

# Preliminary Ecological Appraisal

Barnes School

Richmond Upon Thames

London Borough of Richmond upon Thames

JFA Ref: LON 2062

August 2020

## Contents

1.0 Executive Summary .....	3
2.0 Introduction .....	4
3.0 Study Objectives.....	4
4.0 Legislation & Planning Policy Guidance .....	5
5.0 Methodology.....	5
6.0 Limitations.....	6
7.0 Results .....	6
8.0 Discussion.....	9
9.0 Conclusion .....	11

## Figures

Figure 1 - Phase 1 Habitat Map

## Appendices

Appendix 1 - Legislation and Planning Context

Appendix 2 – Target Notes

<b>Client</b>	London Borough of Richmond upon Thames
<b>Date</b>	17 August 2020
<b>Status</b>	Final
<b>Author</b>	Calum Wallace BSc GradCIEEM
<b>Checked</b>	Jaquelin Clay BSc MSc CMLI FAE



**LEGEND**

- Ornamental Planting
- Amenity grassland
- Scattered trees
- Buildings
- Hardstanding
- ⊗ 2 Target note



BRINGING NATURE TO THE HEART OF DESIGN

✉ Evegate Park Barn, Evegate Business Park,  
Smeeth, Ashford, Kent, TN25 6SX

🌐 www.jfa.co.uk ☎ 0845 226 3618

**Client**  
London Borough of Richmond upon Thames

**Project name**  
Barnes School

**Drawing title**  
Phase 1 Habitat Plan

Not to Scale	Drawn by CW	Checked by JC	Date 31/07/20
--------------	----------------	------------------	------------------

Job number LDN 2062	Drawing number 1	Rev A
------------------------	---------------------	----------

## 1.0 Executive Summary

- 1.0 JFA were commissioned by the London Borough of Richmond upon Thames to undertake an Ecological Assessment in support of a planning application for a new SEN (special education needs) building for Barnes School, Richmond Upon Thames.
- 1.1 The extended Phase 1 habitat survey found the development site supports habitats that are common and widespread and of relatively low ecological value with limited potential to support protected species. The dominant habitats were amenity grassland and buildings and hardstanding. Some scattered trees and patches of ornamental shrub were also present.
- 1.2 All scattered trees and shrub on-site have potential to support nesting birds. Sensitively timed habitat clearance or ecological checks for nesting birds prior to clearance will be required.
- 1.3 One tree scheduled for removal has potential to support roosting bats. Further surveys have been recommended to minimise and harm or disturbance to this species. A small brick storage area and a wooden shed located to the north of the main building had negligible potential to support roosting bats.
- 1.4 Works should be undertaken following best practice methods to ensure local wildlife that may visit the site are not harmed, for example nesting birds.
- 1.5 Biodiversity enhancements have been recommended to create and enhance habitat provisions for local wildlife.
- 1.6 In line with Chapter 11 of the National Planning Policy Framework (NPPF), measures will be undertaken to ensure that any impacts on the protected species and biodiversity of the site have been adequately and proportionately mitigated through best practice methods. Further recommendations will help to enhance the biodiversity of the site. The proposals therefore conform with national policy.

## 2.0 Introduction

2.0 JFA Environmental Planning (herein referred to as JFA) were commissioned by London Borough of Richmond upon Thames to undertake an Ecological Assessment in support of a planning application for a new SEN (special education needs) building for Barnes School, Richmond Upon Thames. The proposed works will involve demolition of an existing residential property and attached garden, with the main habitats being building/hardstanding and two small areas of amenity grassland with patches of ornamental planting. Two semi-mature trees behind the property will also be removed.

2.1 The site is located at The School House, 32 Cross Street, Barnes, London, SW13 0QQ (OS Grid Reference TQ 215759), and covers approximately 215m<sup>2</sup> (0.02ha). The site is within an urban setting bordered with residential housing to the north and south, with a playground and attached school to the east and a road to the west.

2.2 This report identifies potential ecological constraints in the vicinity of the proposed SEN building and where appropriate, recommendations for further survey, mitigation, and potential enhancement opportunities that could increase the ecological value of the site are provided. It has been prepared in line with the British Standard 42020:2013 – The Biodiversity Code of Practice for Planning and Development, and in line with Chapter 11 of the NPPF.

## 3.0 Study Objectives

3.0 This assessment seeks to evaluate the ecological resources on site in the context of the development proposals. To achieve this, the following objectives were set:

- Complete a desk study of the study area to gather information related to designated sites, protected and notable habitats and species;
- Map general habitats within the field survey area and identify habitats that are protected or notable;
- Identify dominant species of vascular plants present within each habitat type where possible, and identify any invasive species; and,
- Assess the potential of each habitat to support, and where possible also undertake preliminary field surveys for, protected or notable species.

3.1 This information has then been used to identify potential ecological constraints to the proposal. Further surveys, mitigation and enhancement measures have been recommended where appropriate.

## 4.0 Legislation & Planning Policy Guidance

4.0 Ecological legislation and planning policy guidance relevant to this assessment are listed in Appendix 1.

## 5.0 Methodology

### **Desk Study**

5.0 Ecological records from the last ten years were obtained from the following sources:

- Greenspace Information for Greater London Environmental Records Centre (GIGL, July 2020); and,
- MAGIC (July 2020).

### **Phase 1 Habitat Survey**

5.1 Calum Wallace Ecologist, BSc GradCIEEM undertook an extended Phase 1 Habitat Survey on 23<sup>rd</sup> July 2020, following the guidelines for Preliminary Ecological Appraisal (CIEEM, 2017).

5.2 The surveyor mapped the habitats present (Figure 1) and recorded the dominant flora (Appendix 2) following the standard Phase 1 habitat survey methodology (JNCC, 2010). Target notes were used to describe features of ecological interest. The potential for the site to support legally protected and notable species was also assessed. This includes species listed under Schedule 41 (S41) of the Natural Environment and Rural Communities (NERC) Act as Species of Principal Importance. Incidental field signs or sightings of such species were recorded if seen.

### **Assessment Methodology**

5.3 The Chartered Institute of Ecology and Environmental Management (CIEEM) (2016) method for the assessment of biodiversity value was applied to the findings of the survey. In accordance with this method, this report has used the following categories to value ecological features:

- International – Natura 2000 sites or areas with biodiversity value at a European level;

- National - Sites of Special Scientific Interest (SSSI) or areas with biodiversity value to England;
- Regional - of biodiversity value to the south-east;
- County - Sites of Nature Conservation Interest areas with biodiversity value to the county;
- District - of biodiversity value to the district;
- Local - of biodiversity value within approximately 5km of the proposed site; and,
- Site - of biodiversity value within the Proposed Site and its immediate surroundings.

## 6.0 Limitations

### **Habitat Survey**

- 6.0 The results of the survey can only provide information regarding the presence (or potential for) flora and fauna that were evident at the time of the survey.

## 7.0 Results

### **Desk Study**

#### *Statutory Sites*

- 7.0 There are two statutory designated sites within 2km:
- Barnes Common Local Nature Reserve (LNR) is located 1.2km to the north east.
  - Dukes Hollow Local Nature Reserve (LNR) is located 0.5km to the north.

#### *Non-Statutory Sites*

- 7.1 There are 11 Sites of Importance for Nature Conservation (SINC's) within 2km of the site.
- River Thames and tidal tributaries
  - Barnes Commons
  - Dukes Hollow
  - Roehampton University
  - Beverly Brook in Wandsworth
  - Hounslow Loop Railside's
  - Beverley Brook from Richmond Park to the River Thames

- Roehampton Club Golf Course
- Bank of England Sports Club Grounds
- Old Mortlake Burial Ground
- Barnes Green Pond

#### *Notable Habitats*

7.2 There are three habitats of Principal Importance as listed under Section 41 of the *Natural Environment and Rural Communities (NERC) Act (2006)* within 1km of the site:

- Several patches of Lowland Dry Acid Grassland; and,
- A large number of Deciduous Woodland areas; and,
- Wood pasture and Parkland present but not mappable.

#### *Protected Species*

7.3 Table 7.3 below list records of species which were recorded within 1km of the site.

Table 7.3. Records of species recorded within 1km of the site from GIGL.

Species		Date	Distance from scheme (km)	Protection
Tree Pipit	<i>Anthus trivialis</i>	2016	0.65	S41, BoCC Red
Bittern	<i>Botaurus stellaris</i>	2014	0.5	S41
Grey Wagtail	<i>Motacilla cinerea</i>	2016	0.65	BoCC Red
House Sparrow	<i>Passer domesticus</i>	2017	0.55	S41, BoCC Red
Starling	<i>Sturnus vulgaris</i>	2012	0.75	BoCC Red
Redwing	<i>Turdus iliacus</i>	2016	0.73	BoCC Red
Song Thrush	<i>Turdus philomelos</i>	2017	0.82	BoCC Red
Field Fare	<i>Turdus pilaris</i>	2012	0.85	BoCC Red
Lapwing	<i>Vanellus vanellus</i>	2014	0.51	S41, BoCC Red
Western European hedgehog	<i>Erinaceus europaeus</i>	2019	0.89	S41
Serotine	<i>Eptesicus serotinus</i>	2017	0.82	S41
Lesser Noctule	<i>Nyctalus leisleri</i>	2016	0.6	S41



Species		Date	Distance from scheme (km)	Protection
Noctule	<i>Nyctalus noctula</i>	2017	0.15	S41
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2015	0.57	S41
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2017	0.57	S41

\* **WCA** - Wildlife and Countryside Act 1981 (as amended), **NERC S41**– Section 41 Species of the Natural Environment and Rural Communities Act (2006) (as amended), **BoCC** – Birds of Conservation Concern Red or Amber listed

- 7.4 There have also been three bat licence applications within the search area, two within the last ten years, (Magic Maps, 2020).

#### **Phase 1 Habitat Survey**

- 7.5 Overall, four Phase 1 habitats were recorded on-site, including; A3.1 scattered trees, J1.2 amenity grassland, J1.4 ornamental shrub and J3.6 buildings and hardstanding. Figure 1 shows the Phase 1 habitat map of the site. Appendix 2 lists the dominant plant species recorded.

##### *A3.1 Scattered Trees*

- 7.6 Two semi-mature scattered trees, white willow (*Salix alba*) and wild cherry (*Prunus avium*) are present directly north east of the property's rear garden.
- 7.7 This habitat has been assessed as having biodiversity value within the site and its immediate surroundings.

##### *J1.2 Amenity grassland*

- 7.8 Amenity grassland is found within both the rear and front gardens of the property, bordered by hardstanding and ornamental shrubs.

##### *J1.4 Ornamental shrub*

- 7.9 Ornamental shrubs consisting predominately of Japanese meadowsweet (*Spiraea japonica*) and common lavender (*Lavandula angustifolia*) occur along the borders of amenity grassland to the north and south of the site.

- 7.10 These are managed regularly and provide biodiversity value to several bee and wasp species that were present during the survey.

### *J3.6 Buildings and Hardstanding*

- 7.11 Hardstanding consists of a driveway and path to the south while to the north lies an area of wooden decking. The main building dominates the site. There is also a garage attached to the main building and two small storage areas to the north.
- 7.12 The hardstanding areas have negligible biodiversity value, while the main building has some potential to support bats.

### *Birds*

- 7.13 No evidence of existing or old bird nests were found on site. All scattered trees and ornamental shrubs on-site offer nesting opportunities for birds.

### *Bats*

- 7.14 One wild cherry tree to the north/northwest of the site was assessed as having low bat roosting potential.
- 7.15 The main building has multiple potential roost features (PRF's) with moderate bat roosting potential.
- 7.16 A brick storage area is located immediately to the north of the main building, while a wooden shed occupies the north east corner of the site. These structures have negligible potential to support roosting bats.
- 7.17 The habitats on-site and immediately adjacent offer low foraging and commuting habitat potential for common bats species. Such habitat is scarce and isolated in the local area. Approximately 500m to the east and southeast of the site several areas of woodland are present that offer increased foraging and commuting habitat.

## 8.0 Discussion

### **Mitigation Hierarchy**

- 8.0 The mitigation hierarchy should be taken into consideration during the design of the development. The hierarchy states that adverse effects on biodiversity should be avoided where possible. Where such adverse effects cannot be avoided through good design, then mitigation measures should be implemented to minimise the negative impact of the

development upon biodiversity. In the exceptional cases where avoidance and mitigation are not possible, compensation measures could be considered. Alongside the efforts to avoid, mitigate or compensate the negative impacts of the development, opportunities to enhance the ecological value of the site should be considered (see Section 8).

### **Designated Sites**

- 8.1 All statutory and non-statutory sites are at least 0.5km from the site and there are no aquatic pathways or other habitat connectivity between the designated sites and the site. Therefore, these designated sites will not be impacted, and they will not be considered further.

### **Habitats**

#### *Notable habitats*

- 8.2 All areas of protected and notable habitats are at least 0.5km from the site and there is no direct terrestrial or aquatic habitat connectivity between those habitats and the site. These habitats will not be impacted by the development, and they will not be considered further.

#### *Other Habitats*

- 8.3 The habitats on site are common and widespread habitats of relatively low ecological value. They are not considered an ecological constraint to development.

### **Protected species**

#### *Breeding birds*

- 8.4 All trees, scrub and shrubs should be considered as potential bird nesting habitat. If any suitable nesting habitat on-site requires removal this should be completed outside the nesting bird period (typically March to August), or be checked for the presence of nests by a suitably qualified ecologist prior to removal. If active nests are found at any time of year on or adjacent to the proposed works area, then all work within close vicinity to the nest should cease until the young have fledged.

#### *Bats*

- 8.5 One tree with bat roosting potential was identified to the north of the site. Currently as this tree is scheduled for removal it will require an inspection survey to determine its potential to support roosting bats and inform any mitigation required. If it is not possible to carry out an inspection survey then further emergence/re-entry surveys may be required. If a bat roost is identified a Natural England Licence may be required for removal.

- 8.6 The main building has been assessed to possess moderate bat roosting potential. As this building will be demolished as part of the development an internal bat roost inspection of the roof void will be required, providing it can be carried out in a safe and covid secure manner. Further emergence/re-entry surveys may be required instead of/following the results of the internal inspection.

#### **Recommended Ecological Enhancements**

- 8.7 In chapter 11 of the NPPF, the planning authority is advised that “Opportunities to incorporate biodiversity in and around developments should be encouraged”. Therefore, the following recommendations have been made for enhancing the site:
1. Landscape and formal planting of native species chosen to attract local wildlife species particularly birds, invertebrates and bats, for example wildlife flower areas, native hedgerow and scrub along the periphery of site boundaries.
  2. Provision of bats boxes on trees and/or buildings on-site. Bat boxes should ideally be integral to the building. Boxes should be chosen that are suited to species in the area. Boxes should be erected in areas with lower human disturbance and should be unlit by artificial lighting. Annual cleaning and maintenance of these boxes is advisable by suitably licensed ecologists.

## 9.0 Conclusion

- 9.0 The development will only result in the loss of habitats that are of widespread and common and of low ecological value. The site has potential to support roosting bats and nesting birds, the recommendations made in this report will ensure any harm or disturbance to these species is minimal.
- 9.1 In line with Chapter 11 of the NPPF, measures suggested in this report will ensure that any impacts on the protected species and biodiversity of the site have been adequately and proportionately mitigated. Enhancements to biodiversity have been incorporated into the design of the development.

## References

Chartered Institute of Ecology and Environmental Management (CIEEM) (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal (2nd edition). CIEEM, Winchester.

Chartered Institute of Ecology and Environmental Management (CIEEM) (2017). Guidelines for Preliminary Ecological Appraisal (2nd edition). CIEEM, Winchester.

JNCC, (2010). Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.

MAGIC. 2020. Magic. [ONLINE] Available at: <http://www.magic.gov.uk/>. [Accessed July 2020].

## Appendix 1: Legislation & Planning Context

This section summarises the legislation which is relevant, in ecological terms, to this assessment, i.e. legislation relevant to species present or potentially present within the field survey area is included here along with legislation relevant to protected sites in the vicinity. The following legislation is relevant to the environmental aspects of the site and has guided the scope of work undertaken in order to reasonably identify potential constraints.

### **Protected Sites**

#### *Statutory Protected Sites*

Local Nature Reserves (LNRs) are areas of geological or wildlife interest of special local interest. They are designated under the National Parks and Access to the Countryside Act 1949 (as amended) and amended by Schedule 11 of the Natural Environment and Rural Communities Act 2006. They are normally owned and managed by local authorities, though increasingly local wildlife trusts are taking over this role. They can be protected from damaging operations within or around them through local bylaws or the policies of the local plan.

#### *Non-Statutory Protected Sites*

Sites of Interest for Nature Conservation (SINC's) form part of a wider national network of locally valued wildlife sites. They are generally administered by local authorities in partnership with conservation organisations. A site may qualify as a SINC due to the presence of a notable species or an important habitat.

### **Protected/Controlled Species**

#### *European Protected Species (EPS)*

EPS include all bat species. All EPS in England are fully protected through inclusion within Schedule II of the Conservation of Habitats and Species Regulations 2010. This legislation makes it an offence to deliberately capture, kill, injure or disturb an EPS. It is also an offence to damage or destroy a breeding site or resting place of these species. For the purposes of this legislation disturbance has been defined as that likely:

- To impair their ability:
  - (i) To survive, breed or reproduce, or to rear or nurture their young; or,
  - (ii) To hibernate or migrate.
- To affect significantly the local distribution or abundance of that species to which they belong.

It may be possible to apply for a licence from Natural England to allow activities that would otherwise be an offence under these Regulations.

*Wildlife and Countryside Act 1981 (as amended)*

The main piece of national legislation which protects animals, plants, and in some cases their habitats in England is the Wildlife and Countryside Act 1981 (as amended).

All wild birds receive protection from being intentionally killed, injured or taken damage. It is also an offence to destroy a wild bird nest (whilst being built or in use) or its eggs. Species listed on Schedule 1 of The Act receive further protection which makes it an offence to intentionally or recklessly disturb these species while building a nest, or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird.

All bat species are protected from being intentionally or recklessly disturbed whilst using a place of rest or shelter and/or from being obstructed from entering such a place.

No licences are available for the purposes of development for offences under the Wildlife and Countryside Act 1981 (as amended). Some offences are subject to a number of defences including if the disturbance was the '*incidental result of a lawful operation that could not reasonably have been avoided*'.

*The Countryside Rights of Way Act 2000 (as amended)*

This legislation makes it an offence to cause reckless (and therefore not necessarily intentional) disturbance or damage to wild birds and their eggs or nests.

*The Natural Environment and Rural Communities (NERC) Act 2006*

This legislation is designed to help achieve a rich and diverse natural environment and thriving rural communities through modernised and simplified arrangements for delivering Government policy.

Section 40 of NERC carries an extension of the earlier CRoW Act biodiversity duty to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. Section 41 requires the Secretary of State, as respects England, to publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity.

*National Planning Policy Framework*

The National Planning Policy Framework (NPPF) sets out the view of central Government on how planners should balance nature conservation with development and helps ensure that

Government meets its biodiversity commitments with regard to the operation of the planning system. One of the key principles of the NPPF is:

*‘LPAs should aim to conserve and enhance biodiversity by applying a number of principles, including the encouragement of opportunities to incorporate biodiversity in and around developments’.*

The NPPF states that development plan policies and planning decisions should be based upon up-to-date information about the environmental characteristics of their areas, including biodiversity. It also states that the aim of planning decisions should be to prevent harm to biodiversity conservation interests and to ‘promote the preservation, restoration and re-creation of priority habitats, ecological networks and the recovery of priority species’.

To minimise impacts on biodiversity (in particular reference to undesignated nature conservation sites), planning policies should ‘identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation’.

Where determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principals: ‘if significant harm 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’; and, ‘planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss’.

This means that full ecological surveys should be carried out and suitable mitigation measures proposed prior to any planning application being submitted. It is common practice for planning officers to consult Natural England or other conservation bodies for advice regarding the suitability of proposals in relation to biodiversity conservation.



## Appendix 2: Target Notes

- T1 – Tree with PRF
- T2 – Common Ivy
- T3 – Small brick storage area
- T4 – Wooden Shed