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139-140 Highgate Road

Ecological Appraisal

Prepared by LUC
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1 Introduction

1.1 In January 2018, LUC was appointed by Design Ventures Highgate Ltd. to undertake an Ecological Appraisal of 138-140 Highgate Road, Highgate, London, NW5 1PB (hereafter referred to as 'the Site'). The appraisal was required to inform proposals for a housing development within the plot.

1.2 LUC previously undertook bat surveys at this Site in August and September 2013. The results of these surveys are reported separately and summarised in this report (138-140 Highgate Road, Bat Assessment, LUC, 2014[1]).

1.3 This report has been prepared for the exclusive use by Design Ventures Highgate Ltd. No part of this report should be considered as legal advice.

Scope

1.4 The proposals include demolition of the existing garage complex and construction of six houses. The houses are to comprise two storeys above ground level and one storey at basement level on the Highgate Road side. The College Road side will have one of the storeys above ground, with two at basement level. The new houses will not exceed the height of the existing garage building. The houses will use approximately half of the Site, and the remaining half will be landscaped.

Site description

1.5 The Site lies along Highgate Road and supports a one storey building set back from the road within a garage and petrol station forecourt. A small amount of ornamental planting is present adjacent to the road, with two small young ornamental trees along the northern border of the Site.

1.6 Areas of Open Space are located to the north and south of the Site. These form part of a continuous band of green space parcels along Highgate Road providing a habitat corridor.

1.7 The wider landscape is heavily urbanised, with the exception of Hampstead Heath which lies 250m west. A railway line runs horizontally to the south of the Site.

Policy and Legal Considerations

- The Wildlife and Countryside Act of 1981 (as amended);
- The Countryside and Rights of Way Act (CRoW Act), 2000 (as amended);
- The Natural Environment and Rural Communities Act (NERC Act), 2006;
- The Conservation of Habitats and Species Regulations 2017;
- The National Planning Policy Framework (DCLG 2012);
- London Borough of Camden Local Plan (2017); and
- Camden Planning Guidance, Biodiversity (Draft, 2017).

[1] LUC (2014), 138-140 Highgate Road, Bat Assessment. LUC, Euston.

Method

1.8 The methods adopted in the survey and appraisal are outlined below. They accord with the best practice guidance documents for survey and appraisal produced by the Chartered Institute of Ecology and Environmental Management[2] and the British Standards Institute[3].

Desk Study

1.9 To provide additional background to the appraisal and to highlight likely features or species groups of interest, a study of available biological records was undertaken to identify sites designated for their nature conservation value, and existing records of protected or notable species of relevance to the Site. A search of the following resources was undertaken:

- Greenspace Information for Greater London (GiGL; records obtained for the Site and a 1km buffer from the centre);
- Multi-Agency Geographical Information for the Countryside (MAGIC);
- Ordnance Survey (OS) mapping; and
- Aerial photography.

1.10 The absence of a species from biological records cannot be taken to represent actual absence. Species distribution patterns should be interpreted with caution as they may reflect survey/reporting effort rather than actual distribution.

1.11 Results from previous surveys undertaken by LUC in 2013 were also reviewed[4].

Extended Phase 1 Habitat Survey

1.12 An Extended Phase 1 Habitat Survey was undertaken within the Site boundary in line with standard methods[5].

1.13 Phase 1 Habitat Survey provides a rapid means of classifying broad habitat types in any given terrestrial site.

1.14 The survey was 'extended' by considering the suitability of the Site to support notable or protected flora or fauna. Species considered included those identified during the desk study, or those considered appropriate by the surveyor during the survey. This included a walk over of surrounding habitat outside of the Site boundary. Detailed surveys were not completed for these species; however, based on an understanding of species ecology, consideration was given to the Site's potential to provide sheltering or foraging habitat and/or connectivity to allow dispersal between populations. Further information is provided in the 'Baseline Data' section below.

1.15 The survey was undertaken on the 6th February 2018 by Amy Coleman ACIEEM. Weather conditions during the survey were sunny and dry.

[2] Survey guidance is available at http://www.cieem.net/sources-of-survey-methods-sosm- and appraisal guidance is available at http://www.cieem.net/guidance-on-preliminary-ecological-appraisal-gpea-

[3] British Standards Institute (2013). BS42020:2013 Biodiversity – Code of Practice for Planning and Development.

[4] LUC (2014), 138-140 Highgate Road, Bat Assessment. LUC, Euston.

[5] Joint Nature Conservation Committee (1990). Handbook for Phase 1 Habitat Survey. JNCC, Peterborough.

Bats

1.16 In addition to the above, the structures and trees within the Site were specifically considered for their potential to support bats. A high powered torch (LED Lenser) and binoculars were used to search for and inspect features with potential to support access points and roosting places suitable for bats, and to locate evidence of bat activity, such as droppings and staining.

1.17 The structures and trees were classified as to their Bat Roost Potential (BRP), with due consideration to best practice guidance[6], and as summarised in **Table 2.1**.

Table 0.1 Bat roost potential categories

Suitability	Description	Further survey implications
Confirmed bat roost	Bats or evidence of bats recorded, both of recent and/or historic activity.	Works affecting a roost are licensable. Further survey required to determine the bat species present, nature of roost and level of use before mitigation is can be determined.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[7] and surrounding habitat.	Three separate survey visits. Of which, at least one dusk emergence and a separate dawn re-entry survey. Subject to initial survey findings, the level of survey effort required may be reviewed.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Subject to initial survey findings, the level of survey effort required may be reviewed.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[5] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to	A single survey visit is required for buildings. No further survey is required for trees. Subject to initial survey findings, the level of survey effort required may be reviewed.

[6] Bat Workers' Manual – 3rd Edition, JNCC, Peterborough; Bat Conservation Trust (2016) Bat Surveys: Good Practice Guidelines – 3rd Edition, London.

[7] For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

Suitability	Description	Further survey implications
	contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential[8].	
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further survey or mitigation required.

Limitations and Constraints

1.18 It is important to note that ecological surveys provide information regarding the ecological baseline of a site for only a 'snapshot' of time. Therefore, if significant time lapses between the surveys and the further development or implementation of proposals, updated ecological surveys may be required to identify any change in the baseline, such as natural succession of habitats, or local extinction or colonisation of species. Ecological surveys can generally be considered as up-to-date for 1 to 3 years dependent on the nature of the site, ecological baseline and proposals and likely impact. Therefore if a year lapses between the progressions of the proposals, it is recommended that ecological advice is sought regarding the applicability of the survey findings.

1.19 Although the survey was not undertaken at an optimal time of year for Phase 1 Habitat Survey, given the urban nature of the site this is not considered to have an impact upon the survey findings.

[8] This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

2 Results

Desk Study

2.1 The findings of the desk study are presented in the tables below. These tables list designated sites and relevant protected and notable species which have been recorded within a 1km search radius from the centre of the Site.

Table 2.1 Desk Study Findings – Designated Sites

Site Name	Designation	Description	Orientation / Distance (m) from boundary of Kew Gardens to nearest border of designated site (approx.)
Sites with Non-Statutory Designations			
Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve	Borough Grade I Site of Importance for Nature Conservation (SINC)	A large area of green railside land, with an adjacent city farm and a tranquil woodland nature reserve. Habitats include hedge, pond/lake, ruderal, scrub, secondary woodland, semi-improved neutral grassland, tall herbs.	100m south
Hampstead Heath	Metropolitan Site of Importance for Nature Conservation (SINC)	One of London's best loved open spaces, the Heath's remarkable range of habitats so close to central London includes one of the capital's few bogs, as well as wide expanses of grassland and ancient woodland. Habitats include acid grassland, ancient woodland, bog, pond/Lake.	250m west
Junction Road Railway Cutting	Borough Grade I Site of Importance for Nature Conservation (SINC)	An isolated but well-vegetated section of the Crouch Hill line, between Dartmouth Park Hill and Junction Road in Tufnell Park. Habitats include scrub, secondary woodland and tall herbs.	590m east
Highgate Cemetery	Metropolitan Site of Importance for Nature Conservation (SINC)	One of London's great Victorian cemeteries, with a blend of historic, cultural and wildlife attractions, which gives it a unique character. Habitats include secondary woodland, semi-improved neutral grassland, vegetated wall/tombstones.	850m north

Dartmouth Park Hill and Reservoir	Borough Grade I Site of Importance for Nature Conservation (SINC)	A covered reservoir and adjacent park supporting a variety of grassland wildflowers, with magnificent views south over the City of London and beyond. Habitats include acid grassland, hedge, planted shrubbery, scrub, semi-improved neutral grassland.	850m north
Foxham Gardens	Local Site of Importance for Nature Conservation (SINC)	A small but imaginatively landscaped park with an abundance of native trees and shrubs. The densely-planted border along the southern edge provides food and shelter for common birds and insects. Habitats include amenity grassland, flower beds, planted shrubbery.	990m east

Table 2.2 Desk Study Findings – Relevant Species Records

Species Name	Designation	Orientation / Distance (m) from boundary of Kew Gardens (approx.)
Higher Plants (Flowering)		
Chives *Allium schoenoprasum*	Nationally Scarce	967m north
Box *Buxus sempervirens*	Nationally Rare Red List	141m north west
Spreading Bellflower *Campanula patula*	Natural Environment and Rural Communities (NERC) Act 2006, Section 41 Nationally Scarce Red List	955m north
Galingale *Cyperus longus*	Nationally Scarce Red List	915m north west
Small Teasel *Dipsacus pilosus*	Local Species of Conservation Concern	967m north
Meadow Crane's-bill *Geranium pratense*	Local Species of Conservation Concern	377m west
Stinking Hellebore *Helleborus foetidus*	Nationally Scarce	278m west
Welsh poppy *Meconopsis cambricae caropyllacaea*	Nationally Scarce	534m north west

Daffodil *Narcissus pseudonarcissus*	Local Species of Conservation Concern	91m south west
Fringed Water-lily *Nymphoides peltata*	Nationally Scarce Local Species of Conservation Concern	274m north west
Wood Club-rush *Scirpus sylvaticus*	Local Species of Conservation Concern	377m west
Orpine *Sedum telephium*	Local Species of Conservation Concern	947m north
Invertebrates		
Stag Beetle *Lucanus cervus*	Habitats Directive Annex 2 NERC ACT Section 41 Local Species of Conservation Concern Nationally Notable B	228m north west
White Admiral *Limenitis camilla*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern Red List	402m west
Grey Dagger *Acronicta psi*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Knot Grass *Acronicta rumicis*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Brown-spot Pinion *Agrochola litura*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Beaded Chestnut *Agrochola lychnidis*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Mouse Moth *Amphipyra tragopoginis*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Large Nutmeg *Apamea anceps*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west

Dusky Brocade *Apamea remissa*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Centre-barred Sallow *Atethmia centrago*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Toadflax Brocade *Calophasia lunula*	Local Species of Conservation Concern	690m west
Mottled Rustic *Caradrina morpheus*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Sallow *Cirrhia icteritia*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Small Square-spot *Diarsia rubi*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Small Phoenix *Ecliptopera silaceata*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Dusky Thorn *Ennomos fuscantaria*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Jersey Tiger *Euplagia quadripunctaria*	Habitats Directive Annex 2	892 south west
Double Dart *Graphiphora augur*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Merveille du Jour *Griposia aprilina*	Local Species of Conservation Concern	690m west
Shoulder-striped Wainscot *Leucania comma*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern UKBAP	690m west
Brindled Beauty *Lycia hirtaria*	NERC Act Section 41	690m west

	BAP Priority London Local Species of Conservation Concern	
Lackey *Malacosoma neustria*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Straw Obscure *Oegoconia caradjai*	Nationally Notable	690m west
Mullein Wave *Scopula marginepunctata*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
White Ermine *Spilosoma lubricipeda*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Buff Ermine *Spilosoma lutea*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Cinnabar *Tyria jacobaeae*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Oak Hook-tip *Watsonalla binaria*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	690m west
Volucella zonaria *Volucella zonaria*	Local Species of Conservation Concern Nationally Notable	791m north
Amphibians		
Common Toad *Bufo bufo*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern UKBAP	53m north
Common Frog *Rana temporaria*	Local Species of Conservation Concern	53m north
Birds		
Common (Mealy) Redpoll *Acanthis flammea*	BAP Priority London Local Species of Conservation Concern	527m north

Mute Swan *Cynus olor*	Local Species of Conservation Concern	872m north west
Swift *Apus apus*	Local Species of Conservation Concern	29m north west
House Martin *Delichon urbicum*	Local Species of Conservation Concern	527m north
Little Egret *Egretta garzetta*	Birds Directive Annex 1 Local Species of Conservation Concern	1057m north
Kestrel *Falco tinnunculus*	Local Species of Conservation Concern	168m north
House Sparrow *Passer domesticus*	Local Species of Conservation Concern NERC Act Section 41 IUCN Bird Population Status- Red	34m north
Herring Gull *Larus argentatus*	Birds Directive Annex 1 BAP Priority London Local Species of Conservation Concern	402m west
Redwing *Turdus iliacus*	IUCN Bird Population Status- Red Local Species of Conservation Concern	402m west
Lesser Black-backed Gull *Larus fuscus*	Local Species of Conservation Concern	872m north west
Red Kite *Milvus milvus*	Birds Directive Annex 1 Wildlife and Countryside Act Schedule 1	1057m north
Spotted Flycatcher *Muscicapa striata*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	926m north
Whimbrel *Numenius phaeopus*	Wildlife and Countryside Act Schedule 1	1057m north
Osprey *Pandion haliaetus*	Birds Directive Annex 1 Wildlife and Countryside Act Schedule 1	1057m north
House Sparrow *Passer domesticus*	NERC Act Section 41 BAP Priority London Local Species of Conservation Concern	134m north
Sandwich Tern *Sterna sandvicensis*	Birds Directive Annex 1	1057m north
Song Thrush *Turdus philomeos*	IUCN Bird Population Status- Red Local Species of Conservation Concern	562m north

Fieldfare *Turdus pilaris*	Wildlife and Countryside Act Schedule 1	402m west
Ring Ouzel *Turdus torquatus*	NERC Act Section 41	510m north west
Mammals (not including bats)		
Western European Hedgehog	NERC Act Section 41 Local Species of Conservation Concern	53m north
Bats		
Soprano Pipistrelle *Pipistrellus pygmaeus*	The Conservation Regulations (Natural Habitats) 2010 (Schedule 2) NERC Act Section 41 Habitats Directive Annex 4 Wildlife and Countryside Act 1981 Schedule 5 Local Species of Conservation Concern	180m west
Common pipistrelle *Pipistrellus pipistrellus*	The Conservation Regulations (Natural Habitats) 2010 (Schedule 2) Wildlife and Countryside Act 1981 Schedule 5 Local Species of Conservation Concern	180m west
Daubenton's Bat *Myotis daubentonii*	The Conservation Regulations (Natural Habitats) 2010 (Schedule 2) Habitats Directive Annex 4 Wildlife and Countryside Act 1981 Schedule 9 Local Species of Conservation Concern	793n north west
Noctule *Nyctalus noctula*	The Conservation Regulations (Natural Habitats) 2010 (Schedule 2) Habitats Directive Annex 4 Wildlife and Countryside Act 1981 Schedule 9 Local Species of Conservation Concern	480m north
Leisler's Bat *Nyctalus leisleri*	The Conservation Regulations (Natural Habitats) 2010 (Schedule 2) Habitats Directive Annex 4 Wildlife and Countryside Act 1981 Schedule 9 Local Species of Conservation Concern	180m west

2.2 LUC undertook bat surveys of the Site in 2013, results of these surveys are summarised in **Table 3.3** below.

Table 2.3 Bat Survey Results

Date	Dusk / Dawn	Findings
28th August 2013	Dusk	1 x soprano pipistrelle

		pass
3rd September 2013	Dusk	2 x common pipistrelle passes
16th September 2013	Dawn	No activity recorded

2.3 A total of three bat passes were recorded during the three surveys undertaken. This is very low level of bat activity.

Extended Phase 1 Habitat Survey

2.4 Habitat descriptions are set out below. While considering this information, reference should be made to the Phase 1 Habitat Map presented in **Appendix 2**. Target notes are presented in **Appendix 3**. Site photographs are presented in **Appendix 4.**

Hardstanding and buildings

2.5 Hardstanding and a building comprised almost the entire Site, with the exception of a small area of ornamental planting. There was a canopy of plastic and metal composition adjacent to the building, this provided a roof over the petrol forecourt. The building was composed of brick and cement with a flat roof.

Ornamental planting and trees

2.6 A small area of ornamental plating was recorded on the eastern boundary of the Site adjacent to Highgate Road. This area was planted with three small and well maintained shrubs, these were bay laurel *Laurus nobilis* and conifer species.

2.7 Two young ornamental chestnut trees were recorded on the northern boundary of the Site.

Adjacent habitats

2.8 Amenity grassland was present to the north and south of the Site. To the south one mature London plane *Platanus x hispanica* tree was present. To the north several mature London plane trees were present, as well as ornamental planting including bay laurel.

Bats

2.9 Bat records identified within 1km of the Site included:

- Common pipistrelle;
- Soprano pipistrelle;
- Daubenton's;
- Noctule; and
- Leilser.

2.10 Surveys undertaken in 2013 returned three bat passes in total across the three surveys within the Site, these were common and soprano pipistrelle species.

2.11 The Site lies within an urban setting, along a busy main road. Both the tree lined main road and railway line to the south provide potential commuting habitat for bats. Hampstead Heath to the west supports woodland, waterbodies, grassland and structures which provide optimal foraging, commuting and roosting habitat for a variety of bat species. However the Site itself was comprised of artificial habitats with a lack of vegetation. The Site forms a break in the continuously vegetated Highgate Road, and fragments this habitat corridor.

2.12 Two young ornamental trees were located within the north of the Site. The trees were small in size and in good condition with a lack of surrounding shelter, furthermore they had no observable features. Therefore these were recorded as with **negligible BRP.**

2.13 There was one building on the Site. This included small cracks in the corner of an area of soffit board and small gaps in the brickwork along the northern aspect. Wooden soffit boarding was restricted to one small area in the north of the Site, two small cracks were in a corner position and would present difficulties for a bat to access due to the angle (refer to **Photo 3** in **Appendix 4**). Additionally, given the nature of the building with a flat roof, and on closer inspection the cracks did not appear to lead anywhere, the features were considered unsuitable for bats to roost. The gaps in the brick work were superficial and limited to the depth of the bricks (refer to **Photo 4** in **Appendix 4**). Furthermore, no signs of bats were recorded during the assessment. Therefore given the sub-optimal and localised nature of the features and lack of suitable surrounding habitat, it is considered highly unlikely the building supports roosting bats. Therefore it is recorded to be of **negligible BRP**.

2.14 The canopy structure did not support features which could support roosting bats, it was well lit and the metal and plastic composition does not provide the thermal qualities which would be required. Therefore it had **negligible BRP**.

Birds

2.15 Bird records identified within 1km of the Site, including common and widespread species, included:

- Kestrel;
- Swift;
- Song Thrush;
- House Sparrow;
- Fieldfare; and
- Redwing.

2.16 It is unlikely the shrubs within the Site would support nesting birds given their small size, lack of shelter and high disturbance located on a main road. The building did not support features suitable for birds to nest. The two ornamental chestnut trees within the Site could support opportunities for birds to nest. No nesting birds were recorded at the time of survey.

3 Discussion

Designated Sites

3.1 Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve SINC lies 100m south. Hampstead Heath SINC lies 250m west, and extends over a vast area to the north. It is a large area of natural and semi-natural habitats including ancient woodland, grasslands and waterbodies, an important site for the borough. Given the small scope and scale of the development and low value baseline of the existing Site it is considered unlikely proposals will have an adverse effect on the nearby SINCs.

3.2 Four other SINCs lie within 1km of the Site, these are considered to be of a distance unlikely to be affected by the proposals.

3.3 Best practice construction methods will be employed on Site to avoid impacts such as dust and contamination from surface runoff.

Habitats

3.4 The Site is primarily comprised of hardstanding and a building with a very small area of ornamental planting. These are common and widespread habitats of low ecological value. Proposals include planting of grass to cover half of the Site. This will increase vegetation cover on the Site and improve connectivity.

Bats

3.5 The legal protection afforded to bats and their roosts is summarised in **Appendix 1**. In summary all bats and their roosts are subject to the highest level of protection afforded to species in the UK as European Protected Species (EPS).

3.6 The Site lies within a heavily urbanised area adjacent to a well-used main road. The trees along the road and railway line to the south support habitat for bats to commute. However the building and trees within the Site itself do not support features suitable for bats to forage or roost.

3.7 Surveys undertaken in August and September 2013 recorded a total of three bat passes over the three surveys undertaken. This is very low levels of commuting. Although the surveys were undertaken five years ago, the baseline of the Site has not changed and it is considered unlikely use of the Site by bats would change significantly in that time.

3.8 There will be an increase in vegetation cover through the proposals, and therefore this will improve connectivity. However there is potential for any new external lighting to impact on commuting bats.

Potential Mitigation

3.9 **Sensitive lighting:** Increased lighting has potential to reduce the suitability of habitats for bat foraging and movement. Therefore, a sensitive lighting scheme would be required to reduce existing levels of lighting wherever possible. Potential design measures which may help to minimise light spill include:

- Avoidance of lighting wherever possible, particularly in the vicinity of any bat roost mitigation/enhancement features;
- Use of LED lighting which does not emit UV (less attractive to flying insects);

- Use of motion sensor lighting;
- Use of timers to restrict lighting to required periods;
- Directional lighting with cowling, shields and/or hoods to minimise light spill;
- Use of the lowest lux possible;
- Screen planting to limit light spill.

Birds

3.10 The young ornamental trees on the Site provide habitat for nesting birds. Therefore removal of the trees would have potential to adversely affect nesting bird species.

Mitigation

3.11 If trees are to be removed, to ensure no adverse effects occur in relation to nesting birds, a precautionary approach is recommended, to include:

- Sensitive timings where possible with works undertaken between September-February (inclusive) to avoid the nesting season.
- If this is not achievable, the presence of bird nests will be searched for prior to works commencing. If bird nests are present and likely to be affected by works, a suitable protection zone would be required until such time that the young have fledged and the nest is no longer active. This would likely result in delays to the programme and may need to be informed by an ecologist.

Enhancement

3.12 The proposals present opportunities for enhancement measures, particularly given the low ecological value of the existing Site. Incorporation of the following measures if possible would deliver ecological enhancement:

- Wildlife friendly planting - planting of native and/or ornamental species with known benefits to wildlife, such as pollinator friendly species, would provide valuable habitat for invertebrates and birds. This could include use of and/or planting of a wild flower mix within the grass verge, shrub planting around the borders of the verge and gardens and ensuring use of a variety of grass species within the grass verge.
- Green Infrastructure - the provision of a green or brown roof and/or green walls (subject to the structural design of the building, green walls may simply comprise use of climbers) has the potential to enhance biodiversity by offering foraging and sheltering resources for invertebrates and birds, and by increasing species-richness and cover of plants. It would also help improve habitat connectivity.
- Bird boxes – proposals could include the incorporation of nesting features within the new building, comprising self-contained boxes which can be incorporated in to the walls or attached externally, or within trees.

Appendix 1

Policy and Legal Considerations

Statutory nature conservation sites and protected species are a 'material consideration' in the UK planning process (DCLG 2012). Where planning permission is not required, for example on proposals for external repair to structures, consideration of protected species remains necessary given their protection under UK and EU law.

Natural England Standing Advice aims to support Local Planning Authorities decision making in respect of protected species (Natural England 2012). Standing advice is a material consideration in determining the outcome of applications, in the same way as any individual response received from Natural England following consultation.

The Conservation of Habitats and Species Regulations 2017 transpose the requirements of the European Habitats Directive (Council Directive 92/43/EEC) and Birds Directive (Council Directive 79/409/EEC) into UK law, enabling the designation of protected sites and species at a European level.

The Wildlife and Countryside Act 1981 (as amended) forms the key piece of UK legislation relating to the protection of habitats and species.

The Countryside Rights of Way Act 2000 provides additional support to the Wildlife and Countryside Act 1981; for example, increasing the level of protection for certain species of reptiles.

The Protection of Badger Act 1992 provides specific protection for this species.

The Wild Mammals Protection Act 1996 sets out the welfare framework in respect to wild mammals, prohibiting a range of activities that may cause unnecessary suffering.

Species and Habitats of Principal Importance for Conservation in England and Wales and priority habitats and species listed in the **London Borough of Camden Local Plan** are species which are targeted for conservation. The government has a duty to ensure that involved parties take reasonable practice steps to further the conservation of such species under **Section 41 of the Natural Environment and Rural Communities Bill 2006**. In addition, the Act places a **biodiversity duty on public authorities** who 'must, in exercising their functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity' (Section 40 [1]). Criteria for selection of national priority habitats and species in the UK include international threat and marked national decline.

The **London Borough of Camden Local Plan (2017)** includes the following policies of relevance to wildlife:

Policy C1 Health and Wellbeing:

- Access to open space and nature – the benefits of open space are seen to be particularly important for physical exercise, relaxation and stress relief, reducing pollutants, cooling the urban heat island and providing areas for local volunteer groups and food growing (Policy A2 Open space). We will protect, maintain and enhance Camden's parks, open spaces and green corridors and seek to tackle deficiencies and meet increased demand for open space.

Policy A2 Open Space:

- Enhancing our green infrastructure - The term 'green infrastructure' refers to the network of green and open spaces, green features such as trees and green roofs and water bodies, such as the Regent's Canal, which taken together provide multiple quality of life benefits. There is a particular opportunity to continue improving links between open spaces to improve access for recreation and corridors which allow species to move between habitats. Schemes should contribute to the implementation of green infrastructure strategies (e.g. All London Green Grid) and wider strategies seeking to enhance green infrastructure, such as the Thames River Basin Management Plan.

Policy A3 Biodiversity:

- 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.

Policy CC2 Adapting to Climate Change:

All development should adopt appropriate climate change adaptation measures such as:

- The protection of existing green spaces and promoting new appropriate green infrastructure;
- not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;
- incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and
- measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.
- Any development involving 5 or more residential units or 500 sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Key messages in the **Camden Planning Guidance, Biodiversity (Draft, 2017)** which supports the Local Plan are below:

A biologically diverse natural environment has an important role in economic prosperity, health and well being of Camden residents, workers and visitors.

Councils have a statutory duty to have regard to the purpose of conserving biodiversity, particularly where there are protected species and habitats

Proposals must demonstrate:

- *how biodiversity considerations have been incorporated into the development;*
- *how the five-point Mitigation Hierarchy has been addressed; and*
- *what positive measures for enhancing biodiversity are planned.*

The National Planning Policy Framework (DCLG 2012) states (Section 11), that the planning system should minimise impacts on biodiversity, providing net gains in biodiversity where possible. It also states that local planning authorities and planning policies should:

- Plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.
- Take account of the need to plan for biodiversity at a landscape-scale across local authority boundaries.
- Identify and map components of the local ecological networks, including: international, national and local sites of importance for biodiversity, and areas identified by local partnerships for habitat restoration or creation.
- Promote the preservation, restoration and re-creation of priority habitats, ecological networks and the recovery of priority species populations, linked to national and local targets and identify suitable indicators for monitoring biodiversity in the plan.

Bats

All British species of bat are listed on the Wildlife and Countryside Act 1981 (as amended) Schedule 5. It is an offence to deliberately kill, damage, take (Section 9(1)) a bat; to intentionally or recklessly disturb a bat whilst it occupies a place of shelter or protection (Section 9(4)(b)); or to deliberately or recklessly damage, destroy or obstruct access to a bat roost (Section 9(4)(c)). Given the strict nature of these offences, there is an obligation on the developer and owner of a site to consider the presence of bats.

All British bats are listed on the Conservation of Habitats and Species Regulations 2010, Schedule 2. Regulation 41 strengthens the protection of bats under the 1981 Act against deliberate capture or killing (Regulation 41(1) (a)), deliberate disturbance (Regulation 41(1) (b))[9] and damage or destruction of a resting place (Regulation 41(1) (d)).

A bat roost is defined as any structure or place which is used for shelter or protection, irrespective of whether or not bats are resident. Buildings and trees may be used by bats for a number of different purposes throughout the year including resting, sleeping, breeding, raising young and hibernating. Use depends on bat age, sex, condition and species as well as the external factors of season and weather conditions. A roost used during one season is therefore protected throughout the year and any proposed works that may result in disturbance to bats, and loss, obstruction of or damage to a roost are licensable.

Application for a Natural England EPS Licence

Development works that may cause killing or injury of bats or that would result in the damage, loss or disturbance of a bat roost would require a Natural England (NE) Bat Mitigation Licence.

For a Mitigation licence to be granted three tests must be met. Evidence is needed to determine these three tests: whether there is a need for the development which justifies the impact on the European Protected Species (EPS); whether there is an alternative which would avoid the impact and need for an EPS licence; and whether mitigation proposed is sufficient to maintain the conservation status of the EPS in question.

A Mitigation Licence application will generally only be considered by NE on receipt of planning consent, and once any pre-commencement conditions of relevance to ecology have been discharged.

There are two licensing routes now available for bats, which comprise:

Full NE England EPS Mitigation Licence:

- NE aim to determine the application within six weeks (although this can take longer).
- The application comprises three components including an application form (broad details of the applicant, site and proposals); a detailed Method Statement providing the survey methods and findings, impact assessment and mitigation measures (including detailed maps and schedule of works); and a Reasoned Statement outlining the „need" for the development and consideration of alternatives.

NE Low Impact Class Licence

- This new route provides an alternative, quicker route (with a much reduced application form, and a target of 10 days to determine an application).
- This Low Impact Class Licence is only available to Registered Consultants identified by NE.
- This is available for sites which support up to three low status roosts (day roosts, night roosts, feeding roosts and transitional roosts) of a maximum of three common species. The common species which can be covered by this licence include common pipistrelle, soprano pipistrelle, brown longeared, whiskered, Brandts, Daubenton"s and Natterer"s bat.
- All licensed works require evidence that there is a need for the development and that appropriate mitigation, including seasonal constraints and provision of alternative habitat and/or roosting structures is considered.
- Before Natural England can confirm the site is registered and licensable works can commence, an assessment of the three tests must be undertaken by the Registered Consultant. Although this does not need to be submitted to NE, NE may subsequently undertake a review of the project and request to see all evidence as collected by the Consultant. This can only be undertaken following a survey and impact assessment which must be carried out in accordance with licence conditions and BCT survey guidelines.
- This licence cannot be used in relation to trees.

[9] Relates specifically to deliberate disturbance in such a way as to be likely to significantly affect i) the ability of any significant group of animals of that species to survive, breed or rear or nurture their young or ii) the local distribution of that species.

Several species of bat, including brown long-eared and soprano pipistrelle are listed as species of principal importance under the NERC Act (2006). Section 41 of the Act is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Nesting Birds

Birds and their nests are protected by the Wildlife and Countryside Act 1981(as amended). This Act gives protection to all species of bird with regard to killing and injury, and to their nests and eggs with regard to taking, damaging and destruction. Certain species listed on Schedule 1 of the Act, are afforded additional protection against protection

Appendix 2

Extended Phase 1 Habitat Map

134-140 Highgate Road

Phase 1 Habitat Survey

Site boundary

Phase 1 habitats

- Ornamental planting
- Hard standing
- Building/ structure
- Target note
- Tree

Map Scale @A3: 1:200

LUC

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

CB:KS EB:Stenson_K LUC FIGX_10230_Phase1_A3L 15/02/2018

Appendix 3

Extended Phase 1 Habitat Survey – Target Notes

Target Note	Description
1.	The main garage building on the Site. This was comprised of brick and cement construction with asphalt roofing felt on top. On the northern aspect the wall indented and there was some wooden soffit boarding present.
2.	Northern aspect of the building with features usually considered as with potential to support bats. These included small cracks in the corner of the wooden soffit board (which is in this location only) and small superficial gaps in the brickwork. However these are considered to have negligible bat roost potential due to the localised positioning, inaccessible angle for bats and superficial nature of the features.
3.	Hardstanding present across a majority of the site surrounding the building.
4.	A canopy structure of plastic and metal composition, this extends from the building over the hard standing to create cover for the petrol / garage forecourt. The canopy had several bar lights on its underside.
5.	A very small area of ornamental planting adjacent to Highgate Road, this has three shrubs, laurel and conifer species. Two young and small ornamental trees were also present in the north of the Site.

Appendix 4

Site photographs

Photo 1: The Site, pictured from the south, with amenity grassland and a London plane tree immediately south of it.

Photo 2: The small area of ornamental planting adjacent to Highgate Road in the west of the Site.

Photo 3: Small cracks in the corner of the soffit boarding.

Photo 4: Superficial gaps in the brickwork on the northern aspect of the building.