildings on site, the bungalow, a garage and a dilapidated shed. The bungalow supports a single bat roosting feature in the form of a dropped soffit along the eastern elevation of the bungalow, therefore the bungalow is considered to have low suitability for roosting bats. The garage and shed buildings do not support any potential bat roosting features and are therefore considered to have negligible suitability to support roosting bats. The results of the building assessment are provided in **Table 2**.

Tree Assessment

The trees on site range in age from immature to mature and appear to be in good condition. No potential bat roosting features were identified during the survey. Therefore, the trees on site are considered to have negligible suitability to support roosting bats.

Foraging and Commuting Habitat

The habitats on site provide some foraging and commuting opportunities for bats. The site has some connectivity to off-site habitats via adjacent garden landscaping. Overall the site is assessed as having moderate suitability for foraging and commuting bats.

Table 2: Building Assessment – Summary of Features with Bat Roost Potential and Evidence of Bat Roost Activity

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
7 Selsmore Avenue	 Figure 6: Bungalow at 7 Selsmore Avenue  Figure 7: Dropped soffit on eastern elevation	A bungalow of brick construction with a flat bitumen felt roof and wooden soffits (Figure 6). No roof void is present internally.	The building supports a single potential bat roosting feature in the form of a dropped soffit located along the eastern elevation of the bungalow (Figure 7).	No evidence of roosting bats was recorded during the survey.	Low suitability
Garage	 Figure 8: Detached garage building	A detached garage building of brick construction with a flat bitumen felt roof is present to the south-west of the site (Figure 8).	The garage does not support any potential bat roosting features. Therefore, the building is considered unsuitable for roosting bats.	No evidence of roosting bats was recorded during the survey.	Negligible suitability

Surveyed Feature	Figure	Building Description	Description of Potential Bat Roost Features	Evidence of Bat Roost Activity and Location	Assessment of Suitability for Roosting Bats
Shed	 Figure 9: Dilapidated shed building	A dilapidated shed is present to the east of the bungalow. It is of wooden construction with a pitched bitumen felt roof (Figure 9). Internally the shed is open to the roof.	The open door provides internal access to the shed, however the shed is of an unsuitable construction to support bats, being well-lit internally and unable to maintain a constant temperature. Therefore, the building is considered unsuitable for roosting bats.	No evidence of roosting bats was recorded during the survey.	Negligible suitability

Bat Emergence/ Survey Results

The surveys recorded at least two species of bat these were common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*. No bats were recorded emerging from the bungalow during the survey.

Table 3 provides details of the species, numbers and locations of bats recorded foraging/commuting during the emergence surveys.

Table 3: Bat Emergence Survey Results[illegible]

4.4.2 Evaluation

Foraging and Commuting Bats

Bat surveys recorded at least two species of bat foraging and commuting at the site. **Table 4** shows the geographic level of value of foraging and commuting habitat at the site.

Table 4: Value of the site to bat species/species complexes

Species	Foraging and Commuting Value
Common pipistrelle	Local
Soprano pipistrelle	Local

During the survey, low numbers of common bat species were recorded foraging and commuting across the site. As the site supports a low number of common species of bats and supports a limited amount of the foraging and commuting habitat present in

the local area, it is considered that the site has local value for common pipistrelle and soprano pipistrelle.

4.5 Otter

4.5.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of otter *Lutra lutra* within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site does not support river or river bank habitats required by this species. The habitat on site is unsuitable for otter and therefore the species is not considered further in this report.

4.6 Badger

4.6.1 Baseline Ecological Conditions

Field Survey Results

No evidence of badger *Meles meles* was recorded on site during the survey. The grassland habitats provide some foraging opportunities for badger and the scrub habitats provide opportunities for colonising badger however the site is isolated from suitable off-site habitats by surrounding roads and residential development, preventing the species from colonising the site. Therefore, the habitat on site is unsuitable for badger and therefore the species is not considered further in this report.

4.7 Hazel Dormouse

4.7.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of hazel dormouse *Muscardinus avellanarius* within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The scrub habitats on site provide some foraging opportunities for hazel dormouse however the site is isolated from off-site habitats by surrounding residential development and roads. The habitat on site is unsuitable for hazel dormouse and therefore the species is not considered further in this report.

4.8 Water Vole

4.8.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of water vole *Arvicola amphibius* within the desktop study area, however, this does not confirm the absence of the species in the local area.

Field Survey Results

The site does not support river or river bank habitats required by this species. The habitat on site is unsuitable for water vole and therefore the species is not considered further in this report.

4.9 Birds

4.9.1 Baseline Ecological Conditions

Field Survey Results

During the survey a number of bird species were recorded on site or passing over including wood pigeon *Columba palumbus*, carrion crow *Corvus corone* and the red list species⁹ herring gull *Larus argentatus*. The scrub and tree habitats on site provide good foraging and nesting opportunities for birds.

The site offers only limited habitat suitable for supporting wintering birds and may support small numbers of overwintering thrushes such as redwing and fieldfare *Turdus pilaris*. It is unlikely to be used by wintering waders or wildfowl. Therefore, wintering birds are not considered further in this report.

4.9.2 Evaluation

Breeding Birds

The site is likely to support a small number of common bird species and supports a small amount of the available of nesting habitat in the local area. Therefore, the site is evaluated as having site value for breeding birds.

⁹ The UK's birds are split in to three categories of conservation importance - red, amber and green. Red is the highest conservation priority, with species needing urgent action. Amber is the next most critical group, followed by green. Red List criteria include species which are: globally threatened; have been subject to historical population decline in UK during 1800–1995; are in severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period, or, subject to severe (at least 50%) contraction of UK breeding range over last 25 years, or longer-term period.

4.10 Reptiles

4.10.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of reptiles within the desktop study area, however, this does not confirm the absence of this species group in the local area.

Field Survey Results

The unmanaged grassland and scrub habitats provide sheltering and foraging opportunities for reptiles, however the site is isolated from off-site habitats by surrounding roads. The habitat on site is unsuitable for reptiles and therefore this species group is not considered further in this report.

4.11 Great Crested Newt

4.11.1 Baseline Ecological Conditions

Desktop Study Results

Consultation with the MAGIC database produced no records of great crested newt within the desktop study area, however, this does not confirm the absence of the species in the local area.

A review of aerial photography and OS mapping revealed a total of 13 waterbodies within 500 metres of the site, a boating lake to the south, two ponds to the north adjacent to Mengeham Rythe Sailing Club and 10 ponds within the Tournurbury Woods Estate. The ponds to the north are considered to isolated from the site by busy roads with high kerbs, residential development, and the Mengham Rithe and the pond to the south are considered unsuitable due to the likely presence of waterfowl and fish.

Field Survey Results

There are no waterbodies present on site. The unmanaged grassland and scrub habitats provide sheltering and foraging opportunities for great crested newt in their terrestrial phase however the site is isolated from off-site breeding habitats by surrounding residential development and roads. Therefore, the habitat on site is unsuitable for great crested newt and therefore the species is not considered further in this report.

4.12 Invertebrates

4.12.1 Baseline Ecological Conditions

Field Survey Results

The site is likely to support a range of common and widespread invertebrate assemblages but is limited in extent and lacks any features that would support protected or notable invertebrate species. The habitat on site is unsuitable for protected or notable invertebrates and therefore this species group is not considered further in this report.

4.13 Other Relevant Species

4.13.1 Baseline Ecological Conditions

Field Survey Results

The scrub habitats provide sheltering opportunities for European hedgehog *Erinaceus europaeus* however the site is isolated from off-site habitats by surrounding roads. Overall, the habitat on site is unsuitable for European hedgehog and therefore this species is not considered further in this report.

5.0 ASSESSMENT OF ECOLOGICAL EFFECTS AND MITIGATION/COMPENSATION/ ENHANCEMENT MEASURES

5.1 Introduction

This section assesses the ecological effects of the proposed development scheme on the identified ecological features as identified in Section 4.0. Methods for addressing potential impacts on ecological features have been approached in accordance with the mitigation hierarchy¹⁰ with avoidance of impacts prioritised where possible. Where significant adverse effects cannot be avoided other forms of mitigation are prioritised over compensation. Enhancement measures have been detailed, where relevant, in order to not only minimise the impacts on biodiversity but also to provide enhancement in accordance with Paragraph 170 of the NPPF (Paragraph 2.2). It is anticipated that mitigation, compensation and enhancement measures will be secured through the planning process.

5.2 Scheme Design

The proposed development entails the construction of three new residential dwellings, with new external lighting, associated garden landscaping and hardstanding access and driveways with a total of six new parking spaces on site. New soft landscaping is proposed, including the planting of trees, shrubs and grassland. New access will enter site along eastern boundary of the site from Selsmore Avenue.

The potential ecological impacts and effects of these proposals, in the absence of mitigation, are described for each ecological feature below. For each ecological feature, measures to mitigate and/or compensate for significant effects are described.

5.3 Designated Sites

5.3.1 Potential Impacts and Effects

The proposal will lead to a net increase in the number of residents on site. It has been identified that residents within 5.6 kilometres of the Chichester and Langstone SPA are likely to make use of the site for recreation (Bird Aware Solent, 2017), this has potential to result in an increase in recreational impacts on nearby designated sites causing disturbance of wintering birds and degradation of habitats for which the sites are designated.

5.3.2 Mitigation Measures

Habitats Regulations Assessment (HRA) is the process that competent authorities must undertake to consider whether a proposed development plan or programme is

¹⁰ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2016) 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'.

likely to have significant effects on a European designated site (i.e. SACs and SPAs). Where impacts on relevant European designated sites cannot be ruled out (and therefore screened out), Appropriate Assessment is required. The purpose of the Appropriate Assessment is to determine whether there will be an adverse effect on the integrity of any site either alone or in combination with other plans or projects. The Appropriate Assessment takes proposed mitigation and compensation measures into account. If it is concluded that there will be no adverse impact the HRA is considered complete, if adverse impacts cannot be ruled out further assessment against the three 'derogation tests' under article 6(4) of the Habitats Directive 92/43/EEC is required. As impacts on the Chichester and Langstone Harbour SPA cannot be ruled out, Appropriate Assessment is required. It is understood that Appropriate Assessment in relation to the Chichester and Langstone Harbour SPA will be undertaken by the local authority.

5.3.3 ***Significance of Residual Effects***

Following mitigation, the increased number of residents will impact on the local designated sites.

5.3.4 ***Compensation***

Where a net gain in dwellings is proposed within the Chichester and Langstone Harbour SPA buffer (a 5.6 kilometre buffer), in accordance with the Solent Recreation Mitigation Strategy, a contribution should be made towards off-site mitigation measures. The contribution required will be determined based on the number of bedrooms within the new dwelling (Bird Aware Solent, 2017). If this financial contribution is secured, it is considered that the local authority will conclude that there will be no adverse impact on the integrity of the Chichester and Langstone Harbour SPA and the HRA can be concluded.

5.3.5 ***Enhancement***

Following compensation, no impacts have been identified and therefore there are no enhancement recommendations in relation to designated sites.

5.4 **Habitats**

5.4.1 ***Potential Impacts and Effects***

The proposals will result in the loss of approximately 0.1 hectares of poor semi-improved grassland, dense and scattered scrub, scattered trees and species-poor hedgerow.

5.4.2 ***Mitigation Measures***

A root protection area of 7.8 metres will be observed around the mature oak tree on site.

5.4.3 **Significance of Residual Effects**

In order to accommodate the scheme, the loss of poor semi-improved grassland, dense and scattered scrub, scattered trees and species-poor hedgerow cannot be avoided.

5.4.4 **Compensation**

Proposed landscaping will incorporate additional tree and hedgerow planting. This landscaping will comprise native tree and shrub species rather than cultivars including pedunculate oak, hazel *Corylus avellana*, holly, hawthorn, guelder rose *Viburnum opulus* and dogwood *Cornus sanguinea*.

New areas of grassland will comprise a native wildflower lawn mix (E.g. Emorsgate EL1 Flowering Lawn Mixture).

5.4.5 **Enhancement**

Following compensation measures, there will be no need for enhancement.

5.5 **Bats**

5.5.1 **Potential Impacts and Effects**

New external lighting may cause disturbance to foraging and commuting bats. Vegetation clearance will lead to a loss of foraging and commuting habitats.

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 6** for details.

5.5.2 **Mitigation Measures**

Lighting to be installed on the new development will comprise hooded luminaires. Ideally the bulbs will be LED and at the warmer end of the spectrum (e.g. avoiding blue or white light). LED lights emit much lower levels of UV and therefore have a lower impact on wildlife¹¹. The new lighting will be motion-activated and task related, associated with specific entrance/exit points of the property. The lux level will 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)¹² will be followed.

¹¹ *Wildlife and Artificial Lighting Seminar*, 21st – 22nd March 2014, Arup London, Bat Conservation Trust.

¹² CIBSE (1992) *Lighting Guide 6: The Outdoor Environment*; CIBSE (2002) *Code for Lighting*, Butterworth-Heinemann, UK.

5.5.3 **Significance of Residual Effects**

Following mitigation, the loss of foraging and commuting habitat cannot be mitigated for.

5.5.4 **Compensation**

The additional planting recommended in Paragraph 5.4.4 will create new foraging and commuting habitats for bats.

5.5.5 **Enhancement**

Three 1FR Schwegler bat tubes (or bat tubes of a similar design) will be installed on the new development to provide additional roosting opportunities post-development.

5.6 **Birds**

5.6.1 **Potential Impacts and Effects**

Nesting birds may be disturbed and/or harmed during vegetation clearance works, if undertaken during the breeding season, March to August inclusive. The proposals will result in the loss of nesting bird habitats.

All birds, their nests, eggs and young are legally protected, with certain exceptions. Refer to **Appendix 6** for details.

5.6.2 **Mitigation Measures**

Vegetation clearance should be undertaken outside the breeding bird season of March to August, inclusive, or if not possible, an ecologist should be present immediately prior to clearance to check vegetation. Active nests should be left with a suitable buffer until nesting ends.

5.6.3 **Residual Effects**

In order to accommodate the scheme, the loss of nesting habitat cannot be suitably mitigated for.

5.6.4 **Compensation**

The additional planting recommended in Paragraph 5.4.4 will create new nesting habitats for breeding birds.

5.6.5 **Enhancement**

Three type 26 Schwegler Brick Nest Boxes (or bird nest boxes of a similar design) will be incorporated into the building to provide additional nesting opportunities post development.

5.7 Cumulative Effects

Assuming that the mitigation and compensation measures outlined in the paragraphs above are implemented, no significant residual effects are anticipated. As such it is considered unlikely that the proposals will contribute to cumulative adverse effects in association with other proposals in the local area.

6.0 CONCLUSIONS

6.1 Conclusion

The site supports a low number of foraging and commuting bats and has suitability for breeding birds. The site also lies within the Chichester and Langstone Harbour SPA zone of influence. Adverse impacts on these ecological features have been identified and appropriate mitigation and compensation measures proposed. No residual or cumulative impacts are anticipated. Post-development the site will be enhanced for bats through the installation of additional bat roosting features and breeding birds through additional nesting features, resulting in an overall net gain for biodiversity. As such it is considered that the proposals will accord with all relevant national and local planning policy in relation to ecology including Policy CS11 and DM9 of the Core Strategy and the NPPF (see Section 2.0).

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 12 months of the date of the most recent relevant survey.

7.0 REFERENCES

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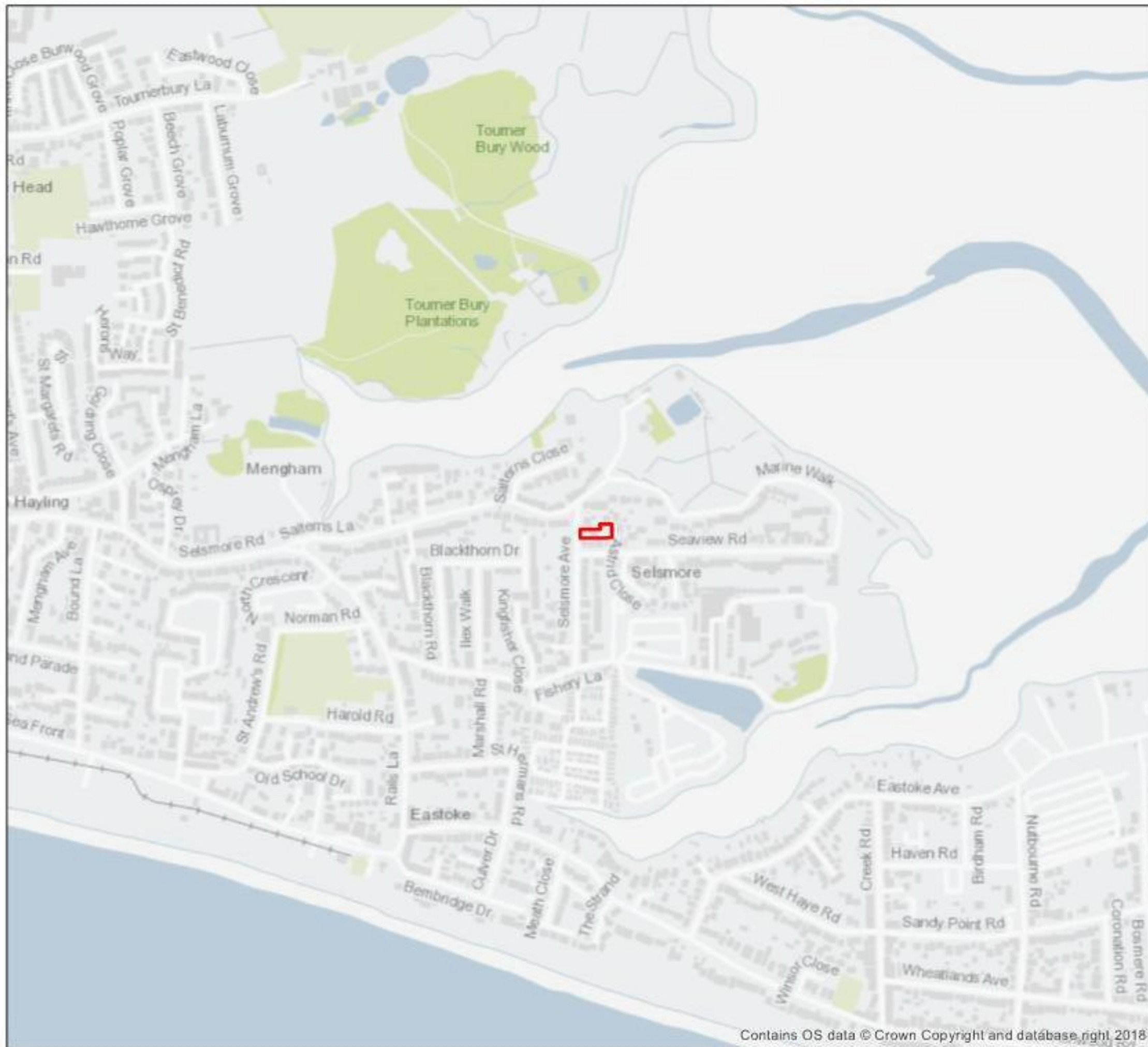
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Map 1 Site Location Plan



**7 SELSMORE AVENUE,
HAYLING ISLAND, HAMPSHIRE**

ECOLOGICAL IMPACT ASSESSMENT

Map 1 - Site Location Plan

Client:	Prestige Homes South Ltd.
Date:	August 2018
Status:	Final

KEY

 Site Boundary



Scale at A4: 1:10,000

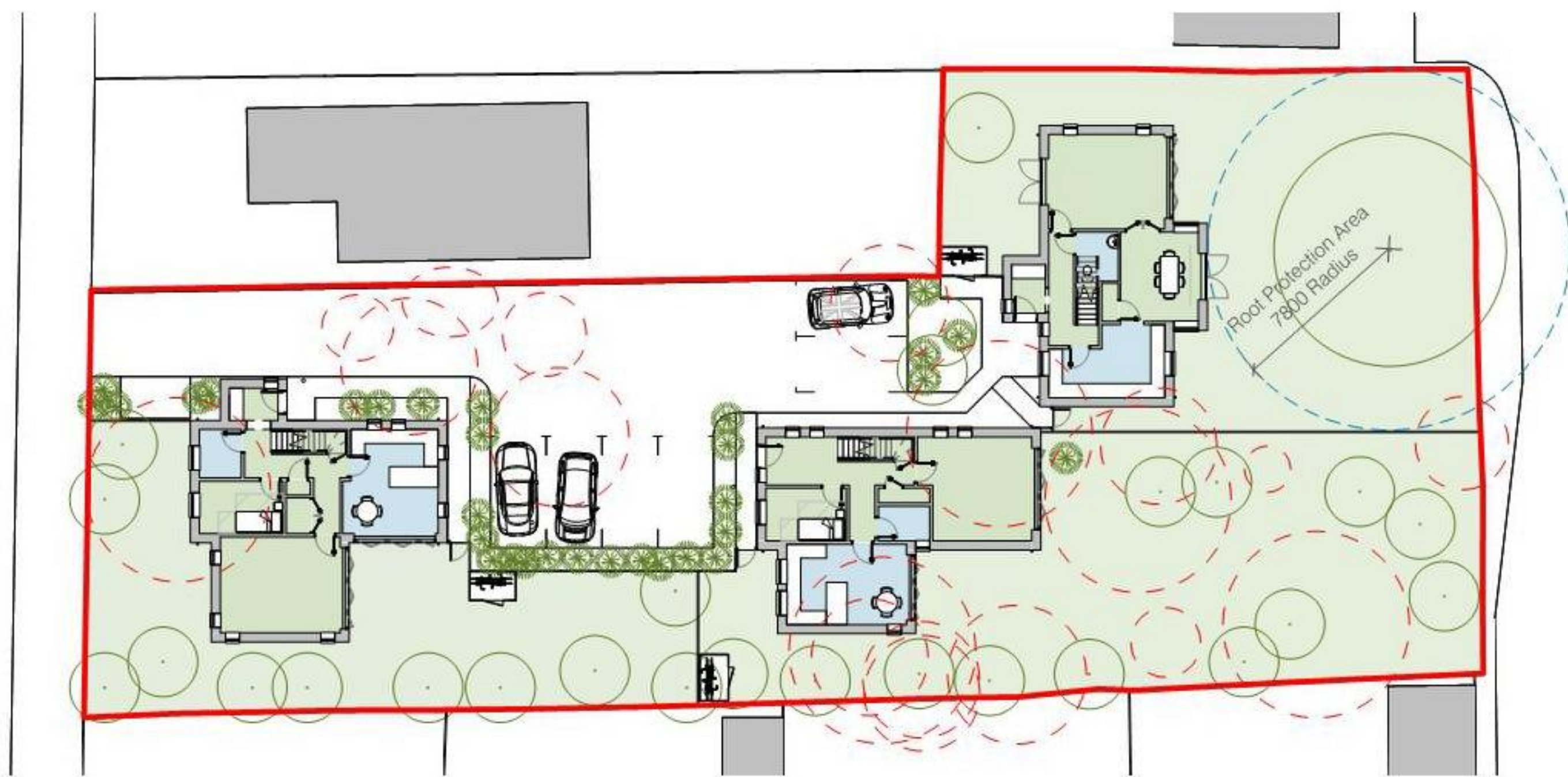
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Appendix 1 Proposed Site Layout



Appendix 2 Sites Designated for Nature Conservation

Statutory Sites

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

Special Protection Areas (SPA) and Special Areas of Conservation (SAC) form a network of protected sites across the European Union called Natura 2000 sites. 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 Natura 2000 sites.

SACs are sites which support intentionally important habitats or internationally important assemblages or populations of species. SPAs are designated for supporting internationally important populations of birds listed in the annexes of the Birds Directive. 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 Natura 2000 sites 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 Natura 2000 site or Ramsar site.

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

Sites of Special Scientific Interest (SSSI) 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 (NNR) 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 (LNR) 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. Protected and Notable Species Appraisal Methods

Bats

The survey conformed to current Bat Conservation Trust guidelines (Collins, 2016). An assessment was made of the suitability of buildings and trees on the site and immediately on the site boundary to support roosting bats based on the presence of features such as loose or missing roof tiles or lifted lead flashing for buildings and holes, cracks, splits, loose bark and ivy cladding for trees.

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 potential for the site to support roosting, foraging and commuting bat 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 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 a detailed investigation of the site to identify evidence of badger residence, foraging or territorial activity. Particular emphasis was placed on locating badger setts, paths, and signs of territorial activity such as latrine sites both on-site and within immediately adjacent areas where access was possible.

Hazel Dormouse

The appraisal for the potential of the site to support 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 potential presence of 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 potential 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 3.4.2), and their suitability to be used as a network.

Invertebrates

An assessment was made of the site for its potential value 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) species¹³, 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 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.

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 5**¹⁴.

Table 5: 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 or 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	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).

¹³ 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.

¹⁴ Table adapted from (Collins, 2016)

	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.	Suitable, but isolated, habitat that could be used by small numbers of foraging bats such as a lone tree or a patch of 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.

Appendix 5 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 6**.

Table 6: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
Chichester and Langstone Harbours	Ramsar	230 metres to the north	The site is designated under Ramsar Criterion 1, 5 and 6. Criterion 1 – Two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. Criterion 5 – Assemblages of international importance: 76480 waterfowl, count in winter (5 year peak mean 1998/99 – 2002/2003) Criterion 6 – species/populations occurring at levels of international importance. Qualifying species/populations (as identified at designation) Species with peak counts in spring/autumn: - Ringed plover <i>Charadrius hiaticula</i>; - Black-tailed godwit <i>Limosa limosa islandica</i>; and - Common redshank <i>Tringa totanus totanus</i>. Species with peak counts in winter: - Dark-bellied brent goose <i>Branta bernicla bernicla</i>; - Common shelduck <i>Tadorna tadorna</i>; - Grey plover <i>Pluvialis squatarola</i>; - Dunlin <i>Calidris alpina alpina</i>. Species/populations identified subsequent to designation for possible future consideration under criterion 6: Little tern <i>Sterna albifrons</i>.
Chichester and Langstone Harbours	SPA	230 metres to the north	The site qualifies for supporting the following Annex I species: Breeding

Table 6: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
			▪ Little tern, 100 pairs representing up to 4.2% of the breeding population in Great Britain; and ▪ Sandwich tern <i>Sterna sandvicensis</i>, 158 pairs representing up to 1.1% of the breeding population in Great Britain. On passage ▪ Little egret <i>Egretta garzetta</i>, 137 individuals representing up to 17.1% of the population in Great Britain. Over winter ▪ Bar-tailed godwit <i>Limosa lapponica</i>, 1,692 individuals representing up to 3.2% of the wintering population in Great Britain; and ▪ Little egret, 100 individuals representing up to 20.0% of the wintering population in Great Britain. This site also qualifies by supporting populations of European importance of the following migratory species: On passage ▪ Ringed plover, 2,471 individuals representing up to 4.9% of the Europe/Northern Africa - wintering population. Over winter ▪ Black-tailed godwit, 1,003 individuals representing up to 1.4% of the wintering Iceland - breeding population; ▪ Dark-bellied brent goose, 17,119 individuals representing up to 5.7% of the wintering Western Siberia/Western Europe population; ▪ Dunlin, 44,294 individuals representing up to 3.2% of the wintering Northern Siberia/Europe/Western Africa population; ▪ Grey plover, 3,825 individuals representing up to 2.5% of the wintering Eastern Atlantic - wintering population; ▪ Redshank <i>Tringa totanus</i>, 1,788 individuals representing up to 1.2% of the wintering Eastern Atlantic - wintering population; and ▪ Ringed plover, 846 individuals representing up to 1.7% of the wintering Europe/Northern Africa - wintering population.

Table 6: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
			The site qualifies by regularly supporting in excess of 20,000 individual waterfowl over winter.
Solent Maritime	SAC	230 metres to the north	Annex I habitats that are a primary reason for selection of this site: ▪ Estuaries; ▪ Spartina swards (<i>Spartinion maritimae</i>); and ▪ Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>). Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: ▪ Sandbanks which are slightly covered by sea water all the time; ▪ Mudflats and sandflats not covered by seawater at low tide; ▪ Coastal lagoons; ▪ Annual vegetation of drift lines; ▪ Perennial vegetation of stony banks; ▪ Salicornia and other annuals colonizing mud and sand; and ▪ Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes). Annex II species present as a qualifying feature, but not a primary reason for site selection: Desmoulin's whorl snail <i>Vertigo moulinsiana</i>.
Chichester Harbour	SSSI	230 metres to the north	Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities. The extensive intertidal mudflats are the feeding grounds, at the relevant times of year for internationally important numbers of ringed plover, grey plover, redshank, black-tailed godwit, dunlin, sanderling <i>Calidris alba</i> , curlew <i>Numenius arguata</i> and greenshank <i>Tringa nebularia</i> (the latter two in autumn particularly). Bar-tailed godwit numbers are of European importance. Amongst the wildfowl, shelduck, teal <i>Anas crecca</i> and dark-bellied brent goose

Table 6: Statutory Designated Sites Located Within the Desktop Study Area

Designation	Name	Approximate Relative Location	Reason for Designation
			numbers are of international importance with 5% of the world population of the latter.

Appendix 6 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.

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.