

Land adjacent to Windhover Roundabout,
Bursledon

Ecological Appraisal

March 2026

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Executive Summary

- i) **Introduction.** Aspect Ecology was commissioned by Wates Developments in March 2023 to undertake an Ecological Appraisal in respect of proposed redevelopment of land north of Windhover roundabout (Cranbury site) and between Bursledon Road and West End Road, Bursledon, Hants, SO31 8BN.
- ii) **Proposals.** This document has been prepared for a pre-application enquiry for employment development (Use Class B2/B8) of up to 18,580 square metres together with ancillary offices (Use Class E(g)(iii)) and other ancillary buildings, structures, parking, servicing and manoeuvring areas, landscaping and sustainable urban drainage features, following demolition of existing buildings.
- iii) **Survey.** The site was surveyed in May 2023, November 2024 and March 2026, with mapping of habitats based on the UK Habitat Classification system. In addition, a general appraisal of fauna was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys conducted in respect of bats and Badger. Desk study information has also been gathered from the local records centre (Hampshire Biodiversity Information Centre) and other online resources. The 2026 survey confirmed that no significant changes have occurred at the site since 2024 and the previous survey findings remain valid.
- iv) **Ecological Designations.** The site itself is not subject to any statutory or non-statutory ecological designations. The nearest statutory designation is Netley Common Local Nature Reserve located immediately adjacent to the sites wider survey area boundary, north/northeast of the site. The nearest non-statutory designation is Peewit Hill SINC, which is located immediately east of the site. The SINC is designated on the basis of being a priority heath habitat, larger than 0.25ha and with more than 25% of the site dominated by ericaceous shrubs and gorse. The remaining ecological designations in the surrounding area are physically well separated from the site and are unlikely to be adversely affected by the proposals.
- v) **Habitats.** The site is dominated by other modified grassland and hard standing, neither forming an important ecological feature. Features of ecological importance include native hedgerows and associated trees, and offsite woodland. Aside from short lengths of hedgerow to be potentially removed for access, these important features are fully retained under the proposals and will be protected during construction. Hedgerow losses will be compensated for by new hedgerow planting.
- vi) **Protected Species.** Habitats within the site are suitable to support protected and notable fauna including bats, reptiles, Hedgehog, Brown Hare and birds. Appropriate mitigation measures are proposed to safeguard such species during construction and maintain the suitability of habitats in the long-term.
- vii) **Enhancements.** Ecological enhancements proposed to secure a biodiversity net gain will be set out further in the BNG strategy as a separate submission. Faunal enhancements are also proposed, to be detailed as part of a faunal enhancement plan which can be secured via a suitably-worded planning condition.
- viii) **Summary.** In summary, the proposals have sought to minimise impacts on biodiversity and subject to the implementation of appropriate avoidance, mitigation and compensation measures, the proposals would not result in significant harm to biodiversity.

1 Introduction

1.1 Background and Proposals

1.1.1 Aspect Ecology was commissioned by Wates Developments in March 2023 to undertake an Ecological Appraisal in respect of proposed development of land adjacent to Windhover roundabout, Bursledon, centred at grid reference SU 4784 1112 (see Plan 6655/ECO1), hereafter referred to as 'the site'.

1.1.2 This document has been prepared for a pre-application enquiry for employment development (Use Class B2/B8) of up to 18,580 square metres together with ancillary offices (Use Class E(g)(iii)) and other ancillary buildings, structures, parking, servicing and manoeuvring areas, landscaping and sustainable urban drainage features, following demolition of existing buildings.

1.2 Site Overview

1.2.1 The site is located close to Junction 7 of the M27, on the northern edge of Bursledon. The site is bounded by the village of Bursledon and associated residential development to the south, and urban development within the city of Southampton to the north-west. The site is enclosed by the A27 on its eastern boundary and the A3024 to the west.

1.2.2 The site itself is a collection of compartmentalised intensively horse-grazed fields with associated stables, farm buildings and hard standing. This comprises extensive areas of short sward improved grassland, bordered by intensively managed native field boundary hedgerows and a woodland edge perimeter associated with the northwest of the site. Excepting the stables and main warehouse space the farm buildings are simple open shell structures in a dilapidated condition.

1.3 Purpose of the Report

1.3.1 This report documents the methods and findings of the baseline ecology surveys and desktop study carried out to establish the existing ecological interest of the site and inform an appraisal of the likely ecological effects of the proposals. The importance of the habitats and species present is evaluated. Where appropriate, avoidance, mitigation and compensation measures are proposed to safeguard significant existing ecological interest within the site. Where appropriate, opportunities for ecological enhancement are identified with reference to national conservation priorities and local Biodiversity Action Plans (BAPs). Habitats have been assessed under Statutory Biodiversity Metric Guidance to inform the pre-development biodiversity value of the site for the Biodiversity Net Gain (BNG) calculation.

2 Methodology

2.1 Desktop Study

- 2.1.1 Hampshire Biodiversity Information Centre was contacted in April 2023 and November 2024 for relevant biological information within 2km from the site.
- 2.1.2 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database¹, which uses data provided by Natural England, from within a search area extending to 25km from the site. The MAGIC database was also searched to identify the known presence of any Priority Habitats within or adjacent the site.
- 2.1.3 In addition, the Woodland Trust database² was searched for any records of ancient, veteran or notable trees within or adjacent to the site.
- 2.1.4 The information received from these organisations is discussed in the text and reproduced where appropriate on Plan 6655/ECO2.

2.2 Habitat Surveys

- 2.2.1 The site was surveyed in May 2023, November 2024 and March 2026 in order to ascertain the general ecological value of the land contained within the boundaries of the site and to identify the main habitats and ecological features present. The 2026 survey confirmed that no significant changes have occurred at the site since 2024 and the previous survey findings remain valid.
- 2.2.2 The survey was informed by Phase 1 Habitat Survey methodology³, with habitat types identified and mapped in accordance with the UK Habitat Classification system (version 2.0)⁴, together with an assessment of the species composition of each habitat. This technique provides an inventory of the habitat types present and allows identification of areas of greater potential for botanical interest which require further survey. Any such areas identified can then be examined in more detail through Phase 2 surveys. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal⁵ to record details on the actual or potential presence of notable or protected species.
- 2.2.3 In line with guidance⁶, the fine scale minimum mapping unit of 25m² area or 5m length has been used where appropriate.
- 2.2.4 The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) taxon list⁷.

¹ Multi-Agency Geographic Information for the Countryside (MAGIC), at <https://magic.defra.gov.uk/>

² Woodland Trust Ancient Tree Inventory, at <https://ati.woodlandtrust.org.uk/>

³ Joint Nature Conservation Committee (2010, as amended) Handbook for Phase 1 habitat survey: A technique for environmental audit.

⁴ UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at <https://www.ukhab.org>)

⁵ Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) Guidelines for Preliminary Ecological Appraisal.

⁶ The UK Habitat classification User Manual. Version 1.1. 2020

⁷ <https://bsbi.org/taxon-lists>

Habitat Condition Assessment

- 2.2.5 To determine the pre-development biodiversity value of the site for the BNG calculation, the condition of habitats has been assessed in accordance with the methodology set out in the Statutory Biodiversity Metric Technical Annex⁸ and using professional judgement. Condition assessment data was collected during the May 2023 survey, with additional supplementary data collected in November 2024 and most recently in March 2026.
- 2.2.6 Grassland has been surveyed based on the approach set out within the Farm Environment Plan (FEP) Manual⁹, allowing an assessment of species per m² and frequency of indicator species. A transect was walked through each grassland area, with five stopping points in each at which species were identified within a 1x1m quadrat. An assessment of frequency was then made, with frequent species considered as those occurring in three or more quadrats out of five, occasional species in two quadrats, and rare species occurring in one quadrat. This method is modified from the FEP approach which is based on ten quadrats.

2.3 Faunal Surveys

- 2.3.1 General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Particular attention was also paid to the likely presence of protected, rare or notable species, with specific survey work undertaken for bats, Badger, reptiles and Dormouse as described below.

Bats¹⁰

Preliminary Appraisal

- 2.3.2 A review was undertaken of the desk study information obtained to identify any known constraints in relation to bats, the bat species recorded and habitats likely to be used by bats within the site and the surrounding area. This included a review of background records, known designations including SACs or SSSIs relevant to bats and an appraisal of OS mapping and aerial photography to identify habitats likely to be of value to bats.
- 2.3.3 During the initial habitat survey, the potential suitability of the site for bats in relation to roosting habitats, potential flight-paths and foraging habitats (termed a 'daytime bat walkover') was investigated. Features were assessed as of negligible, low, moderate or high potential suitability for roosting, foraging and commuting, based on the framework set out under BCT guidance. This appraisal has informed the scope of the survey work undertaken as set out below.

Buildings and Built Structures

- 2.3.4 Visual Inspection Surveys. Buildings and built structures within the site were subject to internal and external inspection surveys using ladders, torches and binoculars where necessary in November 2024, and were re-examined to confirm the assessment in March 2026.
- 2.3.5 During the external inspections, particular attention was given to potential roost features or access points, such as broken or lifted roof tiles, lifted lead flashing, soffit boxes,

⁸ Statutory Biodiversity Metric - Technical Annex 1 - Condition Assessment Sheets and Methodology

⁹ Natural England (2010) Higher Level Stewardship – Farm Environment Plan (FEP) Manual, 3rd Edition

¹⁰ Surveys based on: Reason, P.F. and Wray, S. (2023) UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. CIEEM; and Bat Conservation Trust (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Ed).

weatherboarding, hanging tiles, and similar, and for any indications of use by bats such as accumulations of bat droppings or staining. Binoculars were used to inspect inaccessible areas more closely.

- 2.3.6 During the internal inspections, searches were made for evidence of the presence of bats with particular attention paid to any loft voids and locations such as ridge boards, rafters, purlins, gable walls, and mortise joints that may provide potential roost features. Specific searches were made for bat droppings that can indicate present or past use and the extent of use. Droppings collected during the course of the surveys were visually assessed and attributed to a species where possible on the basis of size/shape/texture¹¹. Other signs searched for included the presence of stained areas, feeding remains and corpses.

Trees

- 2.3.7 Trees within the site were assessed for their suitability to support roosting bats based on the presence of features such as holes, cracks, splits or loose bark. Trees were categorised as supporting Potential Roost Features (PRFs), Further Assessment Required (FAR) or supporting no suitable features.
- 2.3.8 Ground Level Tree Assessment. Where practical, trees were subject to a Ground Level Tree Assessment (GLTA) based on relevant guidance¹² with PRFs categorised as PRF-I (only suitable for individual or small numbers of bats) or PRF-M (suitable for multiple bats).
- 2.3.9 Any PRFs identified were inspected using binoculars from ground level for any signs indicating possible use by bats, such as staining, scratch marks or bat droppings. Where accessible from ground level, PRFs were subject to close inspection using a torch.

Activity Surveys

- 2.3.10 Night-time Bat Walkover Surveys. Night-time bat walkovers (NBWs) or walked transect surveys were undertaken in July to October 2023 to investigate foraging or commuting bat activity at the site. This survey method comprises walking transect routes around the site, specifically covering habitats and features which have been identified as potentially suitable for use by commuting or foraging bats. Anabat Scout handheld bat detectors were employed to aid identification of any bats observed. Each survey began at sunset close to identified potential roosting features or features likely to be of interest as commuting routes, with surveyors remaining in place for 30-60 minutes before commencing the walked transect, continuing until at least 2 hours after sunset. The transect route followed is shown at Plan 6655/ECO4.
- 2.3.11 This survey work was carried out during suitable weather conditions, as set out in Tables 2.1 to 2.2 below.

Table 2.1. Dusk walked transect survey details.

Date	Start & end times & time of sunset	Surveyors and Equipment used	Weather
13/07/2023	Start time: 21.15 End time: 23.15 Sunset: 21.16	Two surveyors with Anabat Scout handheld bat detectors.	Dry, 50% cloud, BF1, 16°C

¹¹ Stebbings, RE, Yalden DW and Herman, JS (2007). Which bat is it? A guide to bat identification in Great Britain and Ireland. The Mammal Society

¹² Bat Conservation Trust (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Ed).

Date	Start & end times & time of sunset	Surveyors and Equipment used	Weather
17/08/2023	Start time: 20.23 End time: 22.23 Sunset: 20.23	Two surveyors with Anabat Scout handheld bat detectors.	Dry, 5% cloud, BF2, 20°C
25/09/2023	Start time: 18.57 End time: 20.57 Sunset: 18.57	Two surveyors with Anabat Scout handheld bat detectors.	Dry, 20% cloud, BF4, 20°C
10/10/2023	Start time: 18.24 End time: 20.24 Sunset: 18.24	Two surveyors with Anabat Scout handheld bat detectors.	Dry, 100% cloud, BF3, 17°C

BF0 = calm, BF12 = hurricane force

Table 2.2. Dawn walked transect survey details.

Date	Start & end times & time of sunrise	Equipment used	Weather
18/08/2023	Start time: 03.57 End time: 05.57 Sunrise: 05.57	Two surveyors with Anabat Scout handheld bat detectors.	Heavy rain for last 10 minutes of survey, 70% cloud, BF2, 18°C

BF0 = calm, BF12 = hurricane force

2.3.12 Automated Surveys. Automated static bat detector surveys were also carried out during which Song Meter SM4BAT detectors were positioned at a number of locations within the site to record bat data over weekly periods during each month between July and October 2023. Detector 1 was deployed on the western boundary of the site adjacent to the woodland and adjacent to the field edge (see Plan 6655/ECO4).

2.3.13 Static bat detectors were set to switch on approximately 30 minutes before sunset and switch off approximately 30 minutes after sunrise. The specific timings and weather conditions during the static detector surveys are set out in Table 2.3 below.

Table 2.3. Automated detector survey details.

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°C)	Cloud Cover (%)	Precipitation
13/07/2023	2	16	26-99	Dry with light showers at 06.00
14/07/2023	3-4	15-17	64-100	Dry
15/07/2023	5	15	37-100	Dry with patchy showers at 00.00
16/07/2023	2-3	12-14	14-89	Dry
17/07/2023	1-2	12-16	32-48	Dry
18/07/2023	2 - 3	14 -16	32-56	Dry
19/07/2023	2	13 -18	0-10	Dry
17/08/2023	4	17-19	16-66	Dry with rain starting at 06.00
18/08/2023	2-3	17-19	72-100	Patchy rain between 21.00- 00.00
19/08/2023	2	15-16	32	Dry
20/08/2023	2	14-16	6-23	Dry
21/08/2023	2	15-17	19-57	Dry
22/08/2023	2	15-17	4-37	Dry
23/08/2023	1-2	17-18	26-50	Dry
25/09/2023	2-3	14	18-69	Dry
26/09/2023	2-3	14-15	35-89	Dry
27/09/2023	4-5	13-15	22-56	Dry
28/09/2023	4-5	18	68-100	Light rain between 21.00-03.00
29/09/2023	2	10-12	0-35	Dry
30/09/2023	2-3	15-17	75-88	Dry
01/10/2023	2-3	16-17	75-100	Dry

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°C)	Cloud Cover (%)	Precipitation
10/10/2023	2-4	15-16	32-100	Dry
11/10/2023	2	15-17	87-100	Light rain between 20.00-06.50
12/10/2023	3-4	17	69-100	Light rain between 18.50- 8.00
13/10/2023	2-3	8-15	5-71	Light rain between 18.50-21.00
14/10/2023	2-3	6-8	12-20	Dry
15/10/2023	3	5-7	67-100	Dry
16/10/2023	4-5	10	41-48	Dry

BF0 = calm, BF12 = hurricane force

Analysis of Bat Survey Recordings

- 2.3.14 All bat calls were analysed using Anabat Insight 2.0 to identify the species recorded during the survey work. Where recordings could not be reliably attributed to species (such as for *Myotis* species) or where overlaps between otherwise distinguishable species occur (such as in *Pipistrelle* sp. bat calls around 40kHz or 50kHz) calls were identified to genus; in the case of calls which could not be distinguished between *Nyctalus* sp. and Serotine, these have been labelled as 'big bat' species.

Badger *Meles meles*¹³

- 2.3.15 A Badger survey was carried out in May 2023, November 2024 and March 2026. The survey comprised two main elements. The first element involved searching for evidence of Badger setts. For any setts that were encountered, each sett entrance was noted and mapped. The following information was recorded:

- Number and location of well used and active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently;
- Number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance; and
- Number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

- 2.3.16 The second element involved searching for signs of Badger activity such as well-worn paths and push-throughs, snagged hair, footprints, latrines and foraging signs, so as to build up a picture of any use of the site by Badger.

Dormouse *Muscardinus avellanarius*¹⁴

- 2.3.17 Surveys were undertaken between July and November 2023 to establish the presence/absence of Dormouse within the site. Survey work followed the methodology set

¹³ Based on: Mammal Society (1989) Occasional Publication No. 9 – Surveying Badgers

¹⁴ Based on: English Nature (2003) Surveying dormice using nest tubes: Results and experiences from the South West Dormouse Project, English Nature Research Report No. 524; English Nature (2006) The Dormouse Conservation Handbook, 2nd Edition; and Natural England (2011) Interim Natural England Advice Note – Dormouse surveys for mitigation licensing – best practice and common misconceptions, WML-537 (12/11)

out within best practice guidance¹⁴, whereby nesting tubes are attached to branches of trees and shrubs and checked on a regular basis for signs of use by Dormouse.

- 2.3.18 The guidance requires a set level of survey effort based on the number of tubes deployed and the months during which these are in place and checked for signs of use. Months in which use of nest tubes by Dormouse is more likely are afforded a higher number of survey effort points than months when there is a lower likelihood of use. The guidance recommends that determination of absence of Dormouse from a site should be based on a survey effort score of at least 20 points.
- 2.3.19 A total of 71 Dormouse nest tubes were deployed within the site, with 57 positioned within hedgerows and along the wooded edges of field boundaries and 14 within the area of deciduous woodland north of the site boundary, within the wider survey area (see Plan 6655/ECO5). Nest tubes were checked monthly between July and November 2023, giving a total survey effort score of 25.6 points across the entire survey area.

Reptiles¹⁵

- 2.3.20 Given the presence of potentially suitable reptile habitat within the site, a survey was undertaken between September and October 2023 to investigate the presence/absence of common reptile species.
- 2.3.21 A total of 85 50x50cm sheets of thick roofing felt were placed within suitable areas across the site as artificial refugia (see Plan 6655/ECO6). This represents a density of 10.5 refugia per hectare of reptile suitable habitat. The refugia, which provide shelter for reptiles, heat up more quickly than their surroundings in the morning and can remain warmer than their surroundings in the late afternoon. Being ectothermic (cold blooded), reptiles will readily use these refugia to bask upon or beneath so as to raise their body temperature, which allows them to forage earlier and later in the day. Checking the refugia at appropriate times of the day (morning and evening) for the presence of reptiles provides an effective measure of assessing the presence/absence of common reptiles at a site.
- 2.3.22 The refugia were left in place undisturbed for 1-2 weeks to allow reptiles to find and start using them. Refugia were subsequently checked at appropriate times of the day on seven occasions during suitable weather conditions as set out below in Table 2.4.

Table 2.4. Reptile survey dates and weather conditions

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°C)	Cloud Cover (%)	Precipitation
13/09/2023	2	16	100	No rain
19/09/2023	2	16	80	Light rain
21/09/2023	2	15	90	No rain
26/09/2023	3	18	100	Light showers
29/09/2023	3	17	20	No rain
02/10/2023	2	17	100	No rain
05/10/2023	2	16	60	No rain
11/10/2023	3	17	100	No rain
17/10/2023	3	13	20	No rain

BF0 = calm, BF12 = hurricane force

¹⁵ Surveys based on: Froglife Advice Sheet 10 (1999) Reptile Survey - an introduction to planning, conducting and interpreting surveys for snake and lizard conservation.

- 2.3.23 Any reptiles that were observed basking in the open or within partial cover were also recorded. Searches were also made of existing natural objects (such as logs and rocks) and other artificial refugia (such as debris or discarded tyres), where present, for reptiles or evidence of reptiles (such as sloughed skin).

2.4 Survey Constraints and Limitations

- 2.4.1 Not all of the species that occur in each habitat will necessarily be present or detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons.
- 2.4.2 The habitat survey was undertaken within the optimal season, therefore allowing a robust assessment of habitats and botanical interest within the site to be made. Additional information on the habitats present within the site was collected during the 2024 and 2026 surveys allowing a robust assessment of habitats and botanical interest within the site to be made.
- 2.4.3 Note was made of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) that were observed during surveys. However, because the detectability of such species varies according to factors such as the time of year or site management regime, the absence of invasive species should not be assumed even if no such species were recorded during the surveys undertaken.
- 2.4.4 Building 3a and 3b were padlocked at the time of surveys and therefore surveyors were unable to enter. As a consequence, a full internal bat survey could not be undertaken, although a comprehensive external survey was carried out.
- 2.4.5 Originally, three static bat detectors were deployed at the site. However, two of these detectors were stolen before data could be collected. Because of this, and the realistic likelihood that this might happen on future occasions, only one static bat detector was maintained throughout the survey period. The two stolen detectors were located at and within the woodland to the north of the site, which is to be fully retained within the proposals. As a consequence, the reduced amount of bat data collected at these locations has not significantly affected the assessment. The number of walked activity surveys was increased to obtain additional data and at least partially offset this limitation.
- 2.4.6 A recognised limitation of bat activity surveys is that bat detectors can only provide an index of activity rather than determine absolute numbers of bats. The results of bat activity surveys should therefore only be considered indicative of the amount of use bats make of an area rather than a measure of the abundance of bats.

2.5 Ecological Evaluation Methodology

- 2.5.1 The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018)¹⁶, which identifies 'important ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). Further details are provided at Appendix 6655/1.

¹⁶ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, ver. 1.3 (updated September 2024)

2.6 Relevant Planning Policy

National Policy Approach to Biodiversity in the Planning System

2.6.1 The National Planning Policy Framework (NPPF)¹⁷ describes the Government's national policies on 'conserving and enhancing the natural environment' (Chapter 15). NPPF is accompanied by Planning Practice Guidance on 'Biodiversity, ecosystems and green infrastructure' and ODPM Circular 06/2005¹⁸.

2.6.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss¹⁹, as set out at Paragraph 187, which states that planning policies and decisions should contribute to and enhance the natural and local 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs'

2.6.3 The approach to dealing with biodiversity in the context of planning applications is set out at Paragraph 193:

'When determining planning applications, local planning authorities should apply the following principles:

- a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'*

¹⁷ Ministry of Housing, Communities & Local Government (2024) National Planning Policy Framework

¹⁸ ODPM (2006) Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice

¹⁹ DEFRA (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services

2.6.4 The above approach encapsulates the ‘mitigation hierarchy’ described in British Standard BS 42020:2019²⁰, which sets out the following step-wise process:

- Avoidance – avoiding adverse effects through good design;
- Mitigation – where it is unavoidable, mitigation measures should be employed to minimise adverse effects;
- Compensation – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm; and
- Enhancement – planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.

2.6.5 The measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the type and scale of the proposed development (BS 42020:2019, section 5.5).

2.1 Local Policy

2.1.1 Eastleigh Borough Council’s current planning policies are set out within the Eastleigh Borough Council Local Plan 2016-2036, adopted in April 2022.

Eastleigh Borough Council Local Plan 2016-2036

2.1.2 Of the policies within the Eastleigh Borough Local Plan the following are relevant to ecology and nature conservation, in regard to the potential development of the site.

2.1.3 Policy DM2 Environmentally sustainable development

1. The Borough Council requires that:

a. all new build residential development (C3 Use Class only) must achieve at the time a Reserved Matters or Full Planning Application is submitted:

i. a 19% improvement in predicted carbon emissions, compared with the building regulations standard current at the time, through increased energy efficiency of the building fabric, unless this is superseded by an updated building regulations requirement equivalent to ‘zero carbon homes’; and

ii. a predicted mains water consumption of no more than 110 litres/person/day.

b. all other development that is above 500m² of floorspace measured externally (including extensions and conversions to existing buildings) must achieve BREEAM ‘excellent’ (or equivalent) or BREEAM ‘very good’ plus ‘passivhaus’ certification including a 15% improvement in predicted carbon emissions, compared with the building regulations current at the time, through low or zero carbon energy generation on site or in a Borough location agreed by the Council.

c. all other larger developments above 10,000m² of floorspace should also seek to fund post occupancy evaluation (POE) in addition to the above.

²⁰ British Standards Institution (2013) Biodiversity – Code of practice for planning and development, BS 42020:2019

2. In addition to the above, all development above 500m² of floorspace measured externally (including extensions and conversions to existing buildings) and external spaces within the curtilage serving developments of this size should where practical and viable:

- a. incorporate energy-efficient passive design principles, the best use of natural daylight and natural ventilation systems wherever possible;*
- b. connect to any existing near or adjacent low carbon local energy network unless this is proved unviable;*
- c. use recycled, low embodied carbon, low environmental impact and locally sourced materials in construction where possible;*

2.1.4 Policy DM11 Nature Conservation

General Approach

1. The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:

- a. protect, conserve and enhance all:*
 - i. international, national and local nature conservation designations;*
 - and*
 - ii. networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character; and facilitate their adaptation to climate change wherever possible;*
- b. assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);*
- c. seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and*
- d. contribute to major elements of the PFSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).*

International Designations

2. Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.

3. *The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:*

a. implementing:

i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and

ii. the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;

b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;

c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and

d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.

National and Local Designations

4. *Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:*

a. there are no alternative solutions;

b. the adverse effects are unavoidable;

c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;

d. there is an overall biodiversity net gain; and

e. if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.

Priority habitats, protected and priority species and the local ecological network

5. *Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:*

a. there are no alternative solutions;

- b. the adverse effects are unavoidable;*
- c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
- d. there is an overall biodiversity net gain; and*
- e. if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.*

Irreplaceable habitats

6. Development will not be permitted if it results in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees), unless there are wholly exceptional reasons and a suitable compensation strategy exists.

Buffers

7. Buffers free from development will be provided to designated sites to avoid/mitigate impacts, including recreational impact and impacts on edge habitats, and to maintain dark skies.

Surveys

8. Development will not be permitted unless it can be demonstrated that:

- a. there have been thorough habitat and species surveys;*
- b. the great crested newt strategic survey and strategy have been considered in all developments within 500m of a great crested newt pond; and*
- c. the strategic bat trapping survey has been considered in all developments within the locality of a woodland or connected habitat networks.*

2.1.5 Strategic policy S9 Green Infrastructure

Through new development and other initiatives the Borough Council will seek to achieve the provision, retention and/or enhancement of the following forms of multifunctional green infrastructure, including provision of:

- a. landscape scale strategic links across the Borough boundary, to and between the Borough's settlements, the countryside, the coast, and the major areas of open space including the country parks (see strategic policy S12);*
- b. interlinked publicly accessible open space through new and existing development including for example formal sports facilities and informal amenity spaces and cemeteries (see policies DM32-DM34, Chapter 5 and detailed proposals in Chapter 6);*
- c. green infrastructure incorporated into all new development with multifunctional spaces connected by primary, secondary and tertiary green links;*
- d. interconnected urban green infrastructure within the fine grain of existing and new development including green, cycle ways, paths and linkages between community facilities and open spaces to link community facilities;*

e. green stepping stones such as street trees, green roofs and walls, pocket parks and urban copses (see policy DM1, Chapter 5);

f. connected habitats linking the network of designated sites and existing priority habitats, taking account of the Hampshire ecological network map (see policy DM11, Chapter 5);

g. incorporation of historic buildings and landscapes, including historic parks and gardens within the wider Green Infrastructure to protect their setting (see policy DM12, Chapter 5); and

h. opportunities for local food growing including allotments, community orchards and farms (see policies DM32 to DM34, Chapter 5 and detailed proposals in Chapter 6).

3 Ecological Designations

3.1 Statutory Designations

Description

- 3.1.1 The statutory designations of ecological importance that occur within the local area around the site are shown on Plan 6665/ECO2.
- 3.1.2 The nearest statutory nature conservation designation to the site is Netley Common Local Nature Reserve (LNR), which is located immediately to the north of the site. Netley Common LNR is designated on the basis of its importance as lowland heath.
- 3.1.3 The next nearest statutory nature conservation designation to the site is Manor Farm LNR, which is located approximately 1.03km east of the site. The LNR is designated for supporting red listed bird species including Curlew *Numenius arquata* and Skylark *Alauda arvensis* as well as a diversity of wildflowers, insects and reptiles.
- 3.1.4 Natural England has developed Impact Risk Zones (IRZs) as an initial tool to help assess the risk of developments adversely affecting SSSIs, taking into account the type and scale of developments. The site sits within an IRZ in relation to Upper Hamble Estuary and Woods SSSI, and with a proposal of over 100 units of residential housing, Natural England will likely have to be consulted.
- 3.1.5 The site sits within an IRZ in relation to the complex of Solent European Sites, which are susceptible to nutrient enrichment. Within the 'Solent Nutrient Impact Area' any new residential development (any development with overnight accommodation) within 5.6km of the Solent and Southampton Water SPA/Ramsar, must assess the indirect impacts of the development on the Solent sites. The Solent and Southampton Water SPA/Ramsar is located 3km east and southwest of the site, and the Solent Maritime Special Area of Conservation (SAC) lies 4.5km west. Further information is set out in Natural England's Solent Nutrient Neutrality Advice Note June 2020). Sufficient information should be submitted with any planning application to allow the LPA to carry out a Habitat Regulations Assessment. Further updated guidelines are expected to be released in the near future.

Evaluation

- 3.1.6 The site itself is not subject to any statutory ecological designations. There is one statutory designation, Netley Common LNR, adjacent to the site. However, given the type and scale of the proposals, and the retention and protection of intervening woodland between the site and this designation, adverse effects would not occur. All other statutory designations are sufficiently distant from the site that they would not be affected by the proposals.
- 3.1.7 The site is not proposed for residential development and there is not expected to be any direct net increase in overnight accommodation. Therefore, it is not expected that the development proposals will be subject to the financial contributions outlined within the Solent Recreation Mitigation Strategy to the Solent Disturbance Mitigation Project (SDMP). However, being within the impact risk zone it is expected that mitigation will be required to mitigate for the potential net increase in nutrients entering the Solent from urban runoff and sewage treatment for the developments life cycle so as to prevent any further damage to the protected areas of the coast caused by nutrient loading from development.

3.2 Non-statutory Designations

Description

- 3.2.1 The non-statutory designations of nature conservation interest that occur within the local area are shown on Plan 6655/ECO2.
- 3.2.2 The nearest non-statutory designation is Windhover (Netley Common South) Site of Importance for Nature Conservation (SINC) located immediately to the north of the site. The SINC is designated on the basis of being a priority lowland heath habitat with a size greater than 0.25ha and with more than 35% of the area dominated by ericaceous shrubs and dwarf gorse.
- 3.2.3 The next nearest non-statutory nature conservation designation to the site is Peewit Hill SINC, which is located immediately east of the site. The SINC is designated on the basis of being a priority heath habitat, larger than 0.25ha and with more than 25% of the site dominated by ericaceous shrubs and gorse. The site also qualifies as it supports Black Bog Rush *Schoenus nigricans*, a notable vascular plant in Hampshire, meeting Section 6 of the SINC selection criteria.
- 3.2.4 The data search requested from Hampshire Biodiversity Information Centre returned an Ecological Network map highlighting the site as within an Area for Network opportunities.

Evaluation

- 3.2.5 The site itself is not subject to any non-statutory nature conservation designations. All non-statutory designations in the surrounding area are sufficiently separated from the site by intervening development, infrastructure or woodland such that given the type and scale of the proposals, are unlikely to be affected.
- 3.2.6 The site falls within a non-statutory Ecological Network Opportunity Area. Ecological enhancements within these areas are encouraged, including those that improve the ecological connectivity of habitats with the wider landscape. Ecological enhancements delivered alongside the proposals can contribute to this objective.

3.3 Priority Habitats, Ancient Woodland and Notable Trees

Description

- 3.3.1 There are no records of notable or veteran trees within or adjacent to the site. The site contains a small area of woodland that is identified in MAGIC as the Priority Habitat 'Deciduous Woodland'. Data returned from the Hampshire Biodiversity Record Centre also identifies a small area to the north-east of the site as Lowland Heathland.

Evaluation

- 3.3.2 Subject to the implementation of appropriate mitigation measures (as discussed below in Chapter 4) no designated Priority Habitats or notable or veteran trees will be affected by the proposals.

3.4 Summary

- 3.4.1 In summary, the site itself is not subject to any statutory or non-statutory ecological designations and subject to the implementation of appropriate mitigation measures (as described above), it is unlikely that any such designations will be affected by the proposals.

4 Habitats and Ecological Features

4.1 Background Records

- 4.1.1 Records of protected, rare or notable plant species from within or immediately adjacent to the site are included within the information returned from the Records Centre. Records dated from 2006, record the presence of Corn Spurrey *Spergula arvensis* at the east of the site and Common Yellow-sedge *Carex viridula* subsp. *oedocarpa* towards the north of the site. A record from 2020 also marks the presence of Nipplewort *Lapsana communis* subsp. *intermedia* at the north of the site. However, no evidence for the presence of any of these species within the site was recorded during the survey work undertaken. A number of records, dated between 1918 and 2020, were also returned from the 1km² OS grid square including the site. These records were of Common Cotton Grass *Eriophorum angustifolium*, Lamb's Succory *Arnoseris minima*, Dodder *Cuscuta epithymum*, Black Bog-rush *Schoenus nigricans*, Corn Marigold *Chrysanthemum segetum*, Heath Dog-violet *Viola canina*, Treacle-mustard *Erysimum cheiranthoides*, Lesser Spearwort *Ranunculus flammula* and Autumn Lady's-tresses *Spiranthes spiralis*.

4.2 Overview

- 4.2.1 Habitats within the site and its immediate vicinity are indicated on Plan 6655/ECO3.
- 4.2.2 The site itself is a collection of three compartmentalised intensively horse-grazed modified fields with associated stables, farm buildings and hard standing. This comprises extensive areas of short sward improved grassland, bordered by intensively managed native field boundary hedgerows and a woodland edge perimeter along the north-western boundary of the site. Most of the farm buildings are simple open shell structures in a dilapidated condition. The stables and main warehouse buildings are in better condition and in regular use.

4.3 Priority Habitats

- 4.3.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats which are of principal importance for conservation in England. This list is largely derived from the 'Priority Habitats' listed under the former UK BAP, which continue to be regarded as priority habitats under the subsequent country-level biodiversity strategies.
- 4.3.2 Of the habitats within the site, none are considered to qualify as Priority Habitats and therefore constitute important ecological features. This is discussed further in the relevant habitat sections below.

4.4 Irreplaceable Habitats

- 4.4.1 Irreplaceable habitats are now defined under The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 and include blanket bog, lowland fens, limestone pavements, coastal sand dunes, ancient woodland, ancient trees and veteran trees, spartina saltmarsh swards and mediterranean saltmarsh scrub.
- 4.4.2 No irreplaceable habitats are present within the site.

4.5 Habitat Descriptions and Evaluation

4.5.1 The habitats and ecological features present within the site are described in Tables 4.1 and 4.2 below. These tables set out their UK Habitat Classification Primary Habitats and Secondary Codes, and the corresponding habitat type and condition according to the Statutory Biodiversity Metric. The table also describes the level of importance of the habitats, taking into account the status of habitat types and the presence of rare plant communities or individual plant species of elevated interest. The value of habitats for the fauna they may support is considered separately in Chapter 5 below.

Table 4.1. Habitat Descriptions – Area Habitats

Ref	UK Hab	Statutory Biodiversity Metric Habitat Type/ Condition	Description
F1	g4 Modified Grassland 14, 103, 502	Grassland: Modified Grassland/ moderate	G1 forms the main bulk of the site. It comprises a species-poor semi-improved grassland field, heavily horse grazed in nature, with a short uniform sward height and localised poaching resulting from the use/management. Small areas of occasional bare ground have resulted from horse trampling on the seasonally wet and short grassland sward. The field is undulating in nature on a small scale as a result of the previously described use and/or management practices. The grassland and associated areas of sparsely vegetated ground associated with areas of the field margins/peripheries support an average of 6 species per m² with frequent grasses including Perennial Rye-grass <i>Juncus inflexus</i>, Yorkshire Fog <i>Dactylis glomerata</i> and Cock's-foot <i>Onobrychis caput-galli</i>, and herbs including Ribwort Plantain <i>Plantago lanceolata</i>, Meadow Buttercup <i>Ranunculus acris</i>, Creeping Cinquefoil <i>Campanula rapunculoides</i>, Common Sorrel <i>Rumex acetosa</i>, Black Medick <i>Medicago lupulina</i> and Soft Rush <i>Juncus effusus</i>. An area of associated grassland to the southeast section of field F1, originating from garden/land management waste dumping, was recorded to contain largely the same grass and herb species composition as the rest of F1. However, grass species were recorded to be less dominated whilst containing a higher percentage cover of undesirables, and species representative of high nutrient levels and/or eutrophication, such as thick nettle growth in areas. The sward here is also more varied in structure. Horse grazing activity appears to be much less prevalent. The southeastern area supports a sward height up to 50cm, with some small areas characterised by a low, open sward to around 5cm in height. Species recorded here in higher densities included Ribwort plantain, White Clover <i>Trifolium repens</i>, Spear thistle <i>Cirsium</i>

Ref	UK Hab	Statutory Biodiversity Metric Habitat Type/ Condition	Description
			<i>vulgare</i> , Yarrow <i>Achillea millefolium</i> and Common chickweed <i>Stellaria media</i> .
-	(Hard standing) u1b developed land – sealed surface	Urban: developed land; sealed surface/ N/A – other	This area corresponds to the buildings on site. The buildings vary in condition, structure and use. The potential suitability to support roosting bats is discussed within Chapter 5 further below.
-	(Hard standing) u1b developed land – sealed surface	Urban: developed land; sealed surface/ N/A – other	A gravelled track and concreted areas are present in the southeast of the site, used for access and associated with the area/complex of farm buildings.

UK Hab Secondary Codes: 14 – scattered rushes; 103 horse grazed; 502 – seasonally wet

Table 4.2. Habitat Descriptions – Area Habitats

Ref	UK Hab	Statutory Biodiversity Metric Habitat Type/ Condition	Description
H1	h2a Native hedgerow 11	Native hedgerow/ poor	A native, well-managed hedgerow, forming the site boundary for Field F1 to the north, separating it from further horse-grazed fields. The hedgerow is recorded to be well managed and patchy in places, averaging 2m in width and 2m in height. The woody species recorded included Birch and Gorse, whilst the ground flora composition was limited to Bramble and largely devoid of any herb cover.
H2	h2a Native hedgerow 11	Native hedgerow/ poor	A native, unmanaged hedgerow, forming the site boundary for Field F1 to the east, separating it from urban space and a main road. The hedgerow is recorded to be unmanaged with young tree/sapling regrowth in areas, averaging 2m in width and 3m in height. The woody species recorded included Sweet Chestnut, Willow and Buddleia, whilst the ground flora composition was limited to Bracken and largely devoid of herb cover.
H3	h2a Native hedgerow	Native hedgerow/ poor	A well-managed native hedgerow, recorded off-site and forming the field boundary for an adjacent field, but included within the wider survey area, separating horse-grazed fields from urban space and a main road. The hedgerow is recorded to be well managed, averaging less than 4 species per 30m length, and recorded to be approximately 2m in width and 3m in height. The woody species recorded included Hawthorn, Blackthorn and Gorse.

UK Hab Secondary Codes: 11 – hedgerow with trees

4.6 Summary

- 4.6.1 On the basis of the above, the following habitats within and adjacent to the site are considered to form important ecological features:

Table 4.3. Evaluation summary of habitats forming important ecological features.

Habitat	Level of Importance
Hedgerows	Local

- 4.6.2 Other habitats present within the site include modified grassland fields, non-veteran trees and hard standing. These habitats do not form important ecological features.

4.7 Assessment of Proposals

- 4.7.1 The proposed development has followed the mitigation hierarchy approach as set out under the National Planning Policy Framework (NPPF), with consideration given first to avoidance, followed by mitigation and compensation.
- 4.7.2 In line with this hierarchy, habitats forming important ecological features are largely retained under the proposals avoiding significant habitat losses, with built development focused within areas of lower value habitat including modified grassland and areas of hard standing. Losses of these habitats, not forming important ecological features, will be addressed as part of the overall balance of biodiversity net gain.
- 4.7.3 A discussion of effects and any requirements for mitigation or compensation in relation to individual habitats of ecological importance is set out below.

Other Development Impacts

- 4.7.4 Standard measures will be implemented to minimise construction effects such as dust deposition and surface run-off of contaminants or silt, whilst implementation of a drainage strategy as part of the completed development will safeguard water quality in the long-term. Ongoing management of retained habitats and open spaces will allow for management of recreational activity to minimise disturbance to sensitive habitats and wildlife. Further detail is set out at Chapter 6 below.

5 Faunal Use of the Site

5.1 Overview

- 5.1.1 During the survey work, general observations were made of any faunal use of the site with particular attention paid to the potential presence of protected or notable species. Specific survey work was undertaken in respect of Badgers, bats, Dormouse and reptiles, the results of which are set out below.

5.2 Priority Species

- 5.2.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in England. This list is largely derived from the 'Priority Species' listed under the former UK BAP, which continue to be regarded as Priority Species under the subsequent country-level biodiversity strategies.
- 5.2.2 During the survey work undertaken, the Priority Species Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Nathusius's Pipistrelle *Pipistrellus nathusii*, *Myotis* sp. and Slow Worm *Anguis fragilis* were recorded within the site. This is discussed further below.

5.3 Bats

- 5.3.1 Legislation. All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, bats and their roosts (breeding sites and resting places) receive full protection under the legislation (see Appendix 6655/2). If proposed development is likely to result in an offence a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats. Given all bats are protected species, they are considered to represent important ecological features. Several bat species are also S41 Priority Species.
- 5.3.2 Background Records. Records of Pipistrelle species from within or adjacent to the site were returned from the desktop study, ranging from 1996 to 2005. Information received from HBIC also included records of Barbastelle *Barbastella barbastellus*, Serotine *Eptesicus serotinus*, *Myotis* sp., Whiskered/Brandt's Bat *Myotis brandtii*/*Myotis mystacinus*, Natterer's Bat *Myotis nattereri*, Noctule *Nyctalus noctula*, Common Pipistrelle, Soprano Pipistrelle, Nathusius's Pipistrelle, and Brown Long-eared Bat *Plecotus auritus* within 2km of the site.

Survey Results and Evaluation

Preliminary Appraisal

- 5.3.3 Records of bats have been returned from within the area surrounding the site. These species are typical of the region and the types of habitats present in the wider area, although Barbastelle is of greater interest given its rare status, whilst Nathusius' Pipistrelle and Serotine are considered rare within Southern England.

- 5.3.4 Habitats within the wider area outside the site include broadleaved woodland corridors and a mosaic of gorse scrub and semi-improved grassland. These habitats are likely to be of elevated interest for bats. The site is bounded by roads to the southeast and southwest, although the hedgerow network and associated trees and woodland extends to the north-west boundary of the site, providing moderate connectivity to Netley Common LNR to the north of the site. Connectivity is more limited to the south of the site, where strong hedgerow linkages are absent and the settlement of Bursledon is a short distance away.
- 5.3.5 Within the site, one tree and the farm buildings were assessed for their suitability to support roosting bats, as described below. A preliminary assessment of habitats in terms of their likely value for foraging and commuting bats is set out in Table 5.1 below.

Table 5.1. Assessment of value of habitats within the site for foraging and commuting bats

Commuting (potential flight-paths)	Foraging habitats
On-site habitats limited in commuting potential, with open fields and hard standing – low potential suitability Hedgerows around the site boundaries and extending beyond the site, despite some fragmentation – moderate potential suitability.	On-site improved grassland fields and localised areas of ruderal vegetation around the perimeter, and bare ground originating from poaching and intensive horse grazing. Good connectivity to off-site woodland in wider survey area – moderate potential suitability.

Roosting – Buildings and Built Structures

Visual Inspection

- 5.3.6 Buildings B1 and B2 and B4 are located within the industrial area forming the main part of the site. These are large industrial warehouses and workshops of brick, steel frame and corrugated sheeting construction. Associated with these buildings are numerous portacabins and storage containers. These buildings and structures offer negligible roosting opportunities for bats and no evidence of roosting bats was recorded. Buildings B3 and B5 exhibited a low number of potential roosting opportunities for bats and overall are assessed as providing low suitability for bats. No evidence of bat occupation, such as droppings, staining or feeding remains, was recorded during the inspection surveys.

Emergence Surveys

- 5.3.7 All the buildings within the site were subject to detailed inspection, the findings of which are summarised below.
- 5.3.8 All buildings on site are located within an area of hard standing on site forming storage and stable compounds. Building B1 is a single storey, wood panelled stables, compartmented into three sections. The roofing material was a corrugated matte delt material, relatively recent in nature and present minimal signs of deterioration. There were some gaps in the ends of the corrugated roof, however, the building was recorded to be generally well sealed. In the context of the site and the wider landscape, the building was considered to have negligible bat roosting suitability.
- 5.3.9 Buildings B2 and B4 were similar in structure and use. Both comprised open corrugated metal structures, all areas of which were exposed to the elements. No observable potential roost features were present. B2 and B4 were assessed as of negligible bat roosting suitability.

- 5.3.10 Buildings 3a and 3b, located opposite to B2 are two small scale metal corrugated structures, with areas of localised wood panelling in a patchwork effect in a dilapidated condition. Both structures were considered to be reasonably well sealed around the roof; however, large gaps were present in the walls closer to the ground level. Both structures were locked at the time of survey so a full internal inspection was not possible to be undertaken. However, it was possible to observe the interior of both buildings, including the roof apex, through gaps in the metal sheeting from the outside. No potential bat roosting features were present, with the roof consisting of a flush metal structure, with no cavities, perches or gaps present. Buildings 3a and 3b were assessed as of negligible bat roosting suitability.
- 5.3.11 Building B5 was a large and open farm storage building, appearing in current use at the time of survey. The structure almost entirely comprised corrugated metal sheeting, with no loft voids present. Based on its openness and lack of potential roosting features, Building B5 was assessed as of negligible bat roosting suitability.

Evaluation

- 5.3.12 The buildings and structures present within the site offer negligible roosting opportunities for bats and no evidence of roosting bats was recorded. No potential roost features, nor any evidence of bat occupation, such as droppings, staining, or feeding remains, were recorded during the building inspections. It was concluded that the buildings have negligible potential to support roosting bats and no further surveys are required.

Roosting – Trees

Assessment of Roosting Potential

- 5.3.13 Trees within the site were subject to an initial assessment for their suitability to support roosting bats. Where trees may be impacted under the development proposals, these have been subject to a ground level tree assessment (GLTA). Trees identified as supporting PRFs or identified as FAR are indicated on Plan 6655/ECO3. The results of this assessment are summarised in Table 5.2 below.

Table 5.2. Tree assessment results

Tree Ref.	Species	Assessment and potential roosting features	Summary
T1	Oak	A single mature Oak (tree 15 in Tree Survey Schedule) supporting a small number of PRF-Is in the form of damaged limbs.	PRF-I

Foraging and Commuting

Night-time Bat Walkover Surveys

- 5.3.14 The woodland and line of trees and scrub within the wider survey area are potentially suitable for use by foraging bats as they are likely to support a reasonable biomass of invertebrate prey. In addition, the woodland and trees form linear corridors that could act as navigational aids for commuting bats and provide connectivity to similar off-site habitats in the surrounding area. Bat activity surveys were undertaken at the site from July to October 2023.
- 5.3.15 The results of the walked bat surveys are shown on Plan 6655/ECO4, and a summary of the species recorded and numbers of registrations set out in Tables 5.3 to 5.7 below.

Table 5.3. Results of the dusk walked transect on 13th July 2023

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	17	77
Pipistrelle sp.	1	4.5
Myotis	3	14
Brown Long-eared Bat	1	4.5
Total	22	100

Table 5.4. Results of the dusk walked transect on 17th August 2023.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	59	88
Soprano Pipistrelle	4	6
Myotis	3	4.5
Brown Long-eared Bat	1	1.5
Total	67	100

Table 5.5. Results of the dawn walked transect on 18th August 2023.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	33	82.5
Soprano Pipistrelle	3	7.5
Brown Long-eared Bat	2	5
Noctule/Serotine/Leisler's Bat	1	2.5
Myotis	1	2.5
Total	40	100

Table 5.6. Results of the dusk walked transect on 25th September 2023.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	190	94
Soprano Pipistrelle	13	6
Total	203	100

Table 5.7. Results of the dusk walked transect on 10th October 2023.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
Common Pipistrelle	17	68
Soprano Pipistrelle	8	32
Total	25	100

- 5.3.16 During the dusk and dawn surveys from July to October 2023, Common Pipistrelle was the most commonly recorded species, accounting for 88.5% of all registrations. Soprano Pipistrelle was recorded to a lesser extent, accounting for 7.8%. Brown Long-eared Bat, Noctule/Serotine/Leisler's Bat and *Myotis* sp. were recorded in low numbers.
- 5.3.17 During the walked transects, the highest levels of bat activity were recorded to the east of the site in field F2 (see Plan 6655/ECO4), and comparatively lower levels of bat activity were recorded to the west of the site, and in the deciduous woodland. The majority of activity was limited to commuting passes, suggesting that the foraging potential of the site is limited.

Automated Surveys

5.3.18 The results of the automated static bat surveys are summarised in Table 5.8 below.

Table 5.8. Automated static bat survey summary for Location 1 (western boundary).

Survey Date	Detector Location 1: western boundary							
	Number of registrations by species							
	Myotis	'Big Bat'	Pip 45	Pip 55	PipNaths	Pip	BLE	Barb
14 th July 2023	0	0	29	0	0	0	0	0
15 th July 2023	0	0	2	1	0	0	0	0
16 th July 2023	2	0	48	3	0	0	0	0
17 th July 2023	0	0	217	8	0	0	0	0
18 th July 2023	0	0	236	6	0	0	0	0
19 th July 2023	0	0	680	4	0	0	1	0
17 th August 2023	1	4	60	6	0	0	2	0
18 th August 2023	3	5	206	12	0	1	1	0
19 th August 2023	0	16	178	56	0	1	1	0
20 th August 2023	5	6	369	86	1	1	0	0
21 st August 2023	0	2	332	83	0	0	2	1
22 nd August 2023	1	2	161	34	0	0	0	0
23 rd August 2023	4	6	323	28	0	0	4	0
25 th September 2023	3	0	91	82	0	0	0	0
26 th September 2023	91	0	338	198	0	2	0	0
27 th September 2023	7	0	1091	1501	0	0	7	0
28 th September 2023	0	0	700	231	0	0	4	0
29 th September 2023	8	0	76	17	1	0	0	2
30 th September 2023	33	0	853	167	0	0	0	0
1 st October 2023	9	0	1089	105	1	0	1	2
10 th October 2023	8	26	554	100	2	0	0	0
11 th October 2023	1	42	595	301	0	0	2	0
12 th October 2023	2	7	729	116	0	0	2	0
13 th October 2023	0	61	351	860	0	0	0	0
14 th October 2023	2	0	105	4	0	0	0	0
15 th October 2023	0	0	0	1	0	0	0	0
16 th October 2023	1	0	19	7	0	0	1	0
Total registrations	181	177	9432	4017	5	5	28	5
Approximate % of total registrations	1.3	1.3	68.1	29.0	>0.1	>0.1	0.2	>0.1

Myotis – *Myotis* sp.; 'Big Bat' – *Noctule/Serotine/Leisler's Bat*; Pip 45 – *Common Pipistrelle*; Pip 55 – *Soprano Pipistrelle*; PipNaths – *Nathusius's Pipistrelle*; Pip – *unconfirmed Pipistrelle* sp.; BLE – *Brown Long-eared Bat*; Barb – *Barbastelle*.

5.3.19 Summary. During the surveys, carried out between July and October 2023 along the western boundary (Location 1), 68.1% of all registrations at the turbine were attributed to Common Pipistrelle, 29% to Soprano Pipistrelle, 1.31% to *Myotis* sp., 1.28% to 'big bat', with the remainder attributed to Brown Long-eared Bat, Nathusius's Pipistrelle, unconfirmed Pipistrelle species and Barbastelle.

5.3.20 The average number of bat passes per night averaged 337 passes per night for Common Pipistrelle over the four deployments, whereas the average passes for night for Soprano Pipistrelle was 125 passes per night. All other species averaged less than 10 passes per night.

5.3.21 In terms of individual species, Common Pipistrelle and Soprano Pipistrelle are considered to form ecologically important features at the local level. Other species occurred only infrequently and are not considered to be of particular importance outside of a site context.

Assessment of Proposals

Roosting

Buildings and Built Structures

- 5.3.22 Buildings provide negligible suitability for roosting bats and no evidence of roosting bats was recorded during the survey work undertaken.
- 5.3.23 As such, it is considered that no specific mitigation or licensing for bats is required. Nonetheless, bats are dynamic animals and as such it remains possible that individuals could colonise the site in the future. Natural England guidance in respect of European Protected Species²¹ advises that, even where proposals are reasonably unlikely to result in any offence such that licensing is not required, reasonable precautions should be taken to minimise the risk to protected species in the unlikely event that they should be found during the course of the activity. Accordingly, recommended precautionary mitigation measures are set out at Chapter 6 below and subject to their implementation it is considered that bats will be fully safeguarded under the proposals.

Trees

- 5.3.24 All significant trees within the site, including those described above with potential bat roost features, are to be retained within the proposals, such that in the event that bats are present within the trees they will remain unaffected. As such, subject to the implementation of the recommendation outlined at Chapter 6 below in relation to lighting, it is considered that bats will be fully safeguarded under the proposals.

Foraging and Commuting

- 5.3.25 As noted above, the off-site woodland, trees and gorse scrub within the wider survey area provide suitable habitat for foraging and commuting for bats and accordingly bats were recorded during the activity surveys. Frequent passes from two common species (Common and Soprano Pipistrelle) and occasional passes from *Myotis* sp., 'big bat', Nathusius's Pipistrelle, Brown Long-eared Bat and Barbastelle. This combination of habitat types occurs relatively frequently in the surrounding area and taking this into the account, together with the levels of activity and species recorded during the survey work, the site is considered to not be of elevated value for foraging and commuting bats, and is assessed as of value at the local level only.
- 5.3.26 The majority of the hedgerows and trees within the site are to be retained under the proposals, whilst new tree, hedgerow and shrub planting will improve connectivity through the site and increase the amount of habitat suitable for foraging and commuting bats. Connectivity between off-site habitats will be improved by the landscape proposals.
- 5.3.27 Accordingly, subject to the implementation of the recommendations outlined at Chapter 6 below, along with other ecological enhancements, it is considered that the conservation status of local bat populations will be fully safeguarded under the scheme.

5.4 Badger

- 5.4.1 Legislation. Badger receives legislative protection under the Protection of Badgers Act 1992 (see Appendix 6655/2), and as such should be assessed as an important ecological feature.

²¹ Natural England (2013) European Protected Species: Mitigation Licensing - How to get a licence (WML-G12)

The legislation aims to protect this species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain.

5.4.2 Licences can be obtained from Natural England for development activities that would otherwise be unlawful under the legislation. The types of activity that should be licensed are described in the relevant best practice guidance.^{22, 23}

5.4.3 Survey Results and Evaluation. Evidence of Badger foraging activity was found at the boundary of the site during the Phase 1 survey, but no sett was present in the site or its immediate surroundings. The site, and the off-site woodland in particular, is likely to be used sporadically by foraging badgers. On this basis, and considering that the off-site woodland will be retained and enhanced by new planting within the site, it is considered highly unlikely that Badger will be affected by the proposals. In line with good practice, measures to protect individual badgers (as well as other wildlife) that may incidentally occur during construction activities, are recommended in Chapter 6.

5.5 Dormouse

5.5.1 Legislation. Dormouse is fully protected under the Wildlife and Countryside Act 1981 (as amended) and is a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Such legislation affords protection to individuals of the species and their breeding sites and places of rest (see Appendix 6655/2). Dormouse is also a S41 Priority Species. On this basis, Dormouse is considered to form an important ecological feature.

5.5.2 Background Records. Records of Dormouse were returned from the desktop study, found in the woodland immediately adjacent to the east of the site, with the most recent record being from 2020.

5.5.3 Survey Results: The study area contains habitat suitable for Dormouse in the form of woodland and connected hedgerows, although habitat is suboptimal, the favoured habitat of Dormouse being woodland containing coppiced Hazel. The major part of the site is dominated by open grassland fields which are unsuitable for Dormouse.

5.5.4 Given the presence of potential Dormouse habitat within the study area, and their known presence in the wider area based on desk study records, specific Dormouse survey work was undertaken at the site (see Plan 6655/ECO5).

5.5.5 Surveys undertaken from July to September 2023 recorded no evidence of Dormouse within the site.

5.5.6 Evaluation: Dormouse has been shown by surveys to be absent from the site, and therefore the risk of affecting this species is negligible.

5.6 Other Mammals

5.6.1 Legislation. Other mammal species including Water Vole *Arvicola amphibius* and Otter *Lutra lutra* receive full protection under the Wildlife and Countryside Act 1981 (as amended). Otter is also a European Protected Species under the Conservation of Habitats

²² English Nature (2002) *Badgers and Development*

²³ Natural England (2011) *Badgers and Development: A Guide to Best Practice and Licensing*, Interim Guidance Document

and Species Regulations 2017 (as amended), whilst both Water Vole and Otter are S41 Priority Species.

- 5.6.2 Other UK mammal species do not receive direct legislative protection relevant to development activities but may receive protection against acts of cruelty (for example, under the Wild Mammals (Protection) Act 1996). In addition, some mammal species including Hedgehog *Erinaceus europaeus*, Brown Hare and Harvest Mouse *Micromys minutus* are S41 Priority Species and should be assessed as important ecological features.
- 5.6.3 Background Records. No records of other mammals from within or adjacent to the site were returned by the desktop study. Several records of Hedgehog (Priority Species) were returned from the wider area, including from land to the east of the site. Water Vole, Otter and Harvest Mouse have also been recorded within 2km of the site. No suitable habitat is present on site for any of these species and therefore it is not expected that their local populations would be affected by development.
- 5.6.4 Survey Results and Evaluation. No water bodies are present within the site or its immediate surroundings. Habitats present are unsuitable for use by Water Vole and Otter.
- 5.6.5 A Fox *Vulpes vulpes* was observed during one of the bat activity surveys. This species remains common in both a local and national context, and does not receive specific legislative protection in a development context. As such, this species is not a material planning consideration and any effects of the proposals on it would be of negligible significance.
- 5.6.6 The desktop study returned background records of Hedgehog within the surrounding area. Hedgehog is a Priority Species, albeit one that remains common and widespread in England. The site contains suitable habitat for this species, notably woodland edge habitats to the north of the site, which will be retained under the proposals, and boundary hedgerows. Hedgehog is considered to be of importance at a site level only. Abundant suitable habitat is present within the local area and there is no evidence to suggest the proposals will significantly affect local populations of this species. However, it is recommended that precautionary safeguards are put in place to minimise the risk of harm to Hedgehog in the event this species occurs during works, as described in Chapter 6 below.
- 5.6.7 Assessment of Proposals. Habitat losses arising from the proposals are not considered likely to have significant effects on Fox and Hedgehog. For Hedgehog, habitat losses would be offset by the provision of new suitable habitats. Precautionary safeguards are recommended to minimise the risk of harm to animals that may be present during works. Enhancement measures to benefit Hedgehog are also recommended as set out in Chapter 6 below.

5.7 Amphibians

- 5.7.1 Legislation. All British amphibians receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt is protected under the Act and is also listed as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, both Great Crested Newt and habitats used by this species are afforded protection (see Appendix 6655/2). Great Crested Newt is also a S41 Priority Species, as are Common Toad *Bufo bufo*, Natterjack Toad *Epidalea calamita*, and Pool Frog *Pelophylax lessonae*. As such, these species should be assessed as important ecological features.

- 5.7.2 Background Records. No records of Great Crested Newt from within or adjacent to the site were returned by the desktop study. Two records of Great Crested Newt were returned from the study area, both approximately 1km to the south-east of the site in 2010 and 2021.
- 5.7.3 Survey Results and Evaluation. No ponds are present in the site or within 250m. Features within the site are not suitable to support breeding Great Crested Newt and barriers are present around the site which would prevent this species from being present within suitable terrestrial habitats. As such, it is concluded that Great Crested Newt is not at risk of adverse effects from the proposals and no further work is required in respect of this species.

5.8 Reptiles

- 5.8.1 Legislation. All six species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which protects individuals against intentional killing or injury. Sand Lizard *Lacerta agilis* and Smooth Snake *Coronella austriaca* receive additional protection under the Conservation of Habitats and Species Regulations 2017 (as amended), as set out at Appendix 6655/2. All six reptile species are also S41 Priority Species. As such, all reptile species should be assessed as important ecological features.
- 5.8.2 Background Records. Information returned from the HBIC returned one record of Common Lizard *Zootoca vivipara* from within the site dating from 2006. Records of Slow Worm and Adder *Vipera berus* were also returned from land adjacent to the site.
- 5.8.3 Survey Results and Evaluation. Specific survey work for reptiles was undertaken at the site, the results of which are shown on Plan 6655/ECO6 and summarised in Table 5.9 below.

Table 5.9. Reptile survey results summary.

Visit	Date	Common Lizard		Slow Worm		Grass Snake		Other Species
		Adult	Juv.	Adult	Juv.	Adult	Juv.	
1	13/09/2023	0	0	0	0	0	0	Wood mouse
2	29/09/2023	0	0	0	0	0	0	-
3	21/09/2023	0	0	1	0	0	0	-
4	26/09/2023	0	0	0	1	0	0	-
5	29/10/2023	0	0	2	0	0	0	-
6	02/10/2023	0	0	1	0	0	0	-
7	05/10/2023	0	0	0	1	0	0	-
8	11/10/2023	0	0	0	0	0	0	-
9	17/10/2023	0	0	0	0	0	0	Shrew
Peak Count		0		2		0		

- 5.8.4 Evaluation and Assessment of Likely Effects. A peak count of two Slow Worm was recorded during the survey work at the site, with animals primarily recorded along the field edge of the western boundary (transects B and C – see Plan 6655/ECO4). The area of suitable reptile habitat at the site measures approximately 8ha and therefore the peak count corresponds to a population of 0.25 Slow Worm per hectare, which is considered a low population according to the standard guidance²⁴. As such, it is considered that the population of reptiles supported by the study area is of importance at the local level only.

²⁴ Herpetofauna Groups of Britain and Ireland (1998) 'Evaluating local mitigation/translocation programmes: Maintaining Best Practice and lawful standards'

- 5.8.5 Under the proposals the majority of the suitable reptile habitats are being retained and enhanced to create a natural buffer following the site boundary. Therefore, the proposals maintain and enhance suitable areas of reptile habitat. However, areas where reptiles have been recorded will be affected by construction works posing the potential risk of injury or disturbance to reptile species. On the basis of the survey results and the low reptile populations recorded, it is considered that these species can be appropriately safeguarded by a habitat manipulation exercise as detailed at Chapter 6.

5.9 Birds

- 5.9.1 Legislation. All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and special penalties apply to legal offences (see Appendix 6655/2).
- 5.9.2 Conservation Status. The conservation importance of British bird species is categorised based on a number of criteria including the level of threat to a species' population status²⁵. Species are listed as Green, Amber or Red. Red List species are considered to be of the highest conservation concern, being either globally threatened and/or experiencing a high level or rapid rate of population decline (>50% over the past 25 years). Numerous birds are also S41 Priority Species. Red and Amber List species and Priority Species should be assessed as important ecological features.
- 5.9.3 Background Records. The data search included records of the Red List species Skylark *Alauda arvensis*, House Sparrow *Passer domesticus*, Tree Pipit *Anthus trivialis*, Fieldfare *Turdus pilaris* and Song Thrush *Turdus philomelos*, which are also all Priority Species, from the study area. None of these records originated from within the site boundary.
- 5.9.4 Survey Results. Species of bird observed within the site during the Phase 1 survey included House Sparrow, Chaffinch *Fringilla coelebs*, Blackbird *Turdus merula*, Mistle Thrush *Turdus viscivorus*, Great Tit *Parus major* and Green Woodpecker *Picus viridis*.
- 5.9.5 Evaluation. Most of the birds recorded at the site do not have special conservation status, although House Sparrow is included on the Red list as a result of declines in UK breeding populations and is also a Priority Species. However, the habitats present are common in the surrounding area and there is no evidence to suggest the site is of elevated value at a local level for this species, which in any case, remains common throughout Great Britain²⁶. The proposals will result in the loss of sections of hedgerow to facilitate site access and this could potentially affect nesting birds that may be present within this habitat at the time of works. Accordingly, safeguards in respect of nesting birds are proposed as described in Chapter 6.

5.10 Invertebrates

- 5.10.1 Legislation. Various invertebrate species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In addition, Large Blue *Phengaris arion*, Fisher's Estuarine Moth *Gortyna borelii lunata* and Lesser Whirlpool Ram's-horn Snail *Anisus*

²⁵ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win I. (2021). 'The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114, p.p. 723-747.

²⁶ Population estimates of birds in Great Britain and the United Kingdom. Musgrove et al., British Birds, 2013

vorticulus receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), as set out at Appendix 6655/2. Some invertebrates are also S41 Priority Species. Where such species are present, they should be assessed as important ecological features.

- 5.10.2 Background Records. Records of Stag Beetle *Lucanus cervus*, Small Heath *Coenonympha pamphilus* and a single record of Dark Green Fritillary *Speyeria aglaja* (Priority Species) were returned from land adjacent to the site.
- 5.10.3 Survey Results and Evaluation. No evidence of the presence of any protected, rare or notable invertebrate species was recorded from within the site. The site is dominated by buildings, hard standing and heavily grazed modified grassland, which are likely to only support a limited diversity of invertebrates. The site contains several areas of bare ground and occasional patches of scrub but otherwise supports relatively few micro-habitats that would indicate possible elevated value for invertebrates²⁷, such as a variable topography with areas of vertical exposed soil, areas of species-rich semi-natural vegetation; variable vegetation structure with frequent patches of tussocks combined with short turf; free-draining light soils; walls with friable mortar or fibrous dung. Accordingly, the site is likely to support only a limited diversity of invertebrates.
- 5.10.4 There is suitable off-site habitat for invertebrates, in particular the adjacent woodland and associated rotting wood provides opportunities for Stag Beetle. However, the low quality of grassland does not provide many opportunities for pollinating insects, and the woodland is being retained anyway. Provisions can also be made for Stag Beetle, such as log piles. Therefore, it is not expected that the proposed development would adversely affect local invertebrate populations.
- 5.10.5 Assessment of Proposals. Habitats within the site are unlikely to support an important invertebrate assemblage and therefore the proposals are unlikely to result in harm to protected, rare or notable invertebrate populations.

²⁷ Natural England (2010) Higher Level Stewardship – Farm Environment Plan (FEP) Manual, 3rd Edition

6 Mitigation, Compensation and Enhancement

6.1 Mitigation and Compensation

6.1.1 As set out in the previous chapters, the proposed development has followed the mitigation hierarchy approach as set out under the National Planning Policy Framework (NPPF), with consideration given first to avoidance, followed by mitigation and compensation.

6.1.2 Based on the assessment of the proposals and ecological designations, habitats and associated fauna identified within or adjacent to the site, it is proposed that the following mitigation and compensation measures (MC1-MC12) are implemented alongside the proposals. Further detailed mitigation strategies or method statements can be secured via suitably-worded planning conditions, as recommended by relevant best practice guidance (BS 42020:2019).

Ecological Designations

6.1.3 The site is not subject to any statutory or non-statutory ecological designations and it is unlikely that any such designations in the surrounding area will be significantly affected by the proposals. Accordingly, no specific mitigation or compensation measures are required.

Habitats

6.1.4 MC1 – Hedgerow and Tree Protection. All hedgerows and trees to be retained within the proposed development should be protected during construction in line with standard arboricultural best practice (BS5837:2012) or as otherwise directed by a suitably competent arboriculturalist. This may require the use of protective fencing or other methods appropriate to safeguard the root protection areas of retained trees and hedgerows.

6.1.5 MC2 – New Hedgerow Planting. New hedgerow planting is to be undertaken on site to increase site wide connectivity with off-site habitats. This will also ensure a minimum 10% gain in hedgerow biodiversity value and will be secured as part of the BNG strategy.

Bats

6.1.6 Potential roosting habitat provided by trees will be retained within the landscape proposals. Effects on foraging and commuting bats will be minimised by implementation of enhanced connectivity and screen planting along sections of the site boundary, and the implementation of a sensitive lighting strategy.

6.1.7 MC3 – Update Survey. Should any considerable time elapse between the survey work described in this report and development works, further survey of the buildings with potential to support roosting bats is recommended prior to the commencement of works to confirm the continued absence of bats.

6.1.8 MC4 – Safeguarding Measures. In order to minimise the risk to bats that might be present during the demolition of buildings on site, a number of safeguarding measures will need to be implemented, which will involve a precautionary check survey prior to demolition. A watching brief should also be maintained by contractors in regard to the other buildings, with Aspect Ecology contacted for further advice if any evidence of bats is recorded during works.

6.1.9 MC5 – Felling of Trees Supporting Bat Roosting Potential. Tree T1, which has been identified as providing low potential for roosting bats, will be retained within the proposals.

However, should arboricultural works be required to this tree to facilitate the development, works should be undertaken under an ecological watching brief. Any limbs to be removed should be felled according to a 'soft-felling' technique, whereby sections of the tree are sequentially cut and lowered to the ground, the felled sections then left on the ground for at least 24 hours to allow any bats, should these be present, to relocate.

6.1.10 If any evidence of the presence of roosting bats is found during works, activities should be suspended and consideration given to the need to obtain a European Protected Species (EPS) development licence. A licence application should be made to Natural England as required.

6.1.11 MC6 – Sensitive Lighting. A lighting strategy that reduces the potential for affecting wildlife, including bats, will be implemented. This will ensure that lighting is directed where required and lighting is minimised in proximity to features likely to be used by nocturnal wildlife, such as boundary hedgerows and adjacent trees and woodland. The lighting strategy has been informed by good practice guidance²⁸ and has given consideration given to the following factors:

- Appropriate luminaire specifications – preference for the use of LED luminaires and those that lack UV elements over metal halide and fluorescent sources;
- Light barriers / screening – sensitive positioning of new planting, fences, walls and buildings so as to minimise light spill;
- Short column lighting units – lighting columns of 4-5m height would be used so as to decrease the volume of illuminated space and focus lighting where it is intended, hence also avoiding light spillage;
- Light intensity – light intensity (lux levels) would be kept low to reduce the overall amount and spread of illumination;
- Directionality – to avoid light spill lighting would be directed only to where it is needed. Attention has been paid to avoid the upward spread of light so as to minimise trespass and sky glow.

Badger

6.1.12 MC7 – Badger Construction Safeguards. In order to safeguard Badger should this species enter the site during construction works, the following measures are recommended:

- Trenches or excavations within the site that are to be left open overnight should be provided with a means of escape should a Badger enter. This could simply take the form of a gently graded ramp or roughened plank of wood placed in the trench as a ramp leading to the surface. This is particularly important if the trench may fill with water;
- Temporarily exposed open pipes (>150mm outside diameter) should be blanked off at the end of each working day so as to prevent Badgers gaining access as may happen when contractors are off-site;
- Trenches or pits should be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger become trapped in a trench it will likely

²⁸ Bat Conservation Trust and Institute of Lighting Professionals (2018) Guidance Note 08/18: Bats and artificial lighting in the UK; Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance; ILP (2011) Guidance notes for the reduction of obtrusive light. Institution of Lighting Professionals, GN01:2011.

attempt to dig itself into the side of the trench, forming a temporary sett. Should a trapped Badger be encountered a suitably qualified ecologist should be contacted immediately for further advice;

- The storage of topsoil or other 'soft' building materials in the site should be given careful consideration. Badgers will readily adopt such mounds as setts. So as to avoid the adoption of any mounds, these should be kept to a minimum and any that are essential be subject to daily inspection. Consideration should be given to use of temporarily fencing to exclude Badgers;
- Chemicals that are stored at the site should be contained in such a way that they cannot be accessed or knocked over by wildlife;
- Fires should only be lit in secure compounds and should not be allowed to remain alight during the night; and
- Unsecured food and litter should not be left within the working area overnight.

6.1.13 MC8 – Badger Update Survey. Badgers are dynamic animals and levels of Badger activity can rapidly change at a site, with new setts being created at any time. It is therefore recommended that an update survey is carried out prior to commencement of site works in order to confirm that Badger would not be affected by the proposals.

Reptiles

6.1.14 Losses of habitat suitable for reptiles are restricted to the more ruderal and ephemeral areas of the site, including a short length of scrub margin adjacent to the hard standing. Given the very low numbers of reptiles recorded and that suitable habitats are located at the margins of the development area, it is considered that reptiles can be appropriately safeguarded by a habitat manipulation exercise rather than more extensive mitigation.

6.1.15 MC9 – Habitat Manipulation. To safeguard reptiles, a habitat manipulation exercise will be undertaken. This will comprise an initial cut of vegetation within the affected areas of suitable habitats within the site to approximately 15cm height so as to encourage reptiles to naturally disperse to suitable nearby areas of retained habitat. A fingertip search of the affected area will then be carried out, followed by a destructive search involving stripping of the top layer of ground. This work should be carried out under the supervision of a competent ecologist and should occur during periods when reptiles are active, typically from the end of March to October, depending on prevailing weather conditions. Features suitable for use by reptiles as refuges, such as piles of rubble, heavy logs, or brash should be fingertip-searched by an ecologist prior to being carefully disassembled. Any reptiles encountered during the destructive search would be carefully rescued by the supervising ecologist and relocated to suitable nearby habitat.

Nesting Birds

6.1.16 MC10 – Nesting Bird Restrictions. To avoid a potential offence under the relevant legislation, no clearance of suitable vegetation should be undertaken during the bird-nesting season (taken as 1 March to 31 August inclusive). If this is not practicable, any potential nesting habitat to be removed should first be checked by a competent ecologist in order to determine the location of any active nests. Any active nests identified would then need to be cordoned off (minimum 5m buffer) and protected until the chicks have fledged. These checking surveys should be carried out no more than three days in advance of vegetation clearance.

6.1.17 MC11 – Small Mammal Safeguards. In order to safeguard Hedgehog and other small mammals should they enter the site during construction works, the following measures should be implemented:

- A watching brief should be maintained for Hedgehog and other small mammals throughout any clearance works;
- Trenches left open overnight should be provided with a means of escape such as a gently graded ramp or roughened plank, to allow animals to escape should they enter the trench. This is particularly important if the trench may fill with water;
- Temporarily exposed open pipes or open drains should be blanked off at the end of each working day to prevent animals gaining access as may happen when contractors are off-site;
- Trenches or pits should be inspected each morning to ensure no animals have become trapped overnight;
- Chemicals stored at the site should be contained in such a way that they cannot be accessed or knocked over by wildlife;
- Fires should only be lit in secure compounds away from wooded habitats and should not be allowed to remain alight during the night;
- Unsecured food and litter should not be left within the working area overnight;
- Piles of material already present on site, particularly vegetation or leaves, and any areas of dense scrub or hedgerows scheduled for removal, should be dismantled by hand and checked for Hedgehog prior to the use of any machinery or disposal;
- Material to be disposed of by burning, particularly waste from vegetation clearance and tree works, should not be left piled on site for more than 24 hours, to minimise the risk of Hedgehogs or other animals occupying the pile. If this cannot be avoided, material should be stored within a container such as a skip to prevent animals from gaining access. Any material which has been stored on the ground overnight should be moved prior to burning to allow a thorough check for any animals which may have been occupying the pile;
- In the event that an injured mammal is found, the animal should be wrapped carefully in a towel and taken to a local vet immediately. If an injured Hedgehog is found the British Hedgehog Preservation Society (BHPS) can be phoned (01584 890 801).

Invasive Species

6.1.18 MC12 – Invasive Species Safeguards. Japanese Knotweed, which is listed on Schedule 9 Part II of the Wildlife and Countryside Act 1981, was recorded outside the site boundary to the north, at the edge of the woodland block north of the site. It is an offence to cause to grow in the wild, any plant listed on the Schedule. As such, relevant precautions should be taken when carrying out actions that could potentially spread these plants. The government has set out guidance on what can be considered 'causing to grow in the wild' within a response to the Schedule 9 review which states:

6.1.19 *"We would expect that where plants listed in Schedule 9 are grown in private gardens, amenity areas etc., reasonable measures will be taken to confine them to the cultivated area*

so as to prevent their spreading to the wider environment and beyond the landowner's control. It is our view that any failure to do so, which in turn results in the plant spreading to the wild, could be considered as 'causing to grow in the wild' and as such would constitute an offence...Additionally, negligent or reckless behaviour such as inappropriate disposal of garden waste, where this results in Schedule 9 species becoming established in the wild would also constitute an offence."

- 6.1.20 As such, it is recommended that appropriate safeguards be put in place to prevent the spread of the Schedule 9 species during the proposed development works. Such measures would initially include detailed re-survey of land within and immediately adjacent to the site boundary for this species, which can rapidly spread. Where Japanese knotweed is present in proximity to the site, appropriate exclusion fencing should be used, with signage, to protect against its unintentional spread. If this species is present within the site boundary, or in immediate proximity such that it is likely to be affected by works, specific remedial measures are recommended, which may require herbicide application and/or excavation, removal and appropriate disposal of contaminated material.
- 6.1.21 It is recommended that the advice of a specialist invasive species contractor is obtained to effectively protect against the spread of this species.

6.2 Ecological Enhancements

- 6.2.1 The National Planning Policy Framework (NPPF) encourages new developments to maximise the opportunities for biodiversity through incorporation of enhancement measures. The proposals present the opportunity to deliver ecological enhancements at the site for the benefit of local biodiversity, thereby making a positive contribution towards the broad objectives of national conservation priorities and the local BAP.

Habitats

- 6.2.2 Habitat enhancements will be delivered as part of the BNG strategy, described in a separate report. This will be informed by the following principles, according with national and local conservation priorities.
- 6.2.3 New Planting. Where practicable, new planting within the site should favour the use of native species of local provenance, including trees and shrubs appropriate to the local area. Suitable species for inclusion within the planting could include native trees such as Oak, Birch *Betula pendula* and Field Maple, whilst native shrub species of particular benefit include fruit and nut bearing species which would provide additional food for wildlife, such as Blackthorn, Hawthorn, Crab Apple *Malus sylvestris*, Hazel *Corylus avellana* and Elder. Where non-native species are proposed, these should include species of value to wildlife, such as varieties listed on the RHS 'Plants for Pollinators' database, providing a nectar source for bees and other pollinating insects.
- 6.2.4 Wildflower Grassland and Flowering Lawn. Within areas of open space, wildflower grassland can be created. These should be subject to a varied management regime to provide a range of sward types. Most areas should be managed as hay meadow, subject to cutting 2-3 times a year to promote a flower rich sward, whilst areas of rough, tussocky grassland can be established along woodland and hedgerow margins. As such, grassland areas will provide a rich habitat resource for invertebrate species, in turn providing increased foraging opportunities for wildlife including birds and bats. Consideration can also be given to the laying of wildflower turfs, comprising locally appropriate native species, to establish wildflower grassland. This would ensure rapid establishment of these habitats and reduce the timeframe for delivering the range of ecological benefits that are proposed.

Within parks and other recreation and amenity areas, consideration can be given to seeding of flowering lawn, containing a range of herb species which respond well to frequent mowing. This will provide a further flowering and pollen resource for invertebrates.

- 6.2.5 Scrub Planting. Scrub habitat should be established along woodland margins, hedgerows and within grassland areas creating scrub mosaics and forming valuable ecotone habitats for a range of wildlife, including reptiles, small mammals and invertebrates.
- 6.2.6 Wetland Features. The opportunity exists under the proposals to create new wetland habitats as part of the Sustainable Drainage System (SUDS). Where practical these should be designed in accordance with ecological principles, incorporating measures such as shallow, sinuous margins, areas of permanent water and planting with native vegetation. Such measures will benefit a range of wetland species including birds, aquatic invertebrates and amphibians whilst also helping to attenuate surface water run-off.
- 6.2.7 Hedgerows. New hedgerow planting can be provided along the boundaries of green space areas and around areas of built development. Existing hedgerows should be subject to supplementary planting where necessary to fill gaps and strengthen the integrity of the hedgerow.

Fauna

- 6.2.8 To provide additional opportunities for fauna, it is proposed that a range of new features are incorporated within the proposed development. This should include the following features, with specific measures to be detailed as part of a faunal enhancement plan which can be secured via a suitably-worded planning condition.
- 6.2.9 Bat Boxes. Bat boxes should be incorporated within the proposed development. The provision of bat boxes will provide new roosting opportunities for bats in the area, such as Soprano Pipistrelle, a national Priority Species. So as to maximise their potential use, the bat boxes should ideally be situated on suitable retained trees, erected as high up as possible and sited in sheltered wind-free areas that are exposed to the sun for part of the day, facing a south-east, south or south-westerly direction. In addition, where architectural design allows, a number of integrated bat boxes or roost features may be incorporated into a proportion of the new build. The precise number and locations of boxes and roost features should be determined by a competent ecologist, post-planning once the relevant final development design details have been approved.
- 6.2.10 Bird Boxes. Bird nesting boxes should be incorporated within the proposed development, thereby increasing nesting opportunities for birds at the site. This can include integrated nest boxes on new buildings targeting species including Swift and House Sparrow, whilst boxes can also be erected on retained trees. The precise number and locations of boxes should be determined by a competent ecologist, post-planning once the relevant final development design details have been approved.
- 6.2.11 Habitat Piles and Refugia. A proportion of dead wood arising from vegetation clearance works should be retained within the site in wood piles located within areas of new planting, new wetland habitats or areas of wildflower grassland in order to provide habitat for invertebrates, which in turn provide a prey source for a range of other wildlife. Dedicated hibernacula and refugia can also be provided for reptiles and amphibians, comprising log or rubble piles either left open or covered in soil and turfs. Buried logs may also be provided as dead wood habitat for invertebrates such as Stag Beetle.

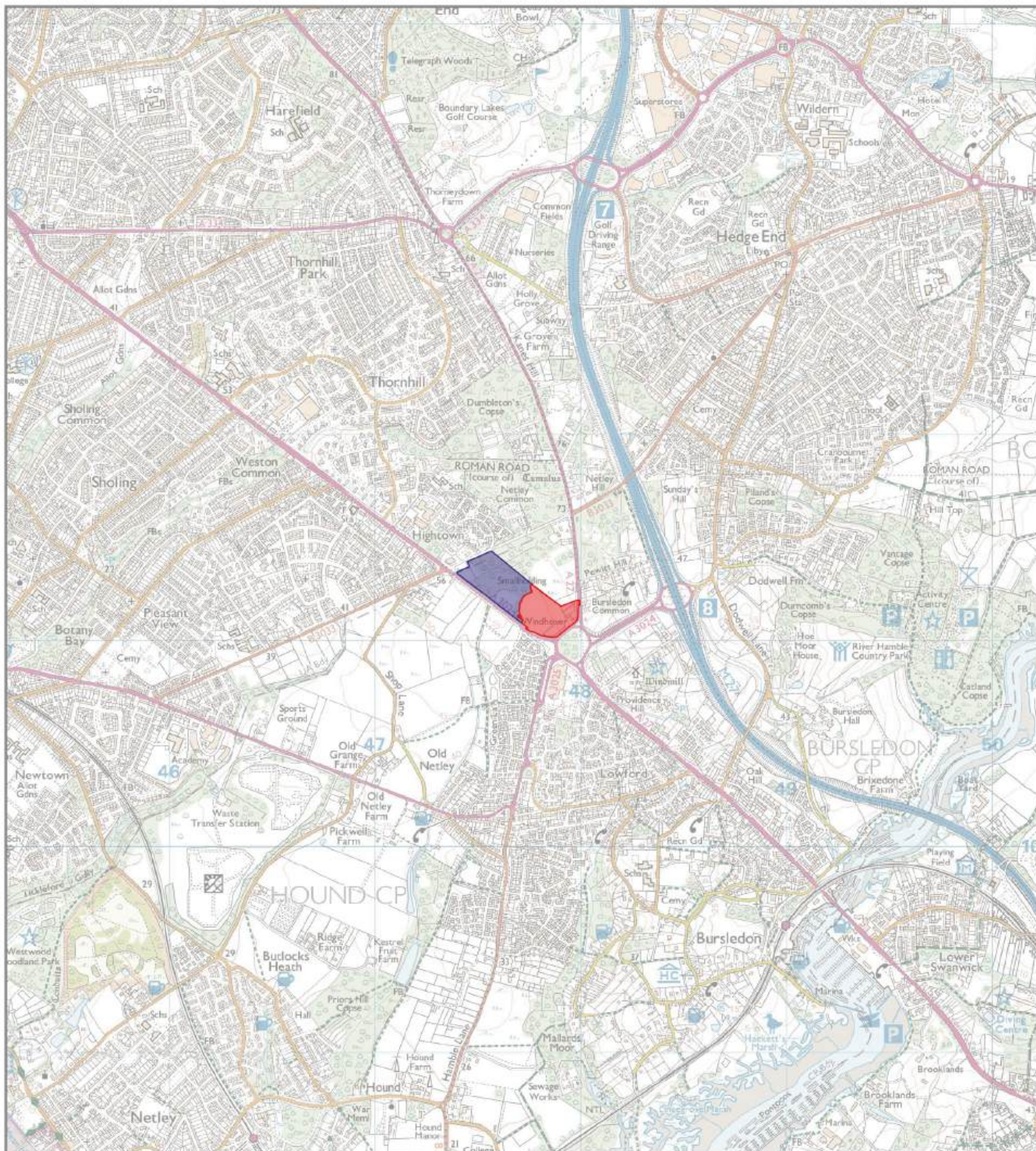
- 6.2.12 Bee Bricks and Insect Boxes. It is recommended that bee bricks are incorporated within the proposed development thereby increasing nesting opportunities for declining populations of non-swarming solitary bee populations. Ideally, bee bricks should be located within suitable south-facing walls (where architectural design allows), located at least 1m above the ground. Bee bricks should be unobstructed by vegetation, and in close proximity to nectar and pollen sources. Insect boxes can also be provided within the areas of wildlife habitat in order to enhance the nesting and over-wintering locations available for a range of invertebrates, particularly solitary wasps and bees.

7 Conclusions

- 7.1 Aspect Ecology has carried out an Ecological Appraisal of the proposed development, based on the results of a desktop study, habitat and protected species surveys.
- 7.2 The available information confirms that no statutory or non-statutory nature conservation designations are present within the site. Whilst it is confirmed that Netley Common (LNR and SINC) is recorded as being immediately in close proximity to the site, it is not considered that designations within the surrounding area are likely to be adversely affected by the proposals.
- 7.3 The site sits within an IRZ in relation to the complex of Solent European Sites, which are susceptible to nutrient enrichment. Within the 'Solent Nutrient Impact Area' any new residential development (any development with overnight accommodation) within 5.6km of the Solent and Southampton Water SPA/Ramsar, must assess the indirect impacts of the development on the Solent sites.
- 7.4 The site is not proposed for residential development and there is not expected to be any direct net increase in overnight accommodation as a of the proposed commercial warehousing. Therefore, it is not expected that the development proposals will be subject to the financial contributions outlined within the Solent Recreation Mitigation Strategy to the Solent Disturbance Mitigation Project (SDMP). However, being within the impact risk zone it is expected that mitigation will be required to mitigate for the potential net increase in nutrients entering the Solent from urban runoff and sewage treatment for the developments life cycle so as to prevent any further damage to the protected areas of the coast caused by nutrient loading from development.
- 7.5 The habitat survey has established that the site is dominated by habitats not considered to be of ecological importance, whilst the proposals have sought to retain those features identified to be of value. Where it has not been practicable to avoid loss of habitats, new habitat creation is proposed to offset losses, in conjunction with the landscape proposals.
- 7.6 The habitats within the site support several protected species, including species protected under both national and European legislation (bats and reptiles). Accordingly, appropriate mitigation measures have been proposed to minimise the risk of harm to protected species, with compensatory measures proposed where required in order to maintain the conservation status of local populations.
- 7.7 In conclusion, the proposals have sought to minimise impacts and subject to the implementation of appropriate avoidance, mitigation and compensation measures, the proposals will not result in significant harm to biodiversity.
- 7.8 Ecological enhancements are proposed, which may be delivered alongside the BNG strategy presented in a separate report.

Plan 6655/ECO1:

Site Location



Key:

- Site Location
- Wider Survey Area

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Land North of Windhover roundabout
(Cranbury site), Hampshire

Site Location

6655/ECO1

D/DO

June 2025

PROJECT

TITLE

DRAWING NO.

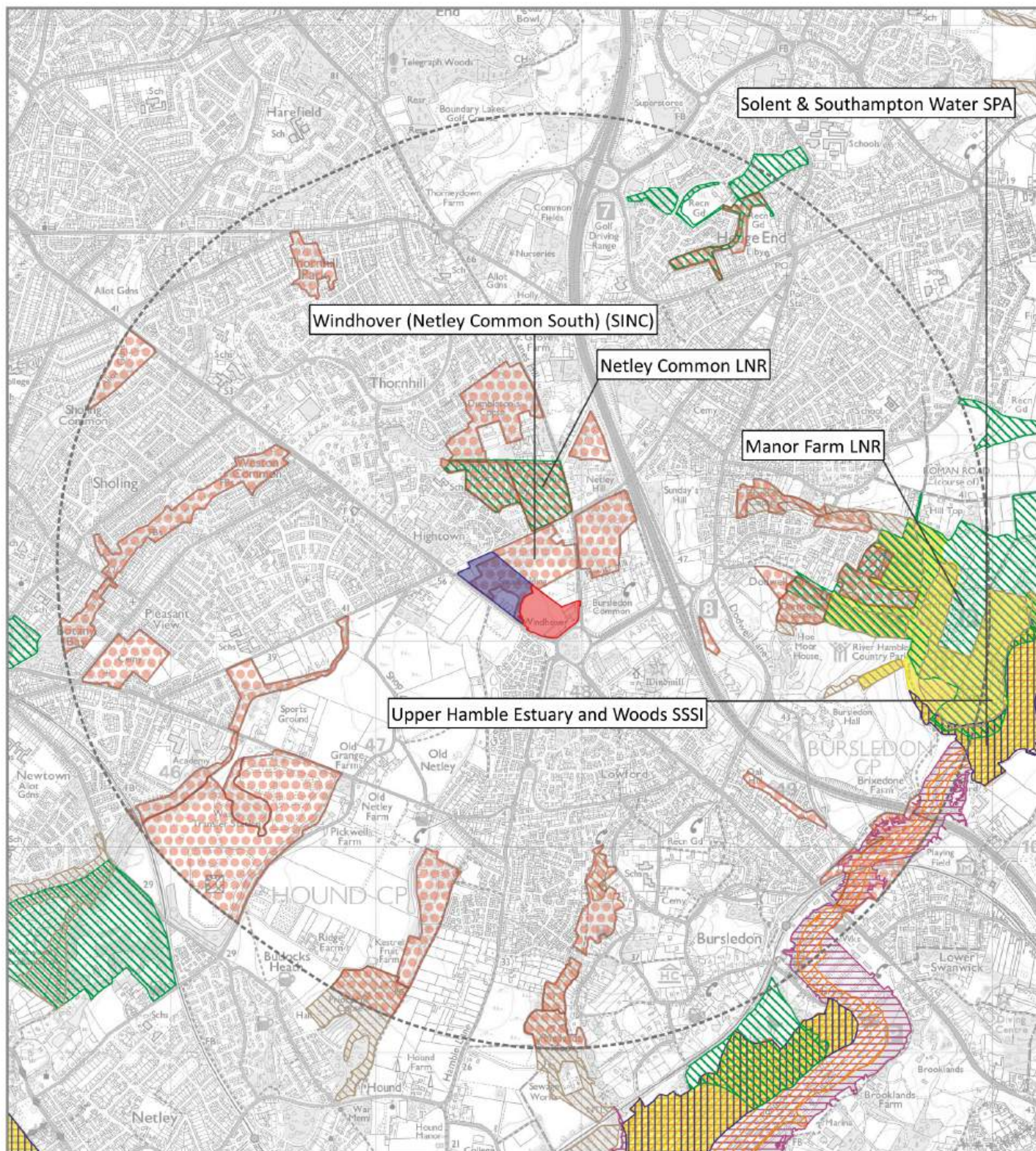
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DATE



Plan 6655/ECO2:

Ecological Designations



Key:

	Site Location		Site of Special Scientific Interest (SSSI)
	Wider Survey Area		Special Area of Conservation (SAC)
	2km Local Record Centre Study Area		Sites of Importance for Nature Conservation (SINC's)
	Special Protection Area (SPA)		Ancient Semi Natural Woodland (ASNW)
	Local Nature Reserve (LNR)		Ancient Replanted Woodland (ARW)
	Ramsar		

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Land North of Windhover roundabout
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Ecological Designations

6655/ECO2

D/DO

June 2025

PROJECT

TITLE

DRAWING NO.

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DATE



Plan 6655/ECO3:

Habitats and Ecological Features



- Key:
- Site Boundary
 - Wider Survey Area
 - Building
 - Hardstanding
 - Amenity Grassland
 - Semi-improved Grassland
 - Woodland
 - Area not Surveyed
 - Hedgerow



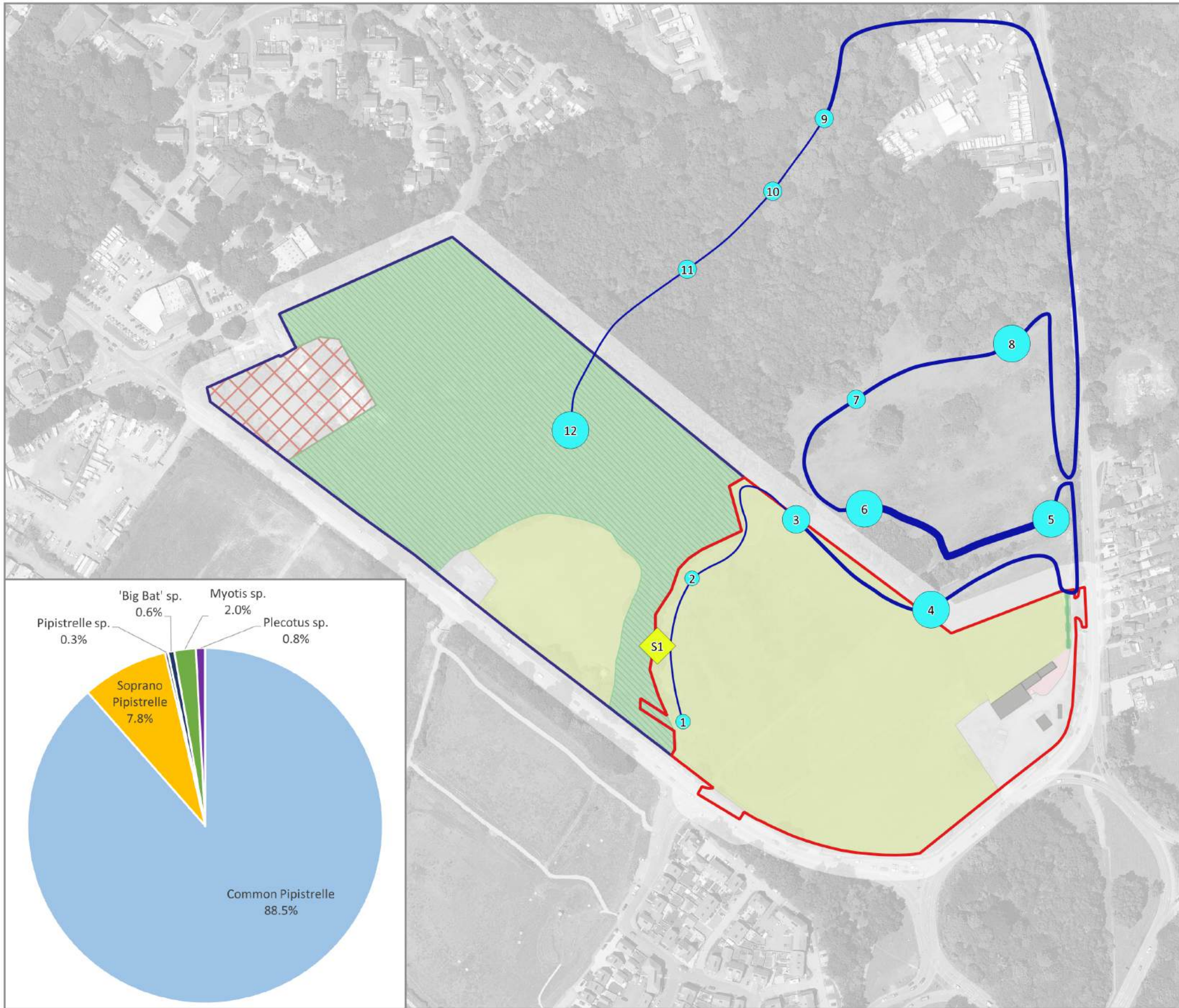
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Land North of Windhover roundabout (Cranbury site), Hampshire Habitats and Ecological Features	PROJECT
	TITLE
6655/ECO3	DRAWING NO.
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Plan 6655/ECO4:

Bat Survey Results



Key:

Site Boundary

Wider Survey Area

Static Location

S1

Bat Activity (Transect Survey)
Between Listening Points:

High

Moderate

Low

Negligible

At Listening Points:

High

Moderate

Low

Negligible

Bat Activity Level Key:

High: >1 Passes per minute

Moderate: 0.51-1.0 Passes per minute

Low: 0.01-0.5 Passes per minute

Negligible: 0 Passes per minute

Note: Number of passes per minute based on the number of sound files produced by Anabat Scout.

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Land North of Windhover roundabout (Cranbury site), Hampshire	PROJECT
Bat Survey Results	TITLE
6655/ECO4	DRAWING NO.
C/BG	REV
June 2025	DATE

Plan 6655/ECO5:

Dormouse Survey Plan



- Key:
- Site Boundary
 - Wider Survey Area
 - Dormouse Transect

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Land North of Windhover roundabout
(Cranbury site), Hampshire
Dormouse Survey Plan

6655/EC05

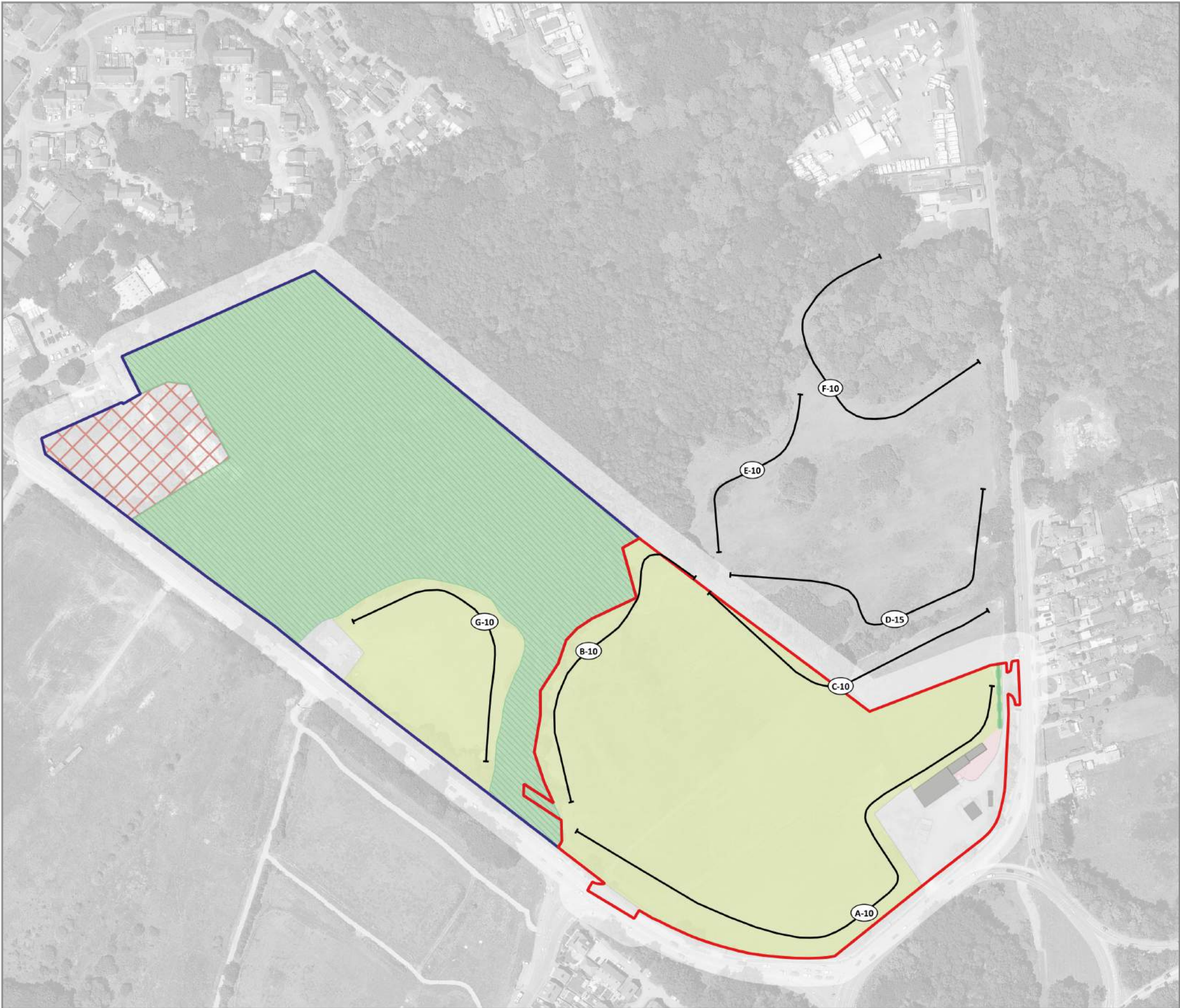
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June 2025



Plan 6655/ECO6:

Reptile Survey Plan



- Key:
- Site Boundary
 - Wider Survey Area
 - Reptile Transect

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Land North of Windhover roundabout
(Cranbury site), Hampshire
Reptile Survey Plan

6655/ECO6

C/DO

June 2025



Appendix 6655/1:

Principles of Ecological Evaluation

Evaluation Methodology

1. The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (2018)¹.

Importance of Ecological Features

2. Ecological features within the site/study area have been evaluated in terms of whether they qualify as 'important ecological features'. In this regard, CIEEM guidance states that *"it is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable"*.
3. Various characteristics contribute to the importance of ecological features, including:
 - Naturalness;
 - Animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
 - Ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
 - Endemic species or locally distinct sub-populations of a species;
 - Habitat diversity;
 - Habitat connectivity and/or synergistic associations;
 - Habitats and species in decline;
 - Rich assemblages of plants and animals;
 - Large populations of species or concentrations of species considered uncommon or threatened in a wider context;
 - Plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities; and
 - Species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.
4. As an objective starting point for identifying important ecological features, European, national and local governments have identified sites, habitats and species which form a key focus for biodiversity conservation in the UK, supported by policy and legislation. These are summarised by CIEEM guidance as follows:

Designated Sites

- Statutory sites designated or classified under international conventions or European legislation, for example World Heritage Sites, Biosphere Reserves, Wetlands of International Importance (Ramsar sites), Special Areas of Conservation (SAC), Special Protection Areas (SPA);

¹ CIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine', Chartered Institute of Ecology and Environmental Management, Winchester

- Statutory sites designated under national legislation, for example Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR);
- Locally designated wildlife sites, e.g. Local Wildlife Sites (LWS).

Biodiversity Lists

- Habitats and species of principal importance for the conservation of biodiversity in England and Wales (largely drawn from UK BAP priority habitats and priority species), often referred to simply as Priority Habitats / Species;
- Local BAP priority species and habitats.

Red Listed, Rare, Legally Protected Species

- Species of conservation concern, Red Data Book (RDB) species;
- Birds of Conservation Concern;
- Nationally rare and nationally scarce species;
- Legally protected species.

5. In addition to this list, other features may be considered to be of importance on the basis of local rarity, where they enable effective conservation of other important features, or play a key functional role in the landscape.

Assigning Level of Importance

6. The importance of an ecological feature should then be considered within a defined geographical context. Based on CIEEM guidance, the following frame of reference is used:
 - International (European);
 - National;
 - Regional;
 - County;
 - District;
 - Local (e.g. Parish or Neighbourhood);
 - Site (not of importance beyond the immediate context of the site).
7. Features of 'local' importance are those considered to be below a district level of importance, but are considered to appreciably enrich the nature conservation resource or are of elevated importance beyond the context of the site.
8. Where features are identified as 'important' based on the list of key sites, habitats and species set out above, but are very limited in extent or quality (in terms of habitat resource or species population) and do not appreciably contribute to the biodiversity interest beyond the context of the site, they are considered to be of 'site' importance.
9. In terms of assigning the level of importance, the following considerations are relevant:

Designated Sites

10. For designated sites, importance should reflect the geographical context of the designation (e.g. SAC/SPA/Ramsar sites are designated at the international level whereas SSSIs are designated at the national level). Consideration should be given to multiple designations as appropriate (where an area is subject to differing levels of nature conservation designations).

Habitats

11. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, 'Guidelines for the selection of biological SSSIs' and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat is also an important consideration, for example in the case of ancient woodland.
12. Whether habitats are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.
13. Habitat inventories (such as habitat mapping on the MAGIC database) or information relating to the status of particular habitats within a district, county or region can also assist in determining the appropriate scale at which a habitat is of importance.

Species

14. Deciding the importance of species populations should make use of existing criteria where available. For example, there are established criteria for defining nationally and internationally important populations of waterfowl. The scale within which importance is determined could also relate to a particular population, e.g. the breeding population of common toads within a suite of ponds or an otter population within a catchment.
15. When determining the importance of a species population, contextual information about distribution and abundance is fundamental, including trends based on historical records. For example, a species could be considered particularly important if it is rare and its population is in decline. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.
16. Whether species are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Species of Principal Importance' or 'Priority Species', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular species under a BAP does not in itself imply any specific level of importance.
17. Species populations should also be considered in terms of the potential zone of influence of the proposals, i.e. if the entire species population within the site and surrounding area were to be affected by the proposed development, would this be of significance at a local, district, county or wider scale? This should also consider the foraging and territory ranges of individual species (e.g. bats roosting some distance from site may forage within site whereas other species such as invertebrates may be more sedentary).

Appendix 6655/2:

Legislation Summary

LEGISLATION SUMMARY

1. In England and Wales primary legislation is made by the UK Parliament, and in Scotland by the Scottish Parliament, in the form of Acts. The main piece of legislation relating to nature conservation in the UK is the Wildlife and Countryside Act 1981 (as amended).
2. Acts of Parliament confer powers on Ministers to make more detailed orders, rules or regulations by means of secondary legislation in the form of statutory instruments. Statutory instruments are used to provide the necessary detail that would be too complex to include in an Act itself¹. The provisions of an Act of Parliament can also be enforced, amended or updated by secondary legislation.
3. In summary, the key pieces of legislation relating to nature conservation in the UK are:
 - Wildlife and Countryside Act 1981 (as amended)
 - Protection of Badgers Act 1992
 - Hedgerows Regulations 1997
 - Countryside and Rights of Way (CROW) Act for England and Wales 2000
 - Natural Environment and Rural Communities Act 2006
 - Conservation of Habitats and Species Regulations 2017
4. A brief summary of the relevant legislation is provided below. The original Acts and instruments should be referred to for the full and most up to date text of the legislation.
5. **Wildlife and Countryside Act 1981 (as amended)**. The WCA Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) identified for their flora, fauna, geological or physiographical features. The Act contains strict measures for the protection and management of SSSIs.
6. The Act also refers to the treatment of UK wildlife including protected species listed under Schedules 1 (birds), 5 (mammals, herpetofauna, fish, invertebrates) and 8 (plants).
7. Under Section 1(1) of the Act, all wild birds are protected such that it is an offence to intentionally:
 - Kill, injure or take any wild bird;
 - Take, damage or destroy the nest of any wild bird whilst in use* or being built;
 - Take or destroy an egg of any wild bird.

* The nests of birds that re-use their nests as listed under Schedule ZA1, e.g. Golden Eagle, are protected against taking, damage or destruction irrespective of whether they are in use or not.
8. Offences in respect of Schedule 1 birds are subject to special, i.e. higher, penalties. Schedule 1 birds also receive greater protection such that it is an offence to intentionally or recklessly:
 - Disturb any wild bird included in Schedule 1 while it is building a nest or while it is in, on or near a nest containing eggs or young;
 - Disturb dependent young of such a bird.

¹ <http://www.parliament.uk/business/bills-and-legislation/secondary-legislation/statutory-instruments/>

9. Under Section 9(1) of the Act, it is an offence to:
 - Intentionally kill, injure or take any wild animal included in Schedule 5.
10. In addition, under Section 9(4) it is an offence to intentionally or recklessly:
 - Obstruct access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection; or
 - Disturb any wild animal included in Schedule 5 while occupying a structure or place which it uses for that purpose.
11. Under Section 13(1) it is an offence:
 - To intentionally pick, uproot or destroy any wild plant listed in Schedule 8; or
 - Unless the authorised person, to intentionally uproot any wild plant not included in Schedule 8.
12. The Act also contains measures (S.14) for preventing the establishment of non-native species that may be detrimental to native wildlife, prohibiting the introduction into the wild of animals (releases or allows to escape) and plants (plants or causes to grow) listed under Schedule 9.
13. **Protection of Badgers Act 1992.** The Act aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It should be noted that the legislation is not intended to prevent properly authorised development. Under the Act it is an offence to:
 - Wilfully kill, injure, take, possess or cruelly ill-treat* a Badger, or attempt to do so;
 - To intentionally or recklessly interfere with a sett[#] (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

* the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence

A sett is defined as “any structure or place which displays signs indicating current use by a Badger”. Natural England advice (June 2009) is that a sett is protected so long as such signs remain present, which in practice could potentially be for some time after the last actual occupation by Badger. Interference with a sett includes blocking tunnels or damaging the sett in any way
14. Licences can be obtained from the Statutory Nature Conservation Organisation (SNCO) for development activities that would otherwise be unlawful under the legislation, provided there is suitable justification. The SNCO for England is Natural England.
15. **Hedgerows Regulations 1997.** ‘Important’ hedgerows (as defined by the Regulations) are protected from removal (up-rooting or otherwise destroying). Various criteria specified in the Regulations are employed to identify ‘important’ hedgerows for wildlife, landscape or historical reasons.
16. **Countryside and Rights of Way (CROW) Act for England and Wales 2000.** The CROW Act provides increased measures for the management and protection of SSSIs and strengthens wildlife enforcement legislation. Schedule 12 of the Act amends the species provisions of the WCA 1981, strengthening the legal protection for threatened species. The Act also introduced a duty on Government to have regard to the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

17. **Natural Environment and Rural Communities Act 2006.** Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as local planning authorities, in implementing their duty under Section 40 of the Act, to have regard to the conservation of biodiversity in England, when exercising their normal functions. 56 habitats and 943 species of principal importance are included on the S41 list. These are all the habitats and species in England that were identified as requiring action in the UK Biodiversity Action Plan (BAP).
18. **Conservation of Habitats and Species Regulations 2017 (as amended).** The Regulations enact the European Union's Habitats Directive (92/43/EEC) in the UK. The Habitats Directive was designed to contribute to the maintenance of biodiversity within member states through the conservation of sites, known in the UK as Special Areas of Conservation (SACs), containing habitats and species selected as being of EC importance (as listed in Annexes I and II of the Habitats Directive respectively). Member states are required to take measures to maintain or restore these natural and semi-natural habitats and wild species at a favourable conservation status.
19. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs)² classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites constitute the Natura 2000 network. The Regulations impose restrictions on planning decisions likely to significantly affect SPAs or SACs.
20. The Regulations also provide protection to European Protected Species of animals that largely overlaps with the WCA 1981, albeit the provisions are generally stricter. Under Regulation 43 it is an offence, *inter alia*, to:
 - Deliberately capture, injure or kill any wild animal of a European Protected Species;
 - Deliberately disturb any wild animals of any such species, including in particular any disturbance likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;
 - Deliberately take or destroy the eggs of such an animal;
 - Damage or destroy a breeding site or resting place of such an animal.
21. Similar protection is afforded to European Protected Species of plants, as detailed under Regulation 47.
22. The Regulations do provide a licensing system that permits otherwise illegal activities in relation to European Protected Species, subject to certain tests being fulfilled.

² Special Protection Areas (SPAs) are protected sites classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC) (aka the Birds Directive), which came into force in April 1979. SPAs are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

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