



Preliminary Ecological Appraisal

**Land at Russell House, Chalcroft Business
Park, SO30 2PA**

The Ecology Partnership, Thorncroft Manor, Thorncroft Drive, Leatherhead, Surrey KT22 8JB

T +44 (0) 1372 364133 **E** info@ecologypartnership.com **W** ecologypartnership.com

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LIABILITIES:

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

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

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

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

1.0 Introduction

Background

- 1.1 The Ecology Partnership was commissioned by Strutt and Parker to undertake a preliminary ecological appraisal (PEA) of the land at Russell House, Chalcroft Business Park, Southampton, SO30 2PA, hereafter referred to as 'the site'.
- 1.2 The key objectives of a PEA (CIEEM 2017) are to:
- Identify the likely ecological constraints associated with a project;
 - Identify any mitigation measures likely to be required, following the 'Mitigation Hierarchy' (CIEEM 2016; BSI 2013, Clause 5.2);
 - Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
 - Identify the opportunities offered by a project to deliver ecological enhancement.
- 1.3 This report comprises the:
- Legislative and planning context (Section 1);
 - Assessment methodologies (Section 2);
 - Results (Section 3);
 - Implications for development, including an impact assessment (Section 4 & 5);
 - Conclusions (Section 6).

Site Context

- 1.4 The site is situated on Burnetts Lane, to the north east of Southampton (SU 48670 16028). The surrounding area constitutes primarily arable fields, with parcels of woodland scattered throughout and an industrial estate to the north. The site itself supports a commercial building, with associated grassland and individual trees, boarded by woodland to the southwest.
- 1.5 The aerial photograph overleaf (Figure 1) shows the site and its immediate surroundings. The red-line depicts the approximate survey area.



Figure 1: Approximate location of the site, indicated by the red-line boundary.

Description of the Proposed Development

- 1.6 The proposals are for a first-floor rear extension of 66sqm to Russell House, an existing commercial building. The new extension will comprise a flat roof which will join at the eaves of the existing pitched roof.

Planning Policies

- 1.7 The site was surveyed to assess its ecological value and to ensure the proposals were compliant with relevant planning policy and legislation. Policy guidance is provided by the National Planning Policy Framework (NPPF 2023) and Eastleigh Borough. The Eastleigh Borough Local Plan 2016-2036 (adopted 2022) provides a framework for planning decisions in the district. Policies relevant to biodiversity and environmental protection have been included below:
- S9 Green Infrastructure
 - DM11 Nature Conservation

1.8 The Environment Bill (Environment Act 2021) received Royal Assent on 9th November 2021 and is now enacted as the Environment Act 2021. Part 6 (Nature and Biodiversity) and Schedule 14 of the Environment Act 2021 insert a new section 90A and Schedule 7A into the Town and Country Planning Act 1990 (TCPA), which contain the provisions requiring mandatory biodiversity net gain for development granted planning permission pursuant to the TCPA. These provisions require developments to provide a biodiversity value post-development that exceeds the predevelopment biodiversity value of the onsite habitats by at least 10%. This was adopted in February 2024 although there are a number of exemptions which may mean that biodiversity net gain is not required. These are listed under government guidance and are as follows:

- Development below a de minimis threshold;
- Householder applications;
- Small scale self-build and custom housebuilding;
- HS2; and
- Biodiversity net gain sites.

1.9 The site has therefore been surveyed to assess its ecological value and to ensure compliance with national and local plan policies and other relevant nature conservation legislation including; Wildlife and Countryside Act 1981, Natural Environment and Rural Communities Act 2006, and the Conservation of Habitats and Species (EU Exit) Regulations 2019.

1.10 The report has been produced with reference to current guidelines for PEA (CIEEM 2017) and in accordance with BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.

2.0 Methodology

Desktop Study

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

notable species within 2km of the site was obtained from Hampshire Biodiversity Information Centre (HBIC).

Preliminary Ecological Appraisal

- 2.2 An extended preliminary ecological appraisal was undertaken on the 2nd October 2024 by consultant ecologist Digby Hayden BSc (Hons) and Hayley Gale BSc (Hons). The surveyors identified the habitats present, following the standard 'UK Hab' auditing method. The site was surveyed on foot and the existing habitats and land uses were recorded on an appropriately scaled map (JNCC 2010). In addition, the dominant plant species in each habitat were recorded. The potential for the site to support protected species was also assessed.

Protected Species Assessments

- 2.3 Any evidence of protected species was recorded. Standard methods of search and measures of presence or likely absence based on habitat suitability were used for bats in trees and buildings (Collins 2016), breeding birds¹, dormouse (Bright *et al.* 2006), great crested newt (ARG 2010), reptiles (Froglife 2015), badgers (Creswell *et al.* 1990) and water vole (Strachan *et al.* 2011).

Limitations

- 2.4 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. The site was visited over the period of one site visit, as such seasonal variations cannot be observed and potentially only a selection of all species that potentially occur within the site have been recorded. Therefore, the survey provides a general assessment of potential nature conservation value of the site and does not include a definitive plant species list.
- 2.5 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on the suitability of the habitat and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group. The assessment is only valid for the time when the survey was carried out. Additional surveys may be recommended if, on the basis of

¹<https://www.bto.org/our-science/projects/birdatlas/methods/breeding-evidence>

this assessment it is considered reasonably likely that protected species may be present.

3.0 Results

Desktop Study

3.1 There are several international statutory designations located within 15km of the site boundary (Figure 2):

- River Itchen (SAC), c. 1.9km north west;
- Solent Maritime (SAC), c. 4.5km south east;
- Solent and Southampton Water (Ramsar & SPA), c. 5.5km south west;
- Emer Bog (SAC), c. 10.2km north west;
- The New Forest (SAC, SPA & Ramsar), c. 12.4km south west; and
- Portsmouth Harbour (Ramsar & SPA), c. 13.8km south east of the site boundary.

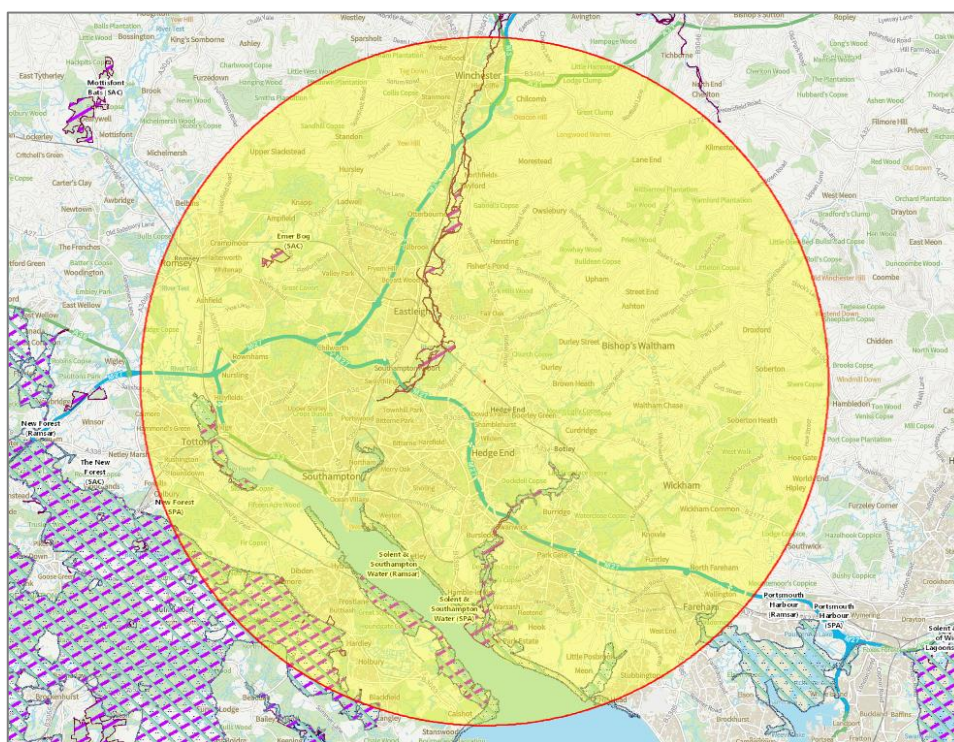


Figure 2 International statutory designations within 15km of the site.

3.2 The site does not fall within any national statutory designations, but there are two national statutory site located within 2km of the site boundary (Figure 3):

- Moorgreen Meadows (SSSI) is located c. 1.1km south of the site and is designated for *Alnus* woods and meadows containing rare orchids.

- River Itchen (SSSI) is located c. 1.9km north west of the site and is designated for its chalk stream/ river and nationally rare freshwater and riparian invertebrates.

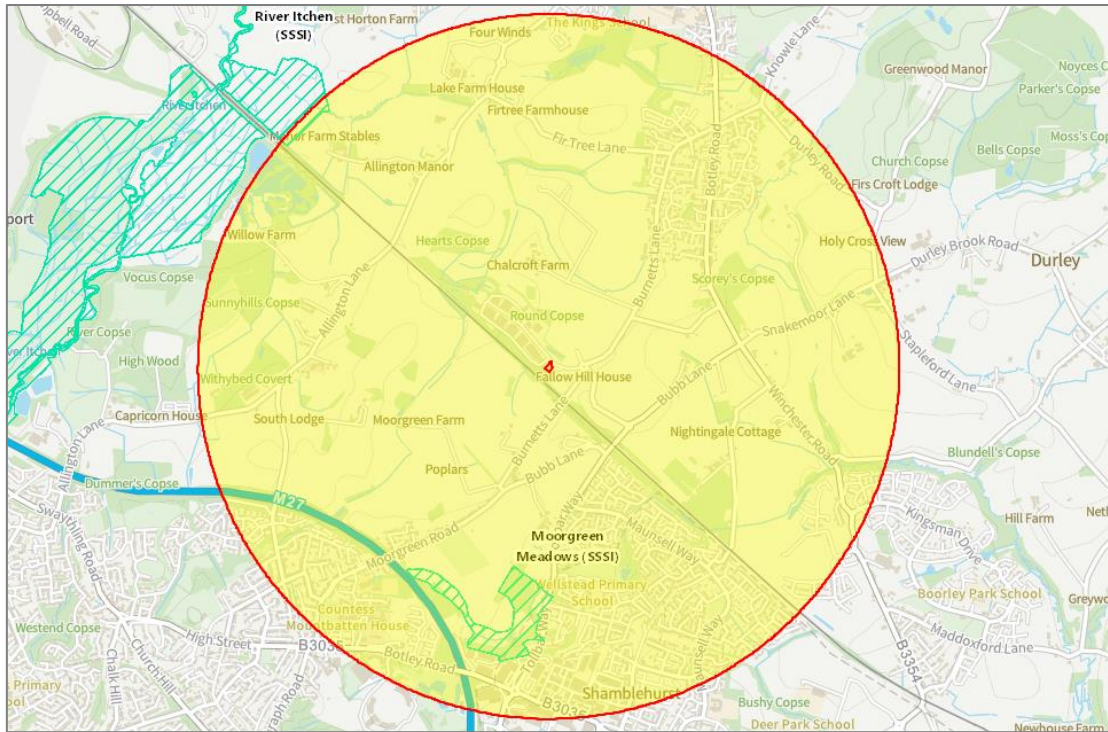


Figure 3 National statutory designations within 2km of the site.

3.3 There are 8 non-statutory sites located within 2km of the site. These are Sites of Importance for Nature Conservation (SINCs).

Site Name	Reason for designation	Distance from site
Chalcroft Distribution Park	Other woodland (significant element of ancient semi-natural woodland surviving)	Southwest Adjacent
Round Copse, West End	Ancient and semi-natural woodland	36m north
Hearts Copse	Ancient and semi-natural woodland	725m northwest
Home Covert, West End	Ancient and semi-natural woodland	755m west
Meadow adjacent to Home Covert	Semi-improved grassland (with significant element of unimproved grassland)	881m west

Field North of Hearts Row, West End	Fens, flushes, seepages, springs and inundation grasslands of floodplains with flora and fauna of less- improved wet conditions	890m north
Treeline Break, West End	Ancient and semi-natural woodland/ Wet Woodland within ancient woodland	930m north
Copse by Oaklands House	Ancient and semi-natural woodland/ Wet Woodland within ancient woodland	969m west

3.4 The site is surrounded by a number of parcels of priority habitat within 2km (Figure 4), including:

- Deciduous Woodland, directly adjacent on southwest border;
- Coastal and Floodplain Grazing Marsh, c. 500m west;
- Ancient Semi-Natural Woodland, c. 600m north west;
- Priority ponds and lakes, c. 500m north;
- Purple moor grass and rush pastures, c.1.1km north east; and
- Lowland meadows, c. 1.2km south of the site boundary.

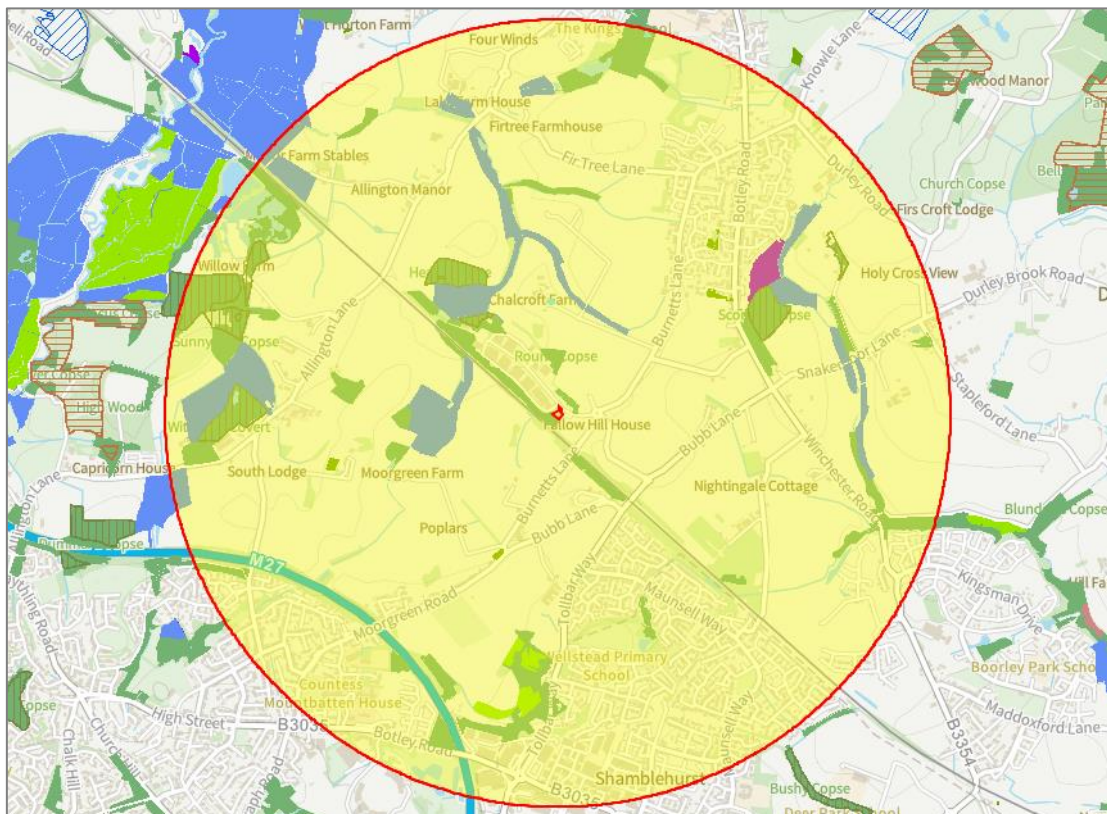


Figure 4 *Priority habitats within 2km of site boundary including: deciduous woodland (dull green), coastal and floodplain grazing marsh (dark blue), ancient woodland (brown vertical hatching), priority ponds and lakes (light blue), purple moor grass and rush pastures (purple) and lowland meadows (lime green).*

3.5 The desktop study revealed there were 10 European Protected Species Mitigation (EPSM) licences issued within 2km of the site boundary (Figure 6):

- 2019-39954-EPS-MIT, destruction of a Common Pipistrelle and Soprano Pipistrelle resting place, c. 1.8km north;
- EPSM2009-903, destruction of a GCN resting place, c. 1.9km north;
- 2020-44604-EPS-MIT-1, destruction of a GCN resting place, c. 1.6km north;
- 2019-39527-EPS-MIT, destruction of a Brown Long-eared bat, Common Pipistrelle and Natterer's Bat breeding place, c. 1.1km north;
- 2015-14283-EPS-MIT, destruction of a GCN resting place, c. 1.5km north west;
- 2015-16719-EPS-MIT, destruction of a Common Pipistrelle resting place, c. 1.5km north west;
- 2018-36779-EPS-MIT, destruction of a Common Pipistrelle resting place, c. 1.8km north east.
- 2016-22386-EPS-MIT, destruction of a Common Pipistrelle, Soprano Pipistrelle and Brown Long-eared bat resting place, c. 900m west;
- 2019-42509-EPS-MIT, destruction of a Common Pipistrelle and Serotine resting place, c. 1.8km southwest; and
- 2016-22944-EPS-MIT, destruction of a Common Pipistrelle and Brown Long-eared bat resting place, c. 1.9km south west of the site boundary.

3.6 The desktop study also revealed 9 GCN Class Survey Licence Returns and one positive GCN pond within 2km of the site boundary (Figure 5).

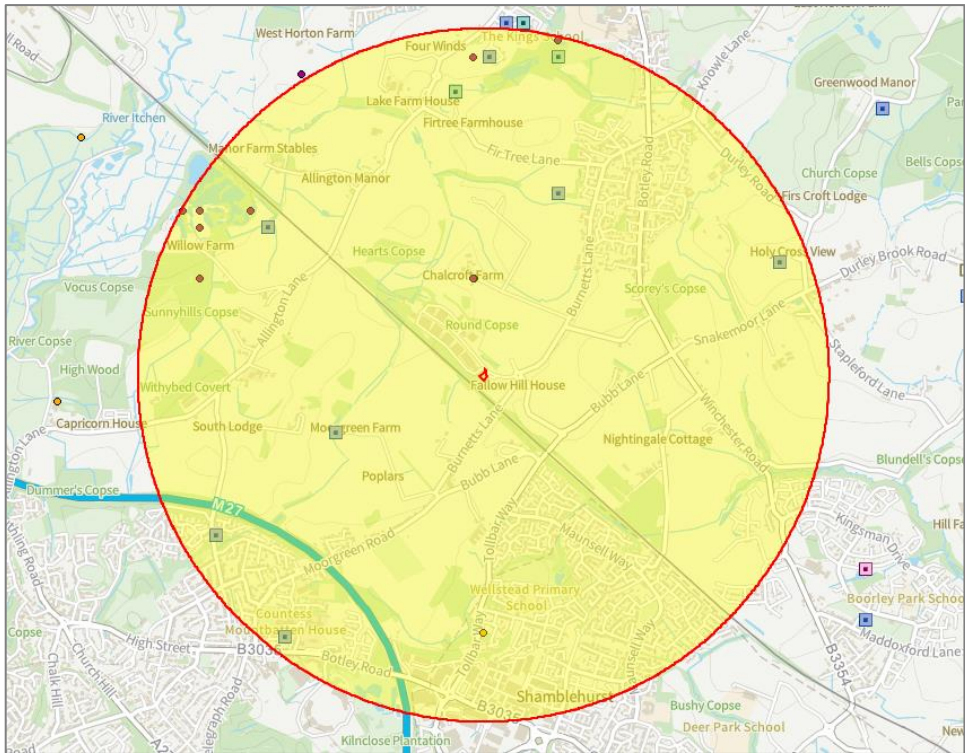


Figure 5 EPMS licences issued within 2km of the site boundary including: bat EPMS (blue square), GCN EPMS (green square), GCN Class Survey Licence Returns (purple dot) and positive GCN pond (orange dot).

- 3.7 OS mapping and aerial photography revealed no ponds on site and none within 250m of the site boundary (Figure 7).
- 3.8 A 1km records search was requested from HBIC. The records closest to site, within the last 10 years and relevant to the habitats on site have been included in Table 1.

Table 1: Species records within 1km of the site boundary in the past 10 years

Species	Status	Closest record	Most recent record
Stag Beetle <i>Lucanus cervus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5; Habitats Directive Annex 2; NERC Act (2006) Section 41	2019 c. 585m northwest	2020 c. 620m southeast
Western European Hedgehog <i>Erinaceus europaeus</i>	NERC Act (2006) Section 41	2020 c. 884m south	
Great Crested Newt <i>Triturus cristatus</i>	Wildlife and Countryside Act (1981 as amended) Schedule 5; Habitats Directive Annex 2 & 4; NERC Act (2006) Section 41	2014 c. 567m north	

Whiskered Bat <i>Myotis mystacinus</i>	Conservation of Habitats and Species Regulations (2010) Schedule 2; Habitat and Species Directive (1992) Annex 4; Wildlife and Countryside Act (1981 as amended) Schedule 5	02/08/2020 c. 510m northwest	
Serotine <i>Eptesicus serotinus</i>	As above	20/05/2019 c. 175m southeast	04/08/2020 c. 845m northwest
Myotis species <i>Myotis sp.</i>	As above	06/06/2019 c. 175m southeast	
Noctule <i>Nyctalus noctula</i>	As above	20/05/2019 c. 170m southeast	04/08/2020 c. 507m northwest
Brown Long-eared Bat <i>Plecotus auritus</i>	As above	17/07/2019 c. 175m southeast	04/08/2020 c. 748m northwest
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	As above	20/05/2019 c. 175m southeast	04/08/2020 c. 720m northwest
Daubenton's Bat <i>Myotis daubentonii</i>	As above	16/08/2018 c. 368m north	04/08/2020 c. 720m northwest
Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>	As above	01/08/2018 c. 854 northeast	
Natterer's Bat <i>Myotis nattereri</i>	As above	22/07/2019 c. 385m northwest	04/08/2020 c. 798m northwest
Pipistrelle species <i>Pipistrellus sp.</i>	As above	01/10/2018 c. 854 northeast	20/08/2021 c. 1.1km southwest
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	As above	06/06/2019 c. 175m southeast	04/08/2020 c. 704m northwest
Long-eared Bat <i>Plecotus spp.</i>	As above	07/05/2019 c. 175m southeast	
Barn Owl <i>Tyto alba</i>	Wildlife and Countryside Act (1981 as amended) Schedule 1	2016 Within 1km	
Cuckoo <i>Cuculus canorus</i>	NERC Act (2006) Section 41; Red List BoCC	2014 Within 1km	
Skylark <i>Alauda arvensis</i>	NERC Act (2006) Section 41; Red List BoCC	2014 Within 1km	
Lesser Redpoll <i>Acanthis cabaret</i>	NERC Act (2006) Section 41; Red List BoCC	2014 Within 1km	
Tree Pipit <i>Anthus trivialis</i>	NERC Act (2006) Section 41	2014 Within 1km	
Spotted Flycatcher <i>Muscicapa striata</i>	NERC Act (2006) Section 41	2014 Within 1km	
House Sparrow <i>Passer domesticus</i>	NERC Act (2006) Section 41	2020 Within 1km	
Lapwing <i>Vanellus vanellus</i>	Birds Directive Annex 2.2; Convention on Migratory Species Appendix 2; NERC Act (2006) Section 41	2016 Within 1km	

Habitat Survey

- 3.9 The site comprised a commercial building, surrounded by other neutral grassland and two individual trees. Bare ground with wood chippings, indicative of stump grinding, was also present within the centre of the grassland in the south and historical imagery indicate a large tree was previously present onsite.
- 3.10 Only species of note have been listed within this section, the full species list can be found within **Appendix 1**. The habitat map is presented in **Appendix 2**.

Buildings

- 3.11 The building onsite was a red brick commercial building with extensions to the northwest, southwest and southeast. The main building was two storeys and supported a pitched roof with clay tiles. Internally the pitched roof supported timber beams and a lining in good condition. The extensions were both single storey with flat felt roofs. The layout of the roofing is below (Figure 6).



*Figure 6 Roofing composition of the main building onsite.
Hatching represents flat roofed sections.*

Other Neutral Grassland

- 3.12 The site was dominated by heavily managed, short sward grassland. Red Fescue *Festuca rubra*, Cock's foot *Dactylis glomerata*, Creeping bent *Agrostis stolonifera*, Yorkshire Fog *Holcus lanatus* and False Oat Grass *Arrhenatherum elatius* were abundant.

Bare Ground

- 3.13 The centre of the other neutral grassland in the west of the site comprised bare ground with wood chippings.

Individual trees

- 3.14 Two individual trees were scattered across the site including a large Oak *Quercus sp.* and a medium Cherry *Prunus avium*.

Protected Species***Bats Roosting***

- 3.15 The main building on site supported a clay tiled roof, which was moss covered and in mostly good condition with one slipped tile in the northwest of the building. The soffit box was sealed and in a good condition. An internal investigation of the building revealed no evidence of bats such as droppings. The single slipped tile could provide potential access to roosting habitat for crevice-dwelling species such as *Pipistrellus spp.* As such, this section of the roof was considered to have 'low' potential to support roosting bats.
- 3.16 The extensions to the building supported flat felt roofs in good condition and no potential roosting features were identified. These single storey extensions were considered to have 'negligible' potential to support roosting bats.
- 3.17 The two individual trees onsite were subject to a ground level tree assessment (GLTA). None of the trees supported any potential roosting features (PRFs) and therefore were considered to have 'negligible' potential to support roosting bats.

Bats Foraging and Commuting

- 3.18 Deciduous woodland is southwest adjacent to the site and the surroundings of the site are dominated by arable fields, and woodland parcels. Records indicate bats are 175m southeast of the site and closest EPSM licence is present 900m west of the site. The

most valuable habitats on site for foraging and commuting bats are the individual trees. However, with only two individual trees onsite, the size and extent of these features are limited.

Great crested newt (GCN)

- 3.19 The highly managed nature of the site made the majority of the site sub-optimal for great crested newts. Records indicate that GCN were present 567m north of the site in 2014 and although there are three GCN EPSM licences within 2km, these licences are 1.5-1.9km from the site. There are also no ponds identified onsite or within 250m of the site. Therefore, due to a lack of suitable habitat and considerable distance from confirmed GCN sites, it is considered that GCN are unlikely present onsite.

Reptiles

- 3.20 The grassland on site was considered unsuitable for reptiles owing to management of a short sward. There are also no records of reptiles within 1km of the site, however, a previous survey by The Ecology Partnership identified a 'low' number of slow worms at a site 22m southeast in 2023 (Planning App: O/23/96467). Therefore, reptiles may be present in the boundaries of the site. As such, it is considered that there is potential for reptiles to be present onsite.

Nesting birds

- 3.21 The two individual trees onsite provide suitable opportunities for nesting birds.

Badger

- 3.22 No evidence of badgers such as latrines or setts were recorded on site at the time of the survey. The adjacent deciduous woodland is considered suitable habitat for badgers, however a fence along this perimeter is considered to potentially prevent foraging and commuting onsite.

Other Species

- 3.23 The site was considered unsuitable to support other protected species, such as dormice, otters and water vole due to lack of suitable habitat.
- 3.24 The habitats onsite are considered suitable to support foraging and commuting hedgehogs.

4.0 Discussion

- 4.1 The following paragraphs consider the effects of the development on designated sites, priority habitats and protected and priority species. Where the desk study and habitat survey provide sufficient evidence for an assessment of effects on any of these groups to be taken through planning, these are detailed below, the need for additional surveys and when and how these should be completed are summarised, if required.

Effects on designated sites

- 4.2 There are six internationally designated sites within 15km, the closest being River Itchen SAC and SSSI is located 1.9km northwest.
- 4.3 The site is located 5.5km southwest of Solent and Southampton Water SPA, which has a zone of influence for residential development of 5.6km according to the Eastleigh Local Plan (2016-2036). As the proposals are for commercial development, no adverse impacts on this designated site, as a result of development, are considered likely.
- 4.4 Impacts on the Solent Maritime SAC, the Solent and Southampton Water SPA, Ramsar and the River Itchen SAC, SSSI are associated with nutrient loading, largely from housing/ overnight accommodation. Eastleigh Borough Council has agreed an interim plan to allow developers to address the environmental impacts of phosphates arising from new development within, and draining into Wastewater Treatment Works in, the River Itchen Special Area of Conservation (SAC) catchment area. As the proposals are for a small commercial extension of an existing commercial building, the requirement for compensation measures may not be required. This is because no net increase in wastewater is likely, as the development is not resulting in an increase in population within the catchment and would likely be utilised by local people already living within the catchment. It is recommended that consultation with the LPA is conducted to ensure that nutrient neutrality is addressed if required.
- 4.5 The site is located within the 13.8km zone of influence for recreational impacts to the New Forest SPA, SAC and Ramsar. As the proposals are for a small commercial extension of an existing commercial building, no recreational impacts are anticipated,

resulting from development. As such, the development is not considered likely to adversely impact this designated site.

- 4.6 The closest statutory site is Moorgreen Meadows SSSI, located approximately 1.1km south of the site and is designated for *Alnus* woods and meadows containing rare orchids. Due to the non-residential nature of the development site, no increase in recreational pressure on this SSSI is anticipated. There are also no linked habitats present onsite. Therefore, given the distance from the site and scale of the development it is determined that the development would result in no residual effect on the SSSI.
- 4.7 The closest non-statutory site is Chalcroft Distribution Park SINC which is adjacent to the southwest of the site. This SINC is designated for the presence of priority habitats including lowland mixed deciduous woodland and due to having significant characteristics of ancient semi-natural woodland. As the development is centred on the existing footprint of the building which is at least 10m from the woodland edge of the SINC, no direct impacts to the woodland canopy and root protection area of the trees are anticipated in the longterm. However, tree protection measures, detailed by an arboriculturalist, should be adhered to during construction to avoid any direct negative impacts to the trees associated with the SINC.

Effects on Priority Habitats

- 4.8 No priority habitats were present on site, but the closest priority habitat to site is deciduous woodland adjacent to the southwest of the site. The proposals are small in nature, and do not result in the loss of any connective habitat or habitat related to parcels of priority habitat in the local area. As this adjacent woodland is designated a SINC due to presence of ancient and semi-natural woodland, the trees will be protected from development during construction. As such, no impacts to priority habitats are anticipated as a result of the proposals.

Effect on on-site habitats

- 4.9 The other neutral grassland and individual trees onsite are common and widespread in the surrounding area. The individual trees and other neutral grassland are to be retained as part of development. As such, it is considered that no adverse impacts to onsite habitats will occur as a result of development. As no natural habitat is being

affected by the works, the development qualifies for the 'de-minus exemption' and is not bound by the requirements for +10% biodiversity net-gain.

Protected Species

Bats Roosting

- 4.10 The main two storey building with a pitched roof was considered to have 'low' potential to support roosting bats owing to a single slipped tile in the northwest of the pitched roof. The single storey extensions to the building were considered to have 'negligible' potential to support roosting bats.
- 4.11 The two individual trees onsite were also considered to have 'negligible' potential to support roosting bats, as no potential roosting features were identified during a GLTA.
- 4.12 It is understood that no tiles are to be removed where the new section of flat roof above the existing extension meets the existing pitched roof. The proposals are for an extension to the southwest the building. As the single slipped tile is in the northwest of the roof and no tiles are to be removed, works can commence without further consideration for the species. However, if any tiles are to be removed, this should be completed under the supervision of a suitably licenced ecologist. If any bats are found during works, then works must cease and an application for a mitigation licence must be sought.

Bats Foraging and Commuting

- 4.13 The deciduous woodland adjacent to the site provides suitable commuting and foraging habitat and is connected further foraging/roosting habitat in the surrounding area. The individual trees onsite that have the potential to support foraging and commuting bats are to be retained during development. As such, no impacts upon the ecological functionality of the local landscape are expected by the proposed development. However, a sensitive lighting scheme avoiding lighting on the western edge of the site, is recommended.
- 4.14 Any proposed lighting scheme as part of the development will have to consider bats in the surrounding area as well as on site. All bat species are nocturnal, resting in dark conditions in the day and emerging at night to feed. Bats are known to be affected by light levels which can affect both their roosting behaviour as well as their foraging

behaviour. This needs to be considered, with a sympathetic lighting scheme for the development. Recommendations include:

- Lighting should only be installed if there is a significant need;
- Lighting should be avoided near trees and hedgerows, with light angled away from these areas, bats use linear features such as hedgerows to commute across the landscape to forage;
- Lights should have focused luminance on their target area, preventing light spill and pollution into other areas of the site and local area.
- Dark buffer zones can be used as a good way to separate habitats or features from lighting by forming a dark perimeter around them. Buffer zones rely on ensuring light levels within a certain distance of a feature do not exceed certain defined limits; and
- Light levels should be kept low. All luminaires should lack UV elements when manufactured and metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.

- 4.15 The retention of individual trees, as well as the use of a sensitive lighting scheme will help ensure that the foraging and commuting potential within the site. As such, no further survey is deemed necessary in relation to commuting and foraging bats.

Reptiles

- 4.16 The site is dominated by managed, short sward grassland. However, a 'low' population of slow worms were identified in 2023, 22m southeast of the site. It is therefore recommended that Reasonable Avoidance Measures (RAMs) are followed to ensure no direct harm to this species. This would include maintaining the grass in the construction zone to a short sward height prior to works, to ensure suitable reptile habitat does not develop.

Badgers

- 4.17 Given the arable fields and woodland parcels in the surroundings of the site and the adjacent deciduous woodland, it is considered possible that badgers would use the site for occasional foraging or commuting purposes. However, no evidence of badgers was recorded on site at the time of survey and perimeter fencing may reduce the likelihood of commuting and foraging badgers onsite. Given the nature of the works,

which centred on the first floor, it is considered unlikely that foraging or commuting badgers will be impacted as a result of development.

Nesting Birds

- 4.18 The individual trees onsite are to be retained during development. As such, no impact on nesting birds is considered likely.

Other Species

- 4.19 The site was considered to have negligible potential to support other protected species, such as such as GCN, dormice, otters and water vole, and no further survey is recommended.
- 4.20 The site has potential to support hedgehog. Whilst receiving no specific legal protection, they are protected from certain forms of harm under the wild mammals (Protection) Act 1996. As, such, it is recommended that best practice guidelines be followed throughout any development to ensure no individuals are harmed.

Ecological Enhancements

- 4.21 Several enhancements can be made to the final development to provide increased ecological opportunities for a range of species and assist 'biodiversity net gain' assessments for the site post-development.
- 4.22 A nest box can be installed in order to provide new nesting opportunities for birds and to achieve ecological enhancements in line with policies set out by the Local Planning Authority.
- 4.23 Hardwearing woodcrete boxes, or similar, such as the Vivara Pro Barcelona WoodStone Open Nest Box are recommended. These could be affixed to the exterior of the new development or on mature trees such as the oak tree in the west, and would cater for species such as wrens, robins, spotted flycatchers, pied and grey wagtails, song thrushes and blackbirds. The boxes should be positioned as high as possible and at least 2m above the ground. Examples of the recommended models are displayed in Figure 7 below.



Figure 7 Vivara Pro Barcelona WoodStone Open Nest Box.

4.24 To enhance the local bat population and provide roosting opportunities within the site, bat boxes will be incorporated into the proposed development. Woodcrete boxes are recommended as they are breathable and long-lasting. These could be affixed to the exterior of the building in an area where they will receive sun and warmth, are away from artificial light and where they are easily connected to ideal habitats in the wider surroundings. A recommended box includes; Vivara Pro WoodStone Bat Box – A general purpose bat box that supports a range of species (Figure 8).



Figure 8 Vivara Pro WoodStone Bat Box

4.25 It is recommended to place hedgehog shelters across the site (Figure 9). These provide areas of shelter for hedgehogs within the site, helping support the local population. These shelters should have a 13 x13 entrance tunnel with an internal partition to prevent predators such as cats and foxes gaining access.



Figure 9: Example of hedgehog shelter with predator protection

- 4.26 It is recommended that log piles are created for use as refugia by, small mammals and invertebrates (Figure 10). These can be located within the other neutral grassland in damp places and situated in sunnier locations. Planting around log piles with species such as honeysuckle or clematis can also add value.



Figure 10: Examples of log piles which should be created on-site.

5.0 Impact Assessment

- 5.1 This section of the report forms an EcIA (Ecological Impact Assessment) and is designed to quantify and evaluate the potential impacts of the development on habitats and species present on site, or within the local area.
- 5.2 The approach to this assessment accords with guidance presented within the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM 2018).
- 5.3 Table 2 below summarises the impacts and required mitigation for each receptor as previously detailed in the discussion.

Table 2: Assessment of effects from the proposal after mitigation and compensation

Feature	Scale of Importance	Mitigation/Compensation Required	Residual Effect
Internationally designated sites (SPA, SAC, Ramsar)	International	No impacts predicted due to the non-residential nature of the development	Not significant
Nationally designated sites (SSSI)	National	No impacts predicted due to the nature of the development and distance from sites and lack of similar habitats	Not significant
Non-statutory sites	District	Tree protection measures during construction are required to ensure no adverse effects on this SINC.	Not significant
Priority habitats	Up to District	Tree protection measures during construction will protect the adjacent woodland from development. No related habitat lost, nor any residual impacts predicted due to small nature of proposals	Not significant
Roosting bats	Up to local	No suitable habitat being lost or impacted through development	Not significant
Reptile	Up to local	Reasonable avoidance measures to ensure no direct harm to reptiles. Other neutral grassland to be kept at a short sward so suitable reptile habitat does not establish.	Not significant
Nesting birds	Up to local	The individual trees onsite are to be retained during development	Not significant

6.0 Conclusions

6.1 The site is not located within a designated site however six international statutory sites and two national statutory sites are present within 15km, the closest being River Itchen SAC/SSSI. The River Itchen SAC, SSSI, Solent Maritime SAC and the Solent and Southampton Water SPA, Ramsar are concerned with impacts resulting from nutrient loading. Due to the non-residential nature of the scheme and no net increase in residents, no impacts are anticipated.

6.2 As well as the River Itchen SSSI, Moorgreen Meadows SSSI is located within 2km of the site. Due to the small and non-residential nature of the proposals and the lack of related habitats onsite, no adverse impacts on this site are anticipated.

- 6.3 Chalcroft Distribution Park SINC is southwest adjacent to the site. As this site is designated for priority habitats including characteristics of ancient semi-natural woodland, a tree protection mitigation is required to avoid any direct negative impacts to the SINC.
- 6.4 The habitats on site are common and widespread throughout the local area and the UK as a whole. They are to be retained as part of the development and no adverse impacts are anticipated.
- 6.5 Although the pitched roof was considered 'low' potential to support roosting bats due to the presence of a single slipped tile, this slipped tile is located in the northwest of the pitched roof, away from the proposed extension in the southwest of the building. No tiles are to be removed as part of development and the internal loft space is not impacted. Therefore, it is considered unlikely that roosting bats will be affected by this development. As such, works can commence without further consideration for the species. However, if tiles are to be removed, supervision by a suitably licenced ecologist is required. If bats are identified, then works must cease and an application for a mitigation licence must be sought.
- 6.6 As a 'low' population of slow worms were previously identified in 2023 on a site 22m southeast, reptiles the is potential for reptile to be present on the site edges. Therefore, reasonable avoidance measure during construction are recommended, maintaining a short sward within the construction zone to avoid the development of suitable reptile habitat.
- 6.7 Birds may use the individual trees on site for nesting and foraging. These features are due to be retained during development.
- 6.8 Recommendations for enhancements have been made within this report, aimed at improving the ecological value of the site post-development.

7.0 References

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Internet resources:

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

Magic Interactive Map: www.magic.gov.uk

Appendix 1: Photos

Photograph 1: Northwest rear of main building showing single storey extensions. Other neutral grassland and bare ground.	 A photograph showing the northwest rear of a two-story brick building. The building has a gabled roof with a chimney on the left. There are several windows, some with white frames. A single-story extension is visible on the left side. The foreground is a grassy area with some bare ground and a pile of dark mulch or soil.
Photograph 2: Single slipped tiles in clay tile roof.	 A close-up photograph of the roof of the building. The roof is covered in dark grey clay tiles. A single tile is shown slipping, indicated by a red circle. The sky is overcast.
Photograph 3: Southwest rear of main building with single storey extensions.	 A photograph showing the southwest rear of the main building. The building is made of red brick and has a gabled roof. There are several windows and a single-story extension on the right side. The foreground is a grassy area with some trees and bushes.

Photograph 4: Individual Cherry Tree, other neutral grassland and fencing.	
Photograph 5: Individual Oak Tree along fence line.	
Photograph 6: Other neutral grassland managed to a short sward.	



Appendix 2: Habitat Map



Appendix 3: Species List

Common name	Latin name	DAFOR score
Other Neutral Grassland		
Yorkshire Fog	<i>Holcus lanatus</i>	A
Cock's Foot	<i>Dactylis glomerata</i>	A
Red fescue	<i>Festuca rubra</i>	A
False Oat Grass	<i>Arrhenatherum elatius</i>	A
Creeping Bent	<i>Agrostis stolonifera</i>	A
Wood Sedge	<i>Carex sylvatica</i>	F
Creeping Cinquefoil	<i>Potentilla reptans</i>	F
Wild Strawberry	<i>Fragaria vesca</i>	F
Sedge Species	<i>Carex sp.</i>	F
Ground Ivy	<i>Glechoma hederacea</i>	F
Soft Rush	<i>Juncus effusus</i>	F
Perennial Rye Grass	<i>Lolium perenne</i>	F
Herb Robert	<i>Geranium robertianum</i>	F
Common Ivy	<i>Hedera helix</i>	F
Common Nettle	<i>Urtica dioica</i>	F
Bramble	<i>Rubus fruticosus</i>	F
Dandelion	<i>Taraxacum officinalis</i>	F
Creeping buttercup	<i>Ranunculus repens</i>	O
White Clover	<i>Trifolium repens</i>	O
Ash Saplings	<i>Fraxinus excelsior</i>	O
Cleavers	<i>Galium aparine</i>	O
Selfheal	<i>Prunella vulgaris</i>	R
Wood Avens	<i>Geum urbanum</i>	R
Germander	<i>Veronica chamaedrys</i>	R
Creeping Jenny	<i>Lysimachia nummularia</i>	R
Field Wood Rush	<i>Luzula campestris</i>	R
Daisy	<i>Bellis perennis</i>	R
Common Sorrel	<i>Rumex acetosa subsp. acetosa</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	R
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	R
Individual Trees		
Oak	<i>Quercus sp.</i>	R
Cherry	<i>Prunus avium</i>	R

The Ecology Partnership Ltd
Thorncroft Manor
Thorncroft Drive
Leatherhead
KT22 8JB

Tel: 01372 364 133

www.ecologypartnership.com

Approved: Matt Pendry BSc (Hons) MCIEEM

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