PHASE 1 ECOLOGY SURVEY

SOUTHBOURNE GARDENS,

RUISLIP, GREATER LONDON

Commissioned by: **VOSS Construction Management Services Ltd**

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EXECUTIVE SUMMARY

1. The overall protected species potential at the application site is considered to be: breeding birds, and this is relevant at the site boundaries only.

2. However, no former bird nests could be found in the garages, suggesting that birds have not bred in here in previous years. The bird potential is within the trees, hedges, shrubs and bushes along the access road and at the rear of the site.

3. There was only very low bat roost potential in the garages and no bat evidence at all. The garages are only suitable as a possible winter bat roost and there was no evidence of this at all.

4. A number of garages could not be entered due to a lack of access, as the keys were not present.

5. The garages have therefore very little ecological value and local houses will be far more suitable for roosting bats, as the garages will be often disturbed by people using them for example. Houses will be less disturbed in the upper features and provide more security for bats.

6. A further daytime bat inspection by a licensed bat consultant should therefore be undertaken of the garages that could not be accessed during this survey, as best practice only. It is very unlikely there will be any bats using the garages for roosting but this would be a sensible measure and precaution.

7. This bat inspection should be undertaken the day before demolition or on the morning of demolition, so if no bats are present, then the all clear can be given immediately for contractors to demolish these garages.

8. Further best practice measures are given in this report too on avoiding any impacts on nesting birds.

1. INTRODUCTION

- A Phase 1 Ecology Survey was undertaken at the Garages Site at Southbourne Gardens, Ruislip, Greater London, during February 2017, for the client: VOSS Construction Management Services Ltd.

- This survey was required due to the proposal to demolish the existing garages and replace with new flats and associated car parking.

- Therefore an investigation was needed into the potential ecological related impacts relevant to this proposed development, with a focus on habitats and also protected species such as bats, badgers, reptiles, amphibians and breeding birds.

- The main method used for this survey, as well as the full results and the final recommendations can be found within this report.

- Both this survey and the report were undertaken and compiled by Mr Andrew S. Waller, Consultant Ecologist, ASW Ecology.

- Mr Andrew S. Waller MSc BSc (Hons) MCIEEM - has been a Consultant Ecologist since 1997, and has very extensive experience/knowledge of protected wildlife species/issues including bats, for which he is fully licensed to survey throughout England by Natural England for consultancy purposes (Bat Class 2 Licence Registration Number: 2015-15703-CLS-CLS). He also has Natural England survey licences for barn owls and great crested newts. He has been studying bats for 23 years and is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

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2. METHODOLOGY

2.1 Phase 1 Ecology Survey method

- A daytime based Phase 1 Ecology Survey was made at the development footprint, on 17/2/2017 by a qualified and experienced Consultant Ecologist.

- Weather conditions were very good and visibility was excellent on the day. The weather included mainly clear conditions, dry, calm, sunny and mild. During this visit, the entire development footprint was walked and assessed in detail for its suitability for various protected wildlife species and habitats.

- Equipment used for this survey included binoculars, digital camera, endoscope and torches.

- The focus on habitats and protected species potential included on bats and breeding birds.

- Site photographs were taken as for reference, and are included at the end of this detailed survey report in Appendix 1, along with a site map with ecological target notes of interest.

2.2 Survey constraints

- The main constraint to this daytime based ecology survey was the timing of this study, where it was not possible to survey during the Spring or Summer months, for example.

- However, given the actual survey results and habitat features present, this is seen as a minor constraint only, since it is not possible to survey any site all year round.

- As always though, without taking into account any further active surveying or monitoring, this study can only provide a “snapshot” of the potential presence of protected wildlife species at the site during the time of the survey visit.

- Additionally, it was not possible to access all of the garages due to a lack of keys to open the front doors. This is often a problem when trying to survey private garage sites. This will be addressed in the future and details can be found in the Recommendations section of this report.

3. PHASE 1 ECOLOGY SURVEY - RESULTS

3.1 Birds

- During the site visit on 17/2/2017, a good range of bird species were seen or heard nearby or over to the development footprint. These were black-headed gull, feral pigeon, woodpigeon, wren, robin, dunnock, blackbird, great tit, blue tit, magpie and starling.

- There were no obvious bird nests in the garages that could be accessed within the development footprint or the boundary habitats. No active nests could be found during this survey although birds could nest in theory within the occasional hedge, shrub or bush at the boundaries.

- It is highly unlikely that any rare breeding species could be present inside the actual application site.

- More information on this can be found in the Recommendations section of this report.

3.2 Bats

Building description:	• Garages: Two rows of brick garages. One row with a tiled roof, whilst second row has a corrugated roof. Minor ivy on a couple of garages • Shed: Very small wooden shed at rear
External bat survey	• Garages: Some garage front doors have gaps above the doors. Some gaps are too small for bats whilst others are just large enough in theory. The garage row 1-8 has a tiled roof with a few minor gaps but not suitable for bats. A missing roof tile was checked with the endoscope and the gap had webs in and no bat evidence at all. Vast majority of roof and ridge tiles are tight fitted and flush with the roof • Shed: No crevices
Internal bat survey	• Garages: The four garages 7, 15, 16 and 17 that could be assessed were searched for bats and bat evidence. All garages are being used for storage and have spider webs. A few garages had minor crevices but these were also searched with an endoscope and no bats or bat evidence found at all. The webs reduce the chance of bats using any of these features • Shed: No interest inside for bats

Bat evidence present	• Garages: None • Shed: None
Other wildlife evidence present	• Garages: None • Shed: None
Overall bat roost grading for the buildings	• Garages: **VERY LOW** • Shed: **NIL**

3.3 Badger

- There were no badger setts at the land surveyed or any other evidence such as latrines, runs, feeding remains or hair.

- Badgers are also unlikely to be present in this urban area. Therefore this species will not be impacted by the proposed development.

3.4 Reptiles

- There is no reptile habitat potential within the development footprint, since there is an absence of any suitable vegetation.

- Therefore, reptiles would not be expected at all to be present within the development footprint.

3.5 Great crested newts

- There are no waterbodies at the development footprint for breeding newts and no suitable tall vegetation either for this species to forage or shelter in.

- This newt species would not be expected to be present at all within the development footprint.

3.6 Water vole and otter

- Since there are no waterbodies at this site, neither of these wetland species would be impacted by the development proposal.

3.7 Hazel dormouse

- Hazel dormice, a European Protected Species, would not be expected at this site as the habitats present within the development footprint are not suitable at all.

- There would be no direct connectivity to the nearest population of this species in the much wider area. This mammal species is not expected to be present therefore or impacted in any way by the proposed development.

3.8 Other wildlife

- Foxes would be expected to be found in this urban area, although there was no evidence of this mammal species at the site. Hedgehogs may be present in the wider general area. This is now a notable mammal species due to its serious long term decline in the UK. Hedgehogs are partially protected under the Wildlife and Countryside Act 1981 and is a Priority Species under the UK Biodiversity Action Plan.

3.9 Habitats present

- The main habitat features present within the development footprint are:

  (a) Garages – includes the units 1-18 at the site.
  (b) Shed – a very small wooden shed is present next to the rear corner of the site.
  (c) Hardstanding – present along the access road to the site and between garage lines.
  (d) Boundary trees, hedges, bushes and shrubs – on edges only. Has some breeding bird potential. A very small patch of bramble is present behind one of the garages at one corner and a couple of buddleia stands.

3.10 Desktop study

- The ASW Ecology wildlife database was primarily used for any previous wildlife records in the area around the application site as this has collated records from more than 35 years for the UK. The NBN (National Biodiversity Network) Gateway website (www.nbn.org.uk) was unfortunately not working properly on 22/2/2017 due to a large volume of records being inputted so could not be used in conjunction with our database. Please see below for the nearest records for the most relevant species to this site plus comments:

    - **Common pipistrelle** – The nearest records we have for this bat species is about 3.5km to the NW, as we have had two bat roosts in 2015 in Northwood.

    - **Soprano pipistrelle** – No records for this species within 2km of this site. This is likely to be down to poor observer coverage rather than an absence of this bat species.

    - **Brown long-eared bat** – No records for this species within 2km of the site. This is likely to be down to poor observer coverage rather than an absence of this bat species.

- **Badger** – This protected mammal species is known to be present in Northwood, about 3km to 4km from the application site, as they have been visiting gardens at some properties.

- **Hazel dormouse** – No records for this mammal species within 2km of the site.

- **Great crested newt** – Nearest known newt population is about 4km to the East of the application site, in the Harrow on the Hill area. This is a large distance away from the application site with many main roads acting as barriers between the newt population and the garages site.

- **Slow-worm** – Nearest known population is about 4.5km to the East of the application site, in the Harrow on the Hill area.

- **Common lizard** – No known records within 2km of the application site.

- **Grass snake** – There is a record for this species about 2.5km to the NW of the application site at the Ruislip Lido (2012).

- **Adder** – This snake species is known to be present at the Ruislip Lido area, about 2.5km from the application site.

4. CONCLUSIONS

4.1 Significance of the ecology survey results

- The overall protected species potential at the application site is considered to be: breeding birds, and this relevant at the site boundaries only.

- However, no former bird nests could be found in the garages, suggesting that birds have not bred in here in previous years. The bird potential is within the trees, hedges, shrubs and bushes along the access road and at the rear of the site.

- No high quality habitats will be lost at the application site, which is mainly composed of garage units, hardstanding and some boundary vegetation.

- There was only very low bat roost potential in the garages and no bat evidence at all. The garages are only suitable as a possible winter bat roost and there was no evidence of this at all.

- A number of garages could not be entered due to a lack of access, as the keys were not present. Only numbers 7, 15, 16 and 17 could be entered and searched for bats and any breeding bird evidence.

- The garages have therefore very little ecological value and local houses will be far more suitable for roosting bats, as the garages will be often disturbed by people using them for example. Houses will be less disturbed in the upper features and provide more security for bats.

- Although no follow up surveys are needed at this site in regards to the application, several best practice recommendations are made in the next chapter of this report.

4.2 Impact Assessment

In the absence of any mitigation measures, the following potential impacts identified from the proposed demolition of the existing garages at this site are considered to be:

(a) **Birds:** There is only some very limited breeding bird potential present at the development footprint due to the boundary trees and hedges plus the overgrown shrubs behind the garages. But no old nests are present at all. Without any mitigation, there is only a small risk that the occasional bird nest could be damaged or destroyed during these works, if done in the nesting bird season. But work will be done under a nesting bird watching brief to ensure there is no impact on breeding birds at all **Potential impact magnitude predicted: LOW**

(b) **Bats:** Since there is minimal bat roost potential within the garages surveyed at the development footprint, without any mitigation, there could be no risk of the direct damage and loss of an occasional bat resting place plus no direct disturbance to bats. **Potential impact magnitude predicted: NIL**

4.3 Summary of the legal protection of relevant wildlife in the UK (Simplified summary only of the legislation – please see other texts for full details)

4.3.1 THE LEGAL PROTECTION OF REPTILES IN ENGLAND AND WALES

In the UK, reptiles are legally protected from intentional killing and injuring, as well as against sale too under the Wildlife and Countryside Act 1981 (as amended). The offences stated may be absolute, intentional, deliberate or reckless (English Nature, 2004).

This means that reasonable steps must always be taken to avoid killing or injuring all reptiles if they are known to be present within the development footprint. A criminal conviction for injuring or killing reptiles could result in large fines being imposed, imprisonment and/or seizure of the equipment involved.

4.3.2 THE LEGAL PROTECTION OF BATS IN ENGLAND AND WALES

Introduction

All species of bats in England and Wales are protected by law. Their legal protection derives from two sources:

- the strict species protection provisions of the EU Habitats Directive as implemented in England and Wales by Part 3 of the Conservation of Habitats and Species Regulations 2010 (the **"2010 Regulations"**); and

- Part 1 of the Wildlife and Countryside Act 1981 (as amended).

Conservation of Habitats and Species Regulations 2010 ("2010 Regulations")

The 2010 Regulations came into force on 1 April 2010. They replace the previously applicable regulations (Conservation (Natural Habitats, &c) Regulations 1994) in relation to England and Wales. The 2010 Regulations are the principal means by which the EU Habitats Directive is transposed in England and Wales.

The Regulations contain a number of Parts but Part 3 sets out the protection to be afforded to "European Protected Species" ("EPS"), which includes all species of British bats. The list also includes other species which are rare on a European scale, such as great crested newts, otters and dormice.

Under Part 3 of the 2010 Regulations both bats themselves and their "breeding sites and resting places" (most commonly their roosts) are protected.

Part 3 provides that it is a criminal offence to do the following (note that this is not an exhaustive list of all offences but rather a list of offences which will be of most relevance to developers):

a. to damage or destroy a breeding site or resting place of a bat (Reg 41(1)(d));

b. to deliberately capture, injure or kill any bat (Reg 41(1)(a));

c. to deliberately disturb bats [note, wherever they are occurring] (Reg 41(1)(b)), in particular:

   i. any disturbance of bats which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young (Reg 41(2)(a)(i)); or

   ii. any disturbance of bats which is likely to impair their ability to hibernate or migrate (Reg 41(2)(a)(ii)); or

   iii. any disturbance of bats which is likely to affect significantly the local distribution or abundance of the species to which they belong (Reg 41(2)(b));

d. to have in one's possession or to control or to transport or to sell or exchange or offer to sell or exchange any live or dead bat or part of a bat which has been taken from the wild; or any part of, or anything derived from, a bat or any part of a bat (Reg 41(3) and (4)); and

e. to attempt any of the above (Reg 116(1)).

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of the company may also be prosecuted if the offence has been committed with their consent or connivance, or is attributable to their neglect (Reg 124).

Wildlife and Countryside Act 1981 ("WCA 1981")

The WCA 1981 protects a wide range of animals, plants and habitats in the UK. All British bat species are afforded protection under Part 1 of the WCA 1981, in addition to the protection they have under the 2010 Regulations.

As regards England and Wales the following offences apply to protect bats under the W&CA 1981:

a. to intentionally or recklessly disturb any bat while it is occupying a structure of place which it uses for shelter or protection (s9(4)(b) WCA 1981);

b. to intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection (s9(4)(c) WCA 1981);

c. attempting either of the above (s18(1) WCA 1981).

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of that company may also be prosecuted if the offence has been committed with their consent or connivance or is attributable to their neglect (s69(1) WCA 1981).

4.3.3 THE LEGAL PROTECTION OF BIRDS IN ENGLAND AND WALES

All birds have the following legal protection (although there are exceptions for game birds, some waterfowl and designated pest species). This is listed below.

All birds, their eggs and nests are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to kill, injure or take any wild bird, or to take or destroy their eggs. It is also illegal to take, damage or destroy the nest of any wild bird while it is in use or being built (RSPB, 2001). No provisions can be made for the destruction of occupied bird nests, eggs, or young for development purposes, and no licences are available for this purpose.

Certain rare and/or vulnerable bird species such black redstart, barn owl, red kite, peregrine and hobby are specially protected under Schedule 1, and have the following additional legal protection:

- It is an offence to intentionally (or recklessly, in England and Wales only) disturb any wild bird listed on Schedule 1 whilst it is nest building or is at (or near) a nest with eggs or young; or disturb the dependent young of such a bird.

4.3.4 THE LEGAL PROTECTION OF GREAT CRESTED NEWTS IN ENGLAND AND WALES

Great crested newts have strong legal protection under both British and European legislation. This is briefly summarised below:

Great crested newts are legally protected under provisions within the Wildlife and Countryside Act 1981 (as amended), the Conservation Regulations 2010 and the Countryside and Rights of Way Act 2000. Taken together, it is illegal to:

- **Intentionally or deliberately capture or kill, or intentionally injure great crested newts.**
- **Deliberately disturb great crested newts or intentionally or recklessly disturb them in a place used for shelter or protection.**
- **Damage or destroy a breeding site or resting place.**
- **Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.**
- **Possess a great crested newt, or any part of it, unless acquired lawfully.**
- **Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.**

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate.

5. RECOMMENDATIONS

5.1 Pre-demolition check of all garages – bat watching brief

- A further daytime bat inspection by a licensed bat consultant should be undertaken of the garages that could not be accessed during this survey, as best practice only. It is very unlikely there will be any bats using the garages for roosting but this would be a sensible measure and precaution.

- This bat inspection should be undertaken the day before demolition or on the morning of demolition, so if no bats are present, then the all clear can be given immediately for contractors to demolish these garages.

- In the highly unlikely event that a bat was found, then work would not be able to commence and a Bat EPS Mitigation Licence from Natural England would be needed if a bat roost was found. But this scenario is not considered to be realistic given the results of this ecology survey.

5.2 Best practice guidelines – nesting birds and development

- In general, no trees, shrubs, bushes, hedges, bramble scrub or dense ivy cover should be removed at any site during the bird nesting season as all bird nests are fully protected by law, and this includes whilst a nest is being built by the adult birds. This also includes buildings, where such nesting has been proved.

- If any nests are present within any of the above stated features to be removed, then these must be left alone until the young birds have left the nest and no further breeding attempts are to take place.

- The bird nesting season in the UK, currently runs mainly from February to September, but sometimes birds can start nesting before or after this period.

- Therefore September to January/February can be the best months for such clearance works, but there is some flexibility available. If any vegetation is to be removed out of this stated period, then this may be allowed if all of the vegetation for example can be searched thoroughly for the complete absence of bird nests e.g. by an experienced ecological consultant.

5.3 Best practice guidelines – bats and development

- As a standard precaution only as per any development related site, the future demolition contractor should still be fully aware of the legal protection of bats and what to do if an unexpected bat is found or suspected at the site during all works.

- This is especially important during any soft stripping works, where external features such as roof tiles, ridge tiles and guttering boards may be removed by hand.

- Bats and their evidence can unexpectedly be present under such features and be completely hidden until accidentally uncovered.

- If any new bat evidence such as crumbly droppings composed of insect remains or an actual bat is seen, during soft stripping or all other demolition works, then such work must stop and a licensed bat consultant contacted immediately for advice. Although this is deemed unlikely to occur given the results of this assessment.

- Usually, late summer/early autumn e.g. late August/September/October or early spring e.g. April/May, are ideally the best times to work on such structures, as this avoids the main bat breeding season and winter hibernation period.

- **But given that no bat roost has been found at all at this site, there are no constraints in terms of when demolition works can be done in regards to bats. As long as all contractors at the site follow the above best practice recommendations.**

6. REFERENCES

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APPENDIX 1

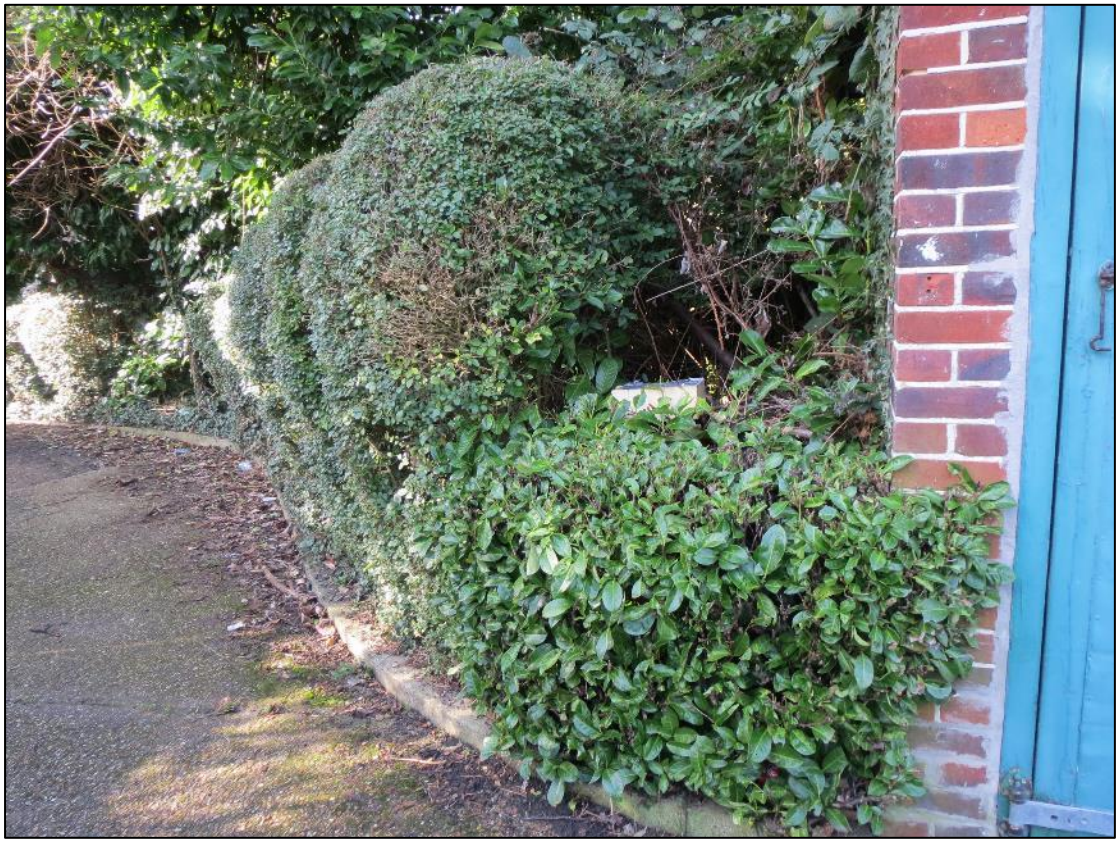
PHOTOGRAPHS A-N

Photograph A
The garages had very poor ecological potential with no wildlife evidence found inside them

Photograph B
The two garage blocks were in a good state of repair with the roofs in good condition

Photograph C
A number of garages could not be accessed due to a lack of keys, but some were surveyed fortunately inside

Photograph D
The boundary bushes, shrubs, trees and hedges all have some bird nesting potential only



Photograph E
The hedges were dense enough for the occasional bird nest although none were seen during this survey

Photograph F
The rear vegetation also has some bird nesting potential

Photograph G
This garage was searched internally with no bats or bat evidence found

Photograph H
This particular garage had an open roof void but no bats could be found

Photograph I
The garages have rough walls and the occasional crevice but no bats were found upon searching these

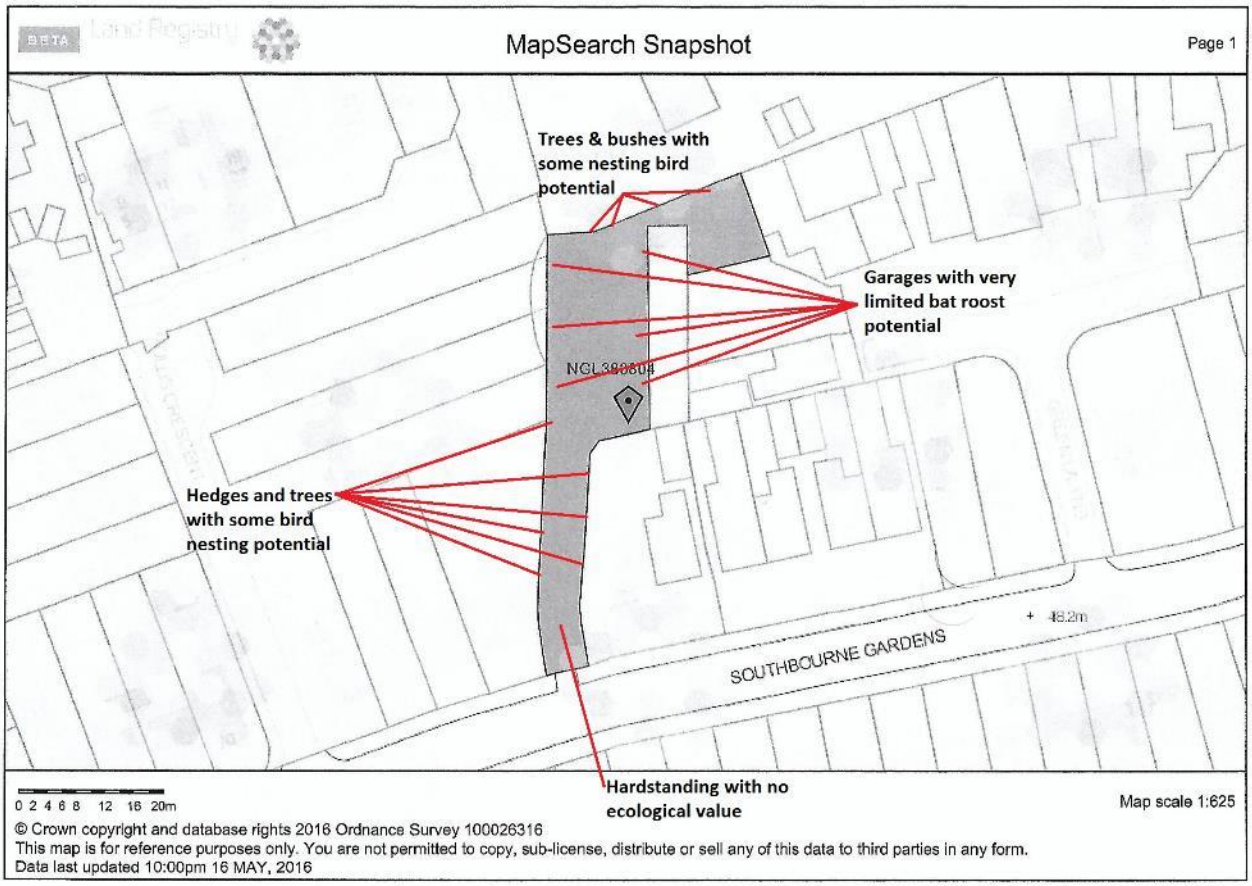
Photograph J
There was no evidence at all therefore that any of the garages that were searched had ever had bats using them

Photograph K
A crevice is present above some doors that lead into the garage

Photograph L
But despite these crevices, no bats or bat evidence was found. Local houses will be far better for bats to use as roosts

Photograph M
The shed at the back had no bat roost potential and the small piece of land had low ecological interest

Photograph N
Overall, the garages have very little ecological value and the proposed demolition will have no impact on the local biodiversity

APPENDIX 2

MAP A – ECOLOGICAL TARGET NOTES AT THE GARAGES SITE AT SOUTHBOURNE GARDENS, RUISLIP, GREATER LONDON – FEBRUARY 2017