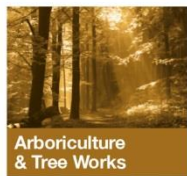




Landscape  
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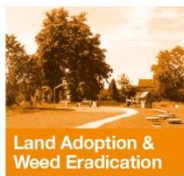
Landscape  
Planning



Arboriculture  
& Tree Works



Ecology & Habitat  
Management



Land Adoption &  
Weed Eradication



Urban  
Design

**JAMES BLAKE**

A S S O C I A T E S

# Preliminary Ecological Appraisal

of

## Land at Mansfield Bowls Club, Camden, London

on behalf of

**Harrison Varma Projects Ltd**

**August 2022**

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Over 30 Years of Service, Value and Innovation

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**Disclaimer**

*James Blake Associates Ltd have made every effort to meet the client's brief. However, no survey ensures complete and absolute assessment of the changeable natural environment. The findings in this report were based on evidence from thorough survey: It is important to remember that evidence can be limited, hard to detect or concealed by site use and disturbance. When it is stated that no evidence was found or was evident at that point in time, it does not mean that species are not present or could not be present at a later date: The survey was required because habitats are suitable for a given protected species, and such species could colonise areas following completion of the survey.*

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## Non-technical Summary

<b>Site:</b>	Land at Mansfield Bowls Club, Camden, London
Ordnance Survey National Grid Reference:	TQ287862
Report Commissioned by:	Harrison Varma Projects Ltd
Date of Walkover Survey:	6 <sup>th</sup> May 2022

Considerations	Description	Potential impacts and timing
Statutory designated wildlife areas within 7km of the site:	Four Sites of Special Scientific Interest (SSSI), One Ramsar, One SPA and Eighteen Local Nature Reserve (LNR).	The site is within a single impact risk zone (IRZ) for one SSSI and within 7km of one Ramsar site and will meet the qualifying criteria for consultation between the Local Planning Authority and Natural England if the proposals include pipelines, pylons and overhead cables or any transport proposal including road, rail and by water (excluding maintenance).
Non-statutory designated wildlife sites within 2km of the site:	28 Sites of importance for nature conservation (SINC).	Suitable green space will be necessary within the development for recreational purposes.
Results of walkover survey:	The site is considered suitable to support bats, hedgehog, nesting birds and reptiles. The site is considered to be of 'moderate' habitat value for foraging and commuting bats.	
Phase 2 surveys:	Reptile survey.	Reptile surveys can be undertaken from mid-March to mid-October in 'suitable weather conditions'.
Phase 2 surveys dependent on final layout:	Bat emergence/return to roost survey (trees).	Up to three survey visits undertaken from May to August.
	Bat activity surveys.	One survey visits a month from April to October.
Precautionary measures:	Proposed vegetation removal.	Outside of the nesting bird season or following a clear nesting bird check. Nesting season is March to mid-August.  Scrub should be cut to 20cm using hand-held tools and checked for hedgehogs, reptiles and amphibians.
	Fox earths and holes.	Precautionary measures for removing soil/vegetation near earths and holes.
	Building works/demolition.	Under ecological supervision between April/May and September.

## 1 Introduction

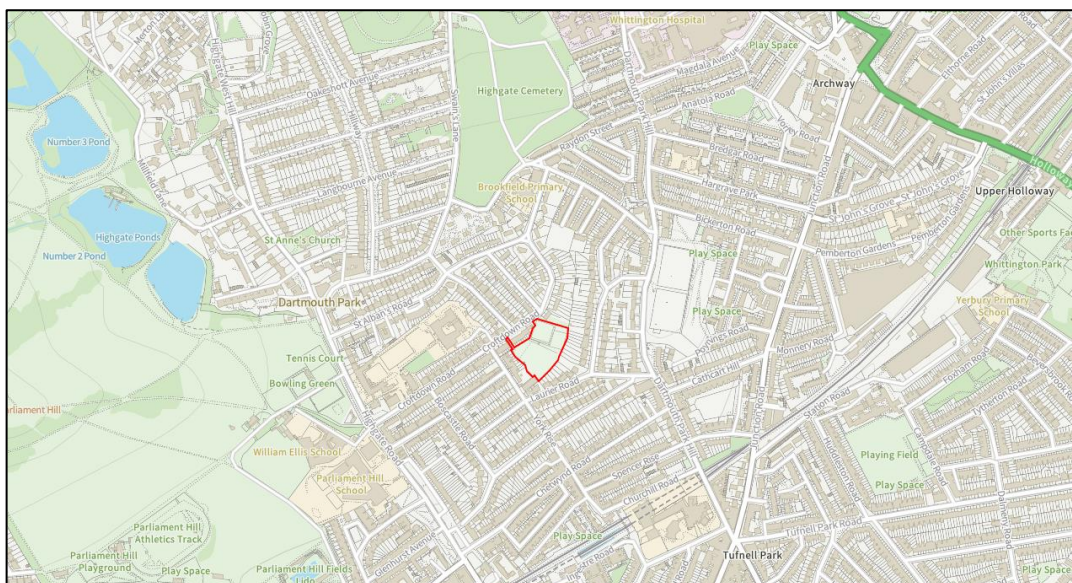
### Background

- 1.1 James Blake Associates Ltd. (JBA) was commissioned by Harrison Varma Projects Ltd. to undertake a Preliminary Ecological Appraisal (PEA) of land at Mansfield Bowls Club, Camden. Ordnance Survey National Grid Reference; TQ 28786Q, taken from the centre of site.
- 1.2 The assessment was required to accompany a planning application for the development of a residential care home and associated infrastructure.

### Site Description

- 1.3 The site is approximately 0.8 hectares in size and is located to the south of Croftdown Road, within the district of Camden in London. The wider landscape includes Camden, residential and commercial buildings with Hampstead Heath to the west of the site. The A1 is approximately 0.8km northeast of the site (see Figure 1 below).
- 1.4 The site itself mainly consists of semi-improved grassland, tall ruderal vegetation, birch and bramble scrub and hard standing, with wooden fencing marking the boundary. Two small wooden sheds (B1 and B2) and a single small wooden structure (B3) are also present on site.

**Figure 1:** Site location



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## **Aims and objectives**

1.5 The aim of the survey was to:

- Identify the presence, or potential presence, of any protected or notable species or habitats on, or adjacent to, the site; and
- make recommendations for further surveys if required, to advise on avoidance and/or mitigation measures following the survey (if necessary) and provide suggestions to enhance the wildlife value of the site post-development to provide a net gain in biodiversity value.

## **Wildlife Legislation and Planning Policy**

1.6 The relevant wildlife legislations and planning policies are listed below:

- Conservation of Habitats and Species Regulations 2017, ('The Habitats Regulations'). The Habitats Regulations implement The Habitats Directive 1992 (92/43/EEC) into English Law. (Amended by the Conservation of Habitats and Species (Amendment) Regulations 2012 S.I. 2012/1927).
- Wildlife and Countryside Act, 1981 (as amended) (WCA). (Amended by the Countryside and Rights of Way Act (2000).
- The Natural Environment and Rural Communities Act, 2006 (NERC).
- The Protection of Badgers Act, 1992 (The Badgers Act).
- The Wild Mammals (Protection) Act, 1996.
- The Hedgerows Regulations, 2007.
- National Planning Policy Framework, 2021 (NPPF).



## 2 Methodology

### *Desk study*

- 2.1 A desk study was undertaken for statutory and non-statutory designated wildlife sites within a 7km and 2km radius of the site, respectively using 'MAGIC', the Multi-Agency Geographic Information system for the Countryside. The data provided from Greenspace Information for Greater London CIC (GIGL) was consulted for records of non-statutory sites and protected and rare species within a 2km search radius (GIGL data provided on the 30th April 2022).
- 2.2 The site is covered by the Local Biodiversity Action Plan (LBAP) for London which was consulted as part of the desk study.
- 2.3 Within the desk study results, the Birds of Conservation Concern (BoCC) are split into three criteria; the Red list is the highest conservation priority (species needing urgent action). The Amber list is the next most critical group, followed by Green. Red listed species are those that are globally threatened according to the International Union for Conservation of Nature (IUCN) criteria, species with populations or ranges that have declined rapidly in recent years, and those that have declined historically and have not shown a substantial recent recovery.

### *Walkover Survey*

- 2.4 The survey was undertaken by Sean Minns BA (Hons) and Alex Ward on 6<sup>th</sup> May 2022.
- 2.5 The survey methodology followed the standard Phase 1 methodology of Joint Nature Conservation Committee Guidelines (JNCC, 2010). An extension of this basic methodology was also undertaken to provide further details in relation to notable or protected habitats present within the survey area, or in relation to habitats present that have the potential to support notable or protected species (CIEEM, 2013).
- 2.6 **Badgers (*Meles meles*):** A visual survey for setts, hair, latrines, prints, snuffle marks or other signs of badgers was undertaken within the site boundary, following guidelines set out by the Mammal Society (1989).
- 2.7 **Bats:** Buildings and trees within the site boundary were surveyed, from the ground, for their potential to support roosting bats in accordance with Bat Conservation Trust's Guidelines (Collins (ed.), 2016).
- 2.8 **Birds:** A visual survey of bird activity and suitable nesting habitat was carried out, to determine if any areas would be suitable for WCA Schedule 1 birds, BoCC or other

common and widespread nesting birds.

2.9 **Reptiles:** A visual survey for the presence of suitable habitat was carried out according to the criteria given in the Herpetofauna Workers' Manual (Gent and Gibson 1998).

2.10 **Amphibians:** Where accessible, known ponds within 500m of the site (unless ecologically separated from the site by significant barriers, such as major roads or rivers) were assessed for potential to support breeding amphibians, such as great crested newts (GCN) (*Triturus cristatus*). Ponds were assessed for their potential suitability to support GCN by undertaking a Habitat Suitability Index (HSI) assessment (Oldham *et al.*, 2000). The HSI for GCN is assessed using ten habitat variables (suitability indices – SI) which are known to affect the survival and ability to breed, of GCN. The variables include:

- Geographical location.
- Pond area.
- Pond permanence (number of years a pond is likely to dry out per decade).
- Water quality.
- Percentage of shade of margin.
- Number of waterfowl.
- Occurrence of fish.
- Pond density.
- Terrestrial habitat.
- Macrophyte (plant) cover.

Each variable (or suitability index) is assessed in the field and expressed on a scale from 1 (optimal suitability for GCN) to 0 (totally unsuitable). The ten variables, or indices, are combined using geometric mean to derive the final HSI score for the waterbody. The scoring system is presented in Table 1 below:

**Table 1:** HSI score and suitability of a waterbody habitat to support breeding GCN

HSI Score	Suitability of water body habitat to support breeding GCN
0.01-0.49	'Poor'
0.50-0.59	'Below average'
0.60-0.69	'Average'
0.70-0.79	'Good'
0.80-1.00	'Excellent'



- 2.11 **Invertebrates:** The site was scoped for significant rotting deadwood, and high quality aquatic or other habitats, which could be used by significant assemblages of invertebrates, or by any of the invertebrates highlighted in the data search.
- 2.12 **Flora and habitats:** All habitats and plant species that were identifiable at the time of the survey were recorded.
- 2.13 **Adjacent Habitat:** Habitats close to the site were identified, using aerial maps and field observation, so that the ecological impact of the proposed works on the wider landscape could be assessed.

#### *Limitations and Assumptions*

- 2.14 The baseline conditions reported in this document represent those identified at the time of the survey on 6<sup>th</sup> May 2022. Although a reasonable assessment of habitats present can be made during a single walkover survey, seasonal variations are not observed. The survey was conducted in July, which is within the optimal season for the identification of flora.
- 2.15 The desk study used available records and historical data from the local area. However, this does not provide a reliable indication of species present since records depend entirely on survey effort in the area, which is highly variable. The data is useful as a general guide to supplement the site visit, but absence of records does not reflect absence of species.

### 3 Results

#### Desk Study

##### *Statutory Designated Wildlife Sites*

- 3.1 Four 'Sites of Special Scientific Interest' (SSSI), one Ramsar, one 'Special Protection Area' (SPA) and eighteen 'Local Nature Reserve' (LNR) were identified within 7km of the site. Statutory designated sites are detailed in Appendix A.
- 3.2 The site is within a single impact risk zone (IRZ) for one SSSI and within 7km of one Ramsar site and will meet the qualifying criteria for consultation between the Local Planning Authority (LPA) and Natural England (NE) if the proposals include pipelines, pylons and overhead cables or any transport proposal including road, rail and by water (excluding maintenance).

##### *Non-Statutory Designated Wildlife Sites*

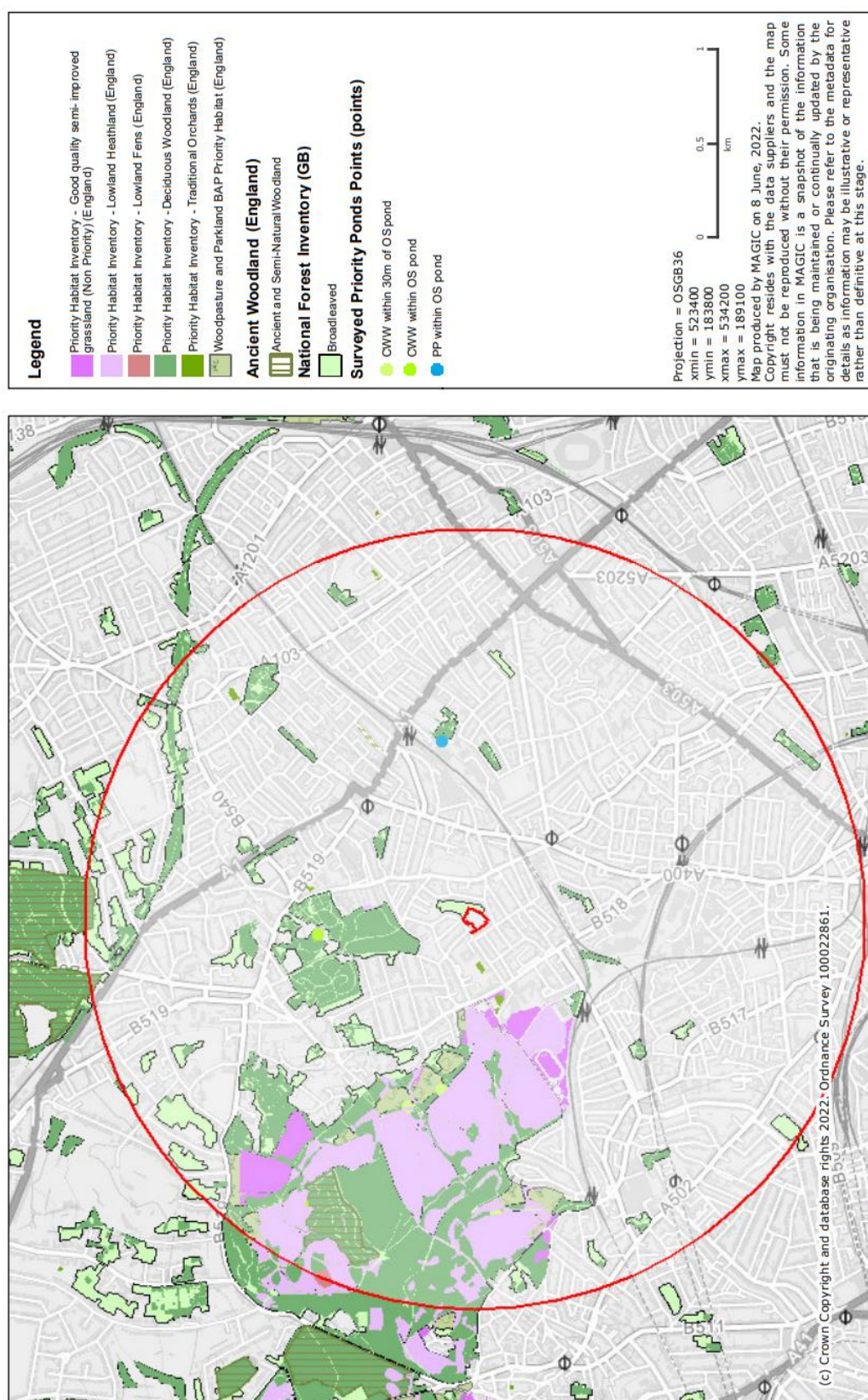
- 3.3 There were twenty eight non-statutory designated wildlife sites identified within 2km of the site; all of which are sites of importance for nature concern (SINCs) These are detailed in Appendix B.
- 3.4 Suitable green spaces will be necessary within the development for recreational purposes to reduce the recreational impacts on local sites.

##### *Ponds within 500m*

- 3.5 There was a single pond identified within 500m of the site boundary. Pond 1 is 125m west of the site. The pond is enclosed by large building in a concrete courtyard and would act as a barrier for colonisation by GCN and other amphibians; therefore, GCN are not considered further within this report.

##### *Habitat Types within 2km*

- 3.6 Habitat types within the area include good quality semi-improved grassland, lowland heathland, lowland fens, one priority pond and 5 cww ponds with good water quality deciduous and broadleaved woodland, woodpasture and parkland, traditional orchards. Habitat types are shown on Figure 2. The nearest broadleaved woodland is located adjacent to the north and eastern boundaries with a traditional orchard 152m west.

**Figure 2:** Habitat types within 2km of the site

*Protected, priority and rare species within 2km of site*

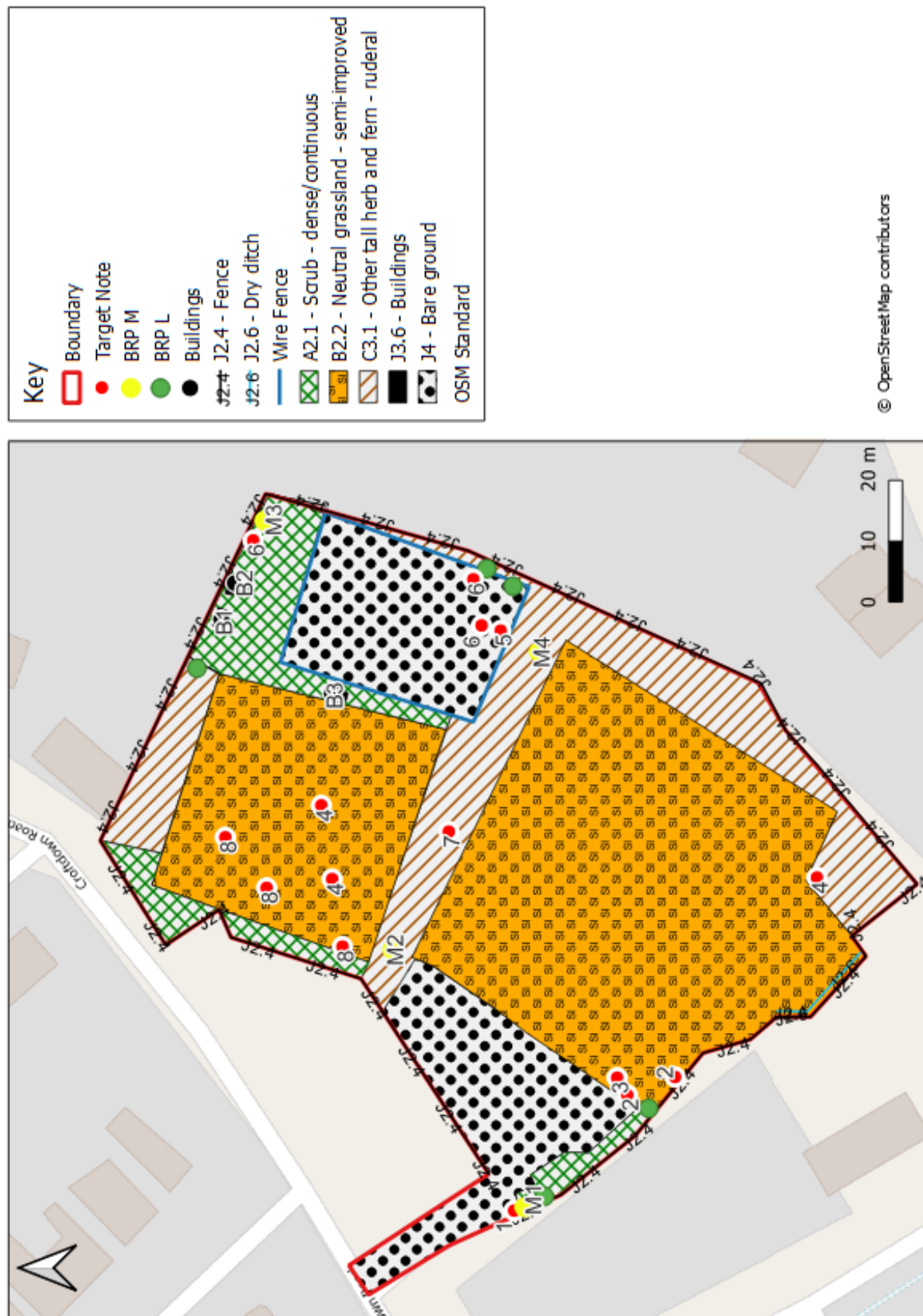
- 3.6 There was one record of swift (*Apus apus*) for the site itself; although there were numerous records of species within 2km of the site (full raw data can be provided upon request). The most relevant records are described below. Records over ten years old have not been referred to as the walkover survey is considered to provide a more up to date and accurate account of the species and habitats for the site.
- 3.7 Within the desk study nine species of bat were identified. Natterers bat (*Myotis nattereri*) and brown long-eared bat (*Plecotus auratus*) were recorded 0.7km north of the site in 2020. Nathusius pipistrelle (*Pipistrellus nathusii*) was identified 0.7km north of the site in 2017. Noctule (*Nyctalus noctule*) were highlighted 0.4km north of the site in 2017 alongside soprano pipistrelle (*Pipistrellus pygmaeus*) 0.3km north. The desk study also highlighted lesser noctule (*Nyctalus leisleri*) 0.4km southwest and common pipistrelle (*Pipistrellus pipistrellus*) 0.1km west of the site in 2017 as well as Brandts bat (*Myotis brandtii*) 1.7km west and Daubentons bat (*Myotis daubentonii*) 0.6km west in 2020.
- 3.8 Hedgehog (*Erinaceus europaeus*) has been recorded on multiple occasions. The most recent record was from 2021, 53m south of the site.
- 3.9 15 Red listed bird species were identified within 2km of the site, including house martin (*Delichon urbicum*) and linnet (*Carduelis cannabina*), mistle thrush (*Turdus viscivorus*) and starling (*Sturnus vulgaris*).
- 3.10 House sparrow (*Passer domesticus*) and black redstart (*Phoenicurus ochruros*) are currently supported by a London Species Action Plan (SAP) and was identified within 2km.
- 3.11 21 Amber listed bird species were also identified within the desk study: including dunnoek (*Prunella modularis*), tawny owl (*Strix aluco*), and grey wagtail (*Motacilla cinerea*).
- 3.12 Grass snake (*Natrix helvetica*) were recorded in 2018, 0.7km west of the site. Slow worm (*Anguis fragilis*) was also recorded in 2013, 1.2km northwest.
- 3.13 Stag beetles (*Lucanus cervus*) have been recorded on multiple occasions with the nearest record 8m south in 2020. This is a nationally scarce species, with protection under Schedule 5 of the Wildlife and Countryside Act (1981).

- 3.14 A total of 7 butterfly species were identified including Purple emperor (*Apatura iris*) recorded on two occasions within 2km of the site boundary; with the most recent record from 2018, 17m south-east. Grayling (*Hipparchia semele*) have been recorded within 2km of the site boundary, with the most recent record from 2014, 1.5km south.
- 3.15 Small heath (*Coenonympha pamphilus*) has been recorded 1.3km west of the site and White letter hairstreak (*Satyrus w-album*) has been recorded 1.4km northwest, both species are protected under section 41 of the NERC act.
- 3.16 Jersey tiger (*Euplagia quadripunctaria*) has been recorded on multiple occasions 1km north of the site, with the most recent record from 2021.

#### *Walkover Survey*





- 3.17 The habitats on site were considered with respect to their potential to support protected species.
- 3.18 Within the redline boundary the site comprises a number of dominant 'habitat types', taken from those listed in the Handbook for Phase 1 Habitat Survey (JNCC, 2010). These habitat types are described below and are shown schematically on Figure 3. Target Notes (TN) are presented in Table 2. A list of plant species identified on site is included in Appendix C. The baseline conditions reported and assessed in this document represent those identified at the time of the survey on 6<sup>th</sup> May 2022. Although a reasonable assessment of habitats present can be made during a single walkover survey, seasonal variations are not observed.
- 3.19 The majority of the site comprises semi-improved grassland. Other habitats present on site are birch and bramble scrub, tall ruderal, boundary trees and hardstanding. A dry ditch was also present at the southern boundary of the site.
- 3.20 The following photographs in Table 2 show the Target Notes referred to in Figure 3.






**Figure 3: Phase 1 Habitat Map**



**Table 2:** Target Notes

Target Note	Description	Photo
2	Areas of brash, leaf and log piles.	
3	Area of rubble and artificial grass	
4	Mammal run	
5	Wood pile	

Target Note	Description	Photo	
6	Area of garden waste containing wooden pallet and vegetation		
7	Fox faeces		
8	Fox dens		

## 4 Protected Species – Results and Evaluation

### *Badger*




- 4.1 The majority of habitats on site are considered unsuitable for badgers due to no or minimal cover for sett creation. The semi-improved grassland on site provides limited foraging opportunities due to horse grazing. However, scrub and the northern boundary of the site has the potential to provide suitable habitat for sett creation, though this is limited. However, habitats adjacent (or within 30m) of the site boundary offer some potential for sett creation.
- 4.2 Some mammal push-throughs were present during the survey to the northern and eastern boundaries of the site which are considered to be fox; not large enough to have been created by badgers.
- 4.3 No setts or evidence of badger activity with regard to hair, latrines or snuffle holes were recorded on the site itself during the survey. However, badgers can move into an area relatively rapidly, especially if there is pressure on the habitat they are currently using or if foraging opportunities increase.




### *Bats*

- 4.4 The two sheds (B1 & B2), shelter (B3) and trees on site were assessed from the ground for bat roosting evidence and potential; see Table 3 for bat roosting feature photographs and descriptions (numbering corresponds to those seen in Figure 4).
- 4.5 Majority of the trees are considered to have 'low to 'moderate' bat roosting potential (BRP) due to minimal to moderate suitable features present, such as dense ivy cover, peeling bark or knot holes.
- 4.6 The remaining scattered/boundary trees on-site are considered to have 'negligible' BRP due to no suitable features present.
- 4.7 All three buildings are considered to hold 'negligible' to 'low' BRP, due to limited roosting features; however due to the surrounding (ivy cover, etc.) emergence/return to roost surveys will be difficult.
- 4.8 Habitat on site was assessed as 'moderate' for foraging and commuting bats. There is good connectivity to the wider landscape by boundary vegetation. Semi-improved grassland within the site provided good foraging habitat, though this is limited.




**Table 3:** Photographs showing potential bat roost features

Potential bat roost features	Photo	
<p><b>M1:</b> Small Leaved-Lime (<i>Tilia cordata</i>) with holes and Ivy which may be concealing suitable roosting features.</p>		
<p><b>M2:</b> Silver birch (<i>Betula pendula</i>), ivy and cracked limb.</p>		
<p><b>M3:</b> Maple (<i>Acer opalus</i>) with ivy cover, 2 holes and peeling bark</p>		

Potential bat roost features	Photo
<p><b>M4:</b> Small Leaved-Lime with ivy cover, holes and peeling bark.</p>	
<p><b>B1:</b> Small wooden structure with ivy, broken windows with wooden roof, broken in places</p>	
<p><b>B2:</b> Wooden structure with ivy, open door with broken sides and overhanging eaves.</p>	



Potential bat roost features	Photo
<p><b>B3:</b> Brick Shelter with wooden seat and ceiling, with uplifted areas and holes and tiled roof containing cracks</p>	

### *Mammals - Other*

- 4.9 The site provides good habitat for hedgehog due to scrub, hedgerow and semi-improved grassland that could provide shelter and foraging opportunities. However, no evidence of hedgehog was recorded during the walkover survey.
- 4.10 During the walkover survey fox earths were identified alongside other evidence of foxes including faeces, this can be seen in figure 3.

### *Birds*

- 4.11 Trees, hedgerows and scrub throughout and surrounding the site provide nesting and foraging opportunities for birds. The semi-improved grassland and tall ruderal fields are considered suitable for ground nesting birds due to little disturbance and size of the habitat.



- 4.12 Bird species observed during the walkover survey included; ring-necked parakeet (*Psittacula krameria*), blackbird (*Turdus merula*), wren (*Troglodytes troglodytes*), great tit (*Parus major*), magpie (*Pica pica*), starling, blackcap (*Sylvia atricapilla*) and wood pigeon (*Columba palumbus*)

#### *Reptiles*

- 4.13 The semi-improved grassland, tall ruderal, hedgerows and scrub within and at the site boundary provides good foraging, hibernation and sheltering opportunities; surrounding habitat, particularly to the north and south is also favourable.
- 4.14 The large brash pile on site could provide sheltering and hibernation opportunities, however this is located on bare ground and isolated from the other habitats on site.

#### *Invertebrates*

- 4.15 The habitats on the site are unlikely to support a diverse assemblage of invertebrates. However, the scrub areas provide potential habitat for invertebrates such as purple emperor, small heath and white letter hairstreak which were identified in the desk study.
- 4.16 Areas of deadwood are also present on site which provide suitable habitat for stag beetles which were identified in the desk study.
- 4.17 No rare or protected invertebrate species were observed during the walkover.

#### *Flora*

- 4.18 No rare, principally important, local BAP or protected plant flora was identified during the walkover survey.
- 4.19 Schedule 9 invasive plant species such as Japanese knotweed (*Fallopia japonica*) were not identified at the site during the walkover survey.

## 5 Evaluation, Legislation and Recommendations

5.1 Table 4 below includes a summary of all identified and potential ecological constraints to the development, including those where there is insufficient information at the time of survey to be definitive. Relevant legislation has also been given here.

**Table 4:** Survey evaluation, relevant legislation and recommendations

Ecological Receptor	Summary of desk and walkover survey findings and relevant legislation	Likely impact and recommendations for further survey
Designated wildlife areas - statutory	<p>The desk study identified four SSSI's, one Ramsar and eighteen LNR within 7km of the site:</p> <ul style="list-style-type: none"> <li>• Hampstead Heath Wood SSSI (1.5km northwest);</li> <li>• Belsize Wood LNR (1.5km southwest);</li> <li>• Parkland Walk LNR (1.7km north);</li> <li>• Queens Wood LNR (1.9km north);</li> <li>• Adelaide LNR (2.2km southwest);</li> <li>• Gillespie Park LNR (2.5km east);</li> <li>• Barnsbury Wood LNR (2.9km east);</li> <li>• Camley Street Nature Park LNR (2.9km southeast);</li> <li>• Alexandre Palace and Park LNR (3.1km northeast);</li> <li>• Railway Fields LNR (3.4km northeast);</li> <li>• St John's Wood Church Grounds LNR (3.6km southwest);</li> <li>• Big Wood &amp; Little Wood LNR (3.8km northwest);</li> <li>• Westbere Copse LNR (4.3km west);</li> <li>• Abney Park Cemetery LNR (4.4km west);</li> <li>• Coldfall Wood LNR (4km northwest);</li> <li>• Coppetts Wood and Glebelands LNR (5.1km northwest);</li> <li>• Springfield Park LNR (5.8km east);</li> <li>• Lee Valley Ramsar, SPA (6km northeast);</li> <li>• Walthamstow Reservoirs SSSI (6km northeast);</li> <li>• Walthamstow Marshes SSSI (6.4km northeast);</li> <li>• Brent Reservoir SSSI (6.4km west); and</li> <li>• Brent Reservoir/Welsh Harp LNR (6.4km west)</li> </ul>	<p>The site is within a single IRZ for one SSSI and within 7km of one Ramsar site and will meet the qualifying criteria for consultation between the Local Planning Authority and Natural England if the proposals include pipelines, pylons and overhead cables or any transport proposal including road, rail and by water (excluding maintenance).</p>
Designated wildlife areas – non-statutory	<p>The desk study identified 28 SINCS within 2km of the site:</p> <ul style="list-style-type: none"> <li>• Hampstead Heath (0.39km west);</li> <li>• Highgate Cemetery (0.35km north);</li> <li>• Parkland Walk, Queen's Wood, and Highgate Wood (1.9km north);</li> <li>• Waterlow Park (0.67km north);</li> <li>• Kentish Town City Farm, Gospel Oak Railsides and Mark Fitzpatrick Nature Reserve (0.7km south);</li> <li>• Belsize Wood Local Nature Reserve &amp; Russell Nurseries Woodland Walk (1.5km southwest);</li> <li>• Dartmouth Park Hill and Reservoir (0.18km east);</li> <li>• Archway Road Cutting (1km north);</li> <li>• Caledonian park (2km southeast);</li> </ul>	<p>No further assessment required; however, the proposed development should provide suitable green spaces within the development to reduce the recreational impacts on local sites.</p>

Ecological Receptor	Summary of desk and walkover survey findings and relevant legislation	Likely impact and recommendations for further survey
	<ul style="list-style-type: none"> <li>• Upper Holloway railway cutting (0.9km east);</li> <li>• Junction road railway cutting (0.39km southeast);</li> <li>• Fitzroy park allotments (1.22km southeast);</li> <li>• Elthorne Park and Sunnyside Gardens (1.6km northeast);</li> <li>• St Joseph's social centre (0.8km north);</li> <li>• Holly lodge gardens (0.8km northwest);</li> <li>• Rochester terrace gardens (1.65km south);</li> <li>• Hampstead green (1.76km southwest);</li> <li>• Harrington site (1.1km north);</li> <li>• Southwood lane wood (1.5km north);</li> <li>• Yeatman road allotments (1.9km northwest);</li> <li>• Shepards hill allotments (1.9km northeast);</li> <li>• Archway Park (0.9km northeast);</li> <li>• Foxham gardens (0.76km east);</li> <li>• Tufnell Park Primary School Gardens (1.2km southeast);</li> <li>• Margaret MacMillan Nursery School Nature Garden (1.8km northeast);</li> <li>• Hatchard Road Wildlife Garden (1.3km east southeast);</li> <li>• Whittington Park (0.9km east); and</li> <li>• Royal Northern Hospital (1.5km east).</li> </ul>	
Habitats	<p>Habitats on the site comprise:</p> <ul style="list-style-type: none"> <li>• Semi-improved grassland;</li> <li>• Dense/continuous scrub;</li> <li>• Tall ruderal</li> <li>• Dry ditch;</li> <li>• Boundary trees;</li> <li>• Bare ground; and</li> <li>• Hardstanding.</li> </ul>	No habitats on site are NERC Priority Habitats. No further assessment required.
Badger	<p>The site was considered largely unsuitable for sett creation, and suitable areas were limited and restricted to the boundaries.</p> <p>There was no evidence of badger activity on site during the walkover survey; however, some mammal push-throughs throughout the site were present. These were assigned to fox and rabbit.</p> <p>Badgers and their setts are protected under the Protection of Badgers Act 1992 and also protected by the Wild Mammals (Protection) Act 1996. Protection also extends to include disturbance.</p> <p>Under the Protection of Badgers Act 1992, it is an offence to intentionally or recklessly:</p> <ul style="list-style-type: none"> <li>• Kill, injure or take badgers;</li> <li>• Damage a badger sett or any part of it;</li> <li>• Destroy a badger sett;</li> <li>• Obstruct access to, or any entrance of a badger sett; and</li> <li>• Disturb a badger whilst it is occupying a badger sett.</li> </ul>	No further survey required.
Bats	<p>Majority of trees within the site boundary are considered to have 'negligible' to 'low' BRP. However, five trees are considered to have 'moderate' BRP.</p> <ul style="list-style-type: none"> <li>• M1: multiple holes and ivy;</li> </ul>	It is recommended that the three buildings on site are soft-demolished under ecological supervision as appropriate emergence surveys will

Ecological Receptor	Summary of desk and walkover survey findings and relevant legislation	Likely impact and recommendations for further survey
	<ul style="list-style-type: none"> <li>• M2: ivy, cracked limb and peeling bark</li> <li>• M3: ivy, multiple holes and peeling bark</li> <li>• M4: multiple holes, ivy and peeling bark.</li> </ul> <p>The site was considered to have 'moderate' suitability for foraging and commuting bats.</p> <p>All species of bat are afforded full legal protection under Schedule 5 of the WCA. They are also listed under Schedule 2 of the Habitats Regulations. Some species of bat are also listed in Section 41 of NERC Act as an SPI.</p> <p>Combined legislation makes it an offence: to deliberately kill, injure, capture/take a wild bat; intentionally or recklessly disturb bats, including whilst occupying a place of shelter or protection; to damage or destroy a place used by a bat for breeding or resting (does not need to be deliberate, reckless or intentional); and to intentionally or recklessly obstruct access to any place used by a bat for shelter or protection.</p> <p>Bats are classed as 'European Protected Species' (EPS) and mitigation will typically be undertaken under the auspices of an EPS licence from Natural England.</p>	<p>be difficult due to surrounding habitats. Demolition should take place when bats are active (during the months of April/May to September/August).</p> <p>Currently layout proposes will retain all trees with bat roosting potential. However, if BRP trees are to be impacted in any way by the development, the trees with 'moderate' BRP will require two surveys. The BCT Guidelines recommend two emergence. An additional emergence survey will be required if a bat roost is identified.</p> <p>The optimum months for emergence and re-entry surveys are from May to August, although it is sometimes possible to survey in September if previous surveys have already been undertaken, weather permitting.</p> <p>Emergence surveys commence 15 minutes prior to sunset to up to two hours after sunset; re-entry surveys commence two hours prior to sunrise, to sunrise. Surveys would be undertaken using electronic bat detectors and observation aids. The number of surveyors is dependant on the proportion of potential exit/entry points of the tree for bats.</p> <p>If bats are discovered using the building(s) as a roost, works can only proceed under the auspices of a European Protected Species (EPS) licence granted by Natural England. Mitigation would be required to offset the loss of roost(s).</p> <p>Lighting may need to be a consideration with respect to foraging bats.</p> <p>It is recommended that a ~3m vegetated strip is incorporated around the boundaries of the site, by retaining and enhancing existing boundary features. If this is not possible then further bat activity surveys should be undertaken.</p> <p>'Moderate' habitat for bats require one survey visit per month (April to October) in suitable weather conditions. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period. Automated/static</p>

Ecological Receptor	Summary of desk and walkover survey findings and relevant legislation	Likely impact and recommendations for further survey
		detectors should also be used in appropriate locations on site and left in situ for at least five consecutive nights.
Mammals - other	<p>Evidence of fox was found during the walkover survey. Fox dens was located to the northwest of the site while fox faeces was identified south of the fox dens. Fox runs were present in multiple locations across the site.</p> <p>No evidence of hedgehogs was found during the walkover survey. The site provided good hibernation and foraging habitat for hedgehogs in scrub and semi-improved grassland.</p> <p>Hedgehogs are listed on Schedule 6 of the WCA which makes it illegal to kill or capture wild hedgehogs, with certain methods listed. The hedgehog is also a SPI under Section 41 of the NERC.</p> <p>All wild mammals are protected under the Wild Mammals (Protection) Act 1996. Offences relate to any act which results in the intent to inflict unnecessary suffering. Mercy killings and killing in a swift and humane way in the course of a lawful activity are not offences under the Act.</p>	<p>No further surveys recommended. However, it is recommended that the fox dens are removed prior to ground works during ecological supervision. The area around the earths should be carefully dug out using hand tools to ensure no harm is inflicted on any animals which may be present.</p> <p>Fox typically breeds in January and cubs are born in March. The earths will be occupied by the vixen and cubs until June. Therefore, the earths should be removed between mid-July and January. If the earths require removal prior to this, further advice should be sought from an ecologist.</p> <p>It is recommended that if scrub is to be removed then scrub areas should be cut to 20cm using hand-held tools (brushcutter/trimmer) and checked for hedgehog before removal.</p> <p>See Section 6 for enhancements.</p>
Birds	<p>The site is considered suitable for nesting birds; however, no nests were present on site during the walkover survey.</p> <p>All wild birds while actively nesting are afforded legal protection under the WCA.</p> <p>Special protection is also afforded to birds listed on Schedule 1 of the WCA which makes it an offence to disturb these species at nest or the dependent young.</p> <p>Combined legislation means that all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to:</p> <ol style="list-style-type: none"> <li>intentionally kill, injure or take any wild bird;</li> <li>intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;</li> <li>intentionally take or destroy the egg of any wild bird;</li> <li>have in one's possession or control any wild bird (dead or alive), part of a wild bird or egg of a wild bird;</li> <li>intentionally or recklessly disturb any wild bird listed on <b>Schedule 1</b> while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependent young of such a bird; and</li> <li>have in one's possession or control any birds of a species listed on Schedule 4 of the Act unless registered in accordance with the Secretary of State's regulations.</li> </ol>	<p>It is recommended that any vegetation clearance and disturbance is undertaken outside of the nesting season. The nesting season is deemed to be from mid-March to mid-August, although these times can be temperature dependent.</p> <p>If this timing is not possible then a nesting bird check must be carried out by a suitably experienced person, no more than 48 hours between the check and the removal. If the 'all clear' is given, then removal/works can commence. The survey lasts for no longer than 48 hours. If works are not completed in this time frame, then a re-survey will need to be carried out.</p> <p>If birds are found to be nesting, then no works should be undertaken within at least 10m of the nest until chicks have fledged.</p>
Reptiles	Habitats on site are considered suitable for reptiles, at present, semi-improved grassland is unmanaged offering foraging opportunities. The scrub areas offer	As the grassland is suitable for reptiles is recommended that further reptile surveys should be undertaken

Ecological Receptor	Summary of desk and walkover survey findings and relevant legislation	Likely impact and recommendations for further survey
	<p>shelter and hibernation opportunities; surrounding habitat is also favourable.</p> <p>Reptiles are afforded protection under Schedule 5 of the WCA from deliberate injury, killing and trade. They are also listed under Section 41 of NERC as an SPI.</p>	<p>Reptile surveys can be undertaken from mid-march to mid-October in 'suitable weather conditions' i.e. when the temperatures are between 9 and 18 °C with no or little rain.</p> <p>An initial visit would be required to lay reptile refugia (bitumen felts) in suitable habitat. These warm up in the sun and act as lures to reptiles and must be left for at least seven days to bed in. The felts would then be visited seven times on separate occasions to establish presence / likely absence of reptiles.</p> <p>If reptiles are found, then mitigation would likely involve trapping and translocating the reptiles to a specific designated area on the site and managed as such. The level of mitigation would depend upon the result of the survey.</p>
Invertebrates	<p>The habitats on site are unlikely to support a diverse assemblage of invertebrates. However, areas of scrub can be used by a small number of invertebrates, such as butterflies.</p>	<p>No further surveys recommended.</p> <p>It is recommended that deadwood on site is kept in situ and protected during development to preserve stag beetle habitat. If this is not possible then the deadwood should be carefully moved to a suitable area nearby.</p> <p>See Section 6 for enhancements.</p>
Flora	<p>The habitats on site are unlikely to support any rare or protected flora.</p> <p>No Schedule 9 invasive plant species were identified on site.</p> <p>Invasive plant species such as Japanese knotweed are listed on Schedule 9 of the WCA. Schedule 9 includes certain plants that have become established in the wild in Great Britain but which the law seeks to prevent spreading further. The WCA creates various offences, including allowing a Schedule 9 plant to grow in the wild. Negligent or reckless behaviour such as inappropriate disposal, resulting in the plant becoming established in the wild also constitutes an offence.</p> <p>Depositing unauthorised 'controlled waste' (such as Japanese knotweed) is also likely to be a breach of Section 33 of the Environmental Protection Act, 1990.</p> <p>In the recent Court of Appeal decision in the case of <i>Network Rail Infrastructure Limited v Williams and Another</i> [2018], a landowner/occupier can be liable for failing to act reasonably to remove any Japanese knotweed after becoming aware of it and where it is foreseeable that it would damage neighbouring land.</p>	<p>No further surveys recommended.</p>



## 6 Ecological Considerations and Enhancements

- 6.1 The proposed development is considered unlikely to be adversely detrimental to designated areas, protected species or habitats, provided the recommendations are followed in Table 5. However, a number of considerations and enhancements are recommended with respect to the overall biodiversity of the site in line with current Planning Policy.
- 6.2 A Biodiversity Net Gain (BNG) assessment may be requested by the LPA to provide a net gain of at least 10%. BNG calculations can be undertaken using Defra Metric 3.1 (2022, as amended) which involves comparing 'baseline' habitat measurements with proposed habitats, post-development.
- 6.3 Where possible, scrub and scattered trees at the boundaries of the site should be retained with a ~3m buffer zone and enhanced to create corridors and shelter/foraging areas for wildlife including bats, birds, hedgehogs and small mammals.
- 6.4 The addition of standard bird boxes on retained trees and proposed new buildings will attract a greater diversity of birds to nest. A number of 1SP Schwegler sparrow terraces should be installed onto new builds. These should be located out of direct sunlight and close to but not restricted by vegetation. A number of Schwegler Swift Bricks should also be installed on the periphery of the new builds.
- 6.5 The addition of bat boxes could also be installed on retained trees and proposed new buildings to provide roosting opportunities for common species.
- 6.6 Landscaping should incorporate native or wildlife attracting trees, shrubs, and wildflower areas as these would likely be of benefit to a variety of wildlife including, birds, bats and invertebrates, including pollinators.
- 6.7 'Hedgehog links' (i.e. 15cm diameter gaps at the base of fences) are recommended to enable small mammals to move through the development.

## **7 Conclusion**

- 7.1 A Preliminary Ecological Appraisal was undertaken at Land at Mansfield Bowls Club, Camden, London by James Blake Associates Ltd. in support of a planning application for a residential care home and associated infrastructure.
- 7.2 The majority of the site comprises semi-improved grassland with dense bramble and birch scrub, tall ruderal, bare ground and a dry ditch located to the southeast of the site.
- 7.3 Further protected species surveys are recommended prior to development for reptiles.
- 7.4 Further bat activity surveys will be required if boundary vegetation cannot be retained. If development proposals impact trees identified to have 'moderate' BRP, then further surveys for bats emergence will be required.
- 7.5 If any mitigation or compensation measures recommended following these further surveys is carried out, and if the precautionary measures for birds and hedgehogs detailed in this report are followed, it is considered that the development is able to proceed with minimal impact on the local conservation status of any protected, principally important or rare species within the area.
- 7.6 It is also considered that with a sensitive landscape scheme, and by including some, or all, of the additional enhancements, the site could be improved for local wildlife post development.

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## 10 Appendices

### Appendix A: Statutory designated wildlife sites within 7km

Site Name	Designation	Distance from Site	Description
Hampstead Heath Woods	SSSI	1.5km northwest	Hampstead heath woods is a long-established high forest woodland with old and over mature trees providing dead wood habitat for invertebrates. The canopy of the wood is dominated by sessile oak, <i>Quercus petraea</i> and beech <i>Fagus sylvatica</i> .
Belsize Wood	LNR	1.5km southwest	Belsize wood is a 0.7-hectare local nature reserve with common canopy trees including ash, sycamore, and Swedish whitebeam. Ground level plants include butcher's-broom, enchanter's- nightshade and neetles.
Parkland Walk	LNR	1.7km north	14.31-hectare site consisting of woodland with Oak, ash and sycamore, semi improved grassland and the only acid grassland in the area. Slow worms ( <i>Anguis fragilis</i> ) thrive in the area as well as Hedgehogs ( <i>Erinaceus europaeus</i> )
Queens Wood	LNR	1.9km north	21.07-hectare site containing an ancient oak-hornbeam woodland, midland hawthorn ( <i>Crataegus laevigata</i> ) and mountain ash ( <i>Sorbus decora</i> ). The ground flora contains a large population of wood anemone ( <i>Anemone nemorosa</i> ), bluebell ( <i>Hyacinthoides non-scripta</i> ) and wood sorrel ( <i>Oxalis acetosella</i> ).
Adelaide	LNR	2.2km southwest	Adelaide is a 0.28-hectare local nature reserve consisting of a summer meadow, areas of scrub, two ponds with dipping stations and a small woodland containing English Oak, Ash and Lime.
Gillespie Park	LNR	2.5km east	3.03-hectare site with meadow grassland containing Birdsfoot trefoil ( <i>Lotus corniculatus</i> ) and musk mallow ( <i>Malva moschata</i> ), woodland and wetlands containing white waterlily ( <i>Nymphaea alba</i> ) and water forgetmenot ( <i>Myosotis scorpioides</i> )
Barnsbury Wood	LNR	2.9 southeast	Barnsbury Wood is a 0.32-hectare site containing woodland with sycamore, ash, and horse chestnut. The wood houses long-tailed tit, lesser stag beetle and sixteen-spot ladybird.
Camley Street Nature Park	LNR	2.9km southeast	Camley Street Nature Park is a 0.84- hectare site containing woodland, grassland and wetland habitats including ponds providing natural habitats for earthstar fungi, reed warblers and kingfishers.
Queen's Wood	LNR	2km north	21.07-hectare site with an ancient oak-hornbeam woodland. The ground flora consists of wood anemone ( <i>Anemone nemorosa</i> ), bluebells ( <i>Hyacinthoides non-scripta</i> ) and wood Sorrell ( <i>Oxalis</i> ). The site has a good population of spiders and Jewel beetle is widespread ( <i>Cyphogastra javanica</i> ).
Alexandra Palace & Park	LNR	3.1km northeast	62.66-hectare site containing Alexandre palace, boating lake and pavilion gardens. The site is known for the bird populations including Peregrine Falcon ( <i>Falco peregrinus</i> ).
Railway Fields	LNR	3.4km northeast	0.87-hectare site consisting of a pond, woodland, meadows, marshland and river habitats are present. The site contains slow worms ( <i>Anguis fragilis</i> ), common lizard ( <i>Zootoca vivipara</i> ), an ancient field maple ( <i>Acer campestre</i> ) as well as Haringey Knotweed ( <i>Fallopia x conollyana</i> ).

Site Name	Designation	Distance from Site	Description
St John's Wood Church Grounds	LNR	3.6km southwest	St John's Wood Church Grounds is a 1.99- hectare disused graveyard containing wildflower glade, thistle meadow and mixed woodland. This site is good for grey sedge and butterfly species.
Big Wood & Little Wood	LNR	3.8km northwest	8.29-hectare site consisting of ancient woodland with a Pedunculate ( <i>Quercus robur</i> ) and sessile oak ( <i>Quercus petraea</i> ) canopy. The woodland also contains Hornbeam ( <i>Carpinus</i> spp.), wild cherry ( <i>Prunus avium</i> ) and wild service tree ( <i>Sorbus torminalis</i> ). Ground flora contains bramble ( <i>Rubus fruticosus</i> ), ivy ( <i>Hedera</i> ) and bluebell ( <i>Hyacinthoides non-scripta</i> ). The site breeding birds include Tawny owl ( <i>Strix aluco</i> ), nuthatch ( <i>Sitta</i> ) and treecreeper ( <i>Certhiidae</i> ).
Westbere Copse	LNR	4.3km west	0.39-hectare site comprising of deciduous woodland including sycamore, oak and aspen, semi-improved grassland, and scrub. The site also contains a pond with frogs, toads and newts being present.
Abney Park Cemetery	LNR	4.4km east	13-hectare woodland consisting of 200 old trees providing habitats for bats and owls. Herb Robert, bluebells and wild garlic make up the floral diversity alongside nettles and grasses. As an old woodland fungus such as Yellow stainers ( <i>Agaricus xanthoderma</i> ) and slime moulds are present.
Coldfall Wood	LNR	4km northwest	13.43-hectare site containing an ancient Oak-Hornbeam woodland with coppice, the ground flora of the woodland consists of ivy, wood, meadow grass and garlic mustard, the site also contains wetland as well as stream.
Coppetts Wood and Glebelands	LNR	5.1km northwest	20-hectare site containing woodland dominated by Oak ( <i>Quercus</i> spp.) and Hornbeam ( <i>Carpinus</i> spp.) with the ground flora being bluebell ( <i>Hyacinthoides non-scripta</i> ) and garlic mustard ( <i>Alliaria petiolate</i> ). The sites breeding birds include sparrowhawk ( <i>Accipiter nisus</i> ). The site also contains a small pond with yellow iris ( <i>Iris pseudacorus</i> ), common frogs ( <i>Rana temporaria</i> ) and smooth newts ( <i>Triturus vulgaris</i> ).
Springfield Park	LNR	5.8km east	Springfield Park is designated as a Regionally Important Geological and Geomorphologic Site (RIGS) and is currently 13.59-hectare in size and contains a lake and a community Orchard with local apple trees, medlar tree ( <i>Mespilus germanica</i> ) and an olive tree ( <i>Olea europaea</i> ).
Walthamstow Marshes	SSSI	6.2km northeast	Walthamstow marshes is a semi-natural wetland, containing areas of dry grassland and low-lying sedge. The marshes contain species with limited distribution in London such as Essex skipper butterfly, <i>Thymelicus lineola</i> , <i>Volucella inanis</i> and pyralid moth, <i>Shoeribus micronellus</i> . The breeding bird community contains species associated with marshland habitats such as reed bunting, sedge, and willow warbler.
Brent Reservoir	SSSI	6.4km west	The Brent reservoir contains a significant number of breeding great crested grebe. Along the shoreline contains a fringe of fenland plants with species with restricted distribution within Greater London, the more notable species include common spotted orchid, <i>Dactylorhiza fuchsia</i> and greater spearwort <i>Ranunculus lingua</i> .
Brent Reservoir/ Welsh Harp	LNR	6.4km west	97.31-hectare site consisting of open water, marshes and meadow. The site also contains woodland. The reservoir is important for great crested grebe ( <i>Podiceps cristatus</i> ), gadwall ( <i>Mareca strepera</i> ) and shoveler ( <i>Anas clypeata</i> ).



Site Name	Designation	Distance from Site	Description
Lee Valley	Ramsar, SPA	6km northeast	The Lee Valley is a 451 hectare site containing embanked water supply reservoirs, sewage treatment lagoons and former gravel pits showing a variety of man-made, semi natural wetland and valley bottom habitats. The Lee Valley contains eight SSSI including Walthamstow reservoirs and marshes. The site supports nationally important numbers of Eurasian bittern ( <i>Botaurus stellaris</i> ), gadwall ( <i>Mareca strepera</i> ) and Northern shoveler ( <i>Spatula clypeata</i> ).
Walthamstow Reservoirs	SSSI	6km northeast	Walthamstow reservoirs contains one of the United Kingdoms largest heronries, the sloping earth banks, and wooded islands form distinct habitat features. Populations of shoveler and tufted duck consistently reach levels of national significance. Great crested grebe, pochard and coot also occur in important numbers.

## Appendix B: Non-statutory designated wildlife sites within 2km

Site Name	Designation	Distance from Site	Description
Hampstead heath	SINC	0.39km west	A 316.9 ha site consisting of semi-natural and formal habitats, with some ancient woodland, bog, acid grassland, and restored heathland. This site has nationally rare invertebrates such as the jewel beetle ( <i>Agrilus pannonicus</i> ), and tube web-spiders ( <i>Atypus affinis</i> ).
Highgate cemetery	SINC	0.35km north	A 15ha site of historic and natural importance, with Secondary woodland of ash ( <i>Fraxinus excelsior</i> ) and sycamore ( <i>Acer pseudoplatanus</i> ) developed in the grounds. The site is used by 9 species of bats as a roost, sparrowhawk, and potentially spotted flycatcher and willow warbler nest here.
Parkland Walk, Queen's Wood, and Highgate Wood	SINC	1.9km north	A 66.7ha woodland with acid grassland, bracken, pond, scrub, semi-improved neutral grassland and walls and tombstones with climbing or mossy vegetation. There is a second of the woodland with ancient oak and hornbeam, with ground flora of bluebell ( <i>Hyacinthoides non-scripta</i> ). Tawny owl and spotted flycatcher have been observed here.
Waterlow Park	SINC	0.67km north	A 10.2 ha site with three spring fed ponds, some containing water figwort ( <i>Scrophularia auriculata</i> ) and bittersweet ( <i>Solanum dulcamara</i> ) are present. there is also amenity grassland, semi-improved neutral grassland, ruderal and some planted shrubs and hedgerow. Birds seen here include nuthatch, kestrel, goldcrest, coot, moorhen, mallard, mute swan, tufted duck and Canada goose.
Kentish Town City Farm, Gospel Oak Railsides and Mark Fitzpatrick Nature Reserve	SINC	0.7km south	6.6ha of railsides that are managed by the London wildlife trust. The site has woodland with sycamore, and a elder, hawthorn, holly, dogwood, rowan and hazel understory. Kentish town city farm is used as an educational resource due to the habitat variety, with a wider variety of trees, and organic produce area, orchard, paddock and some ponds on site.
Belsize Wood Local Nature	SINC	1.5km southwest	A 0.7ha site that's also a part of the LNR, it has sreas sectioned off from the public with ash, sycamore, wild

Site Name	Designation	Distance from Site	Description
Reserve & Russell Nurseries Woodland Walk			cherry, and lime. There is a Swedish whitebeam woodland, and areas of scrub. The site has a variety of ground flora, some ponds and a variety of bird species present.
Dartmouth Park Hill and Reservoir	SINC	0.18km east	3.14 ha of historically Victorian covered reservoir, with neutral and acidic semi-improved grassland. There are records of the small copper butterfly which feeds on sorrels ( <i>Rumex</i> . Sp) that are present. It is a dog free area.
Archway Road Cutting	SINC	1km north	0.73 of Sycamore and poplar woodland with ivy, nettle and daffodils. There is also an area of rough grassland with coltsfoot and hops trefoil. There are breeding birds recorded and bat boxes onsite.
Caledonian park	SINC	2km southeast	This site is 3.1 ha of former cattle market turned amenity grassland with planted shrubs, scattered trees and wildflowers that support a variety of invertebrates and common birds.
Upper Holloway railway cutting	SINC	0.9km east	This site is 4.7 ha of Railside habitat along the crouch hill line consisting of Birch ( <i>Betula pendula</i> ), Ash ( <i>Fraxinus excelsior</i> ), Oak ( <i>Quercus</i> spp.) and Elm ( <i>Ulmus</i> spp.)-woodland. There is also bramble ( <i>Rubus fruticosus</i> agg.) scrub and tall grassland. A range of common birds is present.
Junction road railway cutting	SINC	0.39km south east	This is a 0.5 section along an active railway line with secondary woodland and scrub dominated by sycamore ( <i>Acer pseudoplatanus</i> ), ash ( <i>Fraxinus excelsior</i> ) and bramble ( <i>Rubus fruticosus</i> agg.).
Fitzroy park allotments	SINC	1.22km southeast	1.4 ha of allotment with mature fruit trees. There are acid grasslands, a mature tree boundary with Birch ( <i>Betula pendula</i> ), English Oak ( <i>Quercus robur</i> ), sycamore ( <i>Acer pseudoplatanus</i> ), yew ( <i>Taxus baccata</i> ), and a species poor scrub layer. There are a few ponds on site with yellow flag ( <i>Iris pseudacorus</i> ).
Elthorne Park and Sunnyside Gardens	SINC	1.6km northeast	2.9 ha of amenity grassland with a childrens play area. There is planted trees including field maple ( <i>Acer campestre</i> ), rowan ( <i>Sorbus aucuparia</i> ), hawthorns ( <i>Crataegus</i> spp.) and holly ( <i>Ilex aquifolium</i> ). Sunnyside community garden has a small pond and is community managed.
St Joseph's social centre	SINC	0.8km north	0.49 ha of infrequently used garden, orchard (includes mature and semi-mature trees), hedges, woodland, flowerbeds and grassland areas.
Holly lodge gardens	SINC	0.8km northwest	Two areas of amenity grassland separated by a treeline of non-native trees. Elder ( <i>Sambucus nigra</i> ), wood avens ( <i>Geum urbanum</i> ), enchanters nightshade ( <i>Circaea lutetiana</i> ) and foxglove (can be found beneath the treeline. There are areas of ruderal vegetation.
Rochester terrace gardens	SINC	1.65km south	0.44 ha of amenity public garden with a number of planted non-native trees. Native hedgerow shrubs have been planted as a wide hedge including hornbeam, field maple. Hawthorn and guelder rose.
Hampstead green	SINC	1.76km southwest	0.24 ha of semi improved neutral grassland with workshire fog ( <i>Holcus lanatus</i> ) common bent ( <i>Agrostis capillaris</i> and other common grasses. Bluebells are present here ( <i>Hyacinthus</i> sp.)
Harrington site	SINC	1.1km north	A community nature project that supports vegetable gardens, greater burdock ( <i>Arctium lappa</i> ) and a young

Site Name	Designation	Distance from Site	Description
			sycamore woodland with some silver birch ( <i>Betula pendula</i> ) and tree-of-heaven ( <i>Ailanthus altissima</i> ).
Southwood lane wood	SINC	1.5km north	0.6 ha strip of woodland surrounding a housing estate. There is a sycamore canopy, with pedunculate oak and horse chestnut present.
Yeatman road allotments	SINC	1.9km northwest	3.26 ha of allotments with rough grassland and bramble scrub and 'weed' plants have been recorded. Grass snakes have been recorded in at least two allotment sites in the north of the borough. This site could also suit amphibians, birds, mammals and invertebrates
Shepards hill allotments	SINC	1.9km northeast	3.8ha of allotments that have some mature trees and shrub. Grass snakes have been recorded in at least two allotment sites in the north of the borough. This site could also suit amphibians, birds, mammals and invertebrates.
Archway Park	SINC	0.9km northeast	A 0.83ha site near archway station with a notable slope, with shrubs and trees planted in almost contour lines along the slope. A wild flower bank on site contains parsley-piert ( <i>Aphanes arvensis</i> ).
Foxham gardens	SINC	0.76km east	A 0.61ha site consisting of amenity grassland, flower beds and planted shrub and trees.
Tufnell Park Primary School Gardens	SINC	1.2km southeast	A 0.22ha nature area within a primary school with a 10 metre diameter pond in the centre, with a diverse range of emergent flora.
Margaret MacMillan Nursery School Nature Garden	SINC	1.8km northeast	A 0.29 ha size natura garden with small ponds, lawns and mature ash, horse chestnut and lime trees.
Hatchard Road Wildlife Garden	SINC	1.3km east southeast	A 0.05ha site consisting of roughland habitats with Birch, willow woodland adjacent to the crouch hill railway line.
Whittington Park	SINC	0.9km east	3.7ha of amenity grassland adjacent to Holloway road. There is some scattered trees, planted woodland and managed hedgerow. Mistle thrush, goldfinch and greenfinch have been seen, as has house sparrow.
Royal Northern Hospital	SINC	1.5km east	A 0.48ha park that consists of amenity grassland, ornamental shrub and scattered trees. Approximately 10% of the park is wildlife meadow.

**Appendix C: Flora list identified during the walkover survey**

Common Name	Scientific Name
Ash	<i>Fraxinus excelsior</i>
Bramble	<i>Rubus fruticosus</i> agg.
Cleavers	<i>Galium aparine</i>
Dog rose	<i>Rosa canina</i>
Elder	<i>Sambucus nigra</i>
English oak	<i>Quercus robur</i>
Hawthorn	<i>Crataegus monogyna</i>
Holly	<i>Ilex aquifolium</i>
Nettle	<i>Urtica dioica</i>
Silver birch	<i>Betula pendula</i>
Spear thistle	<i>Cirsium vulgare</i>
White dead nettle	<i>Lamium album</i>
three cornered leek	<i>Allium triquetrum</i>
Ivy	<i>Hedera colchima</i>
Small Leaved lime	<i>Tilia cordata</i>
Feverfew	<i>Tanacetum parthenium</i>
Buddleia	<i>Buddleja davidii</i>
Green alkanet	<i>Pentaglottis sempervirens</i>
Mimosa	<i>Accacia dealpata</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
Dandelion	<i>Taraxacum officinale</i>
Red clover	<i>Trifolium pratense</i>
Rosebay Willowherb	<i>Chamerion angustifolium</i>
Creeping thistle	<i>Cirsium arvense</i>
Birdfoot trefoil	<i>Lotus corniculatus</i>
Broadleaved dock	<i>Rumex obtusifolius</i>
Hoary plantain	<i>Plantago media</i>
Plantain sp.	<i>Plantago</i> sp.
Herb robert	<i>Geranium robertianum</i>
Common forget me not	<i>Myosotis scorpioides</i>
Garlic mustard	<i>Alliaria petiolata</i>
Bamboo sp	<i>Bambuseae</i> spp.
Rye grass	<i>Lolium perenne</i>
Bryony	<i>Bryonia</i> spp.
Spanish bluebell	<i>Hyacinthoides hispanica</i>
White dead nettle	<i>Lamium album</i>
Meadow buttercup	<i>Ranunculus acris</i>
P.mallow	<i>Malva alcea</i>
Oilseed rape	<i>Brassica napus</i>
Ivy-leaved speedwell	<i>Veronica hediflora</i>
Bindweed sp	<i>Calystegia</i> spp.
Mullein sp	<i>Verbascum</i> spp.
Greater periwinkle	<i>Vinca major</i>
Pond sedge	<i>Carex riparia</i>
Honesty	<i>Lunaria annua</i>
Pussywillow	<i>Salix discolor</i>
Barren strawberry	<i>Waldsteinia fragarioides</i>

Common Name	Scientific Name
Italian maple	<i>Acer opalus</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Horse chestnut	<i>Aesculus hippocastanum</i>
Cotoneaster	<i>Cotoneaster horizontalis</i>
Yucca	<i>Yucca spp.</i>
Goatsbeard	<i>Tragopoeun pratensis</i>
Common vetch	<i>Vicia sativa</i>
Common Yarrow	<i>Achillea millefolium</i>
Ragwort	<i>Jacobaea vulgaris</i>
Bristly oxtongue	<i>Picris echioides</i>
Spear thistle	<i>Cirsium vulgare</i>
Snows insummer	<i>Cerastium tomentosum</i>
Wallflower	<i>Erysimum spp.</i>
Dog rose	<i>Rosa canina</i>
Hoary cress	<i>Lepidim draba</i>
Cherry plum	<i>Prunus serafera</i>
Oxford ragwort	<i>Senecio squalidus</i>