DARWIN ECOLOGY
integrating nature conservation

Unit 13 & 14, Sandy Farm Business Centre, Sands Road, Farnham, GU10 1PX

Email: info@darwin-ecology.co.uk
www.darwin-ecology.co.uk

PEA and Bat Scoping Report

26 to 28 Priests Bridge
Barnes
London
SW14 8TA

January 2019
WP 'Site Overview Revision' July 2022

Darwin Ecology Ltd
Registered Office: 8 Layton Lane, Shaftesbury, Dorset SP7 8EY
Company No. 07654823

1. EXECUTIVE SUMMARY

1.1. This report documents the results of a Preliminary Ecological Appraisal at 26-28 Priests Bridge, Barnes, London, SW14 8TA. The survey is required to support a planning application for the proposed demolition of all existing buildings and construction of two new buildings.

1.2. The plants and habitats recorded within the site are common and widespread in the UK. The site is dominated by hardstanding and buildings with a small area of scrub. These are considered to be of negligible to low ecological value. The site has low potential in supporting protected species. However, some precautionary mitigation has been recommended for species which may be in the immediate area or pass through the site.

1.3. The proposed development has potential to impact on common amphibians, hedgehog, badgers and bats should they enter the site. Precautionary mitigation is recommended:

- As a precaution, before commencing any work all contractors will be inducted by an ecologist in a tool box talk, to ensure they are aware of the risks to protected wildlife on site.
- Vegetative areas should be cleared in a sensitive manner to ensure the welfare of any wildlife that may be utilising these habitats.
- Supervised destructive clearance by a suitably qualified ecologist to be undertaken on the scrub habitat and top-soil in this area.
- If any new fence-lines are proposed, these will need to include wildlife access holes so that animals can freely access/exit the site. 13cm by 13cm is sufficient for any hedgehog to pass through.
- If the works involve trenches and/or excavations during the construction phase, it is recommended they are covered overnight or a ramp provided to ensure that no protected species fall in and become trapped.

1.4. Enhancements include two bird boxes and two bat boxes.

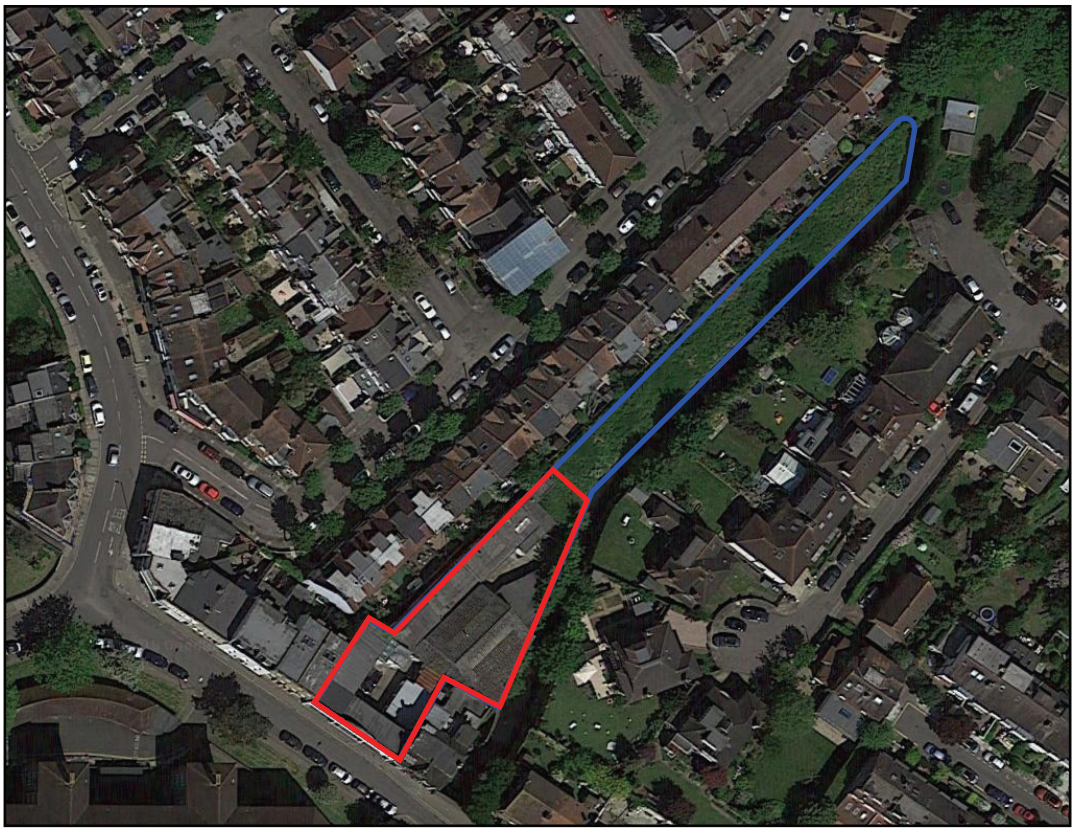
2. INTRODUCTION & BACKGROUND

2.1. This report documents the results of a Preliminary Ecological Appraisal at 26-28 Priests Bridge, Barnes, London, SW14 8TA. The survey is required to support a planning application for the proposed demolition of all existing buildings and construction of two new buildings.

Site Overview

2.2. The proposed development site is located in Barnes in the London Borough of Richmond upon Thames. The site is surrounded by existing commercial and residential developments with Priests Bridge Rd running along the southwestern boundary and Beverley Brook running along the southeastern boundary (see Map 1). The wider landscape comprises of the urban environment of London with areas of deciduous woodland and the River Thames approximately 620m north. The closest area of habitat is 6.6 ha of deciduous woodland approximately 280m east of the site (see Image 2). The immediate habitat surrounding the site is largely urban and comprising of back gardens and roads.

2.3. The proposed development comprises a series of connecting vacant small units with a small garden area. Habitats within the site boundary include the buildings, areas of hardstanding and scrub. The more extensive area of scrubland and coppiced trees to the rear of the site was also assessed for completeness and include: scrub, rough grassland, coppiced trees and the Beverley Brook. There are no planned works in this section. The habitats within the site boundaries offer low foraging and roosting opportunities for bats.



Map 1*:* The proposed development site (Red) and the more extensive area of scrubland which was also assessed (Blue)(*Copyright Google Maps, 2018*).

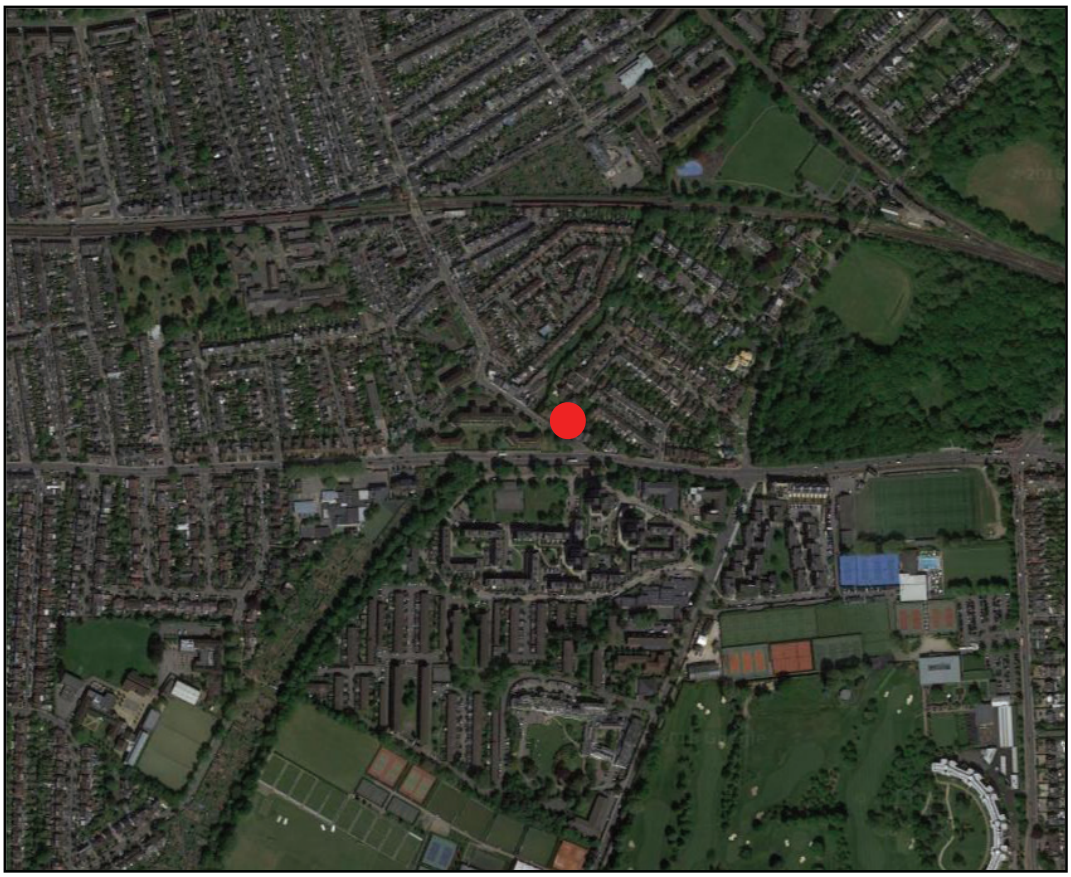


Image 2: The proposed development site in the context of the wider landscape (*Copyright Google Maps, 2018*).

3. LEGISLATION & POLICY

National Planning Policy Framework (NPPF) 2018

3.1. NPPF aims to minimise impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity. Chapter 15 'Conserving and enhancing the natural environment' details what local planning policies should seek to consider with regard to planning applications.

Planning policies and decisions should contribute to and enhance the natural and local environment by:

170 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

170 d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

174 b) 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.

175 a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

175 d) 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.

UK Biodiversity Action Plan & Habitats and Species of Principal Importance

3.2. The UK Biodiversity Plan (BAP) was a programme designed to help conserve the UK's biodiversity. It led to the production of 436 action plans between 1995 and 1999 to help many of the UK's most threatened species and habitats to recover. A review of the UK BAP priority list in 2007 led to the identification of 1,150 species and 65 habitats that met the BAP criteria at UK level. Currently 56 Habitats of Principal Importance and 943 Species of Principal Importance are included within

Schedule 41 of the NERC Act and these include species and habitats which were identified in the UK BAP and which continue to be considered to represent the conservation priorities of England in the UK Post-2010 Biodiversity Framework.

3.3. Species of Principal Importance and Habitats of Principal Importance are those identified as the most threatened and requiring conservation action under the Schedule 41 of the UK Biodiversity Action Plan & Habitats and Species of Principal Importance. Species include West European hedgehog *Erinaceus europaeus*, great crested newt *Triturus cristatus*, dormouse *Muscardinus avellanarius*,and common toad *Bufo bufo*.

London Biodiversity Action Plan (Local BAP)

3.4. The London Biodiversity Action Plan (BAP) identifies priority habitats and species that are of particular importance for biodiversity in London. The London BAP has 11 Habitat Action Plans for named habitat types or land uses, including:

- Acid grassland
- Chalk grassland
- Heathland
- Parks and urban greenspaces
- Private Gardens
- Reedbeds
- Rivers and streams
- Standing water
- Tidal Thames
- Wasteland
- Woodland

3.5. London Biodiversity Partnership identified a total of 214 priority species that are under particular threat in London. Eight of these have been identified as needing specific action and have their own Species Action Plans, including:

- Bats
- Black poplar
- House sparrow
- Mistletoe
- Reptiles
- Sand Martin
- Stag beetle
- Water vole

3.6. Protected species legislation can be found on appendix 1.

4. METHODOLOGY

Desk Study

4.1. A web-based desk study was undertaken for designated sites and protected species and habitat records within 1 km of the site. The following online resources were also consulted:

- The MAGIC website, to obtain information on any designated sites of nature conservation interest within 2 km of the site and details of any European Protected Species licences issued within 2km (http://www.magic.gov.uk/MagicMap.aspx); and

- Google Maps, to view aerial photographs, maps and mapnik data, to assess the ecological context of the site (http://acme.com/planimeter/).

Preliminary Ecological Appraisal

4.2. Ecologist Michael Cummings MCIEEM (Bat Licence no: 2015-13903-CLS) undertook a Preliminary Ecological Appraisal on 28th November 2018.

4.3. The PEA survey identified the habitats present and their potential for protected species, particularly bats, birds, hedgehogs, badgers, amphibians and reptiles, following the standard guidelines set out by the Chartered Institute of Ecology and Environmental Management (CIEEM). The survey focused upon the land within the red line boundary of the planning application, however adjacent areas of connected habitat were also taken into account.

Bat Building Inspection

4.4. Michael Cummings also carried out an internal and external bat scoping survey of the buildings on site on 28th November 2018, in accordance with the following methodology.

External Survey

4.5. An investigation was carried out of features that may indicate bat presence. For example; gaps under roof and ridge tiles, or behind soffit boards and wooden fascias. A search for bat droppings was made beneath each potential entry/exit point identified.

Internal Survey

4.6. An investigation was carried out of all roof and wall features for signs of bats roosting and the access potential of the roof for bats. The surveyor looked for bats,

bat droppings, likely access points, signs of feeding, dead bats, scratch marks and staining, and made a suitability assessment of the structure of the roof. The surveyor used a powerful, low heat LED torch, and a BatBox Duet.

Habitat Assessment

4.7. The trees and other habitats within the site were assessed for their potential to support roosting and foraging bats. Any trees within the site boundary were assessed visually for evidence of bats and assessed for features which increase the likelihood of bats roosting, such as storm damage, rot holes, ivy cover, flaying bark and splits in the trunk.

5. SURVEY RESULTS

Desk Top Survey Results

Designated sites	Type	Approximate distance from site
Within Site Boundaries	The site lies within a Site of Special Scientific Interest (SSSI) Impact Risk Zone (IRZ) for Richmond Park SSSI and Barn Elms Wetland Centre SSSI.	
Within 1km of Site See Appendix 3.	Barnes Common Local Nature Reserve (LNR)	280m East
	Duke's Hollow LNR	800m North
	12 x Sites of Importance for Nature Conservation (SINC); River Thames and tidal tributaries, Richmond Park and associated areas, Roehampton University, Beverley Brook in Wandsworth, Hounslow Loop Railsides, Beverley Brook from Richmond Park to the River Thames, Roehampton Club Golf Course, Bank of England Sports Club Grounds, Old Mortlake Burial Ground, Barnes Green Pond.	The closest is Old Mortlake Burial Ground 455m.

Habitats of principal importance	Habitat type	Approximate distance of closest habitat from site
	Lowland fens	1.9km Northeast
	Lowland dry acid grassland	1 km Northeast
	Intertidal substrate foreshore	740m North
	Mudflats	740m North
	Reedbeds	1.9km Northeast
	Good quality semi-improved grassland	790m Northeast
	Deciduous woodland	280m East
	Traditional orchard	1.9 km Northwest
	Wood-pasture and parkland	350m East

Protected Species	N.o. of species found within 1km	Species/number of records
Birds	31 records were found of red-listed birds and/or birds fully protected under Schedule 1 of the Wildlife and Countryside Act 1981 within 1 km of the site.	Records include species such as herring gull, linnet, grasshopper warbler, nightingale, grey wagtail, spotted flycatcher, grey partridge and curlew.
Reptiles	Slow-worm *Anguis fragilis*	3
	Common lizard *Zootoca vivipara*	2

	Adder *Vipera berus*	1
Amphibians	Common toad *Bufo bufo*	3
	Common frog *Rana temporaria*	95
Mammals	Hedgehog *Erinaceus europaeus*	96
	Eurasian badger *Meles meles*	8
	Common shrew	1
	9 species of bats were recorded within 1 km of the site.	Brown long-eared *Plecotus auritus*, Common pipistrelle *Pipistrellus pipistrellus*, Soprano pipistrelle *Pipistrellus pygmaeus,* Nathusius's pipistrelle *Pipistrellus nathusii,* Serotine *Eptesicus serotinus,* Daubenton's Bat *Myotis daubentonii,* Leisler's bat *Nyctalus leisleri,* noctule *Nyctalus noctula*

5.1. For a development such as this, the only IRZ category that the site could be applicable for is perhaps the Water Supply statement where infrastructure such as warehousing/industry where net additional gross internal floorspace is > 1,000m², or any development needing it's own water supply. The area of the whole site is approximately 1,510m². If the development falls into this category Natural England may require consultation prior to any planning decision.

5.2. All of the habitats and designations in the surrounding area are well separated from the site by existing commercial or residential development and infrastructure. The proposed development at this site is therefore not considered likely to impact on these features.

Habitat Assessment

5.3. Habitats identified within the proposed development site boundary were buildings and hardstanding with a small area of scrub to the rear of unit 5 (Image 1). The more extensive area of scrubland and coppiced trees to the rear of the site was also assessed for completeness and include: scrub, rough grassland, coppiced trees and the Beverley Brook. There are no planned works in this section.

Rough Grassland

5.4. A small area of rough grassland was present directly to the rear of the pottery in unit five which has been kept clear in the past and has an open structure (Image 1). Cocksfoot *Dactylis glomerata* and other common grasses dominate this area with occasional Russian comfrey *Symphytum x uplandicum*, spear thistle *Cirsium*

vulgare and several garden escapees. This falls within the proposed development site.

Beverley Brook

5.5. The river runs parallel to the southeastern boundary of the site and is entirely canalised with steep concrete retaining walls (Image 2). There is no marginal or aquatic riparian present in the whole section of brook observed. This does not fall within the proposed development site.

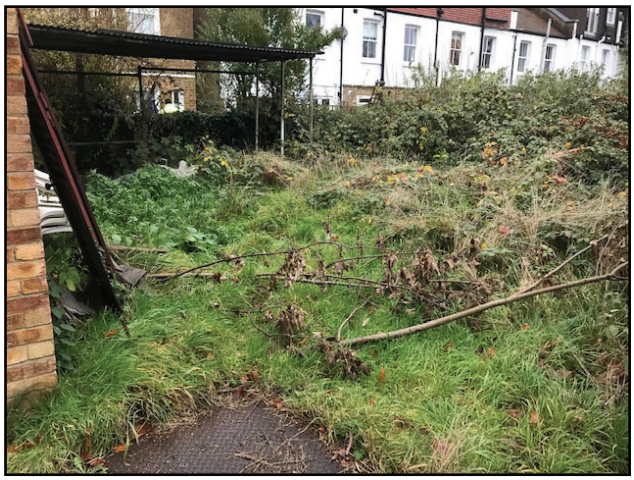


Image 1: Area of rough grassland to the rear of unit 5.

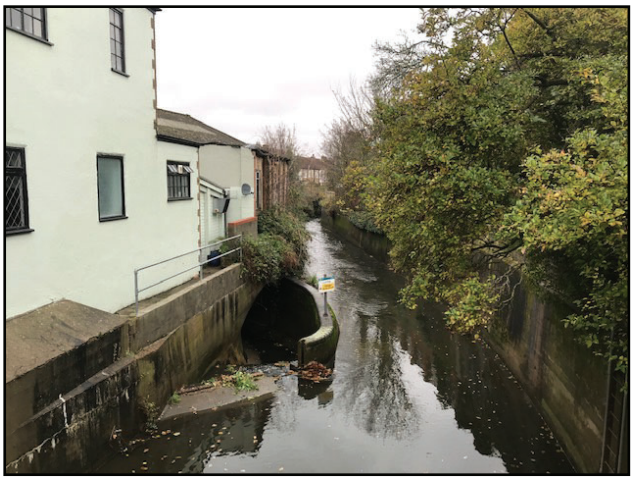


Image 2: Beverley Brook running along the southeastern boundary of the site.

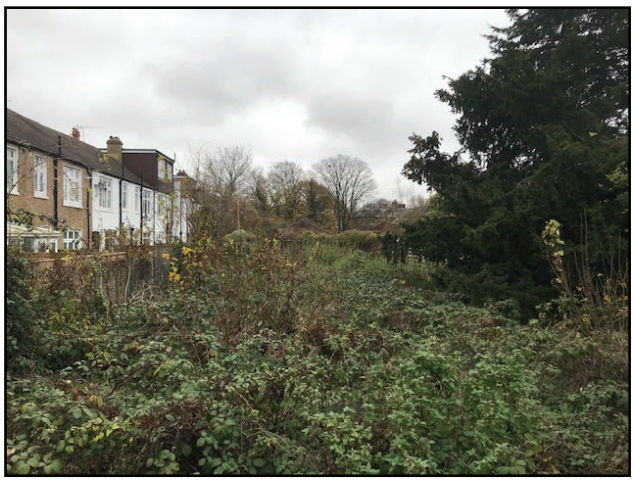


Image 3: Scrub and coppiced trees to the rear of the site.

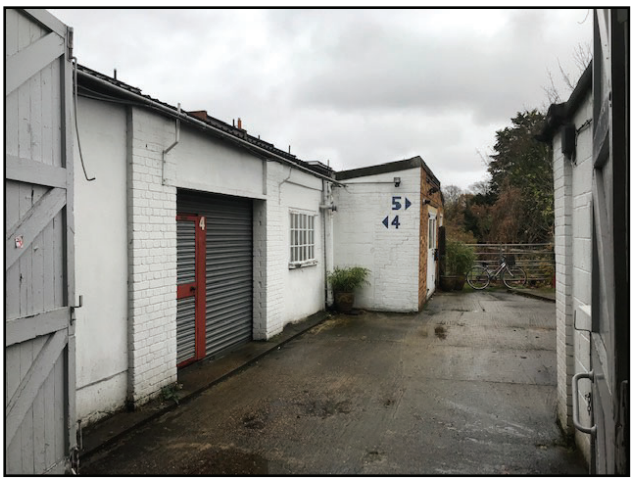


Image 4: An area of buildings and hardstanding present on site.

Scrub and Coppiced trees

5.6. A scrub area was present to the rear of the site which consisted of undulating terrain with large piles of brick rubble debris overgrown entirely by vegetation (Image 3). Previously the site would have been dominated by sycamore *Acer pseudoplatanus* and elder trees *Sambucus nigra* which appear to have been coppiced in recent years and are regrowing back from stumps. The understory is dominated by

bramble *Rubus sp.* and nettle *Urtica dioica* with other herbs present such as hedge bedstraw *Galium mollugo*, ivy *Hedera sp.*, hops *Humulus lupulus*, and honesty *Lunaria annua*. The area appears to be used by foxes frequently. No burrows were seen but an exhaustive search was not undertaken in the denser areas of bramble scrub at the time of survey. These habitats do not fall within the proposed development site.

Hardstanding and buildings

5.7. The buildings covered approximately 50% of the site and hardstanding was present between all buildings on site (Image 4). The buildings are covered in more detail within the bat building assessment section below. All buildings are due to be demolished under the proposed development.

Ecological value

5.8. Overall the site is considered to be of low ecological value for protected species due to the lack of suitable habitat on site.

Protected species

Birds

5.9. The habitats such as the scrub north of the proposed site offer good opportunities for nesting birds which are less restricted by the lack of connectivity than other species. It is considered likely that birds would use the habitats on site to nest. Recommendations with regards to this species are detailed in section 6.

Reptiles

5.10. It is highly unlikely reptile species would pass through the site due to the barriers of terraced houses to the west, Priest Bridge road to the south, and the canalised Beverley Brook to the east. There is a small area of connecting habitat at the northeast tip of the site which connects to gardens of nearby houses however, these are also contained within the urban environment of the local area. Precautionary destructive clearance of the scrub on site is detailed in section 6 to ensure no reptiles are harmed in the unlikely event they are present.

Amphibians

5.11. No ponds lie within 250m of the site and the site lacks connectivity to suitable habitat. No suitable habitat for great crested newts is present within the site boundary and **no records were found within 1 km of the site.** No further survey work is recommended for this species.

5.12. Beverley Brook runs parallel to the southeastern boundary however, this is not considered suitable for amphibians due to the lack of riparian habitat and the canalised walls which restrict access in or out of the brook. Common amphibians such as frogs and toads may be foraging or resting in the scrub and surrounding gardens however, precautionary mitigation has been prescribed for this species in the unlikely event they pass through the site.

Hedgehogs

5.13. The habitat on site provided some suitable habitat for foraging and nesting hedgehogs. Hedgehog street (https://bighedgehogmap.org) does have a live record of hedgehogs within 1 km of the site and as they have large home ranges they may be in the area. Precautionary mitigation has been prescribed.

Badgers

5.14. No badger setts or evidence of badgers was found on site. The habitat has negligible - low suitability for this species with little foraging opportunities. No further survey work is required for this species.

Bats

5.15. Two European Protected Species Licence (EPSL) applications for bats were found within 2 km of the site for soprano pipistrelle. Bats may commute along the canal though the vegetation along this habitat is minimal. It is more likely bats are using the surrounding area for their foraging and roosting purposes such as Richmond park. The site offers low potential for foraging and commuting behaviour.

Bat Building Assessment

5.16. The site is dominated by vacant class E units. Except one, all buildings have flat roofs with a mixture of bitumen felt or corrugated asbestos/cement fibre board coverings (Image 5 to 7).

5.17. The main work shop has an asbestos roof and gables built onto a concrete block structure (Image 6 to 8). The front yoga studio structure which bridges the front entrance to the site is an older brick built structure with a flat bitumen roof. This building is fronted on the southwestern side by a white concrete facade with faux ramparts.

5.18. Bat potential of the whole site was deemed as negligible due to the lack of tiled roofs. Some individual facia board features were deemed to have some low bat potential to support individual crevice roosting bats however, these were categorised as having negligible bat potential due to the built up surrounding they are located within. A precautionary supervised strip of these features is detailed in section 6.

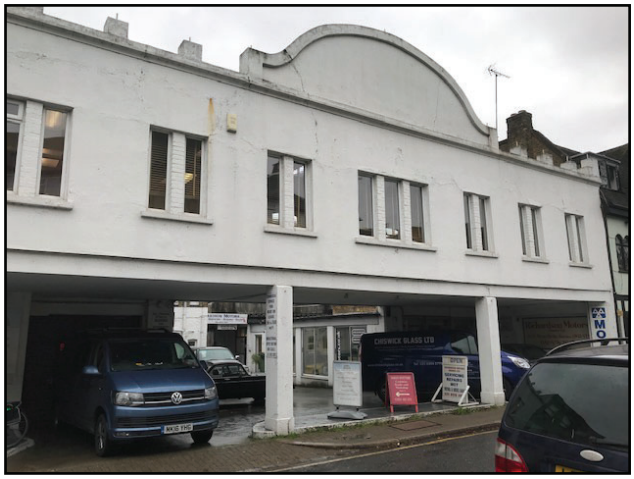


Image 5: The front of site, the southwest elevation.

Image 6: Buildings within the site boundary.

Image 7: Buildings within the site boundary.

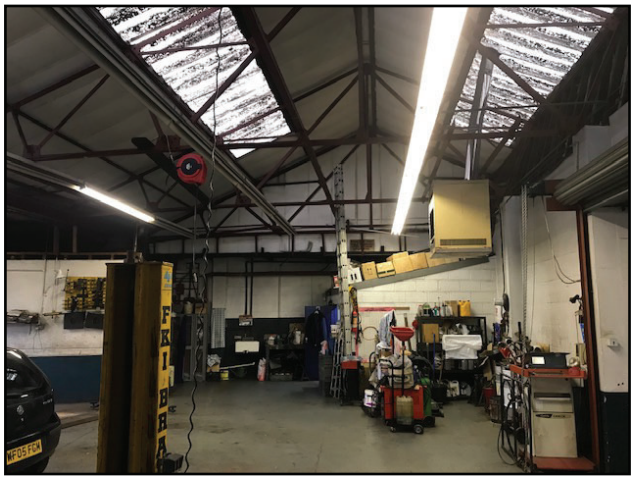


Image 8: Internal of a building within the site boundary.

6. IMPACTS, MITIGATION AND ENHANCEMENT FOR DISCUSSION

Habitat Status and Impacts

6.1. The proposed plans only impacts upon the buildings, hardstanding and a small area of scrub. The impacts of the proposed development have only assessed in this area. If any works are required in the scrub area to the rear of the site boundary, further assessment would be required. The site was considered to have low ecological value.

Protected species

Birds

6.2. Buildings should be inspected for nesting birds prior to demolition by a suitably qualified ecologist. Any vegetation clearance must be undertaken outside of the nesting bird season (March - September inclusive for most bird species in the UK). If this is not possible, an Ecologist should survey the vegetation for nesting birds immediately prior to removal. All occupied birds nests have legal protection from damage and destruction under the Wildlife and Countryside Act 1981.

Hedgehogs

6.3. The proposed development has potential to impact on hedgehogs as there are live records in the area. All dense vegetative areas and deadwood piles should be cleared by hand, in a sensitive manner to ensure the welfare of any hedgehogs that may be utilising these habitats.

6.4. If any new fence-lines are proposed, these will need to include wildlife access holes so that they can freely access / exit the site. 13cm by 13cm is sufficient for any hedgehog to pass through and will be too small for most pets. During all construction works any trenches or excavations will be covered overnight or a ramp provided to allow any animal to escape the hole should they fall in. All excavations should be investigated immediately prior to infilling to ensure no animals are trapped.

Reptiles

6.5. The site is unlikely to support reptiles due to the barriers of the terraced houses, the road and canal which surround the site. However as precautionary mitigation for this and other species, it is recommended that supervised destructive clearance by a suitably qualified ecologist is undertaken on the scrub habitat to ensure no reptiles are harmed in the unlikely event they are present. This will involve ecological

supervision of the removal of vegetation and top-soil by a suitably qualified ecologist.

Amphibians

6.6. The site is unlikely to support amphibians due to the lack of riparian habitat, the canalised walls which restrict access in or out of the brook and the barriers which surround the site. In the unlikely event amphibians are present on site precautions will be taken to ensure they are not harmed. Log piles or compost heaps due for removal should first be searched, then carefully dismantled by hand to ensure the welfare of any animals present. It is recommended that the piles be left in situ if at all possible. All trenches and excavations during the construction phase are to be covered overnight or a ramp provided to ensure that no animals could fall in and become trapped.

Bats

6.7. Bat potential of the whole site was deemed as negligible due to the lack of tiled roofs and suitable features. Some individual facia board features were deemed to have some low bat potential to support individual crevice roosting bats however, these were categorised as having negligible bat potential due to the surrounding urban area they are located within. Precautionary supervision is recommended of these features to ensure the protection of this species in the unlikely event they are present.

Mitigation & Recommendations

6.8. *Toolbox Talk:* Before commencing any work on site as highlighted within this report, all contractors will be inducted by a suitably experienced ecological consultant in a tool box talk. This will ensure they are aware of the risks to wildlife on site, their legal protection and of working practices to avoid harming bats and other species. Working practices on site will then follow legal requirements.

6.9. *Ecological Supervision:* Immediately prior to works commencing, the building must be subject to an internal and external survey by a suitably experienced ecological consultant to ensure no bats are present within any accessible areas. In addition, hand removal/soft strip of all features suitable for use by bats must be undertaken under the direct supervision of a suitably experienced ecologist. A Bat box has been recommended on site as a precaution in the unlikely event bats are found during the works.

Enhancement Recommendations

6.10. In order to improve upon the current ecological situation with respect to bats and and birds, it is recommended that two integrated bat boxes (Beaumaris Woodstone Bat Box or suitable alterative) and two bird box (1SP Schwegler Sparrow Terrace or suitable alterative) are incorporated into the new buildings. These can be purchased from the NHBS website and require no maintenance, see Appendix 3. These should be integrated into the walls of the new build. The installation of these boxes should be carried out by a suitably qualified Ecologist to ensure they are positioned in appropriate locations.

7. REFERENCES

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APPENDIX 1 - PROTECTED SPECIES LEGISLATION

Bats

In England and Wales, all bat species and their roosts are legally protected under the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010). You will be committing a criminal offence if you:

- Deliberately capture, injure or kill a bat
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost

Barbastelle, Bechstein's, greater horseshoe, lesser horseshoe, brown long-eared, soprano pipistrelle, and noctule bats are all priority species under the UK Biodiversity Action Plan (UK BAP) and have also been adopted as species of principal importance in England under Section 41 of the NERC Act 2006.

Badgers

Badgers and their setts are afforded strict protection under the Protection of Badgers Act 1992. This Act consolidates past badger legislation and, in addition to protecting the badger itself, makes it an offence to damage, destroy or obstruct badger setts. Badgers are also protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), and listed under Appendix III of the Bern Convention, as a species that is in need of protection but may be hunted in exceptional instances. Only badger setts that are currently in use are covered by wildlife legislation.

Birds

All wild birds in the UK are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy the nest or its eggs.

Some bird species, such as the barn owl *Tyto alba*, are listed in Schedule 1 of the 1981 Act and receive further protection, making it an offence to intentionally or recklessly disturb these birds whilst building a nest or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird.

The NERC Act (2006) inserts a new schedule into the Wildlife and Countryside Act (1981) to protect the nests of some bird species that regularly re-use their nests, even when the nests are not in use. This protection currently applies to golden eagle, white-tailed eagle and osprey.

Reptiles

All British reptiles are listed under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore protected from intentional killing or injury. This is largely as a consequence of a national decline in numbers associated with habitat loss.

Two scarcer native British reptiles (smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis*), are afforded 'full' protection. This legislation makes it an offence to intentionally or recklessly kill, injure, disturb, take, possess or sell these species (in all life stages). It is also illegal to damage, destroy or obstruct access to places they use for breeding, resting, shelter and protection.

All species of reptile are priority species in the UKBAP and have been adopted as Species of Principal Importance under Section 41 of the NERC Act (2006) in England (Section 42 in Wales).

Amphibians

Great crested newts (GCN's) *Triturus cristatus* and their habitats are fully protected by the Conservation of Habitats and Species Regulations (2010) and partially protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill, injure or capture GCN's, their young or eggs, or destroy / damage their ponds or places of shelter used for breeding or protection. The great crested newt is also a Priority species in the UK Biodiversity Action Plan (UKBAP), and had been adopted as a Species of Principle Importance in England under Section 41 of the NERC Act 2006.

The natterjack toad *Epidalea calamita* is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 making it a European Protected Species. The natterjack toad is also a priority species under the UK Biodiversity Action Plan.

The pool frog *Rana lessonae* is protected under the Conservation (Natural Habitats &C.) Regulations 1994 (as amended). As a European protected species the deliberate capturing, disturbing, injuring or killing of this species is prohibited, as is damage or destruction of its breeding sites or resting places. The pool frog is also a priority species under the UK Biodiversity Action Plan due to a 100% decline over 25 years (1980-2005).

Common toads *Bufo bufo* are also designated UKBAP species due to a serious decline of populations across large areas of southern, eastern and central England, thought to be mainly due to changes in habitat management, mortalities on the roads, and climate change.

Dormice

Common dormice *Muscardinus avellanarius* and their habitats are fully protected by both the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations (2010). This legislation makes it an offence to kill, injure, disturb or capture dormice, or destroy or obstruct their resting or breeding places.

The dormouse is also a priority species under the UK Biodiversity Action Plan and has been adopted as a species of Principal Importance in England under Section 41 of the NERC Act 2006 (section 42 in Wales) and so is protected from any adverse effects as a result of development.

Otters

Otters *Lutra lutra* are protected by both the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010. This legislation makes it is illegal to; deliberately or recklessly kill, injure or capture an otter, deliberately or recklessly disturb or harass an otter, damage, destroy or obstruct access to a breeding site or resting place of an otter.

The otter is also a UK BAP Priority Species and has been adopted as a Species of Principal Importance in England under Section 41 of the NERC Act 2006 (Section 42 in Wales) and the Conservation (Scotland) Act in Scotland.

Water Voles

Water voles *Arvicola terrestris* are fully protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill or injure water voles, and to damage, destroy or obstruct access to places used for protection or shelter, and to disturb water voles whilst they occupy such a place.

The water vole is also a Priority species in the UK Biodiversity Action Plan, and had been adopted as a Species of Principle Importance in England under Section 41 of the NERC Act 2006.

White-clawed Crayfish

The white-clawed crayfish *Austropotamobius pallipes* is protected under the Wildlife and Countryside Act 1981 (as amended), making it a criminal offence to; intentionally or recklessly kill or injure a white-clawed crayfish, or sell or

attempt to sell any part of this species. The Habitats Regulations (2010) provide further protection through the declaration of Special Areas of Conservation (SAC). This protection aims to prevent commercial harvesting of white-clawed crayfish and prohibits their capture without a licence.

The white-clawed crayfish is also a Priority species in the UK Biodiversity Action Plan (BAP), and has been adopted as a Species of Principal Importance in England under Section 41 of the NERC Act 2006.

Hedgehogs

Hedgehogs are UK Biodiversity Action Plan (BAP) species, and therefore must be taken into consideration as part of development planning. A recent report (Wembridge, 2011) shows that hedgehog numbers have declined by 25% in the last ten years.

APPENDIX 2 - SURVEY AND REPORTING LIMITATIONS AND EXCEPTIONS

This report and its survey results should be considered in conjunction with the terms and conditions proposed and scope of works agreed between Darwin Ecology Ltd and the client.

This report has been produced in the context of the proposals stated in the Introduction & Background section of this report (Section 2) and should not be used in any other context.

Darwin Ecology Ltd have endeavoured to identify the likely presence / absence of protected species wherever possible on site, where this falls within the agreed scope of works. Current standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility can be accepted where these methodologies fail to identify all species or significant species on site.

Extended Phase 1 and Preliminary Ecological survey techniques provide a preliminary assessment of the likelihood of protected species occurring on the development site, based on the suitability of the habitats and any field signs found during the site visit. A Phase 1 survey should not be taken as providing a full and definitive survey of any protected species group.

Extended Phase 1 and Preliminary Ecological Appraisals represent a snapshot of conditions at the time of survey and are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour. Surveys should therefore not be considered a comprehensive list of all plant species or as conclusive proof that certain protected species are not present or will not be present in the future.

Where the presence/absence of a certain species is in question our ecologists must apply a precautionary approach until further survey data can be sought to better inform the decision.

Darwin Ecology Ltd will advise on the optimum survey season for a particular habitat or protected species prior to undertaking the survey work. Darwin Ecology Ltd cannot accept responsibility for the accuracy of surveys undertaken outside this period.

The potential impacts, mitigation and enhancement sections of the report provide an overview and is for guidance only. This section should not be solely relied upon, but should be considered in the context of the whole report.

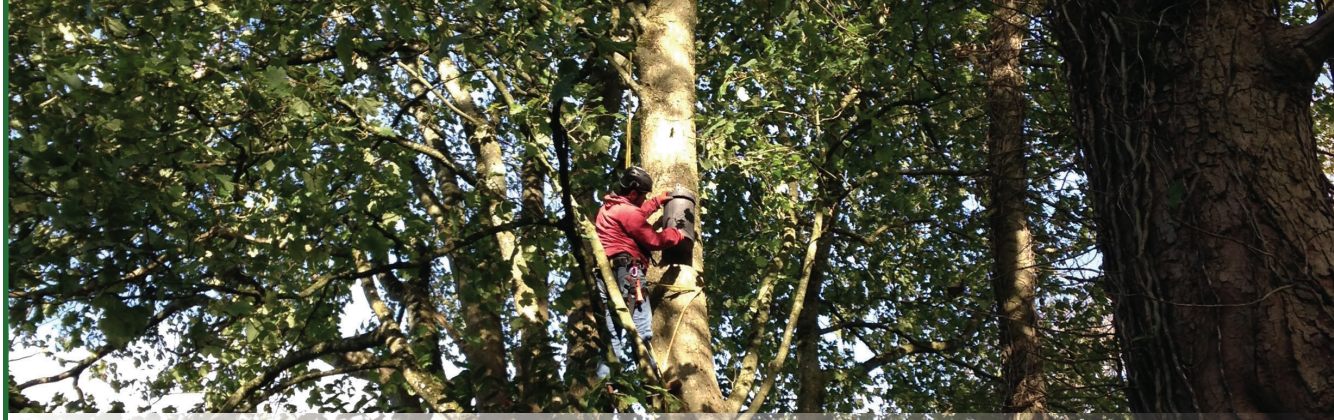
Interpretations of survey results and recommendations outlined in the report represent our professional opinions, expressed in accordance with recognised industry practices and current legislation at the time of reporting. The results of survey work undertaken by Darwin Ecology Ltd are representative at the time of surveying.

Where the client had supplied us with data from previous reports, it has been assumed that this information is valid. No responsibility can be accepted by Darwin Ecology Ltd for inaccuracies within any previous data supplied.

Amendments to this report after its submission may be necessary in light of new, relevant information and / or legislation. This report should be referred to us for re-assessment if any such amendments are necessary or after the expiry of one year from the date of the report.

DARWIN ECOLOGY
integrating nature conservation

Integrated Boxes



TYPES OF BAT AND BIRD BOXES

Schwegler 2F Double Front Panel

- Manufactured from long-lasting Woodstone
- Suitable for pipistrelle species, Brandt's bat and whiskered bat
- Rough interior surface for bats to cling

1SP Schwegler Sparrow Terrace Next Box

- Sparrow populations are decreasing due to a lack of nesting sites
- Sparrows are a sociable species and prefer to nest in a colony
- Likelihood of uptake is increased if more nesting chambers are available (the example nest box shown contains three nesting chambers)
- Various other nest box designs are available
- Install at a minimum of 2m high