

**46 WARBLINGTON ROAD, EMSWORTH,
HAMPSHIRE**

**ECOLOGICAL IMPACT ASSESSMENT IN RESEPECT
OF BATS**

Draft Document

August 2019

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EcIA • HRA • Management Plans
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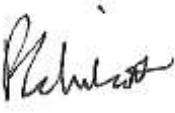
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ECOSA Quality Assurance Record

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). The Ecological Impact Assessment in respect of bats and report has been prepared in line with the CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018) and survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2017).

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**46 WARBLINGTON ROAD, EMSWORTH,
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ECOLOGICAL IMPACT ASSESSMENT IN RESPECT OF BATS

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Map 1 Site Location Plan

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EXECUTIVE SUMMARY

Ecological Survey and Assessment Ltd (ECOSA) have been appointed by Charles Glanville to undertake an Ecological Impact Assessment in respect of bats to support a planning application for the redevelopment of 46 Warblington Road, Emsworth. The site is located in Emsworth, Hampshire and comprises a garage set within garden landscaping with a long field adjoining the south of the site. The proposals entail the demolition of the garage and the construction of six detached dwellings and associated garden landscaping.

The main findings of the Ecological Impact Assessment in respect of bats are:

- No bats were recorded emerging from the garage during the bat emergence/re-entry survey undertaken, and, therefore bats are assessed as being likely absent from the garage. The site supports foraging and commuting bats.
- The proposals have the potential to result in adverse impacts on foraging and commuting bats through the introduction of external lighting. Mitigation measures will include a sensitive lighting strategy. No adverse impacts on foraging and commuting bats are therefore anticipated as a result of the proposals.
- As an enhancement measure, new bat roost units will be incorporated into the new dwellings. Six Schwegler 1FR bat tubes or a similar alternative will provide a sufficient enhancement.
- Given the impacts identified, and the mitigation and enhancement measures proposed it is considered that the proposals accord with all relevant local and national planning policy in respect of bats.
- If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Charles Glanville to undertake an Ecological Impact Assessment in respect of bats to support a planning application for the redevelopment of 46 Warblington Road, Emsworth, Hampshire PO10 7HH (hereafter referred to as the site).

A Preliminary Ecological Appraisal had been undertaken at the site by ECOSA in August 2015 to inform a planning application for the redevelopment of the site (ECOSA, 2015). Due to the amount of time that had elapsed and the change in proposals, an updating survey was undertaken by Ecosupport Ltd in May 2019. A Phase 1 Ecological Survey report for the site was subsequently prepared in support of a planning application for the construction of six detached dwellings (Ecosupport Ltd, 2019).

During the Phase 1 Ecological Survey undertaken by Ecosupport Ltd, a number of potential roost features were identified on the externals of the garage including lifted tiles, gaps between tiles and missing mortar along the ridge line. The garage was therefore assessed as having moderate suitability to support roosting bats. The site was also assessed as having suitability to support foraging and commuting bats and wintering birds.

Further protected species surveys were recommended including bat emergence/re-entry surveys, bat activity transect surveys and wintering bird surveys in order to confirm the presence/likely absence of these species groups and to establish the likely impacts of the proposals (Ecosupport Ltd, 2019). ECOSA were subsequently appointed to undertake bat emergence/re-entry surveys in 2019 to support the planning application.

An application to Havant Borough Council was made on 18th June 2019 (reference APP/19/00623). The planning application is still under determination at the time of preparing this report.

1.2 The Site

The site is located in Emsworth, Hampshire, centred on National Grid Reference (NGR) SU 7440 0544 (**Map 1**).

The site measures approximately one hectare and comprises a garage with a long field adjoining the south of the site. The site is bounded by residential development to the east, Curlew Close and residential development to the west, Warblington Road to the north and Chichester Harbour to the south.

The wider landscape is typified by the Chichester Harbour coastline to the south and a network of towns, villages, rural areas and infrastructure to the north.

1.3 Aims and Scope of Report

The information within this report is based on a Phase 1 Habitat Survey and Desk Based Search undertaken by Ecosupport Ltd, and bat emergence/re-entry surveys carried out by ECOSA between July and August 2019. This report should be read in conjunction with Ecosupport Ltd's Phase 1 Ecological Survey report (Ecosupport Ltd, 2019). This Ecological Impact Assessment in respect of bats report describes the status of bats (hereafter referred to as ecological features) within the site's Zone of Influence (Paragraph 3.2), and provides a detailed assessment of potential ecological effects of the proposed development of the site. It identifies the need for any measures to avoid, mitigate or compensate for significant adverse effects¹ ecological features and outlines enhancements to the site's ecology to be implemented as part of the development. The objectives of the assessment are:

- To provide baseline information on ecological features within the site's Zone of Influence and determine the importance of these features;
- To assess, characterise and quantify the effects on bats, including cumulative effects, and identify significant effects in the absence of any mitigation;
- To set out measures to avoid, mitigate and compensate for significant ecological effects on bats in accordance with the 'mitigation hierarchy'²;
- To provide an assessment of the significance of any residual effects;
- To outline opportunities for enhancement in order to achieve a net gain for biodiversity; and
- To set out the requirements for any post-construction monitoring.

1.4 Site Proposals

The proposals comprise the demolition of the garage and the construction of six detached dwellings and associated garden landscaping. Access to Plot 5 is to be taken off Warblington Road while access to Plots 1-4 and 6 is to be taken off Curlew Close.

¹ For the purposes of this assessment a 'significant' adverse effect is one which will have an adverse effect on the ecological feature at the site level or higher.

² In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

The Ecological Impact Assessment in respect of bats is based on the proposals plan produced by Re-Format, dated November 2018 (Drawing No. 15048-RFT-00-ZZ-DR-A-0121-SI Revision P11) (**Appendix 1**).

The exact timescales for construction are currently unknown. For the purposes of this report it is assumed that construction would have commenced by January 2021.

2.0 PLANNING POLICY CONTEXT

2.1 Introduction

This section summarises the planning policy in relation to ecology and biodiversity within the Havant Borough Council administrative area. This information is then used to assess the compliance of the scheme in relation to relevant planning policy and where necessary make recommendations for mitigation, compensation and enhancements (see Section 5.0).

2.2 National Policy

The National Planning Policy Framework (NPPF) sets out the government's requirements for the planning system in England. The original document was published in 2012 with a revised NPPF published in February 2019. A number of sections of the NPPF are relevant when taking into account development proposals and the environment. As set out within Paragraph 11 of the NPPF *"Plans and decisions should apply a presumption in favour of sustainable development"*. However, Paragraph 177 goes on to state that *"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."*

The NPPF sets out that development proposals should not only minimise the impacts on biodiversity but also to provide enhancement. Paragraph 170 states that the planning system should contribute to and enhance the natural environment by *"...minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures..."*.

A number of principles are set out in Paragraph 175, including that where harm cannot be adequately avoided then it should be mitigated for, or as a last resort, compensated for. Where impacts occur on nationally designated sites, the benefits must clearly outweigh any adverse impact and incorporating biodiversity in and around developments should be encouraged. Specific reference is also made to the protection of irreplaceable habitats³, including ancient woodland⁴. Where loss to irreplaceable habitats occurs planning permission would normally be refused unless there are wholly exceptional reasons and an adequate compensation strategy is in place. Paragraph

³ The NPPF defines irreplaceable habitats as *"Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen."*

⁴ Natural England defines ancient woodland as *"An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)."*

175 also states *“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity”*. Protection of sites proposed as SPAs, SACs and Ramsar sites or acting as compensation for SPAs, SACs and Ramsar sites, should receive the same protection as habitat sites.

In addition to the NPPF, Circular 06/05 provides guidance on the application of the law relating to planning and nature conservation as it applies in England. Paragraph 98 states *“the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat”*. Paragraph 99 states *“it is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the Proposed Project Development, is established before planning permission is granted”*.

2.3 Local Policy

Local planning policy within Havant Borough is provided by the Havant Borough Core Strategy March 2011 with two policies referring in part ecology and biodiversity:

- **Policy CS11:** Protecting and Enhancing the Special Environment and Heritage of Havant Borough. This policy refers in part to biodiversity stating that planning permission will be granted for development that:
 - Protects and where possible enhances the borough's statutory and non-statutory designated habitats and features of biological interest. Protection and enhancement will be achieved by appropriate adaptation and mitigation measures;
 - Has particular regard for nature conservation designations with international designations given the highest regard;
 - Supports an ongoing programme of survey of habitats, species and designations of SINC;
 - Incorporates partnership working with conservation organisations to improve public understanding of biodiversity and to manage public access to designated sites, particularly associated with the coasts, in order to minimise harm;
 - Incorporates partnership working with landowners and developers to ensure land management practices restore, enhance and where appropriate create new valued landscapes, habitats and their soil structure, particularly the ancient woodland remnants of the Forest of Bere and coastal salt marsh;

- Protects wildlife habitats and corridors to prevent fragmentation and to allow species to adapt to climate change; and
 - Responds to the emerging evidence from the Solent Disturbance and Mitigation Project and published recommendations and further research.
- **Policy DM9:** Development in the Coastal Zone. This policy refers to the protection of the coastal zone as defined on the Proposals Map. Permission will only be granted in the coastal zone where the following criteria are met:
- Has no harmful effects on nature conservation within the Chichester and Langstone Harbour SSSIs and SPA, Solent Maritime SAC and Ramsar site, or any SINC and Local Nature Reserves;
 - Maintains and enhances the appearance and distinctiveness of existing settlements and landmarks along the coast;
 - Contributes positively to the landscape and has regard to best practice on the design of new buildings in coastal locations;
 - Upgrades existing footpaths and ensures that public access is retained and provided to connect existing paths along the waterfront where appropriate;
 - Would result in improvements to or redistribution of moorings, marine berths or launch on demand facilities (dry berths) in the harbours;
 - Would not be detrimental to infrastructure for, and quality of, water-based recreation, or be detrimental to the safety of navigation; and
 - Provides recreational opportunities that do not adversely affect the character and appearance of the coast.

3.0 METHODS

3.1 Introduction

This section details the methods employed during the Ecological Impact Assessment in respect of bats. Any significant limitations to the assessment are also considered.

3.2 Zone of Influence

To define the total extent of the study area for this assessment, the proposed scheme was reviewed to establish the spatial scale at which bats could be affected⁵. The Zone of Influence for bats assessed in this report is considered to be restricted to the site and its immediate surrounds. These distances are determined based on the professional judgement of the ecologist leading the appraisal, taking into account the characteristics of the site subject to assessment, its surroundings and the nature of the proposals.

3.3 Scoping

Further surveys in relation to roosting bats, foraging and commuting bats and wintering birds were recommended by Ecosupport Ltd in their Phase 1 Ecological Survey report (Ecosupport Ltd, 2019). It is assumed that Ecosupport Ltd undertook a scoping exercise during their initial survey.

The focus of this assessment is on roosting bats, where further surveys have been undertaken. Bat activity surveys were not undertaken given the small size of the site and the retention of the majority of suitable habitat for foraging and commuting bats. Wintering bird surveys have not been undertaken and the client is currently undergoing discussions with the Local Planning Authority on their need.

The further surveys are discussed within the results section (Section 4.0) of the current report. Where this species group is unlikely to be present on site a justification for likely absence is provided. Species considered likely absent from the site are not then considered in the assessment of ecological effects and mitigation/compensation measures section (Section 5.0) of this report.

3.4 Bat Survey

3.4.1 Survey Methods

Bat Emergence/Re-entry Survey

The bat emergence/re-entry surveys were undertaken in line with current best practice guidelines (Collins, 2016). In accordance with the guidelines for a building assessed as having moderate suitability to support roosting bats a single dusk emergence survey

⁵ The Zone of Influence (Zoi), as defined by CIEEM, is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities (CIEEM, 2018).

and a single dawn re-entry survey were undertaken in order to ascertain the presence/likely absence of roosting bats from within the building. Where the presence of roosting bats is confirmed the data also allows for an assessment of the status of the roost present.

The dusk emergence survey commenced approximately 15 minutes before sunset until approximately two hours after sunset. The dawn re-entry survey commenced approximately two hours before sunrise until just after sunrise.

The surveys were carried out by two experienced ECOSA surveyors, positioned at previously identified vantage points around the building. These vantage point locations allowed a sufficient coverage of the Potential Roosting Features identified on the building impacted by the proposals.

During the surveys surveyors recorded the time, species, location and direction of flight for each bat encountered, with particular attention paid to establishing bat access/egress locations to any roosts within the building.

3.4.2 Survey Details

Bat Emergence/Re-entry Survey

The bat emergence/re-entry surveys were undertaken between July and August 2019.

Table 1 provides details of each emergence/re-entry survey.

Table 1: Bat emergence/re-entry survey details

Survey Date	Survey Type	Survey Timings	Weather Conditions	Sunset/ Sunrise Time
17 th July 2019	Emergence	Start: 20:54 End: 23:09	General conditions: Dry with brief period of rain during survey Start temp: 18°C End temp: 17°C Cloud Cover: 80-90% Wind Speed: Moderate to gentle breeze	21:09
6 th August 2019	Re-entry	Start: 03:37 End: 05:52	General conditions: Dry Start temp: 19°C End temp: 17°C Cloud Cover: 60-40% Wind Speed: Gentle breeze	05:37

During the bat emergence/re-entry surveys the surveyors were equipped with Pettersson D240x time expansion or BatLogger M bat detectors. The Pettersson detectors were connected to Edirol R-05 recorders for the full duration of the survey. Recordings made with the detectors were later analysed using Sonobat® (v2.9.7) to confirm the identity of any species encountered.

The bat emergence/re-entry surveys were coordinated by Lucy Bartlett, Ecologist of ECOSA (Natural England Bat Licence 2018-36644-CLS-CLS) assisted by suitably qualified and experienced ECOSA surveyors David Miller, Olivia Walton, Pete Flood and Hannah Gunn.

3.4.3 Survey Limitations

Some bat species, e.g. long-eared bats *Plecotus* species⁶, generally emerge from their roosts in total darkness and do not produce strong echolocations, and therefore these bats can be difficult to observe and record during bat surveys, leading to under-recording.

The quality of bat detector recordings is based, to a large extent, on the proximity of a bat to the detector's microphone. Obstructions such as vegetation or environmental variables such as rainfall and wind noise from vegetation will all influence the quality of sound reaching the microphone and thus some bat echolocation recordings are of insufficient quality for specific identification. Bats routinely alter their echolocations in relation to behaviour and their environment. It is not always possible to make a robust identification of every bat recording.

The use of bat detectors is likely to result in the under-recording of a percentage of bats present, such as those flying at height (Collins & Jones, 2009), which would be out of the recording range for the detectors.

3.5 Criteria used to Assess Ecological Value

The evaluation criteria used in this report are based on ECOSA's professional judgement and publicly available publications, survey data and other sources as referenced in the main text. The evaluation is based on a sliding scale of importance as follows; international and European, national, regional, county, local and site. There are a wide range of characteristics which contribute to the importance of ecological features, and these may justify an increase or reduction in the value of an ecological feature. Where deviations occur, these will be explained in the evaluation section of this report (Section 4.0). Current published relevant guidance, including information sources such as A Nature Conservation Review (Ratcliffe, 1977) and Guidelines for Ecological Impact Assessment in the United Kingdom (CIEEM, 2018) have also been used to inform the assessment.

⁶ There are two species of long-eared bat, the brown long-eared bat *Plecotus auritus* and the grey long-eared bat *Plecotus austriacus*. These species can only be separated by examination of physical characteristics and Phylogenetic Analysis Identification of bat droppings. Unless confirmation of identification has been made by visual identification the two species shall be referred to in this report as long-eared bat. The brown long-eared bat is the commonest of the two species typically being found roosting within large roof voids although small voids and trees are also utilised. The grey long-eared bat is rare and confined to southern England and like the brown long-eared typically roosts in roof voids.

4.1 Introduction

4.2 Bats

Bat Emergence/Re-entry Survey Results

Table 2 provides details of the species, numbers and locations of bats recorded foraging/commuting during the emergence/re-entry survey.

Table 2: Bat Emergence/Re-entry Survey Results

Survey Date	Recorded Bat Roosts	General Bat Activity at the Site		
17 th July 2019 <i>Dusk Emergence</i>	<u>Summary:</u> No bats were recorded emerging from the garage during the survey undertaken.	Species	First Pass	Last Pass
		Common pipistrelle	21:56	-
		Soprano pipistrelle	22:03	22:24
		<u>Summary:</u> A low level of bat activity was recorded during the survey with two registrations of soprano pipistrelle and a single registration of common pipistrelle recorded. The majority of activity was recorded as heard not seen with a single foraging incident recorded within the site.		
6 th August 2019	<u>Summary:</u>	Species	First Pass	Last Pass
		Common pipistrelle	03:50	05:08

⁷ There are seven species of *Myotis* bats in Britain. *Myotis* bats are very difficult to identify specifically, this can generally only be done by examination of physical features and Phylogenetic Analysis Identification of bat droppings. Many of these bats are common and will utilise buildings for roosting often occupying small and inaccessible voids. For the purpose of this report all species shall be referred to as *Myotis* bats unless a specific identification has been possible.

Survey Date	Recorded Bat Roosts	General Bat Activity at the Site		
Dawn entry Re-entry	No bats were recorded re-entering the garage during the survey undertaken.	Soprano pipistrelle	04:41	05:09
		<i>Myotis</i> bat species	04:25	-
		<u>Summary:</u> Moderate levels of bat activity were recorded during the survey. The majority of activity was dominated by common pipistrelle and soprano pipistrelle with a single registration of <i>Myotis</i> bat species also recorded during the survey. The majority of activity was recorded as heard not seen.		

4.2.2 Evaluation

Roosting Bats

No bats were recorded emerging or re-entering the garage during the bat emergence/re-entry surveys undertaken, and, therefore roosting bats are assessed as being likely absent from within the garage.

Foraging and Commuting Bats

Activity surveys were not undertaken as part of the Ecological Impact Assessment in respect of bats, but foraging and commuting activity was recorded as an incidental result of the bat emergence/re-entry surveys. Bat emergence/re-entry surveys recorded at least three species of bat foraging and commuting at the site: common pipistrelle, soprano pipistrelle and *Myotis* bat species. Given the small size of the site, the site itself is likely to be used by bats as part of a larger foraging and commuting route, and, therefore it is assumed that any local populations present would not rely on the site for foraging. The site has been assessed as having value at the site level.

5.0 ASSESSMENT OF ECOLOGICAL EFFECTS AND MITIGATION/COMPENSATION/ENHANCEMENT MEASURES

5.1 Introduction

This section assesses the ecological effects of the proposed development scheme on the identified ecological features as identified in Section 4.0. Methods for addressing potential impacts on ecological features have been approached in accordance with the mitigation hierarchy⁸ with avoidance of impacts prioritised where possible. Where significant adverse effects cannot be avoided other forms of mitigation are prioritised over compensation. Enhancement measures have been detailed, where relevant, in order to not only minimise the impacts on biodiversity but also to provide enhancement in accordance with Paragraph 170 of the NPPF (Paragraph 2.2). It is anticipated that mitigation, compensation and enhancement measures will be secured through the planning process.

5.2 Scheme Design

The proposed development entails the demolition of the garage and the construction of six detached dwellings and associated garden landscaping. Access to Plot 5 is to be taken off Warblington Road while access to Plots 1-4 and 6 is to be taken off Curlew Close.

The lighting proposals are unknown at the time of preparing this report, but are likely to be restricted to a small number of downlights externally on key walls for entrance and terraces. Low level bollard lights to shared access roads may also be incorporated into the scheme.

The potential ecological impacts and effects of these proposals, in the absence of mitigation, are described for each ecological feature below. For each ecological feature, measures to mitigate and/or compensate for significant effects are described.

5.3 Bats

5.3.1 Potential Impacts and Effects

No bats were recorded emerging or re-entering the garage during the survey. Therefore, it is unlikely that the proposed demolition works will result in any adverse effects on roosting bats.

The majority of habitat suitable for foraging and commuting bats is being retained as part of the development in the form of the boundary vegetation. The introduction of new lighting at the site as a result of the redevelopment has the potential to increase

⁸ In accordance with CIEEM Ecological Impact Assessment guidance (CIEEM, 2018) a sequential process is adopted to address impacts on features of ecological interest, with 'Avoidance' prioritised at the top of the hierarchy and Compensation/Enhancement' at the bottom. This is often referred to as the 'mitigation hierarchy'.

disturbance of foraging and commuting bats. The lighting proposals are unknown at the time of preparing this report, but are likely to be restricted to a small number of downlights externally on key walls for entrance and terraces. Low level bollard lights to shared access roads may also be incorporated into the scheme.

In England, bats and their habitat are fully protected under the Wildlife and Countryside Act 1981 through inclusion in Schedule 5. In addition, all bat species are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). Refer to **Appendix 2** for details.

5.3.2 Mitigation Measures

A sensitive lighting scheme in relation to bats will be designed to minimise light spill onto retained vegetation to ensure no adverse effects on foraging and commuting bats, should they be present. Where possible, the new lighting will be motion-activated and task related. The lux level will be less than 0.5 lux onto any boundary vegetation and will be as low as possible to allow the task to be carried out safely and effectively.

5.3.3 Significance of Residual Effects

The lighting design will avoid disturbance effects on foraging and commuting bats, and, therefore no residual effects are anticipated.

5.3.4 Compensation

Given the absence of significant residual effects in relation to habitat loss, no compensation in respect of bats is considered necessary.

5.3.5 Enhancement

As an enhancement measure, new bat roost units will be incorporated into the new dwellings. Six Schwegler 1FR bat tubes or a similar alternative will provide a sufficient enhancement.

5.4 Cumulative Effects

Assuming that the mitigation and enhancement measures outlined in the paragraphs above are implemented, no significant residual effects in respect of bats are anticipated. As such it is considered unlikely that the proposals will contribute to cumulative adverse effects in association with other proposals in the local area.

6.0 CONCLUSIONS

6.1 Conclusion

No bats were recorded emerging from the garage during the bat emergence/re-entry survey undertaken, and, therefore roosting bats are assessed as being likely absent from the garage. The site has been assessed as having value at the site level for at least three species of foraging and commuting bats: common pipistrelle, soprano pipistrelle and *Myotis* bat species. Adverse impacts on foraging and commuting bats as result of introduced external lighting have been identified and appropriate mitigation measures proposed which comprises a sensitive lighting strategy. No residual or cumulative impacts are therefore anticipated. Post-development the site will be enhanced for bats through the installation of bat roosting features.

6.2 Updating Site Survey

If the planning application boundary changes or the proposals for the site alter, a re-assessment of the scheme in relation to ecology may be required. Given the mobility of animals and the potential for colonisation of the site over time, updating survey work may be required, particularly if development does not commence within 18 months of the date of the most recent relevant survey.

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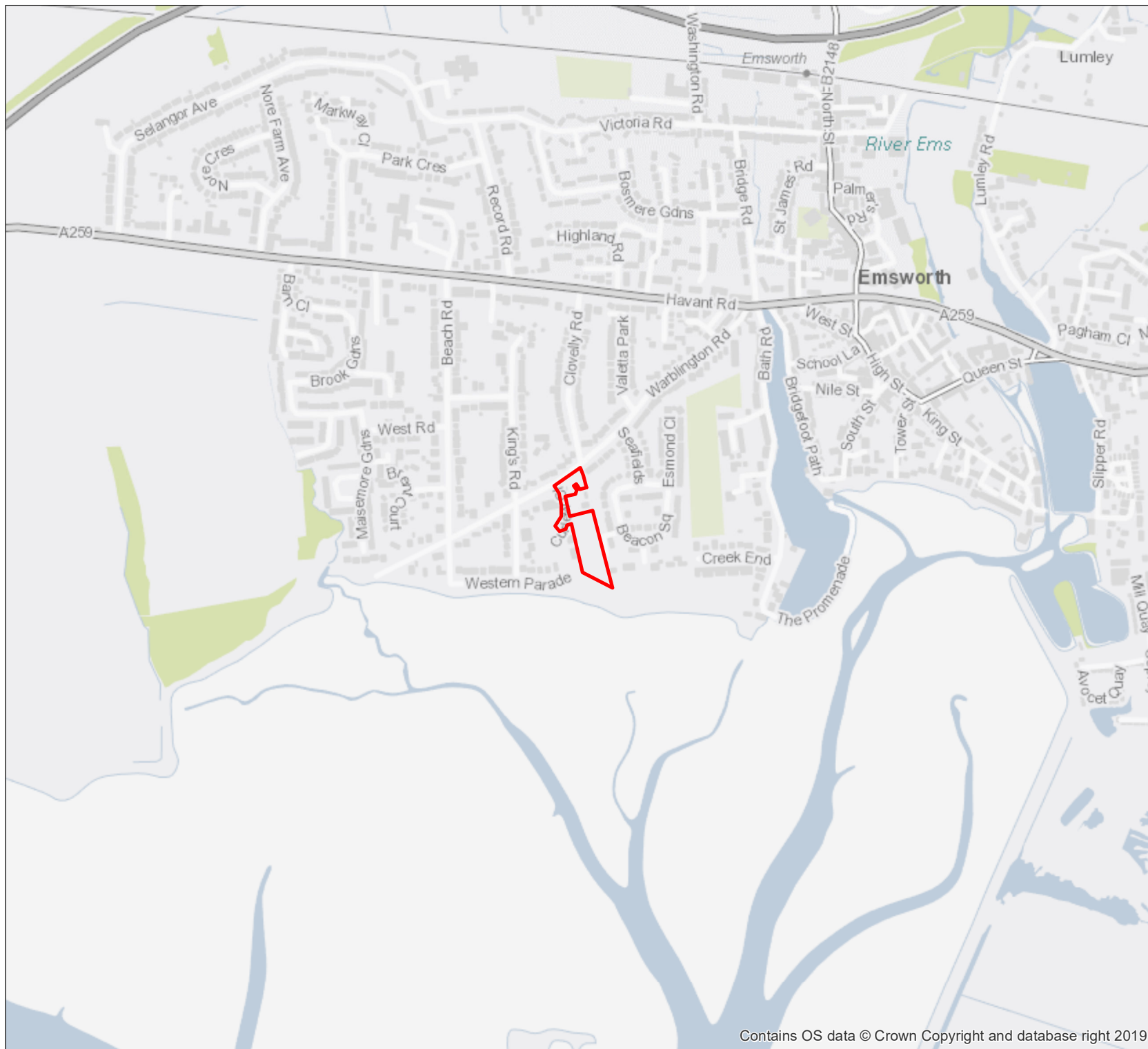
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Map 1 Site Location Plan



46 WARBLINGTON ROAD, EMSWORTH, HAMPSHIRE

ECOLOGICAL IMPACT ASSESSMENT IN RESEPT OF BATS

Map 1 - Site Location Plan

Client:	Charles Glanville
Date:	August 2019
Status:	Final

KEY

Site Boundary



Scale at A4: 1:10,000

0 100 200 400 Metres



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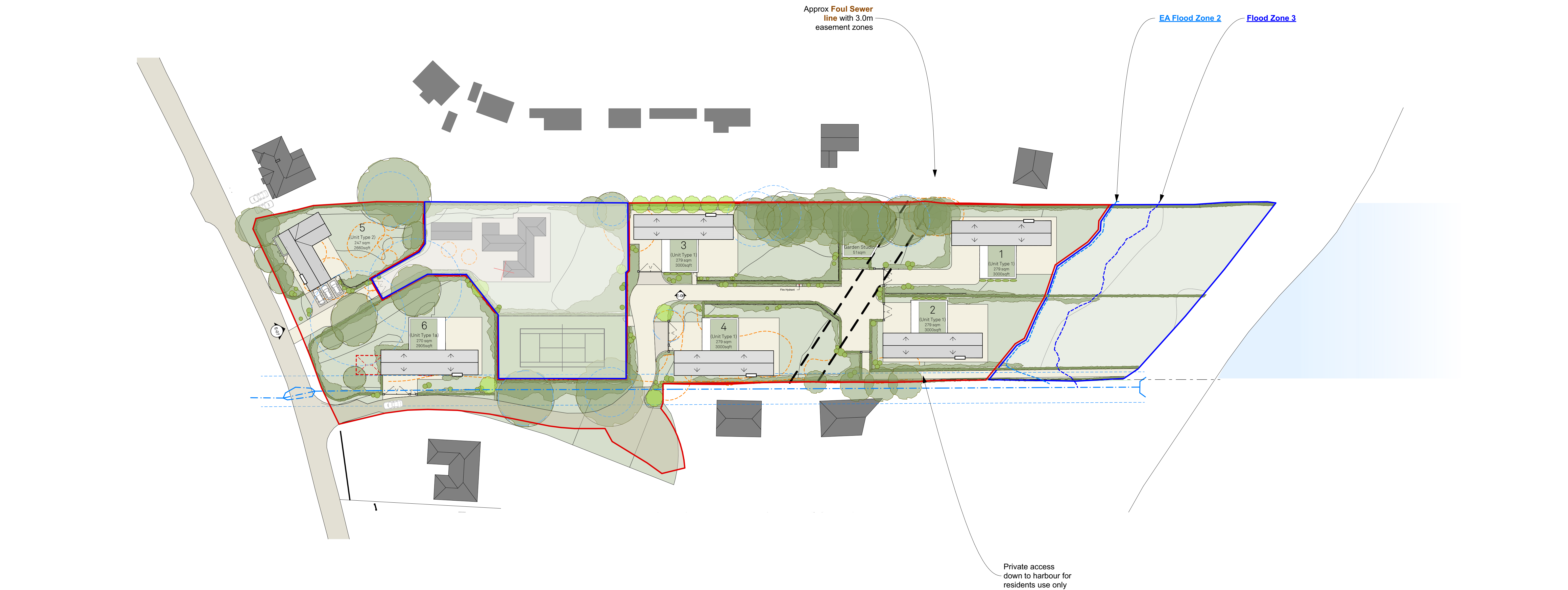
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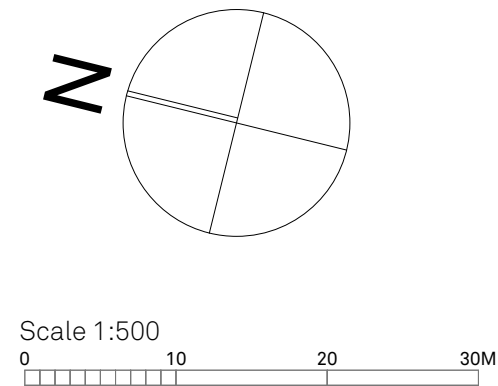
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Appendix 1 Proposed Site Layout



Key:

objects to be removed



Appendix 2 Relevant Legislation

Bats

All UK bat species are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded full protection under Section 9(4) of the Act and Regulation 43 of the Regulations. These make it an offence to:

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb any such animal, including in particular any disturbance which is likely:
 - To impair its ability to survive, breed, or rear or nurture their young;
 - To impair its ability to hibernate or migrate;
 - To affect significantly the local distribution or abundance of that species;
- Damage or destroy a breeding site or resting place of any such animal;
- Intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- Intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat *Rhinolophus ferrumequinum*;
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Bechstein's bat *Myotis bechsteinii*;
- Barbastelle *Barbastella barbastellus*; and
- Greater mouse-eared bat *Myotis myotis*.

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favourable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.