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## Ecological Walkover

**Survey site:**

Land to the rear of Bayners Hotel, King James Way, Royston, Hertfordshire, SG8 7BZ

**Client:**

Zahra Akkerhuys

**Survey date:**

14<sup>th</sup> November 2024

**Project:**

This report is prepared to inform a planning application with North Hertfordshire District Council. The proposal is described as the construction of 9no. apartments and associated vehicle parking, refuse and cycle store.

## **Executive Summary**

Arbtech Consulting Limited was instructed by Zahra Akkerhuys to undertake an Ecological Walkover at Land to the rear of Bayners Hotel, King James Way, Royston, Hertfordshire, SG8 7BZ. The survey was required to inform a planning application for the construction of 9no. apartments and associated vehicle parking, refuse and cycle store.

A Preliminary Ecological Appraisal was completed by Arbtech Consulting in November 2023. The site was found to host limited ecological value with no further surveys recommended. Precautionary working methods during the construction phase were recommended for roosting bats, nesting birds, reptiles, amphibians, and hedgehogs.

An Ecological Walkover was completed by Arbtech Consulting Ltd in November 2024, to provide an update to the PEA previously carried out and to provide updated survey data for establishing current baseline habitats of the site to inform Biodiversity Net Gain calculations.

The Walkover concluded no significant changes to the habitats recorded on site. However, management of the site has changed since the previous survey, whereby a large section of the scrub had been recently cleared. Overall, the site was found to host limited ecological value and as such no further ecological surveys have been recommended. Precautionary working methods during the construction phase remain for roosting bats, nesting birds, reptiles, amphibians, and hedgehogs. Further information, as well as biodiversity enhancements, are outlined in Tables 1, 3 & 4 of this report.

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## Introduction and Context

### Introduction

Arbtech Consulting Limited was instructed by Zahra Akkerhuys to undertake an Ecological Walkover Survey at Land to the rear of Bayners Hotel, King James Way, Royston, Hertfordshire, SG8 7BZ (hereafter referred to as “the site”). The survey was required to inform a planning application for the construction of 9no. apartments and associated vehicle parking, refuse and cycle store (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in Appendix 1.

A Preliminary Ecological Appraisal was completed by Arbtech Consulting in November 2023. The site was found to host limited ecological value with no further surveys recommended. Precautionary working methods during the construction phase were recommended for roosting bats, nesting birds, reptiles, amphibians, and hedgehogs.

The aim of the Ecological Walkover was to provide an update to the PEA previously carried out and to provide updated survey data for establishing current baseline habitats of the site to inform Biodiversity Net Gain calculations.

### Survey Methodology

An extended habitat survey was undertaken, following the methodology set out in The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare). PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024](#).

### Limitations

Whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report is a preliminary assessment and does not provide a complete characterisation of the site. Nor does it represent a full botanical assessment. It

assesses the likelihood of protected, notable and important habitats and species being present, based on a site and landscape level habitat value-based risk assessment. This is based upon the ecology, biology and known distribution of species as currently understood.

The survey was completed outside of the optimal survey period (April to October) for ground flora, and as such the accuracy of botanical assessment and condition assessment data may be limited in terms of species visible and ground conditions at the time of survey.

All limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

## Results, Impacts and Recommendations

### Site Location and Landscape Context

*Table 1: Site Location and Landscape Context*

| Ecological Survey<br>Factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Conclusion, Impact or Recommendations |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Site location</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                       |
| <p>The site is located at National Grid Reference TL 35711 40806 and has an area of approximately 0.3ha. The site comprises unsealed surfaces, bramble scrub, scattered trees and tree lines. The site is located in an urban setting, within the town centre of Royston. It is immediately surrounded by residential and commercial infrastructure in all directions. The local landscape is heavily urbanised, with little in the way of green infrastructure. Where this does exist, this is limited to residential gardens, tree lines and amenity fields. Beyond Royston, the landscape is dominated by arable land, hosting a scattering of woodland pockets and hedgerow networks. No ponds or watercourses are located on, or adjacent to, the site. A site location plan is included in Appendix 2.</p> |                                       |

## Habitats and Flora

The walkover was undertaken in dry conditions with temperatures just under 5°C on 19<sup>th</sup> November 2024 by Emma Platts BSc, Consultant Ecologist (Accredited agent to Natural England Level 2 bat licence number 2018-33540-CLS-CLS)

Table 2: Survey findings – Habitats and flora

| Ecological Survey Factor            | Conclusion, Impact or Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | <p><i>This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Onsite and adjacent habitats</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Summary of Survey Findings          | <p><u>Artificial unsealed, unvegetated surface (u1c)</u><br/>A bare ground access track is present in the northeastern corner of the site (Figure 1).</p> <p><u>Bramble scrub, recent management, scattered grass, scattered trees (h2d, 517, 532, 33)</u><br/>The site is dominated by bramble scrub. A large section of this has been recently cleared, with evidence of fresh cuttings present throughout the site (Figure 2). A small section to the west of the site remains unmanaged (Figure 3) which appears densely vegetated, measuring up to ~3m in height. The scrub is dominated by bramble <i>Rubus fruticosus</i>, with occasional elder <i>Sambucus nigra</i>, nettle <i>Urtica dioica</i>, false spirea <i>Sorbaria sorbifolia</i> and buddleia <i>Buddleia sp.</i><br/>Grassland species are scattered throughout the site peripheries, and amongst previously open glades within the scrub, hosting frequent Yorkshire fog <i>Holcus lanatus</i>, annual meadow grass <i>Poa annua</i>, creeping buttercup <i>Ranunculus repens</i>, occasional bristly ox-tongue <i>Helminthotheca echioides</i>, narrow leaved dock <i>Rumex acetosa</i>, ribwort plantain <i>Plantago lanceolata</i>, ground ivy <i>Glechoma hederacea</i> and rare common ragwort <i>Jacobaea vulgaris</i>.</p> |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | <p>~21 individual trees are scattered along the site peripheries (Figure 4, 5, 6). These comprise 4no small (&lt;30cm DBH), 10no medium (30-60cm DBH), 3no large (60-90cm DBH) and 4no very large (&gt;90cm DBH). Species are mostly native, comprising sycamore <i>Acer pseudoplatanus</i>, lime <i>Tilia x europaea</i>, horse chestnut <i>Aesculus hippocastanum</i> and yew <i>Taxus baccata</i>. The trees are mostly mature, with a small number of trees hosting extensive ivy networks throughout. The trees do not host any evidence of anthropogenic damage or disturbance. More than 20% of the canopy over sails the understorey.</p> <p>In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the individual trees were assessed to have a good condition value (Appendix 6).</p> <p><u>Coniferous woodland, line of trees (w2, 33)</u></p> <p>The site hosts two tree lines along the northern and southern boundaries (Figure 7, 8). These are dominated by cedar <i>Cedrus sp.</i> The northern tree lines hosts 17 trees, of which 14no are small (&lt;30cm DBH) and 3no are medium (30-60cm DBH). The southern tree line hosts 22 trees, of which 14no are small (&lt;30cm DBH), 4no are medium (30-60cm DBH), 3no are large (60-90cm DBH) and 1no is very large (&gt;90cm DBH). The trees appeared to be in good condition, with no significant ecological niches observed.</p> <p>In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the line of trees were assessed to have a poor condition value (Appendix 6).</p> <p>A habitat map can be found in Appendix 3.</p> |
| Foreseen Impacts | The proposed development will result in the loss of ~0.11ha of scrub. This is likely to result in a net loss in biodiversity at the site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Recommendations  | <p>The proposed development will require a Biodiversity Net Gain assessment, to calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain.</p> <p>Best practice measures to minimise the possibility of pollution must be implemented during construction. This should include the following measures:</p> <ul style="list-style-type: none"> <li>• Remove only the minimum of habitat required to facilitate the development</li> <li>• Use of Heras or other appropriate fencing to prevent encroachment by contractors onto retained habitats.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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|  | <ul style="list-style-type: none"><li>• Protect retained turf and soil resource from destruction and compaction using plastic matting and wooden boarding. Do not store skips and other heavy materials on retained turf</li><li>• Grasscrete, cell web or any other porous surface treatment facilitating recovery of vegetation is preferred to hard standing.</li></ul> <p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development:</p> <ul style="list-style-type: none"><li>• Planting of native grassland species (5-7 species mix)</li><li>• Planting of native shrub, hedgerow and tree species</li><li>• Incorporating a green roof into the development</li></ul> |
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**Fauna**

Table 3: Survey findings - Fauna

| Ecological Survey Factor   | Conclusion, Impact or Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                |                    |  |                |                  |                               |                    |               |                      |                                |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------|--|----------------|------------------|-------------------------------|--------------------|---------------|----------------------|--------------------------------|
|                            | This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.                                                                                                                                                                                                                            |                                |                    |  |                |                  |                               |                    |               |                      |                                |
| Invertebrates              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                    |  |                |                  |                               |                    |               |                      |                                |
| Summary of Survey Findings | The site provides habitat value for a variety of commonplace species but is unlikely to support important species and assemblages.                                                                                                                                                                                                                                                                                                                                                        |                                |                    |  |                |                  |                               |                    |               |                      |                                |
| Impacts                    | The proposed development will result in the loss of ~0.11ha of scrub. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat locally.                                                                                                                                                                                                                                                                |                                |                    |  |                |                  |                               |                    |               |                      |                                |
| Recommendations            | The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: <ul style="list-style-type: none"><li>Planting of pollinator friendly grassland species</li><li>Installation of insect hotels</li><li>Incorporation of bee bricks into the fabric of the new building. These should be installed 0.5m above ground level on a south-facing elevation with no obscuring vegetation</li></ul> |                                |                    |  |                |                  |                               |                    |               |                      |                                |
| Roosting bats              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                    |  |                |                  |                               |                    |               |                      |                                |
| Summary of Survey Findings | A review of MAGIC database found 1no granted European Protected Species Licenses (EPSL) for bats within 2km of the site. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site.                                                                                                   |                                |                    |  |                |                  |                               |                    |               |                      |                                |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                    |  |                |                  |                               |                    |               |                      |                                |
|                            | <table><tr><td>EPSL reference</td><td>Species affected</td><td>Impacts allowed under licence</td><td>Distance from site</td></tr><tr><td>EPSM2011-3111</td><td>Brown long-eared bat</td><td>Destruction of a resting place</td><td>~1300m west</td></tr></table>                                                                                                                                                                                                                          |                                |                    |  | EPSL reference | Species affected | Impacts allowed under licence | Distance from site | EPSM2011-3111 | Brown long-eared bat | Destruction of a resting place |
| EPSL reference             | Species affected                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Impacts allowed under licence  | Distance from site |  |                |                  |                               |                    |               |                      |                                |
| EPSM2011-3111              | Brown long-eared bat                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Destruction of a resting place | ~1300m west        |  |                |                  |                               |                    |               |                      |                                |

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|                                    | <p><u>Trees</u></p> <p>Three trees on site were identified to host value to individual or low numbers of roosting bats (PRF-I), due to being heavily clad in ivy along the length of their main trunks. Ivy coverage is dense and well established. The ivy obscures visibility of potential roosting features, and could host roosting features such as crevices within the root networks themselves. A breakdown of each PRF-I hosting tree is listed below and mapped in Appendix 3.</p> <ul style="list-style-type: none"> <li>• T1: Sycamore <i>Acer pseudoplatanus</i>, ~1m DBH, ~13m height (Figure 4)</li> <li>• T2: Horse chestnut <i>Aesculus hippocastanum</i>, 120cm DBH, ~15m height (Figure 5)</li> <li>• T3 Sycamore <i>Acer pseudoplatanus</i>, ~120cm DBH, ~15m height (Figure 6)</li> </ul> |
| Impacts                            | The proposed development will not result in the removal of any trees on site, therefore no impacts are anticipated on roosting bats.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Recommendations                    | In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Foraging and commuting bats</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Summary of Survey Findings         | The bramble scrub and tree on site provide suitable foraging opportunities for bats. The site is poorly connected to more extensive foraging and commuting opportunities in the wide landscape, owing to the surrounding urban infrastructure. However, residential gardens and scattered trees will provide some value to bat species adapted to urban environments, such as pipistrelles.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Impacts                            | The proposed development will result in loss of ~0.11ha of bramble scrub. The loss of this is likely to be inconsequential to foraging and commuting bats due to the presence of more extensive habitat elsewhere locally. However, construction works and external lighting fixtures on the proposed development could include the use of lighting which could spill onto bat foraging and commuting habitat and could deter bats from using these areas.                                                                                                                                                                                                                                                                                                                                                    |
| Recommendations                    | A low impact lighting strategy will be adopted for the site during and post-development, which will be designed to incorporate the measures laid out in the latest (2023) bat lighting guide <b>Guidance Note 8 Bats and Artificial Lighting<sup>1</sup></b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

<sup>1</sup>Bat Conservation Trust/Institute of Lighting Professionals (2023). Guidance Note 8 Bats and Artificial Lighting. <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

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|                            | <p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats:</p> <ul style="list-style-type: none"> <li>Planting of locally characteristic tree, shrub and hedgerows along site boundaries</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Birds</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Summary of Survey Findings | The bramble scrub and trees on site provide suitable opportunities for nesting birds. No evidence of historic nests were observed. Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Impacts                    | The proposed development will result in the loss of the bramble scrub. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Recommendations            | <p>Any vegetation clearance should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.</p> <p>Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged.</p> <p>The installation of a minimum of 5no bird boxes on will provide additional nesting habitat for birds. These can be placed on the proposed development. Bird boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.</p> |
| <b>Reptiles</b>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Summary of Survey Findings | The bramble scrub on site provide suitable shelter, foraging and commuting opportunities for reptiles, albeit the area of recent clearance is considered suboptimal due to its short sward. The wider landscape offers limited habitat for reptiles due to the surrounding urban infrastructure and lack of mosaic habitat favoured by reptiles;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|----------------|-------------------------------|--------------------|---------------------|-------------------------------------------|--------------|
|                            | however residential gardens will provide some value to common species such as slow worm. As such, the presence of reptiles on site is considered unlikely cannot be discounted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |  |                |                               |                    |                     |                                           |              |
| Impacts                    | The proposed development will result in the loss of ~0.11ha of bramble scrub. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value. However, site clearance could result in the death or injury of transient reptiles, if present.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |  |                |                               |                    |                     |                                           |              |
| Recommendations            | <p>A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:</p> <ul style="list-style-type: none"><li>• A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area.</li><li>• Debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas.</li><li>• Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</li><li>• Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats.</li><li>• Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</li><li>• If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.</li></ul> <p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles:</p> <ul style="list-style-type: none"><li>• Creation of reptile refugia using debris and brash from site clearance</li></ul> |                    |  |                |                               |                    |                     |                                           |              |
| Amphibians                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |  |                |                               |                    |                     |                                           |              |
| Summary of Survey Findings | A review of MAGIC database found 1no granted European Protected Species Licenses (EPSL) for great crested newts within 2km of the site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |  |                |                               |                    |                     |                                           |              |
|                            | <table><tr><td>EPSL reference</td><td>Impacts allowed under licence</td><td>Distance from site</td></tr><tr><td>2014-1854-EPS-MIT-1</td><td>Damage and destruction of a resting place</td><td>~1140m north</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |  | EPSL reference | Impacts allowed under licence | Distance from site | 2014-1854-EPS-MIT-1 | Damage and destruction of a resting place | ~1140m north |
| EPSL reference             | Impacts allowed under licence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Distance from site |  |                |                               |                    |                     |                                           |              |
| 2014-1854-EPS-MIT-1        | Damage and destruction of a resting place                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ~1140m north       |  |                |                               |                    |                     |                                           |              |

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|                 | <p>Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton <i>et al.</i> 2001). No ponds are located on, or adjacent to, the site. A review of aerial imagery indicates no ponds are present within 500m of the site.</p> <p>The bramble scrub on site provides good terrestrial amphibian habitat, albeit the area of recent clearance is considered suboptimal due to its short sward. The wider landscape offers limited habitat for amphibians due to the surrounding urban infrastructure, however residential gardens will provide some value.</p> <p>Given the lack of suitably connected breeding ponds within 500m of the site, the presence of great crested newts is considered unlikely. However, the presence of other common amphibians on site cannot be discounted.</p> |
| Impacts         | <p>The proposed development will result in the loss of ~0.11ha of bramble scrub. No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered absent from the site. The loss of such habitats is likely to be inconsequential to local amphibian populations due to the presence of more extensive habitats locally. However, site clearance and construction activities could result in the death or injury of common amphibians, if present.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Recommendations | <p>A precautionary working method will be implemented for common amphibians during construction, including the following measures:</p> <ul style="list-style-type: none"> <li>• A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area.</li> <li>• Debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas.</li> <li>• Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use.</li> </ul>                                                                                                                                                                  |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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|                            | <ul style="list-style-type: none"> <li>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</li> <li>If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.</li> <li>In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist.</li> </ul> <p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for amphibians:</p> <ul style="list-style-type: none"> <li>Creation of amphibian refugia using debris and brash from site clearance</li> </ul> |
| <b>Badger</b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Summary of Survey Findings | No badger setts, or other evidence of badgers, were noted on site or within a 30m radius of the site. The bramble scrub could provide foraging and commuting opportunities for badgers. However, the wider landscape is heavily urbanised and lacks connectivity and suitable habitat such as woodland pockets which are likely to host established populations. As such, the presence of foraging and commuting badgers on site is considered unlikely.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Impacts                    | No works will be undertaken within 30m of a badger sett. The proposed development will result in the loss of ~0.11ha of bramble scrub. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Recommendations            | In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Riparian animals</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Summary of Survey Findings | There are no riparian habitats on or adjacent to the site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Impacts                    | No impacts are anticipated on riparian animals as a result of the proposed development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Recommendations            | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Hazel dormouse</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Summary of Survey Findings      | The bramble scrub on site may provide some shelter and foraging opportunities for hazel dormice, however this is isolated and fragmented from more suitable habitats. The wider landscape lacks extensive woodland habitats or hedgerow networks which are likely to support a viable population of dormice. As such, the presence of hazel dormice is considered unlikely.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Impacts                         | No impacts are anticipated on hazel dormice as a result of the proposed development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Recommendations                 | In the unlikely event that a dormouse or evidence of dormouse is identified, works must cease and advice must be sought from a suitably qualified ecologist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Other e.g. small mammals</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Summary of Survey Findings      | The bramble scrub on site offers suitable foraging, sheltering and commuting opportunities for small terrestrial mammals such as hedgehogs. The site is well connected to residential gardens via small fence gaps, which could support hedgehogs. As such, the presence of foraging, sheltering and commuting small mammals on site cannot be discounted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Impacts                         | The proposed development will result in the loss of ~0.11ha of bramble scrub. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Recommendations                 | <p>A precautionary working method will be implemented during construction, including the following measures:</p> <ul style="list-style-type: none"> <li>• Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</li> <li>• Any pipework exceeding 150mm will be capped overnight.</li> <li>• The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use.</li> <li>• Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</li> <li>• If any small mammals are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.</li> </ul> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                               |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:</p> <ul style="list-style-type: none"><li>• Creation of fence gaps (14cm x 14cm) to enable small mammals to travel freely through the site</li><li>• Creation of brash piles</li><li>• Installation of hedgehog houses in shady areas.</li></ul> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

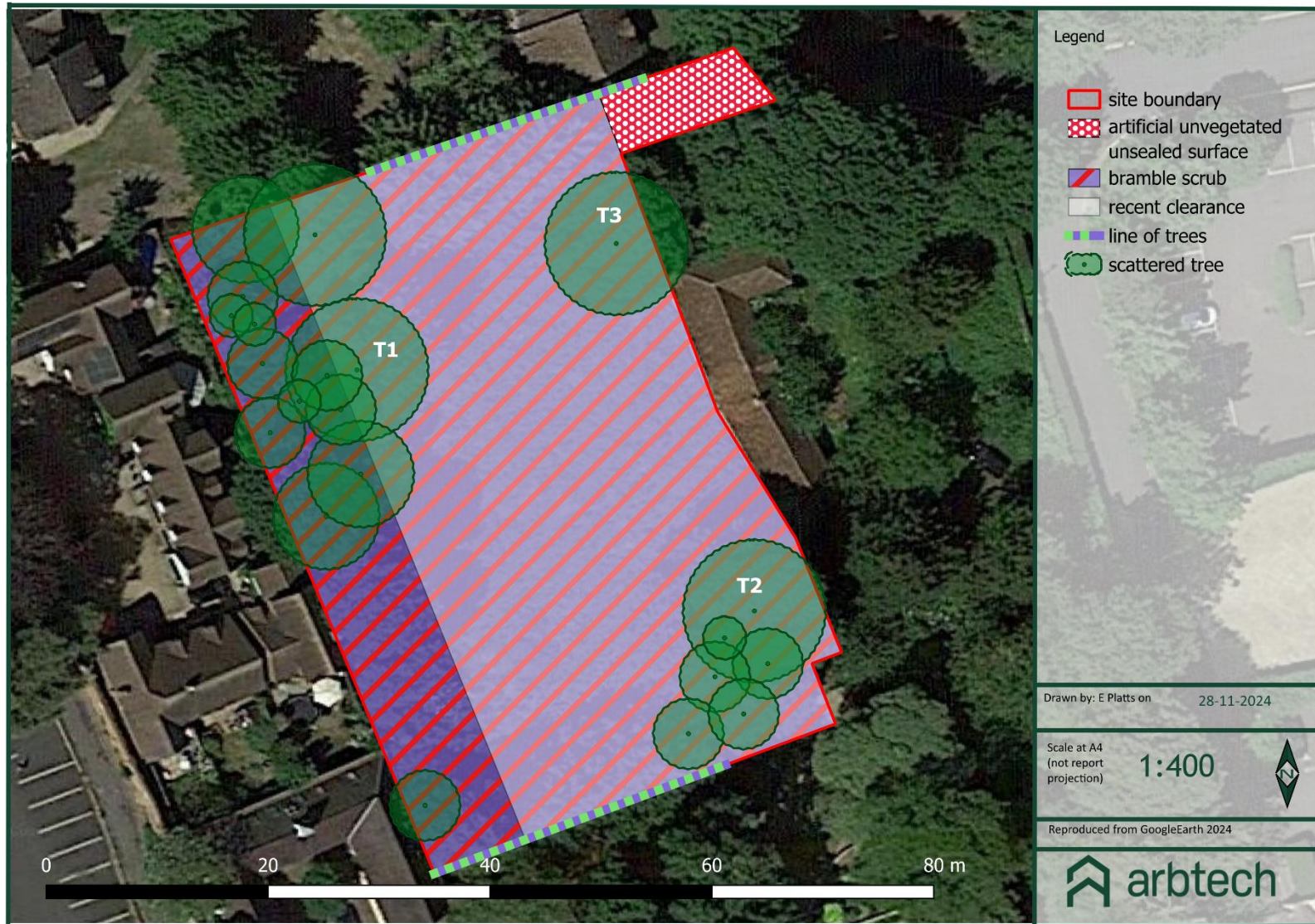
## Appendix 1: Proposed Development Plan



Appendix 2: Site Location Plan



### Appendix 3: Habitat Survey Plan



## Appendix 5: Site Photographs



*Figure 1: Bare ground access track*



*Figure 2: Recently cleared bramble scrub*



*Figure 3: Retained section of bramble scrub*



*Figure 4: Scattered tree (T1)*



*Figure 5: Scattered tree (T2)*



*Figure 6: Scattered tree (T3)*



*Figure 7: Line of trees, southern boundary*



*Figure 8: Line of trees, northern boundary*



## Appendix 6: Baseline Condition Assessments

### Individual trees

| Condition Assessment Criteria                   |                                                                                                                                                                                                                                                                                         | Criterion passed (Yes or No) | Notes (such as justification) |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------|
| A                                               | The tree is a native species (or at least 70% within the block are native species).                                                                                                                                                                                                     | Y                            |                               |
| B                                               | The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).                                                                                         | Y                            |                               |
| C                                               | The tree is mature (or more than 50% within the block are mature) <sup>1</sup> .                                                                                                                                                                                                        | Y                            |                               |
| D                                               | There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height. | Y                            |                               |
| E                                               | Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.                                                                                                                                                     | Y                            |                               |
| F                                               | More than 20% of the tree canopy area is oversailing vegetation beneath.                                                                                                                                                                                                                | Y                            |                               |
| Number of criteria passed                       |                                                                                                                                                                                                                                                                                         | 6                            |                               |
| Condition Assessment Result (out of 6 criteria) | Condition Assessment Score                                                                                                                                                                                                                                                              | Score Achieved x/✓           |                               |
| Passes 5 or 6 criteria                          | Good (3)                                                                                                                                                                                                                                                                                | ✓                            |                               |
| Passes 3 or 4 criteria                          | Moderate (2)                                                                                                                                                                                                                                                                            | ✓                            |                               |
| Passes 2 or fewer criteria                      | Poor (1)                                                                                                                                                                                                                                                                                | ✓                            |                               |

Line of trees

| Condition Assessment Criteria                   |                                                                                                                                                                                                                                                                                      | Criterion passed (Yes or No) | Notes (such as justification) |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------|
| A                                               | At least 70% of trees are native species.                                                                                                                                                                                                                                            | N                            |                               |
| B                                               | Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.                                                                                                                                                | Y                            |                               |
| C                                               | One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.                                                                                          | N                            |                               |
| D                                               | There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice <sup>2</sup> .        | N                            |                               |
| E                                               | At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity. | Y                            |                               |
| Number of criteria passed                       |                                                                                                                                                                                                                                                                                      |                              | 2                             |
| Condition Assessment Result (out of 5 criteria) | Condition Assessment Score                                                                                                                                                                                                                                                           | Score Achieved<br>x/✓        |                               |
| Passes 5 criteria                               | Good (3)                                                                                                                                                                                                                                                                             | ✓                            |                               |
| Passes 3 or 4 criteria                          | Moderate (2)                                                                                                                                                                                                                                                                         | ✓                            |                               |
| Passes 2 or fewer criteria                      | Poor (1)                                                                                                                                                                                                                                                                             | ✓                            |                               |

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### Version control

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|---------|-------|----------------------------------------------|------------|
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