

## **Garden Entrance, Honey Cottage, Clock Tower Cafe and Village Centre, Leonardslee Lakes and Gardens, West Sussex**

### Preliminary Ecological Appraisal

Report for Leonardslee Lakes and Gardens

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# Executive Summary

Temple was commissioned by Leonardslee Lakes and Gardens in February 2024 to carry out a collective Preliminary Ecological Appraisal (PEA) of four areas within the Leonardslee Lakes and Gardens Estate: 'Garden Entrance', Honey Cottage, Clock Tower Cafe and 'Village Centre'. The appraisal was carried out to provide ecological information to inform a detailed planning application for various Estate updates associated with the above proposed areas. This appraisal considers land within the planning application site boundary (henceforth referred to as 'the Site') as indicated on the plan provided by the client (Purcell, 2023a, b and c).

- The Site comprised four survey areas: 'Garden Entrance', Honey Cottage, Clock Tower Café and 'Village Centre'. All four survey areas formed part of the wider Leonardslee Lakes and Gardens Estate, a garden open to the public.
- The four survey Sites are not subject to any international or national statutory nature conservation designations. No internationally important sites are located within a 15km radius of the proposed development Sites. No nationally designated sites are located within 2km of the Sites.
- The Sites are included within the Sussex Biodiversity Opportunity Area (BOA) strategy. A single non-statutory designated site, Old Deer Park Local Wildlife Site (LWS) is located within 2km of the Sites (see Table 3.1). See Appendix 1, Figure 3 for local designated sites map.
- Habitats present are considered of importance within the immediate vicinity of the Site only but may assume higher where they support protected and/or notable species.
- The Sites had suitability to support the following protected and/or notable species;
  - Commuting and foraging bats;
  - Both notable and invasive plant species;
  - Both Schedule 1 and common and widespread bird species;

- Herpetofauna including great crested newts and common and widespread reptile species;
- Terrestrial invertebrates; and,
- Mammal species such as hazel dormouse, [REDACTED] and European hedgehog.

Where possible on the basis of information available to date, recommendations to enhance the importance of the Site for biodiversity in accordance with the Environment Act 2021 and national and local planning policies, have been provided. These include woodland management to reduce the presence of invasive non-native species and promote ground vegetation growth and planting native species of a local provenance on Site.

# 1 Introduction

## BACKGROUND TO COMMISSION

- 1.1 Temple was commissioned by Leonardslee Lakes and Gardens in February 2024 to carry out a collective Preliminary Ecological Appraisal (PEA) of four areas within the Leonardslee Lakes and Gardens Estate: 'Garden Entrance', Honey Cottage, Clock Tower Cafe and 'Village Centre'. The appraisal was carried out to provide ecological information to inform a detailed planning application for various Estate updates associated with the above proposed areas. This appraisal considers land within the planning application site boundary (henceforth referred to as 'the Site') as indicated on the plan provided by the client (Purcell, 2023a, b and c).
- 1.2 An Arboricultural Impact Assessment (AIA) and Arboricultural Method Statement (AMS) is being produced by Temple concurrently for the four areas and the corresponding reports and plans should be read in conjunction with this report.

## DEVELOPMENT PROPOSALS

- 1.3 The development proposals for the Site, based on current plans provided by the architect (Purcell, 2023 a and b) and information contained within an email received from Purcell on the 22<sup>nd</sup> March 2024, include:
  - 'Garden Entrance' – *"A new unified level access route is proposed for all visitors, which will assist in wayfinding and enable anyone wishing to enter the gardens to feel welcomed and not directed to a separate path should they have level access requirements. The new gardens entrance will use an established path which will be slightly altered to meet level accessibility requirements and avoid any established trees."* G22, an area of mixed ornamental shrub will be removed to facilitate the development of the new proposed access route.

*The new ticket kiosk structure will form a new gateway from the publicly accessible areas through to the gardens and to the new children's play area. This will be a*

*focus for visitors to purchase their tickets, consider becoming members, and will be a destination at the end of the new 'High Street'. No established trees are to be removed to facilitate development, just a section of low-quality mixed vegetation (G14). The new structure is at an early concept design stage, but it is intended to be sensitive to its setting and is proposed to utilise natural materials as opposed to any solid mass concrete foundations. The kiosk is a lightweight structure designed to sit above the existing landscape level so as not to disturb roots".*

- Honey Cottage – *"Replace modern conservatory with new stone walls to match the existing facade, with a solid slate roof to create entrance porch and create an all year-round living area, insulated to modern building regulations". This will impact upon areas of modified grassland during the construction phase only and will require the removal of T107 and H2 which abuts the Site to the west.*
- Clock Tower Café – *"Raised timber viewing terrace to the East overlooking the gardens. Two trees will be removed to facilitate development: T118 & 119. The terrace will be erected on posts with a permeable surface allowing water penetrations so as to minimise further disruption to the surrounding shrubs and trees." G15, an area of mixed ornamental shrub will also be removed to facilitate development.*
- 'Village Centre' – *"The primary design move for the ancillary buildings is to create a landscaped intervention which allows visitors to regroup at a central location between the main house, ancillary buildings & gardens." This will include some restructuring of the existing landscaped areas and require the removal of some ornamental shrubs and trees including T97, T98, T122 – T125, partial removal of G13 and G16.*

## **RELEVANT LEGISLATION AND PLANNING POLICY**

1.4 The following key pieces of nature conservation legislation are relevant to this appraisal. A more detailed description of legislation is provided in Appendix 5:

- The Conservation of Habitats and Species Regulations 2017 (as amended) (commonly referred to as the Habitats Regulations);

- Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities Act 2006;
- Environment Act 2021;
- [REDACTED]
- Wild Mammals (Protection) Act 1996.

- 1.5 The National Planning Policy Framework (Department for Levelling Up, Housing & Communities, 2023) requires public authorities to contribute to and enhance the natural and local environment including by minimising impacts on and providing net gains for biodiversity when taking planning decisions. The Environment Act, 2021 has strengthened the duty to conserve biodiversity within the Natural Environment and Rural Communities Act 2006, such that all public authorities are required to conserve and enhance biodiversity.
- 1.6 Other planning policies at the local level of relevance to this development include the Horsham District Local Plan 2021- 2038 and The High Weald Area of Outstanding Natural Beauty (AONB) Management Plan 2019-2024. Further information is provided in Appendix 6.

### **SCOPE OF THE REPORT**

- 1.7 The aim of this appraisal is to provide baseline ecological information about the four survey areas within the Leonardslee Lakes and Gardens Estate. This will be used to identify any potential ecological constraints associated with the proposed developments and/or to identify the need for additional survey work to further evaluate any impact that may risk contravention of legislation or policy relating to protected species and nature conservation.
- 1.8 Where possible, this report outlines any avoidance, mitigation, compensation and enhancement measures as may be required to ensure compliance with legislation and policy. Although enhancement measures may be used to achieve a net gain in

biodiversity in line with national and local planning policies, this does not comprise a formal Biodiversity Net Gain assessment and no metric calculations have been made. A formal Biodiversity Net Gain assessment and metric calculations will be provided in a separate report.

1.9 This appraisal is based on the following information sources:

- a desk study of the Site and land within a 2km surrounding radius;
- a search for international wildlife sites within a 15km surrounding radius;
- a UK Habitat Classification survey (UK Habitat Classification Working Group, 2018) of the Site to identify and map the habitats present;
- a Species Assessment of the Site to identify features with potential to support legally protected and/or notable species including those defined by Section 41 of the NERC Act 2006 as Species of Principal Importance;
- an evaluation of the Site's importance for nature conservation; and,
- an AIA and AMS report for each area produced by Temple (2024).

1.10 This appraisal has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2017) and as detailed in British Standard 42020:2013 *Biodiversity - Code of Practice for Biodiversity and Development* (BSI, 2013).

1.11 The survey, assessment and report were conducted and written by Francesca West, BSc (Hons) MRes, ACIEEM pending, an experienced ecologist with eight years' experience who is trained and competent in carrying out UKHab classification surveys and protected species assessment.

1.12 Habitat maps of the Site are presented in Appendix 1 with a botanical species list of plants recorded in Appendix 2 and target notes for features too small to map in Appendix 3. Photographs of the site are presented in Appendix 4 and Habitat

Condition Assessment forms (in accordance with Panks *et al.*, 2022) are replicated in Appendix 5.

## **SITE CONTEXT AND STATUS**

1.13 The Site comprised four survey areas, 'Garden Entrance', Honey Cottage, Clock Tower Cafe and 'Village Centre'. Honey Cottage, a private residential property, forms part of a U-shaped former carriage house and stables that is currently in use as the Clock Tower café. The garden space, to the south of Honey Cottage and area of woodland to the east of the Clock Tower Café were subject to the PEA survey. Both the 'Garden Entrance' and 'Village Centre' comprised ornamental shrubs and trees. The site of the proposed 'Garden Entrance' was located within an area of parkland and woodland whilst the site of the proposed 'Village Centre' bordered the existing car park to Leonardslee House.

1.14 All four survey areas are situated within Leonardslee Lakes and Gardens, a 97ha Grade I Listed landscaped garden with large lakes, a vineyard, recreational facilities and areas of woodland that is open to visitors all year round. Leonardslee Lakes and Gardens comprises a steep sandstone valley and seven man-made lakes interconnected with woodlands, scrub and landscaped woodland gardens adjoining.

1.15 Areas of Ancient & Semi-Natural Woodland, Ancient Replanted Woodland, Deciduous Woodland, Wood-Pasture and Parkland and Lowland Heathland are present within the wider Leonardslee Lakes and Gardens Estate. The Gardens are bordered by a busy 'A' road to the west, but the wider landscape stretching from the Estate boundary comprises areas of agricultural land bordered by hedgerows, woodland and residential properties. It lies in a rural area north of Crabtree, Lower Beeding and is within the Horsham District of West Sussex. Haywards Heath sits approximately 10km to the east and Horsham approximately 5km to the north-west.

## NOMENCLATURE

1.16 A botanical species list, including scientific names in accordance with Stace (2019), is provided in Appendix 2. Common names of species, in accordance with the Natural History Museum Species Dictionary (Natural History Museum (2022), are used throughout this report with scientific names given at first mention only for fauna.

## 2 Methodology

### DESK STUDY

2.1 The following data sources were reviewed to provide information on the location of statutory designated sites<sup>1</sup>, non-statutory designated sites<sup>2</sup>, legally protected species<sup>3</sup>, Species and Habitats of Principal Importance<sup>4</sup>, and other notable species<sup>5</sup> and habitats<sup>6</sup> that have been recorded within a [2-15km] radius of the wider Leonardslee Gardens Estate:

- Sussex Biodiversity Record Centre (SxBRC), the local Biological Records Centre, principally for species records and information on non-statutory sites;
- MAGIC (<http://www.magic.gov.uk/>) - the Government's on-line mapping service; and
- Ordnance Survey mapping and publicly available aerial photography.

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<sup>1</sup> **Statutory designations** include Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites (referred to collectively as National Site Network sites in England), National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR).

<sup>2</sup> **Non-statutory sites** are designated by local authorities (e.g. Sites of Importance for Nature Conservation or Local Wildlife Sites).

<sup>3</sup> [REDACTED]

<sup>4</sup> **Species/Habitats of Principal Importance** are those defined by Section 41 of the Natural Environment and Rural Communities Act, 2006.

<sup>5</sup> **Notable species** include Species of Principal Importance under the Natural Environment and Rural Communities Act 2006; Local Biodiversity Action Plan (LBAP) species; Birds of Conservation Concern (Stanbury *et al.* 2021); and/or Red Data Book/nationally notable species (JNCC, undated).

<sup>6</sup> **Notable habitats** include Habitats of Principal Importance under the Natural Environment and Rural Communities Act, 2006; those included in an LBAP; Ancient Woodland Inventory sites; and Important Hedgerows as defined by the Hedgerow Regulations 1997.

2.2 A summary of key records provided by the desk study is presented in Section 3 of this report. All records have been used to inform the assessment of the potential for protected or otherwise notable species to be present at the Site to provide a preliminary view of the Site's ecological importance, but these are not presented in full in the report.

## **HABITAT SURVEY**

2.3 A habitat survey of the Site was carried out on the 28 February 2024 in overcast, cool conditions. It covered the three areas within the Leonardslee Estate including boundary features. Habitats were described and mapped following standard UKHabs Classifications Version 2.0 (UK Habitat Classification Working Group, 2023) and marked on a paper base map and subsequently digitised using ESRI ArcGIS software. Habitats were also assessed against descriptions of Habitat of Principal Importance as set out by the UK Habitat Classification where appropriate.

2.4 As a formal Biodiversity Net Gain (BNG) assessment is required, the habitats on Site are described using UK Habitat Classifications (UK Habitat Classification Working Group, 2018) for the purposes of calculating the preliminary baseline units – see Table 3.3. The condition of each of these habitats on Site has been recorded in line with the Statutory Metric (Defra, 2024) with condition assessment forms presented in Appendix 5.

2.5 Records for dominant and notable plants are provided, as are incidental records of birds and other fauna noted during the course of the habitat survey. The latter have been used to justify the potential presence of important ecological features where applicable.

2.6 The Site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); however, detailed mapping of such species is beyond the scope of this commission and locations on the habitat plan are indicative only.

2.7 Target notes are used to provide information on specific features of ecological interest [REDACTED] or habitat features that were too small to be mapped (Appendix 3).

### **PROTECTED AND INVASIVE SPECIES ASSESSMENT**

2.8 The suitability of the Site for legally protected species was assessed on the basis of relevant desk study records<sup>7</sup> combined with field observations from the habitat survey. The likelihood of the habitat(s) supporting protected and/or notable species was ranked on a scale from 'negligible' to 'present' as described in Table 2.1.

2.9 The assessment of habitat suitability for protected or notable species was based on professional judgement drawing on experience of carrying out surveys of a large number of urban and rural sites and best practice survey guidance.

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<sup>7</sup> Primarily dependent on the age of the records, distance from the site and types of habitats at the site.

**Table 2.1: Protected species assessment**

Category	Description
Present	Presence confirmed by the current survey or by recent and/or desk study records.
High	Habitat present provides all of the known key requirements for a given species/species group. Local records are provided by desk study. The Site is within or close to a national or regional stronghold for a particular species. Good quality surrounding habitat and good connectivity.
Moderate	Habitat present provides some of the known key requirements for a given species/species group. Several desk study records and/or the Site are within known national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, barriers to movement and disturbance.
Low	Habitat present is of relatively poor quality for a given species/species group. Few or no desk study records. Presence cannot be discounted on the basis of national distribution, nature of surrounding habitats or habitat fragmentation.
Negligible	Habitat is either absent or of very poor quality for a particular species or species group. No desk study records. Surrounding habitat unlikely to support wider populations of a species/species group. Outside or peripheral to the known range of a species.

2.10 The findings of this assessment help establish the need for protected species surveys. Surveys may be required where a site is judged to be of suitability for a particular species/ species group even if that suitability is deemed to be Low - this is particularly the case where there the risk of contravening the relevant conservation legislation is unknown or cannot be quantified on the basis of the information available. However, in some cases there may be opportunities to ensure compliance with the legislation without further survey through precautionary measures prior to and during construction.

## SITE EVALUATION

2.11 Where sufficient baseline data are available, the Site's ecological importance has been evaluated broadly following guidance issued by CIEEM (CIEEM, 2018) which ranks the nature conservation importance of a site according to a geographic scale of reference: international, national, regional (England, South-East), metropolitan, county, vice-county or other local authority-wide area (West Sussex); and of importance at the zone of influence of the Site only. In evaluating the nature conservation importance of the Site, the following factors were considered: nature conservation designations; species/habitat rarity; naturalness; fragility and connectivity to other habitats. Where no importance has been assigned this is due to insufficient information.

2.12 An assessment of likely ecological impacts has been undertaken in accordance with CIEEM guidelines (CIEEM, 2018) only where clear evidence is available to substantiate and justify the findings. In the absence of such evidence, the ecological feature is merely identified as a potential constraint to development. Reference is also made to the Bat Mitigation Guidelines Reason, P.F. and Wray, S. (2023), Natural England's standing advice and includes a summary of the scale of impact according to bat roost type and development effect, if known, alongside an assessment of the Bat Tree Habitat Key Database (2023) to assess the likelihood of trees on Site to support bat roosts.

2.13 Where ecological constraints to development are identified, further survey requirements and/or mitigation measures that are proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development are described. In addition, in accordance with the Environment Act 2021, National Planning Policy Framework (NPPF) and local/regional planning policies, opportunities to enhance or create benefits for wildlife are provided where this is possible based on the information available to date. These measures may be appropriate for the attainment of net gains in biodiversity, although this assessment does not provide a formal measure of Biodiversity Net Gain.

## DATA VALIDITY AND LIMITATIONS

2.14 Every effort has been made to provide a comprehensive description of the Site; however, the following limitations apply to this assessment.

- The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the Site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if on the basis of the preliminary assessment or during subsequent surveys it is considered reasonably likely that protected species may be present and potentially affected by the proposed development.
- The surveys were undertaken at the sub-optimal time of year for plant growth, during the winter months, so it is possible that species that flower earlier in the year may have been missed. However, the data from the habitat survey is sufficient to inform a baseline assessment.
- The ecological evaluation is preliminary and may change subject to the findings of further ecological surveys (should these be required).
- Even where data for a particular species group are provided in the desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest, the area may simply be under-recorded.
- Where only four figure grid references are provided for protected species by third parties, the precise location of species records can be difficult to determine and they could potentially be present anywhere within the given 1km x 1km square. Equally, six figure grid references are accurate to the nearest 100m only.
- The UK Habitat Classification survey does not constitute a full botanical survey or provide accurate mapping of invasive plant species.
- Ecological survey data are typically valid for 12-18 months unless otherwise specified (CIEEM, 2019).

2.15 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity importance and the potential of the Site to support protected and otherwise notable species.

# 3 Results and Evaluation

## DESIGNATED SITES

### Statutory designated nature conservation sites

3.1 The four survey Sites are not subject to any international or national statutory nature conservation designations. No internationally important sites are located within a 15km radius of the proposed development Sites. No nationally designated sites are located within 2km of the Sites.

### Non-statutory designated nature conservation sites

3.2 The Sites are included within the Sussex Biodiversity Opportunity Area (BOA) strategy. A single non-statutory designated site, Old Deer Park Local Wildlife Site (LWS) is located within 2km of the Sites (see Table 3.1). See Appendix 1, Figure 3 for local designated sites map.

**Table 3.1: Non-Statutory Designated Site**

Site Name	Distance from Site and orientation	Ecological Importance	Qualifying features/Description	Potential constraint
The St Leonards watershed Biodiversity Opportunity Area (BOA)	On site	Local	The St Leonards watershed has been recognised as a Biodiversity Opportunity Area (BOA) as it represents a priority area for the delivery of Biodiversity Action Plan (BAP) targets. It is one of 75 such areas across Sussex. The BOA covers approximately 4057 hectares.	No
Old Deer Park Local Wildlife Site (LWS)	100m east	Local	Old Deer Park is one of the best surviving relicts of St Leonard's Forest. There are ancient parkland trees with a good lichen community, dry and wet heathland, and a	No

Site Name	Distance from Site and orientation	Ecological Importance	Qualifying features/Description	Potential constraint
			bog that contains an assemblage of species no longer found in any other site in West Sussex. The most important area is the southern part of the parkland where the dry and wet heath and bog communities occur. The dry heath consists of a fine area of Heather <i>Calluna vulgaris</i> with Bell Heather <i>Erica cinerea</i> , Heath Bedstraw <i>Galium saxatile</i> , Tormentil <i>Potentilla erecta</i> , Green-ribbed Sedge <i>Carex binervis</i> , Heath-grass <i>Danthonia decumbens</i> and Mat-grass <i>Nardus stricta</i> . At least ten <i>Cladonia</i> species of lichen have been recorded, including one extremely rare species.	

### Habitat inventories and landscape-scale conservation initiatives

#### *Habitats of Principal Importance*

3.3 There are 56 Habitats of Principal Importance (HPI) located within 2km of the four Sites (Natural England, 2022), namely Deciduous Woodland, Ancient Woodland, Wood-pasture and Parkland, Traditional Orchard, and Lowland Heathland. The four Sites sit within an area classified as Wood-pasture and Parkland HPI (Magic, 2023). There are over 20 ancient or veteran trees within 2km of the wider Leonardslee Lakes and Gardens, but none are present on any of the four Sites. The closest Veteran Tree is located approximately <10m from the proposed Garden Entrance location.

3.4 Although the Sites are located within Wood-pasture and Parkland HPI, the 'Village Centre' and Honey Cottage Sites do not contain the characteristics of Wood-

pasture and Parkland which include Ancient/Veteran trees, heathland and areas of scrub providing a rich nectar source for invertebrates. Both the 'Garden Entrance' and Clock Tower Cafe Sites contain Wood-Pasture and Parkland, which are also classified as areas of Deciduous Woodland HPI. However, these areas of Wood-Pasture and Parkland are considered to be degraded due to the higher ratio of non-native to native tree species, lack of decaying or rotting wood, lack of Old trees of >150 years of age, lack of grazing animals and lack of open grassland or heathland.

#### *Ancient woodland*

3.5 80 areas of woodland within a 2km radius of the Leonardslee Lakes and Gardens Estate, appear on the Ancient Woodland Inventory. The four Sites lie approximately 40m west of Ancient Replanted Woodland.

### **UK HABITAT CLASSIFICATION SURVEY**

#### *Site character*

3.6 The Site comprised four survey areas: 'Garden Entrance', Honey Cottage, Clock Tower Café and 'Village Centre'. All four survey areas formed part of the wider Leonardslee Lakes and Gardens Estate, a public garden. The Garden Entrance and Clock Tower Café comprised areas of woodland containing ornamental shrubs and trees which was subject to a degree of management, the Village Centre comprised the soft landscaping for the front of the main Leonardslee House and is heavily managed and Honey Cottage comprised the garden space of a private residential building so was not subject to heavy management.

3.7 UKHabs types are mapped in Appendix 1, Figures 3-6 and areas are given in Table 3.2 below alongside their UKHab equivalent and an assessment of habitat condition in accordance with the Statutory Metric (Defra, 2024).

3.8 A description of dominant and notable species and the composition of each habitat is provided below, with a species list (including all scientific names) provided in

Appendix 2. Target notes, which are used to provide information on specific features of ecological interest, are included in Appendix 3. Photographs are located in Appendix 4. The habitat condition forms are presented in full in Appendix 5.

**Table 3.3: UKHab Classification Areas**

UKHab Primary Habitat	UKHab Secondary Habitat	Condition	Extent (ha)	%
U1 Built-up Areas and Gardens	26 Wood-pasture and Parkland; 32 Scattered Trees; 510 Bare Ground; 516 Active Management; 800 Road; 827 Garden; 839 Track; 846 Flower Bed; 847 Introduced shrub;	N/A for built-up areas and gardens Poor for Bare Ground Moderate for Scattered Trees	0.177	50.14
W1f Lowland Mixed Deciduous Woodland	26 Wood-pasture and Parkland; 510 Bare Ground; 524 Invasive non-native species; 847 Introduced shrub	Poor for Lowland Mixed Deciduous Woodland N/A for Bare Ground	0.143	40.50
U1b Developed Land; Sealed Surface	800 Road; 839 Track	N/A	0.024	7
U1b5 Buildings	818 Residential Building	N/A	0.006	2
H3d Bramble Scrub	853 Mortared Wall	N/A	0.002	0.36
Total			0.352	100
UKHab Primary Habitat	UKHab Secondary Habitat	Condition	Extent (m)	
U1e Built Linear Feature	847 Introduced shrub; 853 Mortared Wall	N/A	270.5 N/A	
H2b Non-native Ornamental Hedgerow	524 Invasive non-native species	Poor	34.9 N/A	

## Habitat Description

*U1 Built up areas and gardens (26 Wood-Pasture and Parkland; 32 Scattered Trees; 510 Bare Ground; 516 Active Management; 800 Roads; 827 Garden; 839 Track; 846 Flower Bed; 847 Introduced Shrub).*

3.9 All four survey areas fall within Wood-Pasture and Parkland HPI. Three areas; Garden Entrance, Honey Cottage and Village Centre all contain areas of managed public gardens. See Photographs 1 and 2 in Appendix 4.

3.10 The Site containing the largest amount of U1b habitat is the location of the Village Centre. This area comprised part of the car park for the main house with ornamental flower beds. The flower beds contained scattered trees including a magnolia, windmill palm *Trachycarpus fortunei* and Japanese cedar *Cryptomeria japonica*. The grassland beneath the magnolia tree was seeded with cyclamen, daffodil *Narcissus* and crocus with self-seeding borage *Borago officinalis*, winter aconite *Eranthis hyemalis* and common primrose *Primula vulgaris*. This Site is well managed as part of the public gardens.

3.11 The garden space to the south of Honey Cottage serves as the recreational space for the residential cottage. The grassland here was mown and the Site contained areas of bare ground interspersed with willowherb species *Epilobium sp.*, common reed *Phragmites australis* and immature *Camellia* to the south of the flower beds located along the eastern Site boundary. The flower beds contained introduced shrub species such as forsythia and spotted laurel *Aucuba japonica*. Scattered trees included a cypress *Cupressus* and bay *Laurus nobilis*.

3.12 The grassland was a mixture of grasses, mosses and forb species which indicated that some areas of the grassland, where moss species were prevalent, are subject to regular water logging or water influx. The dominant grass throughout the garden space was fescue species *Festuca sp.* with occasional occurrences of Yorkshire fog *Holcus lanatus*. Moss species was found to be locally abundant around the periphery of the garden and forb species such as Lords and Ladies *Arum maculatum*, ribwort

plantain *Plantago lanceolata*, nipplewort *Lapsana communis* and cardamine were recorded in locally abundant clusters.

3.13 The third and final area of U1b habitat within the four survey areas was recorded to the south-west of the Garden Entrance Site. this area contained a flower bed with introduced shrubs comprised of hydrangea *Hydrangea sp.*, bay and tree peony *Paeonia sect. Moutan*. The understorey comprised bare ground with intermittent *Narcissus*, borage and meadow buttercup *Ranunculus acris* with locally abundant areas of Italian Lords and Ladies *Arum italicum*.

*W1f Lowland Mixed Deciduous Woodland (26 Wood-Pasture and parkland; 510 Bare ground; Invasive non-native species; 839 Track; 847 Introduced shrub)*

3.14 Lowland mixed deciduous woodland was recorded within two survey areas; Garden Entrance and Clock Tower Café. See Photographs 3 and 4 in Appendix 4.

3.15 Both areas of woodland contain invasive and non-native species such as Rhododendron *Rhododendron ponticum* which dominated areas of both Sites. The woodlands contained a mixture of broadleaved and coniferous species with species such as oak species *Quercus sp.*, gingko *Ginkgo biloba*, camellia, pussy willow *Salix caprea*, juniper *Juniperus communis* and Japanese acer *Acer palmatum* with large areas of introduced shrub. The woodland understorey comprised bare ground interspersed with common ragwort *Jacobaea vulgaris*, pendulous sedge *Carex pendula*, hard rush *Juncus inflexus* and low growing nettle *Urtica dioica*.

3.16 A public footpath ran through the centre of the Garden Entrance Site but the area of woodland to the east of the Clock Tower Café is not subject to pedestrian footfall. Both woodlands contain a mix of two age classes of trees; 0-20 years (Young) and 21 – 150 years (Intermediate). The pedunculate oak (T86), identified as a Veteran tree is not located on Site but is located within close proximity to the location of the proposed Garden Entrance.

*U1b Developed Land – sealed surface (800 Road; 839 Track)*

3.17 Developed land- sealed surface was only recorded within one Site in the location of the proposed Garden Entrance. See Photograph 5 in Appendix 4. This habitat type comprised a gravel pedestrian footpath within the area of Lowland Mixed Deciduous Woodland and a vehicular road that serviced the adjacent Clock Tower Café.

*U1b5 Building (818 Residential Building)*

3.18 A single building was recorded within the Honey Cottage Site and comprised Honey Cottage, a residential two-storey building that was adjoined to the Clock Tower Café to the north. See Photograph 6 in Appendix 4. Further building descriptions can be found within the associated Preliminary Roost Assessment report (Temple, 2024a).

*H3d Bramble Scrub (853 Mortared Wall)*

3.19 A single area of bramble scrub was recorded to the south-west of the Clock Tower Café Site. See Photograph 7 in Appendix 4. The area of scrub formed a small section of the understorey of the deciduous woodland on Site. the scrub was dominated by bramble *Rubus fruticosus* with occurrences of *Hypericum* species, willowherb and buddleia *Buddleja sp.*

*U1e Built Linear Feature (846 Flower Bed; 847 Introduced Shrub; 853 Mortared Wall)*

3.20 Built linear feature was present within three of the Sites, Village Centre, Clock Tower Café and Honey Cottage. Most linear features on Site comprised a form of constructed mortared wall. See Photograph 1 in Appendix 4.

3.21 The wall recorded within the Village Centre Site contained the landscaped flower beds and introduced shrub. The wall recorded within the Honey Cottage Site comprised the Site boundary to the east with a close-boarded fence forming the Site boundary to the south. The built linear feature recorded within the Clock Tower Café

Site comprised the relics of a historic structure and a wall to the south-west of the Site. Harts-tongue fern *Asplenium scolopendrium*, ivy *Hedera helix* and moss were recorded growing on the historic structure.

#### *H2b Non-Native Ornamental Hedgerow (524 Invasive non-native species)*

3.22 Non-native ornamental hedgerow was recorded along the south-west Site boundary of the Graden Entrance, see Photograph 8 in Appendix 4, and along the south and west Site boundary of Honey Cottage, see Photograph 9 in Appendix 4.

3.23 The hedgerow contained within the Garden Entrance Site was dominated by a single invasive non-native species, *Rhododendron ponticum* with rare occurrences of holly *Ilex aquifolium*. To the east of this hedgerow lay an area of flower bed containing introduced shrub and to the north, south and west an access road. The hedgerow was approximately 1.5m in height and 1m in width. Due to the density of the hedgerow reducing ground level light, there was little ground flora with the habitat at the base of the hedgerow comprising leaf litter with a rare occurrence of primrose and occasional low-growing ivy.

3.24 The hedgerow record within the Honey Cottage Site comprised box, Leylandii and rhododendron with ivy and was approximately 12m in length, 2m in height and 1-1.5m in width. This area of hedgerow provided screening between the adjacent public courtyard of the Clock Tower Café and the residential garden space of Honey Cottage. As with the hedgerow contained within the Garden Entrance Site, the hedgerow was dense with year-round foliage preventing any light from reaching its base. The habitat recorded at the base of the hedge comprised predominantly bare ground.

#### **PROTECTED, NOTABLE AND INVASIVE SPECIES ASSESSMENT**

3.25 The potential for the Site to support protected and/or notable species has been assessed using criteria provided in Table 2.1 and is based on the results of the desk study and observations made during the survey of habitats at the Site. Those legally

protected species not referred to in Table 3.4 below have been scoped out as it is considered that the Site does not contain habitats suitable to support them.

3.26 Key pieces of statute are summarised in Section 1 and set out in greater detail in Appendix 6.

**Table 3.4. Protected, notable and invasive species assessment**

Ecological feature	Status <sup>89</sup>	Likelihood of occurrence	Ecological importance	Potential constraint
<b>Bats:</b> Roosting  Foraging/commuting	HR WCA S5 LBAP	<b>CONFIRMED (Built structure roosting suitability):</b> The data search concluded that 8 species of bats have been recorded within 2km of the Site in the last 10 years including, Serotine <i>Eptesicus serotinus</i> , <i>Myotis</i> sp., Bechstein's bat <i>Myotis bechsteinii</i> , noctule <i>Nyctalus noctula</i> , common pipistrelle <i>Pipistrellus pipistrellus</i> , soprano pipistrelle <i>Pipistrellus pygmaeus</i> and Long-eared bat sp. <i>Plecotus</i> sp. and brown long-eared bat <i>Plecotus auritus</i> .  Three maternity roosts are located within 2km of the Site, including a maternity roost for brown long-eared bat recorded within the roof space of the Clock Tower Café by the Ecology Consultancy in 2019 and again by Temple in 2024 and another roost approximately 750 meters south of the four	Likely to be important at District level due to the presence of an existing confirmed brown long-eared maternity roost within the adjacent Clock Tower Café building.	<b>Roosting:</b> Possible disturbance to roosting bats within Honey Cottage during the construction phase of the development. The likely impact to bats is further evaluated within the Preliminary Roost Assessment report (Temple, 2024a).  Trees currently required for removal across all four Sites are not considered to be of a species suitable to support roosting bats with no suitable roosting

<sup>8</sup> The following abbreviations have been used to signify the legislation afforded different species: HR = Conservation of Habitats and Species Regulations 2017 (as amended); WCA S1 = Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); WCA S5 = Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); [REDACTED]

<sup>9</sup> The following abbreviations have been used to signify the policy of conservation assessments applying to notable species: SPI = Species of Principal Importance under the NERC Act 2006; LBAP = Local Biodiversity Action Plan species; BoCC = Birds of Conservation Concern - amber list / red list (Stanbury *et al.*, 2021); and/or RD/NN = red data book/nationally notable species (JNCC, undated).

	<p>Sites, with a peak count of 286 Soprano pipistrelles counted in 2020 (SxBRC, 2022).  Droppings were recorded within the roof space of Honey Cottage on Site. Following DNA analysis these were later confirmed to be from brown long-eared bats.</p> <p><b>LOW (Green habitat roosting suitability):</b> The tree species recorded within all four Sites were not considered suitable to support roosting bats due to the lack of suitable roosting features and relatively young age of the specimens.</p> <p><b>MODERATE Foraging and HIGH Commuting:</b> The Clock Tower Café and Honey Cottage buildings contain confirmed roosts, and the deciduous woodland to the north of the Clock Tower Café, encompassing the Garden Entrance Site, and east of the Clock Tower Café and Honey Cottage Sites, is directly linked to the wider landscaped garden, woodland and lakes. As such, the Site has High suitability to support commuting bats from the confirmed roosts into the wider landscape.</p> <p>The deciduous woodland and introduced shrub areas on Site provide suitable foraging habitat for bats with their floral species attracting invertebrate prey species although these areas are small in extent and are well connected to larger areas of higher-quality foraging habitat off-Site. Although vegetation removal is concerned with small areas</p>		<p>features recorded. No further survey is recommended however, a precautionary approach to shrub and tree removal included within environmental best practice.</p> <p><b>Foraging/Commuting:</b> Potential impacts to foraging and commuting bats could occur during construction and post-development in the Garden Entrance and Clock Tower Café Sites with the removal of some vegetation and potential illumination of the Clock Tower Café woodland post-development. Further details can be found within Section 4 of this report.</p>
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		<p>of woodland, the extent of vegetation removal will be minimal, the Sites will remain connected to larger areas of higher-quality foraging habitat and post-development the loss of some small areas of vegetation will not result in fragmentation or significantly impact upon the foraging resource.</p> <p><b>Bats are confirmed to be present and / or are likely to be present on Site. As such they are considered further in Section 4 of this report.</b></p>		
<b>Hazel Dormouse</b>	HR WCA S5	<p><b>LOW:</b> There are three records of hazel dormice <i>Muscardinus avellanarius</i> within 2km of the four Sites, with the closest record approximately 100m east of the woodland within both the Clock Tower Café and Garden Entrance Sites.</p> <p>There is some connectivity with this area of woodland via linking canopy connectivity to the Clock Tower Café, Garden Entrance and Honey Cottage Sites. Although there is linking connectivity, the vegetation contained within the area of woodland and hedgerow on Site is considered to be sub-optimal for foraging and nesting hazel dormice with the presence of invasive non-native and ornamental plant species. The woodland habitat would provide a commuting habitat only for hazel dormice.</p> <p>Furthermore, the degree of vegetation removal associated with the Garden Entrance and Honey</p>	<p>Likely to be important at Site level only, due to the small extent of suitable habitat recorded within the Garden Entrance and Clock Tower café sites.</p>	<p>No further surveys required at this stage.</p> <p>Precautionary approach to shrub and tree removal included within environmental best practice including sensitive timings of works.</p>

		<p>Cottage will not result in a large loss of suitable commuting habitat and the canopy connectivity will remain in situ post-development.</p> <p><b>Although there is a Low possibility that hazel dormice will be present on Site, a precautionary approach to vegetation removal and sensitive timings of the works are considered proportionate and are further described in Section 4 below.</b></p>		
<b>Great crested newt</b>	HR WCA S5	<p><b>LOW:</b> There are records of great crested newts <i>Triturus cristatus</i> from the last ten years within 2km of the Site. The most recent records are from 2019, where a maximum abundance count of 13 adults were found at South Lodge Hotel, 0.5km southwest of the closest Site, the Village Centre. Historically, great crested newt surveys (Habitat Suitability Indices, environmental DNA and presence/absence surveys) of 12 ponds undertaken by The Ecology Consultancy in 2018 (The Ecology Consultancy, 2018) found a peak count of 1 adult male and a positive eDNA of a pond within the greenhouse of the visitors' centre of Leonardslee Lakes and Gardens. However, since 2018 the pond has been removed. None of the four Sites has connectivity to South Lodge where the 13-adult great crested newts were recorded.</p> <p>The woodlands recorded within the Garden Entrance and Clock Tower Café and the garden</p>	<p>Likely to be important at Site level only, due to the small extent of suitable habitat.</p>	<p>No further surveys required at this stage.</p> <p>Precautionary approach to shrub and tree removal included within environmental best practice including sensitive timings for works.</p>

	<p>vegetation contained within the Honey Cottage Site are considered suitable to support great crested newts within their terrestrial phase including mortared walls and scrub which could be used by hibernating great crested newts. It is unknown if these features will be removed to facilitate development.</p> <p>There are no waterbodies located within any of the four Sites.</p> <p>The extent of habitats proposed for removal is small with impacts to the garden space of Honey Cottage expected to be temporary and during the construction phase only. Although there will be some permanent vegetation loss within both the Garden Entrance and Clock Tower Café Sites, the Sites will remain connected to larger areas of woodland post-development. The introduced shrubs contained within the raised stone flower beds within the Village Centre Site are inaccessible for newts to access. Furthermore, the small area of grassland beneath the magnolia tree is heavily managed, making it unsuitable for commuting, foraging or sheltering great crested newts so is unlikely to provide key habitat for local great crested newt.</p> <p>According to the Natural England rapid risk calculator, an offence is highly unlikely.</p>		
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		<p><b>Although there is a Low possibility that great crested newts will be present on Site, a precautionary approach to vegetation removal and sensitive timings of the works are considered proportionate and are further described in Section 4 below.</b></p>		
<b>Birds:</b> Breeding  Wintering	WCA Sections 1-8	<p><b>LOW for Garden Entrance and Clock Tower Café, CONFIRMED for Honey Cottage and NEGLIGIBLE for Village Centre (Breeding):</b> Both the Garden Entrance and Clock Tower Café contain woodland with tree species, scrub and shrubby habitats suitable to support nesting birds although these habitats are highly disturbed by visitors visiting the wider estate, in particular the Garden Entrance Site which contains a pedestrian footpath beneath the canopy already.</p> <p>Jackdaws <i>Corvus monedula</i> were recorded nesting within the chimney of Honey Cottage during surveys undertaken by Temple in 2022 and during the most recent PEA of Honey Cottage in 2024, furthermore, the hedgerow recorded within the Honey Cottage Site could provide suitable nesting habitat. The vegetation within the Village Centre Site is considered unsuitable to support nesting birds.</p> <p><b>LOW for Garden Entrance, Honey Cottage and Clock Tower Café, NEGLIGIBLE for Village Centre (Wintering):</b> The areas of woodland and hedgerow</p>	<p>Likely to be important at Site level only, due to the minimal opportunities the habitats provide for foraging and breeding birds.</p>	<p>No further surveys required at this time.</p> <p>Precautionary approach to be adopted during tree and shrub removal including sensitive timings for the works.</p>

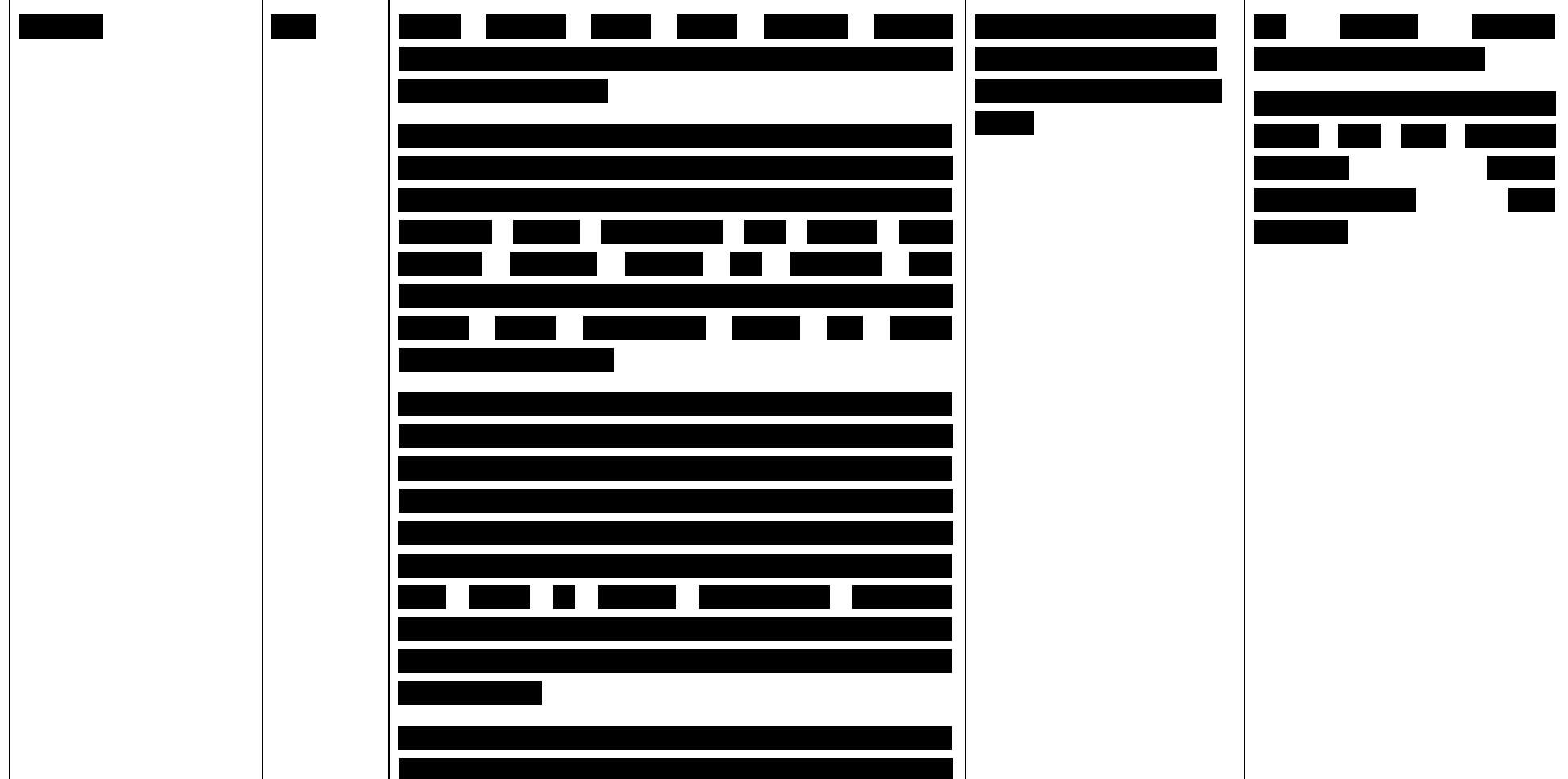
		<p>within the Clock Tower Café, Garden Entrance and Honey Cottage Sites provide suitable habitat for overwintering bird species. The vegetation within the Village Centre Site is not considered suitable to support wintering birds.</p> <p>The vegetation currently proposed for removal, include groups of rhododendron and camellia, which are considered to have low suitability to support breeding and wintering birds as these species would make low quality nesting habitat due to the species' lack of three-way forks in their branch structure that can support a nest. Furthermore, during and post-construction, the Sites will continue to remain connected to higher-quality habitats immediately adjacent and contained within the wider Leonardslee Lakes and Gardens Estate.</p> <p><b>Although the Site is considered to support nesting and wintering bird species, a precautionary approach to vegetation removal and sensitive timings of the works are considered proportionate and are further described in Section 4 below.</b></p>		
<b>Birds</b>	WCA S1 BoCC	<b>LOW:</b> The desk study found records of 14 WCA Schedule 1 species within 2km of the Site from the last ten years. This includes four species found within Leonardslee Lakes and Gardens: kingfisher <i>Alcedo atthis</i> , hobby <i>Falco subbuteo</i> , crossbill <i>Loxia</i>	Likely to be important at Site level only, due to the minimal opportunities the habitats provide for	No further surveys required at this stage. Precautionary approach to be adopted during tree and

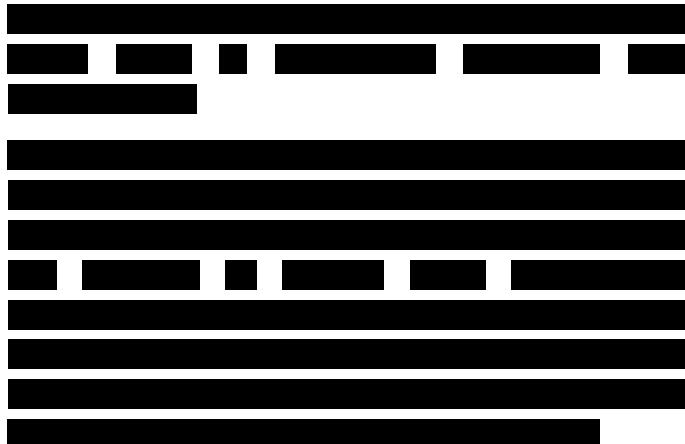
	<p><i>curvirostra</i> and firecrest <i>Regulus ignicapilla</i>. There were also two records of birds classed as confidential by the Sussex Ornithological Society (SOS).</p> <p>Schedule 1 bird species which could utilise habitats on Site include brambling <i>Fringilla montifringilla</i> and fieldfare <i>Turdus pilaris</i>, species which like to use hedgerows and gardens for foraging in winter, or firecrest which are associated with conifers. Suitable habitats for these species were present on Site but they were only minimal and compared with habitats within the immediate vicinity, they were of a much lower quality. The cypress tree within the Honey Cottage Site presented suitable habitat associated with firecrest and crossbills, but there will be no impact on this habitat as the tree is to be retained.</p> <p>Any disturbance to nearby Schedule 1 birds is not going to be notably increased by the proposed development, due to its small scale, the limited value of the onsite habitat and the continued use of the Sites as a public garden. Although there may be potential foraging habitat loss with the hedgerow within the Garden Entrance proposed to be removed, there is similar, more expansive, and higher quality habitat within the vicinity which will be less frequently disturbed by human activity, so this will not have a major impact.</p>	<p>foraging and breeding birds.</p>	<p>shrub removal. Further details can be found in section 4.</p>
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		<b>There is a low potential that Schedule 1 birds will occur at Site, therefore they are considered further in Section 4 in the general recommendations for breeding birds, as this covers Schedule 1 birds too.</b>		
<b>Plants</b>	WCA S8	<p><b>LOW:</b> There are two records of Schedule 8 plant species within 2km of the Site and within the last ten years, with the closest record being Bluebell within Leonardslee Lakes and Gardens.</p> <p>No Schedule 8 plant species were observed during the Site visit; however, this could be as a result of the time of year the survey was undertaken. Furthermore, habitats such as the areas of woodland within the Graden Entrance and Clock Tower Café Sites, have the potential to cultivate Schedule 8 plant species such as the English Bluebell <i>Hyacinthoides non-scripta</i> although due to the high levels of pedestrian footfall and management it is unlikely large assemblages of Schedule 8 plant species would be present.</p> <p><b>Although no notable plants were recorded on Site at the time of the survey, due to the Site's location within an area of Deciduous Woodland and Wood-Pasture and Parkland, and the high levels of pedestrian footfall it is subject too, notable plants are considered further in Section 4 below.</b></p>	<p>Likely to be important at Site level only due to the low number of records.</p>	<p>No further surveys required at this stage.</p> <p>Good practice with regards to BSI 2013 should be adopted during the development works.</p>

Reptiles	WCA S5	<p><b>LOW:</b> The desk study found only one reptile record from the last ten years within 2km of the Sites. Several slow worms were recorded to have been found 0.9km south of the Site.</p> <p>The woodlands recorded within the Garden Entrance and Clock Tower Café Sites and the garden vegetation contained within the Honey Cottage Site are considered suitable to support foraging, sheltering and hibernating common and widespread reptile species.</p> <p>The extent of habitats proposed for removal is small with impacts to the garden space of Honey Cottage expected to be temporary and during the construction phase only. A small compost pile and rockery were recorded within the garden space of Honey Cottage. These features could provide suitable hibernation habitat for a range of common and widespread reptile species. It is unknown if these features will be removed as part of the development on Site.</p> <p>Although there will be some permanent vegetation loss within both the Garden Entrance and Clock Tower Café Sites, the Sites will remain connected to larger areas of woodland post-development. The introduced shrubs contained within the raised stone flower beds within the Village Centre Site are considered inaccessible for some reptile species such as slow worm <i>Anguis fragilis</i> and the tarmac</p>	Likely to be at Site level only due to the lack of local records and distance/dispersal barriers to known reptile locations.	<p>No further surveys required at this stage.</p> <p>Precautionary approach to suitable sheltering features such as compost heap and rockery and shrub and tree removal included within environmental best practice including sensitive timings for works.</p>
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		<p>road and pavement would act as a likely deterrent for dispersal from the woodland to these areas. Furthermore, the small area of grassland beneath the magnolia tree is heavily managed, making it less suitable for commuting, foraging or sheltering reptile species as habitats within the wider estate.</p> <p><b>Although there is a Low possibility that common and widespread reptile species will be present on Site, a precautionary approach to vegetation removal and sensitive timings of the works are considered proportionate and are further described in Section 4 below.</b></p>		
<b>Invasive plants</b>	WCA S9	<p><b>PRESENT:</b> The desk study found 11 records of Invasive Non-Native Species (INNS) within 2km of the Site from the last ten years. Some, including Montbretia <i>Crocosmia</i> sp and cherry laurel <i>Prunus laurocerasus</i>, which have been recorded on Site within the areas of Deciduous Woodland, could successfully germinate and become further established on Site.</p> <p>Within the Garden Entrance, Clock Tower Café and Village Centre Sites, rhododendron, a Schedule 9 plant species was recorded. Current proposals require the removal of areas of vegetation containing rhododendron to facilitate the development of a pedestrian footpath and ticket kiosk within the Garden Entrance Site.</p>	Likely to be important at Site level only.	<p>Where Rhododendron is to be impacted by the works, measures should be taken to ensure the plant does not spread into the wider habitat.</p> <p>Steps should be taken to avoid treading any part of the plant onto the Site to prevent further spreading.</p>

		<p><b>As INNS have been recorded within the Sites and will be disturbed or removed to facilitate development, INNS are considered further in Section 4 below.</b></p>		
				

				
<b>Hedgehog</b>	S41 NERC	<p><b>LOW:</b> The desk study returned no records of European hedgehog <i>Erinaceus europaeus</i> within 2km of the Site within the last ten years.</p> <p>The areas of woodland, garden space, introduced shrub, bramble scrub, hedgerows and flower beds provide suitable habitat for foraging and commuting hedgehogs although these are minimal in extent when considered within the wider Leonardslee estate.</p> <p>The compost heap recorded within the garden space of Honey Cottage could provide suitable hibernation habitat. It is unknown if this hibernation feature will be removed to facilitate development.</p> <p><b>Although there is Low potential for hedgehogs to be present on Site, a precautionary approach</b></p>	<p>Likely to be important at Site level only.</p>	<p>No further surveys required at this time.</p> <p>Precautionary approach to shrub and tree removal included within environmental best practice.</p>

		<b>to vegetation removal and sensitive timings of the works are considered proportionate and are further described in Section 4 below.</b>		
<b>Terrestrial invertebrates</b>	S41 NERC	<p><b>LOW:</b> The desk study returned records for two invertebrate species within 2km within the last ten years listed under Section 41 of the NERC Act 2006; small heath <i>Coenonympha pamphilus</i> and white admiral <i>Limenitis camilla</i>. Both species are also listed UK Biodiversity Action Plan (BAP) Priority list.</p> <p>The closest record pertains to 2 individual white admiral butterflies recorded within the garden space of Leonardslee Lakes and Gardens. The small heath butterfly was recorded approximately 0.5km west of the of the Village Centre Site.</p> <p>All four Sites contain habitat suitable to support these species, with the areas of deciduous woodland providing areas of bramble scrub which support adult white admirals. The larval host plant of the small heath, fescue grass, was recorded on Site within the garden space of Honey Cottage and within the flower bed in the Village Centre. Both of these areas of grassland are small in extent, and in the case of Honey Cottage, will only temporarily be impacted upon during the construction phase. The area of grassland within the Village Centre Site will not be impacted upon to facilitate development</p>	Likely to be important at Site level only.	<p>No further surveys required at this stage.</p> <p>Consideration should be given to a planting scheme to enhance the Sites post-development for terrestrial invertebrates.</p>

	<p>and will remain in situ and protected throughout the works.</p> <p>The larval host plant for white admiral butterflies, honeysuckle, was only recorded within an area of managed deciduous woodland within the Garden Entrance Site. It is not known if this area of honeysuckle will be removed to facilitate development, however, the Site will continue to remain open and well connected to areas of landscaped garden and woodland providing habitat for both adult larval phases of these species.</p> <p><b>Although there is a Low possibility that terrestrial invertebrates will be present on Site, the Site will remain open and well connected with only temporary impacts to suitable habitat. Therefore, terrestrial invertebrates are not considered further in this report, however, consideration should be given to improving the Sites overall for terrestrial invertebrates post-development.</b></p>		
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## NATURE CONSERVATION EVALUATION

3.27 The Sites are included within the St Leonards watershed BOA as it represents a priority area for the delivery of BAP targets. It is one of 75 such areas across Sussex.

3.28 The Sites are not subject to any nature conservation designations, but they are situated approximately 100m east of Old Deer Park LWS, an area of nature conservation importance. The habitats that comprise the LWS are not found within any of the Sites, and it is considered that the development proposals will not impact upon the LWS.

3.29 The Sites, as well as the rest of Leonardslee Lakes and Gardens, are classified as Wood-Pasture and Parkland HPI. Wood-pasture and parkland has a long history of continued management, is rare across Sussex and are mosaic habitats valued for their old trees and the wildlife they support. However, the four Sites do not contain relics of the former St. Leonards Forest and do not contain any of the characteristic habitats of Wood-pasture and parkland (Brig, 2011) given the age class of the trees present, the current levels of management and the Estate's use as a public garden with introduced and ornamental trees. Therefore, any future renovations will not impact upon this habitat.

3.30 The habitats within the Sites were suitable for a range of noteworthy species, as reported in the desk study or recorded during the survey, as follows:

- Commuting and foraging bats;
- Both notable and invasive plant species;
- Both Schedule 1 and common and widespread bird species;
- Herpetofauna including great crested newts and common and widespread reptile species;
- Terrestrial invertebrates; and,
- Mammal species such as hazel dormouse, [REDACTED] and European hedgehog.

3.31 The habitats on Site and populations of the above species are likely to be of importance within the immediate vicinity of the Site only. It is unlikely that the Site would support rare species, or diverse assemblages or large populations of any noteworthy species.

# 4 Recommendations

4.1 This section summarises the potential impacts on habitats and notable species that may be present at this Site. It also sets out the recommendations for further survey and mitigation where required. The impact assessment is preliminary and further detailed assessment and surveys will be required to assess impacts and design suitable mitigation, where appropriate.

## FURTHER SURVEY AND MITIGATION

4.2 For each constraint identified as being of importance at greater than the Site level, all mitigation options provided follow the established Mitigation Hierarchy as set out in Section 5.2 of BS42020:2013. This seeks as a preference to avoid impacts then to mitigate unavoidable impacts, and, as a last resort, to compensate for unavoidable residual impacts that remain after avoidance and mitigation measures. The measures set out below will address no net loss of biodiversity, although no formal calculation of losses and gains has been carried out. Features deemed important at the Site level only are considered here only where further survey and/or mitigation is necessary to ensure legal compliance.

4.3 In the absence of mitigation, the following key ecological issues have been identified:

- Habitats suitable to support nesting and foraging birds were present on Site – where these habitats are due to be removed, removal should take place outside of the known nesting season (February to September inclusive).
- Habitats suitable to support foraging and commuting bats were present on Site – impacts via light disturbance should be considered and avoided post-development.
- Invasive Non-Native Species, rhododendron, was recorded on Site. Government guidance should be followed to prevent the spread of this species beyond the Site boundary during its removal.

## STATUTORY AND NON-STATUTORY SITES

- 4.4 The Sites do not lie within any international statutory or non-statutory nature conservation designations. However, the wider Leonardslee Lakes and Gardens Estate is included within the Sussex BOA strategy. No significant impacts are envisaged as the proposed development Sites are small in scale and will not result in a change in land use.
- 4.5 The Sites are situated approximately 100m west of Old Deer Park LWS an area of nature conservation importance. The habitats that comprise the LWS are not found within any of the proposed development Sites, and the development proposals are small and discrete in nature, therefore, development proposals will not impact upon the LWS.

## HABITATS

- 4.6 Working under the principle of 'net-gain' as supported by national planning policy, any habitats removed should be compensated for. Where proposals are concerned with the loss of areas of woodland, consideration should be given to the enhancement of existing woodland. Consideration should be given to any tree removal and planting. If replacement trees are to be planted, they should be native species that are local to the area, which are more likely to support a range species including birds and invertebrates.

### Ancient Woodland

- 4.7 Ancient Replanted Woodland is regarded as irreplaceable habitat and the National Planning Policy Framework (2023) states that planning permission should be refused for development that results in the loss or deterioration of Ancient Replanted Woodland unless the need for, and benefits of, the development clearly outweigh the loss.
- 4.8 All areas of Ancient Replanted Woodland should be protected during works. In line with Natural England's Standing Advice (2017) on Ancient Replanted Woodland, a

minimum 15m buffer zone of semi-natural habitat should be provided between the areas of development and Ancient Replanted Woodland. The Deciduous Woodland to the east of the Clock Tower Café lies approximately 20m east of an area of Ancient Replanted Woodland, with an area of Deciduous Woodland separating the Site from the Ancient Replanted Woodland.

- 4.9 Due to the proximity of the Ancient Replanted Woodland to the Site, potential impacts may include dust and air pollutant during construction works although the adjacent area of Deciduous Woodland would lessen the effects of these pollutants on the Ancient Replanted Woodland. Recommendations to reduce the risks of pollutants reaching the nearby Ancient Replanted Woodland should be provided within a corresponding CEMP.
- 4.10 Any new lighting should be directed away from surrounding woodland and Ancient Replanted Woodland and avoid night-time lighting of these areas, to minimise impacts on species such as birds and bats.

#### Wood-Pasture and Parkland

- 4.11 The Natural Environment and Rural Communities Act 2006 requires that HPIs are regarded as a material consideration in determining planning applications. All HPIs are by default also Sussex BAP habitats. It is recommended that all HPIs within the four Sites are retained where possible.
- 4.12 All four Sites are situated with an area designated as 'Wood-Pasture and Parkland' Habitat of Principal Importance. Wood-Pasture and Parkland are mosaic habitats valued for their trees, especially veteran and ancient trees, and the plants and animals that they support. Grazing animals are fundamental to the existence of this habitat (Brig, 2011).
- 4.13 The Site does contain areas of woodland to the east of the Clock Tower Café and within the location of the Garden Entrance, which though degraded and containing invasive non-native species, qualifies as a feature of Wood-Pasture and Parkland. A

single tree, T86, a pedunculate oak, has been identified as a Veteran tree following the Arboricultural Impact Assessment (Temple, 2024b). Although this tree is not contained within the Site boundary it is in close proximity to the proposed location of the general admission ticket kiosk. Following consultation with the arboriculturalist, in order to ensure there are no impacts to T86 during construction and post-development, it is recommended that works are excluded from the Root Protection Area (RPA) including working areas required for the construction of the ticket kiosk.

4.14 Two trees within the woodland to the east of the Clock Tower Café, areas of low-quality shrub and a single hedgerow comprising an invasive non-native species within the Garden Entrance Site, are proposed to be removed to facilitate the building of a terrace, public footpath and admission ticket kiosk. Given that the on-site woodland is a potentially degraded feature of Wood-Pasture and Parkland, it is recommended that this habitat is compensated for if removal is unavoidable. It is recommended that the remaining woodland is managed to enhance it, including removal of rhododendron, opening up the woodland to allow more of a woody understorey to develop and allowing deadwood to remain in the woodland where safe to do so. This management approach could increase the quality of the woodland over time.

4.15 Potential impacts should be mitigated with a Construction Environment Management Plan (CEMP). Potentially adverse impacts during the construction phase include but are not limited to pollution events, surface runoff, dust, spills or changes in hydrological conditions. Best environmental practice measures which should be implemented where appropriate include:

- The provision of a buffer strip of semi-natural vegetation between woodland and landscaping to allow ground flora to grow.
- Avoidance of lighting woodland. Mounted lights should not light up the woodland.

- The protection of retained trees in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations and in line with recommendations included within the corresponding Arboricultural Impact Assessment report (Temple, 2024b).
- In conjunction with tree protection (above), the erection of Heras fencing around the development footprint boundary to protect habitats and restrict vehicle and pedestrian access; and
- Appropriate storage of fuels and chemicals to minimise the risk of accidental spillage. Sources of best construction practice and environmental management include CIRIA guidance (Connolly and Charles, 2005) and Defra/Environment including the Environmental Damage (Prevention and Remediation) Regulations 2009.

4.16 Any trees that require removal should be replaced at a ratio of at least 1:1, or equivalent lengths, using native specimens or like-for-like species. Replacement planting should include the use of nectar-rich plants and berry and nut producing trees that will increase the foraging habitat on Site for birds and mammals, whilst continuing to accommodate those already using habitats on Site.

4.17 Native plants with local provenance are encouraged, as well as avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

### Deciduous Woodland

4.18 The proposals include an extension terrace to the east of the existing Clock Tower Cafe, which overlaps with an area designated as Deciduous Woodland. As part of the current proposals for the Clock Tower development, an area of woodland would be lost, with shrubs, bramble scrub and two trees removed to facilitate the installation of the terrace.

4.19 The proposals for the Garden Entrance include the installation of a public footpath and 'floating' admission ticket office. As part of the current proposals for the Garden Entrance, shrubs will be removed to facilitate the installation of a pedestrian footpath and a hedgerow containing invasive non-native rhododendron will be removed to facilitate the installation of the ticket kiosk.

4.20 Loss of habitat should be avoided where possible. Where direct impacts cannot be avoided, like for like habitat replacement and enhancement should be undertaken. Sensitive lighting should also be imposed to avoid illuminating the adjacent woodland at night.

#### **Lowland heathland**

4.21 The Sites are situated approximately 0.3km west of an area of Lowland Heathland located within the Old Deer Park LWS. The distance between the Lowland Heathland and the Sites mean it is unlikely that the Lowland Heathland will be affected by the proposals.

#### **Traditional Orchard**

4.22 There are three areas of Traditional Orchard within 2km of the site, with the closest situated approximately 980m south of the site. The distance between the Traditional Orchard and the Sites mean it is unlikely that the Traditional Orchard will be affected by the proposals.

#### **BATS**

4.23 All British species of bat are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). Under this legislation it is an offence to deliberately capture, kill, disturb and damage or destroy a bat roost. Some species of bat are also Species of Principal Importance (SPI) and Sussex BAP species.

4.24 Honey Cottage contained a confirmed bat roost for brown long-eared bats. Bat droppings were recorded within the roof void above the bedroom space and were confirmed as brown long-eared through DNA analysis.

4.25 Additional features with suitability to support roosting bats were identified during the survey and the building is considered suitable to support both summer roosting and hibernating bats. The building is due to be directly impacted under the current proposals, therefore further survey comprising roost characterisation surveys are required, and works may need to proceed under a Mitigation Licence from Natural England. Three surveys are required for buildings with Confirmed bat roosts. Surveys should be spread across the bat active season (May-October inclusive). And sensitive timings of the works to avoid the hibernation period may also be required. Further information can be found within the corresponding Preliminary Roost Assessment report (Temple,2024a).

4.26 Trees and shrubs due to be removed under current proposals do not contain any trees considered suitable to support roosting bats. Should proposals change and further trees are required for removal or will be indirectly impacted upon by the works, a Ground Level Tree Assessment (GLTA) may need to be undertaken.

4.27 A sensitive lighting strategy is recommended, covering construction and post-development with respect to foraging and commuting bats. This could include specifications for downward facing lights or the inclusion of baffles with light spillage kept to a minimum. During the construction phase artificial lighting should only be utilised where necessary for health and safety reasons with lighting only used for the period of time for which it is required (Jones, 2000). It is recommended that a lighting strategy is devised to minimise impacts on the surrounding woodland that includes the following accepted best practice measures (Fure, 2006; Institute of Lighting Engineers, 2009; Institution of Lighting Professionals, 2023):

- The level of artificial lighting should be kept to a minimum;

- Where this does not conflict with health and safety and/or security requirements, the Site should be kept dark during peak bat activity periods (0 to 1.5 hours after sunset and 1.5 hours before sunrise);
- Lighting that is required for security or safety reasons should use a lamp of no greater than 2000 lumens (150 Watts) and should comprise sensor activated lamps;
- LED or low pressure sodium lights are a preferred option to high pressure sodium or mercury lamps;
- Warm-white (i.e. long wavelength) should be used over blue-white (i.e. short wavelength) lights as the latter have a significant negative impact on bats (Stone, 2013);
- Lighting should be directed to where it is needed with minimal light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a shield or hood that directs the light below the horizontal plane; and
- Artificial lighting should not directly illuminate any habitats of value to commuting/foraging bats such as the grassland and woodland to the west or trees assessed as having suitability for roosting bats.

4.28 The High Weald AONB Management Plan (2019) propose that public bodies and others 'follow the Institute for Lighting Professionals guidance; promote information on dark sky-friendly lighting; install outside lighting only when needed and use dark sky-friendly lighting' (objective OQ4).

### HAZEL DORMOUSE

4.29 Hazel dormice, their breeding sites, and their resting places are protected by law under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

4.30 Hazel dormice were found to be present within 100m of the four Sites within the last five years. The leylandii hedge and woodland within the Garden Entrance and Clock Tower Café Sites have Low suitability to support nest-building. These habitats also have suitability for dispersing dormice, especially where there is canopy connectivity to the area of Ancient Replanted Woodland to the east.

4.31 The woodland within both the Clock Tower Café and Garden Entrance Sites had little understory and was predominantly Rhododendron, camelia and willow species. As such, it is considered to be of Low suitability for dispersing, foraging and nest-building hazel dormice despite the connectivity with a historical record. In addition to this, the amount of vegetation removed according to current plans is small in extent and contains species considered to be of Low suitability for hazel dormice. For these reasons, the likelihood of encountering a dormouse is considered to be low, so it is not considered necessary to carry out presence/ likely absence surveys for hazel dormice at the Site.

4.32 As trees will be removed to facilitate the development of the pedestrian footpath and café terrace, vegetation removal should be undertaken under a precautionary method of works, outside of the hibernation season, under the supervision of an ecologist.

4.33 Should any dormouse nests or individual dormice be found during clearance, works should stop and the Ecological Clerk of Works (ECoW) consulted for advice. A mitigation licence from Natural England may be required to continue the work.

### **GREAT CRESTED NEWTS**

4.34 Great crested newts, their breeding sites, and their resting places are protected by law under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

4.35 None of the four Sites contain aquatic habitat but they do contain terrestrial habitat suitable for dispersing great crested newts. Therefore, a precautionary approach to

vegetation clearance and sensitive timings for the works are recommended. Vegetation clearance should be completed within February to October inclusive when temperatures are  $>5^{\circ}\text{C}$ , and should avoid prolonged periods of hot dry weather when newt activity is reduced. Vegetation removal should be overseen by an ecologist who can dismantle any log/brash/woodchip piles, or any suitable features that may be used by sheltering great crested newt, by hand prior to any groundbreaking.

### **BREEDING BIRDS**

4.36 All wild birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). Some birds, known as 'schedule 1 birds', have extra legal protection. For these bird species it's also an offence to disturb them while they're nesting, building a nest, in or near a nest that contains their young and disturb their dependent young, either intentionally or by not taking enough care. The Sites have potential to support both common species of breeding bird and some Schedule 1 bird species and jackdaws were recorded nesting within the chimney of Honey Cottage.

4.37 Where possible vegetation removal within the Garden Entrance, Village Centre and Clock Tower Café Sites should take place outside of the main breeding bird season (February-September inclusive). If this is not possible, then a nesting bird check of the building should be carried out by a suitably qualified ecologist no longer than 48 hours prior to works commencing. Any active birds' nests should be left in situ and a suitable buffer established until all the chicks have fledged, or the breeding attempt considered over.

### **NOTABLE PLANTS**

4.38 Although no notable or rare plants were recorded on Site at the time of the survey, there are records for notable plant species within the Leonardslee Lakes and Gardens Estate. As the Garden Entrance Site contains a pedestrian footpath and the

Clock Tower Café Site is located adjacent to a pedestrian footpath, the potential for seed dispersal of these local notable plant species is high.

4.39 It is recommended that prior to any habitat removal and ground disturbance, a check for any notable or rare plant species is undertaken by a qualified botanist immediately prior to any vegetation removal.

## REPTILES

4.40 All species of reptile are protected from killing or injury under the Wildlife and Countryside Act 1981 (as amended).

4.41 All four Sites contain habitat suitable to support common and widespread reptile species, with some connectivity to suitable reptile habitats in the surrounding area. The data search returned only one record for slow worm within 2km of the Site within the past ten years.

4.42 The proposals will include the permanent removal of small areas of woodland that were considered suitable for foraging, dispersing and sheltering common and widespread species of reptile. Temporary removal of suitable foraging habitat within the Village Centre will also occur but will be replaced with like for like habitats post-development. No further surveys are required in order to inform the proposals; however, habitat removal should be undertaken within the reptile active period (March to October), under the supervision of an ecologist.

4.43 Should the compost pile or rockery be required for removal during the demolition and installation of the proposed extension to Honey Cottage, these features should be removed by hand by an ecologist within the reptile active period (March to October).

4.44 [REDACTED]

4.45

A black and white image showing a series of horizontal black bars of varying lengths, suggesting a redacted document. The bars are positioned at different heights and widths, creating a pattern of horizontal lines across the frame.

Term	Percentage
GMOs	85
Organic	75
Natural	70
Artificial	45
Organic	75
Natural	70
Artificial	45
Organic	75
Natural	70
Artificial	45
Organic	75
Natural	70
Artificial	45
Organic	75
Natural	70
Artificial	45

## SPECIES OF PRINCIPAL IMPORTANCE

## Hedgehog

4.46 Hedgehogs are a SPI, making them a material consideration for planning, and as such should be protected as part of the development and habitats enhanced for this species. The Hedgehog is protected under Schedule 6 of the Wildlife and Countryside Act 1981, making it illegal to kill or capture them using certain methods.

## OTHER PROTECTED SPECIES

4.48 Works must stop immediately, and advice sought from a suitably qualified ecologist on how to proceed in the unlikely event that any protected species are found during Site clearance or construction.

4.49 All mammals are afforded protection under the Wild Mammals (Protection) Act 1996, which make it an offence to cause unnecessary suffering to wild mammals.

## ENVIRONMENTAL BEST PRACTICE

4.50 Good site practice during the construction phase must take place to avoid any negative impacts through increased noise, lighting, sound, vibration, dust or particles. Best environmental practice measures which should be implemented where appropriate to include:

- Appropriate storage of fuels and chemicals to minimise the risk of accidental spillage. Sources of best construction practice and environmental management include CIRIA guidance (Connolly and Charles, 2005) and various Defra/ Environment Agency guidelines (2016). This guidance relates to various pieces of legislation including the Environmental Damage (Prevention and Remediation) Regulations 2009.
- The protection of retained trees in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction.
- All materials should be stored on hardstanding. Where materials cannot be stored on hardstanding, methods for ground protection should be considered and put in place to prevent damage to the root system of any retained trees within the development footprint or wider Leonardslee area. This would also protect against any damage caused by the tracking of heavy machinery during construction works.

- Adherence to best construction practice including CIRIA guidance (Connolly and Charles, 2015) and various Defra/Environment Agency guidelines (2016) that have replaced the Pollution Prevention Guidelines (Environment Agency, 2007).
- All individuals on site should perform frequent checks for plant material on shoes, vehicle tracks and tyres, and equipment to prevent transfer of invasive plant material across the wider Leonardslee Lakes and Gardens Estate and beyond the ownership boundary.
- overnight working should be avoided to minimise noise and disturbance to protected species including [REDACTED] bats, breeding birds and dormice;
- any trenches should be covered overnight, or include a means of escape for any animals falling in (such as a ramp); and
- any open or exposed pipe work should be capped to prevent animals from gaining access.

### INVASIVE SPECIES MANAGEMENT

4.51 Rhododendron is an invasive non-native species. It is listed on Schedule 9 of the Wildlife and Countryside Act in England and Wales therefore, it is also an offence to plant or otherwise cause to grow these species in the wild. As this species will be removed to facilitate the construction of the terrace, pedestrian footpath and ticket kiosk, appropriate site management and waste disposal will be required. Environmental management guidance to prevent the spread of invasive plant species is available on the Government website (Natural England, Defra & Environment Agency, 2016).

4.52 Mechanical methods of control and removal are advised for rhododendron and these comprise pulling both young seedlings and mature specimens and excavating the root mass. Appropriate measures should be taken to ensure it is contained during works to avoid spreading and specialist guidance on how to safely remove and dispose of invasive species should be adhered to.

4.53 All personnel working on Site should perform frequent checks for plant material on shoes, vehicle tracks and tyres, and equipment to prevent transfer of invasive plant material across the wider Leonardslee Lakes and Gardens Estate and beyond the ownership boundary.

### FURTHER SURVEY REQUIREMENTS

4.54 Table 4.1 lists further survey requirements as recommended in the constraints section.

**Table 4.1: Further survey requirements**

Ecological Feature	Survey Requirement	Number of surveys and seasonal considerations
Dormice, breeding birds, reptile and great crested newts	Supervision of vegetation removal	Any vegetation removal concerned with the areas of woodland should be done under the supervision of an Ecologist. Vegetation clearance should be completed within February to October inclusive

### SUMMARY OF RESIDUAL EFFECTS

4.55 Provided that the above is adhered to, with the exception of the additional information required to assess impacts on roosting bats, all identified impacts to ecological receptors will have been addressed, with no residual impacts.

### OPPORTUNITIES FOR ECOLOGICAL ENHANCEMENT

4.56 Planning policy at the national and local level and strategic biodiversity partnerships encourage inclusion of ecological enhancements in development projects. Ecological enhancements can also contribute to green infrastructure and ecosystem services such as storm water attenuation and reducing the urban heat island effect. Measures set out below may be used to help achieve biodiversity net gain. Please note, however, that no formal calculations have been provided in this instance.

4.57 As proposals for these four Sites are part of a wider plan for multiple sites within Leonardslee Lakes and Gardens Estate, enhancements should be made as part of an enhancement plan that covers the proposals for each Site within the Leonardslee Lakes and Gardens Estate.

4.58 The following measures would be suitable for integration into the Site's design.

#### **Dark-sky friendly lighting**

4.59 The High Weald AONB Management Plan (2019) propose that public bodies and others 'follow the Institute for Lighting Professionals guidance; promote information on dark sky-friendly lighting; install outside lighting only when needed and use dark sky-friendly lighting' (objective OQ4) (High Weald Joint Advisory Committee 2019).

4.60 Consideration should be given to a sensitive artificial lighting strategy during construction and post-development with respect to breeding birds, dormice and foraging and commuting bats. This could include specifications for downward facing lights or the inclusion of baffles with light spillage kept to a minimum. During the construction phase artificial lighting should only be utilised where necessary for health and safety reasons with lighting only used for the period of time for which it is required (Jones, 2000).

#### **Wildlife Planting**

4.61 In order to provide enhancements with the aim of a net-gain in biodiversity, further planting in context within the setting of the Site and with wildlife value could be advantageous within the ownership boundary. Planting opportunities could include potted planters, planted trellis for climbing plant species and the use of hanging baskets. Whichever species are chosen, wildlife planting should include a diversity of native species of local provenance. The use of nectar-rich and berry producing plants will attract a wider range of insects and birds and will continue to accommodate those already accessing habitats on Site.

4.62 Any new or replacement tree planting should be under-planted to improve structure and cover for wildlife.

4.63 Good horticultural practice should be utilised, including the use of peat-free composts, green manure, mulches and soil conditioners, native plants with local provenance, and avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

#### Provision of nesting opportunities

4.64 In order to enhance the Sites for both birds and bats, it is recommended that bird and bat boxes are erected on suitably mature trees within the Site or wider Estate boundary to provide suitable nesting/ roosting features. It is recommended that bird and bat boxes should include the following or similar where these are not available;

- 2F Schwegler standard bat boxes (or similar approved) (mounted on mature trees)
- 2FN Schwegler standard bat boxes (or similar approved) (mounted on mature trees)
- Open-fronted bird boxes
- Tunnel-fronted bird boxes
- Multipurpose bird boxes

4.65 Notwithstanding any requirements for a licence, roosting features for bats could be installed on trees within the areas of woodland on Site, or other trees within the wider Leonardslee Lakes and Gardens Estate or even on the side of Honey Cottage. A species-specific bat box should be chosen following the results of the required bat surveys (see the Preliminary Roost Assessment report, Temple, 2024a), however, consideration should also be given to Bechstein's bat, Barbastelle, brown long-eared and noctule bats which are primarily woodland species, and all UK BAP priority species.

4.66 Bat boxes can be sited on trees at a height of between 3m to 6m in an open sunny position. A group of 3 to 5 boxes facing in different directions will provide a variety of micro-habitats. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.

4.67 Woodcrete/woodstone bird and bat boxes (or equivalent sustainable material) are recommended as they are long lasting compared to wooden boxes, insulate occupants from extremes of temperature and condensation and are available in a broad range of designs.

#### **Log piles and bug hotels**

4.68 Log piles could be provided within the woodland on Site and could be formed using any off cuts from Site clearance or maintenance. They should be cited in shady areas within quiet locations away from human disturbance. As the woodland is frequented by visitors to wider Leonardslee Lakes and Gardens Estate, they may be subject to some level of disturbance. Where this may occur, then the log piles should be secured and bound together.

4.69 Leave cut timber in the wood to rot down individually or use logs to create habitat piles. Log piles offer sheltered places for dormice and amphibians and reptiles to hibernate over winter. The crevices will also provide habitat for other small mammals and the rotting timber itself provides a home for a variety of invertebrates.

#### **Tree Planting**

4.70 Where tree removal is required to facilitate development, replacement tree planting should occur or alternatively where trees are removed, removal should be done sensitively so that trees can be re-planted elsewhere on Site or within the wider Estate. Where replacement trees are required, wildlife planting should include a diversity of native species local to the area. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals. Any new

or replacement tree planting should be under-planted to improve structure and cover for wildlife. Any trees which fail to establish or fail after being re-planted should be replaced.

4.71 The tree size ratio is crucial for the success of any planted trees. It will be important to plant the correct size saplings to ensure the trees longevity. For example, planting 'whips', which are 2-4 years old and typically non branching saplings, will be risky as many could fail given the density of the woodland and surrounding plant competition. As such it will be necessary to plant 'standard trees' (standard, heavy standard, extra heavy standard, advanced heavy standard) which are specimens which are grown to be well established small trees which have a substantial upright stem, clean of lateral growths, supporting a branched crown.

### Woodland Management

4.72 The woodlands on Site could undergo some selective crown reduction or woodland thinning to allow for a more diverse ground flora to develop. Where this is implemented, the woodland could be under-planted to create greater structure and cover for wildlife, with shrubs including hazel *Corylus avellana*, blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, honeysuckle *Lonicera sp.*, gorse *Ulex europaeus* and bramble. The use of block planting of single species should be avoided in favour of a higher diversity of plant types per square metre. The aim should be to achieve a complexity of structure, variety of habitat niches, a species palette that flowers throughout the year, and wilder naturalistic landscape planting to optimise the value of the site for wildlife.

4.73 The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals including bats, and continue to accommodate those already utilising the Site. Alternatively, the understorey could be planted with a wildflower seed such as Emorsgate Seeds, Wild Flowers for Woodlands EW1F which would still help to attract a wide range of insects, birds and mammals.

### Good horticultural practice

- It is recommended that the following sustainable horticultural practices are employed to minimise offsite ecological impacts when incorporating new areas of planting. These include:
  - All native plant material should be sourced from suppliers who have adopted Flora Locale's (2012) Code of Practice for collectors, growers and suppliers of native flora;
  - The use of peat-free composts and soil conditioners to reduce the loss of important peat bogs;
  - Feeding of plants using organic based fertilisers and improving the soil structure by incorporating organic material, preferably composted municipal waste;
  - The use of drought tolerant plants and mulches to reduce evaporation and the amount of mains water needed for horticulture; and
  - Minimising the use of pesticides (herbicides, insecticides, and fungicides) to prevent cumulative fatal effects to animals via the food chain. Where use is unavoidable, non-residual chemicals should be applied.

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## Appendix 1: Maps

Figure 1: Site Context Map

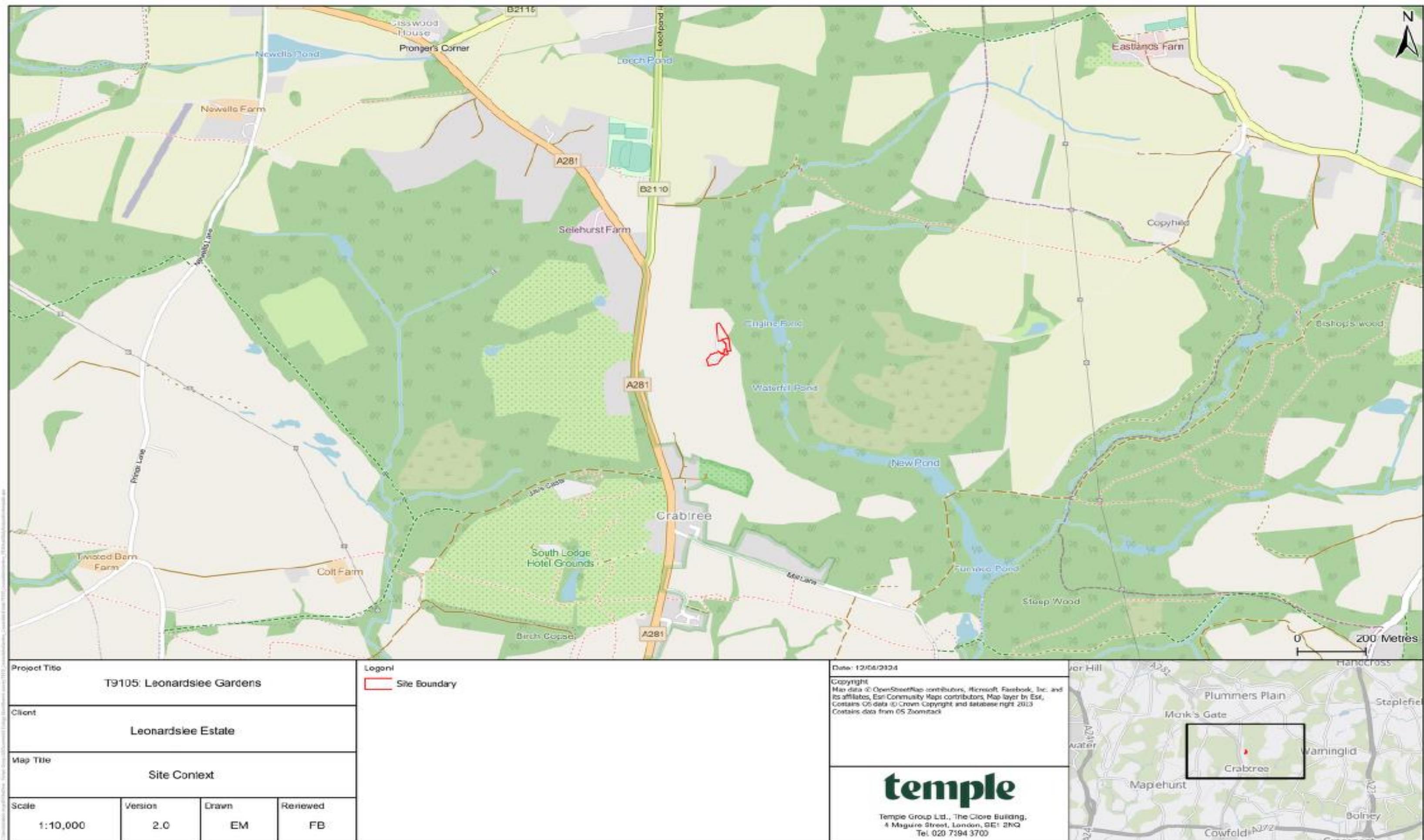


Figure 2a: International Designated Sites Map

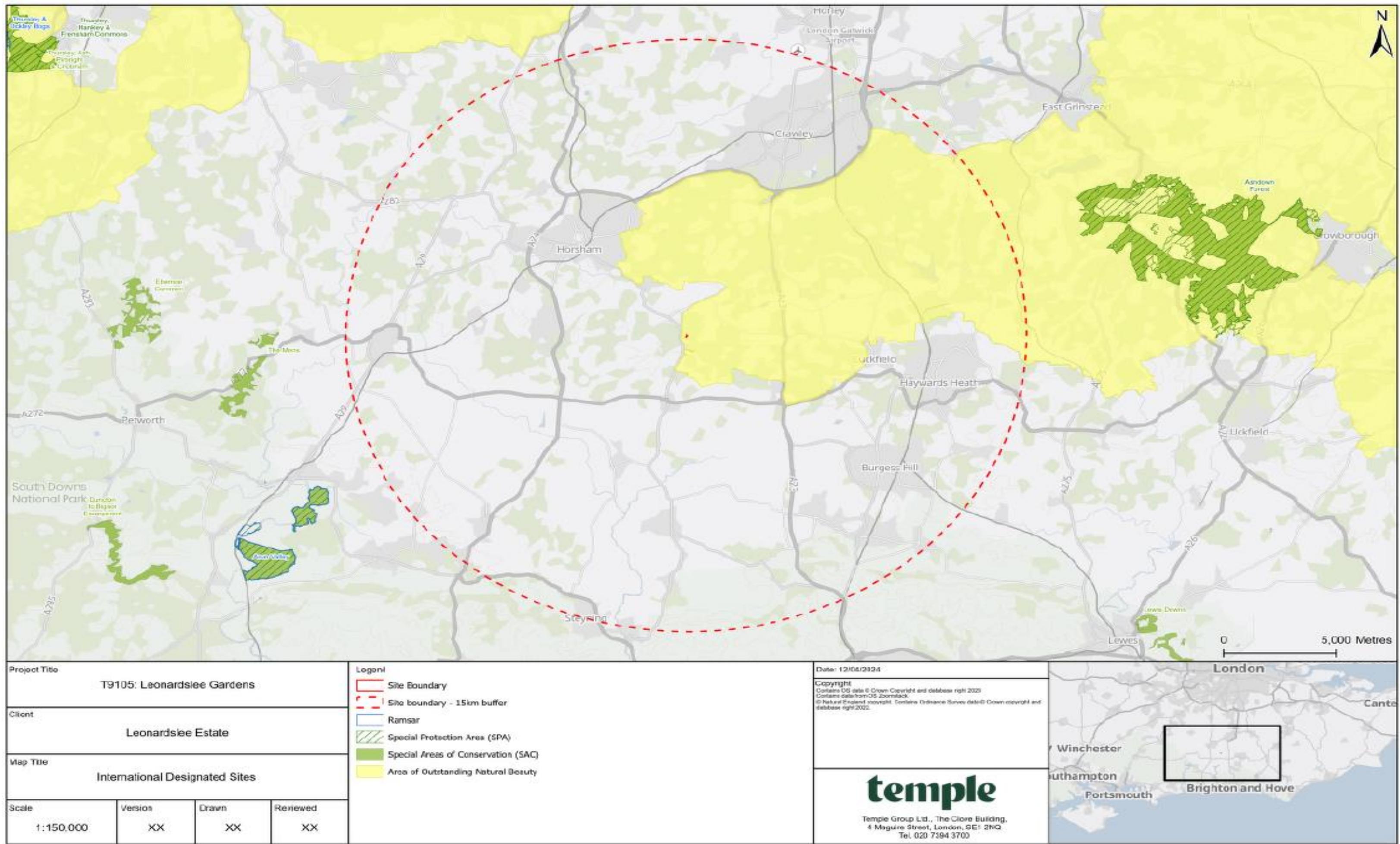


Figure 2b: Local Designated Sites Map

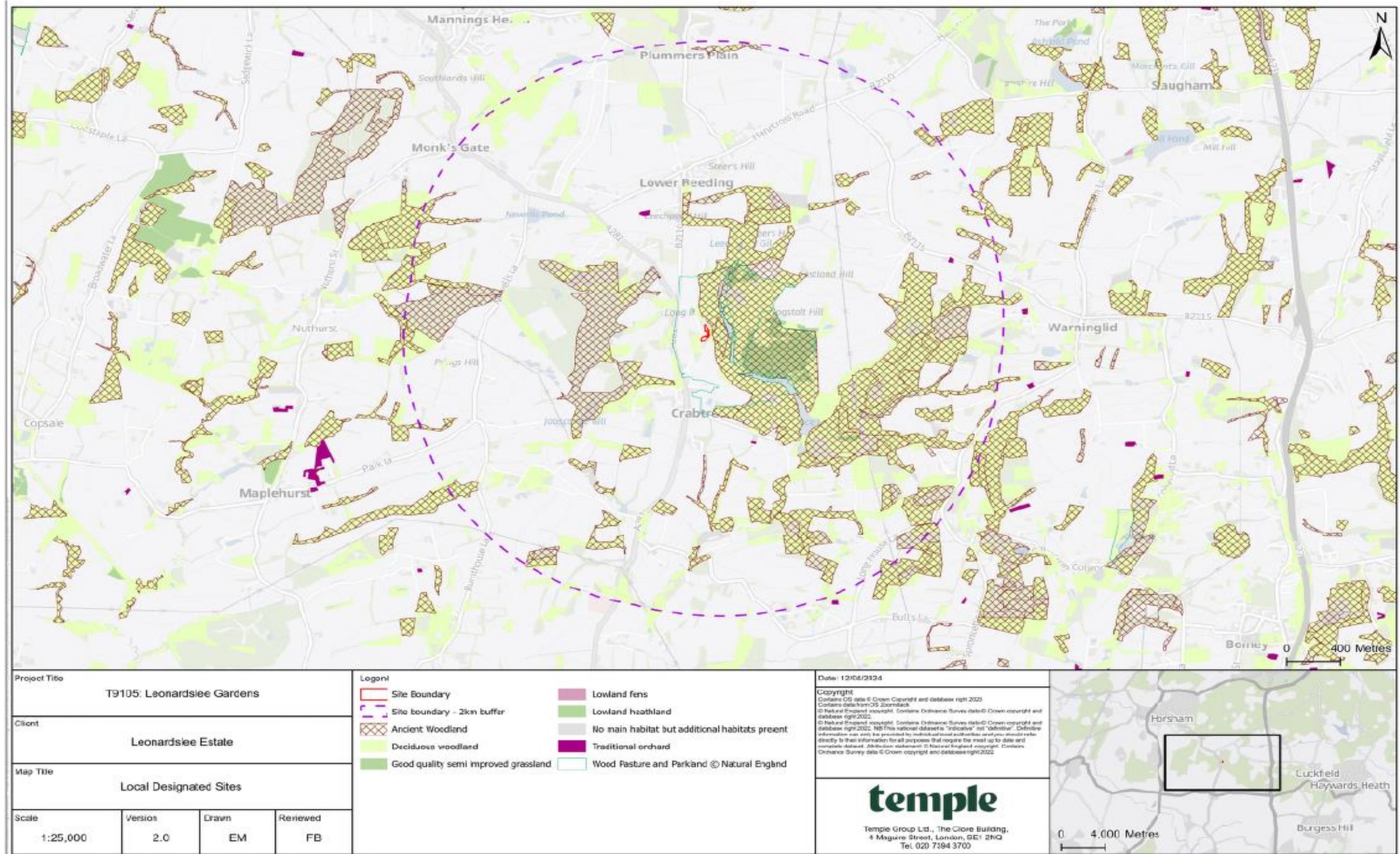


Figure 3: Habitat Survey Map – Clock Tower Café

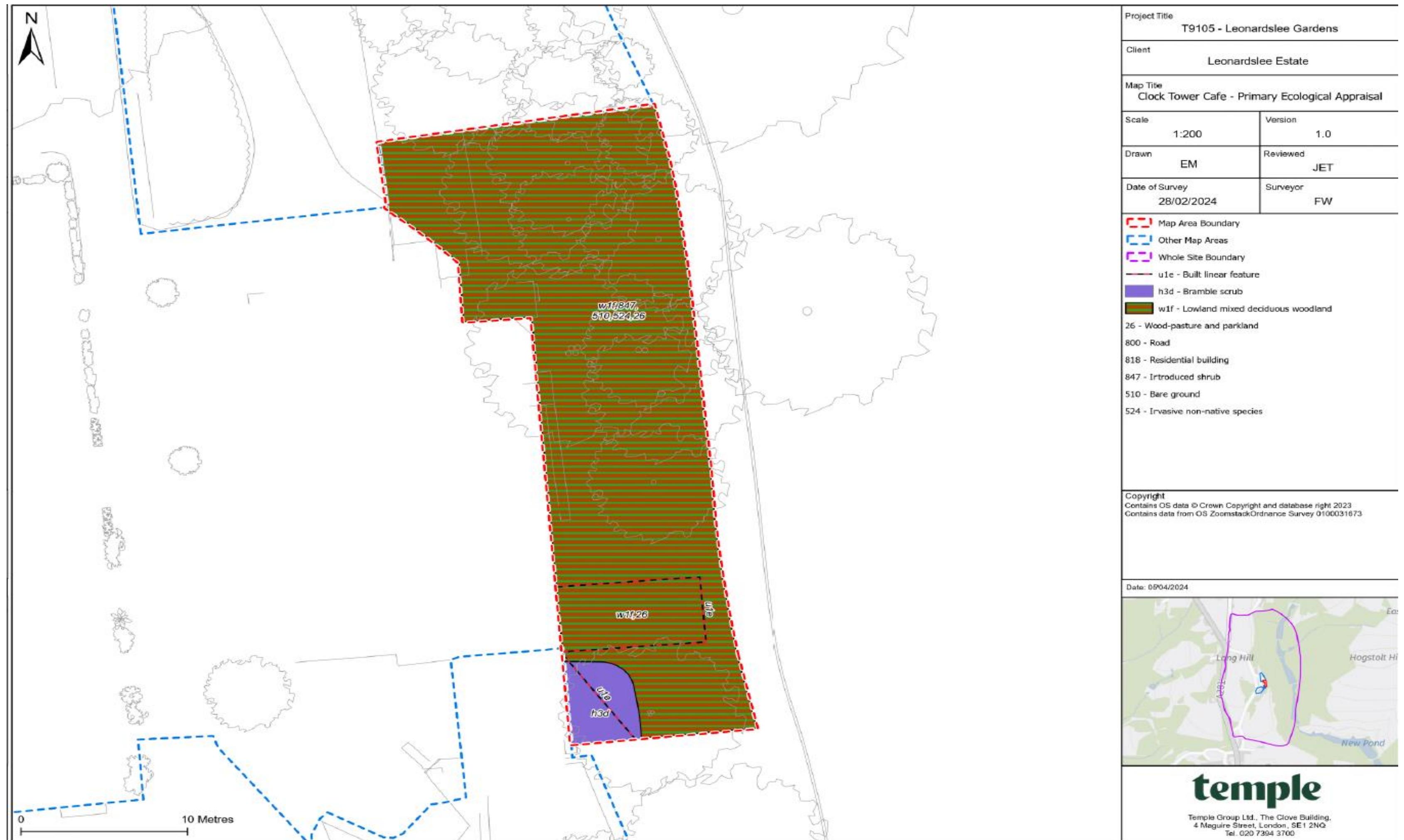


Figure 4: Habitat Survey Map – Garden Entrance



Figure 5: Habitat Survey Map – Honey Cottage

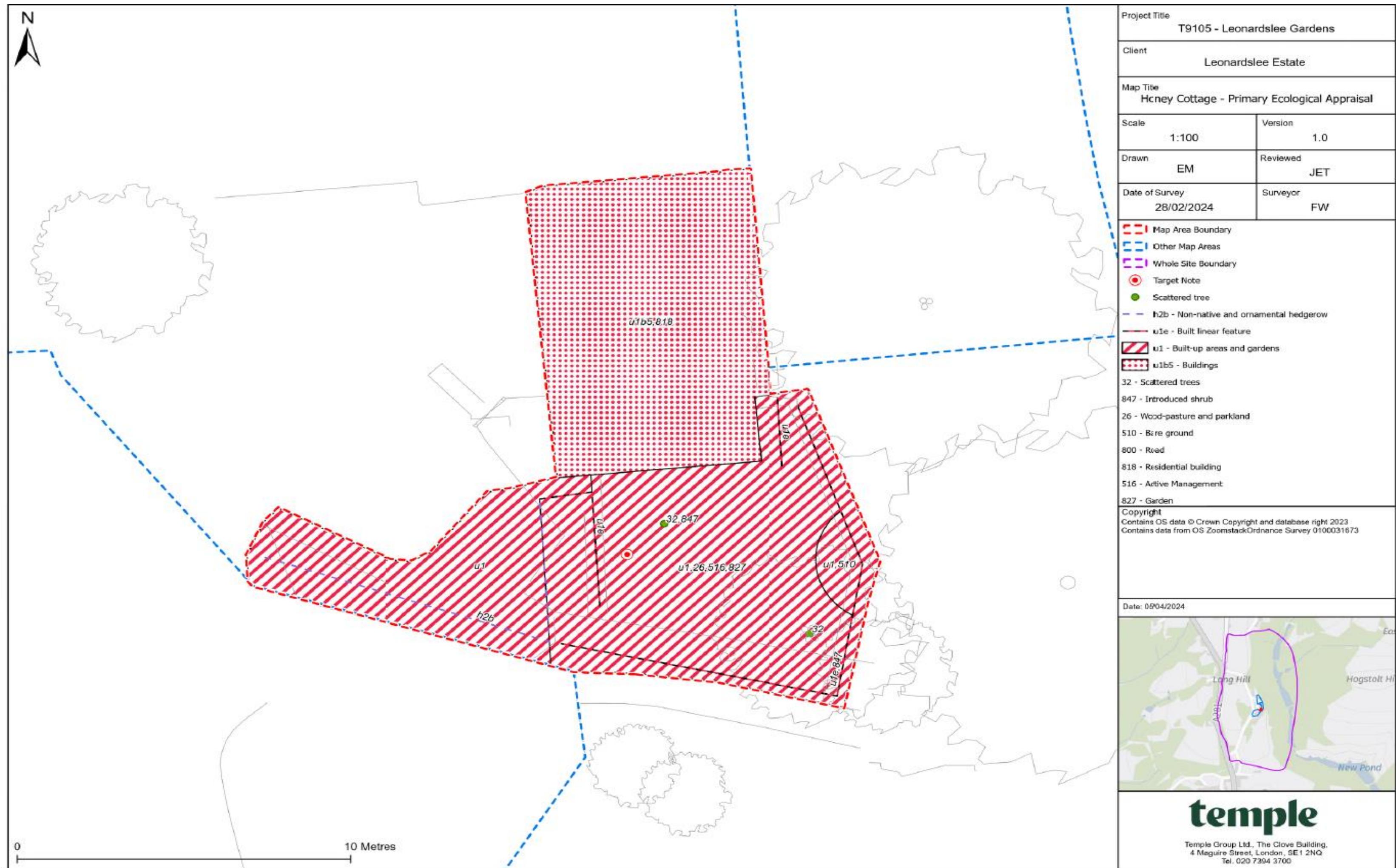


Figure 6: Habitat Survey Map – Village Centre



## Appendix 2: Species List

**Botanical Species List for Garden Entrance, Honey Cottage, Clock Tower Café and Village Centre, Leonardslee Lakes and Gardens compiled from UKHabitat Classification survey carried out on the 28<sup>th</sup> February 2024.**

Scientific nomenclature and common names for vascular plants follow Stace (2019) and Blockeel and Long (1998) for bryophyte species. Please note that this plant species list was generated as part of a Phase 1 habitat survey, does not constitute a full botanical survey and should be read in conjunction with the associated results section of this PEA.

**Abundance was estimated using the DAFOR scale and additional notes taken as follows:**

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally

c=clumped, e=edge only, g=garden origin, p=planted, y = young, s=seedling or sucker, t=tree, h=hedgerow, w=water

Scientific Name	Common Name	Abundance	Qualifier
<i>Achillea millefolium</i>	Yarrow	LO	
<i>Allium</i>	Allium	R	
<i>Aquilegia</i>	Aquilegia	O	
<i>Arum italicum</i>	Italian Lords and Ladies	LO	
<i>Arum maculatum</i>	Lord and Ladies	LO	
<i>Asplenium scolopendrium</i>	Harts-tongue fern	R	
<i>Aucuba japonica</i>	Japanese aucuba	R	T, p
<i>Azalea</i>	Azalea (Rhododendron)	R	
<i>Bellis perennis</i>	Daisy	LA	
<i>Borago officinalis</i>	Borage	R	
<i>Buddleja davidii</i>	Buddleja	R	t
<i>Camelia sp.</i>	Camelia	LO	T, p
<i>Cappadocicum 'Aureum'</i>	Golden Cappadocian Maple	R	T
<i>Cardamine sp.</i>	Cardamine sp.	LO	
<i>Carex pendula</i>	Pendulous sedge	R	

<i>Cerastium fontanum</i>	Common mouse-ear chickweed	LO	
<i>Chamaerops humilis</i>	Palm	R	T, p
<i>Convallaria majalis</i>	Lily of the Valley	R	
<i>Cotoneaster</i>	Cotoneaster sp.	R	p
<i>Crocus</i>	Crocus	R	
<i>Cryptoeria japonica</i>	Japanese cedar	R	T, p
<i>Cupressus</i>	Cypress	R	T, p
<i>Cyclamen</i>	Cyclamen	D	
<i>Digitalis</i>	Foxglove	R	
<i>Epilobium</i>	Willowherb sp.	LO	
<i>Eranthis</i>	Winter acanite	LF	
<i>Euphorbia</i>	Spurge	R	
<i>Europhyllia glutenosa</i>	Brush bush	R	
<i>Festuca sp.</i>	Fescue species	A	
<i>Ficaria verna</i>	Lesser celandine	R	
<i>Forsythia</i>	Forsythia	R	T, P
<i>Fungi</i>	Fungi	R	
<i>Galanthus</i>	Snowdrop	R	
<i>Galium aparine</i>	Cleavers	R	
<i>Geranium robertianum</i>	Herb Robert	O	
<i>Gingko biloba</i>	Gingko	R	T, p
<i>Glechoma hederacea</i>	Ground ivy	R	
<i>Hedera helix</i>	Ivy	LA	
<i>Helminthotheca echioides</i>	Bristly ox tongue	LO	
<i>Holcus lanatus</i>	Yorkshire fog	O	
<i>Hydrangea</i>	Hydrangea	LA	
<i>Hypericum</i>	Hypericum	R	

<i>Hypericum calycinum</i>	Rose of Sharon	R	p
<i>Ilex aquifolium</i>	Holly	R	t
<i>Jacobaea vulgaris</i>	Ragwort	O	
<i>Juncus inflexus</i>	Hard rush	R	
<i>Lapsana communis</i>	Nipplewort	LA	
<i>Laurus nobilis</i>	Bay Tree	R	t
<i>Lolium perenne</i>	Perennial Rye grass	A	
<i>Lonicera sp.</i>	Honeysuckle	R	
<i>Magnolia</i>	Magnolia	R	T, p
<i>Mahonia x media</i>	Mahonia	R	T, p
<i>Medicago lupulina</i>	Black medic	F	
<i>Narcissus</i>	Daffodil	LA	
<i>Paeonia sect. Moutan</i>	Peony tree	R	t
<i>Palmarum 'bloodgood'</i>	Acer	R	t
<i>Phyloeladus trichomanoides</i>	Celery pine	R	T, p
<i>Pieris japonica</i>	Japanese andromeda	R	t
<i>Pinus shrobus</i>	Eastern white pine	R	T, p
<i>Pittosporum tenuifolium</i>	Black matipo	R	
<i>Plantago lanceolata</i>	Ribwort plantain	LA	
<i>Plantago major</i>	Greater plantain	O	
<i>Primula vulgaris</i>	Primrose	R	
<i>Pseudotsuga menziesii</i>	Douglas fir	R	T, p
<i>Pteridium</i>	Bracken	R	
<i>Ranunculus acris</i>	Meadow buttercup	LO	
<i>Ranunculus acris</i>	Meadow buttercup	LF	
<i>Ranunculus repens</i>	Creeping buttercup	LO	
<i>Rhododendron ponticum</i>	Rhododendron	D	H
<i>Rosa sp.</i>	Rose sp.	R	

<i>Rubus fruticosus</i>	Bramble	LA	
<i>Salix caprea</i>	Pussy Willow	R	t
<i>Sphagnum sp.</i>	Moss	LA	
<i>Symphytum</i>	Comfrey	R	
<i>Taraxacum officinalis</i>	Dandelion	R	
<i>Taxus baccata</i>	Yew	R	T, p
<i>Trachycarpus fortunei</i>	Chinese windmill palm	R	T, p
<i>Trifolium</i>	Clover	F	
<i>Tulipa</i>	Tulip	R	
<i>Urtica dioica</i>	Common Nettle	R	
<i>Veronica</i>	Speedwell	R	

## Appendix 3: Target Notes

**Target Notes List for Garden Entrance, Honey Cottage, Clock Tower Café and Village Centre, Leonardslee Lakes and Gardens compiled from UKHabitat Classification survey and protected and notable species assessment carried out on the 28<sup>th</sup> February 2024.**

Target note (TN)	Description
1	Rockery providing suitable hibernation habitat for herpetofauna.
2	Compost pile providing suitable hibernation habitat for herpetofauna.

## Appendix 4: Photographs

**Photograph 1:** Area of introduced shrub and flower bed contained within a mortared wall within the Village Centre Site. View looking south.



**Photograph 2:** Area of introduced shrub contained within a flower bed to the north of the Clock Tower Café, within the Garden Entrance Site. View looking north.



**Photograph 3:** Area of Mixed Deciduous Woodland within the Garden Entrance Site. View looking north. This area of woodland lies adjacent to a pedestrian footpath.



**Photograph 4:** Area of Mixed Deciduous Woodland contained within the Clock Tower Café Site. the camellia in the background of this photo will be removed to facilitate development. View looking north.



**Photograph 5:** Area of sealed surface forming the existing car park at the front of the main Leonardslee House within the Village Centre Site. view looking east.



**Photograph 6:** Honey Cottage, a residential property contained within the Honey Cottage Site. this building is adjoined to the neighbouring Clock Tower Café. View looking east.



**Photograph 7:** Area of bramble scrub within the area of woodland to the east of the Clock Tower Café. The bramble at the forefront of the photo is situated above a mortared wall.



**Photograph 8:** Single species hedgerow containing the non-native invasive species rhododendron to the west of the Garden Entrance Site.



**Photograph 9:** Hedgerow to the south-west of the Honey Cottage Site. View looking east.



## Appendix 6: Habitat Condition Assessments

## Habitat Condition Assessment Proforma

CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS															
Date		28.02.24		Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)				U1							
Weather conditions		overcast, cool conditions													
Surveyor name(s)		Francesca West		Unique polygon reference(s)		secondary code 510									
Project / development name		Clock Tower Café and Garden Entrance		Statutory Biodiversity Metric habitat type		URBAN									
Site name or location		Leonardslee Lakes and Gardens		Condition assessment required? (y/n)		Y									
Onsite or offsite?		Onsite		Condition sheet used		22A Urban									
Reason for assessment (if not baseline condition survey)															
Limitations (if applicable)															
Habitat description															
Areas of bare ground within the ground flora of the woodland on Site															
Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria. For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.															
Criterion	CA	CB	CC	CD	CE1	CE2	CF	CG							<b>TOTAL</b>

Result	F	F	F	F	F	F	F	F							
Photo ref															
Target note ref															
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N				Condition (Good/Moderate/Poor):				N/A						
Suggested enhancement interventions to improve condition score	N/A														

CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS			
Date	28.02.24	Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)	U1
Weather conditions	overcast, cool conditions		
Surveyor name(s)	Francesca West	Unique polygon reference(s)	secondary code 32
Project / development name	Village Centre	Statutory Biodiversity Metric habitat type	INDIVIDUAL TREES
Site name or location	Leonardslee Lakes and Gardens	Condition assessment required? (y/n)	Y

Onsite or offsite?	Onsite	Condition sheet used	9A Individual Trees
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			
Habitat description			

Scattered trees contained within the areas of introduced shrub on Site

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.

For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	CA	CB	CC	CD	CE	CF								<b>TOTAL</b>
Result	F	P	P	P	F	P								4
Photo ref														
Target note ref														
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N			Condition (Good/Moderate/Poor):			Moderate							
Suggested enhancement interventions to improve condition score	N/A													

## CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS

Date	28.02.24	Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)	W1f
Weather conditions	overcast, cool conditions		
Surveyor name(s)	Francesca West	Unique polygon reference(s)	
Project / development name	All four sites	Statutory Biodiversity Metric habitat type	WOOD-PASTURE AND PARKLAND
Site name or location	Leonardslee Lakes and Gardens	Condition assessment required? (y/n)	Y
Onsite or offsite?	Onsite	Condition sheet used	25A Woodland and Forest
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			
Habitat description			

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria. For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.													
Criterion	CA	CB	CC	CD	CE1	CE2	CF	CG	CH				<b>TOTAL</b>
Result	F	F	P	F	P	F	F	F					

Photo ref												
Target note ref												
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N			Condition (Good/Moderate/Poor):			Poor					
Suggested enhancement interventions to improve condition score	Contained within Section 4 of this report											

### CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS

Date	28.02.24	Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)	U1
Weather conditions	overcast, cool conditions		
Surveyor name(s)	Francesca West	Unique polygon reference(s)	secondary code 32
Project / development name	Village Centre	Statutory Biodiversity Metric habitat type	INDIVIDUAL TREES
Site name or location	Leonardslee Lakes and Gardens	Condition assessment required? (y/n)	Y
Onsite or offsite?	Onsite	Condition sheet used	9A Individual Trees
Reason for assessment (if not baseline condition survey)			

Limitations (if applicable)															
Habitat description															
Scattered trees contained within the areas of introduced shrub on Site															
Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria. For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.															
Criterion	CA	CB	CC	CD	CE	CF									<b>TOTAL</b>
Result	F	P	P	P	F	P									4
Photo ref															
Target note ref															
Are any criteria non-negotiable? (Y/N) If Yes are they passed?			N				Condition (Good/Moderate/Poor):			Moderate					
Suggested enhancement interventions to improve condition score			N/A												

## CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS

Date	28.02.24	Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)	W1f
Weather conditions	overcast, cool conditions		
Surveyor name(s)	Francesca West	Unique polygon reference(s)	
Project / development name	All four sites	Statutory Biodiversity Metric habitat type	WOODLAND - Lowland Mixed Deciduous Woodland
Site name or location	Leonardslee Lakes and Gardens	Condition assessment required? (y/n)	Y
Onsite or offsite?	Onsite	Condition sheet used	24A Woodland
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			
Habitat description			

Areas of woodland containing non-native and introduced shrub species. The areas of woodland are managed as part of the Leonardslee Lakes and Gardens Estate.

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.  
For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	CA	CB	CC	CD	CE1	CE2	CF	CG	CH	CI	CJ	CK	CL	CM
Result	2	3	1	1	1	1	1	1	3	2	2	1	1	3
Photo ref														

Target note ref												
Are any criteria non-negotiable? (Y/N) If Yes are they passed?	N			Condition (Good/Moderate/Poor):			Poor					
Suggested enhancement interventions to improve condition score	Contained within Section 4 of this report											

CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS			
Date	28.02.24	Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)	U1
Weather conditions	overcast, cool conditions		
Surveyor name(s)	Francesca West	Unique polygon reference(s)	secondary code 32
Project / development name	Village Centre	Statutory Biodiversity Metric habitat type	INDIVIDUAL TREES
Site name or location	Leonardslee Lakes and Gardens	Condition assessment required? (y/n)	Y
Onsite or offsite?	Onsite	Condition sheet used	9A Individual Trees

Reason for assessment (if not baseline condition survey)														
Limitations (if applicable)														
Habitat description														
Scattered trees contained within the areas of introduced shrub on Site														
Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria. For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.														
Criterion	CA	CB	CC	CD	CE	CF								<b>TOTAL</b>
Result	F	P	P	P	F	P								4
Photo ref														
Target note ref														
Are any criteria non-negotiable? (Y/N) If Yes are they passed?		N				Condition (Good/Moderate/Poor):			Moderate					
Suggested enhancement interventions to improve condition score		N/A												
<b>CONDITION ASSESSMENT PROFORMA FOR USE WITH THE STATUTORY METRIC - AREA BASED HABITATS</b>														

Date	28.02.24	Statutory Biodiversity Metric survey reference (if condition assessment of this polygon relates to a wider habitat survey)	H2b
Weather conditions	overcast, cool conditions		
Surveyor name(s)	Francesca West	Unique polygon reference(s)	
Project / development name	Garden Entrance and Honey Cottage	Statutory Biodiversity Metric habitat type	Hedgerows and lines of trees – non-native and ornamental hedgerow
Site name or location	Leonardslee Lakes and Gardens	Condition assessment required? (y/n)	N – condition fixed at Poor
Onsite or offsite?	Onsite	Condition sheet used	N/A
Reason for assessment (if not baseline condition survey)			
Limitations (if applicable)			
Habitat description			

#### Non-native hedgerows on Site

Allocate pass 'P' or fail 'F'. Allocate 'NA' to any irrelevant criteria numbers where condition sheet contains fewer than 13 criteria.

For Woodland & Intertidal condition sheets, allocate scores of '1' '2' or '3' against each criteria assessed.

Criterion	CA	CB	CC	CD	CE1	CE2	CF	CG	CH						<b>TOTAL</b>
Result															

Photo ref												
Target note ref												
Are any criteria non-negotiable? (Y/N) If Yes are they passed?		N/A			Condition (Good/Moderate/Poor):			Poor				
Suggested enhancement interventions to improve condition score		Contained within Section 4 of this report										

## Appendix 7: Legislation and Planning Policy

**Important Notice:** This section contains details of legislation applicable in England and Wales only (i.e. not including Scotland, the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to represent the current (at the time of writing) situation with respect to the UK's position outside of the EU and to ensure accuracy throughout, this section should not be relied upon as a definitive statement of the law.

Over the past few years, three important bills have been published which are intended to shape how growing pressures on the environment post-Brexit (post-transition period) are tackled. Both the Agriculture Bill and Fisheries Bill gained Royal Assent in November 2020 and are now the Agriculture Act 2020 and Fisheries Act 2020 respectively; and, more recently, the Environment Bill was passed into law in November 2021, becoming the Environment Act 2021. *N.B. as environment policy is a devolved matter, most of this Act applies to England only.*

## A LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive<sup>10</sup> is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by **The Conservation of Habitats and Species Regulations 2017 (as amended)** and **The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)**.

Various amendments to the 2017 Regulations in England and Wales have been made through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These changes came into effect on the 1 January 2021 following the UK's departure from the EU and the end of the Transition Period. The changes are largely limited to

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<sup>10</sup> Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

'operability changes' that will ensure the Regulations can continue to have the same working effect as before.

**The Wildlife and Countryside Act 1981 (as amended)** is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on [www.opsi.gov.uk](http://www.opsi.gov.uk). Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000).

As well as delivering long-term targets to reduce waste and improve resource efficiency and improve air and water quality targets, the **Environment Act 2021** aims to halt the decline of nature by 2030, mandates Biodiversity Net Gain for developments in England and amends the Wildlife and Countryside Act 1981 (as amended) to introduce an additional purpose for granting a protected species licence in relation to development which is 'for reasons of overriding public interest'. The Act also introduces the Office for Environmental Protection (OEP), which will be a new public body intended to hold government and public authorities to account, although the government will be able to issue guidance to the OEP on how it enforces policies and legislation.

Some of the key biodiversity elements in the Act that will have a bearing on species protection in the UK include:

- A strengthened biodiversity duty on Local Planning Authorities;
- Biodiversity net gain to ensure developments, including Nationally Significant Infrastructure Projects (NSIP), deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;

- Strengthen woodland protection enforcement measures;
- Conservation Covenants;
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature;
- Introduces the power for the Habitats Regulations to be amended or 'refocused' to 'to deliver creative public policy thinking that delivers results'.

This section does not provide further detail on the Environment Act 2021 as, at the time of writing (November 2021), the Act, in its final form, has not been published and it remains to be seen how and when the various elements will be enacted at a national and local level.

Other legislative Acts affording protection to wildlife and their habitats include:

- Salmon and Freshwater Fisheries Act 1975;
- Deer Act 1991;
- [REDACTED]
- Wild Mammals (Protection) Act 1996;
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment & Rural Communities (NERC) Act 2006;
- The Eels (England and Wales) Regulations 2009; and
- Environment (Wales) Act 2016.

Species and species groups that are protected or otherwise regulated under the aforementioned legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), [REDACTED] bats, birds, dormouse, invasive species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (as amended), which includes smooth snake, sand lizard, great crested newt, natterjack toad, all bat species, otter, dormouse and some plant, invertebrate and fish species, are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Habitats Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 (as amended) does not define the act of 'migration' and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered where relevant.
- In order to obtain a mitigation licence for species protected under the Conservation of Habitats and Species Regulations 2017 (as amended), the application must demonstrate that it meets all of the following three 'tests': i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

A horizontal bar chart with five categories on the x-axis and a single data point '11' on the y-axis. The categories are represented by black bars of varying lengths. The first bar is the longest, followed by the fourth bar, then the second bar, then the third bar, and the fifth bar is the shortest.

<sup>13</sup> Natural England and Natural Resources Wales will only consider issuing a licence where detailed planning permission (if applicable to operation) has already been granted.

A series of 12 horizontal black bars of varying lengths, decreasing in length from top to bottom. The bars are evenly spaced and extend across the width of the frame.

## BATS

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats);
- Deliberate disturbance of bat species as:
  - a) to impair their ability:
    - to survive, breed, or reproduce, or to rear or nurture young; or
    - to hibernate or migrate.
  - b) to affect significantly the local distribution or abundance of the species.
- Damage or destruction of a breeding site or resting place; and
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended) in respect to sub-sections 9 (4) (b) and (c) and 9 (5) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

#### How is the legislation pertaining to bats liable to affect development works?

The appropriate licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost<sup>14</sup>.

## BIRDS

All wild birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). A wild bird is defined as any bird of a species that is

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<sup>14</sup> Garland and Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. 150. The Mammal Society, Southampton.

resident in or is a visitor to the European Territory of any member state in a wild state.

Among other things, the legislation makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy an egg of any wild bird; or
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl *Tyto alba*, black redstart *Phoenicurus ochruros*, hobby *Falco subbuteo*, bittern *Botaurus stellaris* and kingfisher *Alcedo atthis* receive additional special protection under Schedule 1 of the Act. This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young.
- Intentional or reckless disturbance of dependent young of such a bird.

### How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction is to undertake work outside the main bird nesting season which typically runs from March to August<sup>15</sup>. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

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<sup>15</sup> It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species, geographical location of the site and vagaries of the season in any

Those species of bird listed on Schedule 1 are also protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest. It should be noted that there is no threshold under which disturbance is not an offence, that is to say that disturbance need not be 'significant' for an offence to be committed.

While it is possible to obtain a licence to permit some activities that would otherwise constitute an offence, these can only be issued for specific purposes set out in the Act. This includes damage to crops, to preserve public health or safety and to preserve air safety, but does not include development, some land management and recreational activities and damage to property.

## DORMOUSE

Dormice *Muscardinus avellanarius* are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. dormouse);
- Deliberate disturbance of dormice as:
  - a) to impair their ability:
    - (i) to survive, breed, or reproduce, or to rear or nurture young; or
    - (ii) to hibernate or migrate.
  - b) to affect significantly the local distribution or abundance of the species.

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particular year) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- Damage or destruction of a breeding site or resting place; or
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Dormouse are also protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5 in respect to sub-sections 9 (4) (b) and (c) and 9 (5). Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level);
- Intentional or reckless obstruction of access to any place of shelter or protection; or
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

#### How is the legislation pertaining to dormice liable to affect development works?

A mitigation licence issued by the relevant countryside agency (e.g. Natural England and Natural Resources Wales) will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Once evidence of dormouse has been found within a site, all contiguous, suitable habitat should be regarded as supporting dormice. Thus, if clearance of suitable habitat is proposed away from, but contiguous with, an area where a dormouse nest was found, a licence is likely to be required, even if no evidence was found within the specific section to be removed.

## HERPETOFAUNA (AMPHIBIANS AND REPTILES)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, great crested newt *Triturus cristatus* and pool frog *Pelophylax lessonae* receive full protection under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2;
- Deliberate disturbance of any Schedule 2 species as:
  - to impair their ability:
    - to survive, breed, or reproduce, or to rear or nurture young; and
    - in the case of animals of a hibernating or migratory species, to hibernate or migrate.
  - to affect significantly the local distribution or abundance of the species.
- Deliberate taking or destroying of the eggs of a Schedule 2 species;
- Damage or destruction of a breeding site or resting place; and
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect to sub-sections 9 (4) (b) and (c) and 9 (5). The pool frog is afforded protection in respect of sub-sections 9(4) (b) and (c) for England only. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level);
- Intentional or reckless obstruction of access to any place of shelter or protection; and
- Selling, offering or exposing for sale, possession or transporting for purpose of sale (excluding pool frog).

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to sub-section 9 (1) & (5). For these species, it is prohibited to:

- Intentionally kill or injure these species; and
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to sub-section 9 (5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

#### How is the legislation pertaining to herpetofauna liable to affect development works?

The appropriate licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation of Habitats and Species Regulations 2017 (as amended). A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

## OTHER INVERTEBRATES

Three species of invertebrate are afforded protection under Schedule 2 of The Conservation of Habitats and Species Regulations 2017 (as amended): the large blue butterfly *Phengaris arion*, Fisher's estuarine moth *Gortyna borelii lunata* and the little whirlpool ramshorn snail *Anisus vorticulus*. Regulation 43 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species;
- Deliberate disturbance of Schedule 2 species as:
  - a) to impair their ability:
    - (i) to survive, breed, or reproduce, or to rear or nurture young;
    - (ii) to hibernate or migrate.
  - b) to affect significantly the local distribution or abundance of the species.
- Damage or destruction of a breeding site or resting place; and
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

These species, and numerous other invertebrates, including the Norfolk hawker *Aeshna isosceles*, marsh fritillary *Euphydryas aurinia*, purple emperor *Apatura iris*, freshwater pearl mussel *Margaritifera margaritifera* and medicinal leech *Hirudo medicinalis*, are also protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). The degree to which the various invertebrate species are protected by this Act varies widely, ranging from full protection of the animal and its habitat to protection from sale only. Useful summaries of the level of protection afforded individual species can be found at <https://hub.jncc.gov.uk/assets/478f7160-967b-4366-acdf-8941fd33850b>.

For those afforded full protection, it is an offence to:

- Intentionally kill, injure or take (capture) a wild Schedule 5 invertebrate;

- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- Intentionally or recklessly disturb Schedule 5 invertebrates while they are occupying a structure or place used for shelter or protection; and
- Sell, offer or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead Schedule 5 invertebrate or part thereof.

How is the legislation pertaining to protected invertebrates liable to affect development works?

A mitigation licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect invertebrate species protected under The Conservation of Habitats and Species Regulations 2017 (as amended). A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed and rear young). The licences are to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

There is no provision in law for the issuing of licences to permit the killing, injuring or taking of protected invertebrates, the damage, destruction or obstruction of access to places of shelter or protection, or the disturbance of invertebrates for the purposes of development. In situations where there is potential for impact, it must be shown that all reasonable effort has been made to avoid contravening the legislation, for example, by ensuring adequate surveys and mitigation measures are in place, that the use of alternative sites has been explored and that there has been liaison with the relevant countryside agency (e.g. Natural England or Natural Resources Wales). It will be necessary to carefully plan any development activities in areas with protected invertebrates; this is likely to require appropriate timing of works with measures to ensure minimal loss of habitat.

## **WILD MAMMALS (PROTECTION) ACT 1996**

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

## **NON-NATIVE SPECIES (FAUNA)**

Under Section 14 (1) of the Wildlife and Countryside Act 1981 (as amended), it is an offence to release, or allow to escape into the wild, any animal that is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state, or is listed on Schedule 9 of the Act. Examples of species included on Schedule 9 are signal crayfish *Pacifastacus leniusculus*, American mink *Neovison vison*, grey squirrel *Sciurus carolinensis* and European pond terrapin *Emys orbicularis*. In the main, Schedule 9 species are those that are already established in the wild, but which continue to pose a threat to the conservation of native biodiversity and habitats, such that further releases should be regulated. The Schedule also includes some native species, such as barn owl *Tyto alba*, to ensure that any releases or re-introduction programmes are undertaken in consultation with the relevant authorities and in accordance with best practice guidelines.

**How is the legislation pertaining to non-native faunal species liable to affect development works?**

In most cases, development works are unlikely to infringe the legislation. This is because such operations are unlikely to result in the release or escape of non-native faunal species. However, there may be circumstances, particularly where works involve

watercourses or water bodies, which have the potential to exacerbate the spread of e.g. signal crayfish or certain fish or amphibian species. If this is deemed a possibility, it will be necessary to ensure appropriate preventative measures are in place prior to and during the works.

## PLANTS AND FUNGI

All wild plants are protected under the Wildlife and Countryside Act 1981 (as amended). This makes it an offence for an 'unauthorised' person to intentionally uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant and fungi, for example some species of orchid, red-tipped cudweed *Filago lutescens*, spiked speedwell *Veronica spicata*, holly-leaved naiad *Najas marina*, field cow wheat *Melampyrum arvense* and sandy stilt puffball *Battarrea phalloides* are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 13. This prohibits any person:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species; and
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof.

In addition to the legislation outlined above, several plant species, such as slender naiad *Najas flexilis*, fen orchid *Liparis loeselii* and early gentian *Gentianella anglica*, are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017 (as amended). These are species of European importance. Regulation 45 makes it an offence to:

- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species; and

- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

#### How is the legislation pertaining to protected plants liable to affect development works?

A mitigation licence issued by the relevant countryside agency (e.g. Natural England, Natural Resources Wales) will be required for works liable to affect species of plant listed under The Conservation of Habitats and Species Regulations 2017 (as amended). The licence is to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

#### INVASIVE PLANT SPECIES

Under Section 14 (2) of the Wildlife and Countryside Act 1981 (as amended), it is an offence to plant or otherwise cause to grow in the wild any species of plant listed on Part II of Schedule 9. Schedule 9 plant species include Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*. In the main, Schedule 9 species are those that are already established in the wild, but which continue to pose a threat to the conservation of native biodiversity and habitats, such that further releases should be regulated.

#### How is the legislation pertaining to invasive plants liable to affect development works?

Although it is not an offence to have these plants on your land per se, it is an offence to cause these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works.

As a rule, planting on managed land (private gardens, estates and amenity planting, for example), where it is expected that the spread of the plant will be kept under control, and

where the plant will not have an adverse impact, is not regarded as planting in the wild and thus would not constitute an offence. However, where the plant is inadequately managed or contained and is likely to have an adverse effect, it may. Whether or not planting is an offence should therefore be judged on a case by case basis, taking into account the potential impacts on habitats and native flora and fauna, and the existence or extent of management practices to be employed<sup>16</sup>.

### PLANTS: INJURIOUS WEEDS

Under the Weeds Act 1959 any land owner or occupier may be required prevent the spread of certain 'injurious weeds' such as spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, curled dock *Rumex crispus*, broad-leaved dock *Rumex obtusifolius*, and common ragwort *Senecio jacobaea* onto agricultural land, particularly grazing areas or land which is used to produce conserved forage. It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice<sup>17</sup> as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines on how to prevent the spread of this species but is not legally binding.

## B EUROPEAN AND NATIONAL LEGISLATION AFFORDED TO SITES AND HABITATS

As for certain species described above, habitats and sites are also protected directly through the Wildlife & Countryside Act 1981 (as amended), The Conservation of Habitats and Species Regulations 2017 (as amended) and The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) through the notification, classification or designation of various protected sites as detailed below.

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<sup>16</sup> Defra (2010) Guidance on Section 14 of the Wildlife and Countryside Act, 1981. [ARCHIVED CONTENT](https://www.nationalarchives.gov.uk) ([nationalarchives.gov.uk](https://www.nationalarchives.gov.uk))

<sup>17</sup> Defra (2004) Code of Practice on How to Prevent the Spread of Ragwort: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69264/pb9840-cop-ragwort.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69264/pb9840-cop-ragwort.pdf)

In addition, The Environment Act 2021 and the Water Framework Directive indirectly afford protection to non-designated habitats through the duties placed on public and private bodies to promote nature conservation and biodiversity, for example, the creation of Local Nature Recovery Strategies (LNRS) and associated Species Conservation and Protected Site strategies, and to reduce or avoid harmful activities. Many of these duties and targets form the basis for national and local planning policy and wider conservation strategies and are not covered in detail here.

### **STATUTORY SITE DESIGNATIONS: NATIONAL**

Nationally important areas of special scientific interest, by reason of their flora, fauna, or geological or physiographical features, are notified by the countryside agencies as statutory **Sites of Special Scientific Interest** (SSSI) under the National Parks and Access to the Countryside Act 1949 and latterly the Wildlife & Countryside Act 1981 (as amended). As well as underpinning other national designations (such as **National Nature Reserves** which are declared by the countryside agencies under the same legislation), the system also provides statutory protection for terrestrial and coastal sites which are important within a European context (formerly referred to as part of the Natura 2000 network and recently amended to the National Site Network in line with the UK's departure from the EU) and globally (such as Wetlands of International Importance) - see subsequent sections for details of these designations. Improved provisions for the protection and management of SSSI have been introduced by the Countryside and Rights of Way Act 2000.

The Wildlife & Countryside Act 1981 (as amended) also provides for the making of **Limestone Pavement Orders**, which prohibit the disturbance and removal of limestone from such designated areas, and the designation of **Marine Nature Reserves**, for which byelaws must be made to protect them.

### **STATUTORY SITE DESIGNATIONS: INTERNATIONAL**

**Special Protection Areas** (SPAs), together with **Special Areas of Conservation** (SACs) form the basis of the **National Site Network** (until recently, these were part of the Natura 2000 network whilst the UK was part of the EU). SPAs are identified and classified by the Government under the EC Birds Directive (Council Directive 2009/147/EC (formerly 79/409/EEC)) on the Conservation of Wild Birds) via the mechanisms set out in the Habitats Regulations (as applicable at the time of classification).

SPAs are areas of the most important habitat for rare (listed on Annex I of the Directive) and migratory birds within the European Union. Protection afforded SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles (nm) is given by The Conservation of Habitats & Species Regulations 2017 (as amended). The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) provide a mechanism for the classification and protection of European Marine Sites or EMS (SPAs and SACs) in UK offshore waters (from 12-200 nm).

SACs are identified and designated under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) via the mechanisms set out in the Habitats Regulations (as applicable at the time of designation). These are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive within the European Union. SACs in terrestrial areas and territorial marine waters out to 12 nautical miles are protected under The Conservation of Habitats & Species Regulations 2017 (as amended). The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) provide a mechanism for the designation and protection of European marine sites or EMS (SACs and SPAs) in UK offshore waters (from 12-200 nm).

**Ramsar sites** are listed under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and wise use, in particular recognizing wetlands as ecosystems that are globally important for biodiversity conservation. Wetlands can include areas of marsh,

fen, peatland or water and may be natural or artificial, permanent or temporary. Wetlands may also incorporate riparian and coastal zones adjacent to the wetlands. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSI) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government highlighting the special status of Ramsar sites. This effectively extends the level of protection to that afforded to sites in England and Wales which have been designated under the EC Birds and Habitats Directives as part of the Natura 2000 network and now the National Site Network (e.g. SACs and SPAs).

### **STATUTORY DESIGNATIONS: LOCAL**

Under the National Parks and Access to the Countryside Act 1949 **Local Nature Reserves** (LNRs) may be declared by local authorities after consultation with the relevant countryside agency. LNRs are declared for sites holding special wildlife or geological interest at a local level and are managed for nature conservation and provide opportunities for research and education and enjoyment of nature.

### **STATUTORY PROTECTION OF AQUATIC HABITATS**

#### *Water Framework Directive and The Environment Act 2021*

Aquatic habitats are also afforded protection under The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017, which transposes the Water Framework Directive 2000/60/EC (The WFD). At its core it aims to prevent deterioration of the water environment and improve water quality by managing water in natural river basin districts, rather than by administrative boundaries. It looks at ecological, physico-chemical, quantitative and morphological aspects of the water environment and requires that improvements take account of economic aspects, including costs and benefits. Plans to improve the status of water bodies are set out in River Basin Management Plans (RBMPs). The Directive aims for 'good status' of all ground and surface water (rivers, lakes,

transitional water and coastal waters) in the EU and the UK. The Environment Agency and Natural Resources Wales are the competent authorities for river basin planning in England and Wales.

Any works which could affect the hydro-morphology, ecology or water quality of any classified waterbody up to 1nm out to sea requires an assessment under the WFD to demonstrate how any adverse impacts will be mitigated and, where possible, the status of the waterbody enhanced in order to achieve the required good status targets. Construction must have no permanent, unmitigated effects which cause any deterioration in the current status of any surface-water or groundwater body. If a WFD assessment shows an activity will either cause a deterioration in the status of a water body or jeopardise a water body achieving good status, it may then be necessary to consider whether it meets the criteria for an Article 4(7) exemption<sup>18</sup>.

The Environment Act also places a new statutory duty on government to produce a plan to reduce discharges from storm overflows, on water companies and the Environment Agency to publish data on storm overflow operation and on water companies to monitor the water quality upstream and downstream of storm overflows and sewage disposal works. The Act also contains a new duty on the water sector to create drainage and sewerage management plans and enables the revocation or variation of permanent abstraction licences where the change is necessary to protect the environment. This is because some older abstraction licences do not take account of fluctuating water availability and may enable too much water to be taken from the environment.

## NON-STATUTORY DESIGNATIONS

Areas considered to be of local conservation interest may be designated by local authorities as a **Wildlife Site**, under a variety of names such as **Local Wildlife Sites** (LWS),

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<sup>18</sup> [https://circabc.europa.eu/sd/a/e0352ec3-9f3b-4d91-bddb-939185be3e89/CIS Guidance Article 4 7 FINAL.PDF](https://circabc.europa.eu/sd/a/e0352ec3-9f3b-4d91-bddb-939185be3e89/CIS%20Guidance%20Article%204%20%207%20FINAL.PDF)

**County Wildlife Sites** (CWS), **Listed Wildlife Sites** (LWS), **Local Nature Conservation Sites** (LNCS), **Sites of Biological Importance** (SBIs), **Sites of Importance for Nature Conservation** (SINCs), or **Sites of Nature Conservation Importance** (SNCIs). The criteria for designation may vary between counties.

Together with the statutory designations, these are defined in Local Plan documents under the Town and Country Planning system and are a material consideration when planning applications are being determined. The level of protection afforded to these sites through local planning policies may vary between counties.

### **THE HEDGEROW REGULATIONS 1997**

The Hedgerow Regulations 1997 are intended to protect 'important' countryside hedgerows from destruction or damage. Under the 'Wildlife and Landscape' criteria of the Regulations, a hedgerow is considered important if (a) it has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy important hedgerows without permission from the local planning authority. Hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys are covered by these regulations. Hedgerows *'within or marking the boundary of the curtilage of a dwelling-house'* are not.

## **C PLANNING POLICY**

### **NATIONAL PLANNING POLICY FRAMEWORK**

The National Planning Policy Framework (2023) emphasises the need for sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species (see Section D below). An emphasis is also made for the need for ecological networks via preservation, restoration and re-creation. The

protection and recovery of priority species is also listed as a requirement of planning policy. In determining planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

### **THE NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006 AND THE BIODIVERSITY DUTY**

Section 40 of The Natural Environment and Rural Communities (NERC) Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

### **LOCAL PLANS**

The Horsham District Council Planning Framework (2015) includes the following nature conservation policies that are relevant to the site proposals:

#### **Policy 31: Green Infrastructure and Biodiversity**

"1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the

loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss and ensures that the ecosystem services of the area are retained.

2. Development proposals will be required to contribute to the enhancement of existing biodiversity, and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.
3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required.
4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows: i. Special Protection Area (SPA) and Special Areas of Conservation (SAC) ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.  
b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that: i. The reason for the development clearly outweighs the need to protect the value of the site; and, ii. That appropriate mitigation and compensation measures are provided.
5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition,

development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan".

## **D BIODIVERSITY ACTION PLANS (BAPs)**

Since the publication of the [UK BAP](#) in 1994, new strategies and frameworks have resulted in the development of biodiversity issues and changes in the terminology used to describe these habitats and species in England. This has been brought about through the replacement of the previous England Biodiversity Strategy with *Biodiversity 2020: A Strategy For England's Wildlife and Ecosystem Services* (2011) and the replacement of the UK BAP itself with the *UK Post-2010 Biodiversity Framework* (2012). All previous UK BAP species and habitats are still of material consideration in the planning process but are now referred to as Habitats and Species of Principal Importance (as described under the NERC Act 2006 above).

The distribution of BAP/priority habitats has been used to identify [Biodiversity Opportunity Areas](#) at a regional scale through Biodiversity Strategies/Partnerships. They represent a strategic landscape scale approach to habitat creation, restoration or expansion. They represent regional priority areas of opportunity to restore and create key habitats. They are therefore a spatial representation of targets for Habitats of Principal Importance and are areas of opportunity, not constraint.

- **London:** 3rd floor, The Clove Building, 4 Maguire Street, London, SE1 2NQ. T: +44 (0)20 7394 3700
- **Haywards Heath:** Unit 6 Basepoint, John De Mierre House, 20 Bridge Road, Haywards Heath, RH16 1UA. T: +44 (0)20 7394 3700
- **Lewes:** 3 Upper Stalls, Iford, Lewes, East Sussex, BN7 3EJ. T: +44 (0) 1273 813739
- **Lichfield:** 1-2 Trent Park, Eastern Avenue, Lichfield, Staffordshire, WS13 6RN. T: +44 (0)1543 229049
- **Manchester:** Express Building, 3 George Leigh Street, Manchester, M4 5AD. T: +44 (0)161 509 4900
- **Norwich:** 60 Thorpe Road, Norwich, Norfolk, NR1 1RY. T: +44 (0)1603 628408
- **Wakefield:** St James Suite, Nostell Business Park, Doncaster Road, Wakefield, WF4 1AB. T: +44 (0)1924 921900