



# **The Spinney, Essendon**

## Preliminary Ecological Appraisal

### **Report for Lime Interiors Limited**

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# Executive Summary

A Preliminary Ecological Appraisal was carried out at the site at The Spinney, Essendon on 12 February 2015. The appraisal includes an assessment of any ecological constraints applying to the proposed development and provides recommendations for protecting and enhancing the wildlife value of the site. The main findings of the survey are as follows:

- The site does not form part of any statutory or non-statutory designated nature conservation site. There are no statutory designated sites within 2 km of the site. The nearest non-statutory site is St Mary's Church, Essendon a Local Wildlife Site located 200 metres (m) to the south west of the site.
- The proposed development site comprised buildings, mixed semi-natural woodland, introduced shrubs, bare ground, hardstanding, a species-poor hedgerow, scattered trees and amenity grassland.
- The site has potential to support protected species groups including: high potential to support breeding birds, moderate potential to support roosting bats, great crested newt and hazel dormouse and low potential to support badger and widespread reptile species. The invasive plant species rhododendron was also confirmed as being present.
- It is understood that a small section of the woodland and amenity grassland will be lost in order to facilitate the development of two dwellings. The following further survey work and/or mitigation is therefore required to comply with legislation:
  - An inspection and bat surveys of the buildings and trees which are scheduled for removal and which hold the potential to support bats. These would involve at least two emergence/re-entry surveys for roosting bats which must be carried out between May and September.
  - Dormice Habitat Suitability Assessment (HSA) of the on-site woodland and hedgerows on the site during the months of April – September.
  - Removal of habitats with potential to support breeding birds, including buildings, hedgerows, scrub, trees and woodland must be carried out September to February inclusive, to avoid the main bird breeding season. However, this must not be undertaken ahead of bat or dormice surveys.
  - Woodland and a veteran oak tree represent the habitat of highest value at the site and it is recommended that, where possible, both the veteran tree and the majority of the woodland habitat is retained as part of development proposals.

- Protection measures for retained areas of woodland and trees should follow the guidance given in British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction and the ACD Environmental Arboricultural Impact Assessment & Method Statement (Ref: PRI19764aia\_ams).
- Enhancement measures are also provided in Section 5 of this report to improve the biodiversity of the site in line with Policy RH11: Biodiversity and Development, Policy R16 - Protection of Species, Policy R17 - Trees, Woodland and Hedgerows and Policy D8: Landscaping of the Welwyn and Hatfield District Local Plan (2011).

# 1 Introduction

## BACKGROUND

- 1.1 The Ecology Consultancy was commissioned by Lime Interiors Limited to carry out a Preliminary Ecological Appraisal of the Spinney site in Essendon, Hertfordshire.

## SCOPE OF THE REPORT

- 1.2 This report outlines the methodologies and results of the Preliminary Ecological Appraisal conducted on 12 February 2016.
- 1.3 The survey was carried out in order to provide baseline ecological information and to assess the potential for the site to support protected species. The assessment highlights any potential ecological constraints associated with the proposed development and provides recommendations for further surveys, where appropriate, to ensure that the development complies with relevant legislation. This appraisal considers land within the planning application site boundary as indicated in Appendix 1, Figure 1 (hereafter this area is referred to as ‘the site’).
- 1.4 The Preliminary Ecological Appraisal is based on a desk study, and a field survey based on Phase 1 survey methodology (JNCC, 2010), extended to focus on the potential presence of Habitats of Principal Importance<sup>1</sup>. The Phase 1 survey is designed to identify the broad habitat types present, to assess the potential of habitats to support protected species and to assist in providing an overview of the ecological interest at a site. It is generally the most widely used and professionally recognised method for initial ecological site appraisal.
- 1.5 This appraisal has also been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2013) as detailed in British Standard 42020:2013 Biodiversity - Code of Practice for Biodiversity and Development (BSI, 2013). The Arboricultural Impact

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<sup>1</sup> 56 Habitats of Principal Importance for Biodiversity and 943 Species of Principal Importance for Biodiversity are defined by the NERC Act. These are all the habitats and species in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

Assessment produced by ACD Environmental (Ref: PRI19764aia\_ams) and Scarp Landscape and Visual Impact Assessment Report (2016).

- 1.6 A habitat map of the site is included in Appendix 1, with photographs provided in Appendix 2. A full list of plant species that were present on site are provided in Appendix 4. The relevant legislation and policies relating to protected species and habitats are set out in Appendix 4.

### **SITE CONTEXT AND STATUS**

- 1.7 The site is located within a rural setting south of the centre of Essendon, consisting predominantly of residential properties surrounded by woodland and agricultural fields. It is bound by High Road in the east, a large golf course in the west and woodland in the south and north. Further afield, approximately 600 metres (m) away lies the Essendon Brook and the River Lea is approximately 1.7 kilometres (km) away.
- 1.8 The proposed development site totals approximately 1 hectares (ha) in size. The National Grid reference for the centre of the site is TL 275 080.

### **DEVELOPMENT PROPOSAL**

- 1.9 The proposals for the site include the demolition of the existing detached dwelling and construction of two new dwelling houses. It is understood that the site has permitted development rights for several extensions and outbuildings under permitted development rights (see Welwyn Hatfield Council ref (S6/2015/1203/HH) as well as a Certificate of Lawfulness (see Welwyn Hatfield Council ref S6/2015/0727/LUP).
- 1.10 The footprints of the two new dwellings will be located on an area of amenity grassland with scattered trees. The hedgerows in the west of the site will be retained; however, a section of the woodland will be removed to facilitate the construction of a driveway. Attention has been given to conserve the local landscape character; tree protection fencing will be installed and tree and shrub planting is proposed (ACD Environmental, Tree Protection Plan, Drawing ref: PRI19764-03 (2016) & Scarp, Landscape and Visual Impact Assessment, 2016).

## 2 Methodology

### DESK STUDY

- 2.1 Information regarding the areas afforded present and historical ecological interest of the site within a 2km radius was requested from Hertfordshire Environmental Records Centre (HERC) in February 2016. A search was also completed of an on-line mapping service Multi-Agency Geographic Information for the Countryside <sup>2</sup>(MAGIC) to ascertain the presence of any statutory designated sites in the area within a radius of 2km.
- 2.2 The following information regarding the present and historical ecological interest of the site and land within these areas were sourced from HERC and MAGIC:
- locations and citations of statutory sites of nature conservation importance;
  - locations of non-statutory sites designated as Local Wildlife Sites (LWSs) at county level often recognised in Local Authority development plans;
  - species protected by legislation (protected species);<sup>3</sup>
  - Habitats and Species of Principal Importance for the Conservation of Biodiversity in England under the NERC Act 2006 which may be relevant to the site (hereafter referred to as 'Priority Species'<sup>4</sup> and 'Priority Habitats'<sup>5</sup>);
  - rare and other noteworthy species such as those on "red lists" using and Birds of Conservation Concern (Eaton et al. 2015).

### HABITAT SURVEY

- 2.3 A field survey of the site was carried out on 12 February 2016. Habitats were described and mapped following standard Phase 1 Habitat survey methodology (JNCC, 2010) and an internal inspection of the building. A full list of plant species

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<sup>2</sup> <http://magic.defra.gov.uk/>

<sup>3</sup> Legally protected species include those listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act, 1981 (as amended); Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended); or in the Protection of Badgers Act, 1992.

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

<sup>5</sup> Priority Habitats are mapped based on Natural England's Priority Habitats Inventory. This is a spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance. Polygons are classified as Priority Habitats where a particular habitat is present within at least 50% of the polygon, based on various data sources.



identified during the survey, along with an assessment of their abundance<sup>6</sup>, is provided in Appendix 3. Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2010) for vascular plant species. The site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act, 1981 (see Appendix 4).

2.4 The habitat survey was used to assess the presence, location, extent and quality of any Priority habitats within the site. The extent of such habitats recorded during the site survey was compared with data from the desk study.

2.5 The survey was conducted by a suitably experienced and qualified ecologist, who is competent in carrying out Extended Phase 1 habitat surveys.

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

2.6 The potential for the site to support legally protected species, priority species noteworthy species and invasive species<sup>7</sup> was assessed from field observations carried out at the same time as the habitat survey, combined with the results of the desk study.

2.7 Those species or species groups considered in the assessment, on the basis of suitable habitat being present, were:

- The presence of nesting habitat for breeding birds, such as mature trees, dense scrub, hedgerows, and buildings;
- Scrub/grassland mosaic and potential hibernation sites for widespread species of reptile;
- The presence of features in, and on trees, indicating potential for roosting bats *Chiroptera* such as fissures, holes, loose bark and ivy *Hedera helix* and those associated with buildings such as cavities, roof voids, hanging tiles, unenclosed soffits etc. A search for direct evidence, such as the presence of bats, staining, droppings and feeding remains was also carried out;

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<sup>6</sup> Plant species abundance was recorded using the DAFOR system (where D = dominant, A = abundant, F= frequent, O = occasional and R = rare).

<sup>7</sup> Invasive species are those listed in Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended).

- Cover and topography suitable for badger *Meles meles* sett construction, as well as evidence of badger activity including runs, push-throughs, setts, hair and latrines; and
- Suitable habitat for hazel dormice *Muscardinus avellanarius* such as woodland, hedgerows and scrub, particularly when connected to suitable habitats across the wider landscape;

2.8 If, on the basis of the preliminary assessment or during subsequent surveys, it is considered likely that other protected species may be present, recommendations for further surveys will be made. Without such surveys, it would not be possible to determine presence / likely absence of that species.

### Protected Species Assessment Criteria

2.9 The likelihood of occurrence of protected and/or invasive species is ranked as follows and relies on the findings of the current survey and an evaluation of existing data.

- Negligible – while presence cannot be absolutely discounted, the site includes very limited or poor quality habitat for a particular species or species group. No local returns from a data search, surrounding habitat considered unlikely to support wider populations of a species/species group. The site may also be outside of, or peripheral to, a known national range for a species.
- Low – on-site habitat of poor to medium quality for a given species/species group. Few or no returns from data search, but presence cannot be discounted on the basis of national distribution, nature of surrounding habitats, habitat fragmentation, recent on-site disturbance etc.
- Medium – on-site habitat of medium quality, providing all of the known key requirements of a given species/species group. Local returns from the data search, within national distribution, suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat severance, and disturbance.
- High – Good quality surrounding habitat and good connectivity. The site is within or close to a national or regional stronghold. Local records provided by desk study.
- Present – presence confirmed from the current survey or by recent, confirmed

2.10 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species should be recommended.

## SITE EVALUATION

2.11 The site has been evaluated broadly following guidance issued by the Institute of Ecology and Environmental Management<sup>8</sup> (IEEM, 2006), according to a geographic scale (significance at the international level down to the site level) and using a range of criteria for assigning ecological value, as follows:

- Presence of sites or features designated for their nature conservation interest. Examples include internationally or nationally designated sites such as Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs), locally designated sites such as Local Nature Reserves (LNRs) and non-statutory sites such as Local Wildlife Sites (LWSs).
- Biodiversity value, for example, habitats or species which are rare or uncommon, species-rich assemblages, species which are endemic or on the edge of their range, large populations or concentrations of uncommon or threatened species, and/or plant communities that are typical of valued natural/semi-natural vegetation types;
- Potential value, as addressed by targets to increase the biodiversity value for example of SSSIs, international sites and some Biodiversity Action Plan (BAP) species and habitats. If detailed plans exist to enhance the value of such areas, then it may be appropriate to value them as if the intended resource already existed;
- Secondary and supporting value, for example, habitats or features which provide a buffer to valued features or which serve to link otherwise isolated features; and
- Presence of priority species and legally protected species.

2.12 The ecological interest of the site and the proposed development has also been evaluated in terms of the Welwyn Hatfield District Council Local Plan adopted in 2005 and saved in 2008 containing development policies relating to nature conservation.

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<sup>8</sup> Established in 1991, the Institute of Ecology and Environmental Management (IEEM) received the Royal Charter in 2013, becoming the Chartered Institute of Ecology and Environmental Management (CIEEM).

## LIMITATIONS

- 2.13 Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.
- 2.14 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded. This is taken into account when interpreting records and also through the Phase 1 habitat survey methodology which identifies where protected species may be supported within the site.
- 2.15 The walkover habitat survey was carried out during sub-optimal season for plant identification. As such, species present on site might have been under recorded. A number of ornamental plant species were present on site. These have been identified to species level where possible; however, owing to the large number of horticultural varieties, some plants could not be identified. Ornamental plants may be of value to wildlife; however, none are characterised as rare or notable from a native biodiversity conservation perspective. Thus this limitation does not affect the overall conclusions of this appraisal.
- 2.16 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries, and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected species group. It is only valid at the time the survey was carried out.
- 2.17 This Preliminary Ecological Appraisal does not constitute a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species.
- 2.18 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity value and the potential of the site to support protected species.

## 3 Results

### DESK STUDY

- 3.1 The following records regarding present and historical ecological interest at the site within a 2km radius supplied by Hertfordshire Biodiversity Records Centre (HERC) are summarised in paragraphs 3.2 - 3.13 below.

### Statutory Sites of Importance for Nature Conservation

- 3.2 The proposed development site is not located within 2km of statutory nature conservation sites.

### Non-Statutory Sites of Importance for Nature Conservation

- 3.3 The proposed development site does not form part of a non-statutory designated site. There are 32 non-statutory sites designated as LWS located within the 2km data search area.
- 3.4 The closest, a LWS, St Mary's Church, Essendon, is located approximately 200m south west of the site. Details of this and all other non-statutory designated sites within 2km of the development site are described in Appendix 3.

### Landscape and Habitat Classifications

#### *Ancient woodland*

- 3.5 There are 10 blocks of ancient woodland within a 2km radius. The closest of these is 'Black House Wood' Ancient Semi-Natural Woodland (ASNW) site located 360m north-west of the site.

### Protected and Noteworthy Species

- 3.6 Protected Species, priority species and noteworthy species such as Hertfordshire BAP species have been recorded within a 2km radius of the site. Species that may potentially utilise the site are discussed below. The level of protection afforded to each species and the distance and orientation of the records, as well as the dates of those recorded in the past ten years are also provided.

#### *Bats*

- 3.7 No records of bats were recorded within 2 km of the site.

#### *Great Crested Newts*

- 3.8 No records of great crested newts were recorded within 2 km of the site.

### *Birds*

- 3.9 The data search returned records for 53 bird species within the past ten years. Ten species listed are listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). These species are protected from disturbance whilst breeding; however, the habitats within the site are not considered likely to support any breeding Schedule 1 species.
- 3.10 The species listed that are most likely to use the habitats on site included house sparrow *Passer domesticus*, dunnock *Prunella modularis*, song thrush *Turdus philomelos*, mistle thrush *Turdus viscivorus*, bullfinch *Pyrrhula pyrrhula*, green woodpecker *Picus viridis*, great spotted woodpecker *Dendrocopos major*, goldcrest *Regulus regulus*, swift *Apus apus*, starling *Sturnus vulgaris* and cuckoo *Cuculus canorus*. The nearest record was house sparrow and cuckoo located within 450m from the site during 2002 and 2013 respectively.

### *Invertebrates*

- 3.11 Two records of white-letter hairstreak *Satyrrium w-album* and one record of the small heath butterfly *Coenonympha pamphilus* was documented. Both species are priority species. The closest was the white-letter hairstreak butterfly recorded approximately 550m west of the site.

### *Widespread reptiles*

- 3.12 No records of reptiles were recorded within 2 km of the site.

### *Badger*

- 3.13 Three records of badger *Meles meles* were noted, the nearest of which was located 1850m south of the site in 2014.

### *Hazel Dormice*

- 3.14 Records for dormouse were documented approximately 1.7km from the site, the date of the records were not specified.

## **EXTENDED PHASE 1 HABITAT SURVEY**

- 3.15 The proposed development site comprised largely semi-natural mixed woodland, amenity grassland with scattered trees, species-poor intact hedgerow and a building with small areas of hardstanding and introduced shrub.

## Buildings

### *Building 1*

- 3.16 A two-storey Victorian building of a brick and concrete construction was present in the north of the site. It comprised a pitched roof with slate tiles and a chimney. The brick work was in a good state of repair with no gaps or cracks. On the building's eastern wall was a flat roof extension covered by bitumen felt.
- 3.17 A hole was noted on the north facing gable end of the pitched roof, directly above a security light. The hole was covered by chicken wire, allowing access into the loft space. In the loft space there was a wooden floor and cobwebs containing moth wings on the main beam. Between the wooden boards directly below the main beam were rodent droppings. (See Appendix 2, Photograph 15-18).

### *Building 2*

- 3.18 Adjacent to the building was a brick-built garage with a flat bitumen felt roof. It was under repair and tightly sealed by plastic sheeting.

### *Building 3*

- 3.19 A single-storey wooden shed was located in the west of the site with a wooden porch and a low pitched felt roof in a good state of repair.

### *Building 4*

- 3.20 A pebble dash shed with a flat bitumen felt roof and wooden barge boards. The wooden barge boards were weathered with paint missing and the wood was rotten in places.

### *Hardstanding*

- 3.21 A pathway joining the buildings and a gravel driveway was present in the north of the site. (See Appendix 2, Photograph 1).

### *Bare ground*

- 3.22 In the centre of the site was a large pile of soil.

### *Species-poor hedgerow (non-native)*

- 3.23 A hedgerow lined the north east boundary of the site. It was approximately 120m in length and 1m in width. It was dominated by cherry laurel *Prunus laurocerasus* and holly *Ilex aquifolium*. (See Appendix 2, Photograph 10).

### *Introduced shrub*

3.24 A number of introduced shrubs surrounded the building within an area of wood chippings including dominant spindle *Euonymus sp.*, and frequent box, barberry *Mahonia sp.*, Christmas berry *Photinia*, skimmia species *Skimmia sp* and camelia *Camellia sp* (See Appendix 2, Photographs 12 &13).

### *Amenity grassland with scattered trees*

3.25 An amenity grassland with a short sward was present in the east of the site. Moss species dominated the sward with annual meadow grass *Poa annua*, perennial rye grass *Lolium perenne*, daisy *Bellis perennis*, plantain *Plantago major*, white clover *Trifolium repens*. Hart's tongue fern *Asplenium scolopendrium* was present rarely. Scattered tree species included ivy-clad hawthorn *Crataegus monogyna* trees, mature common lime *Tilia x europaea* trees with bird boxes and mature and veteran oak *Quercus robur* trees (See Appendix 2, Photographs, 3, 7 & 10).

### *Semi-natural mixed woodland*

3.26 Whilst a number of planted trees were present, these comprised less than 30% of all trees on site. The canopy comprised 12 species including abundant common oak and common lime, frequent sycamore *Acer pseudoplatanus*, with occasional beech *Fagus sylvatica*, holly, silver birch *Betula pendula*, Lawson cypress *Chamaecyparis lawsoniana*, hornbeam *Carpinus betula*, wild cherry *Prunus avium*, hawthorn and white mulberry *Morus alba*, and holm oak *Quercus ilex*. The understorey comprised abundant cherry laurel and occasional holly, yew *Taxus baccata* and rhododendron *Rhododendron*, with locally frequent mahonia *Mahonia japonica*, spotted laurel *Aucuba japonica* and spindle *euonymus sp.* Ivy was frequently growing on trees and across the woodland floor and ground flora species were present including snowdrops *Galanthus*, fern *Dryopteris sp*, common dog violet *Viola riviniana* and moss *moss sp.* A number of fallen branches were present throughout the woodland, providing deadwood habitat and there was also compost piles in the west of the woodland (See Appendix 2, Photographs, 1, 2, 4 &5).

### *Target notes*

3.27 Refer to Figure 1 in Appendix 1 for the locations of the features of ecological interest labelled as target notes and described below:

- TN1 – Compost pile (grass cuttings)
- TN2 – Bird boxes



- TN3 – Feathers
- TN4 – Mammal hair
- TN5 – Gap under fence (potential mammal access point)
- TN6 – Mole hills

### **PROTECTED SPECIES ASSESSMENT**

3.28 The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, nesting and foraging habitat for all protected and invasive species. Those species/species groups identified as being present or potentially present, owing to suitable habitat being present within or adjacent to the site, were:

- Bats;
- Breeding birds;
- Stag beetle;
- Widespread species of reptile;
- Badger; and
- Hazel dormouse.

3.29 No suitable habitat was identified on the site or nearby with the potential to support other protected species.

3.30 The likelihood of those species identified being present within the site are evaluated in Table 2 below, based on the results of the desk study, observations made during the site survey, an assessment of the suitability of on-site and adjoining habitat.

**Table 2: Protected Species Assessment**

Habitat/species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
Bats	<p>Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended).</p> <p>Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).</p>	<p>The site contained potential roosting habitat (i.e. buildings and trees) and foraging habitat.</p>	<p><b>Roosting – Building</b></p> <p><b>Building 1</b>  <b>Moderate:</b> The building comprised a pitched roof with slate tiles supporting a feature of potential value to roosting bats. A hole on the north-facing gable end of the roof covered by chicken wire allowed access into the loft space. The brick work was otherwise in a good state of repair with no gaps or cracks.</p> <p>The loft space comprised a wooden floor. Rodent droppings were present between the wooden boards and above the main beam. Cobwebs with moth wings were also present along the main roof beam. The fabric lining the internal walls of the loft space was in a good state of repair. No access and egress points were noted apart from the hole with chicken wire as described above (See Appendix 2, Photograph 15-18).</p> <p><b>Building 2</b>  <b>Negligible:</b> A tightly sealed wooden shed with no visible accessible architectural features that could support a bat roost.</p> <p><b>Building 3</b>  <b>Negligible:</b> The wooden barge boards surrounding the building were in a poor state of repair and rotten in places but no gaps or other features were noted with potential to support roosting bats.</p> <p><b>Roosting – Trees</b>  <b>Moderate:</b> Trees with potential to support roosting bats were noted on site, including a large veteran tree with numerous holes, cracks and splits located in the east of the site. (See Appendix 2, Photograph 11).</p> <p><b>Foraging</b></p> <p>There is a high likelihood of common/widespread species of foraging/commuting bats being present within the site, as the</p>

**Table 2: Protected Species Assessment**

Habitat/species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
			illumination of the site is likely to be low given the remote location of the site and limited road lighting.
Breeding birds	Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended) (with some species listed on schedule 1.)	The site includes suitable breeding habitat.  The desk study returned records of UK BAP Priority species and common bird species	<b>High:</b> The site included scrub, woodland and hedgerows of value to breeding and foraging birds. There were also a number of bird boxes (TN2) in the woodland and feathers were recorded on the site (TN3).  It is considered that breeding birds may utilise the habitats on site. The areas of suitable habitat were moderate in size and considering the lack of disturbance and connectivity to the surrounding habitats the site has been assessed as having high potential to support breeding bird species.
Reptiles	Wildlife and Countryside Act 1981 (as amended) – Schedule 5.	Suitable habitat for reptiles was present in open areas of woodland and piles of grass cuttings were present.	<b>Low:</b> Deadwood (TN2) and compost heaps provided suitable habitat for reptile. There is also connectivity to areas containing standing water within 500m from the site which provides a suitable habitat for grass snake. The woodland floor over much of the site largely comprised bare ground and adjacent vegetation was dominated by cherry laurel and rhododendron which are unlikely to provide a sufficient foraging resource. Overall, the site is considered sub-optimal, but may support a small population of common and widespread species, such as slow worm <i>Anguis fragilis</i> .
Badger	Protection of Badgers Act 1992.	The site provides suitable badger foraging habitat and opportunities for sett construction.	<b>Low:</b> The site provided suitable habitats for sett construction. There were no setts recorded at the time of the survey; however, a mammal run was recorded in the east of the site. The site is in a rural setting and has good connectivity to the wider landscape where badgers are likely to commute and forage.

**Table 2: Protected Species Assessment**

Habitat/species	Main legislation and policy (see Appendix 4)	Reason for consideration	Likelihood of occurrence
Hazel Dormouse	Wildlife and Countryside Act 1981 (as amended) – Schedule 5. The Conservation of Habitats and Species Regulations 2010 (as amended) – Schedule 2.	The mixed semi-natural woodland and hedgerows provide potentially suitable habitat for hazel dormouse. There is also a record for dormouse approximately 1.7km from the site with good connectivity to the site.	<b>Moderate:</b> Potential food sources included yew, oak and hawthorn. The site is relatively small, it is adjacent to a B road in the west and the shrub layer in the woodland is limited; however, it has connectivity to suitable off-site habitats, in particular, a larger area of woodland with similar species and of a dense structure is located north east of the site, it is connected by the onsite species poor hedgerow semi-natural woodland. It is also adjacent to Essendon golf course surrounded by open countryside and residential properties with large gardens in the west.  Overall, the likelihood of this species persisting at this site is considered as a remnant, low population and movement of this species through the landscape cannot be discounted.
Great Crested Newt	Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended).  Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).	The site contained potential terrestrial habitat (woodland and hedgerow, compost heaps etc) and is located within 500m of waterbodies with potential to provide suitable breeding habitat.	<b>Moderate:</b> There are no waterbodies on site; however, terrestrial habitat suitable to support great crested newts is present. The site has connectivity to a network of four ponds within a 500m radius of the site. The closest pond is approximately 200m north west. Cherry laurel and rhododendron shrubs are sub-optimal terrestrial habitat, but the semi-natural woodland and hedgerows are of value with additional features such as deadwood (TN2) and compost heaps (TN3).
Invasive Species	Section 14 and Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)	Invasive species are widespread in many habitats and commonly found in gardens, which surround the site.	Present: Rhododendron was present on site, which is listed on Schedule 9.

## 4 Evaluation

- 4.1 Habitats and species on the site were evaluated following standard guidance on ecological impact assessment published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2006) using the recommended geographic frame of reference.

### Features of International, National, Regional and County Value

- 4.2 The proposed development site does not form part of any internationally or nationally designated site, does not form any part of sites of nature conservation of value at the country level (e.g. SINC)s and is not likely to support any populations of protected species of international, national, regional or county importance.

### Features of Local (i.e. 1-5km radius) Value

- 4.3 The site is not designated a SINC and it contains no features that would justify designation at the borough level.
- 4.4 The site has the potential to support the following protected and/or priority species:
- Bats;
  - Hazel dormice;
  - Great crested newt;
  - Breeding birds;
  - Reptiles;
  - Badgers.
  - Stag beetle;
- 4.5 Due to the limited extent of suitable habitat and known distribution of the species in the area, it is considered likely that any populations of these species (if present) would be of importance up to a local level only.
- 4.6 Many existing trees on the site are the subject of a Tree Preservation Order (TPO) by Welwyn Hatfield Borough Council (Ref: TPO03 W4). The woodland on the site is classified as a priority habitat, but is not considered to be a good example of its type. It is small in extent with a low diversity of woody species and has rhododendron and cherry laurel dominant in shrub layer. As the woodland provides connectivity and may

support protected species, such as bats, badgers or dormice it is considered to be of importance locally.

### Features of value within the immediate vicinity of the site

- 4.7 With the exception of the woodland and veteran trees on site, all of the habitats present are common and widespread habitats of low conservation value and considered to be of value at this scale. The hedgerow is classified as species-poor and non-native and does not qualify as a priority habitat.

### LOCAL PLANNING POLICY

- 4.8 On the basis of the survey undertaken, it is considered that four policies contained in the Welwyn Hatfield District Plan are relevant to the site, as listed in Table 3 below. The full text of the relevant policies from the document are contained in Appendix 4.

**Table 3: Welwyn Hatfield District Council Local Plan policies relevant to the site**

Policy	Relevance to the site
<b>R11: Biodiversity and Development</b>	
Objective: <i>'All new development will be required to demonstrate how it would contribute positively to the biodiversity of the site'</i>	Enhancement measures to promote natural areas, wildlife corridors and landscaping of value to wildlife is provided Section 5 of this report.
<b>R16: Protection of Species</b>	
Objective: <i>'Planning permission will not be granted for any development or use of land which would have an adverse impact on badgers or species protected by schedules 1, 5, or 8 of the 1981 Wildlife and Countryside Act, as amended.</i>  <i>Where development is permitted the Council will consider the use of conditions and/or planning obligations to ensure the protection of the site's species.'</i>	The habitat survey highlighted the potential for the site to support protected species. Further surveys and mitigation regarding these species are provided in section 5 below.
<b>Policy R17 Trees, Woodland and Hedgerows</b>	
Objective : <i>'The Council will seek the protection and retention of existing trees, hedgerows and woodland by the use of planning conditions, section 106 agreements, hedgerow retention notices and tree preservation orders where</i>	Scattered trees, woodland and hedgerows are present on site. Protection and retention measures have been provided in section 5 below.

**Table 3:** Welwyn Hatfield District Council Local Plan policies relevant to the site

Policy	Relevance to the site
<p><i>applicable. New development will be required to incorporate wherever appropriate new planting with locally native species and should be in accordance with Policy D8 Landscaping.'</i></p>	
<p><b>Policy D8: Landscaping</b></p>	
<p><b>Objective :</b></p> <p><i>'All development, other than changes of use of buildings, should include landscaping as an integral part of the overall design.</i></p> <p><i>Landscaping schemes will require the use of materials which respect the character of the area, the planting of trees, hedgerows and shrubs and details of future maintenance. The retention and enhancement of existing key landscape features such as trees and shrubs, ponds and watercourses will be expected where feasible; where this is not possible, replacement planting should be carried out'</i></p>	<p>Measures for enhancement and recommendations for landscaping of value to wildlife have been provided in section 5 below.</p>

# 5 Conclusions and Recommendations

## CONCLUSIONS

5.1 The site is not a designated statutory or non-statutory site of nature conservation. The site comprised examples of habitats of low intrinsic ecological value, including semi-natural woodland, buildings, hardstanding, a species-poor, non-native hedgerow and introduced shrub. The main ecological constraints that apply to the site are as follows:

- High possibility of breeding birds;
- Moderate possibility of roosting bats;
- Moderate possibility of dormouse;
- Moderate possibility of stag beetle;
- Moderate possibility of great crested newt;
- Low possibility of reptiles; and,
- Low possibility of badger.

5.2 The site was considered unsuitable to support any other protected species. However, rhododendron was confirmed as being present and is an invasive plant species listed on Schedule 9 of The Wildlife and Countryside Act 1981 (as amended). Cherry laurel, an invasive plant species of woodland (but not listed on Schedule 9) was also present.

5.3 The potential presence of protected species will require further surveys and mitigation measures to be undertaken at the site in order to ensure compliance with protected species legislation. Advice regarding this is summarised below.

5.4 Recommendations are also provided below in order to improve the overall ecological value of the site for a range of wildlife including Hertfordshire BAP priority species.

## RECOMMENDATIONS

### Habitat retention

5.5 The trees on site should be retained and protected in line with the ACD Environmental Arboricultural Impact Assessment & Method Statement (ref: PRI19764aia\_ams). Veteran trees are irreplaceable habitats which are considered important for wildlife, providing cultural, historical, landscape and nature conservation value (Natural England, 2014).



- 5.6 The mixed semi-natural woodland is of local value and as much as possible should be retained and protected during construction, and enhanced long-term as part of development proposals. Where this is not possible, potential impacts to the woodland and protected species that it might support should be mitigated for, with any residual impacts addressed through further surveys and compensatory measures required based on the findings of these surveys.

### Further Survey Work and Mitigation

#### *Bats*

- 5.7 Prior to the commencement of works it is recommended that an update internal inspection of building one is conducted together with dusk emergence and dawn re-entry surveys in order to assess the presence/ likely absence of bat roosts. The presence/absence surveys must be carried out between May and September and spread at least two weeks apart during this period in line with best practice guidelines (Collins, 2016).
- 5.8 The trees proposed for removal must also be subject to a detailed (climbed) tree inspection prior to any works. Following these surveys it may be necessary to carry out further emergence/re-entry surveys.

#### *Hazel Dormouse*

- 5.9 The semi-natural woodland and hedgerows on site had moderate potential to support dormice. As such, a habitat suitability assessment for dormice must be undertaken prior to the commencement of works in line the Dormouse Conservation Handbook (Bright et al., 2006). The assessment will be used to determine whether a dormouse survey is required prior to the clearance of suitable vegetation on site.
- 5.10 If dormouse survey is required, they will follow best practice guidelines (Bright *et al.*, 2006) and involve setting up dormouse tubes in target habitats. These must be left in situ for a month prior to surveys commencing. Monthly survey visits are then undertaken between April and November, incorporating the peak months of August and September.
- 5.11 If dormice are confirmed present, a European Protected Species Mitigation (EPSM) licence may be required to facilitate the lawful removal of the woodland as proposed in the current Tree Protection Plan Drawing (Ref PRi19764-03).

### *Great Crested Newt*

- 5.12 Great crested newts are protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 5.13 Terrestrial habitat on site was considered suitable to support great crested newt, therefore, a Habitat Suitability Index (HSI) assessment must be undertaken on any suitable water bodies within 500m of the boundary to determine the probability of great crested newts being present within them (Oldham *et al.*, 2000). If those water bodies are found to be suitable, further surveys to determine presence/likely absence may be required. HSI assessments can be carried out at any time of year, but further surveys for great crested newts are time constrained and can involve eDNA surveys (between mid-April and June) and/or pond surveys (between mid-March and mid-June).

### *Birds*

- 5.14 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). The scrub, introduced shrub, scattered trees, hedgerow and semi natural woodland has the potential to support common breeding birds.
- 5.15 Any vegetation clearance on site, or immediately adjacent to the site should be carried out outside of the main bird nesting season (March to August, inclusive) to avoid any potential offences relating to nesting birds (Newton *et al.*, 2004).
- 5.16 Where this is not possible, a search for nesting birds up to 48 hours prior to vegetation clearance taking place must be undertaken by an experienced ecologist. If any nests are found, the nests are to be protected by establishing an exclusion zone around the nest. Works may then proceed up to, but not within, this exclusion zone until such time as an ecologist confirms the young have fledged the nest. If nesting birds are found at any time during clearance works, work must stop immediately and an ecologist must be called for further advice.

### *Reptiles*

- 5.17 All UK reptile species are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.18 Habitats on site (woodland edge, compost heaps) were found suitable to support widespread reptile species. To avoid possible contravention of the Wildlife and

Countryside Act 1981 (as amended), an ecologist should supervise two stage clearance of any low lying vegetation or clearance of other suitable refugia (TN2, TN3) on site to avoid any potential harm to reptiles. Any reptiles found on site should be moved by an ecologist to suitable nearby habitat, outside of the works area.

### *Badger*

- 5.19 As badgers are highly mobile it is recommended that a walkover survey of the site and a 30m radius of the boundaries (access permitting) is carried out immediately prior to the start of development works to ensure that no setts have been created over the intervening period. If setts are discovered and may be impacted by the works, a Natural England Development Licence may be required.

### *Mammals*

- 5.20 Although common mammals such as mole *meles meles*, red fox *Vulpes vulpes* and European hedgehog *Erinaceus europaeus* may not receive the level of protection afforded to protected species, all wild animals are protected against intentional acts of cruelty under Wild Mammals (Protection) Act 1996. To avoid possible contravention, due care and attention should be taken when carrying out construction works (for example, operations near burrows or mole hills).
- 5.21 It is recommended that Heras fencing should be erected around works area to prevent animals entering the works site. Any excavations and trenches should be covered during non-working hours to minimise risk of animals getting trapped, injured and/or killed. An escape route, in the form of a platform (i.e. timber plank or gradual bank profile), should be provided in excavations and/or trenches that are too large to cover.

### *Other protected species*

- 5.22 No other protected species were considered likely to occur on site and/or be affected by the proposed development. However, should the presence of a protected species be confirmed or suspected during works, they must cease immediately and the advice of a suitably qualified and experienced ecologist must be sought.

### *Invasive plant species*

- 5.23 The invasive plant species, rhododendron, was present on the site within the woodland. It is an offence to plant or otherwise cause these species to grow in the wild, therefore if any of these plants are due to be removed as part of the proposed development it is advised that they are correctly disposed of following best practice guidelines – see <https://www.gov.uk/japanese-knotweed-giant-hogweed-and-other-invasive-plants> .

5.24 In order to prevent these plant species from being an ongoing problem at the site, it is recommended that these species are completely eradicated from the site, through the use of a specialist contractor.

### *Trees*

5.25 Protection measures for the trees on site outlined in the ACD Environmental Arboricultural Impact Assessment & Method Statement (Ref: PRI19764aia\_ams) should be followed. In addition, any retained areas of trees and hedgerows should follow the guidance given in British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction. This includes the erection of a vertical barrier to protect the trees and their root zones. Barriers are typically placed around the Root Protection Area (RPA). No works, tracking of heavy machinery or storage of materials should take place in protected areas. The contractor should erect ecological protection prior to any preliminary construction or preparation works e.g. clearing of the site or erection of temporary site facilities. Regular checks should be made to ensure the protection measures are intact and fenced habitats are not being impacted.

### **Ecological enhancements**

5.26 The enhancements and landscape recommendations detailed below will improve the wildlife value of the area thereby contributing to Hertfordshire BAP Priority habitat 'Urban and 'Woodland' and Hertfordshire BAP priority species such as 'Song thrush' and 'house sparrow'. These recommendations will also ensure that the proposed redevelopment of this site meets the requirements of Policy SC.4 within the Newham Local Development Framework Core Strategy (2013) which aims to enhance biodiversity.

### *Lighting*

5.27 Lighting has the potential to impact a wide range of species groups, including but not limited to, bats. Increasing levels of lighting can cause significant changes in animal behaviour for example causing species to move away from suitable foraging areas and affecting their use of movement corridors and existing resting sites. It is important that the use of lighting associated with the site is carefully considered to ensure that the impacts on wildlife are minimised.

5.28 In order to minimise indirect impacts from lighting associated with development it is recommended to limit light spillage and glare. This can be achieved by following accepted best practice (Fure, 2006; Institute of Lighting Engineers, 2009; Jones, 2000):

5.29 The level of artificial lighting including flood 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;
- 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 potential bat roosting features, confirmed roost access point or habitats of value to commuting/foraging bats. Similarly, any newly planted linear features should not be directly lit.

#### *Bird boxes*

5.30 Recommendations to both compensate for the loss of habitats of potential value to breeding birds, and to enhance the site for this species group include the use of bird boxes. The new on-site buildings could include specially designed features within its structure, for example bird bricks that can be incorporated into walls, soffits or along parapets.

5.31 It is recommended that Schwegler woodcrete boxes are installed as they include a broad range of designs, are long lasting compared to wooden boxes and insulate occupants from extremes of temperature and condensation.

5.32 The landscape planting should also include the provision of native tree and shrub species of value to foraging and nesting birds (see planting of value to wildlife below).

#### *Planting of value to wildlife*

5.33 It is recommended that landscape planting of recognised value to wildlife is included within the landscaping proposals.

5.34 The post-development landscape design should utilise native plant species of recognised wildlife value which will provide nectar for invertebrates. Larger shrubs and trees should be under-planted with smaller flowering bulbs and herbaceous perennials

that are tolerant to shade, which creates a greater structural diversity within the planting scheme and will provide dense cover for wildlife when established. A list of suitable plants can be found here:

[https://www.rhs.org.uk/science/pdf/conservation-and-biodiversity/wildlife/rhs\\_pollinators\\_plantlist](https://www.rhs.org.uk/science/pdf/conservation-and-biodiversity/wildlife/rhs_pollinators_plantlist).

### *Stag beetle habitat*

5.35 The mature trees on site may provide a source of deadwood for stag beetles. Deadwood was found on the floor of the woodland and introduced shrubs were located in beds comprising wood chippings. It is recommended that, where possible, these are all retained, and that new habitat is created using the material from any trees that are due to be removed. 'Log pyramids' can be created by partially burying logs in the soil, sited in partial shade. For more advice on creating habitat for stag beetle, see the People's Trust for Endangered Species website <http://ptes.org/get-involved/wildlife-action/help-stag-beetles/>.

# References

British Standards Institution (2013). *Biodiversity. Code of practice for planning and development: 42020*. BSI, London.

British Standards Institution (BSI) (2012). *BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations*. BSI, London.

CIEEM (2013). *Guidelines for Preliminary Ecological Appraisal*. [On-line] Available from [http://www.cieem.net/data/files/Resource\\_Library/Technical\\_Guidance\\_Series/GPEA/GPEA\\_April\\_2013.pdf](http://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/GPEA/GPEA_April_2013.pdf) [Accessed 08/01/2016]

Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A. and Gregory, R.D. (2015). *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man*. British Birds 108, 708–746. [On-line]. Available from <http://britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf> [Accessed 08/01/2016]

Hertfordshire Biodiversity Action Plan (2011) Available at: [http://www.hef.org.uk/nature/biodiversity\\_vision/](http://www.hef.org.uk/nature/biodiversity_vision/) [Accessed 04/03/2016]

HMSO. (1981). *The Wildlife and Countryside Act (WCA)* (as amended).

HMSO. (1994). *Biodiversity – the UK Action Plan* (Cm 2428) HMSO, London.

HMSO. (2000). *The Countryside and Rights of Way Act (CRoW)*.

HMSO (2010). *The Conservation of Habitats and Species Regulations* (as amended).

IUCN 2015. *The IUCN Red List of Threatened Species. Version 2015-4*. [On-line]. Available from <http://www.iucnredlist.org>. [Accessed: 08/01/2016].

JNCC (2010). *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council. Reprinted by Joint Nature Conservation Committee, Peterborough.

JNCC (2010). *UK Biodiversity Action Plan: New List of Priority Species and Habitats*. [On-line]. Available from <http://www.ukbap.org.uk/NewPriorityList.aspx> [Accessed: 08/01/2016].

MAGIC (2015). *Multi-Agency Geographic Information for the Countryside*. [On-line]. Available from [www.magic.gov.uk](http://www.magic.gov.uk) [Accessed: 08/01/2016].

Natural England (2013). *GIS Digital Boundary Datasets – Priority Habitat Inventory* [on-line]. Available from [http://www.gis.naturalengland.org.uk/pubs/gis/GIS\\_register.asp](http://www.gis.naturalengland.org.uk/pubs/gis/GIS_register.asp) [Accessed 04.02.2016].

Natural England (2014) *Planning and development – guidance Ancient woodland and veteran trees: protecting them from development*. Available from:

<https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences> [Accessed: 07/03/16].

National Planning Policy Framework, Government (2012). <http://planningguidance.planningportal.gov.uk/> [Accessed: 08/01/16].

Schwegler (2011). *Bird and Nature Conservation Products. No.68.* [On-line]. Available from <http://www.schwegler-natur.de/>. [Accessed: 08/01/2016].

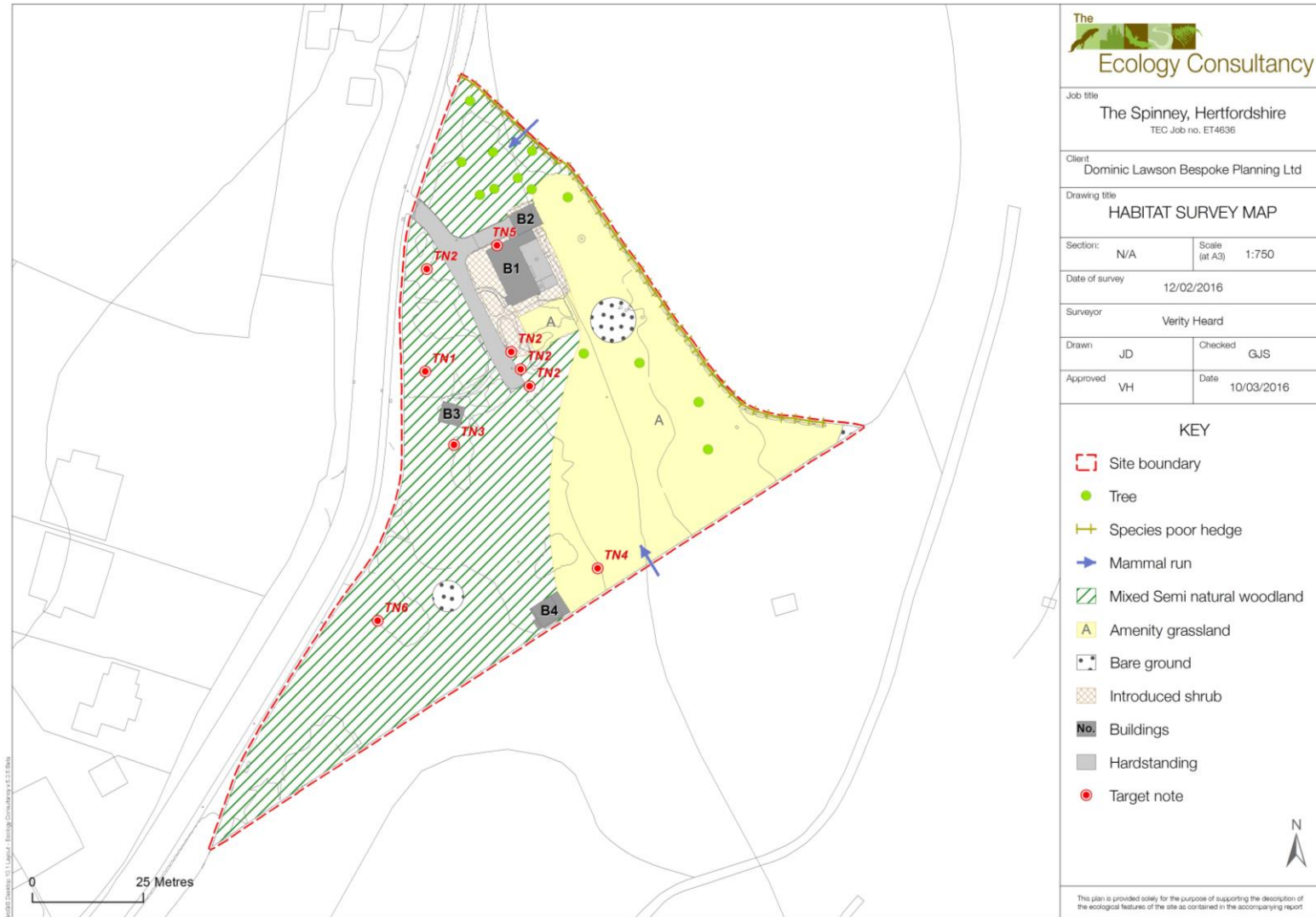
Stace, C.A. (2010). *New Flora of the British Isles* (3rd Ed.). Cambridge University Press,

*Welwyn and Hatfield District Council (2011) District Wide Policies. Available at:* <http://www.welhat.gov.uk/CHttpHandler.ashx?id=869&p=0> [Accessed: 07/03/2016]



## Appendix 1: Habitat Map

Figure 1: Habitat Survey Map



## Appendix 2: Photographs

**Photograph 1:** Semi natural woodland adjacent to hardstanding and a building in the north of the site.



**Photograph 2:** Semi-natural mixed woodland in the west of the site.



**Photograph 3:** Amenity grassland with scattered trees and introduced shrubs adjacent to the building.



**Photograph 4:** Semi-natural mixed woodland



**Photograph 5:** Semi-natural mixed woodland



**Photograph 6:**  
Moles hills within the semi-improved grassland (TN6)



**Photograph 7:**  
Ivy-clad hawthorn tree in the centre of  
the site.



**Photograph 8:**  
Mammal run under a gap in the  
fencing in the east of the site  
(TN5).



**Photograph 9:**  
Mammal hair (TN4)



**Photograph 10:**  
Amenity grassland in the west of the site border by a species-poor hedgerow.



**Photograph 11:**  
Veteran oak tree in the east of the site with numerous holes and splits.



**Photograph 12:**  
Building surrounded by introduced shrubs in the north of the site.



**Photograph 13:**  
Building surrounded by introduced shrubs with wood chippings in the west of the site.



**Photograph 14:**  
Scattered trees with bird boxes in the west of the site.



**Photograph 15:**  
Building with hole in the gable end of the roof allowing access into the loft space (circled in red).





**Photograph 16:**  
Access point within the building loft space.



**Photograph 17:**  
Loft space of the building



**Photograph 18:**  
Beams with cobwebs containing moth wings.



**Photograph 19:**

Droppings between the wooden boards and the main floor beam in the centre of the loft space.



## Appendix 3: Desk Study Results

**Table 1: Non - statutory sites within a 2km radius of the site.**

Site Name	Reason for designation	Area (ha)	Distance from site (m)
<b>Local Wildlife Sites</b>			
St Mary's Church, Essendon	Building and environs important for protected species.		200
Backhouse Wood	Ancient semi-natural pedunculate oak, hornbeam coppice-with-standards woodland with wild cherry and silver birch and some broadleaved planting. ash and hazel coppice are locally frequent. The ground flora supports ancient woodland indicators including bluebell, yellow archangel, dog's mercury, wood meadow-grass and remote Sedge. A stream crosses the site.	7.59	360
Essendon Glebe Meadow	Old pasture with semi-improved neutral grassland. Species recorded include the grasses meadow foxtail, yorkshire fog, creeping bent, red fescue and sweet vernal-grass and the herbs pignut, meadow vetchling, meadow buttercup and bulbous buttercup. A small pond partly shaded by a sycamore is present along the southern edge.	1.47	450
Ox Wood	Ancient semi-natural pedunculate oak/ hornbeam woodland with bluebell. Further south there is a scots pine plantation and at the very southern end a large pit and elder are present. Shrubs, notably spindle, are numerous within the conifer plantation. The boundary partly supports hedges of blackthorn or coppiced hornbeam.	4.40	510
Essendon Brook Pasture	Old semi-improved neutral grassland bisected by the Essendon Brook supporting a good range of grass and herb species such as red fescue and creeping soft-grass plus several indicator species including sweet vernal-grass, field wood-rush, meadow vetchling, lady's bedstraw, common sorrel and common knapweed.	4.77	610
Grassland S. of Essendon Pinetum	Old unimproved neutral to slightly acidic grassland with a moderately species-rich sward often dominated by red fescue plus a good diversity of indicator species such as pignut, Bird's-foot trefoil, lady's bedstraw, field wood-rush and meadow vetchling. The presence of Hairy Sedge and lady's smock indicate some damper soils.	2.56	620
Meadow at Essendon Place	Unimproved species-rich neutral grassland with scattered trees, mainly of pedunculate oak and invading mixed species scrub. Many indicator species have been recorded including agrimony, sweet vernal-grass, common knapweed, pignut, lady's bedstraw and bird's-foot trefoil. A small stream crosses the site and is lined with shrubs and trees of hornbeam, lime and conifers with some woodland flora.	11.82	660

Bedwell Chalk Quarry	Rough chalk grassland with much invading scrub on a remnant area of old chalk pit. The chalky soils provide rich conditions for a wide diversity of herbs, with species recorded such as common centaury, common eyebright, hairy St John's-wort, pyramidal orchid, common spotted-orchid and ploughman's Spikenard. Of particular note are the records of the scarce plant Chiltern Gentian.	4.99	750
Larkinhill Grove	Small fragment of ancient semi-natural Oak and Hornbeam coppice-with-standards woodland with some ash plus coppice of hazel and field maple. The ground flora supports abundant Bluebell and frequent Dog's mercury along with other indicator species such as pignut, wood melick, wood meadow-grass and Hairy-brome. The wood is largely surrounded by a boundary bank with some old field maple and hawthorn and a small pond is present in the north of the wood.	0.66	900
Pasture W. of Essendon Place	Old herb-rich semi-improved neutral grassland supporting a sward mostly of fine grasses with a varied herb community. A small spring source is present which creates some wet ground.	5.47	920
Berkhamsted Lane Plantation	Ancient semi-natural oak/hornbeam woodland and old secondary estate planting. In the shrub layer species include elder, hawthorn, holly and hazel. The ground flora supports a good diversity of species including several woodland indicators such as dog's mercury, bluebell, wood meadow-grass and wood anemone. Remnant hedge and wood banks are present along with streams, ditches, ponds, rides and small glades, which all add to the habitat diversity.	28.89	990
Long Wood (Essendon)	Ancient semi-natural pedunculate oak /hornbeam coppice-with-standards woodland with frequent Ash standards. There is some old Hazel coppice at the north end and down the west side The ground flora supports woodland indicators and is dominated by Bluebell with frequent yellow archangel. Several small streams occur within the wood and there are boundary bank remnants supporting old hornbeam or field maple.	2.08	1100
Harefield Wood Green Lane	Green lane with substantial hedges and trees supporting a good diversity of woody species. The ground flora includes hairy-brome, bluebell, yellow archangel, Dog's mercury and wood meadow-grass. To the south-east there is a linking, banked, hedgerow supporting more abundant hornbeam and Bluebell.	1.17	1100
Meadow at Howe Green South	Semi-improved neutral grassland with a moderate diversity of grasses and herbs including several indicator species. Plants recorded include lady's smock, field wood-rush, common sorrel and meadow buttercup. The site is bordered by trees and shrubs and there is one large pedunculate oak within the field.	0.54	1150
Essendon Place Farm Meadow	Old pasture supporting semi-improved neutral grassland. The sward typically contains species such as meadow foxtail, Yorkshire fog, creeping bent and red fescue. Several pedunculate oak are present.	4.48	1190

Veteran trees nr Ashfield Farm	Numerous scattered veteran trees along path and within field. Mainly pedunculate Oak trees with hollows.	0.70	1260
Furze Field Wood East	Ancient semi-natural Pedunculate Oak Hornbeam coppice-with-standards woodland. The ground flora is typically sparse but several woodland indicator species have been recorded including Bluebell, wood sedge, broad buckler-fern and wood meadow-grass.	2.28	1320
Wood by Belvedere Farm	Ancient streamside woodland composed predominantly of Hornbeam coppice and standards with some large Pedunculate Oak. To the south is a larger area of Hornbeam coppice. The ground flora is reasonably diverse, particularly along the brook, and supports woodland indicators. Pendulous Sedge is occasional along the watercourse (Essendon Brook) which is deeply incised in places. An old double bank feature (an old trackway) is present along the west edge in the northern part of the site.	2.61	1480
Bath Wood	Old plantation dominated by mature sycamore with some remnants of Hornbeam woodland. A small watercourse (Wildhill Brook) bordered by scattered Hornbeams bisects the wood.	4.03	1510
Woodland E. of Deeves Wood	Small fragment of ancient semi-natural broadleaf woodland with hornbeam) and occasional pedunculate oak. Hornbeam present as standards, stubs and pollards. The ground flora supports a number of woodland indicators, predominantly bluebell with some dog's mercury and yellow archangel.	0.29	1540
Deeve Wood/Pope's Pondholes	Ancient semi-natural pedunculate oak, Hornbeam woodland. The majority of the wood has been replanted, mostly with hybrid black poplar and pine but remnant coppice of hornbeam and other species, including field maple and hazel with occasional pedunculate oak standards are present.	10.26	1550
Breach Lane and Stream Course	Old green lane and a network of wooded streams with a good diversity of trees and shrubs. Some of the trees alongside the stream and part of the lane are ancient in character, including old contorted coppices, pollards and standards of Hornbeam. The green lane is partly bordered by hawthorn hedges with some pedunculate oak and ash and areas of scrub and tall ruderals. A small block of secondary Pedunculate Oak woodland is also present.	1.59	1550
Grassland and Track E. of Deeves Wood	Remnant green lane lined with trees and shrubs with an area of species-rich damp grassland at the western end. The grassland has much bramble along with species such as ragged robin, Meadow Saxifrage, meadow vetchling and marsh thistle.	0.53	1580
Spring Wood (near Howe Green)	Broadleaved woodland alongside the River Lea with remnant, possibly ancient, semi-natural pedunculate oak/ hornbeam coppice. A spring source is present towards the northern end.	8.38	1640

Wood S. of Harefield Wood	Ancient semi-natural woodland with pedunculate oak, hornbeam and ash standards with some hornbeam coppice, hazel and elm scrub. The ground flora supports several woodland indicators including bluebell, dog's mercury and wood meadow-grass. Several very large horse-chestnuts are present in the north-east and the margin is partly bordered by old banks.	1.32	1670
Culver Wood	Ancient semi-natural Pedunculate Oak ( <i>Quercus robur</i> )/Hornbeam ( <i>Carpinus betulus</i> ) woodland composed of predominantly Hornbeam with some Pedunculate Oak and Silver Birch ( <i>Betula pendula</i> ). Within the western margin a stream lies in a narrow valley with adjacent wet areas and scrub of Elder ( <i>Sambucus nigra</i> ) plus Crack Willow ( <i>Salix fragilis</i> ) and Ash ( <i>Fraxinus excelsior</i> ). The ground flora is typically sparse but a good number of woodland indicators have been recorded including Bluebell ( <i>Hyacinthoides non-scripta</i> ), Dog's Mercury ( <i>Mercurialis perennis</i> ), Remote Sedge ( <i>Carex remota</i> ), Yellow Archangel ( <i>Lamium galeobdolon</i> ), Giant Fescue ( <i>Festuca gigantea</i> ), Wood Meadow-grass ( <i>Poa nemoralis</i> ), Primrose ( <i>Primula vulgaris</i> ) and Common Dog-violet ( <i>Viola riviniana</i> ).	2.54	1720
Meadow and Spring near the Rectory	Old neutral to slightly acidic grassland with a fine sward supporting a good diversity of grasses and herbs such as bird's-foot trefoil, yarrow, common knapweed, meadow buttercup, field wood-rush and common sorrel. There is also a small spring-fed pond in the north-east corner.	0.66	1730
Pather's Wood	Ancient semi-natural hornbeam coppice. The ground flora supports woodland indicators. An incised watercourse (Essendon Brook) is present within the south-west edge of the wood.	2.28	1760
Little Berkhamsted House Meadow	A series of grasslands supporting a moderately diversity of grasses and herbs. The grassland is predominantly neutral in character but becomes more acidic on higher ground to the south. A spring-fed pond and associated ditches is present with an aquatic community.	7.84	1780
Cole Green Way	Disused railway route supporting linear secondary woodland and scrub on either side of steep embankments. The banks have been colonised by Pedunculate Oak, ash, sycamore, hawthorn, blackthorn, field maple and Bramble. Thin strips of grasses and herbs border the central track and larger open areas of more species-rich grassland occur in places.	9.35	1920
Home Wood N. of Wildhill	Ancient semi-natural pedunculate oak, hornbeam woodland, including coppice, with some ash standards. Elder is dominant in the shrub layer. The ground flora supports woodland indicators dominated by Bluebells with additional species such as Dog's mercury, broad buckler-fern and yellow archangel.	7.06	1960

Greater Captain's & Howell Park Wood	Remnant of a much larger ancient semi-natural pedunculate oak /hornbeam woodland. The remaining woodland is dominated by silver birch together with some pedunculate oak, ash and hornbeam standards plus coppice. Hazel coppice is also present. There has been some recent replanting to the north-east part. The ground flora supports frequent Bluebell and wood anemone and areas of Bracken.	7.96	1990
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## Appendix 4: Plant Species List

**Plant Species List for the Spinney site compiled from the Preliminary Ecological Appraisal habitat and botanical survey carried out on 12 February 2016.**

Scientific nomenclature follows Stace (2010) for vascular plant species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, [www.bsbi.org.uk](http://www.bsbi.org.uk). 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 Phase 1 Report.

**Abundance was estimated using the DAFOR scale as follows:**

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, LD =locally dominant  
P = planted, T = tree, Y = young tree, S = shrub.

Latin Name	Common name	Abundance	Qualifiers
<i>Prunus laurocerasus</i>	Cherry laurel	LD	
<i>Ilex aquifolium.</i>	Holly	O	
<i>Euonymus sp.</i>	Spindle	O	p
<i>Cotoneaster sp.</i>	Cotoneaster species	O	p
<i>Buxus sempervirens</i>	Box	O	
<i>Mahonia sp.</i>	Barberry	F	p
<i>Aucuba japonica</i>	Spotted laurel	LD	
<i>Photinia</i>	Christmas berry	F	
<i>Skimmia sp</i>	Skimmia species	F	
<i>Camellia sp.</i>	Camelia	O	
<i>Quercus robur</i>	<i>Common oak</i>	A	
<i>Tillia x europaea</i>	Common Lime	A	
<i>Acer pseudoplatanus</i>	Sycamore	F	
<i>Fagus sylvatica</i>	Beech	O	
<i>Ilex aquifolium.</i>	Holly	O	
<i>Chamaecyparis lawsoniana,</i>	Lawson cypress	O	

<i>Hedera helix</i>	Ivy	D	
<i>Crataegus monogyna</i>	Hawthorn	O	
<i>Carpinus betula</i>	Hornbeam	O	
<i>Prunus avium</i>	Wild cherry	LA	
<i>Betula pendula,</i>	Silver birch	O	
<i>Morus alba</i>	White Mulberry	R	
<i>Quercus ilex.</i>	Holm oak	O	
<i>Taxus baccata</i>	Yew	O	
Rhododendron	Rhododendron	O	
<i>Galanthus,</i>	Snowdrops	O	
<i>Dryopteris sp</i>	Fern	O	
<i>moss sp</i>	Moss	LD	

## Appendix 5: Legislation and Planning Policy

**Important notice:** This section contains details of legislation and planning policy applicable in Britain only (i.e. not including 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 ensure accuracy, this section should not be relied upon as a definitive statement of the law.

## **A NATIONAL LEGISLATION AFFORDED TO SPECIES**

The objective of the EC Habitats Directive<sup>9</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 2010 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

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).

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

- Deer Act 1991;
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment & Rural Communities (NERC) Act 2006;
- Protection of Badgers Act 1992;
- Wild Mammals (Protection) Act 1996.

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected

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<sup>9</sup> Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive plant 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 2010 (as amended) (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the 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 2010 (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.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, 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.

## Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2010 (as amended) through their inclusion on Schedule 2. Regulation 41 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:
    - (i) to survive, breed, or reproduce, or to rear or nurture young;
    - (ii) to hibernate or migrate<sup>3</sup>
  - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (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?*

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) 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 allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity of a local population.

### **Badger**

Badgers *Meles meles* receive protection under The Protection of Badgers Act 1992 which consolidates the previous Badger Acts of 1973 and 1991. The Act makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett<sup>19</sup> or any part thereof
- Intentionally or recklessly disturb<sup>20</sup> a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

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

A Development Licence<sup>21</sup> will be required from the relevant countryside agency (e.g. Natural England) for any development works liable to affect an active badger sett, or to disturb badgers whilst in the sett. Depending on the nature of the works and the specifics of

the sett and its environs, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. The countryside agencies have issued guidelines on what constitutes a licensable activity. N.B. there is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

## Birds

All wild birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this 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;
- 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, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). 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 in particular is to undertake work outside the main bird nesting season which typically runs from March to August<sup>10</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>10</sup> It should be noted that this is the main breeding period. Breeding activity may occur outwith this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.



Those species of bird listed on Schedule 1 are additionally 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.

### **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.

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

### **Statutory 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** (SSSIs) under the National Sites 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 (Natura 2000 network) and globally (such as Wetlands of International Importance). See subsequent sections for details of these designations. Improved provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).

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 Designations: International**

**Special Protection Areas** (SPAs), together with **Special Areas of Conservation** (SACs) form the **Natura 2000** network. The Government is obliged to identify and classify SPAs under the EC Birds Directive (Council Directive 2009/147/EC (formerly 79/409/EEC)) on the Conservation of Wild Birds). 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 2010 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SPAs in UK offshore waters (from 12-200 nm).

The Government is obliged to identify and designate SACs under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora). 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 2010 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SACs in UK offshore waters (from 12-200 nm).

**Ramsar** sites are designated 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 (SSSIs) 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 in England and Wales highlighting the special status of Ramsar sites. This effectively extends the level of protection to that afforded to sites which have been designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

### **Statutory Designations: Local**

Under the National Sites 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.

### **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 **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 and structure plans 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 and development frameworks may vary between counties.

**Regionally Important Geological and Geomorphological Sites** (RIGS) are the most important places for geology and geomorphology outside land holding statutory designations such as SSSIs. Locally-developed criteria are used to select these sites, according to their value for education, scientific study, historical significance or aesthetic qualities. As with local Wildlife Sites, RIGS are a material consideration when planning applications are being determined.

## **C NATIONAL PLANNING POLICY**

### **The National Planning Policy Framework (NPPF)**

The National Planning Policy Framework (NPPF) replaced Planning Policy Statement (PPS9) in April 2012 as the key national planning policy concerning nature conservation. The NPPF

emphasises the need for suitable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species. An emphasis is also made for the need for ecological networks via preservation, restoration and re-creation. The protection and recovery of priority species – that is those listed as UK Biodiversity Action Plan priority species – is also listed as a requirement of planning policy. In determining a 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**

The Natural Environment and Rural Communities (NERC) Act came into force on 1<sup>st</sup> October 2006. Section 40 of the 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.

## **D REGIONAL AND LOCAL PLANNING POLICY**

### **WELWYN HATFIELD DISTRICT COUNCIL’S ADOPTED CORE STRATEGY**

#### *Core Strategy Policy R11- Biodiversity and development*

All new development will be required to demonstrate how it would contribute positively to the biodiversity of the site by;

- (i) The retention and enhancement of the natural features of the site;
- (ii) The promotion of natural areas and wildlife corridors where appropriate as part of the design;

- (iii) The translocation of habitats where necessary, where it can be demonstrated that the habitat or species concerned cannot be successfully accommodated within the development;
- (iv) The use of locally native species in planting in accordance with Policy D8 Landscaping;
- (v) Helping meet priorities/targets set out in the Local Biodiversity Action Plan.

PPG9 Nature Conservation identifies different levels of protection for sites of varying importance for biodiversity, for example European and National statutory sites such as Special Areas of Conservation (SAC), Special Protection Areas (SPAS), National Nature Reserves, Sites of Special Scientific Interest (SSSIs) and Local Nature Reserves and non statutory locally designated sites such as County Wildlife Sites. PPG 9 recognises that local and informal designations form part of a habitat network which helps to retain local biodiversity, but designation should only be for sites of substantive local value. Sites of International Importance 5.37

The district contains a small part of the Wormley-Hoddesdon Park Woods candidate Special Area of Conservation (SAC), which is identified on the Proposals Map. This designation is intended to protect the habitat of threatened species of wildlife. In accordance with PPG 9 development proposals for a candidate SAC will be treated in the same way as if it had already been designated.

## **E SPECIES AND HABITATS OF MATERIAL CONSIDERATION FOR PLANNING IN ENGLAND**

In recent years there has been some confusion and uncertainty over the use of Biodiversity Action Plan (BAP) list as a material planning consideration in England. The uncertainty has arisen as a consequence of the publication of Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011) to replace the previous England Biodiversity Strategy, coupled with the replacement of the UK BAP itself with the UK Post-2010 Biodiversity Framework (2012). Biodiversity issues are now devolved. These new strategies and framework resulted in changes in the terminology used to describe priority habitats and species in England.

Previous planning policy (and some supporting guidance which is still current, eg ODPM Circular 06/2005, now under revision), refers to UK BAP species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but

such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list. So the same species and habitats are of material consideration for planning purposes as previously was the case, they are just referenced using different terminology.

Given the relatively recent nature of these changes you will still see references in local plans and some Government or Government agency documents and circulars to BAP habitats and species. As stated above these same habitats and species remain material considerations in planning albeit they are now referred to either as habitats and species of principal importance or simply priority habitats and priority species.

<http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>

## **F REGIONAL AND LOCAL BAPS**

The UK plan also encourages the production of local Biodiversity Action Plans at the County or District level. There are 17 Hertfordshire BAP Species and 7 broad Hertfordshire BAP Habitats with specific Habitat Action Plans (HAPs). Specific HAPs and SAPs, which are of potential relevance to this site include:

### **Habitats**

- Urban
- Woodland

### **Species**

- House Sparrow
- Song thrush
- Dormouse
- Stag beetle
- Great crested newt



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