

Hayes Digital Park

Ecological Appraisal

Quality Management			
Client:	studioNWA		
Project:	Hayes Digital Park		
Report Title:	Ecological Appraisal		
Project Number:	ECO-6890		
File Reference:	6890 EcoAp vf /JB/LP		
Date:	29/08/2024		

Copyright

The copyright of this document remains with Aspect Ecology. All rights reserved. The contents of this document therefore must not be copied or reproduced in whole or in part for any purpose without the written consent of Aspect Ecology.

Confidentiality

This report may contain sensitive information relating to protected species. All records of Badger setts must remain confidential. Where this report is circulated publicly or uploaded to online planning portals, reference to Badger setts must be redacted and any maps pertaining to the locations of Badger setts removed from the document.

Legal Guidance

The information set out within this report in no way constitutes a legal opinion on the relevant legislation (refer to the relevant Appendix for the main provisions of the legislation). The opinion of a legal professional should be sought if further advice is required.

Liability

This report has been prepared for the exclusive use of the commissioning client and unless otherwise agreed in writing by Aspect Ecology no other party may use, or rely on the contents of the report. No liability is accepted by Aspect Ecology for any use of this report, other than for the purposes for which it was originally prepared and provided. No warranty, express or implied, is made as to the advice in this report. The content of this report is partly based on information provided by third parties; Aspect accepts no liability for any reliance placed on such information. This report is subject to the restrictions and limitations referenced in Aspect Ecology's standard Terms of Business.

Contact Details

Aspect Ecology Ltd

Hardwick Business Park | Noral Way | Banbury | Oxfordshire OX16 2AF t 01295 279721 e info@aspect-ecology.com www.aspect-ecology.com

Contents

Text:

Exec	utive Summary	1
	Introduction	
2	Methodology	3
3	Ecological Designations	9
4	Habitats and Ecological Features	. 11
5	Faunal Use of the Site	. 15
6	Mitigation Measures and Enhancements	. 22
7	Conclusions	. 26

Plans:

Plan 6890/ECO1 Site Location

Plan 6890/ECO2 Ecological Designations

Plan 6890/ECO3 Habitats and Ecological Features

Appendices:

Appendix 6890/1 Evaluation Methodology

Appendix 6890/2 Legislation Summary



Executive Summary

- i) **Introduction.** Aspect Ecology was commissioned by studioNWA in May 2024 to undertake an Ecological Appraisal in respect of proposed redevelopment of land at Heathrow Interchange Park, Hayes, Hillingdon.
- ii) **Proposals.** The proposals are for redevelopment of the site to provide a substation, associated with the permitted data centre campus development (ref: 38421/APP/2021/4045) to the south.
- iii) **Survey.** The site was surveyed in May 2024 based on standard extended Phase 1 methodology. In addition, a general appraisal of faunal species was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys conducted in respect of bats and Badger.
- Ecological Designations. The site itself is not subject to any statutory or non-statutory ecological designations. The nearest statutory nature conservation designation to the site is Yeading Meadows Local Nature Reserve (LNR), which is located approximately 1.87km north-west of the site. The nearest non-statutory site is Yeading Brook, Minet Country Park and Hitherbroom Park Site of Importance for Nature Conservation (SINC), which is located approximately 20m from the north-east boundary of the site. The Yeading Brook, Minet Country Park and Hitherbroom Park SINC is located close to the site and safeguarding measures are therefore proposed. All of the other ecological designations in the surrounding area are physically well separated from the site and are therefore unlikely to be adversely affected by the proposals.
- v) **Habitats.** The site comprises a single building, with associated areas of hardstanding, and amenity grassland and planting, along with a small number of trees. The features of ecological importance comprise the hedgerows, which are only of site level value. The hedgerows will be removed under the proposals, and this will be compensated for by new, native species-rich hedgerow planting. The remaining habitats within the site are not considered to form important ecological features and their loss to the proposals is therefore of negligible ecological significance.
- vi) **Protected Species.** The site generally offers limited opportunities for protected species and no evidence of any such species was recorded during the survey work. However, it is likely that birds nest within suitable habitat at the site and could therefore potentially be adversely affected by the proposals. Appropriate mitigation measures, centred on the careful timing of works, will therefore be implemented to safeguard nesting birds during relevant site clearance works. Long-term nesting opportunities will be maintained, if not enhanced, under the proposals through new landscape planting.
- vii) **Enhancements.** The proposals present the opportunity to secure a number of biodiversity net gains, including additional native tree, wildflower, and hedgerow planting.
- viii) **Summary.** In summary, the proposals have sought to minimise impacts on biodiversity and subject to the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm.



1 Introduction

1.1 **Background and Proposals**

- 1.1.1 Aspect Ecology was commissioned by studioNWA in July 2024 to undertake an Ecological Appraisal in respect of proposed development of land at Heathrow Interchange Park, Hayes, Hillingdon centred at grid reference TQ 1152 8036 (see Plan 6890/ECO1), hereafter referred to as 'the site'.
- 1.1.2 The proposals are for redevelopment of the site to provide a substation, associated with the permitted data centre campus development (ref: 38421/APP/2021/4045) to the south.

1.2 Site Overview

- 1.2.1 The site is located in Hayes, Hillingdon within an urban context. The site is bound by Bullsbrook Road to the north and east, an access road to the west, and existing industrial development to the south. The Yeading Brook lies approximately 30m east of the site. In the wider landscape, further industrial development and large areas of residential development are located to the north and east of the site, with further industrial development and Minet Country Park lying to the south and west.
- 1.2.2 The site itself comprises an industrial building, in active use as offices and a warehouse, with associated areas of hardstanding and landscaping.

1.3 **Purpose of the Report**

1.3.1 This report documents the methods and findings of the baseline ecology surveys and desktop study carried out in order to establish the existing ecological interest of the site, and subsequently provides an appraisal of the likely ecological effects of the proposals. The importance of the habitats and species present is evaluated. Where necessary, avoidance, mitigation and compensation measures are proposed so as to safeguard any significant existing ecological interest within the site and where appropriate, opportunities for ecological enhancement are identified with reference to national conservation priorities and local Biodiversity Action Plans (BAPs).



2 Methodology

2.1 **Desktop Study**

- 2.1.1 In order to compile background information on the site and its immediate surroundings, Greenspace Information for Greater London (GiGL) was contacted in July 2024, with data requested on the basis of a search radius of 2km.
- 2.1.2 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England, with an extended search radius (25km). The MAGIC database was also searched to identify the known presence of any Priority Habitats within or adjacent the site.
- 2.1.3 In addition, the Woodland Trust database was searched for any records of ancient, veteran, or notable trees within or adjacent to the site.
- 2.1.4 Where relevant information has been received from the above sources, this is reproduced on Plan 6890/ECO2, where appropriate.

2.2 **Habitat Survey**

- 2.2.1 The site was surveyed in July 2024 in order to ascertain the general ecological value of the land contained within the boundaries of the site and to identify the main habitats and ecological features present.
- 2.2.2 The site was surveyed based on standard Phase 1 Habitat Survey methodology¹, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail through Phase 2 surveys. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal² to record details on the actual or potential presence of any notable or protected species or habitats.
- 2.2.3 Habitats were classified in accordance with the UK Habitat Classification system, version 2.0³, and condition assessed in accordance with the methodology set out in the Metric Technical Annex⁴ and using professional judgement. In line with guidance⁵, the fine scale minimum mapping unit (MMU) of 25sqm or 5m in length has been used where possible / relevant. The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) Checklist.

2.3 Faunal Surveys

2.3.1 General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Specific attention was also paid to the potential presence of any protected, rare or notable species, and specific consideration was given to bats, as described below.

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

² Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) 'Guidelines for Preliminary Ecological Appraisal.'

³ UKHab Ltd (2023). UK Habitat Classification Version 2.0 (at https://www.ukhab.org)

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

⁵ The UK Habitat classification User Manual. Version 1.1. 2020



Bats⁶

Visual Inspection Surveys

- **Buildings.** Buildings within the site were subject to specific internal and external inspection surveys using ladders, torches and binoculars where necessary in July 2024.
- 2.3.3 During the external inspections, particular attention was given to any potential roost features or access points, such as broken or lifted roof tiles, lifted lead flashing, soffit boxes, weatherboarding, hanging tiles, etc. and for any external signs of use by bats such as accumulations of bat droppings or staining. Binoculars were used to inspect any inaccessible areas more closely where appropriate.
- During the internal inspections, evidence for the presence of bats was searched for with particular attention paid to any loft voids and relevant potential roost features and locations, such as ridge boards, rafters, purlins, gable walls, and mortise joints. Specific searches were made for bat droppings that can indicate present or past use and extent of use, whilst other signs that can indicate the possible presence of bats were also searched for, e.g. presence of stained areas, feeding remains, corpses, etc. Any droppings collected during the course of the surveys were visually assessed and attributed to a species where possible on the basis of size/shape/texture⁷. Where appropriate, samples of similar droppings were collected with gloved hands and put into labelled eppendorfs, and forwarded to the University of Warwick for DNA analysis.
- 2.3.5 **Trees**. Trees were assessed for their suitability to support roosting bats based on the presence of features such as holes, cracks, splits or loose bark, with trees initially classified as supporting potential roost features (PRFs), requiring further assessment (FAR) or supporting no suitable features.
- 2.3.6 Where trees may be impacted under the development proposals, these were subject to a ground level tree assessment (GLTA) based on relevant guidance with potential roost features (PRFs) categorised as PRF-I (only suitable for individual or small numbers of bats) or PRF-M (suitable for multiple bats). Any potential roost features identified were also inspected for any signs indicating possible use by bats, e.g. staining, scratch marks, bat droppings, etc.

Badger (Meles meles)8

- 2.3.7 A detailed Badger survey was carried out in July 2024. The survey comprised two main elements. The first element involved searching for evidence of Badger setts. For any setts that were encountered, each sett entrance was noted and mapped. The following information was recorded:
 - Number and location of well used / active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently;

Surveys based on: English Nature (2004) 'Bat Mitigation Guidelines' and Bat Conservation Trust (2023) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).'

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

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



- Number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance; and
- Number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.
- 2.3.8 The second element involved searching for signs of Badger activity such as well-worn paths and push-throughs, snagged hair, footprints, latrines and foraging signs, so as to build up a picture of any use of the site by Badger.

2.4 Survey Constraints and Limitations

- 2.4.1 All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons. The Phase 1 habitat survey was undertaken within the optimal season therefore allowing a robust assessment of habitats and botanical interest across the site.
- 2.4.2 Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, etc., and hence the absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.

2.5 **Ecological Evaluation Methodology**

2.5.1 The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018)⁹, which involves identifying 'important ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). For full details refer to Appendix 6890/1.

2.6 **Relevant Planning Policy**

National Policy Approach to Biodiversity in the Planning System

- 2.6.1 The National Planning Policy Framework (NPPF)¹⁰ describes the Government's national policies on 'conserving and enhancing the natural environment' (Chapter 15). NPPF is accompanied by Planning Practice Guidance on 'Biodiversity, ecosystems and green infrastructure' and ODPM Circular 06/2005¹¹.
- 2.6.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss¹², as set out at Paragraph 180, which states that planning policies and decisions should contribute to and enhance the natural and local environment by:

GIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine', ver. 1.2, Chartered Institute of Ecology and Environmental Management, Winchester

Department for Levelling Up, Housing and Communities (2023) 'National Planning Policy Framework'

¹¹ ODPM (2006) 'Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice'

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



'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures'

2.6.3 The approach to dealing with biodiversity in the context of planning applications is set out at Paragraph 186:

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

- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'
- 2.6.4 The above approach encapsulates the 'mitigation hierarchy' described in British Standard BS 42020:2019¹³, which involves the following step-wise process:
 - Avoidance avoiding adverse effects through good design;
 - Mitigation where it is unavoidable, mitigation measures should be employed to minimise adverse effects;
 - **Compensation** where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm; and
 - **Enhancement** planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.
- 2.6.5 The measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development (BS 42020:2019, section 5.5).

¹³ British Standards Institution (2013) 'Biodiversity - Code of practice for planning and development', BS 42020:2019



Local Policy

2.6.6 Current policy for Hayes Digital Park, Hayes is outlined in the 'Hillingdon Local Plan' (adopted November 2012) and includes policies of relevance to ecology and biodiversity, as set out below.

Local Plan Part 1

Policy EM7: Biodiversity and Geological Conservation

'The Council will review all the Borough grade Sites of Importance for Nature Conservation (SINCs). Deletions, amendments and new designations will be made where appropriate within the Hillingdon Local Plan: Part 2- Site Specific Allocations Local Development Document. These designations will be based on previous recommendations made in discussions with the Greater London Authority. Hillingdon's biodiversity and geological conservation will be preserved and enhanced with particular attention given to:

- 1. The conservation and enhancement of the natural state of:
 - Harefield Gravel Pits
 - Colne Valley Regional Park
 - Fray's Farm Meadows
 - Harefield Pit
- 2. The protection and enhancement of all Sites of Importance for Nature Conservation. Sites with Metropolitan and Borough Grade 1 importance will be protected from any adverse impacts and loss. Borough Grade 2 and Sites of Local Importance will be protected from loss with harmful impacts mitigated through appropriate compensation.
- 3. The protection and enhancement of populations of protected species as well as priority species and habitats identified within the UK, London and the Hillingdon Biodiversity Action Plans.
- 4. Appropriate contributions from developers to help enhance Sites of Importance for Nature Conservation in close proximity to development and to deliver/ assist in the delivery of actions within the Biodiversity Action Plan.
- 5. The provision of biodiversity improvements from all development, where feasible.
- 6. The provision of green roofs and living walls which contribute to biodiversity and help tackle climate change.
- 7. The use of sustainable drainage systems that promote ecological connectivity and natural habitats.'

Policy EM8: Land, Water, Air and Noise

2.6.7 This Policy includes reference to the Yeading Brook, which lies approximately 30m east of the site, and states:

'The Council will seek to safeguard and improve all water quality, both ground and surface. Principal Aquifers, and Source Protection Zones will be given priority along with the:



- River Colne
- Grand Union Canal
- River Pinn
- Yeading Brook
- Porter Land Brook
- River Crane
- Ruislip Lido'

Local Plan Part 2

Policy DMEI 7: Biodiversity Protection and Enhancement

- 'A) The design and layout of new development should retain and enhance any existing features of biodiversity or geological value within the site. Where loss of a significant existing feature of biodiversity is unavoidable, replacement features of equivalent biodiversity value should be provided on-site. Where development is constrained and cannot provide high quality biodiversity enhancements on-site, then appropriate contributions will be sought to deliver off-site improvements through a legal agreement.
- B) If development is proposed on or near to a site considered to have features of ecological or geological value, applicants must submit appropriate surveys and assessments to demonstrate that the proposed development will not have unacceptable effects. The development must provide a positive contribution to the protection and enhancement of the site or feature of ecological value.
- C) All development alongside, or that benefits from a frontage on to a main river or the Grand Union Canal will be expected to contribute to additional biodiversity improvements.
- D) Proposals that result in significant harm to biodiversity which cannot be avoided, mitigated, or, as a last resort, compensated for, will normally be refused.'



3 Ecological Designations

3.1 Statutory Designations

Description

- 3.1.1 The statutory designations of ecological importance that occur within the local area around the site are shown on Plan 6890/ECO2.
- 3.1.2 The nearest statutory nature conservation designation to the site is Yeading Meadows Local Nature Reserve (LNR), which is located approximately 1.87km north-west of the site. The LNR is designated on the basis of the presence of hundred-year-old oak plantation woodland and species rich meadows, which support a range of birds and invertebrates. The next nearest statutory nature conservation designation to the site is Littern Nature Reserve LNR, which is located approximately 3.7km to the north-east of the site. This LNR is designated for the presence of woodland, wildflower meadows, and ponds.
- 3.1.3 Natural England has developed Impact Risk Zones (IRZs) as an initial tool to help assess the risk of developments adversely affecting Sites of Special Scientific Interest (SSSIs), taking into account the type and scale of developments. The site sits within an IRZ in relation to Syon Park SSSI, however the IRZ does not require a development of this type to be referred to Natural England for consultation.

Evaluation

3.1.4 The site itself is not subject to any statutory nature conservation designations. All statutory ecological designations in the surrounding area are well separated from the site by existing development and given the nature and scale of the proposals, these designations are unlikely to be affected.

3.2 Non-statutory Designations

Description

- 3.2.1 The non-statutory designations of nature conservation interest that occur within the local area are shown on Plan 6890/ECO2.
- 3.2.2 There are a number of non-statutory designations within 2km of the site. The nearest non-statutory site is Yeading Brook, Minet Country Park and Hitherbroom Park Site of Importance for Nature Conservation (SINC), which is located approximately 25m from the north-east boundary of the site. The SINC is designated at Borough Grade 1, with the country park consisting of reclaimed derelict land comprising grassland, a stream and damp and aquatic habitats, which support a diverse range of flora and birds.
- 3.2.3 The next nearest non-statutory nature conservation designation to the site is London's Canals SINC, located 150m to the east of the site. This SINC is designated on the basis of supporting a range of aquatic flora.

Evaluation

The site itself is not subject to any non-statutory nature conservation designations. The Yeading Brook, Minet Country Park and Hitherbroom Park SINC is located close to the site, and as such, measures are proposed in Chapter 6 below to safeguard the Yeading Brook and downstream habitats.



3.2.5 All other non-statutory designations in the surrounding area are well separated from the site by existing development and given the nature and scale of the proposals, these designations are unlikely to be affected by the proposals.

3.3 Priority Habitats, Ancient Woodland and Notable Trees

Description

3.3.1 There are no records of any notable or veteran trees within or adjacent to the site. There are no areas of Ancient Woodland within 5km of the site. There is an area of deciduous woodland located 200 metres to the south-east of the site, however this is well separated from the site boundary by developed land.

Evaluation

3.3.2 Subject to the implementation of appropriate mitigation measures (as discussed below in Chapter 4) it is unlikely that any Priority Habitats or any notable or veteran trees will be significantly affected by the proposals.

3.4 **Summary**

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



4 Habitats and Ecological Features

4.1 Background Records

4.1.1 No specific records of any protected, rare or notable plant species from within or immediately adjacent to the site are included within the information returned from the Records Centre.

4.2 **Overview**

- 4.2.1 The habitats and ecological features present within the site are described below and evaluated in terms of whether they constitute an important ecological feature and their level of importance, taking into account the status of habitat types and the presence of rare plant communities or individual plant species of elevated interest. The likely effects of the proposals on the habitats and ecological features are then assessed. The value of habitats for the fauna they may support is considered separately in Chapter 5 below.
- 4.2.2 The following habitats/ecological features were identified within/adjacent to the site:
 - Amenity Grassland;
 - Trees;
 - Hedgerows;
 - Ornamental Planting and Hedgerow; and
 - Buildings and Hardstanding.
- 4.2.3 The locations of these habitat types and features are illustrated on Plan 6890/ECO3 and individual habitats are described below.

4.3 **Priority Habitats**

- 4.3.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats which are of principal importance for conservation in England. This list is largely derived from the 'Priority Habitats' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority habitats under the subsequent country-level biodiversity strategies.
- 4.3.2 Of the habitats within the site, the hedgerows qualify as Priority Habitats.

4.4 Amenity Grassland

Description

4.4.1 A single, small area of grassland is present in the south-west of the site, extending outwards from **B1** into the area of hardstanding surrounding it. This area is not regularly managed and is in a busy, frequently disturbed area and appears to be heavily poached, likely from regular trampling from walkers and vehicles. The grassland comprises a uniformly short sward, with taller dead flower heads, and is relatively species poor. The species present within the grassland sward include Barren Brome *Bromus sterilis*, Cock's Foot *Dactylis glomerata*, False Oat-grass *Arrhenatherum elatius*, Perennial ryegrass *Lolium perenne*, and



Yorkshire Fog *Holcus lanatusI*, along with Bristly oxtongue *Helminthotheca echioides*, Cherry laurel *Prunus larocerasus*, Common Cat's-ear *Hypochaeris radicata*, Ribwort Plantain *Plantago lanceolata*, and Yarrow *Achillea millefolium*.

Evaluation

4.4.2 Overall, the grassland supports a low diversity of common and widespread species and as such does not constitute an important ecological feature. The loss of grassland to the proposals is therefore of minor ecological significance.

4.5 **Trees**

Description

- 4.5.1 A number of trees are located within the site, largely associated with the ornamental hedgerow located on the northern site boundary.
- 4.5.2 A small group of three trees is located in the north-east corner and comprises a semi-mature Pear *Pyrus*, a semi-mature Chanticleer pear *Pyrus calleryana*, and a semi-mature Norway maple *Acer platanoides*. The remaining trees along this northern boundary comprise four semi-mature Norway maple and three young Ash *Fraxinus*. There are also two young trees, a Norway Maple 'Crimson king' and a Sycamore *Acer pseudoplanatus*, present in the west of the site included within the hardstanding as a landscape feature.

Evaluation

- 4.5.3 The trees are relatively small in size being young to semi-mature in nature. They are of limited ecological interest individually and are also not considered to form important ecological features. The loss of trees to the proposals is therefore of minor ecological significance.
- 4.5.4 It is understood that the trees within the site are to be removed under the proposals, and as such, new planting is proposed to provide new opportunities for wildlife.

4.6 **Hedgerows**

Description

4.6.1 There are two hedgerows present on site. **H1** is located at the northern edge of **B1** and **H2** along the eastern edge, described in more detail in Table 4.1 below.

Table 4.1. Hedgerow descriptions.

No.	н	w	Woody species	Avg. per 30m*	Ground flora & climbers	Associated features	Comments (including structure / management)	Likely to qualify#
Н1	1m	1- 1.5m	Ash (y), Buddleia, Cherry Laurel, Dogwood, Garden Privet, Hazel, Norway Maple (y), Rose sp, and <u>Wayfaring Tree</u>	5	Bramble, Dandelion, False Oatgrass, Herb Robert, Wood Avens	<10% gaps	Unmanaged, gappy, curbstones defining border between hedge and hardstanding	Υ
Н2	2- 2.5m	1.5- 2m	<u>Dogwood</u> , <u>Hazel</u> , and Buddleia	3	Bramble and Herb Robert	<10% gaps	Unmanaged and gappy	N

Woody species (as listed under Schedule 3 of the Hedgerows Regulations 1997) and woodland ground flora species (as listed under Schedule 2 of the Hedgerows Regulations 1997) underlined, y = young, sm = semi-mature, m = mature, pv = possible veteran, B = bank, W = wall, br = bridleway, f/p = footpath, b/w = byway, (D) = dominant species



- *estimated average number of woody species (as listed under Schedule 3 of the Hedgerows Regulations 1997) in any one 30m stretch
- # likely to qualify as 'important' under the wildlife and landscape criteria of the Hedgerows Regulations 1997

Evaluation

- 4.6.2 The hedgerows present on site are unmanaged and gappy in nature and only **H1** is considered to be species-rich¹⁴. Both hedgerows are unlikely to qualify as ecologically 'important' under the Hedgerows Regulations 1997, based on the number of woody species and / or associated features
- 4.6.3 The hedgerows are likely to qualify as a Priority Habitats based on the standard definition¹⁵, which includes all hedgerows (>20m long and <5m wide) consisting predominantly (≥80%) of at least one native woody species. It has been estimated that approximately 84% of countryside hedgerows in GB qualify as a Priority Habitat under this definition.¹⁵
- 4.6.4 On this basis, the hedgerows within the site constitute important ecological features, although given the relatively limited network present, are only of importance at the site level.
- 4.6.5 The hedgerows will be removed under the proposals. The proposals therefore incorporate new hedgerow planting which will aim to enhance the value of the site for biodiversity.

4.7 Ornamental Hedgerow and Planting

Description

4.7.1 An ornamental hedgerow and ornamental planting form the northern boundary of the site. The hedgerow is dominated by Wintergreen Barberry *Berberis julianae*, with other species including Hazel *Coryllus avellana*, Buddleia *Buddleia davidii*, Dog-rose *Rosa canina*, and Hedge bindweed *Calystegia sepium*. The remaining areas of ornamental planting include Portuguese Laurel *Prunus lutanica*, Silverberry *Elaegnus* sp., Honeysuckle *Lonicera* sp., Purple toadflax *Linaria purpurea*, Cotoneaster *Cotoneaster* sp., Snapdragon *Antirrhinum majus*, and Fennel *Foeniculum vulgare*.

Evaluation

4.7.2 The ornamental planting and hedgerow do not constitute Priority Habitats, and the areas present within the site support a low diversity of common and widespread species. As such the ornamental planting and hedgerow do not constitute important ecological features and the loss of areas of these habitats under the proposals is not of ecological significance. The potential invasive species Cotoneaster is discussed below

4.8 **Invasive Species**

Description and Evaluation

4.8.1 Frequent Cotoneaster species was recorded within the areas of amenity planting and scrub at the site. A number of Cotoneaster species are included under Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to cause to

¹⁴ i.e. five or more native woody species within a 30m length (or four or more in Northern England) – FEP Manual

Based on: Biodiversity Reporting and Information Group (2011) 'UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions', ed. Ant Maddock



grow in the wild any plant listed on the schedule. Further discussion of this issue along with a number of recommendations for removing these species are included at Chapter 6 below.

4.9 **Buildings and Hardstanding**

Description

- 4.9.1 The site is dominated by the northern section of a large two-storey commercial building, building **B1**, along with associated hardstanding. **B1** is of brick construction, with a corrugated metal overhanging roof. The building is in frequent use by a moving and storage company as both office space and a storage facility.
- 4.9.2 B1 is surrounded by areas of hardstanding, including car parking and an access road. The hardstanding is predominantly devoid of vegetation, aside from a number of cracks between bricks. These cracks support small areas of colonising vegetation, restricted to common and widespread species including Perennial Rye-grass Lolium perenne, Ribwort Wall Barley Hordeum murinum, Plantain Plantago lanceolata, Willowherb Epilobium sp., and Yarrow Achillea millefolium.

Evaluation

4.9.3 Building **B1** and the associated areas of hardstanding support a limited range of common and widespread species and are inherently of negligible ecological value. As such, they do not form important ecological features and their removal under the proposals is of negligible ecological significance.

4.10 Habitat Evaluation Summary

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

Table 4.2. Evaluation summary of habitats forming important ecological features.

Habitat	Level of Importance
Hedgerows	Site

4.10.2 Other habitats present within the site include amenity grassland, trees, ornamental planting and hedgerow, invasive species, and buildings and hardstanding. However, these habitats do not form important ecological features.



5 Faunal Use of the Site

5.1 **Overview**

5.1.1 During the survey work, general observations were made of any faunal use of the site with specific attention paid to the potential presence of protected or notable species. Specific survey work was undertaken in respect of bats and Badger, with the results described below.

5.2 **Priority Species**

5.2.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in England. This list is largely derived from the 'Priority Species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies.

5.3 **Bats**

- 5.3.1 **Legislation.** All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, both bats and their roosts (breeding sites and resting places) receive full protection under the legislation (see Appendix 6890/2). If proposed development work is likely to result in an offence a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats. Given all bats are protected species, they are considered to represent important ecological features. A number of bat species are also considered S41 Priority Species.
- 5.3.2 **Background Records.** No specific records of bats from within or adjacent to the site were returned from the desktop study. Information received from the LRC includes records of Daubenton's Bat *Myotis daubentonii* and Pipistrelle bat species *Pipistrelle* sp. within 3km of the site. The closest record is for a Pipistrelle bat located 312m to the south-east from 1994.

5.3.3 Survey Results

Visual Inspection Surveys

Buildings

- 5.3.4 A detailed visual inspection was undertaken of building **B1**, the results of which are summarised below.
- 5.3.5 Building **B1** is a large, two-storey office and warehouse building of brick construction, with an overhanging corrugated metal upper storey and roof. The building is largely in active use, albeit the upper floor offices are currently unused. There is a metal porch providing access in the north-west corner and warehouse roller doors along the west side to provide access for lorry deliveries to the warehouse section. Well-sealed windows run along both stories where offices are present. Some small gaps are present between the overhanging metal roof and brickwork, and there are some further gaps around wires and pipes protruding



from the building exterior. There is also a small section of ivy present in the north-east corner of the building.

- Internally a single loft void, **LV1a**, is present above the office area of the building, with the remainder of the building being open to the ceiling where the warehouse area is located. **LV1a** is located above a suspended ceiling, which was inaccessible at the time of survey, albeit could be inspected through a large number of gaps where the suspended ceiling had fallen down. **LV1a** is of breezeblock construction, with a pitched metal roof and fibrous lining is present in places. It is relatively light in places due to the missing ceiling.
- 5.3.7 Building **B1** has negligible roosting opportunities for bats and no evidence of roosting bats was recorded e.g. droppings, staining, feeding remains, etc., during the inspection survey.

Trees

5.3.8 A number of young and semi-mature trees are present on site, albeit none of these currently have features with suitability to support roosting bat.

Roosting

Buildings

- 5.3.9 Building **B1** has negligible suitability for roosting bats and no evidence of roosting bats was recorded during the survey work undertaken.
- 5.3.10 As such it is considered that no specific mitigation or licensing for bats is required. Nonetheless, bats are dynamic animals and as such it remains possible that individuals could colonise the site in the future. Natural England guidance in respect of European Protected Species¹⁶ such as bats advises that, even where proposals are reasonably unlikely to result in any offence, such that licensing is not required, reasonable precautions should be taken to minimise the risk to protected species in the unlikely event that they should be found during the course of the activity. Accordingly, recommended precautionary mitigation measures are set out at Chapter 6 below and subject to their implementation it is considered that bats will be fully safeguarded under the proposals.

Trees

5.3.11 It is understood that all trees within the site are to be removed, albeit no trees have been identified to have features suitable to support roosting bats, and as such, subject to the implementation of the recommendation outlined at Chapter 6 below in relation lighting, it is considered that bats will be fully safeguarded under the proposals.

Foraging / Commuting

5.3.12 The vast majority of the site is dominated by buildings and hardstanding, with the vegetation present largely limited to hedgerows and trees at the boundaries. These vegetated habitats are then surrounded by further areas of hardstanding such that it does not provide a significant linear feature or foraging resource for foraging / commuting bats, particularly given the very small size of the site and heavily developed, urban surroundings. There is suitable foraging habitat to the south and west of the site, albeit as stated above, these are well separated from the site by areas existing industrial development. Accordingly, the site is considered to provide low opportunities for foraging / commuting bats, which are unlikely to represent a potential constraint to the proposed redevelopment.

¹⁶ Natural England (2013) 'European Protected Species: Mitigation Licensing - How to get a licence (WML-G12)'



- of the site, especially as the proposed redevelopment will be of a similar nature to the existing development.
- 5.3.13 Subject to the implementation of the recommendations outlined at Chapter 6 below, along with other ecological enhancements, it is therefore considered that the conservation status of local bat populations will be fully safeguarded under the scheme.

5.4 **Badger**

- 5.4.1 **Legislation.** Badger receive legislative protection under the Protection of Badgers Act 1992 (see Appendix 6890/2), and as such should be assessed as an important ecological feature. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It is the duty of planning authorities to consider the conservation and welfare impacts of development upon Badger and issue permissions accordingly.
- 5.4.2 Licences can be obtained from Natural England for development activities that would otherwise be unlawful under the legislation. Guidance on the types of activity that should be licensed is laid out in the relevant best practice guidance. ^{17, 18}
- 5.4.3 Background Records, Survey Results and Evaluation. No specific records of Badger from within or adjacent to the site were returned from the data search. Information received from the LRC includes records of Badger within 2km of the site. The closest record returned was located 0.76km south-west of the site in 2019. No Badger setts were recorded within or immediately adjacent to the site, nor were any latrines or dung pits identified. In the unlikely event that Badger enter the site, safeguarding measures are proposed in Chapter 6. Accordingly, subject to the implementation of these recommendations, this species is unlikely to be affected by the proposals.

5.5 Water Vole

- 5.5.1 **Legislation.** Water Vole is fully protected under the Wildlife and Countryside Act 1981 (as amended). Water Vole is also a S41 Priority Species. As such, this species is considered to represent an important ecological feature. The legislation affords protection to individuals of the species and their breeding sites and places of shelter (see Appendix 6890/2).
- 5.5.2 If, despite all reasonable efforts, properly authorised development will adversely affect Water Vole and there are no alternative habitats nearby, Natural England may issue a licence to displace or trap and translocate Water Vole for the purpose of development. To issue such a licence, Natural England would need to be assured there is no reasonable alternative to the development and that there are no other practical solutions that would allow Water Vole to be retained at the same location. Natural England would also require no net loss of Water Vole habitat resulting from the works.
- 5.5.3 **Background Records.** No specific records of Water Vole within or adjacent to the site were returned from the desktop study. Furthermore, no records were recorded within the surrounding 2km search area.
- 5.5.4 **Survey Results and Evaluation.** The habitats within the site itself are generally unsuitable for Water Vole, mostly comprising existing industrial development. However, the adjacent Yeading Brook offers potential opportunities for this species, albeit this is separated from

¹⁷ English Nature (2002) 'Badgers and Development'

¹⁸ Natural England (2011) 'Badgers and Development: A Guide to Best Practice and Licensing', Interim Guidance Document



the site by areas of hardstanding. As such, the site is not considered to be of importance for this species

5.6 Otter

- Legislation. Otter is fully protected under the Wildlife and Countryside Act 1981 (as amended) and is a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Such legislation affords protection to individuals of the species and their breeding sites and places of rest (see Appendix 6890/2). Otter is also a S41 Priority Species. On this basis, Otter is considered to represent an important ecological feature.
- 5.6.2 **Background Records.** No specific records of Otter within or adjacent to the site were returned from the desktop study. Furthermore, no records were recorded within the surrounding 2km search area.
- 5.6.3 **Survey Results and Evaluation.** The majority of the site is unsuitable for Otter, comprising existing industrial development. However, the adjacent Yeading Brook offers potential opportunities for this species, albeit this is separated from the site by areas of hardstanding. As such, the site is not considered to be of importance for this species.

5.7 Other Mammals

- 5.7.1 **Legislation.** A number of other UK mammal species do not receive direct legislative protection relevant to development activities but may receive protection against acts of cruelty (e.g. under the Wild Mammals (Protection) Act 1996). In addition, a number of these mammal species are S41 Priority Species and should be assessed as important ecological features.
- 5.7.2 **Background Records.** No specific records of other mammals from within or adjacent to the site were returned from the desktop study. A number of records of Hedgehog *Erinaceus europaeus* (Priority Species) were returned from within the search area around the site. The closest record returned was 0.64km north-east of the site in August 2022.
- 5.7.3 **Survey Results and Evaluation.** No evidence of any other protected, rare or notable mammal species was recorded within the site. Other mammal species likely to utilise the site, such as Fox *Vulpes vulpes*, remain common in both a local and national context, and as mentioned above do not receive specific legislative protection in a development context. As such, these species are not a material planning consideration and the loss of potential opportunities for these species to the proposals is of negligible significance.
- The desktop study returned background records of Hedgehog within the surrounding area. Hedgehog is a Priority Species, albeit this species remains common and widespread in England. The site offers limited potential opportunities for this species, with some possible foraging areas on the northern boundary. Habitats are unlikely to be of importance in a local context, and Hedgehog is considered to be of importance at a site level only. These habitats are proposed for removal under the proposals, however, abundant similar opportunities are present within the local area and new planting is proposed. There is no evidence to suggest the proposals will significantly affect local populations of this species. However, it is recommended that precautionary safeguards are put in place to minimise the risk of harm to Hedgehog in the event this species is present, as detailed in Chapter 6 below.



5.8 **Amphibians**

- Legislation. All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt is protected under the Act and is also classed as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, both Great Crested Newt and habitats utilised by this species are afforded protection (see Appendix 6890/2). Great Crested Newt is also a S41 Priority Species, as are Common Toad Bufo bufo, Natterjack Toad Epidalea calamita, and Pool Frog Pelophylax lessonae. As such, these species should be assessed as important ecological features.
- 5.8.2 **Background Records.** No specific records of Great Crested Newt were returned from the desktop study. A number of records for both Common Toad and Common Frog *Rana temporaria* were returned from the search area surrounding the site, with the closest located approximately 460m to the west of the site.
- 5.8.3 **Survey Results and Evaluation.** The majority of the site is unsuitable for amphibians, comprising existing industrial development. The site is also surrounded by busy roads with frequent vehicle movement. As such, it is unlikely this species would be present within the site, and therefore the proposals are reasonably unlikely to adversely affect this species.

5.9 **Reptiles**

- 5.9.1 Legislation. All six species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which protects individuals against intentional killing or injury. Sand Lizard Lacerta agilis and Smooth Snake Coronella austriaca receive additional protection under the Conservation of Habitats and Species Regulations 2017 (as amended); refer to Appendix 6890/2. All six reptile species are also S41 Priority Species. As such, all reptile species should be assessed as important ecological features.
- 5.9.2 **Background Records.** No specific records of reptile species from within or adjacent to the site were returned from the desktop study. A single record of Slow-worm *Anguis fragilis* was returned from 2017, located 2.0km north-west of the site. Two records of Grass snake were also returned from the search, with closest record 747m south of the site in 2005.
- 5.9.3 **Survey Results and Evaluation** The habitats within the site are largely unsuitable to support reptile species, comprising of existing industrial development. Accordingly, it is unlikely that reptile species would be present or affected by the proposed development at the site.

5.10 **Birds**

- 5.10.1 Legislation. All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and are subject to special penalties (see Appendix 6890/2).
- 5.10.2 Conservation Status. The conservation importance of British bird species is categorised based on a number of criteria including the level of threat to a species' population status¹⁹. Species are listed as Green, Amber or Red. Red Listed species are considered to be of the

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



highest conservation concern being either globally threatened and or experiencing a high/rapid level of population decline (>50% over the past 25 years). A number of birds are also S41 Priority Species. Red and Amber listed species and priority species should be assessed as important ecological features.

- 5.10.3 **Background Records.** Information from the data search included records for several bird species in the vicinity of the site, including the Red Listed species Fieldfare *Turdus pilaris*, House Sparrow *Passer domesticus*, Skylark *Alauda arvensis*, and Mistle Thrush *Turdus viscivorus*, which are also all Priority Species. None of the records originate from within the site itself.
- 5.10.4 **Survey Results.** Several species of bird were observed within the site during the Phase 1 survey including Blackbird *Turdus merula*, Dunnock *Prunella* modularis, Goldfinch *Carduelis carduelis*, Great Spotted Woodpecker *Dendrocopos major*, Great Tit *Parus major*, House Sparrow, Ring-necked Parakeet *Psittacula krameria* (which is listed on the London Invasive Species list (LISI)), and Wood Pigeon *Columba palumbus*. The hedgerows and trees on site may provide suitable nesting opportunities for bird species, and a previously used nest was recorded in the pear tree in the north-east corner of the site.
- 5.10.5 **Evaluation.** Most of the birds recorded at the site are not listed as having any special conservation status, although House Sparrow is included on the Red list as a result of declines in UK breeding populations and is also a Priority Species. However, the habitats present are common in the surrounding area and there is no evidence to suggest the site is of elevated value at a local level for this species, which in any case, is common in Great Britain. The proposals will result in the loss of all vegetation, and this could potentially affect any nesting birds that may be present at the time of works Accordingly, a number of safeguards in respect of nesting birds are proposed, as detailed in Chapter 6 below.

5.11 **Invertebrates**

- 5.11.1 **Legislation.** A number of invertebrate species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In addition, Large Blue Butterfly *Maculinea arion*, Fisher's Estuarine Moth *Gortyna borelii lunata* and Lesser Whirlpool Ram's-horn Snail *Anisus vorticulus* receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended); refer to Appendix 6890/2. A number of invertebrates are also S41 Priority Species. Where such species are present, they should be assessed as important ecological features.
- 5.11.2 **Background Records.** No specific records of invertebrates were returned from within or adjacent to the site in the desktop study. A number of records of S41 Priority Species were returned from the search, with the closest recent record that of Small Heath *Coenonympha pamphilus* 374m west of the site.
- **Survey Results and Evaluation.** No evidence for the presence of any protected, rare or notable invertebrate species was recorded within the site. The site is dominated by buildings, hardstanding with some small areas of vegetation, which are likely to support only a limited diversity of invertebrates. Aside from areas of ornamental planting, a hedgerow, and a small area of grassland, the site contains relatively few micro-habitats that would typically indicate elevated potential for invertebrates²⁰, such as a variable topography with areas of vertical exposed soil, areas of species-rich semi-natural vegetation; variable vegetation structure with frequent patches of tussocks combined with short turf; free-draining light soils; walls with friable mortar or fibrous dung. Accordingly,

²⁰ Natural England (2010) 'Higher Level Stewardship – Farm Environment Plan (FEP) Manual', 3rd Edition



given the habitat composition of the site and lack of adjacent sites designated for significant invertebrate interest, it is considered unlikely that the proposals will result in significant harm to any protected, rare or notable invertebrate populations, and the site is not considered to support an important invertebrate assemblage.

5.12 **Summary**

5.12.1 On the basis of the above, a summary of the evaluation of fauna is provided below:

Table 5.1. Evaluation summary of fauna forming important ecological features.

Species / Group	Supported by or associated with the site	Level of Importance
Bats – Foraging / Commuting	Potential presence on site	Site
Hedgehog	Potential presence on site	Site
Birds	Confirmed presence on site	Local

5.12.2 Other fauna supported by the site include non-priority species of mammals, amphibians and invertebrates. However, these species do not form important ecological features.



6 Mitigation Measures and Enhancements

6.1 **Mitigation**

6.1.1 Based on the habitats, ecological features and associated fauna identified within / adjacent to the site, it is proposed that the following mitigation measures (MM1 – 7) are implemented under the proposals. Further, detailed mitigation strategies or method statements can be secured via suitably-worded planning conditions, as recommended by relevant best practice guidance (BS 42020:2019).

<u>Watercourses</u>

- 6.1.2 **MM1 Pollution Prevention.** In order to safeguard the Yeading Brook to the east of the site against any potential run-off or pollution events during construction, the following safeguards will be implemented:
 - Storage areas for chemicals, fuels, etc. will be sited well away from the watercourse (minimum 10m), and stored on an impervious base within an oil-tight bund with no drainage outlet. Spill kits with sand, earth or commercial products approved for the stored materials shall be kept close to storage areas for use in case of spillages;
 - Where possible, and with prior agreement of the sewage undertaker, silty water should be disposed of to the foul sewer or via another suitable form of disposal, e.g. tanker off-site;
 - Water washing of vehicles, particularly those carrying fresh concrete and cement, mixing plant, etc. will be carried out in a contained area as far from the watercourse as practicable (minimum 10m), to avoid contamination; and
 - Refuelling of plant will take place in a designated area, on an impermeable surface, away from the watercourse (minimum 10m).
- 6.1.3 Post-development, the drainage system for the development will ensure the watercourse is not subject to adverse changes in surface water run-off or quality.

Bats

- 6.1.4 **MM2 Update Survey.** Should any considerable time (e.g. >2 years) elapse between the survey work detailed above and any development works, a further survey of the buildings with potential to support roosting bats should be undertaken prior to the commencement of works to confirm the continued absence of bats.
- 6.1.5 **MM3 Sensitive Lighting.** Light-spill onto newly created habitat, will be minimised in accordance with good practice guidance²¹ to reduce potential impacts on light-sensitive bats (and other nocturnal fauna). This may be achieved through the implementation of a sensitively designed lighting strategy.

²¹ Bat Conservation Trust and Institute of Lighting Professionals (2018) 'Guidance Note 08/18: Bats and artificial lighting in the UK'; Stone, E.L. (2013) 'Bats and lighting: Overview of current evidence and mitigation guidance.'; ILP (2011) 'Guidance notes for the reduction of obtrusive light' Institution of Lighting Professionals, GN01:2011.



Badger

- 6.1.6 **MM4 Badger Construction Safeguards.** In order to safeguard Badger should they enter the site during construction works, the following measures will be implemented:
 - Any trenches or excavations within the site that are to be left open overnight will be provided with a means of escape should a Badger enter. This could simply be in the form of a gently graded ramp or roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water;
 - Any temporarily exposed open pipes (>150mm outside diameter) should be blanked off at the end of each working day so as to prevent Badgers gaining access as may happen when contractors are off-site;
 - Any trenches/pits will be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger become trapped in a trench it will likely attempt to dig itself into the side of the trench, forming a temporary sett. Should a trapped Badger be encountered a suitably qualified ecologist will be contacted immediately for further advice;
 - The storage of topsoil or other 'soft' building materials in the site will be given careful consideration. Badgers will readily adopt such mounds as setts. So as to avoid the adoption of any mounds, these will be kept to a minimum and any essential mounds subject to daily inspections with consideration given to temporarily fencing any such mounds to exclude Badgers;
 - The storage of any chemicals at the site will be contained in such a way that they cannot be accessed or knocked over by any roaming Badgers;
 - Fires will only be lit in secure compounds away from areas of Badger activity and not allowed to remain lit during the night; and
 - Unsecured food and litter will not be left within the working area overnight.

Hedgehogs

- 6.1.7 **MM5 Hedgehog Safeguards.** In order to safeguard Hedgehogs and other small mammals should they enter the site during construction works, the following measures will be implemented:
 - A watching brief should be maintained for Hedgehog and other small mammals throughout any clearance works;
 - Any piles of material already present on site, particularly vegetation/leaves, etc. and any areas of dense scrub or hedgerows, shall be dismantled/removed by hand and checked for Hedgehog prior to the use of any machinery/disposal;
 - Any material to be disposed of by burning, particularly waste from vegetation clearance and tree works, should not be left piled on site for more than 24 hours in order to minimise the risk of Hedgehogs occupying the pile. If this cannot be avoided, material should be stored within a container such as a skip to prevent animals from gaining access. Any material which has been stored on the ground overnight should be moved prior to burning to allow a thorough check for any animals which may have been occupying the pile; and
 - In the event that an injured Hedgehog is found, the animal should be wrapped carefully in a towel, the British Hedgehog Preservation Society (BHPS) phoned (01584 890 801) and the Hedgehog taken to a local vet immediately.



Nesting Birds

6.1.8 MM6 – Timing of Works. To avoid a potential offence under the relevant legislation, no clearance of suitable vegetation should be undertaken during the bird-nesting season (1st March to 31st August inclusive). If this is not practicable, any potential nesting habitat to be removed should first be checked by a competent ecologist in order to determine the location of any active nests. Any active nests identified would then need to be cordoned off (minimum 5m buffer) and protected until the end of the nesting season or until the birds have fledged. These checking surveys would need to be carried out no more than three days in advance of vegetation clearance.

Invasive Species

6.1.9 MM7 – Invasive Species Safeguards. Cotoneaster, some species of which are listed on Schedule 9 Part II of the Wildlife and Countryside Act 1981, was recorded within the site. It is an offence to cause to grow in the wild, any plant listed on the schedule. As such, all relevant precautions should be taken when carrying out actions that could potentially spread these plants. The government has set out guidance on what can be considered 'causing to grow in the wild' within a response to the Schedule 9 review which states:

"We would expect that where plants listed in Schedule 9 are grown in private gardens, amenity areas etc., reasonable measures will be taken to confine them to the cultivated area so as to prevent their spreading to the wider environment and beyond the landowner's control. It is our view that any failure to do so, which in turn results in the plant spreading to the wild, could be considered as 'causing to grow in the wild' and as such would constitute an offence...Additionally, negligent or reckless behaviour such as inappropriate disposal of garden waste, where this results in Schedule 9 species becoming established in the wild would also constitute an offence."

6.1.10 As such, it is recommended that appropriate safeguards be put in place to prevent the spread of Cotoneaster during the proposed development works. Such measures would likely involve herbicide application and/or excavation and removal of any material within the site itself (which should then be disposed of appropriately to prevent colonisation of off-site areas).

6.2 **Ecological Enhancements**

6.2.1 The National Planning Policy Framework (NPPF) encourages new developments to maximise the opportunities for biodiversity through incorporation of enhancement measures. The proposals present the opportunity to deliver ecological enhancements at the site for the benefit of local biodiversity, thereby making a positive contribution towards the broad objectives of national conservation priorities and the local Biodiversity Action Plan (BAP). The recommendations and enhancements summarised below are considered appropriate given the context of the site and the scale and nature of the proposals. Through implementation of the following ecological enhancements (**EE1** & **EE2**), the opportunity exists for the proposals to deliver a number of biodiversity net gains at the site.

Habitat Creation

6.2.2 **EE1 – New Planting.** It is recommended that where practicable, new planting within the site be comprised of native species of local provenance, including trees and shrubs appropriate to the local area. Suitable species for inclusion within the planting could include native trees such as Oak, Ash, Birch *Betula pendula* and Field Maple, whilst native shrub species of particular benefit would likely include fruit and nut bearing species which would provide



additional food for wildlife, such as Blackthorn, Hawthorn, Crab Apple *Malus sylvestris*, Hazel *Corylus avellana* and Elder. Where non-native species are proposed, these should include species of value to wildlife, such as varieties listed on the RHS' 'Plants for Pollinators' database, providing a nectar source for bees and other pollinating insects.

6.2.3 EE2 – Wildflower Grassland. It is recommended that areas of wildflower grassland are created within the site such that, in combination with new native landscape planting, opportunities for biodiversity will be maximised under the proposals. This would make a positive contribution towards the local BAP, which lists 'lowland meadows' as a priority. Consideration should be given to the laying of wildflower turfs, comprising locally appropriate native species, to establish wildflower grassland. This would ensure rapid establishment of these habitats and reduce the timeframe for delivering the range of ecological benefits that are proposed.



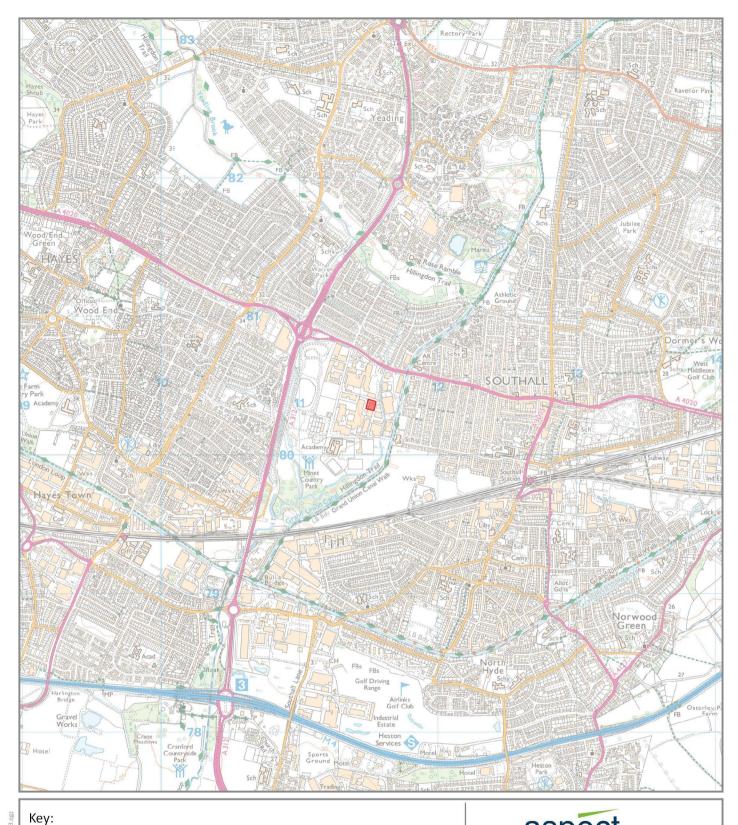
7 Conclusions

- 7.1 Aspect Ecology has carried out an Ecological Appraisal of the proposed development, based on the results of a desktop study, Phase 1 habitat survey and a number of detailed protected species surveys.
- 7.2 The available information confirms that no statutory or non-statutory nature conservation designations are present within the site and appropriate mitigation measures have been provided to safeguard the non-statutory designation within close proximity of the site, therefore, none of the designations within the surrounding area are likely to be adversely affected by the proposals.
- 7.3 The Phase 1 habitat survey has established that the site is dominated by habitats not considered to be of ecological importance. New habitat creation has been proposed to offset the losses within the landscape proposals.
- 7.4 The habitats within the site do not appear to offer particularly suitable opportunities for protected, rare or notable species. Suitable habitat for nesting birds is present within the site and it is recommended that clearance of suitable habitat be undertaken outside of the bird nesting season (i.e. outside of March to August inclusive), or first preceded by a nesting bird survey undertaken by a suitably qualified ecologist.
- 7.5 In conclusion, the proposals have sought to minimise impacts and subject to the implementation of appropriate avoidance, mitigation, and compensation measures, it is considered unlikely that the proposals will result in significant harm to biodiversity. On the contrary, the opportunity exists to provide a number of biodiversity net gains as part of the proposals.



Plan 6890/ECO1:

Site Location





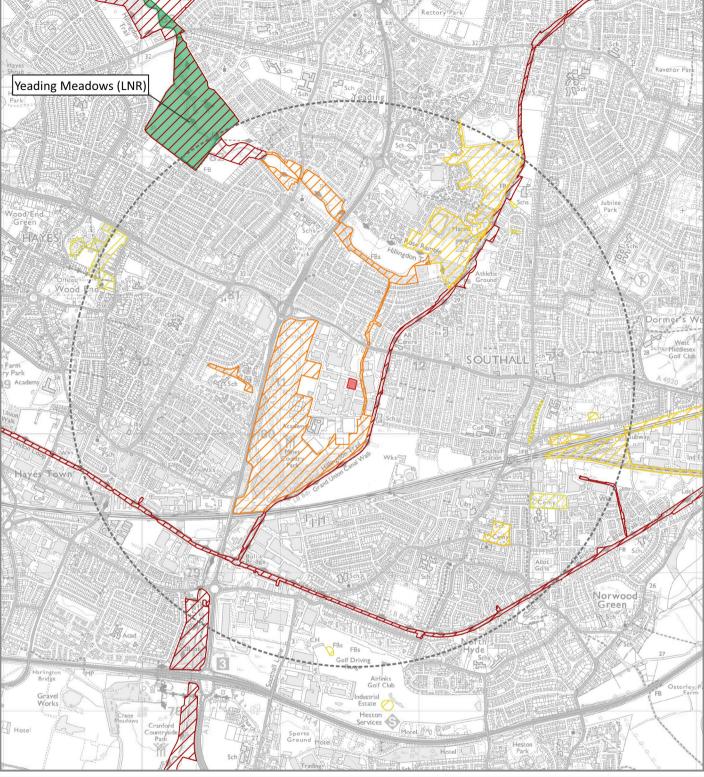
Site Location



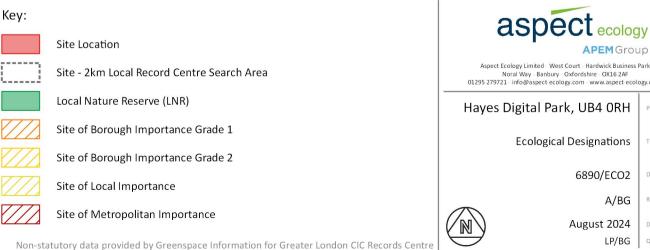


Plan 6890/ECO2:

Ecological Designations







DATE



Plan 6890/ECO3:

Ecological Features





Appendix 6890/1:

Evaluation Methodology



Evaluation Methodology

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

Importance of Ecological Features

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

Designated Sites

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

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



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

Biodiversity Lists

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

Red Listed, Rare, Legally Protected Species

- Species of conservation concern, Red Data Book (RDB) species;
- Birds of Conservation Concern;
- Nationally rare and nationally scarce species;
- Legally protected species.
- 5. In addition to this list, other features may be considered to be of importance on the basis of local rarity, where they enable effective conservation of other important features, or play a key functional role in the landscape.

Assigning Level of Importance

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



Designated Sites

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

Habitats

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

Species

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



Appendix 6890/2:

Legislation Summary



LEGISLATION SUMMARY

- 1. In England and Wales primary legislation is made by the UK Parliament, and in Scotland by the Scottish Parliament, in the form of Acts. The main piece of legislation relating to nature conservation in the UK is the Wildlife and Countryside Act 1981 (as amended).
- 2. Acts of Parliament confer powers on Ministers to make more detailed orders, rules or regulations by means of secondary legislation in the form of statutory instruments. Statutory instruments are used to provide the necessary detail that would be too complex to include in an Act itself¹. The provisions of an Act of Parliament can also be enforced, amended or updated by secondary legislation.
- 3. In summary, the key pieces of legislation relating to nature conservation in the UK are:
 - Wildlife and Countryside Act 1981 (as amended)
 - Protection of Badgers Act 1992
 - Hedgerows Regulations 1997
 - Countryside and Rights of Way (CRoW) Act for England and Wales 2000
 - Natural Environment and Rural Communities Act 2006
 - Conservation of Habitats and Species Regulations 2017
- 4. A brief summary of the relevant legislation is provided below. The original Acts and instruments should be referred to for the full and most up to date text of the legislation.
- Wildlife and Countryside Act 1981 (as amended). The WCA Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) identified for their flora, fauna, geological or physiographical features. The Act contains strict measures for the protection and management of SSSIs.
- 6. The Act also refers to the treatment of UK wildlife including protected species listed under Schedules 1 (birds), 5 (mammals, herpetofauna, fish, invertebrates) and 8 (plants).
- 7. Under Section 1(1) of the Act, all wild birds are protected such that is an offence to intentionally:
 - Kill, injure or take any wild bird;
 - Take, damage or destroy the nest of any wild bird whilst in use* or being built;
 - Take or destroy an egg of any wild bird.
 - * The nests of birds that re-use their nests as listed under Schedule ZA1, e.g. Golden Eagle, are protected against taking, damage or destruction irrespective of whether they are in use or not.
- 8. Offences in respect of Schedule 1 birds are subject to special, i.e. higher, penalties. Schedule 1 birds also receive greater protection such that it is an offence to intentionally or recklessly:
 - Disturb any wild bird included in Schedule 1 while it is building a nest or while it is in, on or near a nest containing eggs or young;
 - Disturb dependent young of such a bird.

 $^{^{1}}$ http://www.parliament.uk/business/bills-and-legislation/secondary-legislation/statutory-instruments/



- 9. Under Section 9(1) of the Act, it is an offence to:
 - Intentionally kill, injure or take any wild animal included in Schedule 5.
- 10. In addition, under Section 9(4) it is an offence to intentionally or recklessly:
 - Obstruct access to, any structure or place which any wild animal included in Schedule
 5 uses for shelter or protection; or
 - Disturb any wild animal included in Schedule 5 while occupying a structure or place which it uses for that purpose.
- 11. Under Section 13(1) it is an offence:
 - To intentionally pick, uproot or destroy any wild plant listed in Schedule 8; or
 - Unless the authorised person, to intentionally uproot any wild plant not included in Schedule 8
- 12. The Act also contains measures (S.14) for preventing the establishment of non-native species that may be detrimental to native wildlife, prohibiting the introduction into the wild of animals (releases or allows to escape) and plants (plants or causes to grow) listed under Schedule 9.
- 13. **Protection of Badgers Act 1992.** The Act aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It should be noted that the legislation is not intended to prevent properly authorised development. Under the Act it is an offence to:
 - Wilfully kill, injure, take, possess or cruelly ill-treat* a Badger, or attempt to do so;
 - To intentionally or recklessly interfere with a sett[#] (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).
 - * the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence
 - # A sett is defined as "any structure or place which displays signs indicating current use by a Badger". Natural England advice (June 2009) is that a sett is protected so long as such signs remain present, which in practice could potentially be for some time after the last actual occupation by Badger. Interference with a sett includes blocking tunnels or damaging the sett in any way
- 14. Licences can be obtained from the Statutory Nature Conservation Organisation (SNCO) for development activities that would otherwise be unlawful under the legislation, provided there is suitable justification. The SNCO for England is Natural England.
- 15. **Hedgerows Regulations 1997**. 'Important' hedgerows (as defined by the Regulations) are protected from removal (up-rooting or otherwise destroying). Various criteria specified in the Regulations are employed to identify 'important' hedgerows for wildlife, landscape or historical reasons.
- 16. Countryside and Rights of Way (CRoW) Act for England and Wales 2000. The CRoW Act provides increased measures for the management and protection of SSSIs and strengthens wildlife enforcement legislation. Schedule 12 of the Act amends the species provisions of the WCA 1981, strengthening the legal protection for threatened species. The Act also introduced a duty on Government to have regard to the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.



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

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

ecology • landscape planning • arboriculture



Aspect Ecology Ltd

West Court Hardwick Business Park Noral Way Banbury Oxfordshire OX16 2AF

T: 01295 279721