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## 24 Heath Drive Ecology Report

Prepared by:

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#### Our Ref:

2348 - 24 Heath Drive Ecology Survey -1707-21rc.docx

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Prepared for: Sebastian Potiriadis The Estate Office 32-38 Scrutton Street London EC2A 4RQ

### Issue Status 24 Heath Drive Ecology Report

	Prepared on behalf of Eight Associates by
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Position:	Assistant Environmental Consultant
Signature:	RC
	Quality Assured by
	Rosie Lodge
Position:	Environmental Consultant
Signature:	RL

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### Executive Summary 24 Heath Drive Ecology Report

Executive summary

Eight Associates has been commissioned by The Estates Office to carry out a Phase 1 Habitat survey and bat building assessment in connection with a proposed new development at 24 Heath Drive in the London Borough of Camden

This report details the existing site ecology of the site, its potential for relevant protected species and the building's bat roosting potential. It also outlines the legislation for these protected species, as well as reviewing the Camden Biodiversity Action Plan.

The facades and roofs of the existing building were inspected for potential bat roosting features. 24 Heath Drive had a number of features that bats could potentially use to access the internal space and roost in; including;

- Openings in the soffits
- Broken tiles on the roof
- Access points to the eaves and roof space
- Cracks in the walls

However, some of these features are not easily accessible to bats, and on inspection of these access points and spaces, there were no signs of use by bats such as urine staining, fur grease, food remains and droppings. Considering this and the sites urban setting, 24 Heath Drive is thought to have negligible bat potential. No further bat detector surveys have been recommended.

The site is dominated by introduced shrub habitat, with a diverse mix of bushes and herbs present. This habitat gives good opportunities for foraging and nesting bird species, with native, fruiting and flowering species present. Invertebrates will also use this habitat for foraging. An area of poor semi-improved grassland is also present, which is less suitable for birds, and will provide limited resources for invertebrates foraging.

Due to the large amount of potential nesting habitat on the site, it is recommended that if works are to take place in the bird nesting season (March to August inclusive), a suitably qualified ecologist should come to site to confirm whether there are any wild bird nests present immediately prior to the site clearance taking place.

Recommendations have been made to mitigate against the loss of suitable nesting habitat, and to ecologically enhance the site in line with the Camden Biodiversity Action Plan

### Introduction 24 Heath Drive Ecology Report

Introduction

A Phase 1 habitat survey was undertaken at 24 Heath Drive on the 12<sup>th</sup> July 2017 to review the existing ecology of the site and assess its potential for protected species. A bat building assessment was also undertaken to assess the building's potential for roosting bats. Results from these surveys are presented within this report as well as the following topics: the ecologist's qualifications, UK wildlife legislation, Phase 1 habitat survey methodology, conclusions and recommendations and a schedule of evidence including a site map and photographs.

The legislative context and local policy sections provide information on the national legislation in relation to wildlife and protected species that are relevant to the development site.

The methodology section details how the surveys were conducted and the guidelines that were followed. The results are presented, with reference to items in the Appendix including the Phase 1 habitat map for the site and site visit photos.

The report is concluded and recommendations are made to mitigate any impact from the development and ensure that site is enhanced for wildlife and a gain for biodiversity is achieved.

### Contact Details 24 Heath Drive Ecology Report

Ecologist's Details	
Company Name	Eight Associates
Company Address	Ground Floor, 57a Great Suffolk Street, London, SE1 0BB
Contact Name	Rachel Crookes
Contact Telephone Number	020 7043 0418
Ecology Report Reference	2348 - 24 Heath Drive Ecology Survey - 1707-21rc.docx
Developer Details	
Company Name	The Estate Office
Company Address	32-38 Scrutton Street, London, EC2A 4RQ
Contact Name	Sebastian Potiriadis
Contact Telephone Number	020 7490 8100
Development Details	
Development Name	24 Heath Drive
Development Address	24 Heath Drive, London, NW3 7SB
Development Description	The project consists of the refurbishment and extension of a listed residential building in the London Borough of Camden.

### Ecologist's Qualifications 24 Heath Drive Ecology Report

Site survey conducted and report produced by Rachel Crookes

Ecologist's Qualifications: Rachel Crookes	MSc - Conservation and Biodiversity BSc - Zoology
Evidence of practicing Ecologist	Eight Associates, Assistant Sustainability Consultant, conducting ecology surveys and bat detector surveys, producing reports to support planning and BREEAM (2016); carrying out habitat surveys of nature reserves and writing protected species survey guidelines for volunteers at the Chiltern Society (2015) carrying out water vole surveys, bat box inspections, bat radio tracking and mist netting with Aylesbury Vale Biodiversity department (2014)
Report QA by Rosie Lodge	
Ecologist's Qualifications: Rosie Lodge	BSc – Biological Sciences MSc – Environmental Sustainability
Evidence of practicing Ecologist	Eight Associates, Sustainability Consultant, conducting ecology surveys, bat inspections and detector surveys and producing reports to support Planning and BREEAM (2013 to present date); Ecological surveying and habitat management for London Wildlife Trust (2014); GIS mapping for the Environmental Records Centre for Greater London (GiGL) (2014); Surveying for London Wildlife Trust (2014); Ecology surveying and reporting for URS Consultancy (2008-2009), Ecological Field Assistant for Roehampton University (2009), Bristol University (2007) and Royal Society of Wildlife Trusts (2003).

### Legislative Context 24 Heath Drive Ecology Report

Wild birds	The Wildlife & Countryside Act 1981 (as amended) is domestic legislation for Great Britain. The Act includes the UK's domestic implementation of the species protection of the European Directive on the Conservation of Wild Birds (79/409).
	<ul> <li>Under the Wildlife and Countryside Act 1981 all birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions to intentionally:</li> <li>Kill, injure or take any wild bird.</li> <li>Take, damage or destroy the nest of any wild bird while it is in use or being built.</li> <li>Take or destroy the egg of any wild bird.</li> <li>Have in one's possession or control any wild bird (dead or alive) or any part of a wild bird which has been taken in contravention of the Act or the Protection of Birds Act 1954.</li> <li>Have in one's possession or control any egg or part of an egg which has been taken in contravention to the Act. This includes items taken or killed before the passing of the Act.</li> <li>Have in one's possession or control any live bird of prey of any species in the world (with the exception of vultures and condors) unless it is registered and ringed in accordance with the Secretary of State's regulations.</li> <li>Have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered (and in some cases ringed) in accordance with the Secretary of State's regulations.</li> <li>Disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.</li> </ul>
Bats	All species of bat are fully protected under the Conservation of Habitats and Species Regulations 2010. It is illegal to injure, kill, capture or disturb a bat. It is also illegal to damage, destroy or obstruct trees, buildings or other places used for roosting, even if bats are not present. Most development and maintenance work affecting bats and / or roosts e.g. bridge /
	tree maintenance works, demolition, barn conversions etc., therefore require a Habitats Regulations License for work to take place legally. All bat species are also protected under the Wildlife and Countryside Act 1981 (as amended). This means they are additionally protected from intentional or reckless disturbance, intentional or reckless obstruction of access to any place of shelter or protection; and/or, selling, offering or exposing for sale, possession or transporting for

purpose of sale.

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### Local Biodiversity Action Plan 24 Heath Drive Ecology Report

#### London Borough of Camden Local Biodiversity Policy

The London Borough of Camden Biodiversity Action Plan (BAP) (2013-2018) outlines a series of actions to ensure that biodiversity is safeguarded in the borough and that people in Camden have opportunities to get involved with nature. There are 3 key areas of focus:

#### Access to Nature:

These actions aim to ensure that opportunities are available for Camden's residents to get involved in nature across the borough.

#### The Built Environment:

These actions aim to ensure Camden's built environment makes a positive contribution to biodiversity across the borough, through land management, the planning process and bespoke projects.

#### Open Spaces and Natural Habitats:

These actions aim to ensure that Camden's open spaces are managed to benefit wildlife across the borough.

The Built Environment Action Plan outlines the following priorities and opportunities for protecting and enhancing biodiversity:

The built environment provides significant opportunities for urban greening and enhancing biodiversity. In an urban borough such as Camden, buildings and infrastructure are dominant in the cityscape and we need to ensure they deliver environmental services for the benefit of our residents. Enhancements should provide multi-functional benefits that address issues of biodiversity, air quality, flood alleviation, climate change and access to the natural environment.

The main opportunities for providing biodiversity enhancements in the built environment are stated as:

- living roofs and walls;
- biodiversity enhancing landscaping;
- installation of artificial nesting and roosting sites;
- sustainable drainage systems (SuDS);
- trees.

The current planning policy environment requires that developers consider biodiversity in their proposals and contribute to an overall biodiversity enhancement. The BAP seeks to work with existing planning policy and provide further direction on what the priorities are in Camden and how enhancements can be delivered. The BAP also seeks to encourage retro-fitting of biodiversity enhancements within the existing built environment.

## Local Biodiversity Action Plan 24 Heath Drive Ecology Report

#### London Borough of Camden Local Biodiversity Policy

The BAP includes the following Actions for the Built Environment, which are relevant to 24 Heath Drive:

**Nesting and Roosting Features:** Installation of species features such as bird and bat bricks. These should be targeted to Camden priority species.

Landscaping and Trees: All landscaping schemes to include biodiversity enhancing landscaping.

**Green Corridors:** Improve the 'green network' in Camden by retaining existing habitat corridors and securing biodiversity improvements along gaps in habitat corridors, as per the Core Strategy Policy CS15 and reflects the All London Green Grid.

Street trees: Plant and maintain c.400 street trees per year.

**Retro-fitting:** Encourage retro-fitting of biodiversity enhancements (i.e. living roofs, species features).

Bats: Provide new roosting opportunities for bats across Camden.

Protected and / or priority bat and bird species in Camden, which are relevant to the assessed development include the following:

Group / taxon	Protected and / or Priority Species
Bats	Nathusius's Pipistrelle Pipistrellus nathusii
	Common Pipistrelle Pipistrellus pipistrellus
	Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>
Birds	Song Thrush Turdus philomelos
	Common Starling <i>Sturnus vulgaris</i>
	House Sparrow Passer domesticus
	Common Linnet Carduelis cannabina
	Brambling Fringilla montifringilla
	Sky Lark <i>Alauda arvensis</i>
	Common Bullfinch Pyrrhula pyrrhula
	Hawfinch Coccothraustes coccothraustes
	Eurasian Tree Sparrow Passer montanus

### Survey Methodology 24 Heath Drive Ecology Report

Phase 1 Habitat Survey Methodology	A survey was carried out to assess the ecology of the site on 12 <sup>th</sup> July 2017, conducted by Rachel Crookes, an experienced ecologist. The survey provided an Initial Site Survey (Phase 1 Habitat survey), which involved the identification of habitat types present and assessment of the possibility for protected species on site. This report summarises the findings from this survey.
	The site consists of a three storey residential building, with an unmaintained front and rear garden. The majority of the site is covered in dense vegetation, with some areas of hardstanding and grassland; a large number of trees are present on the property. The extent of the assessed development site is shown on the 'existing site boundary plan', contained within the Appendix of this report.
	The survey was carried out prior to any works being done at the site. The time of year was optimal for Phase 1 habitat surveys. The survey represents the site's existing ecology prior to the commencement of initial site preparation works, i.e. before RIBA stage 5 Construction (previously RIBA stage K, Construction to Practical Completion), and after RIBA stage 1 Preparation and Brief (previously RIBA stage B, Design Brief).
	The site survey was based upon the standard Phase 1 survey methodology (JNCC, 2010). An inventory of habitats present on site was recorded and mapped. Plant species nomenclature followed Stace (2010) for vascular plant species. The site was also checked for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act, 1981, as amended.
	A Phase 1 Habitat map (contained within the Appendix) shows the habitats present at the site survey and photographs illustrate the key habitat features within the site. The Phase 1 survey findings are reported on the next page.
Bat building assessment	An inspection of the interiors of the buildings were completed where safe to do so, searching specifically for potential bat access points into the building, evidence of bat entry, and suitable roosting sites within the buildings. The conditions inside were assessed, recording the construction and suitability of the structures to support bat roosts.
	The survey was undertaken during daylight hours in good survey conditions. Torches, binoculars and ladders were used where required to look for evidence of bats (e.g., urine staining, fur grease, food remains, droppings) and identify features suitable for use by bats that could offer potential roosting sites. The exterior of the building was also inspected from the ground level using binoculars and a torch, again to identify features affording bats access into the building or external roosting opportunities.
	Standard survey guidelines were followed (Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed (Collins, J (ed) 2016) with the building being evaluated for its bat roost potential according to these guidelines.

Site description	The site consists of a three storey residential building, with an unmaintained front and rear garden. The majority of the site is covered in dense vegetation, with some areas of hardstanding and grassland; a large number of trees are present on the property. The site is bounded by Heath Drive to the northwest, and other residential properties on its other sides. There are no statutory or non-statutory sites within 1km of the site Please refer to the Appendix 1 for a red line boundary plan of the development, the
	Phase 1 Habitat map showing existing habitats on site and photos taken at the of site survey.
24 Heath Drive	24 Heath Drive is a brick built structure that comprises of a basement, ground first and second floor and a small roof void, with spaces along the eaves of the roof.
	The building's brickwork is generally in a good state of repair, with no gaps in the mortar that could act as roosts. There is a large crack in the brickwork on the front of the house, on the garage extension – this was inspected using binoculars and no signs of bat use were seen. There is also a crack in the south-east facing wall of the garage, which has opened up enough to give enough space for bats to access the gap. However, the small courtyard area it looks out onto is relatively enclosed due to the surrounding trees and buildings, and it would be difficult for a bat to navigate to the feature. In addition there were no signs of bat use when the crack was inspected. Although the rear façade of the building is partially covered in stem and leaf vegetation
	from a wisteria, it does not have a tight structure that would act as bat roost habitat.
	Original timber frame windows are present on all sides of the building; none of the windows frames had appropriate crevices for bats. The timber soffit has a gap on the north-western façade overlooking the small courtyard area, however this was blocked by a tree branch and the courtyard area is too enclosed for bat flight, so this feature is unlikely to be used by bats. A similar hole was seen on the south-eastern façade, but, again, due to the proximity of the neighbouring house is would be difficult for a bat to maneuverer into this access point.
	The slate roof is in a reasonable state of repair, with evidence of tiles being replaced over time. Two broken tiles that could act as ingress points, located on the front and rear of the building were observed. Tiles were also damaged along the ridge of the eastern extension, however these did not provide access into the internal space.
	The top floor bedrooms and bathroom have no features that bats could have accessed or used to roost – although there are number of cracks in the walls due to subsidence damage, there are no points at which bats could access the internal space. Therefore these gaps could not be used by roosting bats. The fireplace located in one of the bedrooms is also blocked.

24 Heath Drive	The eaves space facing north-east, accessed by a panel in the boiler room, was inspected. The eaves were of timber construction, and were lined with black waterproofing material that prevent bat access across the roof. The space was dark and heavily cobwebbed. There were two access points where light could be seen shining from the outside. One was located in the middle of the length of the void, which looked to have no evidence of bats using the space, and another at the northern corner of the space which could not be safely closely examined. No droppings were seen in the space.
	The eaves space facing south-east, accessed by a panel next to the top of the staircase, was inspected. These eaves were of a similar construction to the north eastern ones, the space was dark and also heavily cobwebbed. One access point was seen to the left of the opening, which on inspection did not had evidence of bat use. No droppings or other bat use indicators were seen in the space.
	The loft space was also inspected. This is a dark, large space of timber construction with a black waterproof lining. Only one access point could be seen in the loft space, which corresponded to the gap under the north-western soffit that has been blocked by a tree. No droppings or other bat use indicators were seen in the space.
	The garage was inspected internally for access points. Both entrances to the garage are blocked by doors, and there were no suitable bat roosting features inside.
Hardstanding	Hardstanding habitat in the form of paving slabs was present on the site in the front and rear gardens. This habitat had scattered ruderal plants in the paving slab gaps, with plants such as dandelion <i>Taraxacum officianale</i> , herb robert <i>Geranium robertianum</i> , hairy bittercress <i>Cardamine hirsuta</i> , wood avens <i>Geum urbanum</i> , annual meadow grass <i>Poa annua</i> and selfheal <i>Prunella vulgaris</i> . This habitat affords little ecological value.
Introduced shrub	The majority of the front and rear gardens are covered by introduced shrub habitat.
	The front garden is bordered by privet <i>Ligustrum sp.</i> hedges, with interspersed small ash <i>Fraxinus excelsior</i> and sycamore <i>Acer pseudoplatanus</i> saplings growing from the base – ivy <i>Hedera helix</i> and heliotrope <i>Petasites fragrans</i> covers the ground under the hedges. The shrub bed immediately next to the road contains an unmaintained mix of native and non-native shrubs including holly <i>llex aquifolium</i> , boxelder maple <i>Acer negundo</i> , blackcurrant <i>Ribes nigrum</i> , elder <i>Sambucus nigra</i> , goat willow <i>Salix</i> and horse chestnut <i>Aesculus hippocastanum</i> , with a holly <i>llex aquifolium</i> , bramble <i>Rubus fruticosus</i> and ivy <i>Hedera helix</i> understory. The shrub bed adjacent to the front of the house has more ornamental species such as pyrocantha <i>Pyrocantha sp</i> .and laurel <i>Laurus sp</i> , with some native species including holly <i>llex aquifolium</i> and elder <i>Sambucus nigra</i> ; this bed again had not been recently maintained.

Introduced shrub (continued)	The rear façade of the house was covered with a wisteria <i>Wisteria sp.</i> climber. This plant had some foliage but large sections were dead, with major decay in the stems. A small raised flowerbed is present in the courtyard, containing scattered male ferns and ivy <i>Hedera helix</i> . A goat willow <i>Salix caprea</i> and elder tree <i>Sambucus nigra</i> are also present in the courtyard.
	The introduced shrub in the rear garden in front of and around the grassland habitat has a mix of native and non-native shrubs and herbs. The majority of this habitat has dense foliage from species such as blackcurrant <i>Ribes nigrum</i> , elder <i>Sambucus nigra</i> , holly <i>llex aquifolium</i> , birch <i>Betula sp.</i> , rose <i>Rosa sp.</i> , rowan Sorbus aucuparia, cherry <i>Prunus</i> <i>avium</i> and rhododendron <i>Rhododendron sp.</i> , with ivy <i>Hedera helix</i> , bramble <i>Rubus</i> <i>fruticosus</i> and male ferns <i>Dryopteris filix-mas</i> covering the ground. Some wildflowers such as rosebay willowherb <i>Chamaenerion angustifolium</i> , dock <i>Rumex sp.</i> and herb robert <i>Geranium robertianum</i> and have also grown in these areas.
	The area in the middle of the garden paths is less overgrown, with ornamental plant species such as crocosmia <i>Crocosmia sp.</i> and asters <i>Aster sp.</i> present in amongst larger stands of bramble <i>Rubus fruticosus</i> , rowan Sorbus aucuparia, cherry <i>Prunus avium</i> and birch <i>Betula sp.</i>
	The introduced shrub beyond the grassland extending to the rear of the property is mostly overshadowed by the trees present. Ivy <i>Hedera helix</i> covers nearly the entire ground area, with some areas of bramble <i>Rubus fruticosus</i> , male fern <i>Dryopteris filix-mas</i> , holly <i>Ilex aquifolium</i> and deadwood from previous shrub clearance present. Stands of species including ash <i>Fraxinus excelsior</i> , crab apple <i>Malus sp</i> , lilac <i>Syringa Vulgaris</i> , rhododendron <i>Rhododendron sp</i> , sycamore <i>Acer pseudoplatanus</i> , yew <i>Taxus baccata</i> and lime <i>Tilia x europea</i> are present across this area, forming semi-mature areas of shrub across the habitat. These plants are likely self-set.
	All of these areas of habitat have good potential to support nesting birds.
Poor semi-improved grassland	An area of grassland is present in the middle of the rear garden. The grass has not recently been maintained, creating a medium sward of grassland dominated by annual meadow grass <i>Poa annua</i> , perennial ryegrass <i>Lolium perenne</i> , and smooth-stalked meadow grass <i>Poa pratensis</i> . Small bramble and ivy patches are present, as well as scattered wildlfowers including herb robert <i>Geranium robertianum</i> , selfheal <i>Prunella vulgaris</i> , bindweed <i>Convolvulus arvensis</i> , broad-leaved willowherb <i>Epilobium montanum</i> and wood avens <i>Geum urbanum</i> . There is limited foraging potential for birds and invertebrates in this habitat.

_ Trees	A large number of trees are present on the site, in various stages of life from early-
11665	mature to over-mature. These trees were predominantly located around the site boundaries, and were in various conditions of health - please see the Tree Survey report by Eight Associates for more details on the categorisation and conditions of the trees on the site (reference - 1948 24 Heath Drive Tree Survey 1610-31sc). The majority of the trees had foliage that could support nesting birds.
	The mature trees on the site were inspected with binoculars for features that could accommodate roosting bats, e.g., loose bark, cavities in the trunk and branches, woodpecker holes. No such features were seen on any of the trees on the site.
Fauna	A juvenile robin <i>Erithacus rubecula</i> was seen in the introduced shrub habitat in the rear garden.

## Site Evaluation 24 Heath Drive Ecology Report

Site evaluation	The site is dominated by introduced shrub habitat, with a diverse mix of bushes and
	herbs present. This habitat provides good opportunities for foraging and nesting bird species, with native, fruiting and flowering species present. Invertebrates are also likely to use this habitat for foraging. An area of poor semi-improved grassland is also present, which is less suitable for birds, and will provide limited resources for invertebrates foraging.
	24 Heath Drive was assessed for bat roosting potential; this results of the bat building assessment are discussed below.
Bats	<ul> <li>The facades and roofs of the existing building were inspected for potential bat roosting features. 24 Heath Drive had a number of features that bats could potentially use to access the internal space and roost in; including;</li> <li>Openings in the soffits</li> <li>Broken tiles on the roof</li> <li>Access points to the eaves and roof space</li> <li>Cracks in the walls</li> </ul>
	However, some of these features are not easily accessible to bats, and on inspection of these access points and spaces, there were no signs of use by bats such as urine staining, fur grease, food remains and droppings. Considering this and the sites urban setting, 24 Heath Drive is thought to have negligible bat potential.
	No further bat detector surveys have been recommended.
Nesting birds	There is a large amount of habitat on the site, including the trees and the introduced shrub that has potential for nesting birds.
	It is therefore recommended that site work take place outside of the bird nesting season (i.e. between September and February) to avoid disturbing any wild birds nesting in the site's vegetation. If works are to take place in the bird nesting season (March to August inclusive), a suitably qualified ecologist should come to site to confirm whether there are any wild bird nests present immediately prior to the site clearance taking place. In the instance that nests are present, site works must be delayed until the young have fledged.

### Ecological Mitigation and Enhancement 24 Heath Drive Ecology Report

Introduction	To ensure the proposed development enhances the ecological value of the site, the development should include a number of ecological enhancements. This is to ensure the loss of existing features of ecological value is mitigated against, and the development contributes to the greening of the borough and an increase in biodiversity, whilst contributing to the plans set out in the London Borough of Camden Biodiversity Action Plan.
	<ul> <li>These recommendations include:</li> <li>Installation of at least two bat boxes/bricks on the site,</li> <li>Inclusion of native plant species or species that are beneficial to wildlife in the soft landscaping,</li> <li>Inclusion of night scented planting in the soft landscaping.</li> </ul>
Bat boxes/bricks	It is recommended that at least two bat boxes or bat bricks be installed in suitable locations around the site.
	A bat box can provide internal roost space, which can be incorporated into the fabric of a building as it is built or renovated. A variety of facings can be fitted to suit any existing brick, wood, stonework or rendered finish, rendering the box unobtrusive. Particularly for those bats typically roosting in crevices, bat bricks with gaps between 15 to 20mm high by 20 to 50mm wide are recommended. Bats appear to prefer timber, or at least rough surfaces for grip, so timber bat boxes with suitable thermal properties could be used.

Native planting

Where new planting is installed on the proposed development, this should include native species or species of benefit to wildlife.

Planting should ideally include a diverse mix of species, including a variety of fruiting and flowering species, grasses and herbaceous plants to provide a nectar source and overwintering habitat for invertebrates and in turn a foraging habitat for birds.

### Ecological Mitigation and Enhancement 24 Heath Drive Ecology Report

Native planting	Dense planting is recommended to include shrubs, groundcover, bulbs or a combination of these, and should be biased towards (and preferably exclusively) wildlife-friendly species such as the following:
	Beech (Fagus sylvatica), Box (Buxus sempervirens) Lavender (Lavendula angustifolia), Hazel (Caryluss avellana), Common dogwood (Cornus sanguinea), Wild privet (Ligustrum vulgare), Holly (Ilex aquifolium), Blackthorn (Prunus spinosa), Ivy (Hedera helix), Hawthorn (Crataegus monogyna), Guelder rose (Viburnum opulus), Honeysuckle (Lonicera periclymenum), Dog rose (Rosa canina), Heather (Calluna vulgaris), Viper's burgloss (Echium vulgare), Primrose (Primula vulgaris), Daffodil (Narcissus pseudonarcissus), Wood anemone (Anemone nemorosa).
Night scented planting	Night scented plants are beneficial in attractingt insects and in turn bats. Species such as evening-primrose ( <i>Oenathera biennis</i> ), night-scented stock ( <i>Mattiola bicornia</i> ), lemon balm ( <i>Melissa officinalis</i> ), borage ( <i>Borago officinalis</i> ), may be appropriate for this purpose.

### Conclusions 24 Heath Drive Ecology Report

Conclusions

A site survey was undertaken at 24 Heath Drive to review the ecology of the site and assess the buildings potential for roosting bats. Results of the surveys are presented, compliance with EU & UK legislation for protected species are discussed.

The majority of the site is covered in dense vegetation, with some areas of hardstanding and grassland; a large number of trees are present on the property

24 Heath Drive had a number of features that bats could potentially use to access the internal space and roost in. However, some of these features are not easily accessible to bats, and on inspection of these access points and spaces, there were no signs of use by bats. Considering this and the site's urban setting, 24 Heath Drive is thought to have negligible bat potential. No further bat detector surveys have been recommended.

Due to the large amount of potential nesting habitat on the site, it is recommended that if works are to take place in the bird nesting season (March to August inclusive), a suitably qualified ecologist should come to site to confirm whether there are any wild bird nests present immediately prior to the site clearance taking place.

Recommendations have been made to mitigate against the loss of the introduced planting and the suitable nesting habitat, and aim to create an ecologically enhanced, biodiverse habitat that Camden Biodiversity Action Plan priority species will benefit form.

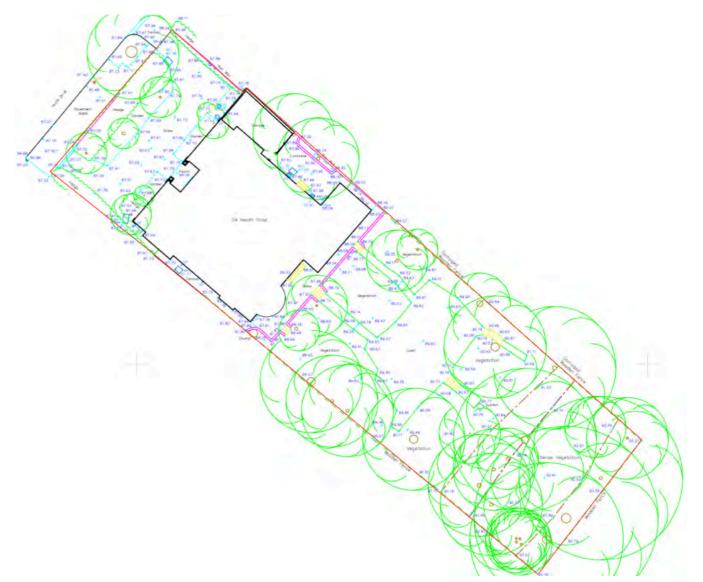
### Document References 24 Heath Drive Ecology Report

#### Document References

Document	Reference
Photos taken by Rachel Crookes during the site survey	12 <sup>th</sup> July 2017
24 Heath Drive – Existing Site Boundary	Gleeds Building Surveying Ltd, LNBS0490_T01
24 Heath Drive – Phase 1 Habitat Map	Created by Rachel Crookes. Base map – Gleeds Building Surveying Ltd, LNBS0490_T01

## Appendix 24 Heath Drive Ecology Report

Plan showing existing site and the red line boundary



## Appendix 24 Heath Drive Ecology Report

# Phase 1 Habitat Map of the site Buildings and hardstanding Introduced planting SI Semi-improved grassland 24 Heath Drive SI

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## Appendix 24 Heath Drive Ecology Report

Photos 1 - 6 showing site features



Northwestern eaves space



Northeastern eaves space



Loft space



Blocked up fireplace



Opening in northeastern eaves space



Opening in the loft space

## Appendix 24 Heath Drive Ecology Report

Photos 7 - 12 showing site features



View of 24 Heath Drive from Heath Drive



Front facing roof with broken tile



Front garden hedge



Crack in the wall on the front façade



View of front façade of the house



Internal garage space

## Appendix 24 Heath Drive Ecology Report

Photos 7 - 12 showing site features



Crack in garage wall



Extension with missing tiles on roof ridge



Introduced planting in the rear garden

Gap in soffit covered by tree branches



View of rear façade from garden



Mature tree with no bat roosting potential

## Appendix 24 Heath Drive Ecology Report

Photos 7 - 12 showing site features



Introduced planting in the rear garden



Introduced planting in the rear garden



Introduced planting in the rear garden



Wisteria covering rear façade of the house



Hole in the south-west facing soffit



Juvenile robin