

Court Royal & Red Roofs, Surbiton, London

Preliminary Ecological Appraisal

A Report for William George Homes

November 2019



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Controlled Copy

01 of 02

01 William George Homes

02 Greenspace Ecological Solutions Ltd

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*The content of this report is the responsibility of Greenspace Ecological Solutions Ltd.
It should be noted that whilst every effort has been made to meet the client's requirements, no site survey can ensure complete assessment or prediction of the changeable onsite environment. Furthermore, should more than 12 months elapse between the date of this survey and any subsequent development, it may be necessary to consider the need for an update survey to be undertaken.*

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1 PROJECT OVERVIEW

Client:	William George Homes
Site Address:	Court Royal and Red Roofs, Church Hill Road, Surbiton, KT6 4UG
Attending Ecologists:	Joseph Dyson ACIEEM Martin Rann Qualifying CIEEM
Survey Date:	13 th November 2019
Site Proposals:	Demolition of existing buildings and replacement with residential flats.

Source of Relevant Documents:

Document:	Source:
Site Location Plan:	Google Earth Pro
Desk Study:	Greenspace Information Centre for Greater London (GIGL) Multi-Agency Geographic Information for the Countryside (Magic.gov.uk)
Site Plans:	CREATE Design + Architecture

2 INTRODUCTION

2.1 Context

2.1.1 In response to proposed development at Court Royal and Red Roofs, Surbiton, London, a Preliminary Ecological Appraisal (PEA) has been undertaken of the land to be affected (henceforth referred to as 'the site').

2.1.2 The site's potential to support protected species and habitats has been assessed and appropriate recommendations have been provided.

2.2 Site Location

2.2.1 The site is situated near the centre of Surbiton, London at Ordnance Survey (OS) Grid Reference: TQ 182 676. The location of the site is depicted in Image 1.

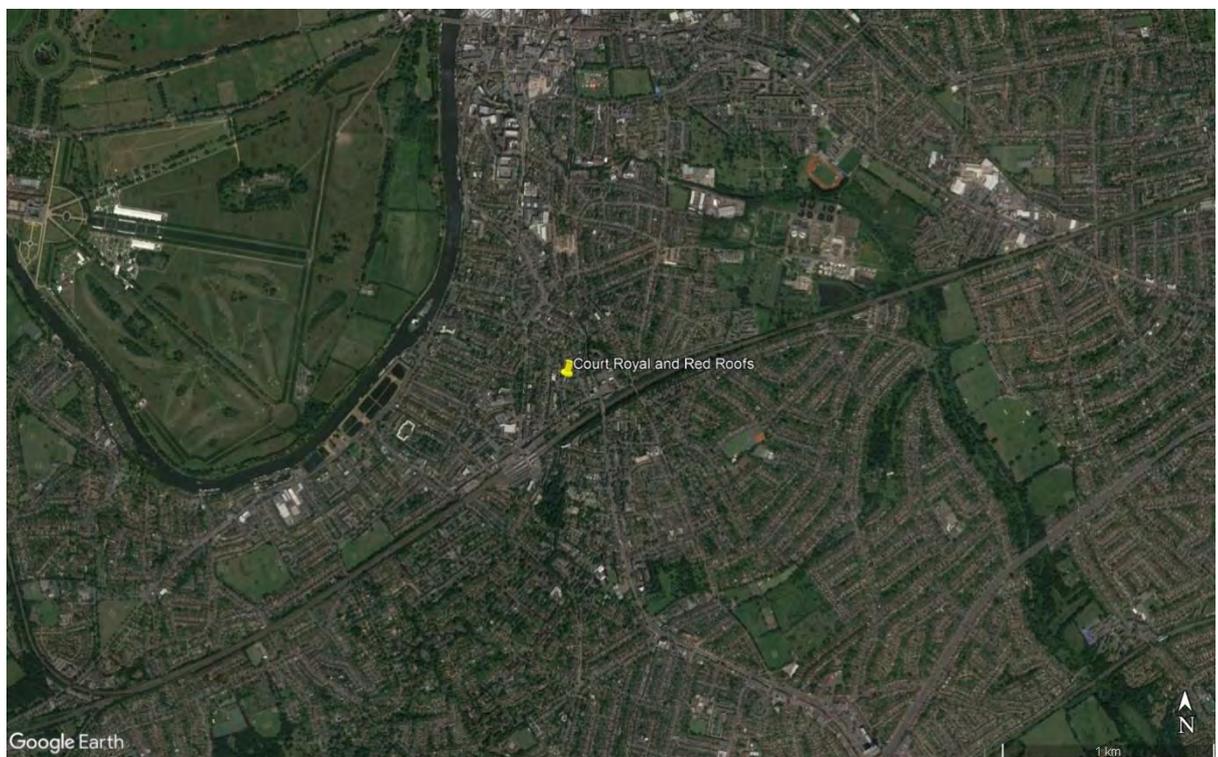


Image 1. Geographical Location of Court Royal and Red Roofs.

2.3 Site Description

2.3.1 The site is approximately 0.08 hectares (ha) in area and currently consists of two semi-detached residential bungalows and associated amenity lawn and planting, as well as scattered trees and areas of hardstanding.

2.3.2 The surrounding landscape is predominantly urban with the river Thames to the west with Hampton court further west. Isolated blocks of woodland are present but are poorly connected.

2.4 Policies and Legislation

Legislation

2.4.1 The main legislation that applies to ecological issues within England and Wales are:

- The Conservation of Habitat and Species Regulations 2018 transposes European Union Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. These regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' and the adaptation of planning controls for the protection of such sites and species. Under the regulations, public bodies have a duty in exercising their functions to have regard to the EC Habitats Directive.
- The Wildlife and Countryside Act 1981 (as amended) provides detail on a range of protection and offences relating to wild birds, other animals, and plants. The level of protection depends on which Schedule of the Act the species is listed on. Licences are available for specific purposes to permit actions that would otherwise constitute an offence in relation to species.
- The Natural Environment and Rural Communities (NERC) Act 2006 imposes an obligation on all public bodies, including local authorities, to consider whether their activities can contribute to the protection of wildlife. The duty is created by section 40(1) of the Act, which states that: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."
- The Hedgerows Regulations Act 1997 serves to; enforce under the Environment Act 1995, restrict the removal of hedgerows, or parts of hedgerows which are over 20m in length. In this case, removal includes digging up and replanting elsewhere, as well as removing from the land completely or destroying in the course of other actions. This includes developments or activities which destroy the roots, causing the vegetation to die.
- The Protection of Badgers Act 1992 exists to protect badgers *Meles meles* from cruelty. Under the act it a criminal offense to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so, or to intentionally or recklessly interfere with a sett.

2.4.2 The above summary serves as guidance only – the reader is referred to the original legislation for definitive interpretation.

UK Planning Policy

2.4.3 The recommendations of this report are in line with the key principles of the National Planning Policy Framework (NPPF), 2019 and Government Circular 06/05.

2.4.4 Local planning policies relating to ecology are invariably based on the conservation of species protected under the above legislation, including species and habitats of principal importance (HPI) listed under Section 41 of the NERC Act 2006; and the protection of designated sites. All these features are considered within the scope of this PEA and therefore any recommendations made herein are likely to be in line with this policy.

2.5 Objectives of the Survey

2.5.1 The objectives of the survey were to:

- Classify the main habitats present within the site;
- Evaluate the ecological importance of these habitats;
- Assess buildings and trees for their potential to support roosting bats;
- Determine the suitability of ponds within 250m of the site to support great crested newts (GCN) *Triturus cristatus*; and
- Establish the need or not for further presence/likely absence surveys for GCN.
- Evaluate the potential for other protected species to occur within the site; and
- Provide appropriate recommendations for further surveys and mitigation where required.

2.6 Survey Constraints

2.6.1 All measurements and indications of area given within this report are approximate.

2.6.2 There were no other constraints to this survey.

3 SURVEY METHODOLOGY

3.1 Desk Study

3.1.1 A desk study was undertaken to determine the presence of sites and habitats of conservation importance together with historical records of protected and notable species within a 1km radius of the site.

3.1.2 The following bodies were consulted for the desk study:

- Magic.gov.org
- Greenspace Information for Greater London (GIGL)

3.2 Preliminary Ecological Appraisal

Habitats

3.2.1 The site was surveyed using the methodology outlined in 'The Handbook for Phase I Habitat Survey: A Technique for Environmental Audit' (JNCC, 2010). This involves identifying the main plant communities present on the site and classifying the habitat types following the JNCC methodology. This technique provides an inventory of the basic habitat types present and enables areas of greater botanical interest which may require further, more detailed, surveys to be identified. Any occurrences of recognised invasive species as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were also noted.

3.2.2 A map of the habitats and areas of interest (using a variation of the JNCC, 2010 protocol for Phase I Habitat plans) is provided in Figure 1. Photographs of features of interest are presented in Appendix A.

3.2.3 The survey identified the main plant communities present on the site, with abundance of identified characterising species noted according to the DAFOR scale. Classification of the habitat types also follows the Phase I Habitat Survey methodology.

3.2.4 The DAFOR scale characterises species abundance as Dominant (D), Abundant (A), Frequent (F), Occasional (O) or Rare (R). These scores represent the abundance within the defined area only and do not reflect national or regional abundances. Botanical species nomenclature follows Stace (2019).

3.2.5 Application of the above technique provides an inventory of the basic habitat types present and enables areas of greater botanical interest which may require further, more detailed, surveys to be identified. The habitats have been mapped and are provided in Figure 1. Photographs of features of interest are presented in Appendix A.

Protected Species

3.2.6 The survey was extended to include an assessment of the site's potential to support protected and notable species. This involved assessing the suitability of the habitats present within the site for these species as well as connectivity to the site from other areas of potentially suitable habitat nearby.

Badger

3.2.7 Evidence of badger activity within and adjacent to the site was assessed by searching for:

- Presence of setts, indicated by suitably sized holes or burrows;
- Evidence of badger hair and/or footprints;
- Evidence of well-used runs supported by secondary evidence such as foraging signs or footprints; and
- Presence of badger latrines.

Bats

3.2.8 Where buildings, trees or other structures are present, specific survey work was undertaken to assess their suitability to support roosting bats. In this instance, a variety of equipment was used to complete the bat scoping survey, including high powered torches, telephoto lens cameras and a ladder.

3.2.9 Any trees within the site, which were deemed likely to be affected by the development, were surveyed in accordance with current best practice guidance (Collins, 2016). Trees were inspected for features such as splits, fissures, delaminated bark, heavy ivy *Hedera* sp. cover and woodpecker holes. Evidence such as droppings, staining and bats themselves were searched for below and in suitable features.

3.2.10 Where buildings were encountered, a full external and internal inspection was undertaken (access permitting). Any likely roosting or access points for bats such as raised fascia boards, missing/lifted tiles cracks or crevices in brick/blockwork and gaps in soffit boxes were recorded and searched for evidence of use by bats (staining, droppings, scratch marks, or the bats themselves).

3.2.11 The results of the scoping survey enable buildings and trees to be categorised as having 'Confirmed roosts'; or 'High', 'Moderate', 'Low' or 'Negligible' suitability to support roosting bats. An outline of categorisation procedure for classifying bat suitability is presented in Appendix B.

3.2.12 In accordance with current best practice guidance (Collins, 2016), the level of suitability

determines the need or not for further summer emergence surveys. Although left to the discretion of the appointed ecologist, in most instances High suitability requires three surveys, Moderate suitability requires two surveys and Low suitability requires one evening emergence or pre-dawn re-entry survey (although trees with Low suitability do not require further emergence or pre-dawn re-entry surveys). Greater detail on the minimum number of surveys recommended in most instances is presented in Appendix C.

Birds

- 3.2.13 The site was assessed for its potential to support other nesting bird species. Factors considered include suitable cover and feeding habitat, as well as any active or disused birds' nests.

Great Crested Newt

- 3.2.14 The site was assessed for its potential to support GCN populations. Suitable terrestrial habitat for great crested newt includes long grass, tall ruderal, woodland and hedgerow borders, as well as wood and rubble piles that act as hibernacula.
- 3.2.15 Specific survey work was undertaken of any on-site and adjacent waterbodies to assess their suitability to support GCN. This was undertaken using a simplified version of the habitat suitability index (HSI) assessment methodology developed by Oldham et al (2000) (ARG, 2010). The HSI incorporates ten suitability indices, all of which are factors considered to affect GCN.
- 3.2.16 The results of a HSI provide a numerical index of between 0 and 1, whereby 0 indicates unsuitable habitat and 1 represents optimal habitat. A score of ≥ 0.5 is considered indicative of a pond that may support a population of GCN.
- 3.2.17 It should be noted that although there is a positive correlation between HSI scores and numbers of GCN observed, the HSI is not a substitute for presence/likely absence surveys and a low HSI score does not necessarily indicate the absence of GCN from a waterbody.

Reptiles

- 3.2.18 The site was assessed for its potential to support reptile populations. Suitable habitat for reptiles includes long grass, vegetated boundaries, woodland and hedgerow borders, as well as wood and rubble piles that act as hibernacula.

Other Species

- 3.2.19 Consideration was given to the site's suitability to support other protected and notable species.

4 SURVEY RESULTS

4.1 Desk Study

Statutory Designated Sites

4.1.1 Two statutory designated sites exist within 1km of the site. This is presented in Table 1.

Table 1 – Statutory designated sites within 1km of the site.

Site Name	Description	Distance from site
The Wood and Richard Jefferies Bird Sanctuary LNR	<i>"This site is comprised of areas of woodland and grassland and there are two old ponds at the bottom of the escarpment. The western part of the site is mainly secondary woodland with a mixed canopy including sycamore Acer pseudoplatanus, horse chestnut Aesculus hippocastanum and ash Fraxinus excelsior. The grassland areas are mainly perennial rye-grass Lolium perenne, meadow grasses Poa spp., cock's foot Dactylis glomerata, couch Elymus repens and red fescue Festuca rubra. On the eastern side is a more densely wooded area that is fenced off, forming the bird sanctuary. Long-tailed tit Aegithalos caudatus, green and greater spotted woodpeckers Picus viridis and Dendrocopos major, nuthatch Sitta europaea, treecreeper Certhia familiaris and goldcrest Regulus regulus have been recorded."</i>	0.5km S
Bushy Park and Home Park SSSI	<i>"Bushy Park and Home Park SSSI is of special interest for its nationally important saproxylic (dead and decaying wood associated) invertebrate assemblage, population of veteran trees and acid grassland communities. These features occur within and are supported by the wider habitat mosaic. The saproxylic invertebrates include those associated with heartwood decay, bark and sapwood decay and with fungal fruiting-bodies found within the veteran trees which are located throughout the site, notably in the large areas currently managed as wood pasture. Lowland dry acid grassland communities present include National Vegetation Classification (NVC) types U1 sheep's fescue Festuca ovina-common bent Agrostis capillaris-sheep's sorrel Rumex acetosella grassland and U4 sheep's fescue Festuca ovina-common bent Agrostis capillaris-heath bedstraw Galium saxatile grassland community which are found within the grassland mosaic of the site."</i>	0.9km W

(SSSI – Site of Special Scientific Interest)

(LNR – Local Nature Reserve)

Non-statutory designated sites

4.1.2 There are six non-statutory designated sites within 1km of the site. These are presented in Table 2.

Table 2 – Non-statutory designated sites within 1km of the site.

Site Name	Distance from site
Oakhill, The Wood and Richard Jefferies Bird Sanctuary BIG2	0.5km S
River Thames and tidal tributaries MI	0.7km W
Seething Wells Filter Bes BIG1	0.7km W
Hogsmill River BIG1	0.9km N
Bushy park and Home Park MI	0.9km W
Fishponds BIG2	1km SE

(MI – Metropolitan Importance)

(BIG1 – Borough of Importance Grade 1)

(BIG2 – Borough of Importance Grade 2)

Ancient Woodland

- 4.1.3 No areas of ancient woodland lie within 1km of the site.

NERC s41 Habitats of Principal Importance

- 4.1.4 Habitats listed under s41 of the NERC Act (2006) within 1km of the site are presented in Table 3.

Table 3 – NERC s41 HPI within 1km of the site.

Habitat Type	Distance from site
Deciduous Woodland	0.2km SE
Woodpasture and Parkland	0.8km W

*Protected or Notable Species**Bats*

- 4.1.5 Bat species of conservation concern of potential relevance to the site are provided in Table 4.

Table 4 - Bat species records within 1km of the site.

Common Name	Scientific Name	Legal Protection / Conservation Priority Status
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	HabDir:A4; Berne:A3; Bonn:A2; WCA5; Local Spp of Cons Conc
Noctule Bat	<i>Nyctalus noctula</i>	HabDir:A4; Berne:A2; Bonn:A2; BAP; S41; WCA5; Local Spp of Cons Conc
Serotine Bat	<i>Eptesicus serotinus</i>	HabDir:A4; Berne:A2; Bonn:A2; WCA5; Local Spp of Cons Conc
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	HabDir:A4; Berne:A2; Bonn:A2; BAP; S41; Local Spp of Cons Conc
Daubenton's Bat	<i>Myotis daubentonii</i>	HabDir:A4; Berne:A2; Bonn:A2; BAP; S41, Hab Reg Sch2, WCA5; Local Spp of Cons Conc

Other Mammals

- 4.1.6 No other records of mammals of conservation interest of potential relevance to the site were reported in the data search.

Birds

- 4.1.7 Bird species of conservation interest of potential relevance to the site are presented in Table 5.

Table 5 – Relevant bird species records within 1km of the site.

Common Name	Scientific Name	Legal Protection / Conservation Priority Status
Kestrel	<i>Falco tinnunculus</i>	BoCC4 Amber; Notable Bird; Local Spp of Cons Conc
Stock dove	<i>Columba oenas</i>	Berne:A3; BoCC4:Amber; BirdsDir:A2.2; Local Spp of Cons Conc
Bullfinch	<i>Pyrrhula pyrrhula</i>	WCA1, Notable Bird; Local Spp of Cons Conc

Common Name	Scientific Name	Legal Protection / Conservation Priority Status
Grey wagtail	<i>Motacilla cinerea</i>	Berne:A2; BoCC4:Red; WCA1; Local Spp of Cons Conc
Song thrush	<i>Turdus philomelos</i>	BoCC4:Red; S41; Local Spp of Cons Conc
Starling	<i>Sturnus vulgaris</i>	BAP; BoCC4:Red; BirdsDir:A2.2; S41; Local Spp of Cons Conc
Swift	<i>Apus apus</i>	BoCC4 Amber; Notable Bird; Local Spp of Cons Conc
House martin	<i>Delichon urbicum</i>	BoCC4:Amber; Notable Bird; Local Spp of Cons Conc
House sparrow	<i>Passer domesticus</i>	BAP; BoCC4:Red; S41; Local Spp of Cons Conc
Redwing	<i>Turdus iliacus</i>	Berne:A3; BoCC4:Red; BirdsDir:A2.2; WCA1; Local Spp of Cons Conc
Mistle thrush	<i>Turdus viscivorus</i>	Berne:A3; BoCC4:Red; BirdsDir:A2.2; Local Spp of Cons Conc
Goldcrest	<i>Regulus regulus</i>	Berne:A2; Local Spp of Cons Conc

Herpetofauna

4.1.8 Herpetofauna species of conservation concern of potential relevance to the site are presented in Table 6.

Table 6 – Herpetofauna species records within 1km of the site.

Common Name	Scientific Name	Legal Protection / Conservation Priority Status	Closest record	Date
Grass snake	<i>Natrix helvetica</i>	Bern_III, WCA5(p), S41; Local Spp of Cons Conc	0.7km W	2018

4.2 Preliminary Ecological Appraisal

4.2.1 The following habitat types were recorded within the site:

- Scattered trees
- Ponds
- Amenity grassland
- Introduced shrub
- Buildings
- Bare ground
- Hardstanding

Scattered trees

4.2.2 Occasional trees are present around the amenity lawns within the rear garden of the properties, comprising: maple *Acer sp.*, apple *Malus sp.*, cherry *Prunus sp.*, hazel *Corylus avellana*, common holly *Ilex aquifolium*, Leyland cypress *x leylandii* and sycamore.

Ponds

- 4.2.3 Two small ponds are present within the rear gardens of each of the respective properties. The ponds are described in greater detail and in terms of their potential to support GCN in Section 4.3 below.

Amenity grassland

- 4.2.4 Amenity grassland consisting of two rear gardens and one front lawn makes up three managed lawns with a total footprint of approximately 0.03ha in size and consists of the following grass species: dominant perennial rye *Lolium perenne* and frequent annual meadow grass *Poa annua*. Other species present include: common comfrey *Symphytum officinale*, crane's-bill *Geranium* sp., common dandelion *Taraxacum officinale* agg., herb Robert *Geranium robertianum*, common mouse-ear *Cerastium fontanum*, common nettle *Urtica dioica*, ribwort plantain *Plantago lanceolate*, spear thistle *Cirsium vulgare* and Bryophytes.

Introduced Shrub

- 4.2.5 Introduced shrub is present surrounding both properties and forming flower borders in the front and rear gardens. Species present consist include: ash saplings, bramble *Rubus fruticosus* agg., bay *Laurus nobilis*, common comfrey, dogwood *Cornus sanguinea*, fig *Ficus carica*, grape *Vitis* sp., common ivy *Hedera helix*, mint *Mentha* sp., common nettle, old mans' beard *Clematis vitalba*, orchid *Orchidaceae* sp., rose *Rosa* sp., rosemary *Rosmarinus officinalis*, emerald 'n' gold *Euonymus fortunei*, spruce *Picea* sp. and sedge *Carex* sp.

Buildings

- 4.2.6 There are 3 buildings on-site including the semi-detached residential property split into two dwellings (B1), a garden shed (B2) and an outbuilding with wood store (B3). These structures have a combined footprint of approximately 278m². A more detailed description and an assessment into the structure's potential to support roosting bats is presented below in Section 4.3.

Bare ground

- 4.2.7 A small area of bare ground is present in Red Roofs rear garden in the northern corner. No botanical species were present.

Hardstanding

- 4.2.8 Hardstanding is present in the form of a driveway and patios that are well maintained and in good condition.

4.3 Protected Species

Badgers

- 4.3.1 No evidence of badger activity or badger setts was recorded during the survey.

Bats Roosting Habitat - Buildings

B1

- 4.3.2 B1 is a large semi-detached residential building split into two dwellings. Externally its walls are brick with exterior rendering. The roof is multi-pitched and covered in tiles which are generally tight and in good condition. Potential roosting features (PRF) for bats are limited to small gaps in the tiles, particularly underneath the ridge tiles.

In one half of the building the roof void has been converted to a living space with a small crawl space present along the edges of the roof, whilst in the other half of the building the roof void is a conventional loft space that appears unused. Where present these voids have timber frames and a ridge board is present at the apex of the roof. The roof is lined with a type of plastic membrane and insulated with fibreglass lagging. The floor of the unused roof void is lined with plyboard. No access points into the roof void were observed and PRF were limited to the ridge board.

Therefore, B1 is considered to have “**Low**” suitability to support roosting bats.

B2

- 4.3.3 B2 is a small garden shed at the northern end of the site used for storage. It is made up of single-skinned timber boards with a pitched timber roof covered in bitumen felt. There are no external PRF for bats present.

Internally, the shed is well lit from a large window and supports no suitable PRF for roosting bats.

Therefore, B2 is considered “**Negligible**” to support roosting bats.

B3

B3 is an outbuilding with an attached wood store. Externally, the outbuilding is constructed of concrete and wooden weatherboarding. While the roof is a steeply pitched roof covered in tiles. The wood store attached is constructed from a cross hatch timber frame which is open to the elements to a tiled catslide roof. A fox was recorded in the woodstore during the study *Vulpes vulpes*. External PRF include gaps under the tiles, gaps in the weatherboarding and gaps under the tiles that lead into the roof void of the outbuilding.

Internally the roof of the woodstore section of the building sits directly onto the timber frames

with no lining. Gaps in the point where the wood store meets the outbuilding also appear to offer entry points into the roof space of the outbuilding from the wood store. The interior roof void of the outbuilding is insulated with lagging and lined with a membrane that appears in good condition. PRF internally are limited to gaps between the roof tiles and the membrane lining.

Therefore, B3 is considered to have “**Low**” suitability to support roosting bats.

Bats Roosting Habitat - Trees

- 4.3.4 No trees identified as potentially suitable for roosting bats were present within the site.

Bats - Foraging and Commuting Habitat

- 4.3.5 The scattered trees along the boundaries of the site provide limited commuting and foraging features for bats.

Birds

- 4.3.6 Suitable nesting habitat is present in the form of introduced shrub, buildings and trees.

Great Crested Newts

- 4.3.7 Two ponds are present on-site, one within each of the gardens of the residential properties.
- 4.3.8 The first pond (P1) is a small kidney shaped pond within a preformed, raised plastic/fibreglass pond basin, approximately 1m wide by 2m long in the garden of Court Royal. The only vegetation in this pond, other than duckweed *Lemna* sp. is a single water lily *Nymphaeaceae* sp.
- 4.3.9 The second pond is a small oval pond, approximately 1m x 2m in the garden of Red Roofs. This pond is covered by a garden table and is surrounded by a border of raised wooden posts. No aquatic vegetation was present in this pond.
- 4.3.10 Given the isolated nature of these ponds within an urban landscape and their lack of suitable egg laying material, as well as the lack of surrounding suitable habitat, they are considered unsuitable for GCN.
- 4.3.11 A single further pond is present approximately 200m west of the site within a small area of greenery however, this pond is separated from the site by a number of roads areas of hard standing and buildings that make up the dense urban area surrounding the site. This was deemed a suitable barrier to any GCN movement and as a result, no further survey of this pond was carried out.

- 4.3.12 Terrestrial habitats on-site are deemed of sub-optimal suitability for GCN owing to their well-

managed nature.

Reptiles

4.3.13 Habitats on-site are deemed of sub-optimal suitability for reptiles owing to their well-managed nature.

Other Protected Species

4.3.14 The survey identified no evidence of other protected or notable species within the site.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Designated Areas

5.1.1 The closest statutory designated area is approximately 0.5km from the site, and the closest non-statutory site is 0.5km away. Due to the small-scale and localised nature of the proposed development, it is not anticipated to affect any designated areas

5.2 Ancient Woodland

5.2.1 There are no ancient woodland sites within 1km of the site and therefore the proposed development will not have any detrimental impacts on ancient woodland.

5.3 Habitats and Botanical Species of Interest

5.3.1 The development will result in no detrimental impact to any HPI listed under s41 of the NERC Act (2006).

5.3.2 The habitats to be affected are common and widespread and no further botanical surveys are required in this instance.

5.3.3 Any trees to be retained as part of the proposed development should be protected in accordance with BS 5837:2012, 'Trees in relation to design, demolition and construction.'

5.4 Protected Species

Badger

5.4.1 No evidence of badger activity or badger setts was recorded during the survey and no further surveys for badgers are required.

5.4.2 However, badgers are a highly mobile species and regularly expand their territories into new habitats. If for any reason no works take place within 12 months of the submission of this report, an update badger survey of the site should be carried out.

Bats Roosting Habitat – Buildings

5.4.3 Records of five species of bats within 5km of the site were returned as part of the desk study.

5.4.4 The main residential building and the outbuilding with attached woodstore (B1 & B3) was deemed to have **Low** suitability to support roosting bats, whilst garden shed (B2) was deemed to be of **Negligible** suitability.

5.4.5 As a result, B1 and B3 will require a single further dusk emergence/pre-dawn re-entry survey for roosting bats, conducted in line with good practice guidance (Collin, 2016) between May and August. Should roosting bats be identified in B1 or B3 during this survey, then further dusk

emergence/pre-dawn entry surveys may be required, and a Natural England protected species mitigation licence may be required in order to permit works.

- 5.4.6 No further surveys for roosting bats of B2 are required.

Bats Roosting Habitat - Trees

- 5.4.7 No suitable trees for roosting bats exist within the site and no further surveys of any trees for roosting bats is required.

Bats - Foraging and Commuting Habitat

- 5.4.8 The proposed development will result in no significant loss of, or severance of suitable bat foraging and commuting features. The proposed planting plan will, however, provide additional features suitable for invertebrates and subsequently bats. The impact of the proposed development upon foraging and commuting bats is anticipated to be negligible and no further bat activity surveys are required.

- 5.4.9 Since lighting can be detrimental to bats using vegetation for foraging and commuting, any external lighting proposed for the development should be sensitive to these boundaries and commuting features, avoiding direct illumination of them, for example through the use of directional and low-level bollard lighting. The Institution of Lighting Professionals (ILP), in partnership with the Bat Conservation Trust (BCT), has published guidance relating to bats and lighting – this is available at the following link: [Guidance Note 8 Bats and Artificial Lighting](#).

Birds

- 5.4.10 Suitable nesting habitat exists in the form of buildings, trees and introduced shrub. As all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended) it is recommended that works to these areas (where necessary) are conducted outside the core breeding period for birds of Late February – August inclusive.

- 5.4.11 Should this timeframe be unobtainable, a thorough search for the presence of nesting birds should be conducted by a suitably experienced ecologist prior to the start of works. Should evidence of nesting birds be recorded, works within 5m of the nest, or works that have potential to destroy the nest, should stop until the eggs have hatched and the chicks fledged, or the nest is deemed by a suitably experienced ecologist to have been abandoned.

Great Crested Newts

- 5.4.12 The two ponds on-site were deemed unsuitable for GCN and the on-site terrestrial habitat was also deemed to be of sub-optimal suitability for GCN. In addition, the site is separated from ponds in the surrounding landscape by a mixture of buildings, roads and areas of

hardstanding, GCN are therefore considered likely absent from the site and no further surveys are required.

Reptiles

5.4.13 Habitats on-site are considered sub-optimal for reptiles and no further surveys for reptiles are required.

Other species

5.4.14 With the exception of the above, there are no obvious and immediate issues regarding other protected species on the site and no further surveys to determine the presence of other protected species is required in this instance. However, should at any point during the development a protected or notable species be identified within the site, then all works should **stop**, and the appointed ecologist consulted on the appropriate manner in which to proceed.

6 ECOLOGICAL ENHANCEMENTS

6.1 Opportunities to include biodiversity enhancements within the proposed development and landscaping exist and in accordance with the requirements of the NPPF 2019, the following recommendations are considered appropriate for the site:

- The installation of bat boxes in suitable locations would increase the site's potential for roosting bats. These boxes should be installed at a height of 3m or more or at eaves height on sunny, sheltered aspects, away from direct illumination by artificial lighting and in a location, which ensures connectivity to foraging habitats within the wider landscape. In this instance, boxes such as those provided by www.habibat.co.uk are recommended for within built structures. the [Kent Bat box](#) or [Schwegler 2FN](#) (or similar) are recommended for installation within trees.
- The installation of bird boxes in suitable locations within the site and/or integrated within the buildings would increase the site's potential for nesting birds. Tree mounted boxes should be selected from a range of open fronted and closed (with a hole) fronted boxes such as those available from [The Nest Box Company](#). Integrated boxes should be selected from boxes such as those provided by [Habibat](#) . Boxes should aim to replace the loss of swallow and house martin nests in the stable block with any integrated boxes implemented during the design phase of development. To maximise suitability, the boxes should be installed on sheltered aspects, at eaves height and preferably on north, north-east or north-west facing elevations.
- Ornamental planting around the proposed buildings should comprise a variety of wildlife-friendly and native plant species, to maximise benefit to invertebrates and subsequently other fauna such as birds and bats.
- Any tree planting should also use native species, for example rowan *Sorbus aucuparia*, hazel *Corylus avellana*, wild cherry *Prunus avium* and whitebeam *Sorbus aria* or similar.

7 SUMMARY

- 7.1 In response to the proposed development at Court Royal & Red Roofs, Surbiton, London the site has been subject to a PEA. The site's potential to support protected species and habitats was assessed.
- 7.2 The development is considered unlikely to directly affect designated sites of conservation importance, HPI or areas of ancient woodland.
- 7.3 Retained trees should be protected in accordance with BS 5837:2012.
- 7.4 The buildings (B1 and B3) is considered to have Low suitability to support roosting bats and further surveys of this building to determine the presence/likely absence of roosting bats are required.
- 7.5 Suitable nesting habitat for birds exists within the site and should be retained where possible. Should suitable nesting habitat be affected by the proposed development, timings and methods of best practice should be adhered to. Due to the number of house martin and swallow nests in the stable block, integrated nest boxes should be implemented during the design phase in order to replace the nesting habitat that will be lost as a result of the development.
- 7.6 Recommendations for the retention of habitat and enhancement of the site for the ivy mining bees nesting within the manège have been provided.
- 7.7 The likelihood of other protected and notable species to occur within the site is considered unlikely. However, should at any point during the development a protected or notable species be identified within the site then all works should **stop**, and the appointed ecologist consulted on the appropriate manner in which to proceed.
- 7.8 In accordance with the requirement of the NPPF, 2019, recommendations to improve the site's suitability for wildlife have been provided.

8 REFERENCES

Bat Conservation Trust and the Institute of Lighting Professionals (BCT&ILP) 2018. *Guidance Note 8; Bat and Artificial Lighting in the UK*.

<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

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

Eaton et al (2015). *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man*. British Birds 108.

English Nature (2004). *Reptile Mitigation Guidelines*. Peterborough

HGBI (1998). *Evaluating Local Mitigation / Translocation Programmes: Maintaining Best Practice and Lawful Standards*. Suffolk

JNCC (2010). *Handbook for Phase I Habitat Survey; A Technique for Environmental Audit*. Peterborough.

Langton et al (2001). *Great Crested Newt Conservation Handbook*. Froglife. Suffolk.

National Planning Policy Framework (NPPF) 2019

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

Natural Environment and Rural Communities (NERC) Act 2006.

<http://www.legislation.gov.uk/ukpga/2006/16/contents>

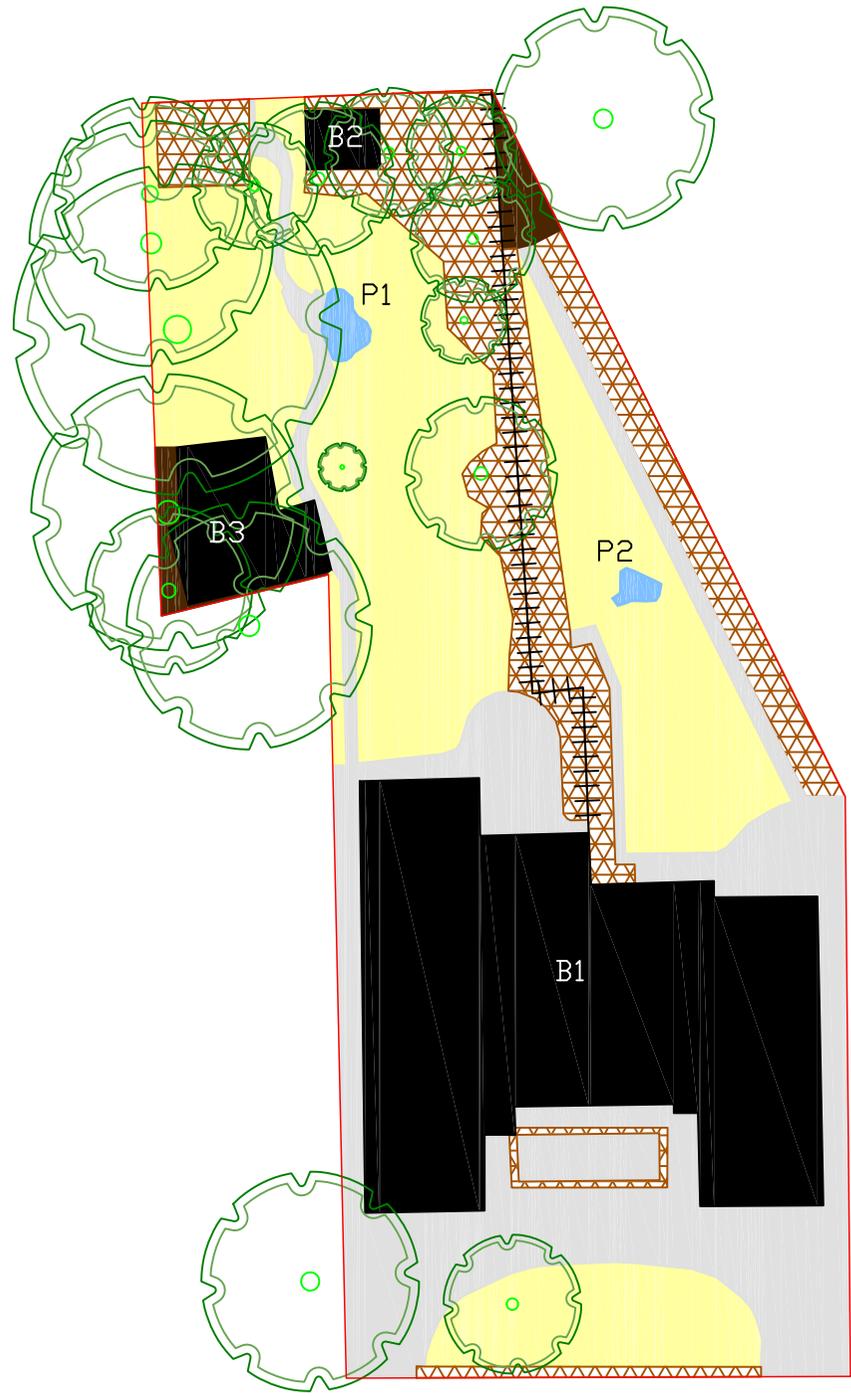
Protection of Badgers Act (1992). <http://www.legislation.gov.uk/ukpga/1992/51>

The Conservation of Habitats and Species Regulations (Habitats Regulations) 2018.

<http://www.legislation.gov.uk/uksi/2018/1037/made>

Wildlife and Countryside Act (as amended) 1981. <http://jncc.defra.gov.uk/page-1377>

Figures



Legend

-  Site Boundary
-  Scattered Trees
-  Ponds
-  Amenity Grassland
-  Introduced Shrub
-  Buildings
-  Bare Ground
-  Hardstanding
-  Fence



Job Reference : J20822
 Project Title:
 Court Royal & Red Roofs
 Drawing Title
 Figure 1: Phase 1 Habitat Map
 Date : 19-11-19 Checked : JD
 Drawn : MTR Approved : N/A
 Status : Final Scale : NTS

Appendices

APPENDIX A – PHOTOGRAPHS



Plate 1. Front of Red Roofs (B1).



Plate 2. Front of Court Royal (B1).



Plate 3. Rear of Court Royal (B1).

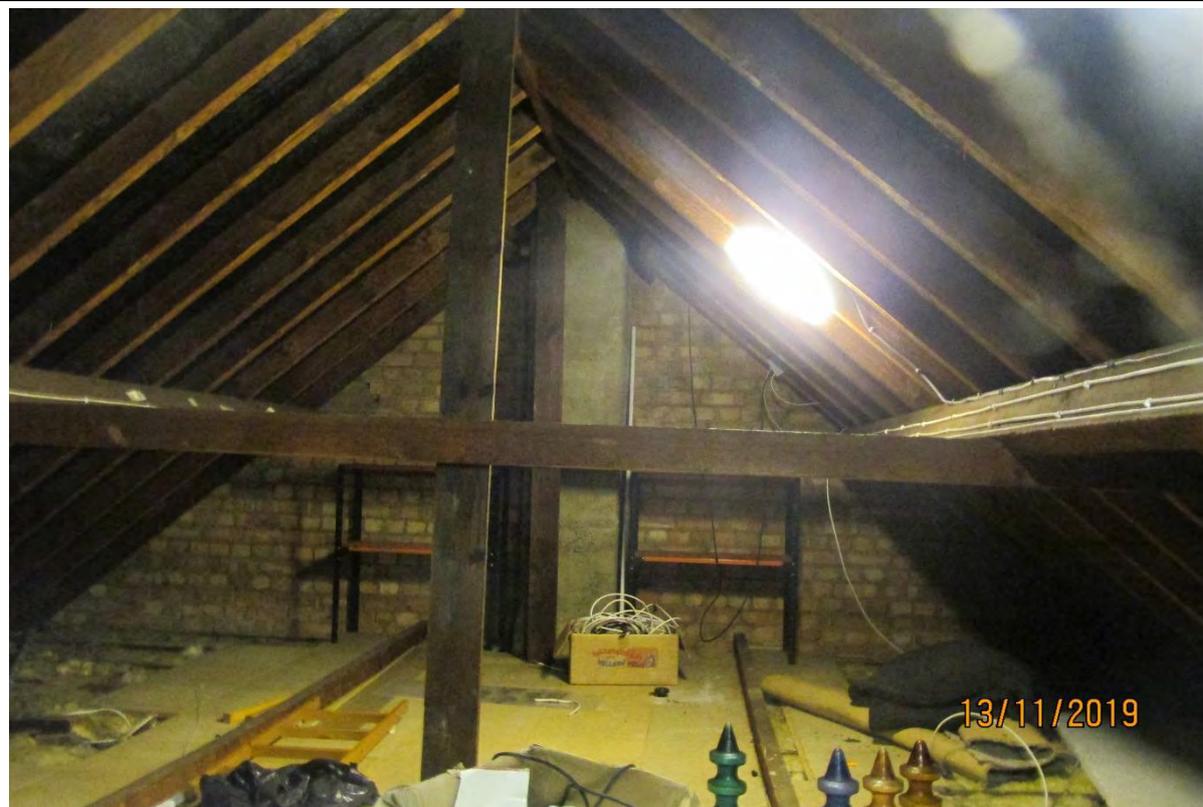


Plate 4. Internal void (B1).

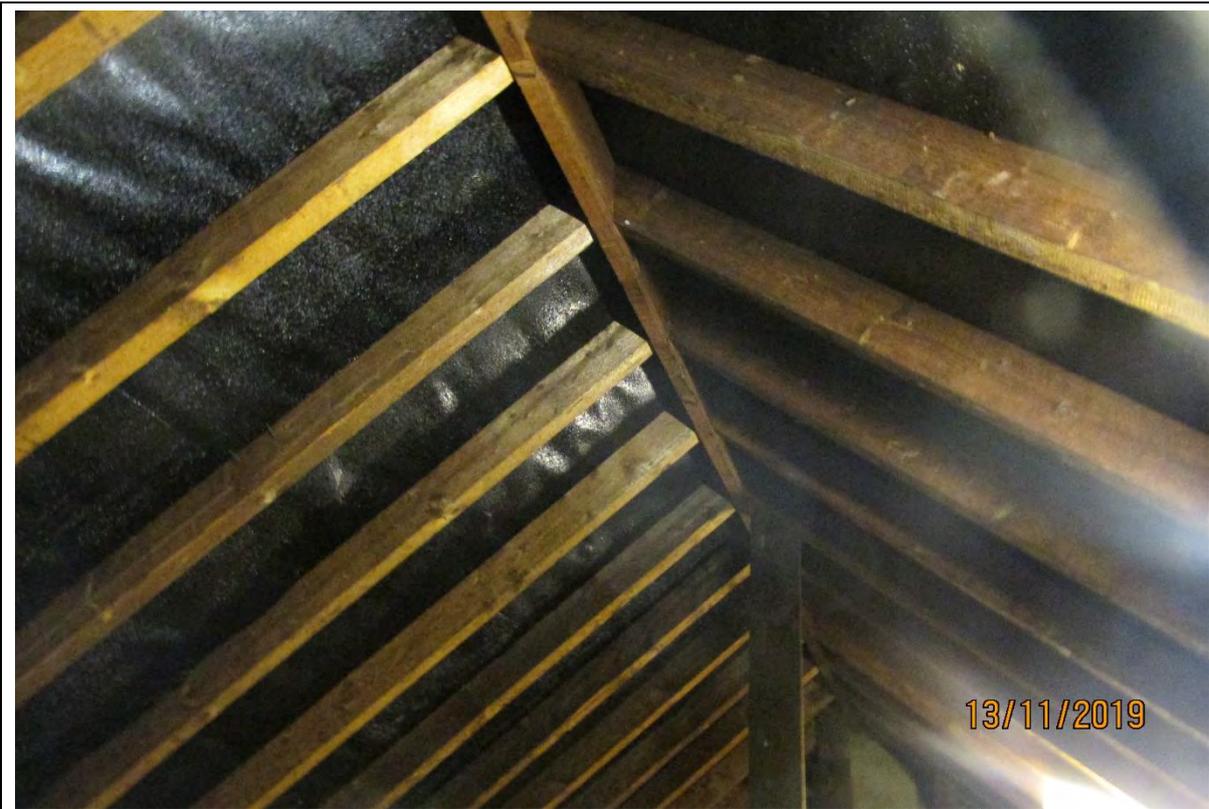


Plate 5. Timber frame and lining of B1.



Plate 6. Garden shed (B2).



Plate 7. Interior of B2.



Plate 8. Amenity lawn and B3.



Plate 9. Front of B3.



Plate 10. Roof of B3 and adjacent wood store.

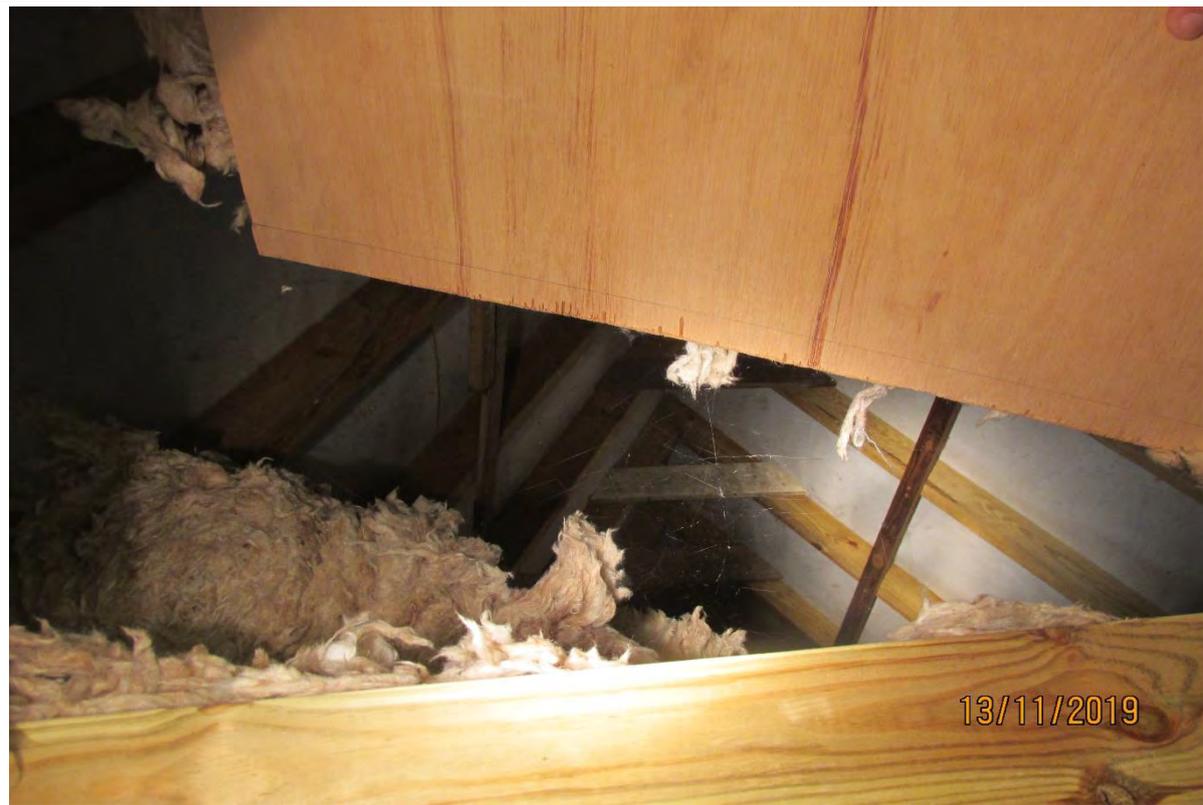


Plate 11. Internal void in B3



Plate 12. Ceiling of B3 wood store.



Plate 13. Scattered trees



Plate 14. Amenity lawn.

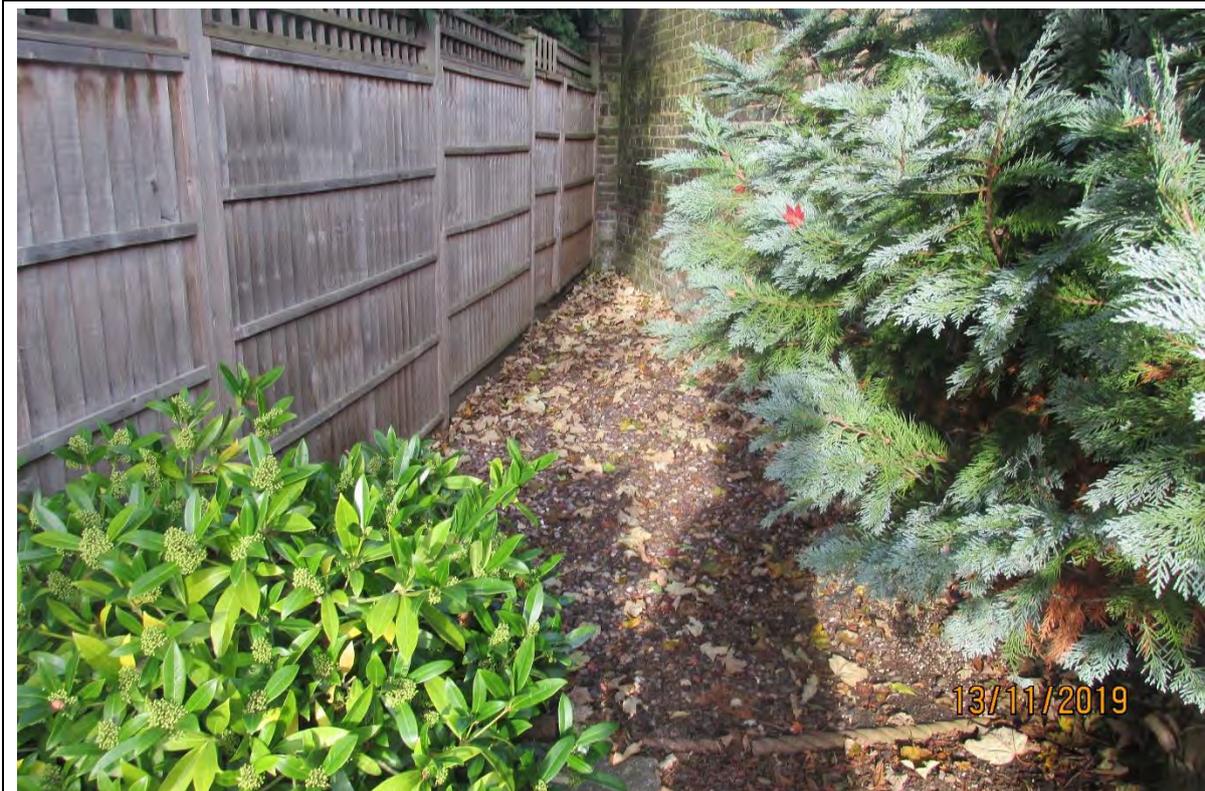


Plate 15. Bare ground.



Plate 16. P1.



Plate 17. P2.

APPENDIX B – Categories of Bat Roost Suitability

Roost type Level of suitability	Summer Roost used by Non- Breeding Bats	Maternity Roost	Hibernation Roost
Confirmed roost	Presence of bats or evidence of bats identified. Confirmation of a roost will likely require further surveys.		
High	Building/Structure or tree with multiple opportunities for one or more species of roosting bat. Optimal orientation. Good connectivity to optimal foraging habitats.	Building/Structure or tree with multiple roosting opportunities for pregnant female bats and young pups. Optimal orientation. Good connectivity to optimal foraging habitats.	Building/Structure or tree that has suitable thermal stability and levels of humidity to support torpid bats throughout the winter months.
Moderate	Building/Structure for tree with some opportunities for roosting bats. Preferable orientation. Connectivity to moderate to high quality foraging habitat available.	Building/Structure or tree with some roosting opportunities for pregnant female bats and young pups. Good orientation. Good connectivity to moderate to high quality foraging habitats.	Building/Structure or tree that has suitable thermal stability and levels of humidity to support torpid bats for some of the winter months. Moderate connectivity to suitable foraging areas.
Low	Building/Structure or tree with limited opportunities for roosting bats. Poor connectivity to foraging habitat.	Building/Structure or tree with limited opportunities for breeding bats. Poor connectivity to foraging habitat.	Building/Structure or tree with limited potential to support hibernating bats due to instable environmental conditions.
Negligible	Building/Structure or tree with no or very limited opportunities for roosting bats. Little to no connectivity to foraging habitat	Building/Structure or tree with no or very limited opportunities for breeding bats. Little to no connectivity to foraging habitat.	No suitable roosting opportunities for hibernating bats.

APPENDIX C – Minimum Number of Bat Surveys Required in Most Instances

Negligible	Low roost suitability	Moderate roost suitability	High roost suitability*
Dusk emergence and/or pre-dawn re-entry surveys unlikely to be required.	<p>Structures: 1 survey visit. 1 dusk emergence or pre-dawn re-entry survey.</p> <p>To be conducted during May – August.</p> <p>Trees: Dusk emergence and/or pre-dawn re-entry surveys unlikely to be required.</p>	<p>2 separate survey visits. 1 dusk emergence survey and 1 pre-dawn re-entry survey.</p> <p>To be conducted during May-September with at least one of the surveys May – August.</p>	<p>3 separate survey visits. At least 1 dusk emergence survey and a separate pre-dawn re-entry survey. The third visit could be either a dusk or dawn survey.</p> <p>To be undertaken during May-September with at least two of the surveys between May and August.</p>

^a Structures that have been categorised as low suitability can be problematic, and the number of surveys required should be judged on a case by case basis. If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

^b Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; It is recommended that surveys are spaced out at least two weeks apart, preferably more. A dawn survey immediately after a dusk survey is considered one visit. If there is potential for a maternity colony, then consideration should be given to seasonal detectability and the ecologist should use their professional judgement to design the most appropriate survey regime.

*For the purpose of this exercise a confirmed roost is considered under the criteria of 'High roost suitability'