



Preliminary Ecological Appraisal

Orchard Mews,
West End

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Report	Preliminary Ecological Appraisal
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Executive Summary

Ecosupport Ltd was instructed by Macra Ltd to undertake a Preliminary Ecological Appraisal (PEA) of a parcel of land known as 'Orchard Mews' in West End. This was required in order to identify any potentially important ecological features that may be affected by the proposed development. As part of this assessment, the following surveys were undertaken:

- Data request submitted to HBIC (April, 2024)
- Extended phase I habitat survey (also assign UK Habs types) (April, 2024)

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Low potential for foraging and commuting bats
- Moderate potential for foraging and commuting Badgers
- Low potential for common reptile species
- Low potential for breeding and nesting birds
- Low potential for Hazel Dormouse
- Recreational pressure upon Solent SPAs

In the absence of any mitigation measures, the proposed development is anticipated to result in **certain adverse impacts** (significance level to be determined following phase II survey work where considered appropriate).

In addition to this, measures are outlined within **section 6.0** of this document to mitigate where impacts (which includes further survey work where considered appropriate) been identified as well as provide targeted ecological enhancements.

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Macra Ltd to conduct a Preliminary Ecological Appraisal (PEA) of a parcel of land known as 'Orchard Mews' in West End (here after referred to as 'the site'). The purpose of this survey was to assess any ecological impacts that may arise as a result of a proposed residential development. The objectives of the survey were as follows:

- Identify and classify any priority habitats;
- Assess the ecological value of the site;
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as necessary;
- Make recommendations for any necessary ecological avoidance and mitigation where possible at PEA stage.

NB: If the works do not take place within 18 months of this report¹ then the findings of this survey will no longer be considered valid and may require updating.

1.2 Site Description & Location

The site comprises of a parcel of land to north-east of Westgate Mews, West End, Southampton, SO30 3RE (centered on OS grid reference SU 47362 14194). The north, east and west by residential dwellings and commercial properties, and the south by grassland associated with Utilia Bowl to the south-east (**Fig 1**).

Figure 1. Approximate redline boundary of the site (Google Satellite, 2024).



¹ <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

1.3 Proposed Development

Residential development of land for eight dwellings (Use Class C3), including associated landscaping, parking and infrastructure (**Fig 2**).

Figure 2. Proposed site layout (DMW architects, Job no. 240722, Drg no PL02, October 2025).



2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 *The Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019*

The Conservation of Habitats and Species Regulations 2017 transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

The Conservation of Habitats and Species Regulations 2019 (EU Exit) makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.2 *The Wildlife and Countryside Act (1981) (as amended)*

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 art II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrots Feather (*Myriophyllum aquaticum*).

2.1.3 *The Countryside and Rights of Way Act (2000)*

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.4 Natural Environment and Rural Communities Act (2006)

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies must have due regard to the conservation of biodiversity with a particular regard to species and habitats considered to be of greatest conservation importance. This means that Planning authorities must consider biodiversity and the list of species and habitats of importance when planning or undertaking activities.

Section 41 of the Act lists species and habitats found in England which are considered to be priority species and were identified as requiring action under the UK Biodiversity Action Plan. The latest update to the list of Section 41 habitats of principal importance under the *UK Post – 2010 Biodiversity Framework* includes 56 listed habitats including arable field margins, traditional orchards, hedgerows and several specific habitats within the categories of coastal, grassland, freshwater, inland rock, marine, wetland and woodland. The latest update to the list of Section 41 species of principal importance was in May 2014 and now includes a list of 943 species covering a range of species including vertebrates, terrestrial and marine invertebrates, plants and fungi.

2.1.5 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a set and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

2.1.6 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature

recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

2.2 Policy

2.2.1 National

The National Planning Policy Framework (NPPF) (2024) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and minimising impacts on and providing net gains for biodiversity including by incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and land should be allocated with the least environmental or amenity value and take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure for the enhancement of natural capital at a catchment or landscape scale.

To protect and enhance biodiversity, plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

The NPPF states 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 SSSI, 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 SSIs;

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;

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.

Potential SPAs and possible SACs, listed or proposed Ramsar sites and sites required as compensatory measures for the previous should be given the same protection as habitats sites.

2.2.2 Local – Eastleigh Borough Local Plan 2016 - 2036

The Eastleigh Borough Local Plan 2016 – 2036 has a number of policies relating to ecology with the relevant ones listed below;

‘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:*
 - a. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and*
 - b. 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.'*

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Data Request

A data request was submitted to the Hampshire Biodiversity Information Centre (HBIC) to ascertain any records held of nature conservation designations and protected species within 1 km of the boundary of the site. The data search covered:

- Statutory designated sites
- Non-statutory designations such as Sites of Importance for Nature Conservation (SINCs)
- Open Spaces
- Records of protected and notable species.

3.1.2 Waterbodies

Any ponds located within 250 m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

3.2 Field Survey

3.2.1 Habitats

The field survey work which forms the basis of the findings of this report was carried out by Madison Errington BSc (Hons) ACIEEM (project ecologist with Ecosupport) and Darla Brown BSc (Hons) (project ecologist with Ecosupport) on the 9th April, 2024.

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 2.0 (UKHab Ltd., 2023). This was chosen as an appropriate habitat categorisation system as it fits within the Biodiversity Statutory Metric. Where appropriate primary habitat codes were used although for some habitat types, the use of secondary habitat codes was necessary as well.

3.2.2 Badger

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

3.2.3 Bats

During the updated walkover, based on the most recent layout plan, an assessment of the buildings on site to be removed due the proposed works, as well as a non-exhaustive assessment of any notable trees on site which may be impacted by remedial works, was undertaken by Madison Errington BSc (Hons) ACIEEM of Ecosupport in April 2024 (acting under the license of Tristanna Boxall NE class level 2 bat licence number 2015-14147-CLS-CLS). This followed BCT (Collins (ed) 2023) best practice survey guidelines searching for any PRFs /

evidence of bat occupation and assigning a roost potential assessment as outlined in **Table 1** below.

Table 1. Guidelines for assessing the potential suitability of a built structure for roosting bats (reproduced from BCT (Collins (ed) 2023).

Suitability	Description of Roosting Habitats
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ² and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ³ .
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ² and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ² and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity or classic cool/stable hibernation site.

3.3 Assessment Methodology

3.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on CIEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the CIEEM guidelines provide a useful framework for assessing ecological impacts at any level.

3.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

3.4 Limitations

3.4.1 Habitats

There were not considered to be any limitations on the results of the habitat assessment as it was undertaken during good weather conditions and during the optimal time of the year (with regards to the presence of flowering plants). As such, it was considered an accurate assessment of the habitats could be made (for factoring into the BNG calculations).

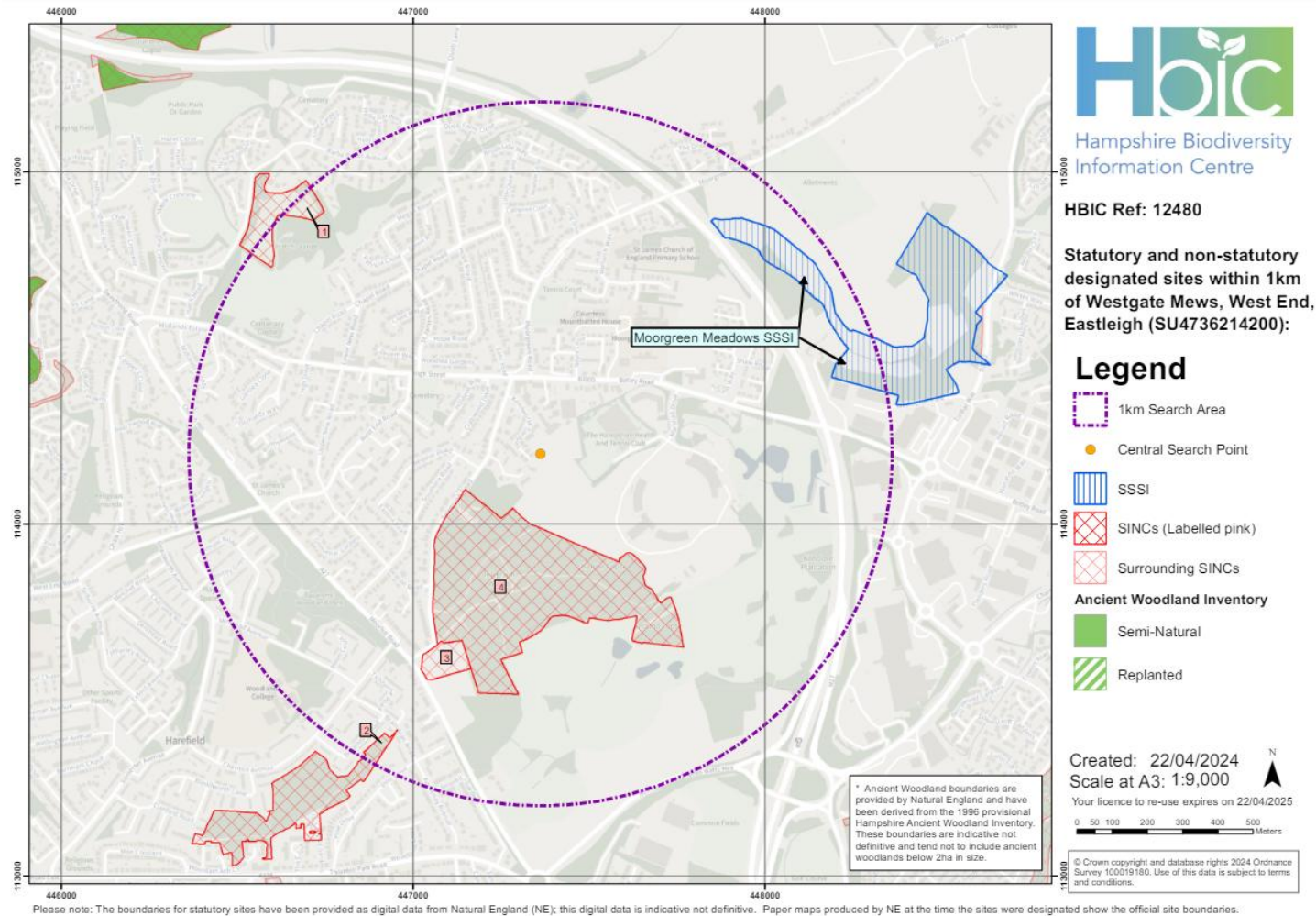
4.0 ECOLOGICAL BASELINE

4.1 Designated Sites

4.1.1 Statutory and Non-Statutory Designated Sites

As indicated in **Fig 3** below, HBIC have identified the following statutory and non-statutory designated sites within the 1 km search radius (listed in order of proximity to the site and criteria definitions of SINC from Wilson, 2021):

- Hatch Grange Meadows SINC (EA0041, map label 1 as per **Fig 3**, and 0.9 km to NW) – designated under criteria 1Cii/2B. 1Cii is a criterion for wet woodlands such as Alder or Willow woods and Birch bog woods which support a good diversity of woodland and/or marsh/swamp/mire species. Meanwhile 2B is a criterion for semi-improved grasslands which retain a significant element of unimproved grassland.
- Harefield Copse SINC (SO0046, map label 2 as per **Fig 3**, and 0.9 km to S) – designated under criteria 1B. 1B is a criterion for other woodlands where there is a significant element of ancient semi-natural woodland surviving or supporting some characteristics of ancient woodland.
- West End Covered Reservoir (EA0051, map label 3 as per **Fig 3**, and 0.5 km to SW) – designated under criteria 2D*/6A. SINC criteria 2D is no longer valid, however it is being retained on existing SINC until they are re-evaluated. 2D SINC are Grasslands which have become impoverished through inappropriate management, but which retain sufficient elements of relic unimproved grassland to enable recovery. Meanwhile criterion 6A is for species supported that meet Section 6 of SINC Selection Criteria, for this site the species concerned is Green-winged Orchid (*Anacamptis morio*).
- Telegraph Woods SINC (EA0057, map label 4 as per **Fig 3**, and 0.1 km to S) – designated under criteria 1D/3Bi. 1D is a criterion for pasture woodland and wooded commons not included in any of the criteria 1A – 1C which are of considerable biological and historical interest. Meanwhile 3Bi is a criterion for areas of heathland which are afforested or have succeeded to woodland.
- Moorgreen Meadows SSSI – 0.8 km NE

Figure 3. Statutory and non-designated sites located within 1 km of the site as provided by HBIC.

4.1.2 Ecological Network

The data received from HBIC also includes the provision of information about the local Ecological Network designations. Further information on this is provided within *Mapping the Hampshire Ecological Network* (Court & Ritter, 2020) which outlines the following:

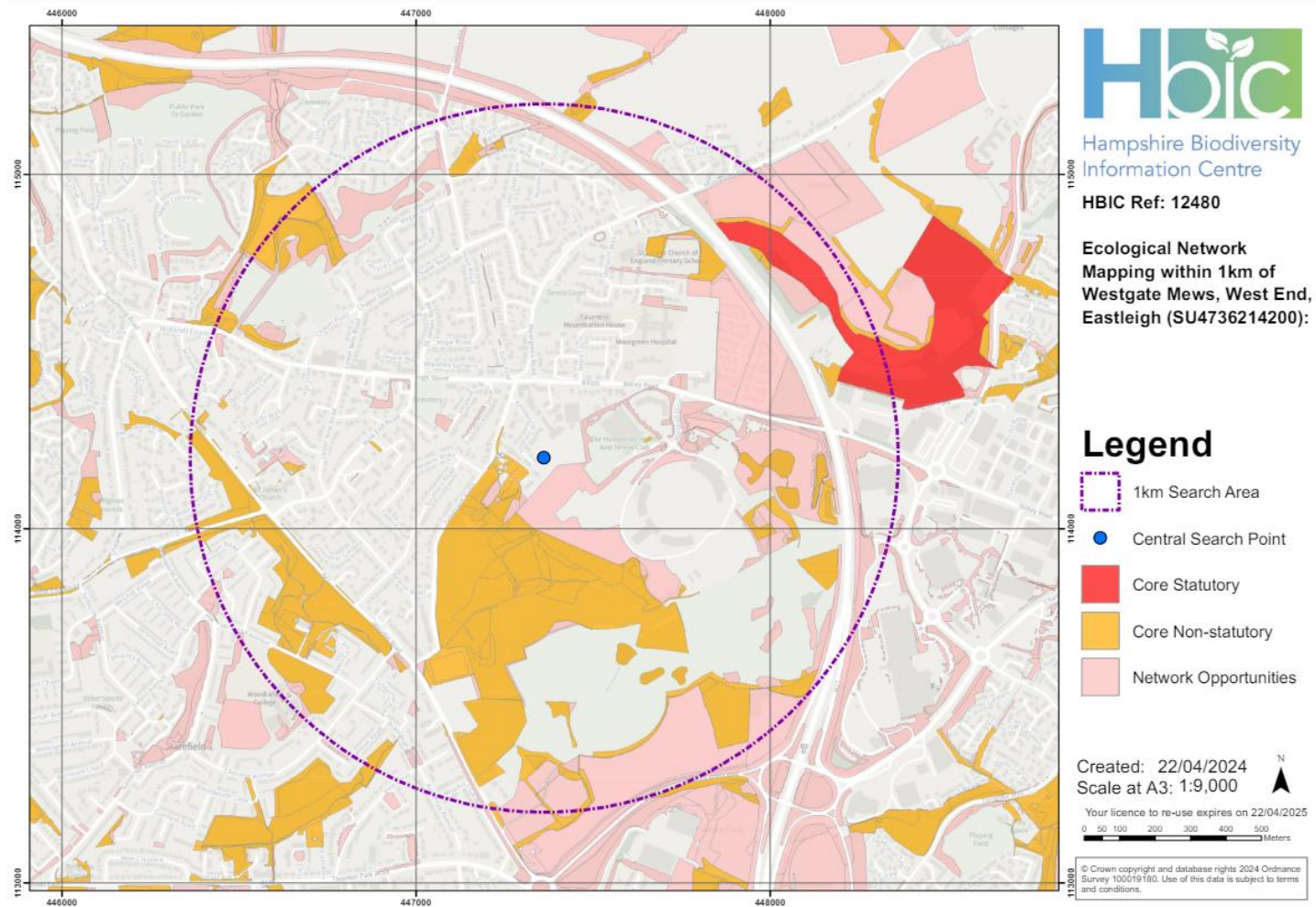
“The Hampshire Ecological Network Map should not be viewed as a barrier to development; instead it can be used to guide the location, layout and design of development to enable habitat and species mitigation, restoration and re-creation to inform green infrastructure and achieve biodiversity net gain.

The ‘Network Opportunities’ component of the mapping can also be used to inform proposals to achieve net gain for biodiversity as part of the planning process in order to:

- promote the restoration and re-creation of priority habitats including increasing the size of existing wildlife sites,*
- enhance connections between sites, either through physical corridors or through ‘stepping-stones’*
- enable the recovery and enhancement of priority species populations”*

As per **Fig 4** below, there are no ecological networks or network opportunities within the site. Although there is a network opportunity **directly adjacent** to the site, which encompasses the line of trees along the southern boundary. With areas of core non-statutory ecological networks in close proximity to the south-west comprising Telegraph Woods.

Figure 4. Screenshot from the ecological network map as provided by HBIC indicating the line of trees along the southern boundary lies within a 'network opportunities' classification.



4.2 Vegetation Survey Results

The vegetation within the site has been described below using the UK Habs Habitat Definitions Version 2.0 (UKHab Ltd., 2023). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area. The habitat types on site comprise (approximate spatial extent shown in the habitat map appended):

- Built-up areas and gardens (u1) (secondary habitat codes: 828, vegetated garden comprising: 32, scattered trees, 108, frequently mown with 521, unmanaged patches)
- Bramble scrub (h3d)
- Non-native and ornamental hedgerow (h2b)
- Other woodland; broadleaved (w1g) (secondary habitat code: 33, line of trees)
 - ***NB As per the update from UKHab Version 1.1 to 2.0 Habitat Definitions (2023) – line of trees must now be classified under the ‘w – woodland and forest’ primary habitat code. Although it must be noted this habitat type does not fall under the definition of a ‘woodland and forest’ as is under the 25% land cover required. As such, this has been reflected in the accompanying BNG Assessment (Ecosupport Ltd., 2024).***
- Buildings (u1b5)

4.2.1 Built-up Areas and Gardens (828 comprising 32, 108, 521)

This was the dominant habitat type present on site, classified as a vegetated garden as it forms the front garden of the adjacent property (5 Westgate Mews) and is frequently mown (108) by the homeowner. In the northern corner, an area of the garden has been left to establish in unmanaged patches (521) (**Fig 5**), including in historical aerial imagery. The managed area of the garden had limited forb diversity (**Fig 6**), with common lawn species including Dandelion (*Taraxacum officinale* agg.) and Daisy (*Bellis perennis*) present. Within the unmanaged portion of the garden, species noted included, but was not limited to, Cock's-foot (*Dactylis glomerata*), Daffodil (*Narcissus pseudonarcissus*), *Carex* sp., Broad Leaved Dock (*Rumex obtusifolius*), Lesser Stitchwort (*Stellaria graminea*), Field Speedwell (*Veronica agrestis*) and Narrow Leaf Sorrell (*Rumex thyrsiflorus*). Finally, the scattered trees (32) included *Prunus* sp. and an ornamental non-native tree.

Figure 5. View of the unmanaged vegetated garden which was present within the northern portion of site (taken April, 2024).



Figure 6. View of the frequent mown vegetated garden which was present across the majority of site with scattered trees notable from this picture (taken April, 2024).



4.2.2 Bramble Scrub (h3h)

A small area of dense scrub was present within the northern portion of site adjacent to the unmanaged patches of the garden, dominated by Bramble (*Rubus fruticosus* agg.) (Fig 7).

Figure 7. View of the Bramble scrub within the northern portion of the site (taken April, 2024).



4.2.3 Non-native and Ornamental Hedgerow (h2b)

The north-eastern boundary of site was marked by a non-native and ornamental hedgerow comprised of Leyland Cypress (*Cupressus x leylandii*) (**Fig 8**).

Figure 8. View of the non-native and ornamental hedgerow habitat located along the north-eastern boundary of the site (taken April, 2024)



4.2.4 Other Woodland; Broadleaved (w1g) (33)

The northern (**Fig 9**) and southern boundaries of site were marked by mature line of trees (33). Along the northern boundary, species comprised of Hazel (*Corylus avellana*), Ash (*Fraxinus excelsior*), Common Nettle (*Urtica dioica*), Cleavers (*Galium aparine*), Ivy (*Hedera helix*), Small Henbit (*Veronica hederifolia*), Herb Robert (*Geranium robertianum*), Common Hogweed (*Heracleum sphondylium*), Spanish Bluebell (*Hyacinthoides hispanica*), Bramble, Daffodil, Wild Strawberry (*Fragaria vesca*) and Large Leaved Avenas (*Geum macrophyllum*). Along the southern boundary, species comprised of Oak (*Quercus robur*), Holly (*Ilex aquifolium*), Bramble, Spanish Bluebell, Daffodil, Ivy, *Prunus* spp., Field Maple (*Acer campestre*) and *Juniperus* sp.

Figure 9. View of the line of trees habitat located along the northern boundary of the site (taken April, 2024)



4.3.5 Buildings (u1b5)

The final habitat type on site is buildings that are described in greater detail in the next section.

4.3 Bat Survey Results

4.3.1 Pre-existing Data

The data request from HBIC returned the following bat records within 1 km of the site (**Table 2**).

Table 2. List of bat records within 1 km of the site provided by HBIC.

Taxon Name	Species Name	Number of Records	Further Information
Chiroptera	Bats	2	Roost visit (droppings), recorded roosting
<i>Plecotus auritus</i>	Brown Long-eared Bat	9	Roost visit (hibernation), droppings, bat detectors
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	21	Droppings, bat detectors
<i>Plecotus</i> spp.	Long-eared Bat species	2	Bat detector
<i>Myotis</i> spp.	Myotis Bat species	6	Bat detector
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle	1	Bat detector
<i>Myotis nattereri</i>	Natterer's Bat	1	Roost visit (tree survey)
<i>Nyctalus noctula</i>	Noctule Bat	6	Bat detector
<i>Pipistrellus</i> spp.	Pipistrelle Bat species	11	Roost visit, droppings, Bat detectors
<i>Eptesicus serotinus</i>	Serotine	5	Droppings, roost visit (hibernation), bat detectors
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	12	Bat detector, bat in hand (injured)
<i>Barbastella barbastellus</i>	Western Barbastelle	2	Bat detector

4.3.2 PRA (Trees)

A full assessment of the trees was not undertaken on site as it is understood that they are largely to be retained as part of the proposed plans. Only an assessment of the trees that are anticipated to be removed was undertaken. These were largely small in diameter and lack the age and size to support roosting bats (**Fig 6 & Fig 10** below). A small cavity formed within the *Prunus* sp. (**Fig 6**), this was located approximately 0.5m from the ground and was considered too shallow to provide a **PRF-I** for roosting bats. Therefore, all trees anticipated to be impacted upon (restricted to the scattered trees within the central garden) were considered to be of **Negligible Potential** for bats.

Figure 10. View of the scattered trees located within the garden on site (taken April, 2024)



NB: Based on the layout plan, none of the mature trees on site will be impacted on by the proposed works, however should it be deemed necessary that remedial works will affect these trees (either removal or crown reduction) or trees require removal to facilitate the development (such as those along the northern boundary which will be included within rear gardens), a detailed ground-based assessment will be required on all trees to be impacted upon.

4.3.3 Buildings

The findings of the preliminary ecological assessment of the two containers on site beneath the hedgerow located along the north-eastern boundary of site are outlined in **Fig 11** below.

In summary, the two containers located within the north-eastern boundary hedgerow of site were found to have **Negligible Potential** for roosting bats. Both containers were in good condition with no PRFs present.

Figure 11. View of the two containers in the northern portion of the site (taken April, 2024)



Negligible Potential

No potential roost features (PRF's) were identified and both containers were considered to be in good condition.



4.3.4 Foraging and Commuting Habitat

The line of trees and hedgerows associated with the boundaries of site provide a continuous linear corridor for local commuting bats, and the unmanaged areas of the garden on site would support a rich supply of invertebrates for local foraging bats. Based on the nature of the proposals, existing habitats on site and extensive suitable habitat immediately surrounding the site available for foraging bats, the habitat to be impacted upon is considered to be of **Low Potential** for foraging and commuting bats.

4.4 Badgers

4.4.1 Pre-existing Information

HBIC returned 8 records of Badger (*Meles meles*) presence from within the 1 km search radius.

4.4.2 Site Assessment

The tree lines and hedgerows on site provide suitable commuting habitat for Badgers with the garden areas also providing suitable foraging habitat. In addition to this, evidence of possible foraging Badgers was noted within the garden to be impacted upon by the proposals (**Fig 12**). Beyond this, no evidence of Badgers was noted within the wider site area. That being said, given the woodland and grassland habitats surrounding the site, there is **Moderate Potential** for Badgers to be foraging within the property. It is also possible that other mammals such as Hedgehogs may also be present within the site.

Figure 12. View of the possible Badger foraging evidence on site (taken April, 2024)



4.5 Reptiles

4.5.1 Pre-existing Information

HBIC returned records for Slow Worm (*Anguis fragilis*, 4 records) and Common Lizard (*Zootoca vivipara*, 1 record) from within the 1 km search radius. The closest record returned was Slow Worm from 2015, located 160m south of site within Telegraph Woods.

4.5.2 On site Habitat Assessment

The majority of the garden had been recently managed, however if garden had been left unmanaged this would have supported a tussocky and varied sward height needed by foraging and sheltering reptiles (Edgar et al., 2010), such as indicated within the northern portion of site (**Fig 4**). It can also be considered that the dense scrub offers some potential for reptiles although due to its very limited structure the scrub would lack the variety of thermal niches typically required by reptiles. In addition to this, a brash pile was located in the northern portion of site, which would be considered suitable for reptiles (**Fig 13**). Therefore, it is considered that there is **Low Potential** for common reptile species to be present across site.

NB However if the managed garden is to be left unmanaged it would be Moderate Potential for common reptile species.

Figure 13. View of the brash pile located along the northern boundary of site (taken April, 2024).



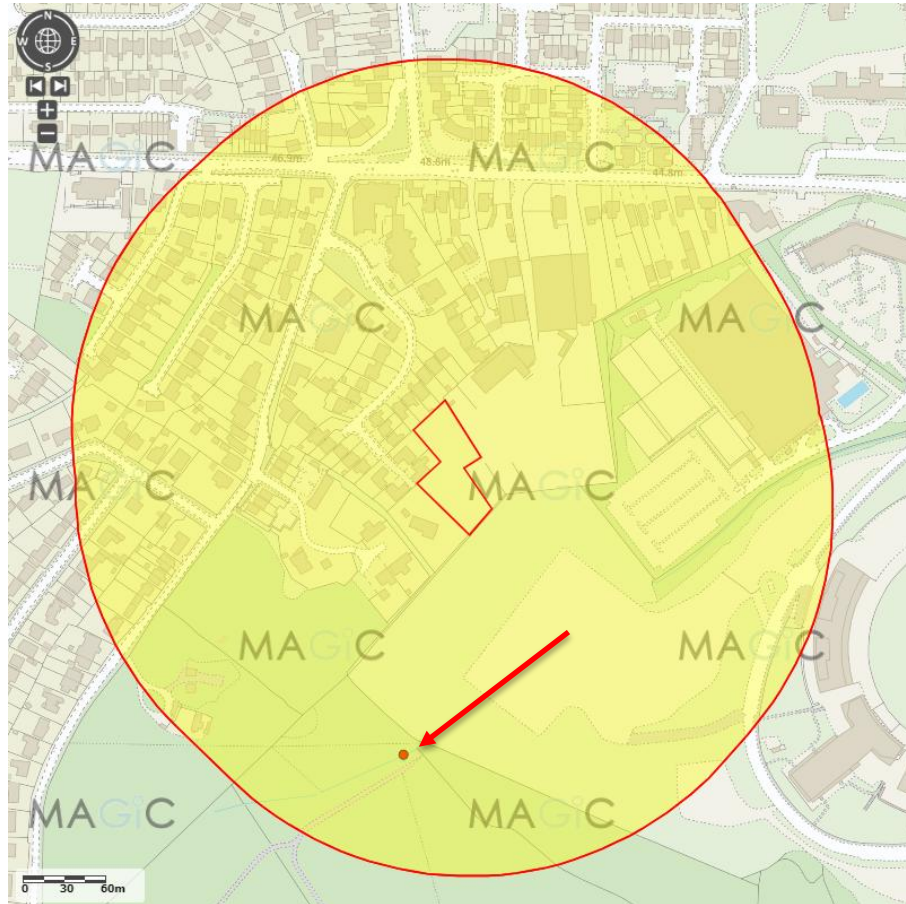
4.6 Great Crested Newts

4.6.1 Pre-existing Information

HBIC did not return any records of GCN presence from within the 1 km search radius.

4.6.2 Water Bodies Within 500 m

A single waterbody is located within 250m of the site, located approximately 170m to the south of site (**Fig 14**).

Figure 14. View of the water bodies located within 250m of site (Magic Maps, 2024).

4.6.3 Habitat Suitability Index

The pond located approximately 170m south of site ("Pond 1") (Figs 14 & 15) was subject to an HSI assessment. This was to assess the suitability for the waterbody to support GCN. The results of this are provided below in **Table 3**.

Table 3. The results of the HSI carried out on the pond located 170m south of site.

Suitability Indices	Criteria Selected	Score Awarded	Notes
Location	Zone A	1	
Pond area	<50m ²	0.05	<i>Estimated</i>
Pond drying	Rarely Dries	1	
Water quality	Poor	0.33	
Shade	86-90%	0.4	
Waterfowl	Absent	1	
Fish	Absent	1	
Ponds within 1km	7	0.85	
Terrestrial habitat quality	Good	1	
Macrophytes	31-35%	0.65	
HSI Score 0.5704 "Below Average"			

Pond 1 scored a **0.5704** in the HSI, giving it the suitability level “**Below Average**” for supporting a GCN population (as per ARG, 2010).

Figure 15. View of Pond 1 located within the woodland 170m south of site (taken April, 2024).



4.6.4 Site Assessment

The proposals for the development are to be undertaken within the **amber impact zone** for GCN under the District Licencing scheme, which determines there is suitable habitat where GCN are likely to be present.

Similar to reptiles, the site can be considered largely unsuitable for GCN due to the frequently managed garden, which does not provide the required structure and heterogeneity by GCN. That being said, the unmanaged garden and dense scrub could offer sheltering and foraging opportunities for GCN. However, taking into consideration no records of GCN were returned within 1 km, a single waterbody within 250m which returned “below average” HSI result and the limited habitat suitability on site, the site can be considered to have **Negligible Potential** for GCN.

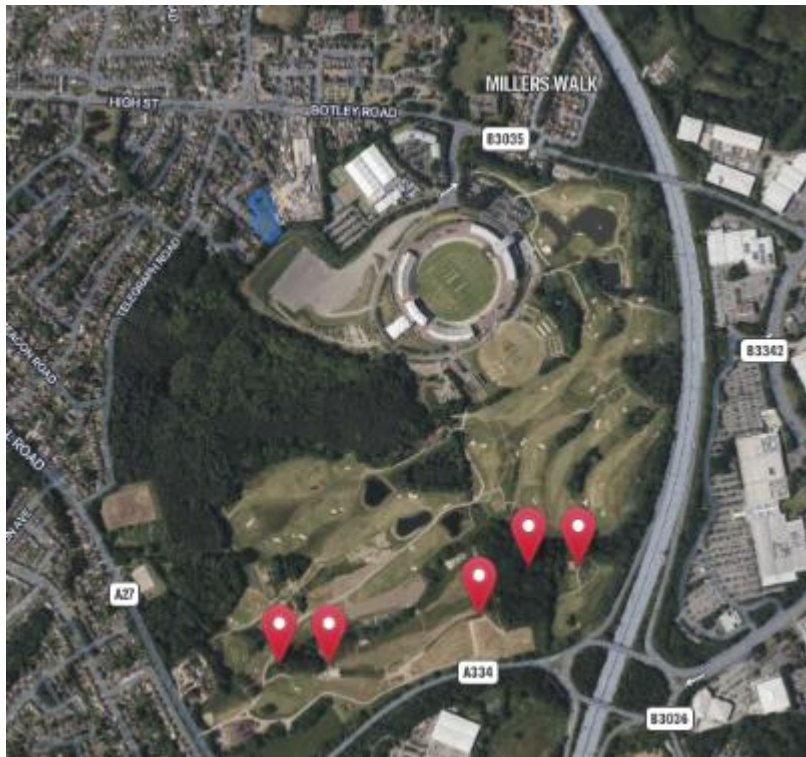
4.7 Hazel Dormouse

4.7.1 Pre-existing Information

HBIC provided 7 records of Dormouse presence for within the 1 km search radius with the locations of these records shown in **Fig 16** below.

In addition, a granted European Protected Species Licence (EPSL) for Dormouse was granted approximately 0.84km to the south-east of site under **EPSM2012-4209** and **2014-636-EPS-MIT**
NB The habitat on site is not contiguous with this granted EPSL.

Figure 16. The locations of the Dormouse records as provided by HBIC within 1 km of the site.



4.7.2 Site Assessment

The line of trees along the southern boundary can be considered to provide suitable habitat for Dormouse as it is well established and formed by a variety of different native species of known benefit to Dormice (e.g. Oak, Bramble and Holly as per Bright et al., 2006). The northern line of trees is less established and is only connected to the southern boundary from the non-native and ornamental *Leylandii* hedgerow. The northern hedgerow benefits from linkages into a wider network of Telegraph Woods and small copses associated with the neighbouring golf course. Whilst there are Dormouse records also provided by HBIC, it is understood the boundary habitats, particularly the southern boundary, is being retained. Therefore, the habitats to be impacted upon by the proposals are considered to be **Low Potential** for Dormouse.

4.8 Notable and Birds of Conservation Concern (BoCC)

4.8.1 Pre-existing Information

HBIC returned a high number of records of birds of conservation concern within 1 km of the site including a number of records for red listed species including but not limited to Fieldfare (*Turdus pilaris*), Hawfinch (*Coccothraustes coccothraustes*), Lapwing (*Vanellus vanellus*), Lesser Spotted Woodpecker (*Dryobates minor*), Marsh Tit (*Poecile palustris*), Nightingale (*Luscinia megarhynchos*), Redwing (*Turdus iliacus*), Spotted Flycatcher (*Muscicapa striata*), Whimbrel (*Numenius phaeopus*), Whinchat (*Saxicola rubetra*), Woodcock (*Scolopax rusticola*) and Yellow Wagtail (*Motacilla flava*).

4.8.2 Site Assessment

The hedgerows, scrub and line of trees areas on-site provide ideal nesting habitat for nesting and foraging birds. The site is also situated within a surrounding environ that provides a mosaic of habitats, including woodland, grassland and hedgerows, providing ideal foraging habitat for any nesting or breeding birds using the site. Due to the large quantity of notable bird records and the suitable breeding and nesting bird habitat within and surrounding the site, the site is considered to be of **Low Potential** for nesting and breeding birds.

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

5.1 Introduction

The CIEEM guidelines (CIEEM 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

5.2 Site Preparation and Construction

5.2.1 Impacts to Habitats

The proposals will predominantly involve the loss of the vegetated garden habitat with this considered to be of value at the **Site** level of significance. The proposals will also entail the loss of small areas of scrub which is considered to be of **Local** value as well as taking place adjacent to retained hedgerows and line of trees (construction works could result in both direct (noise, dust, water pollution) and indirect (roost zone compaction) impacts). The loss or damage to these habitats and potential indirect effects would have a **moderate adverse impact** to habitats of **Local** value.

5.2.2 Impacts to Wildlife

The proposed works involve groundworks and the creation of some excavations. This may lead to the potential for Badgers and Hedgehogs becoming trapped or injured during the works. Therefore, in the absence of mitigation an **adverse impact is possible** at the **Local level**.

The proposed plans would involve the stripping of the unmanaged grass of the garden and scrub vegetation on site which has been assessed as offering suitable habitat for reptiles. This has the potential to cause harm, or even death of common reptile species which may be present on site. Therefore, in the absence of mitigation and **adverse impact is possible at the local level**.

The proposed works may involve the loss of some of the scrub/hedgerows on site. This could lead to the disturbance, harm or even death of any Dormice within these habitats. Therefore, in the absence of mitigation an **adverse impact is possible** at the **local level**.

The proposed works could result in the disturbance of nesting birds and damage to their nests if conducted during the nesting season as the works are in close proximity of suitable breeding and nesting habitat. Therefore, it is considered an **adverse impact is possible** at the **site level**.

5.3 Site Operation

5.3.1 Impacts to Wildlife

The development will result in an increase in lighting within the general area from street lights and external lights on the new houses. This can affect the behaviour, particularly foraging, of nocturnal wildlife. Therefore, an **adverse impact is likely** on Badgers and bats.

5.3.2 Impacts to Designated Sites

5.3.2.1 Solent Area SPA

The development will take place within the 5.6 km 'disturbance zone' for the Solent and Southampton Water SPA and Ramsar. It is Natural England's advice that all net increases in residential development within the 5.6km 'Zone of Influence' are likely to have a significant effect on the SPA either alone or in-combination with other development. As such the increase in visitor numbers would have **a likely adverse impact** to features of **international significance**.

The site is located within the recreational zone of influence 13.6km buffer for New Forest SAC. The proposals involve a net gain in dwellings and therefore will result in possible increased visitor pressure to the SPA's. Therefore, there will be **an adverse impact to features of international value**.

6.0 RECOMMENDATIONS

6.1 Introduction

The below sections outline a number of recommendations for further survey work required to fully assess the potential ecological impacts of the development and ensure proposed mitigation and compensation is appropriate and proportionate. In addition to this, measures are outlined to protect the existing features of value and provide enhancements post development.

6.2 Bats

6.2.1 Foraging and Commuting

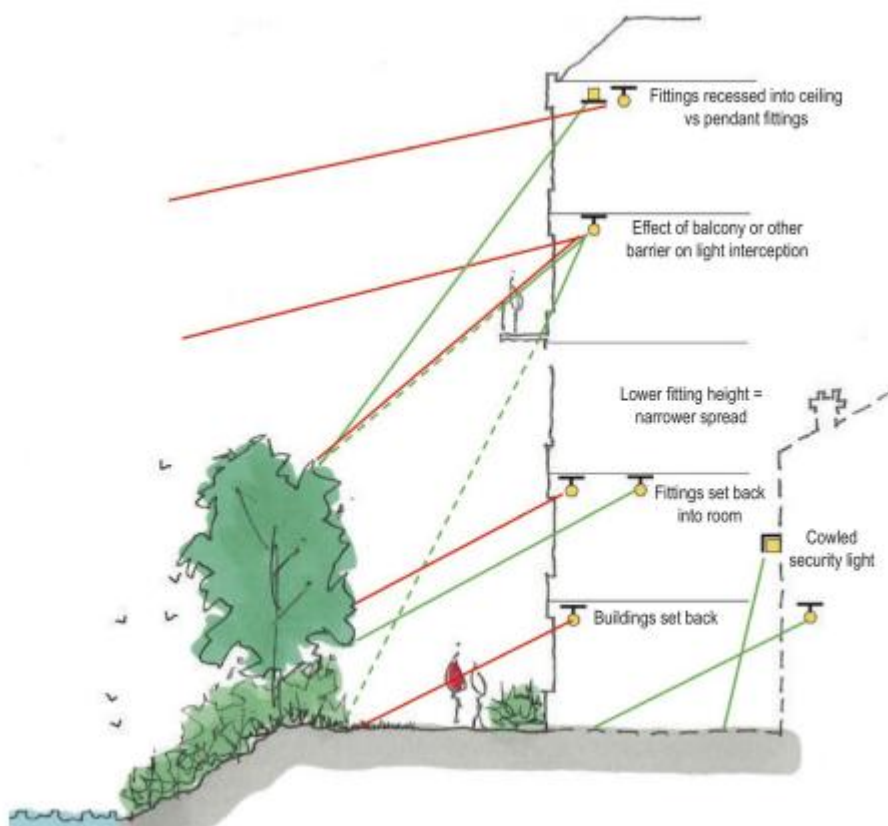
It is recommended that any new lighting installed on the dwellings, or the lighting used during construction, complies with the following document (*Guidance Note 08/23 Bats and Artificial Lighting at night*) produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT). This document outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats. The key recommendations within this document have been outlined below and will be implemented as far as is practicable.

'Light sources, lamps, LEDs and their fittings come in a myriad of different specifications which a lighting professional can help to select. However, the following should be considered when choosing luminaires and their potential impact on Key Habitats and features:

- *All luminaires will lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used*
- *LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability*
- *A warm white light source (2700Kelvin or lower) will be adopted to reduce blue light component*
- *Light sources will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)*
- *Internal luminaires can be recessed (as opposed to using a pendant fitting - See **Figure 17**) where installed in proximity to windows to reduce glare and light spill*
- *Waymarking inground markers (low output with cowls or similar to minimise upward light spill) to delineate path edges (see Case Study 1)*
- *Column heights will be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards*
- *Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered - See ILP GN01*
- *Luminaires will always be mounted horizontally, with no light output above 90° and/or no upward tilt*

- Where appropriate, external security lighting will be set on motion sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate
- Use of a Central Management System (CMS) with additional web-enabled devices to light on demand Use of motion sensors for local authority street lighting may not be feasible unless the authority has the potential for smart metering through a CMS
- The use of bollard or low-level downward-directional luminaires is strongly discouraged. This is due to a considerable range of issues, such as unacceptable glare, poor illumination efficiency, unacceptable upward light output, increased upward light scatter from surfaces and poor facial recognition which makes them unsuitable for most sites. Therefore, they should only be considered in specific cases where the lighting professional and project manager are able to resolve these issues. See Case Study 6
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. However, due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely'

Figure 17. Internal lighting mitigation options (ILP 2023)



6.3.2 Roosting

It is not yet known which trees on site will require removal or remedial works to facilitate the proposals. Therefore, it is recommended that an updated PRA is undertaken once any tree removal needs have been identified. A more detailed PRF inspection survey may be required, including tree climbing and use of an endoscope to characterise the PRF's present.

6.3 Badgers

During the construction phase, any open excavations left overnight should either be covered to prevent commuting Badgers falling in or escape ladders should be used to prevent them from becoming trapped. Any open pipework should be checked and then capped nightly.

6.4 Reptiles

The unmanaged grass of the garden and scrub areas on site have been assessed as having the potential to support common reptiles. ***It is therefore recommended that an updated reptile presence/likely absence survey be completed.*** This would involve the laying of artificial refugia within areas of suitable habitat and checking the refugia on seven occasions between March and mid-October (optimal survey season April, May and September) in suitable weather conditions. Should reptiles be present it is recommended that wherever possible suitable habitats are retained and protected during works, with exclusion fencing used if necessary to ensure reptiles cannot enter the construction area. Translocation of reptiles out of the construction area may also be necessary (likely to be present based on current layout).

6.5 Breeding & Nesting Birds

To ensure the works do not affect any breeding / nesting birds, clearance of hedgerow / scrub will be undertaken outside of the core breeding / nesting season (March – August). Should this not be possible, any habitat removal will first be subject to a thorough check by a Suitably Experienced Ecologist (SEE) and if any nests are found, these will be subject to a 5m buffer. The nests will need to be checked and once the SEE is satisfied the chicks have fledged and the nests no longer active, works can proceed.

6.9 Hazel Dormice

Taking into consideration the limited suitable Dormouse habitat on site, it is considered should any vegetation require removal a precautionary method statement approach would be the most pragmatic means. This would entail the following:

Prior to clearance commencing, 5 Dormouse nest boxes will be installed through the retained hedgerow northern boundary or the edge of the Romford bridge copse SNCI, to increase the carrying capacity of the retained habitats for Dormice. These will also act as receptors for any Dormice found during the sensitive clearance works (outlined below). All habitat clearance will adopt the following methodology:

- Fingertip search of all vegetation to be cleared, by the licenced ecologist, immediately prior to clearance commencing (on the same day and every day clearance occurs). ***If any Dormice are found, works will cease and Natural England consulted.***
- The licenced ecologist will deliver a toolbox talk to the vegetation clearance contractors, detailing the sensitive measures required. The ecologist will then

supervise all vegetation clearance. No clearance will be undertaken without the supervision of the ecologist.

- Hand tools will be utilised to sensitively cut vegetation down to ground level in a single stage. This will be undertaken in a directional fashion to passively encourage Dormice to move away from the works area towards retained, suitable habitats (i.e. towards Telegraph Woods woodland). All arisings will be moved away from the cleared areas immediately to an area of within the central part of the site and will then be chipped and immediately removed from site.
- In the unlikely event of any Dormice being discovered (within areas where they cannot be let in situ), they will be moved (along with their nest) into one of the nest boxes.
- Ideally no more than 50 m² of habitat will be cleared in a single day, up to a maximum of 2500 m² in line with limitations of European Protected Species Licenses (EPSLs) issued by Natural England and works will take place during mid-April - mid-May or during October to avoid the breeding period (but ensure works are done during a time when Dormice are active).

6.7 Biodiversity Net Gain

In line with the requirements of delivery a 10% gain as per the Environment Act (2021), a BNG assessment of the development will need to be undertaken to support the scheme. This will need to account for trading rules and may require an off-site scheme in order to be used to achieve a 10% gain. The results of this along with baseline habitat condition assessment sheets and a post development targeted habitats map will be provided as a stand alone document.

6.8 Nitrate Neutrality

To ensure the scheme does not adversely affect the Solent area designated sites through an increase in nitrate loading, a nitrogen budget calculation will need to be undertaken with credits purchased to offset this as required.

6.9 Designated Sites

6.9.1 Solent SPA 'Zone of Influence' for Recreation

The site lies within the vicinity of the recreational zone of influence for the Solent & Southampton Water SPA. In order to mitigate for the likely increases in residential pressure upon this SPA, due to the high densities of wildfowl and waders for which the area is predominantly protected, the Solent Recreation Mitigation Strategy (SRMS) has been introduced in collaboration with Natural England, comprising a partnership of all local councils. Mitigation towards the SPA must be provided for all new recreational developments within the 5.6km disturbance zone of the SPA.

The simplest method of providing a necessary suitable and appropriate level of mitigation towards the SPAs associated with the Solent is via financial contributions. These contributions are used to enable the continued use of the coastline in a way that reduces the risks to the bird species of international importance that use the area, for example funding a team of

rangers and implementing initiatives to encourage responsible dog walking (Solent Recreation Mitigation Partnership, 2014). It is considered that the contribution, in compliance with the recommendations presented within the SDMP, provides a suitable level of mitigation for the potential adverse impacts associated with the proposed scheme upon the Solent SPA.

The contributions from 1st April 2025 are as follows:

- 1 bedroom property £482
- 2 bedroom property £696
- 3 bedroom property £907
- 4 bedroom property £1067
- 5 bedroom property £1251
- Flat rate £805

Therefore, a contribution will be made either prior to planning permission being granted, by completing the Agreement and sending the completed form along with mitigation contribution to the Planning Agreements Officer at the Local Planning Authority or by completing a Unilateral Undertaking before planning permission is granted with the per dwelling payment made before the development is implemented.

6.9.2 New Forest SAC

Policy ENV1 in the Local Plan requires mitigation for potential recreational impacts to The New Forest SAC for development within the district. As this development is under 50 new dwellings this mitigation can be provided financially. This contribution will go towards the provision of new green spaces and the enhancement of existing green spaces and walking routes, including long-term maintenance and management costs. The rolling supply of projects will be maintained by the Council.

6.10 Enhancements

6.10.1 Birds

To act as biodiversity enhancement, Swift bricks will be incorporated into the new dwellings in a 1:1 ratio to the number of units (8 No). The 'CJ Wildlife Swift maxi nesting box' (**Fig 18**) with entrance via a CJ Wildlife 'Cambridge Swift full-face brick' will be used (The Cambridge System is a concept comprising an entrance piece and a nest box embedded in the cavity and inner leaf. It is particularly suited to gable ends at roof-space level). If this model is not suitable for the building specifications, an alternative swift box with internal floor space exceeding 400cm squared must be used

Figure 18. A schematic of how the Cambridge full face Swift brick leads into a cavity created by the prior installation of the Swift maxi nesting box.



6.10.2 Bats

50% of the newly built dwellings will also have Ibstock bat bricks (**Fig 19**) integrated within the external brick work (4 No). These features are entirely self-contained and available in a variety of different colours to match different construction materials. They should ideally be placed on an elevation which will benefit from some degree of sunlight exposure and be located away from windows.

Figure 19. Ibstock bat brick 'B' which will be integrated into the 50% the new dwellings on-site.



6.10.3 Hedgehogs

To ensure permeability for small mammals across the site, the garden fences of the properties will ensure at least 2 gaps are present within the gravel boards / bases of each fence line to allow for movement of Hedgehogs between gardens and into the wider area. The gaps should be at least 15 cm high by 15 cm wide with permeability for small mammals.

Small signage could be installed at these points to ensure they remain open upon completion of the development. The People's Trust for Endangered Species provide such signage, the purchase of which also supports conservation efforts (**Fig 20**).

Figure 20. Example of Hedgehog Highway signage to be placed above fence gaps provided to allow movements between gardens.



In addition to the above, the retained buffer on site along the southern boundary will incorporate 2 No Hedgehog homes (**Fig 21**) (such as the Igloo Hedgehog home or Hogitat Hedgehog house). This will be provided within or adjacent to areas of retained trees / shrubs and will provide a rapidly declining species with a place to shelter / hibernate.

It is recommended that the hedgehog homes are maintained in perpetuity to ensure they remain suitable for use by Hedgehogs. The hibernation period for Hedgehogs typically spans from October – April, therefore it is recommended that the hedgehog homes are inspected every year in mid to late-April, after hibernation but prior to the nesting period. During these inspections the hedgehog homes should be checked for any damage and replaced/repared where necessary.

Additionally, the hedgehog homes should be cleared of any old nesting material and would be beneficial to be replaced with fresh, dry hay. The hedgehog homes should be placed back in their original location, unless the hedgehog homes have been interfered with by the public or not utilised by any Hedgehogs, an alternative discrete location should be considered.

Figure 21. Example of the Igloo Hedgehog Home.



3.10.4 Invertebrates

To increase opportunities for invertebrates within the site, each of the dwellings will incorporate 1 No insect brick (at least 8 No) (**Fig 22**). These will be located adjacent to retained / planted vegetation wherever possible to increase the likelihood of them being used. The brick can be used in place of a standard brick and provides cavities for solitary bee species such as Red Mason bees (*Osmia bicornis*) or Leafcutter bees (*Megachile* sp.), both non-aggressive native species. The bricks should be placed in a sunny location at a minimum height of 1m. It is highly recommended the brick is placed in a location where landscaping will include nearby pollinator-friendly plants.

Figure 22. Bee Bricks (NHBS)



7.0 CONCLUSION

A Preliminary Ecological Appraisal was undertaken of the site known as 'Orchard Mews' in relation to the proposed residential development on site. The site was identified to have potential for reptiles so further surveys have been recommended. As well as this the site was found to be of potential for Hazel Dormice, breeding and nesting birds and foraging and commuting badgers so precautionary methods have been recommended for the works to ensure no impacts to these protected species occur. Finally, a number of ecological features have been recommended to enhance the sites value for wildlife and increase biodiversity in the local area.

8.0 REFERENCES

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Legend

- Site Boundary
- g4 - modified grassland
- h3 - dense scrub
- ▨ u1 - built-up areas and gardens
- ▨ u1b - developed land. sealed surface
- u1b5 - buildings
- Line of Trees
- - - Ornamental Hedgerow
- Secondary Codes:
 - Scattered Trees - 32
 - Line of Trees - 33
 - Frequently Mown - 108
 - Unmanaged - 521
 - Vegetated Garden - 828



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Map	Appendix A - UKHabs Plan
Site	Orchard Mews, West End
Client	Macra Ltd
Date	29/07/2025

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