

2 AND 4 SHOOT UP HILL LONDON

ECOLOGICAL IMPACT ASSESSMENT



Ecology
Archaeology
Arboriculture
Landscape Architecture



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APPENDIX 1: ECOLOGICAL FEATURES PLAN

APPENDIX 4: GLOSSARY OF KEY TERMS

1 EXECUTIVE SUMMARY

- 1.1. In October 2019, ACD Environmental Ltd carried out a Preliminary Ecological Appraisal (PEA) of a parcel of land to the rear of 2 and 4, Shoot-Up-Hill, London, hereafter referred to as the 'Application Site'.
- 1.2. The PEA comprised a desk study and an Extended Phase 1 Habitat Survey combined with a visual assessment of buildings and trees for protected species.
- 1.3. The Application Site is a plot of land of approximately 286m², which comprises buildings, hardstanding and an amenity grassland, within an urban context.
- 1.4. The Application Site will be subject to a planning application for a new block of six residential units with the London Borough of Camden Council.
- 1.5. There are no designated sites within the Application Site and none nearby that would be impacted by the proposed development owing to spatial separation and limited quantum of development with no anticipated impacts on nearby sites in terms of visitor pressures.
- 1.6. Habitats present on the Application Site include buildings and hardstanding currently in use as a mechanics garage, an amenity grassland and scattered trees.
- 1.7. No wildlife was identified on the Application Site during the survey, with very little scope for existing habitats to support any protected species. One ivy clad sycamore provides low potential for roosting bats and the scattered trees may provide habitat for common species of nesting birds. No other evidence of protected species was identified on the Application Site, therefore no further surveys are recommended.
- 1.8. The scattered trees are anticipated to be cleared within the scheme. To compensate for their loss wildlife friendly planting will be incorporated within the soft landscaping and green roofs will be incorporated which will be designed with biodiversity in mind.
- 1.9. The proposed building will be provisioning new and permanent structures for use by roosting bats and nesting birds. To compensate for the loss of a low potential roosting opportunity when the trees are cleared, a new Habitat bat box will be installed.
- 1.10. To compensate for the loss of potential bird nesting sites, nesting boxes will be installed on the external walls of the new building. These will include two Schwegler 1MR Avianex nest boxes, one Schwegler 1SP sparrow terrace, and one Vivara Pro Barcelona Woodstone Open nest box. These will target common species which are most likely to be present in the locality, as well as targeting black redstart *Phoenicurus ochruros*, a Schedule 1 species which are known

to breed in and around central London.

- 1.11. Implementing all of the above recommendations will ensure that there are no significant impacts upon protected species and that the proposals will be in conformity with relevant legislation and policy.
- 1.12. Measures to mitigate for impacts have been set out along with recommendations for enhancement of the Application Site's ecological value.

2 INTRODUCTION, CONTEXT AND PURPOSE

Introduction

- 2.1. In October 2019, ACD Environmental Ltd carried out an extended Phase One Habitat survey of a parcel of land at 2-4, Shoot-Up-Hill, London, hereafter referred to as the 'Application Site'.
- 2.2. The Application Site comprises 286m² of land, which is composed of buildings, hardstanding and an amenity grassland.
- 2.3. The Application Site is located in an urban area of central London, with residential units to the north, east and south. Shoot-Up-Hill, a busy A road is located almost immediately to the west of the Application Site, with further residential and commercial properties beyond, and a railway almost immediately south amongst the residential area.



Image 1: Application Site location and approximate boundary shown in red¹

Context

- 2.4. Plans are being drawn up to re-develop the Application Site for a new residential building, comprising a total of six units over four storeys, along with associated landscaping and access works.

¹ Map of Shoot-Up-Hill, *Google Maps*, 2019, accessed 19/11/2019, <https://maps.google.co.uk>

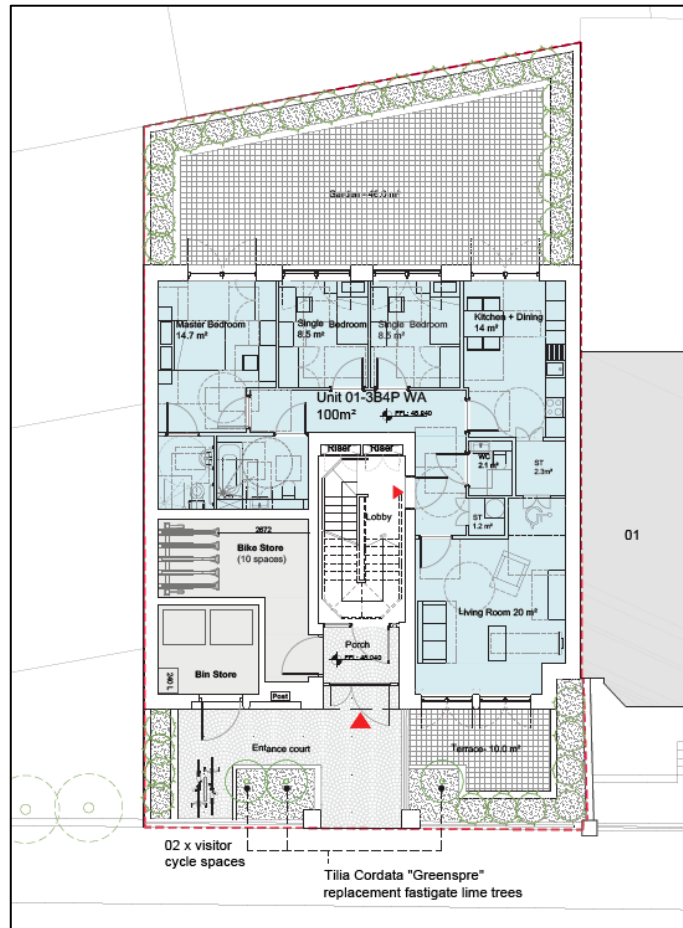


Image 2: The layout of the proposed development

Purpose

2.5. The purpose of this assessment is to:

- Ascertain the general ecological value of the Application Site by:
 - Identifying and assessing the main habitats and plant communities;
 - Assessing the potential for protected species to use the Application Site;
- To assess any ecological impacts of the proposed scheme and recommend appropriate mitigation and enhancements.

3 METHODOLOGY

Names and Qualifications of Surveyors

- 3.1. The extended Phase 1 Habitat survey was carried out by Brian Hicks of ACD Environmental Ltd. Brian is an Ecologist and has been involved in a wide range of surveys including extended Phase 1 Habitat Surveys and Phase 2 surveys for protected species. He is experienced in writing a range of reports including PEAs and Ecological Impact Assessments (EclAs), along with post-consent work. Brian holds Natural England Class Licences for bats, hazel dormouse *Muscardinus avellanarius*, and great crested newt *Triturus cristatus*, and is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).
- 3.2. The report was produced by Hayley Roberts of ACD Environmental Ltd. Hayley is an Ecologist and has been involved in a wide range of surveys including extended Phase 1 Habitat Surveys and protected species surveys. She is experienced in writing reports including PEAs and Ecological Impact Assessments (EclAs) and various post consent reports. Hayley is a Qualifying Member of CIEEM and holds a Natural England class licence for great crested newt, barn owl *Tyto alba* and bats.
- 3.3. This report was checked by Jane Cole of ACD Environmental Ltd. Jane is a Senior Ecologist with 11 years' experience and holds Natural England Class licences to survey for bats, barn owl *Tyto alba*, hazel dormouse and great crested newt. She is an Associate Member of the Chartered Institute of Ecology and Environmental Management (ACIEEM).

Background Data Search

- 3.4. The data search involves researching existing ecological knowledge of a site, such as biological records, and any relevant ecological information from the surrounding area.
- 3.5. The data search has been carried out for a 5km radius around the Application Site for statutory designated nature conservation sites.
- 3.6. The following data sources/organisations and, where relevant, the information provided has been incorporated with acknowledgement within this report:
- The Multi-Agency Geographic Information for the Countryside (MAGIC) website² (5km statutory designated nature conservation sites);
- 3.7. A 2km data search has not been undertaken for the Application Site in accordance with CIEEM

² Available at: <http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx>

guidance which states that data searches are not required when the scheme is a “Low impact or small-scale development (e.g. by size, extent, duration of works, magnitude or locality).”³

- 3.8. As a small scale demolition and rebuild on a small parcel of land of limited ecological value, the proposed development is considered to be sufficiently low impact to not require an additional data search.

Habitat Survey

- 3.9. The Application Site was surveyed in October 2019 using a technique based upon the Phase 1 Habitat Survey methodology⁴. This 'extended' Phase 1 Habitat Survey 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. The vegetation present was clearly visible and allowed an accurate assessment to be made.
- 3.10. The survey results are considered to be valid until October 2021 as the habitat types onsite are common, of limited value and unlikely to change significantly given their management within its urban context. However if any changes occur onsite prior to this date an update surveys should be undertaken.
- 3.11. Using the above method, the Application Site was classified into areas of similar botanical community types with a representative sample of those species present at the time of the survey being described.
- 3.12. The hedgerows were assessed against criteria for ‘importance’ under the Hedgerow Regulations 1997⁵.

Fauna

- 3.13. Incidental records of fauna were made during the survey and the habitats identified were evaluated for their potential to support legally protected species and other species of conservation concern, including species listed on UK Post-2010 Biodiversity Framework (which supersedes UK Biodiversity Action Plan Priority species), and mammals assessed as being of conservation concern by ‘Britain’s Mammals 2018: The Mammal Society’s Guide to

³ CIEEM (2016) *UK Guidelines for Accessing and Using Biodiversity Data*. Chartered Institute of Ecology and Environmental Management (CIEEM).

⁴ JNCC, (2010), *Handbook for Phase 1 habitat survey - a technique for environmental audit*. JNCC, Peterborough.

⁵ Available at: <http://www.legislation.gov.uk/ukssi/1997/1160/contents/made>

their Population and Conservation Status⁶.

3.14. As part of the extended Phase 1 Habitat Survey, the following species surveys were carried out:

- Badger *Meles meles* - visual survey;
- Bats - Preliminary Roost Assessment (PRA) ;
- Birds - evidence of birds recorded during PRA and any incidental bird observations/birds heard was noted.

Badger

3.15. Where possible, the Application Site was systematically surveyed for evidence of badgers, in the form of:

- Setts - comprising either single isolated holes or a series of holes, which may be link to each other underground;
- Faeces - badgers deposit faeces in characteristic excavated pits, concentrations of which (latrine sites) are typically found at home range boundaries, field boundaries and around setts;
- Paths - worn paths used by badger, often linked to setts or foraging grounds;
- Scratching posts - typically at the base of tree trunks;
- Snuffle holes - scrapes where badgers have searched for food;
- Day nests - bundles of grass and other vegetation where badgers may sleep above ground); and
- Hairs - usually found outside setts or caught under fencing.

Bats

Preliminary Roost Assessment

3.16. A Preliminary Roost Assessment (PRA) was carried out with reference to guidance published

⁶ The Mammal Society (2018). *Britain's Mammals 2018: The Mammal Society's Guide to their Population and Conservation Status*. The Mammal Society, London.

by the Bat Conservation Trust⁷. This is an external and internal inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.

3.17. A systematic search was made of the building and the ground, especially below potential access points where present. Such features include windows sills, window panes, walls, tiles, weather boarding, lead flashing, eaves, behind surfacing materials and under tiles, and other cracks and crevices that provide protection from the elements. Such features are known to be used by roosting bats.

3.18. The internal inspection included searching for the following evidence of roosting bats:

- Roosting bats within crevices or free-hanging;
- Bat corpses e.g. on the floor, in uncovered water (header) tanks or other containers in roof voids;
- Bat droppings beneath roosting features;
- Feeding remains e.g. moth/butterfly *Lepidoptera* spp. wings and beetle *Coleoptera* spp. wing casings;
- Scratch marks and characteristic staining from urine and/or fur oil beneath roosting features e.g. on roofing timbers and walls within roof voids;
- 'Clean' gaps associated with bat roosts;
- Bat-fly *Nycteribiid* spp. pupal cases;
- Droppings, corpses, feeding remains and/or bat-fly pupal cases beneath roof insulation, which indicates use by bats before the insulation was installed; and
- Clean swept floors, which may indicate evidence has been removed.

3.19. The internal inspection included searching for the following features:

- Gaps within the structure of the roof e.g. mortise joints and junctions between roof timbers and between timbers and walls, and between the roof lining and roof covering;

⁷ Collins J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

- Gaps within the structure of walls and potential access points to cavity or rubble-filled walls;
- Gaps around the structure chimneys or within disused chimneys;
- Suitable locations for free-hanging bats and/or night/feeding perches e.g. timber beams;
- Gaps between lintels above windows or doors;
- Light gaps in the roof indicating access points to the outside; and
- Cool areas suitable for torpor or hibernation e.g. cellars.

3.20. The following equipment was used for the bat survey:

- Elevation and baseline drawings of the building or structure;
- Powerful torch to illuminate dark corners from the ground;
- Collection pots and labels for corpses and droppings;
- Camera to record evidence and potential roosting sites; and
- Personal protective equipment (e.g. boots, gloves, helmet, mobile telephone).

3.21. In addition to the buildings, the trees were also searched for bats/evidence of bats and assessed for their potential to support roosting bats. The evidence of roosting bats searched for is detailed above with regard to buildings (e.g. bat droppings and feeding remains). The features of bats were searched for on the trees with reference to the three broad categories of Potential Roost Features (PRFs) and sub-categories of PRFs from the Bat Tree Habitat Key⁸. These are as follows:

- Longitudinal splits;
- Crevices;
- Rot-hollows;
- Transverse cracks;

⁸ Bat Tree Habitat Key 2018. Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-care and Ecology professionals. Exeter: Pelagic Publishing. Online resource available at <http://battreehabitatkey.co.uk/>

- Loose bark; and
- Ivy.

Potential Limitations

3.22. During the survey the amenity grassland at the north of the Application Site could not be accessed, therefore a full assessment of floristic diversity could not be achieved. However given the nature of this section of the Application site as a rear garden, the evaluation and habitat descriptions are likely to give a good representation of the habitats present.

Habitats and Species Evaluation and Impact Assessment

3.23. The habitats and species evaluations are made with reference to the Chartered Institute of Ecology and Environmental Management's (CIEEMs) guidelines for Ecological Report Writing and Guidelines for Preliminary Ecological Appraisal⁹. The PEA provides the results of the Extended Phase 1 Habitat Survey. The report is used to identify further ecological surveys necessary to inform an Ecological Impact Assessment (EclA), to identify ecological constraints to a project, make recommendations for design changes, and to highlight opportunities for ecological enhancement. It can be used as a scoping report, but unless it can be determined that the project would have no significant ecological effects, no mitigation is required and no further surveys are necessary, should be superseded by an EclA report.

3.24. Where possible, the habitats and species evaluations are made with reference to CIEEMs guidelines for EclA¹⁰.

3.25. These guidelines aim to give a degree of consistency in approach to evaluating the importance of the ecological features within a site and any effects or impacts a scheme will have upon them.

3.26. Firstly, the species or habitats must be valued and a commonly used framework involves assigning a level of geographical importance to ecological receptors. This framework incorporates a wide range of legislation and governmental guidance in assessing each feature's value.

3.27. Next, the impacts of the proposed scheme have to be predicted, taking into account different stages and activities within the development process. These impacts then have to be assessed for their significance, based upon the value of the species or habitat in question. The

⁹ Available at: <https://www.cieem.net/technical-guidance-series-tgs->

¹⁰ CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal and Marine*. Chartered Institute for Ecology and Environmental Management, Winchester.

assessment of impact significance is done before and after any proposed mitigation to give an overall indication of significance.

3.28. The value of specific ecological receptors (sites, habitats or species) is assigned according to their level of importance using the following terms:

- International value;
- UK value;
- National value (i.e. England/Northern Ireland/Scotland/Wales);
- Regional value;
- County value;
- District value (or Unitary Authority, City, or Borough);
- Local or Parish value; and
- Of value within the zone of influence or a larger defined area.

3.29. It has been determined that the proposed development would have no significant ecological effects, provided that all the recommendations detailed in this report are fully adhered to. No further surveys are recommended on this basis.

4 RESULTS AND EVALUATION

4.1. Set out below are the results of the background data searches and field surveys.

Context

4.2. The Application Site sits in an urban environment with residential and commercial properties to the north and east. Shoot Up Hill, a busy A road, is located to the west of the Application Site and an unvegetated railway is almost directly south, both of which have further residential and commercial properties beyond.

Data Search Results

Designated Sites

- 4.3. Statutory designated sites are the most significant ecological receptors and include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and RAMSAR sites, which are all of **International Value**, and Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs), which are of **National Value**.
- 4.4. Local Nature Reserves (LNRs) are notified under Section 21 of the National Parks and Access to the Countryside Act 1949 (as amended) by local authorities and are of **Local Value**. They are intended for public appreciation and enjoyment of wildlife. The LNR designation does not afford special protection; however, LNRs are protected under legislation and planning policy.
- 4.5. The statutory designated sites within 5km of the Application Site are shown in **Table 1**.

Table 1: Statutory designated sites within 5km of the Application Site.

| Name of statutory designated sites | Approximate distance from Application Site | Reason for designation |
|------------------------------------|--|---|
| Westbere Copse LNR | 0.8km north | Woodlands covering almost 8 hectares. Noted as supporting 25 species of bird. |
| Hampstead Heath Wood SSSI | 2.6km north-east | Hampstead Heath Woods are examples of high forest |

| | | |
|-------------------------------------|-------------------|--|
| | | woodlands comprising an abundance of old and over-mature trees providing dead wood habitat for a range of invertebrate species including the jewel beetle <i>Agrilus biguttatu</i> . |
| St Johns Woods Church Ground LNR | 2.68km south-east | A mixture of meadow and woodland habitats and associated communities of tall grasses and herbs. |
| Belsize Wood LNR | 2.87km east | The site has a rich variety of species, especially of insects. |
| Adelaide LNR | 2.91km east | A south facing meadow with adjacent woodland and ponds. |
| Wormwood Scrubs LNR | 3.31km south-west | Habitats include woodland (plantation), scrub and grassland. Animals include common lizards <i>Zootoca vivipara</i> , over 100 species of bird and 20 species of butterfly. |
| Brent Reservoir/Welsh Harp LNR SSSI | 3.71km north-west | Designated for its bird populations including redpoll <i>Carduelis flammea</i> , willow tit <i>Poecile montanus</i> , reed bunting <i>Emberiza schoeniclus</i> , sedge warbler <i>Acrocephalus schoenobaenus</i> , willow warbler <i>Phylloscopus trochilus</i> , pochard <i>Aythya farina</i> and wintering smew <i>Mergus albellus</i> . |

| | | |
|---------------------------------|--------------|---|
| Big Wood and Little Wood LNR | 4.15km north | Two pockets of ancient woodland dominated by pedunculate oak <i>Quercus robur</i> , also including wild service tree. |
|---------------------------------|--------------|---|

Protected Species Records

4.6. The relevant protected species records are incorporated into the Fauna section, below, with due acknowledgement.

Survey Results

Habitats

4.7. The Application Site supports the following habitats:

- Amenity Grassland (J1.2);
- Buildings (J3.6) and hardstanding; and
- Scattered Trees.

4.8. For ease of reference, habitat types have been described alphabetically, below. All the features described are shown on the Ecological Features Plan at **Appendix 1**.

Amenity grassland (J1.1)

4.9. A small garden covering approximately 100-120m² is located at the north of the Application Site (**Photograph 1**). This section of amenity grassland was not accessible during the extended Phase 1 Habitat survey, so a full assessment of floristic diversity could not be undertaken, however it appears to be regularly mown and isolated by buildings on all sides. Common herbaceous species were present and dominated by common dandelion *Taraxacum officinale* agg. Given the surrounding habitats, and that the area was likely to have been planted with the intention to use as an amenity area it is considered unlikely to support uncommon or remarkable plant species.

4.10. The amenity grassland covers only a small area and is unlikely to support any notable ground flora, and is considered to be of **negligible ecological value**.



Photograph 1: The amenity grassland at the north of the Application Site

Buildings (J3.6) and hardstanding

- 4.11. A total of three sheds are present on the Application Site, with an area of hardstanding at the south, currently used for car parking (**Appendix 1**). The largest of these is at the west; a garage of single skin brick and concrete construction, with a sloping roof clad in a single layer of corrugated metal (**Photograph 2**). Several gaps are visible in the construction. This building is currently in use as a mechanics garage and is regularly disturbed with loud machinery.



Photograph 2: The main building at the east of the Application Site

4.12. To the north-east of the Application Site is a storage shed of wooden construction clad in corrugated metal (**Photograph 3**). The roof comprises sloping corrugated metal and Onduline. No gaps were visible upon inspection.



Photograph 3: The storage shed at the north east

4.13. The third building is of timber construction and is also clad in corrugated metal. The roof is flat and clad in metal with no gaps visible (**Photograph 4**).



Photograph 4: Small shed used for further storage.

4.14. The buildings and hardstanding on the Application Site are of **negligible intrinsic value**. Their value to bats is discussed in the fauna section below.

Scattered Trees

4.15. The Application Site contains a total of seven trees. At the south of the Application Site there are three lime *Tilia* sp. trees along the street frontage. At the north of the Application Site within the amenity grassland is a further four trees. These include two sycamore trees *Acer pseudoplatanus*, one of which is clad in ivy *Hedera helix*. A wild cherry *Prunus avium* is located centrally in the amenity grassland with an elder *Sambucus nigra* in the north eastern corner.

4.16. Aerial photography indicates that pockets of scattered trees such as those found on the Application Site are common in the wider environment. Given this, the scattered trees on the Application Site are considered to be of **site value** only.

Fauna

4.17. For ease of reference, descriptions of the fauna have been described alphabetically,

below.

Amphibians

- 4.18. No European Protected Species (EPS) licences for great crested newts have been granted within 5km of the Application Site.
- 4.19. No waterbodies are located within 500m of the Application Site, which itself is isolated on all sides by existing residential and commercial properties and busy roads which are a significant barrier to dispersal. The grassland onsite and in the surrounding area is unsuitable for commuting amphibians, and lacks connectivity to habitats capable of supporting them.
- 4.20. The Application Site is therefore considered to be of **negligible value** to amphibians, and they will not feature further in this report.

Badger

- 4.21. The Application Site is considered to be unsuitable habitat for badgers due to heavily urbanised location and lack of suitable foraging habitat onsite and in the wider environment. No evidence of badger was observed on the Application Site, including setts, latrines, or badger hair.
- 4.22. The Application Site is considered to be of **negligible value** to badger, and they will not feature further in this report.

Bats

- 4.23. Three buildings are present on the Application Site. The largest of these buildings is currently used as a garage by a mechanic. A number of gaps are present in this building, where the corrugated metal cladding on the roof has begun to lift, and small holes are present in the brickwork. Despite the presence of gaps it is considered that this building is unsuitable for bats for two reasons. Firstly the level of disturbance at the Application Site in its current level of use is sufficiently high that it is considered that bats are unlikely to roost. Secondly the majority of the gaps are formed beneath the corrugated metal roof, which is typically considered unsuitable for bats as it creates unfavourable thermal conditions which are subject to large temperature fluctuations.

- 4.24. The remaining two buildings were considered to be unsuitable for bats due to the lack of gaps, and presence of unlined corrugated metal rooves.
- 4.25. The Application Site supports a total of seven trees. Most of these trees are young and lack features suitable for roosting bats. One larger sycamore with a cover of ivy is present which provides **a low roosting potential (Photograph 5; Target note: Appendix 1)**. Ivy is considered to be a poor roosting feature according to the Bat Tree Habitat Key and is of limited value. No further PRF's were observed.
- 4.26. No sheltered linear features, such as hedgerows or rivers, suitable for commuting bats are present on the Application Site, limiting its value to commuting and foraging bats.
- 4.27. Overall the Application Site is considered to be of **low value** to roosting bats, and of **value in the zone of influence value** to foraging and commuting bats.



Photograph 5: The ivy covered sycamore in the amenity grassland beyond the buildings (TN).

Birds

- 4.28. No birds were recorded during the survey, however there are seven trees present which offer potentially suitable habitat for nesting birds. Given the locality and current level of disturbance it is unlikely that notable species are present, however common

species of nesting bird such as wood pigeon, are likely to use the Application Site. There is little scrub on the Application Site which is typically used by smaller species of bird.

4.29. On balance the Application Site is considered to be of **value within the zone of influence** to nesting birds.

Reptiles

4.30. The grassland on the Application Site has a short sward and lacks thatch or tussocks. It appears to be regularly managed for amenity use and is heavily shaded by the larger sycamore tree. Typically common species of reptile will favour a mosaic of scrub and grassland which is less managed, with tussocks or thatch present. The Application Site does not support any such features and is isolated from suitable habitats.

4.31. The Application Site is considered to be of **negligible value** to reptiles, which will not feature any further in this report.

Conclusion

4.32. The extended Phase One Habitat Survey and protected species surveys have identified that the following ecological receptors should be brought forward for further assessment:

- Species: roosting bats and nesting birds
- Habitats: scattered trees

4.33. The following habitats and species have been **scoped out** of the assessment process and will not be discussed any further within this report:

- Habitats: Amenity grassland, buildings and hardstanding.
- Species: Amphibians, badger, hazel dormouse, and reptiles.

5 LEGISLATION AND PLANNING POLICY

5.1. This section summarises the legislation and national, regional and local planning policies, as well as other reference documents, relevant to the baseline ecology results.

Legislation

5.2. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:

- The Conservation of Habitats and Species Regulations 2017;
- The Natural Environment and Rural Communities Act 2006;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Countryside and Rights of Way (CROW) Act 2000;
- The Hedgerows Regulations 1997; and
- The Protection of Badgers Act 1992.

5.3. Where relevant, the assessment takes account of the legislative protection afforded to specific habitats and species.

5.4. The Conservation of Habitats and Species Regulations 2017 affords protection to European sites, such as SACs, and EPS, which are detailed further within this report with regard to designated sites and specific species respectively.

5.5. The WCA 1981 (as amended) lists invasive plant and animal species under Schedule 9¹¹. This means that it is an offence to plant or allow species on this list to be released into the wild. It is also an offence for animals not ordinarily resident or a regular visitor to Great Britain or listed on Schedule 9 to be released into the wild.

5.6. The UK Post-2010 Biodiversity Framework, which supersedes UK Biodiversity Action Plan (UK BAP) priority habitats and species, provides the 'broad enabling structure for action across the UK', which in England is interpreted into Biodiversity 2020: A strategy for England's wildlife and ecosystem services; however, some authorities do still refer

¹¹ Available at: <https://www.legislation.gov.uk/ukpga/1981/69/schedule/9>

to BAPs. Protecting habitats and species listed on Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 is an outcome of this strategy. The lists of priority habitats and species in England required under S41 were published by Natural England in May 2014¹². These measures are given due acknowledgement where relevant.

Flora

5.7. The WCA 1981 (as amended) affords protection to plant species listed on Schedule 8¹³, which protects plants against picking, uprooting or destruction. Example of species included on this list are Deptford pink *Dianthus armeria*, pennyroyal *Mentha pulegium*, Plymouth pear *Pyrus cordata* and small fleabane *Pulicaria vulgaris*. For some species, only one section of Schedule 8 applies, which is section 13(2), and protects these species against selling. Examples of species to which this applies are bluebell *Hyacinthoides non-scripta* and early gentian *Gentianella anglica*.

Fauna

5.8. All animals, irrespective of their conservation status, are subject to protection from cruelty under the Animal Welfare Act 2006 and wild mammals are also protected from cruelty under the Wild Mammals Protection Act 1996.

European Protected Species

5.9. EPS are protected under the Conservation of Habitats and Species Regulations 2017 as well as the WCA 1981 (as amended), which are specifically under Regulation 42¹⁴ and Schedule 5¹⁵ respectively. The Countryside and Rights of Way Act 2000 amended the WCA 1981 and added 'or recklessly' to existing mentions of 'intentionally' as detailed below. These species include great crested newt, all bat species, hazel dormouse and otter. This level of protection for these species (at all stages of their life cycle) makes it an offence to do the following:

- Intentionally or recklessly capture or kill a wild animal of an EPS;

¹² Available at: <http://publications.naturalengland.org.uk/publication/4958719460769792>

¹³ Available at: http://jncc.defra.gov.uk/PDF/waca1981_schedule8.pdf

¹⁴ Available at: <https://www.legislation.gov.uk/uksi/2017/1012/regulation/42/made>

¹⁵ Available at: http://jncc.defra.gov.uk/PDF/waca1981_schedule5.pdf

- Intentionally or recklessly disturb any such animal;
- Intentionally or recklessly to take or destroy the eggs of such an animal;
- Intentionally or recklessly to damage or destroy a breeding site or resting place of such an animal; or
- To keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of an EPS, or any part of, or anything derived from, such an animal.

5.10. All wild birds¹⁶ and their nests, irrespective of their conservation status, are protected under the WCA 1981 (as amended). It is an offence to:

- Intentionally or recklessly kill, injure or take any wild bird;
- Intentionally or recklessly take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- Intentionally or recklessly take or destroy the egg of any wild bird;
- Have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954;
- Have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954;
- Use traps or similar items to kill, injure or take wild birds; or
- Have in one's possession or control any bird of a species occurring on Schedule 4¹⁷ of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations.

5.11. In addition to protection from cruelty under the Animal Welfare Act 2006 and the Wild Mammals Protection Act 1996, wild hares *Lepus* spp, wild rabbit *Oryctolagus cuniculus* and hedgehog are protected under sections of the WCA 1981 (as amended).

¹⁶ Available at: <https://www.gov.uk/wild-birds-protection-surveys-and-licences>

¹⁷ Available at: http://jncc.defra.gov.uk/PDF/waca1981_schedule4.pdf

Hedgehog is listed on Schedule 6¹⁸, which makes it an offence to kill or take by certain methods. Brown hare, mountain hare and hedgehog are listed as a priority species under the NERC Act (2006).

Planning Policy

National Planning Policy Framework

5.12. The National Planning Policy Framework (NPPF)¹⁹ sets out planning policies on protection of biodiversity and geological conservation through the planning system for local authorities in England. The NPPF outlines the role of the decision maker in considering the requirements of wildlife legislation to protect wildlife. A redacted summary is presented below.

5.13. The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by:

- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
- Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services;
- Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks;
- Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve environmental conditions;
- Remediating and mitigating despoiled, degraded, derelict, contaminated and

¹⁸ Available at: http://jncc.defra.gov.uk/PDF/waca1981_schedule6.pdf

¹⁹ Ministry of Housing, Communities and Local Government (2018). *National Planning Policy Framework*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728643/Revised_NPPF_2018.pdf

unstable land, where appropriate.

5.14. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

5.15. To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

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

- If significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;
- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are

wholly exceptional reasons and a suitable compensation strategy exists; and

- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

5.17. The following should be given the same protection as habitats sites:

- Potential SPAs and possible SACs;
- Listed or proposed Ramsar sites; and
- Sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential SPAs, possible SACs, and listed or proposed Ramsar sites.

5.18. The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

5.19. The Government Circular 06/2005²⁰ accompanies the NPPF and sets out the application of the law in relation to planning and nature conservation in England.

Local Planning Policy

Camden Council Local Plan

5.20. The Camden Local Plan was adopted in 2017, and outlines the development strategy for Camden through to 2031. Policy A3 of the Camden Local Plan outlines planning policy with respect to biodiversity, stating the following:

- Designate and protect nature conservation sites and safeguard protected and priority habitats and species;
- Grant permission for development unless it would directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species;

²⁰ Office of the Deputy Prime Minister (2005). *Government Circular: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System*. Available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/147570.pdf>

- Seek the protection of other features with nature conservation value, including gardens, wherever possible;
- Assess developments against their ability to realise benefits for biodiversity through the layout, design and materials used in the built structure and landscaping elements of a proposed development, proportionate to the scale of development proposed;
- Secure improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;
- Seek to improve opportunities to experience nature, in particular where such opportunities are lacking;
- Require the demolition and construction phase of development, including the movement of works vehicles, to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species;
- Secure management plans, where appropriate, to ensure that nature conservation objectives are met; and
- Work with The Royal Parks, The City of London Corporation, the London Wildlife Trust, friends of park groups and local nature conservation groups to protect and improve open spaces and nature conservation in Camden.

6 DISCUSSION AND RECOMMENDATIONS

Statutory Designated Sites

- 6.1. There are no designated sites within the Application Site although a number of LNR's are located within 5km. However, these designated sites will not be impacted by the proposed development owing to spatial separation, lack of habitat connections and limited quantum of development (286m²) with no anticipated impacts on nearby sites in terms of visitor pressures.

Habitats

- 6.2. The works will be carried out in accordance with Guidance for Pollution Prevention (GPPs)²¹ to prevent pollutants from entering habitats and to appropriately deal with any pollution incidents should they arise.

Habitats

- 6.3. The scattered trees on the Application Site comprise seven native trees of limited quality. The trees at the north of the Application Site are common species and have been identified in the tree survey (drawing: GEN22015-01) as being of low quality. The three lime trees along the street frontage are of a limited size and appear to be regularly managed, limiting their intrinsic value.
- 6.4. Under current proposals the scattered trees are all likely to be removed to facilitate the development. The limited size of the Application Site and relatively large footprint of the proposed new building leaves little capacity for tree planting within the scheme, however the inclusion of street trees within the scheme would reduce the impact of the proposed development. Species chosen should reflect those which have been removed wherever possible e.g. lime trees, however if below ground service constraints are present, species to be included can be altered to more suitable native species.
- 6.5. The amenity space to be provided on the ground floor of the new building includes boundary vegetation being planted to the front and rear of the new building. This will

²¹ Available at: <http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/>

include some new planting of value to wildlife, such as *Ceanothus*, elder and honeysuckle. Whilst this type of planting cannot replace the habitats being cleared it may go some way towards offsetting the loss in biodiversity which may otherwise occur.

- 6.6. Additional measures are to be included within the scheme using biodiverse green roofs. Extensive green roof systems are anticipated to be installed as the most ecologically valuable option, though the final designs will be provided by a specialist contractor with biodiversity in mind. This could be secured through a suitably worded planning condition.
- 6.7. The impacts of the loss of the scattered trees will be **negligible**.

Fauna

- 6.8. Care must be taken during clearance/groundworks to ensure wildlife is not harmed and in the event any protected species are found when the ecologist is not in attendance, works must stop, they must not be handled and ACD Environmental Ltd contacted in the first instance.
- 6.9. Any excavations should be covered when works are not taking place to ensure that they do not fill with water and to prevent the potential for wildlife to become trapped and avoid encouraging amphibians during the course of the works.

Bats

- 6.10. It is anticipated that the clearance of the ivy clad sycamore with low bat roosting potential will be required to facilitate the development. Given the small size of the Application Site and the relatively large footprint of the proposed building, this is likely to be unavoidable.
- 6.11. The Application Site is situated in a heavily urbanised area with little opportunity for bats to roost, forage or commute. The only linear feature in the wider environment which may be of limited commuting interest, and therefore a possible access point to the Application Site, is an un-vegetated railway almost immediately to the south of the Application Site boundary. While this may offer some sub-optimal commuting interest around the Application Site, this is not considered an important route as it provides no

shelter for bats during flight, as there is so little vegetation present.

- 6.12. Given this, the value of the Application Site to bats is considered to be fairly low, and the likelihood of a bat roosting on the Application Site is likewise very low. With this in mind a soft felling methodology is considered sufficient to clear the low potential sycamore tree in this case. The soft felling methodology requires cutting the tree in sections and lowering the detached branches and limbs to the ground in a sling or similar. Care must be taken to avoid cutting through any potential roosting features such as cavities formed by rot holes. These must be left for at least one night to allow any wildlife which may be using it to disperse of their own accord.
- 6.13. If a bat is identified at any stage during the development process, works must stop immediately and the advice of an appropriately qualified ecologist sought. An EPS licence will be required to proceed with the development lawfully if this should occur.
- 6.14. An alternative roosting provision will be provided within the new development in the form of a bat box. Depending on the construction type a Habibat bat box, which can be either stone faced or rendered, will be integrated into the external wall, or alternatively a Schwegler 1FF bat box will be affixed to the external wall of the new building should the final construction type not be compatible with integrated bat boxes. Wherever it is feasible to do so, integrated bat boxes will be favoured. This will be installed on the western wall of the new building at a minimum height of 4m.
- 6.15. With the proposed recommendations and mitigation, the impacts on bats will be **negligible**.

Birds

- 6.16. Under current proposals the scattered trees on the Application Site are likely to be removed to facilitate the proposed Development. This has the potential to impact on nesting birds.
- 6.17. Given the protection afforded to all nesting birds, any works impacting upon the scattered trees should ideally be undertaken during September to February (inclusive) outside of the main bird breeding season. If this is not feasible, the vegetation on the Application Site will be subject to a nesting bird check by a suitably qualified ecologist prior to clearance. If any active bird's nests are found then works should stop in the

area and an appropriate buffer zone (as determined by the ecologist, usually approximately 5m) must be established around the nest and the nest left until the young have fledged. The buffer must remain intact until it has been confirmed by the ecologist that the nest is no longer in use.

6.18. Bird boxes are to be installed on the new building to replace the nesting habitats which will be lost when the scattered trees are felled. These are to include two Schwegler 1MR Avianex nesting boxes, one Vivara Pro Barcelona Woodstone Open nest box and one Schwegler 1SP sparrow terrace. There are to be installed on the northern, and north-eastern elevations of the proposed building.

6.19. With the proposed recommendations and mitigation, the impacts on nesting birds will be **non-significant negative**.

Other Wildlife

6.20. During construction there will be an increase in the number and amount of hazards which could potentially harm any wildlife in the area, such as open trenches and pipes.

6.21. All excavations will be covered at night to prevent any wildlife becoming trapped.

6.22. In the unlikely event that an animal becomes trapped in any trenches or other excavations during the construction phase, a timber ramp with a roughened surface should be inserted to allow the animal to escape of its own accord.

6.23. Any temporary pipes will be capped to prevent animals gaining access during the night and all sharp objects/machinery are to be appropriately stored away.

6.24. With the proposed recommendations and mitigation, the impacts on wildlife will be **negligible**.

Enhancements

6.25. The NPPF encourages development to provide net gains in biodiversity where possible.

6.26. It is recommended that the following additional enhancements are provided:

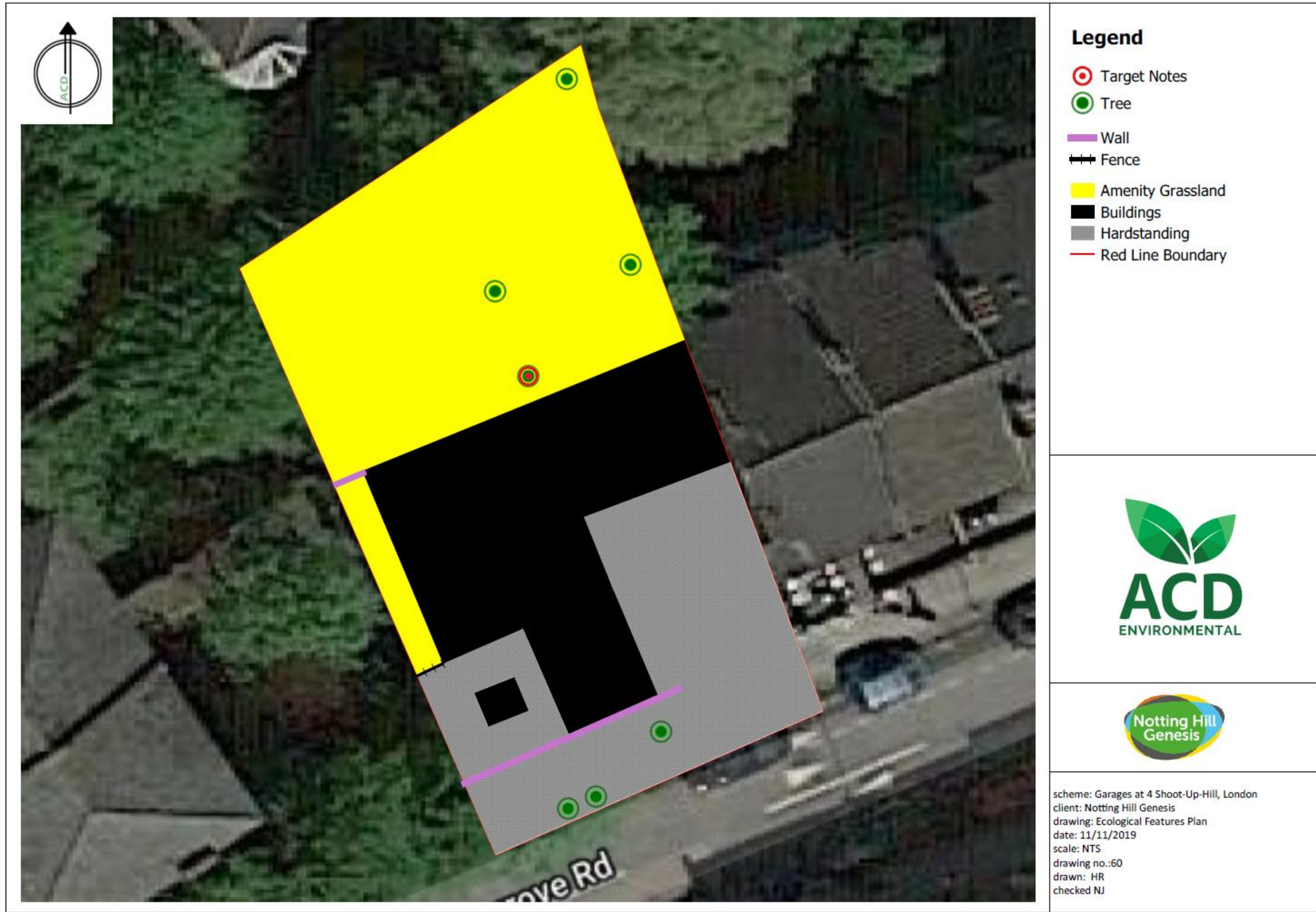
- Two Schwegler no.16 Swift Boxes to be installed just below the eaves on the

northern or eastern elevations of the new building.

7 CONCLUSIONS

- 7.1. There are no designated sites within the Application Site and none nearby that would be impacted by the proposed development owing to spatial separation and limited quantum of development with no anticipated impacts on nearby sites in terms of visitor pressures.
- 7.2. The Application Site comprises buildings and hardstanding with a small area of amenity grassland. A total of seven scattered trees are present including an ivy covered sycamore. Of these habitats, the scattered trees are of the highest ecological value.
- 7.3. On the day of the survey no fauna were identified on the Application Site, however there is low potential for nesting birds and low potential for roosting bats to be using the scattered trees, most likely at the north, within the amenity grassland. Given the urban nature of the Application Site it is not expected that any rare or notable species will be present. Green roofs and wildlife friendly soft landscaping will compensate for the loss of the onsite trees.
- 7.4. The proposed building will be provisioning new and permanent structures for use by roosting bats and nesting birds. To compensate for the loss of the ivy covered sycamore when the trees are cleared, a new Habibat bat box will be installed.
- 7.5. To compensate for the loss of potential bird nesting sites, nesting boxes will be installed on the external walls of the new building. These will include Schwegler two 1MR Avianex nest boxes, one Schwegler 1SP sparrow terrace, and one Vivara Pro Barcelona Woodstone Open nest box. These will target common species which are most likely to be present in the locality, as well as targeting black redstart *Phoenicurus ochruros*, a Schedule 1 species which are known to breed in and around central London.
- 7.6. Implementing all of the above recommendations will ensure that there are no significant impacts upon protected species and that the proposals will be in conformity with relevant legislation and policy.

APPENDIX 1: ECOLOGICAL FEATURES PLAN



APPENDIX 4: GLOSSARY OF KEY TERMS

A summary of key terms from the Chartered Institute of Ecology and Environmental Management (CIEEM).²²

“Avoidance

See mitigation.

Baseline Conditions

The conditions that would pertain in the absence of the proposed project at the time that the project would be constructed/operated/decommissioned. The definition of these baseline conditions should be informed by changes arising from other causes (e.g. other consented developments).

Compensation

Measures taken to make up for the loss of, or permanent damage to, biological resources through the provision of replacement areas. Any replacement area should be similar to or, with appropriate management, have the ability to reproduce the ecological functions and conditions of those biological resources that have been lost or damaged.

Connectivity

A measure of the functional availability of the habitats needed for a particular species to move through a given area. Examples include movements of migratory fish from feeding grounds to spawning grounds or linking areas of appropriate habitat needed by some slow colonising species if they are to spread.

Cumulative Impact

Impacts caused either by a number of separate developments in the same area or those caused by increasing the size of arrays of marine renewable units or other developments.

Effect

These guidelines use the word impact rather than effect when referring to how ecological resources might be affected by a project.

Enhancement

The genuine enhancement of the natural heritage interest of a site or area because the project includes improved management or new habitats or features, which are better than the prospective management, or the habitats or features present there now. There is, therefore, a net or new benefit to the natural heritage.

Habitat

A place in which a particular plant or animal lives. Often used in the wider sense referring to major assemblages of plants and animals found together.

Impact

The way in which an ecological resource/receptor is affected by a project (see effect).

Mitigation

Measures taken to avoid or reduce negative impacts. Measures may include: locating the development and its working areas and access routes away from areas of high ecological interest, or timing works to avoid sensitive periods. See also compensation (which is separate from mitigation).

Network

An interconnected system of corridors.

Net Ecological Gain

The point at which the quality and quantity of habitats or species improves compared to their original condition.

²² Available at: <https://www.cieem.net/glossary>

i.e. improvements over and above those required for mitigation/compensation.

Population

A collection of individuals (plants or animals), all of the same species and in a defined geographical area.

Receptor

Any ecological or other defined feature (e.g. human beings) that is sensitive to or has the potential to be affected by an impact.

Replacement

The creation of a habitat that is an acceptable replacement for the habitat which has been lost.

Resource

Any ecological or other environmental component affected by an impact.

Restoration

The active re-establishment of a damaged or degraded system or habitat to a close approximation of its pre-degraded condition.

Zone of Influence

The areas/resources that may be affected by the biophysical changes caused by activities associated with a project.”



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