



ECOLOGYSOLUTIONS

Part of the ES Group

BROOKSIDE SITE,
HIGHGATE TENNIS CLUB,
CROUCH END,
HARINGEY

Ecological Assessment

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1. INTRODUCTION

1.1. Background and Proposals

- 1.1.1. Ecology Solutions was commissioned in June 2021 by Highgate Tennis Club to undertake an ecological assessment of the Brookside Site, Highgate Tennis Club at Crouch End, Haringey, London (see Plan ECO1).
- 1.1.2. The proposals for the site include the conversion of three existing shale courts into a set of Lawn Tennis Association (LTA) sized artificial clay courts located primarily on the footprint of the existing three shale tennis courts. The existing clubhouse is also proposed for demolition and will be replaced with a new pavilion/clubhouse alongside the installation of new floodlights.

1.2. Site Characteristics

- 1.2.1. The site consists predominately of hardstanding (clay and tarmac) tennis courts. A clubhouse and storage shed are located in the south of the site and are surrounded by an area of amenity grassland and planting with scattered mature trees. A mature treeline bounds the site to the north.
- 1.2.2. The site is approximately 0.2 ha in size and falls within Crouch End Playing Fields Complex Site of Borough Importance Grade 1 (SBI1), situated in the neighbourhood of Highgate within the Royal Borough of Haringey. The site is bound to the east by Shepherds Lane and to the north, south and west by cricket grounds and tennis courts.

1.3. Ecological Assessment

- 1.3.1. This document assesses the ecological interest of the site as a whole. The importance of the habitats within the site is evaluated with due consideration given to the current guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)¹.
- 1.3.2. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and, where appropriate, potential enhancement measures are put forward and reference made to both national and local biodiversity priorities.

¹ CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.1 – Updated September 2019. Chartered Institute of Ecology and Environmental Management, Winchester.

2. SURVEY METHODOLOGY

- 2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desk Study

- 2.2.1. In order to compile background information on the site and the surrounding area, Ecology Solutions contacted Greenspace Information for Greater London (GIGL).
- 2.2.2. The data search area included a 1.5km radius centred on the site for protected species records and a wider 2.5km radius centred on the site for information on designated sites.
- 2.2.3. Further information on designated sites from a wider search area was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)² database, which uses information held by Natural England and other organisations.
- 2.2.4. This information is reproduced at Appendix 1, and where appropriate on Plan ECO1.

2.3. Habitat Survey

- 2.3.1. Habitat surveys were carried out by Ecology Solutions in June 2021 in order to ascertain the general ecological value of the site and to identify the main habitats and associated plant species present.
- 2.3.2. The site was surveyed based on extended Phase 1 survey methodology³, as recommended by Natural England, 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.
- 2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.
- 2.3.4. All 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 at different seasons. The timing of the survey work undertaken is such that a good understanding of the nature of the habitats present has been gained.

² <http://www.magic.gov.uk>

³ Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

2.4. Faunal Survey

- 2.4.1. Obvious faunal activity recorded during the site survey, such as birds or mammals observed visually or by call, was recorded. Specific attention was paid to any potential use of the site by bats and other protected species, priority species or other notable species.

Bats

- 2.4.2. The site was surveyed to assess its potential to support bats in June 2021. The two buildings present were subject to an external and internal assessment of its suitability for bats.
- 2.4.3. The survey work carried out by Ecology Solutions was undertaken using (where necessary) a ladder, torch, endoscope, mirrors and binoculars. Internally, evidence of the presence of bats was also sought.
- 2.4.4. The probability of a building being used by bats as a summer roost site increases if it:
- is largely undisturbed;
 - dates from pre-20th Century;
 - has a large roof void with unobstructed flying spaces;
 - has access points for bats (though not too draughty);
 - has wooden cladding or hanging tiles; and / or
 - is in a rural setting and close to woodland or water.
- 2.4.5. Conversely, the probability decreases if a building is of a modern or pre-fabricated design / construction, is in an urban setting, has small or cluttered roof voids, has few gaps at the eaves or is a heavily disturbed premises.
- 2.4.6. The main requirement for a winter / hibernation roost site is that it maintains a stable (cool) temperature and humidity. Sites commonly utilised by bats as winter roosts include cavities / holes in trees, underground sites and parts of buildings. Whilst different species may show a preference for one of these types of roost site, none are solely dependent on a single type.
- 2.4.7. Internally, evidence of the presence of bats was searched for. A detailed search was made for bat droppings on the floors of the buildings or the roof voids (droppings can indicate present or past use by bats and extent of use). Other signs searched for included dead animals, staining on beams or around crevices and areas that were conspicuously cobweb-free, or the animals themselves.
- 2.4.8. All trees within or immediately adjacent to the site were assessed in June 2021 for their potential to support roosting bats. Features typically favoured by bats were searched for, including:
- Obvious holes, e.g. rot holes and old Woodpecker holes;
 - Dark staining on the tree, below the hole;
 - Tiny scratch marks around a hole from bat claws;

- Cavities, splits and or loose bark from broken or fallen branches, lightning strikes etc.; and
 - Very dense covering of mature Ivy over trunk.
- 2.4.9. In addition, the site was appraised for its suitability for both foraging and commuting bats during the initial survey.
- 2.4.10. On account of building B2 having low suitability for roosting bats, a single dusk emergence survey was undertaken on 31 August 2021.
- 2.4.11. This survey method aimed to identify any roosting bats leaving the buildings in the evening. The survey was undertaken from a quarter of an hour before sunset and ended two hours after sunset. The echolocation calls of bats (where present) were recorded using an iPad paired with an Echo Meter Touch 2 PRO bat detector.
- 2.4.12. Additionally, an SM4BAT detector was deployed along the northern treeline on 31 August 2021 for nine consecutive nights, in order to assess the use of the treeline by commuting and foraging bats.
- 2.4.13. Following completion of the surveys, the recorded data was analysed using the Kaleidoscope software.
- 2.4.14. Field surveys were undertaken with regard to best practice guidelines issued by Natural England (2004⁴), the Joint Nature Conservation Committee (2004⁵) and the Bat Conservation Trust (2016⁶).

Badgers

- 2.4.15. The surveys comprised two main elements: firstly, searching thoroughly for evidence of Badger setts. If any setts were encountered each sett entrance was noted and plotted, even if the entrance appeared disused. The following information was recorded:
- i) The number and location of well used or very active entrances; these are clear of any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.
 - ii) The 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.
 - iii) The 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 together with the remains of the spoil heap.

⁴ Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

⁵ Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2004). *Bat Workers' Manual*. 3rd edition. Joint Nature Conservation Committee, Peterborough.

⁶ Collins, J. (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 3rd Edition. The Bat Conservation Trust, London.

- 2.4.16. Secondly, evidence of Badger activity such as well-worn paths, run-throughs, snagged hair, footprints, latrines and foraging signs was recorded so as to build up a picture of the use of the site by Badgers.

3. ECOLOGICAL FEATURES

3.1. A habitat survey was undertaken within the site by Ecology Solutions in June 2021.

3.2. The following main habitat / vegetation types were identified within the site during the surveys undertaken:

- Buildings;
- Amenity Grassland;
- Trees;
- Amenity Planting;
- Bare Ground; and
- Hardstanding.

3.3. The locations of these habitats are shown on Plan ECO2 and described individually below.

3.4. Buildings

3.4.1. Two buildings are present on site, referred to as buildings B1 and B2 on Plan ECO2.

3.4.2. Building B1 is a single storey wooden framed storage shed with a corrugated metal roof. The walls have been clad with a mix of corrugated metal and wood strips. There are no internal loft voids or inner skin to the walls or roof (see Photograph 1).

3.4.3. Building B2 is a single storey clubhouse and gym constructed primarily of brick and breezeblock and clad with coated plywood panels and weatherboarding. The building supports both pitched and flat roof sections covered in roofing felt (see Photograph 2). Internally the building is bright with numerous large windows. There are no internal loft voids, but the roof has an internal skin made of wooden strips (see Photograph 3).

3.5. Amenity Grassland

3.5.1. A small area of amenity grassland is associated with the clubhouse in the south of the site, with further strips present between the tennis courts. The grassland is not well managed, though a short sward is typically present throughout (see Photograph 4).

3.5.2. The grassland is dominated by Perennial Rye Grass *Lolium perenne*, with False Oat-grass *Arrhenatherum elatius*, Yorkshire Fog *Holcus lanatus*, Rough Meadow-grass *Poa trivialis*, Cocksfoot *Dactylis glomerata*, Tufted Hair-Grass *Deschampsia cespitosa*, Wall Barley *Hordeum murinum*, Crested Dog's-tail *Cynosurus cristatus*, and Red Fescue *Festuca rubra* also present.

3.5.3. Several herbaceous species are present throughout the grassland and include Wood Avens *Geum urbanum*, Bramble *Rubus fruticosus*, Ivy *Hedera helix*, Dandelion *Taraxacum officinale*, Garden Geranium *Geranium* sp., Broad-leaved Dock *Rumex obtusifolius*, Common Nettle *Urtica dioica*, Daisy *Bellis perennis*, White Clover *Trifolium repens*, Lesser

Burdock *Arctium minus*, Cleavers *Galium aparine*, Creeping Buttercup *Ranunculus repens*, Greater Plantain *Plantago major*, Ribwort Plantain *Plantago lanceolata*, Hedge Bindweed *Calystegia sepium*, Cut-leaved Cranesbill *Geranium dissectum*, Nipplewort *Lapsana communis*, Redshank *Persicaria maculosa*, Meadow Foxtail *Alopecurus pratensis*, Colts-foot *Tussilago farfara*, Black Horehound *Ballota nigra*, Green Alkanet *Pentaglottis sempervirens*, Selfheal *Prunella vulgaris*, and Common Field Speedwell *Veronica persica*.

3.6. Trees

- 3.6.1. A treeline runs along the northern perimeter of the site consisting of mature trees and sparse scrub understorey (see Photograph 5). Tree species present include English Oak *Quercus robur*, Turkey Oak *Quercus cerris*, Horse Chestnut *Aesculus hippocastanum*, Sycamore *Acer pseudoplatanus*, Ash *Fraxinus excelsior*, London Plane *Platanus x hispanica*, Holly *Ilex aquifolium*, and Yew *Taxus baccata*. Small pockets of Bramble, Ivy, Elder *Sambucus nigra*, and Hawthorn *Crataegus monogyna* are present in the scrub layer.
- 3.6.2. Several semi-mature Ash, Leyland Cypress *Cupressus x leylandii*, and Sycamore trees are also present beyond the existing fence line on the eastern boundary of the courts, but will be incorporated in the new site with the extension of the courts in this direction. An established scrub and ground flora consisting Ivy, Bramble, Hedge Bindweed, Smooth Sow-thistle *Sonchus oleraceus*, and Garlic Mustard *Alliaria petiolate* is present.
- 3.6.3. Additionally, a Leyland Cypress tree line is present to the west of the clubhouse with scattered mature Oak, Horse Chestnut, Yew, and Sycamore present within the clubhouse garden and at the southern boundary of the site.

3.7. Amenity Planting

- 3.7.1. A small area of amenity planting is present in the south of the site, adjacent to the clubhouse. Species present include Elephants Ear *Bergenia* sp, Yellow Iris *Iris pseudacorus*, Tutsan *Hypericum androsaemum*, Giant Rhubarb *Gunnera tinctoria*, Green Alkanet, Hedge Bindweed, Garden Geranium, Bramble, Lady's Mantle *Alchemilla mollis*, Wood Avens, False Oat-grass, Bethlehem Lungwort *Pulmonaria saccharata*, Great Willowherb *Epilobium hirsutum*, Spotted Laurel *Aucuba japonica*, Honeysuckle *Lonicera periclymenum*, Bluebell *Hyacinthoides non-scripta*, Creeping Buttercup, Bamboo *Bambuseae* sp, Yarrow *Achillea millefolium*, Creeping Cinquefoil *Potentilla reptans*, and Yellow Loosestrife *Lysimachia vulgaris*.
- 3.7.2. A Privet *Ligustrum* sp. hedgerow is present to the south of the clubhouse, adjacent to Shepherds Lane.

3.8. Bare Ground

- 3.8.1. A thin strip of bare ground is present on the eastern boundary of the site, beyond the existing fence and treeline.

3.9. Hardstanding

- 3.9.1. Three shale tennis courts dominate the site (see Photograph 6). Concrete access paths are also present around the clubhouse and shed. Some signs of early colonising species were recorded and include Annual Meadow-grass *Poa annua*, White Clover, Nipplewort, and Redshank.

3.10. Non-native Invasive Species

- 3.10.1. Giant Rhubarb and Green Alkanet have been recorded in areas of amenity planting and amenity grassland within the site.

3.11. Background Records

- 3.11.1. 17 records of Bluebell were returned from the data search. Bluebell is protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). The closest and most recent record relates to a location approximately 1.4km northwest of the site boundary dating from 2016.

4. WILDLIFE USE OF THE SITE

- 4.1. General observations were made during the surveys of any faunal use of the site with specific attention paid to the potential presence of protected species.

4.2. Bats

Internal and External Inspection

- 4.2.1. No evidence of roosting bats was recorded during the internal and external survey work completed in June 2021. Building B1 offers negligible opportunities for roosting bats, whilst building B2 offers some limited opportunities via a small gap presented by a broken soffit board.

Tree Assessment

- 4.2.2. All trees within and immediately adjacent to the site were subject to a ground-based assessment to determine bat roosting potential, with limited opportunities for this species group observed. The treelines do however provide opportunities for both foraging and commuting bats and are well connected to other areas of suitable habitat in the wider landscape.

Emergence Survey

- 4.2.3. Owing to the low potential that building B2 presents for roosting bats, a single dusk emergence survey was completed on 31 August 2021. The survey was undertaken in favourable weather conditions as shown in Table 4.1 below.

Date	31.08.21
Survey Type	Emergence
Sunset / Sunrise	19:49
Survey Start	19:34
Survey End	21:49
Cloud Cover (%)	60%
Temperature (°C)	16 - 14
Weather & Wind	Light breeze

Table 4.1. Emergence survey conditions and timings.

- 4.2.4. The results of the survey are detailed below and illustrated on Plan ECO3.

Emergence Survey 31.08.21

- 4.2.5. No bats were seen emerging from building B2. All registrations recorded were attributed to Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Nathusius' Pipistrelle *Pipistrellus nathusii* and Leisler's Bat *Nyctalus leisleri*. A single Soprano Pipistrelle was recorded flying over Building B2 from the southeast (see Plan ECO3). Two bats (species unknown) were observed flying over Building B2 from the southwest, but were not recorded on the bat detector (see Plan ECO3). Pipistrelle social calls were also recorded within the vicinity of the building and surrounding scrub, with the earliest registration four minutes after sunset.

Location	Species	Number of Registrations	First Registration after Sunset
Not Seen	Ppip	116	9 mins
Flying over Building B2 from southeast	Ppyg	25	21 mins
Not Seen	Pnat	2	1 h 13 mins
Not Seen	NI	1	1 h 26 mins

Table 4.2. Emergence survey results 31.08.21⁷.

Remote Survey

- 4.2.6. A static SM4BAT detector was placed along the northern treeline on 31 August 2021 and left for nine consecutive nights (see Plan ECO3) to determine the use of the treeline by commuting and foraging bats. The results of the detector deployment on 31 August 2021 are detailed in Table 4.3 below.
- 4.2.7. The detector recorded high levels of foraging activity with most recordings being attributed to Common Pipistrelle and Soprano Pipistrelle. Early and late registrations for Common Pipistrelle, Soprano Pipistrelle and Noctule *Nyctalus noctula* were recorded, suggesting roosts for these species are present in the vicinity of the site.

Survey Nights	Location	Species	No. Registrations	First Registration after sunset	Last Registration before sunrise
31.08.21 – 08.09.21 (9 nights)	Location 1 (E19)	Ppip	2319	31 mins	22 mins
		Ppyg	1356	9 mins	8 mins
		Nn	48	6 mins	17 mins
		NI	1		4 h 8 mins
		Myo	5	1 h 13 mins	3 h 13 mins
	Total	5	3735		

Table 4.3. Static SM4BAT detector results 31.08.21 – 08.09.21.

Background Records

- 4.2.8. The desk study returned 998 records from seven bat species including Common Pipistrelle, Nathusius' Pipistrelle, Noctule, Leisler's Bat, Natterer's Bat *Myotis nattereri*, Brandt's Bat *Myotis brandtii*, and Brown Long-eared Bat *Plecotus auritus*. Several records of unidentified bat were also returned from the desk study.
- 4.2.9. A total of 360 records of Common Pipistrelle, 69 records of Nathusius' Pipistrelle and 267 records of Noctule were returned dating from the last 10 years. The closest and most recent records relating to these species were recorded at a location approximately 0.2km southwest of the site boundary dating from 2018.

⁷ In all cases the following abbreviations are used: Nn: Noctule *Nyctalus noctula*; NI: Leisler's Bat *Nyctalus leisleri*; Pnat: Nathusius' Pipistrelle *Pipistrellus nathusii*; Ppip: Common Pipistrelle *Pipistrellus pipistrellus*; Ppyg: Soprano Pipistrelle *Pipistrellus pygmaeus*; and Myo: *Myotis* sp..

4.2.10. A total of 60 records of Leisler's Bat, 16 records of Brown Long-eared and 225 records of Natterer's Bat were also returned. The closest and most recent records relating to these species were recorded at a location approximately 0.5km southwest of the site boundary dating from 2018.

4.2.11. A single record of Brandt's Bat was returned relating to a location approximately 1.2km north of the site boundary dating from 2016.

4.3. Badgers

4.3.1. No evidence of Badger *Meles meles* was recorded during Ecology Solutions' survey work in June 2021. The site provides very limited opportunities for this species, confined to boundary vegetation.

Background Records

4.3.2. No records of Badger were returned from the data search within the past 10 years.

4.4. Hedgehogs

4.4.1. No evidence of Hedgehog *Erinaceus europaeus* was recorded on site. There are very limited opportunities for foraging, dispersing and hibernating Hedgehog, confined to the boundary vegetation and amenity area associated with the clubhouse, which includes a dead leaf bin.

Background Records

4.4.2. A total of 97 records of Hedgehog were returned from the desk study. The closest and most recent record relates to a location approximately 0.5km southwest of the site boundary dating from 2020.

4.5. Other Mammals

4.5.1. A Grey Squirrel *Sciurus carolinensis* drey was recorded in the northern treeline. It is considered likely that other small common mammal species could make use of vegetation within the site. None of the small mammals are likely to be notable or species of conservation concern.

Background Records

4.5.2. No records of notable mammals were returned within the search area by the desk study.

4.6. Birds

4.6.1. The trees provide suitable nesting and foraging habitat for birds, with the amenity planting and grassland providing additional opportunities for foraging.

4.6.2. Robin *Erithacus rubecula*, Wood Pigeon *Columba palumbus*, and Magpie *Pica pica* were all recorded on site, while Herring Gull *Larus argentatus* and Swift *Apus apus* were recorded flying over the site. Several old bird nests were also recorded under the eaves of the clubhouse.

Background Records

- 4.6.3. Several notable bird records were returned by the data search including 391 records from 23 species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Protected species include Kingfisher *Alcedo atthis*, Little Ringed Plover *Charadrius dubius*, Bewick's Swan *Cygnus columbianus*, Merlin *Falco columbarius*, Brambling *Fringilla montifringilla*, Little Gull *Hydrocoloeus minutus*, Mediterranean Gull *Larus melanocephalus*, Wryneck *Jynx torquilla*, Red-backed Shrike *Lanius collurio*, Black-tailed Godwit *Limosa limosa*, Red Crossbill *Loxia curvirostra*, Red Kite *Milvus milvus*, Whimbrel *Numenius phaeopus*, Osprey *Pandion haliaetus*, Honey Buzzard *Pernis apivorus*, Black Redstart *Phoenicurus ochruros*, Slavonian Grebe *Podiceps auratus*, Firecrest *Regulus ignicapillus*, Garganey *Anas querquedula*, Greenshank *Tringa nebularia*, Redwing *Turdus iliacus*, and Fieldfare *Turdus pilaris*. The closest and most recent of these records relates to Redwing, Fieldfare, and Whimbrel from a location approximately 1.4km northeast of the site boundary dating from 2017.
- 4.6.4. A total of 322 records from 15 bird species listed under Schedule 41 of the NERC Act 2006 (as amended) were returned from the desk study. Protected species include Lesser Redpoll *Carduelis cabaret*, Skylark *Alauda arvensis*, Tree Pipit *Anthus trivialis*, Cuckoo *Cuculus canorus*, Bewick's Swan, Yellowhammer *Emberiza citronella*, Reed Bunting *Emberiza schoeniclus*, Grasshopper Warbler *Locustrella naevia*, Spotted Flycatcher *Muscicapa striata*, Curlew *Numenius arquata*, House Sparrow *Passer domesticus*, Tree Sparrow *Passer montanus*, Wood Warbler *Phylloscopus sibilatrix*, Ring Ouzel *Turdus torquatus*, and Lapwing *Vanellus vanellus*. The closest record relates to Spotted Flycatcher from a location approximately 0.6km south of the site boundary dating from 2012. The most recent records relate to Skylark from a location approximately 1.4km northeast of the site boundary dating from 2018.
- 4.6.5. Additionally, 233 records from 20 bird species were returned from the desk study listed under Annex 1 of the Birds Directive. Notable species include Kingfisher, Short-eared Owl *Asio flammeus*, Black Tern *Chlidonias niger*, Bewick's Swan, Little Egret *Egretta garzetta*, Ortolan Bunting *Emberiza hortulana*, Merlin, Little Gull, Mediterranean Gull, Red-backed Shrike, Bar-tailed Godwit *Limosa lapponica*, Smew *Mergus albellus*, Red Kite, Osprey *Pandion haliaetus*, Honey Buzzard, Golden Plover *Pluvialis apricaria*, Slavonian Grebe, Common Tern *Sterna hirundo*, Arctic Tern *Sterna paradisaea*, and Sandwich Tern *Sterna sandvicensis*. The closest record relates to Short-eared Owl from a location approximately 0.6km southeast of the site boundary dating from 2015. The most recent record relates to Red Kite from a location approximately 1.4km northeast of the site boundary dating from 2017.

4.7. Reptiles

- 4.7.1. No evidence of reptile activity was recorded on site during Ecology Solutions' survey work in June 2021. There are very limited opportunities for reptiles on site and given the lack of recent records they are not expected to be utilising the site.

Background Records

- 4.7.2. No records of reptiles were returned within the data search area by the desk study.

4.8. Amphibians

- 4.8.1. No amphibians were recorded on site during Ecology Solutions' survey work in April 2021. There are no waterbodies on or immediately adjacent to the site, with the closest pond located in Queen's Wood approximately 400m from the site boundary. There are limited opportunities present on site, confined to the boundary vegetation and amenity area associated with the clubhouse. Given the lack of records, proximity of local waterbodies and limited opportunities presented by the site, Great Crested Newt *Triturus cristatus* are not expected to be present on site.

Background Records

- 4.8.2. No records for Great Crested Newt were returned by the data search.
- 4.8.3. Ten records of Common Toad *Bufo bufo* were returned from the data search. The closest and most recent record relates to a location approximately 1.4km southwest of the site boundary dating from 2011.
- 4.8.4. A total of 72 records of Common Frog *Rana temporaria* were returned. The closest and most recent record relates to a location approximately 1.4km northwest of the site boundary dating from 2016.

4.9. Invertebrates

- 4.9.1. The site likely supports an assemblage of common invertebrate species in areas of amenity planting and trees. There is no evidence to suggest that any rare or notable species would be present.

Background Records

- 4.9.2. Six records of Jersey Tiger *Euplagia quadripunctaria* and 32 records of Stag Beetle *Lucanus cervus* were returned by the data search. Both species are listed under Annex II of the Habitats Directive, with Stag Beetle also listed under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended).
- 4.9.3. The closest and most recent record of Stag Beetle relates to a location approximately 1.2km north of the site boundary dating from 2019. The closest record of Jersey Tiger relates to a location approximately 0.8km southwest of the site boundary dating from 2012. The most recent record relates to a location approximately 1.3km east of the site boundary dating from 2019.
- 4.9.4. The desk study returned 303 records from 24 invertebrate species listed under schedule 41 of the NERC Act 2006 (as amended) and as priority species by the UK BAP including Small Heath *Coenonympha pamphilus*, White-letter Hairstreak *Satyrrium w-album*, Grey Dagger *Acronicta psi*, Knotgrass *Polygonum aviculare*, Mouse Moth *Amphipyra tragopoginis*,

Mottled Rustic *Caradrina Morpheus*, Small Square-spot *Diarsia rubi*, Small Phoenix *Ecliptopera silaceata*, Spinach *Spinacia oleracea*, Garden Dart *Euxoa nigricans*, White-line Dart *Euxoa tritici*, Small Emerald *Hemistola chrysoprasaria*, Rustic *Hoplodrina blanda*, Shoulder-striped Wainscot *Leucania comma*, Rosy Minor *Litologia literosa*, Brindled Beauty *Lycia hirtaria*, Lunar Yellow Underwing *Noctua orbona*, Powdered Quaker *Orthosia gracilis*, Mullein Wave *Scopula marginepunctata*, White Ermine *Spilosoma lubricipeda*, Buff Ermine *Spilosoma lutea*, Blood-vein *Timandra comae*, Cinnabar *Tyria jacobaeae*, and Oak Hook-tip *Watsonalla binaria*. The closest and most record relates to Small Heath from a location approximately 1.3km northeast of the site boundary dating from 2019.

5. ECOLOGICAL EVALUATION

5.1. The Principles of Ecological Evaluation

- 5.1.1. The guidelines for ecological evaluation produced by CIEEM propose an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.
- 5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe⁸. These are broadly used across the United Kingdom to rank sites so priorities for nature conservation can be attained. For example, current SSSI designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.
- 5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.
- 5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.
- 5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with a comparatively poor species diversity, common in the south of England, may be of importance at its northern limits, say in the border country.
- 5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP). The London BAP has been considered as part of this assessment and is referenced below.
- 5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the international level.
- 5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

5.2. Habitat Evaluation

Designated Sites

- 5.2.1. **Statutory Sites.** The site is not part of or adjacent to a statutory nature conservation designation.
- 5.2.2. The closest such site is Queen's Wood Local Nature Reserve (LNR) located approximately 0.2km west of the site boundary (see plan ECO1). The LNR is designated for its ancient Oak and Hornbeam woodland.

⁸ Ratcliffe, D A (1977). *A Nature Conservation Review: The Selection of Biological Sites of National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

- 5.2.3. Other designations that fall within the 5km search area include Alexandra Palace and Park LNR approximately 0.5km north; Parkland Walk LNR approximately 0.6km northwest; Coldfall Wood LNR approximately 1.8km northwest; Railway Fields LNR approximately 2.4km east; Hampstead Heath Woods Site of Special Scientific Interest (SSSI) approximately 2.5km southwest; Coppetts Wood and Glebeland LNR approximately 3km northwest; Gillespie Park LNR approximately 3km southeast; Big Wood and Little Wood LNR approximately 3.5km west; Abney Park Cemetery LNR approximately 4.2km southeast; Belsize Wood LNR approximately 4.5km southwest; Adelaide LNR approximately 4.8km southwest; and Barnsbury Wood LNR located approximately 4.9km southeast of the site boundary as shown on Plan ECO1.
- 5.2.4. The site falls into an Impact Risk Zone (IRZ) associated with Hampstead Heath Woods SSSI such that Natural England consider that development within this zone has the potential to impact the SSSI in some way. However, only a restricted range of uses (namely aviation, oil and gas exploration and extraction, air pollutant uses such as large-scale manure storage, large-scale combustion use such as incineration, and water discharge) would trigger the need for the local planning authority to consult with Natural England in regard to potential impacts on the SSSI. Given the nature of the proposals, it is not considered likely that any direct or indirect effects on the interest features of the SSSI would occur.
- 5.2.5. Given the scale and nature of the proposals and the intervening land use between the site and the nearby statutory designations, it is considered unlikely that the development of the site will have any direct, indirect or in-combination adverse effect upon these designated sites, be it during construction or operational phase.
- 5.2.6. **Non-statutory Sites.** The site falls within Crouch End Playing Fields SBI1. Several other sites of importance for nature conservation (SINCs) lie within the vicinity of the site (see Plan ECO1).
- 5.2.7. Given the nature and scale of the development, namely the modification of the existing tennis courts, it is not considered likely to have any adverse effects upon Crouch End Playing Fields SBI1 or any other local SINCs within the vicinity of the site.

Habitats

- 5.2.8. The majority of the habitats present on site are of limited intrinsic nature conservation value, including the buildings, hardstanding, bare ground and amenity planting. The trees are considered to be of some ecological interest for the foraging and nest-building opportunities they offer faunal species, as opposed to any significant intrinsic ecological value.
- 5.2.9. None of the above habitats pose an overriding ecological constraint in themselves that would prevent the development proceeding.

Invasive Non-native Species

- 5.2.10. Giant Rhubarb and Green Alkanet have been recorded in areas of amenity planting and grassland within the site.

- 5.2.11. Giant Rhubarb was recorded within an area of amenity planting to the west of the clubhouse. Giant Rhubarb is listed under Schedule 9 Part II of the Wildlife & Countryside Act 1981, making it an offence to cause these species to grow in the wild. Clearance works taking place in this area will either remove specimens carefully and dispose of these at an approved facility, or (if specimens are to be retained) will be mindful not to disturb these specimens or the ground around them.
- 5.2.12. Green Alkanet, while not listed on the Schedule 9 Part II of the Wildlife & Countryside Act 1981 (as amended), is categorised as an invasive species in London by the London Invasive Species Initiative (LISI). The London Invasive Species Initiative is a sub-group of the London Biodiversity Partnership which encourages better co-ordination and partnership working to prevent, reduce and eliminate the impacts caused by invasive non-native species across the city.
- 5.2.13. Green Alkanet is classed as LISI 6, which in London are:
- Species that were not currently considered to pose a threat or have the potential to cause problems in London.**
- 5.2.14. It is noted that the control of species listed under the LISI is not a legal requirement, but nonetheless where works are proposed within or close to the boundary vegetation all reasonable measures should be taken to prevent the spread of these plant species. Where vegetation is to be removed the material should be disposed of at an approved facility.
- 5.2.15. To prevent the spread of invasive non-native species, any other such species identified within or immediately adjacent to the site during the demolition and construction works will be treated with caution and will be removed or avoided (with suitable barriers installed where necessary) as is deemed most appropriate.

5.3. Faunal Evaluation

Bats

- 5.3.1. **Legislation.** All bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations"). These include provisions making it an offence:
- Deliberately to kill, injure or take (capture) bats;
 - Deliberately to disturb bats in such a way as to:-
 - (i) be likely to impair their ability to survive, to breed or rear or nurture their young; or to hibernate or migrate; or
 - (ii) affect significantly the local distribution or abundance of the species to which they belong;
 - To damage or destroy any breeding or resting place used by bats;
 - Intentionally or recklessly to obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).
- 5.3.2. While the legislation is deemed to apply when bats are not in residence, Natural England guidance suggests that certain activities such as re-

roofing can be completed outside sensitive periods when bats are not in residence provided these do not damage or destroy the roost.

- 5.3.3. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.
- 5.3.4. The offence of damaging (making worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.
- 5.3.5. European Protected Species licences are available from Natural England in certain circumstances, and permit activities that would otherwise be considered an offence.
- 5.3.6. In accordance with the Habitats Regulations Natural England must apply the three derogation tests as part of the process of considering a licence application. These tests are that:
1. the activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
 2. there must be no satisfactory alternative; and
 3. the favourable conservation status of the species concerned must be maintained.
- 5.3.7. Licences can usually only be granted if the development is in receipt of full planning permission.
- 5.3.8. **Site Usage.** No evidence of roosting bats was recorded during the internal and external survey work completed in June 2021. Building B1 offers negligible opportunities for roosting bats, whilst building B2 offers some limited opportunities via a small gap presented by a broken soffit board.
- 5.3.9. All trees within and immediately adjacent to the site were subject to a ground-based assessment to determine bat roosting potential, with limited opportunities for this species group observed. The treelines do however provide opportunities for both foraging and commuting bats and are well connected to other areas of suitable habitat in the wider landscape.
- 5.3.10. The emergence survey undertaken in August 2021 recorded no emergence from building B2. The results of the emergence survey and remote detector show that Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, *Myotis* sp., Noctule and Leisler's Bat are using the boundary habitats for foraging and commuting.
- 5.3.11. Additionally, early registrations of Common Pipistrelle, Soprano Pipistrelle and Noctule Bat would indicate that roosts for these species are within close proximity to the site.
- 5.3.12. **Mitigation and Enhancements.** Owing to an absence of roosting bats within building B2, a Natural England European Protected Species (EPS) licence will not be required to facilitate its demolition. In the unlikely event that any bat is discovered, work will cease, advice sought and a Natural England licence may be required.

- 5.3.13. Careful consideration will be required for lighting extent and design, with particular regard given to boundary features such as the northern treeline. Lighting should be directional and should be designed specifically to avoid upward spill, using cowls as appropriate. These measures would also benefit non-diurnal bird species.
- 5.3.14. To offer further enhancements for the site, bat boxes on retained trees or integrated into new buildings could be provided as part of the development.

Hedgehogs

- 5.3.15. **Legislation.** Hedgehog is a species of principal importance for the conservation of biodiversity under Section 41 (England) of the NERC Act 2006.
- 5.3.16. The NERC Act 2006 requires the Secretary of State to:
- ... take such steps as appear... to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or... promote the taking by others of such steps.**
- 5.3.17. **Site Usage.** No evidence of Hedgehogs was recorded during the survey work undertaken. The site contains limited suitable habitat for Hedgehog foraging dispersal and hibernation, confined to the boundary vegetation and amenity area associated with the clubhouse, including a dead leaf bin.
- 5.3.18. **Mitigation and Enhancements.** In accordance with best practice and a precautionary approach, any clearance of the dead leaf bin or other Hedgehog shelter features should be subject to inspections to ensure that Hedgehogs are absent. In the unlikely event that an individual is encountered it should be carefully placed in an appropriate lidded box and immediately removed to an area of suitable habitat at the margins of the site away from working areas. Any vegetation clearance should be carried out in a systematic and controlled manner to allow Hedgehogs to disperse.

Birds

- 5.3.19. **Legislation.** Section 1 of the Wildlife & Countryside Act 1981 is concerned with the protection of wild birds, whilst Schedule 1 lists species that are protected by special penalties. All species of birds receive general protection whilst nesting.
- 5.3.20. **Site Usage.** A number of common bird species were identified on site during the survey work undertaken. The site offers some opportunities for nesting and foraging birds in the form of trees, amenity planting and buildings.
- 5.3.21. Several old nests were recorded under the eaves of building B2.
- 5.3.22. **Mitigation and Enhancements.** In order to avoid impacts on nesting birds, and to avoid a potential offence under the Wildlife & Countryside Act 1981, all necessary clearance of vegetation and the demolition of suitable buildings would be undertaken outside of the nesting season (typically

March to July inclusive) wherever possible. Where this cannot be achieved a check survey for nesting birds should be undertaken by an ecologist immediately prior to clearance, with any confirmed nests left in situ, with a five-metre exclusion zone around it until the young have fledged.

- 5.3.23. Consideration should be given to incorporating native fruit-bearing plant species known to benefit birds into any proposed landscaping associated with the clubhouse. This would compensate for any losses of foraging habitat and provide new foraging opportunities for bird species post-development.
- 5.3.24. As a further enhancement, bird boxes could be installed on the new clubhouse or retained trees to offer additional nesting opportunities for a range of species.

Invertebrates

- 5.3.25. **Site Usage.** Given the habitats present, it is likely a varied assemblage of common invertebrate species utilises the site. There is no evidence to suggest that any rare or notable species would be present.
- 5.3.26. **Mitigation and Enhancements.** It is recommended that any new planting associated with the clubhouse be composed of native species rather than non-native species, as native species are known to support a greater assemblage of invertebrates.

6. PLANNING POLICY CONTEXT

- 6.1. The site lies in the London Borough of Haringey. The planning policy framework that relates to nature conservation at the site is issued at three main administrative levels: nationally through the National Planning Policy Framework (NPPF), regionally through the London Plan and locally through the local planning policies of Haringey Borough Council.
- 6.2. Any proposed development will be judged in relation to the policies contained within these documents.

6.3. National Policy

National Planning Policy Framework (July 2021)

- 6.3.1. Guidance on national policy for biodiversity and geological conservation is provided by the National Planning Policy Framework (NPPF), published in March 2012, revised on 24 July 2018, 19 February 2019 and again on 20 July 2021. It is noted that the NPPF continues to refer to further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system provided by Circular 06/05 (DEFRA / ODPM, 2005) accompanying the now-defunct Planning Policy Statement 9 (PPS9).
- 6.3.2. The key element of the NPPF is that there should be *“a presumption in favour of sustainable development”* (paragraphs 10 to 11). It is important to note that this presumption *“does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site”* (paragraph 182). ‘Habitats site’ has the same meaning as the term ‘European site’ as used in the Habitats Regulations 2017.
- 6.3.3. Hence, the direction of Government policy is clear. That is, the presumption in favour of sustainable development is to apply in circumstances where there is potential for an effect on a European site, if it has been shown that there will be no adverse effect on that designated site as a result of the development in prospect.
- 6.3.4. A number of policies in the NPPF are comparable to those in PPS9, including reference to minimisation of impacts to biodiversity and provision of net gains to biodiversity where possible (paragraph 174).
- 6.3.5. The NPPF also considers the strategic approach that Local Authorities should adopt with regard to the protection, maintenance and enhancement of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.
- 6.3.6. Paragraphs 179 to 181 of the NPPF comprise a number of principles that Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments; provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for; applying the protection given to European sites to potential Special Protected Areas (SPA), possible Special Areas of

Conservation (SAC), listed or proposed Ramsar sites and sites identified (or required) as compensatory measures for adverse effects on European sites; and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats – unless there are 'wholly exceptional reasons' (for instance, infrastructure projects where the public benefit would clearly outweigh the loss or deterioration of habitat) and a suitable compensation strategy exists.

- 6.3.7. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.

6.4. Regional Planning Policy

The London Plan (March 2021)

- 6.4.1. The new London Plan was published in March 2021. This document sets out a framework for how London will develop over the next 20-25 years.
- 6.4.2. The policy areas within the London Plan are formed by six Good Growth objectives to ensure that London's growth is Good Growth. These policies are: GG1 Building strong and inclusive communities; GG2 Making the best use of land; GG3 Creating a healthy city; GG4 Delivering the homes Londoners need; GG5 Growing a good economy; and GG6 Increasing efficiency and resilience.
- 6.4.3. Of these objectives, GG2 is concerned with protecting and enhancing London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces. It also seeks to promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible.
- 6.4.4. Five new policies have been introduced specifically relating to green infrastructure and the natural environment.
- 6.4.5. *Policy G1 Green Infrastructure* states that green features in the built environment, such as street trees and green roofs, should be planned, designed and managed in an integrated way to achieve multiple benefits.
- 6.4.6. *Policy G2 London's Green Belt* states that the Green Belt should be protected from inappropriate development.
- 6.4.7. *Policy G5 Urban Greening* requires major developments to incorporate measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.
- 6.4.8. *Policy G6 Biodiversity and Access to Nature* requires the protection of Sites of Importance for Nature Conservation (SINCs). Boroughs should also support the protection and conservation of priority species and habitats that sit outside of the SINC network and promote opportunities for enhancing them using Biodiversity Action Plans.
- 6.4.9. *Policy G7 Trees and Woodlands* is concerned with the protection of these features, including 'veteran' trees and ancient woodland not already in a

protected site and identifying opportunities for tree planting in strategic locations. It encourages the retention of existing trees, wherever possible, and the planting of new trees as part of development.

6.5. Local Policy

Haringey Local Plan 2013

- 6.5.1. The Royal Borough of Haringey Local Development Framework consists of The Local Plan, together with supplementary and procedural documents including the Highgate Neighbourhood Plan.

Highgate Neighbourhood Plan (July 2017)

- 6.5.2. The Highgate Neighbourhood Plan was adopted in July 2017. The following policies are of particular relevance to nature conservation issues.
- 6.5.3. On the policies map the site is within the Shepherd's Cot, which is designated as a Grade 1 SINCE.
- 6.5.4. **Policy OS1 – Highgate's Major Open Spaces.** This policy details the actions which will be taken to protect neighbouring open spaces in relation to wildlife and nature conservation.
- 6.5.5. **Policy OS2 – Protection of Trees and Mature Vegetation.** This policy states that developments will be expected to preserve or enhance any TPO trees and mature vegetation present resulting in no net loss of trees.
- 6.5.6. **Policy OS3 – Local Green Space.** This policy summarises sites of local green space designation which must be protected from the impact of development.
- 6.5.7. **Policy OS4 – Biodiversity and Highgate's Green Grid.** This policy seeks developments to support the Highgate Green Grid. Any new development would be encouraged to promote wildlife of local provenance.

6.6. Discussion

- 6.6.1. The development proposals for the site should be judged against the policies summarised above. It is considered that following the recommendations in this report, the proposed development has the capacity to accord fully with national and local policy and avoid any significant impacts on nearby designated sites for nature conservation.

7. SUMMARY AND CONCLUSIONS

- 7.1. Ecology Solutions was commissioned in June 2021 by Highgate Tennis Club to undertake an ecological assessment of the Brookside Site, Highgate Tennis Club at Crouch End, Haringey, London.
- 7.2. The proposals for the site include the conversion of three existing shale courts into a set of Lawn Tennis Association (LTA) sized artificial clay courts located primarily on the footprint of the existing three shale tennis courts. The existing clubhouse is also proposed for demolition and will be replaced with a new pavilion/clubhouse alongside the installation of new floodlights.
- 7.3. The site was subject to an extended Phase 1 habitat survey in June 2021.
- 7.4. In order to compile background information on the site, Ecology Solutions contacted GIGL.
- 7.5. **Statutory Sites.** The site is not part of or adjacent to a statutory nature conservation designation. The closest such site is Queen's Wood LNR located approximately 0.2km west of the site boundary.
- 7.6. Other designations that fall within the 5km search area include Alexandra Palace and Park LNR approximately 0.5km north; Parkland Walk LNR approximately 0.6km northwest; Coldfall Wood LNR approximately 1.8km northwest; Railway Fields LNR approximately 2.4km east; Hampstead Heath Woods SSSI approximately 2.5km southwest; Coppetts Wood and Glebeland LNR approximately 3km northwest; Gillespie Park LNR approximately 3km southeast; Big Wood and Little Wood LNR approximately 3.5km west; Abney Park Cemetery LNR approximately 4.2km southeast; Belsize Wood LNR approximately 4.5km southwest; Adelaide LNR approximately 4.8km southwest; and Barnsbury Wood LNR located approximately 4.9km southeast of the site boundary.
- 7.7. Given the scale and nature of the proposals it is not considered likely that any direct or indirect effects on the interest features of statutory sites would occur.
- 7.8. **Non-statutory Sites.** The site falls within Crouch End Playing Fields Complex SBI1. The development proposals are not considered likely to have any adverse effects upon the SBI1 or other local SINCS given their scale and nature.
- 7.9. **Habitats.** The site consists predominately of hardstanding tennis courts with buildings, amenity planting and grassland with scattered mature trees. A mature treeline bounds the site to the north.
- 7.10. The majority of the habitats present within the site are of limited intrinsic nature conservation value including the buildings, hardstanding, amenity grassland, bare ground and amenity planting. The habitats of value in the context of the site are the mature trees (especially where these offer suitable opportunities for locally present bird species). However, none of the above habitats pose an overriding ecological constraint in themselves that would prevent the development proceeding.
- 7.11. **Invasive Species.** Giant Rhubarb and Green Alkanet were recorded in areas of grassland and amenity planting within the site. Giant Rhubarb is listed in the Wildlife and Countryside Act (WCA) 1981 (as amended) under schedule 9 Part

II, whilst both Giant Rhubarb and Green Alkanet are categorised as invasive species in London by the LISI. In accordance with best practice, it is advised these species are removed from the site and omitted from any further landscaping of the site.

- 7.12. **Bats.** No evidence of roosting bats was identified during the emergence survey undertaken of building B2. The demolition of all buildings and structures can proceed without supervision. In the unlikely event that any bat is discovered, work will cease, and a Natural England licence may be required.
- 7.13. Building B1 and all trees that fall within or immediately adjacent to the site offer negligible opportunities for roosting bats.
- 7.14. The results of the emergence and remote detector surveys show that Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, Myotis sp., Noctule and Leisler's Bat are using the boundary habitats for foraging and commuting. Additionally, early registrations of Common Pipistrelle, Soprano Pipistrelle and Noctule would indicate that roosts for these species are within close proximity to the site.
- 7.15. Careful consideration will be required for lighting extent and design, with particular regard given to the boundary features. Lighting should be directional and should be designed specifically to avoid upward spill, using cowls as appropriate. These measures would also benefit non-diurnal bird species.
- 7.16. To offer further enhancements for the site, bat boxes on retained trees or integrated into new buildings could be provided as part of the redevelopment.
- 7.17. **Badgers.** No evidence of the presence of Badgers was recorded during Ecology Solutions' survey work in June 2021. The site provides limited opportunities for Badger foraging and commuting confined to the boundary vegetation, and no opportunities for sett building.
- 7.18. **Hedgehogs.** Evidence of Hedgehog activity was not recorded during survey work. The site contains some limited suitable habitat for Hedgehog foraging, dispersal and hibernation and as a precaution any clearance of Hedgehog shelter features will be subject to inspection to ensure that Hedgehogs are absent. Any vegetation clearance should be carried out in a systematic and controlled manner to allow Hedgehogs to disperse.
- 7.19. **Birds.** The site offers some opportunities for nesting and foraging birds in the form of trees, amenity planting and buildings, with several old nests recorded under the eaves of building B2.
- 7.20. In order to avoid impacts on nesting birds, and to avoid a potential offence under the Wildlife & Countryside Act 1981, all necessary clearance of vegetation and the demolition of suitable buildings would be undertaken outside of the nesting season (typically March to July inclusive) wherever possible. Where this cannot be achieved a check survey for nesting birds should be undertaken by an ecologist immediately prior to clearance, with any confirmed nests left in situ, with a five-metre exclusion zone around it until the young have fledged.
- 7.21. Consideration should be given to incorporating native fruit-bearing plant species known to benefit birds into any proposed landscaping associated with the clubhouse. As a further enhancement, bird boxes could be installed on the new

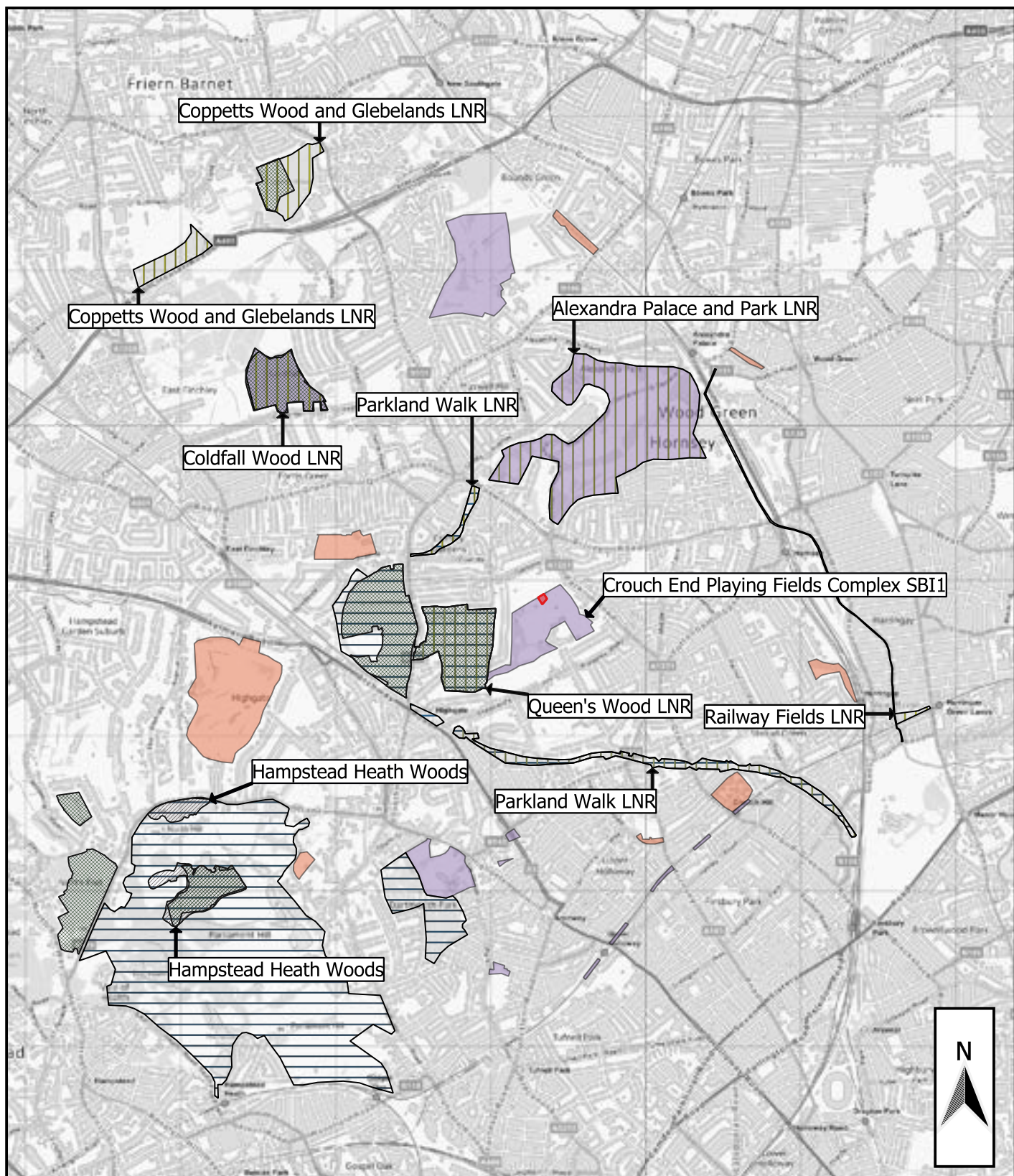
clubhouse or retained trees to offer additional nesting opportunities for a range of species.

- 7.22. **Reptiles.** No evidence of reptile activity on site was recorded during Ecology Solutions' survey work in June 2021. There are limited opportunities for reptiles on site and they are not expected to be present.
- 7.23. **Amphibians.** No evidence of amphibian activity on site was recorded during Ecology Solutions' survey work in June 2021 and there are no waterbodies on site or the immediate vicinity. There are limited opportunities for amphibians on site and they are therefore not expected to be presented.
- 7.24. **Invertebrates.** The site likely supports an assemblage of common invertebrate species. There is no evidence to suggest that any rare or notable species would be present. It is recommended that any new planting associated with the new clubhouse be composed of native species rather than non-native species.
- 7.25. In conclusion, the site is of some limited ecological value and further surveys relating to bats have been recommended. Nonetheless, the site is considered likely to be able to accommodate any required mitigation and avoidance measures, and in doing so, significant effects are considered unlikely. Overall, there are no identified insurmountable constraints to the redevelopment of the site.

PLANS

PLAN ECO1

Site Location and Ecological Designations



KEY:

- SITE BOUNDARY
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- LOCAL NATURE RESERVE (LNR)
- SITE OF METROPOLITAN IMPORTANCE (SMI)
- SITE OF BOROUGH IMPORTANCE GRADE 1 (SBI1)
- SITE OF BOROUGH IMPORTANCE GRADE 2 (SBI2)
- ANCIENT WOODLAND



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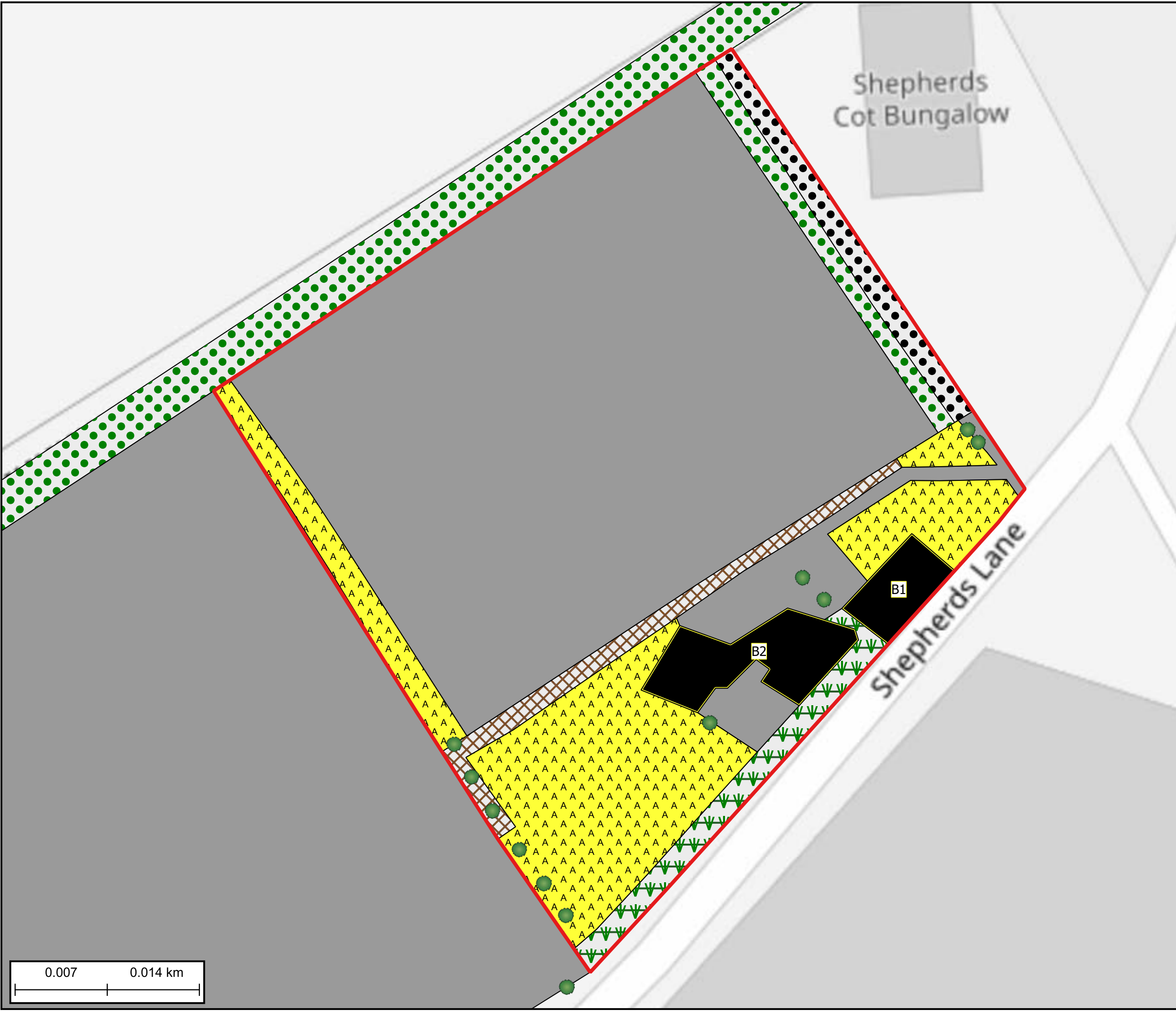
9953: BROOKSIDE SITE, HIGHGATE
TENNIS CLUB, CROUCH END,
HARINGEY

PLAN ECO1: SITE LOCATION AND
ECOLOGICAL DESIGNATIONS

Rev: B
Jul 2021

PLAN ECO2

Ecological Features



KEY:

-  SITE BOUNDARY
-  BROADLEAVED TREELINE
-  AMENITY GRASSLAND
-  AMENITY PLANTING
-  HEDGEROW
-  BUILDINGS
-  BARE GROUND
-  HARDSTANDING
-  SCATTERED TREES



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TENNIS CLUB, CROUCH END,
HARINGEY

PLAN ECO2: ECOLOGICAL
FEATURES

Rev: B
Jul 2021

PLAN ECO3

Emergence Survey Results 31.08.21

- SITE BOUNDARY
- SURVEYOR POSITION
- SOPRANO PIPISTRELLE
- UNKNOWN BAT SPECIES
- REMOTE STATIC DETECTOR



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9953: BROOKSIDE SITE, HIGHGATE
TENNIS CLUB, CROUCH END,
HARINGEY

PLAN ECO3: EMERGENCE
SURVEY RESULTS 31.08.21

Rev: B
Oct 2021

PHOTOGRAPHS

PHOTOGRAPH 1: Exterior of building B1 (storage shed)



PHOTOGRAPH 2: Exterior of building B2 (clubhouse)



PHOTOGRAPH 3: Interior of building B2 (clubhouse)



PHOTOGRAPH 4: Amenity grassland



PHOTOGRAPH 5: Mature treeline



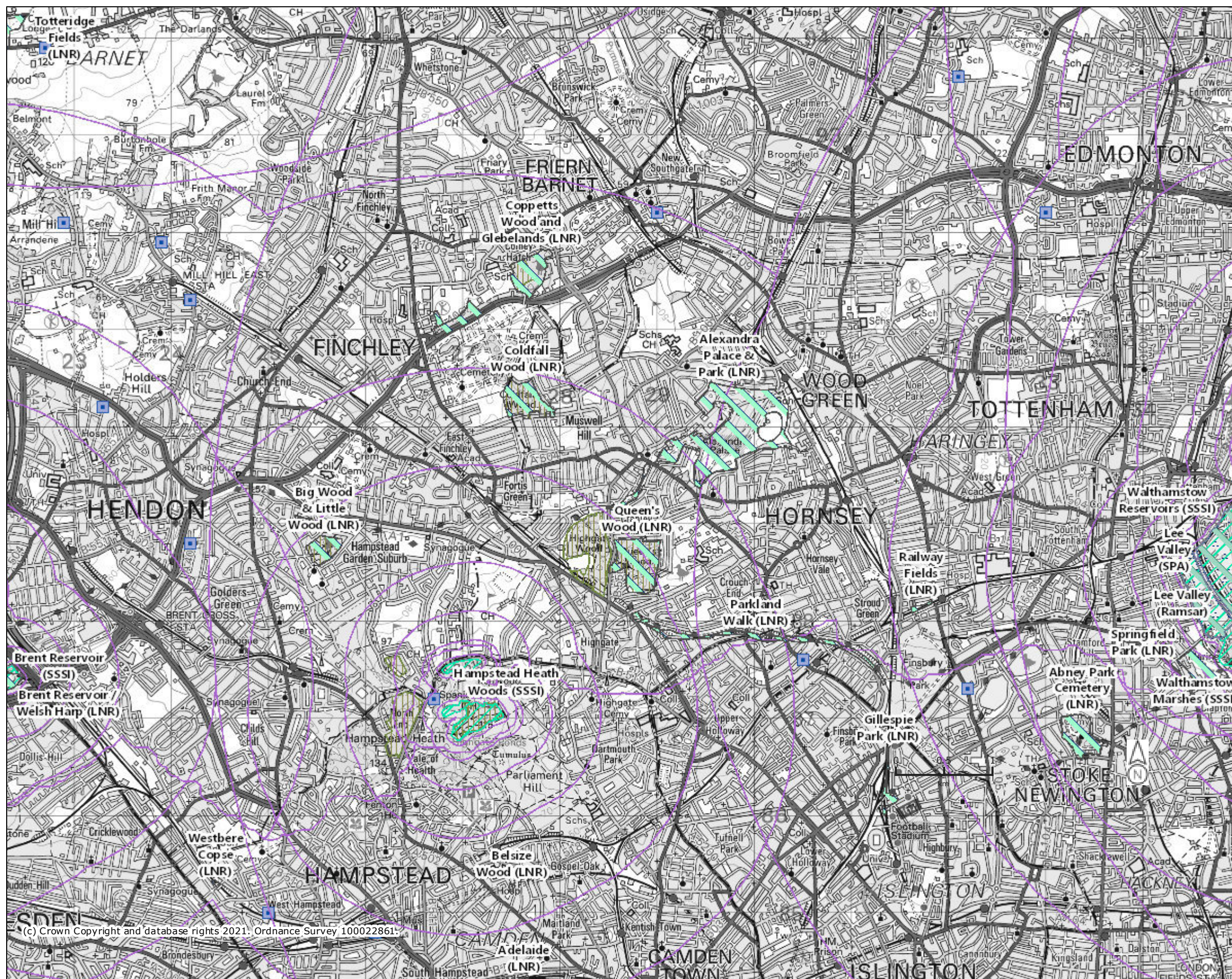
PHOTOGRAPH 6: Tennis courts



APPENDICES

APPENDIX 1

Information downloaded from Multi-Agency
Geographic Information for the Countryside (MAGIC)



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Granted European Protected Species Applications (England)

- Amphibian
- Bat
- Cetacean
- Invertebrate
- Other Mammal
- Plant
- Reptile

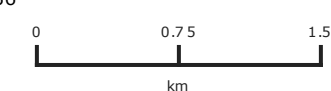
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ymin = 184200

xmax = 538700

ymax = 194400



Map produced by MAGIC on 16 July, 2021.
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