

# Ecological Mitigation, Enhancement and Management Plan

**Survey site:** Springfield House, Hatch Gate Lane, Wargrave, RG10 8QD

**Client:** Cayton Park Ltd

**Date:** 20<sup>th</sup> January 2025

**Project:**

This report is prepared to inform a planning application with **Wokingham Council**. The proposal is described as: *Erection of a part single part two storey side/rear extension (re-build) following the partial demolition of the barn, of which is ancillary to Springfield House*

**Planning Application Number:**

241686

1.0 Introduction

This Ecological Mitigation, Enhancement and Management Plan (EMEMP) has been prepared for the above-named client to outline measures to be implemented in development works at the above-named site.

The purpose of this plan is to ensure the protection and mitigation of ecological receptors, adherence to best practices and industry standards, and to ensure that there is adequate supervision by licensed professionals. The EMEMP also outlines the management frameworks required for the planning and implementation of construction activities to comply with local and national planning policy. As such, the EMEMP aims to provide sufficient information to discharge condition 6 of the approved planning application.

Table 1. Ecological context of the site and details any associated planning conditions.

| Site Context and Landscape History                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| A detailed description and history is provided in the Preliminary Ecological Appraisal. (Arbtech, 2024). The proposed development has been approved by Wokingham Council under application number -----. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Planning Conditions                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Condition 6                                                                                                                                                                                              | No development shall commence on site until details of a habitat enhancement scheme are submitted to and approved in writing by the Local Planning Authority. This shall include four bat and bird boxes. The scheme is to include a programme for implementation and ongoing maintenance. The habitat enhancement scheme shall thereafter be implemented and adhered to in accordance with agreed programme. Reason: Details are required prior to commencement as insufficient information was submitted with the application and in order to avoid harm to habitats and species whilst securing biodiversity enhancement in the long term. This accords with policy CP7 of the Core Strategy and TB23 of the MDD as well as the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017. |

## Ecological Background Information

### Detailed using desk study and site survey.

The site had a PEA undertaken by Arbtech Ltd. on the 17<sup>th</sup> of December 2024.

Habitats identified at the site include-

- Developed land including buildings
- Vegetated gardens
- Scattered trees
- Introduced scrub
- Non-native/ornamental hedgerow

Value for protected species on the site comprises the following:

- **Birds-** There is a low volume of nesting opportunities due to the trees on the site, both within the development boundary and wider site.
- **Badgers-** No badger setts were noted on site or within a 30m radius of the site. Further, no evidence of foraging badgers was noted within the development area. However, the site was considered suitable for badger sett excavation and foraging habitat.
- **Bats-** The main buildings on site have value for roosting bats. The habitats on the site would also provide foraging and commuting for bats due to the trees, hedgerows and scrub in the landscape.
- **Reptiles-** The site is within close proximity to woodland which provides high habitat value for reptiles. Whilst the site provides low suitable habitat for reptiles in the form of introduced scrub, there is the chance the adjacent habitats provide optimal foraging, commuting, and refuge opportunities for reptiles
- **Amphibians-** The habitat where the proposed works are to take place is of low value for amphibians and has a lack of features for shelter or hibernation.
- **Terrestrial mammals-** The vegetated garden and hedgerows onsite provide limited foraging and commuting opportunities for hedgehogs, with woodland habitat nearby.

The following tables detail the proposed mitigation, habitat creation and biodiversity enhancement measures for the development as well as management requirements to ensure the longevity of these measures. as detailed in the PEA and BNG. These include further details of the habitats on site and the impacts of the development upon them and will be read in conjunction with this document.

## **Aims and Objectives**

This report aims to identify key stakeholder requirements, ensure compliance by all stakeholders with all relevant legislation, minimise potential adverse effects on the environment and protected/notable species, and provide site specific biodiversity enhancement measures including a management strategy in order to achieve long-term success and improvements.

## **Work Schedules and Ecological Presence**

Work schedules will be developed to ensure activities with specific timing requirements are carried out in a manner that minimises harm to ecological receptors. These schedules will be provided to all relevant personnel and contractors involved in the project.

## **Ecological Clerk of Works**

A qualified and suitably experienced ecologist will be present on-site during critical phases of construction activities, namely demolition works. Their role will be to oversee and monitor compliance with the EMEMP, provide guidance, and take immediate action to prevent any harm to ecological receptors. Should protected species be identified during vegetation clearance, works will be halted whilst a suitably licensed ecologist is contacted.

## 2.0 Habitat Creation and Biodiversity Enhancement Measures

Table 2 shows habitat creation and biodiversity enhancement measures for the site. These are also illustrated in Appendix 2.

**Table 2.** Ecological/Biodiversity enhancement and management measures

| Ecological/Biodiversity enhancement and management measures | This table includes any measure required to obtain or comply with planning permission, conditions ,or other consent and to comply with legislation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Works                                                       | Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Grassland</b>                                            | <p><b>Overview</b></p> <p>Areas of grassland will be enhanced around the new development to improve opportunities for invertebrates and other local fauna. This is shown in Appendix 2.</p> <p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>• To create a successful grassland that will provide habitat for pollinating invertebrate species, that will in turn, provide foraging opportunities for protected and/ or notable species groups including amphibians, bats, birds, invertebrates and hedgehogs.</li> <li>• Employ techniques that use organic fertilizers and minimise the use of chemicals wherever possible.</li> </ul> <p><b>Ground preparation</b></p> <ul style="list-style-type: none"> <li>• The location of the proposed grassland creation is covered by vegetation, largely grassland. The seed mix proposed below can be seeded directly into existing grassland. To effectively prepare the soil for sowing in late summer, it is recommended to implement rigorous cutting practices. This should be followed by the use of harrows or rakes to create gaps in the vegetation, targeting 50% bare soil coverage. See figure 1 for best mowing practice to avoid adverse harm to present fauna.</li> </ul> <p><b>Seeding</b></p> <ul style="list-style-type: none"> <li>• To be undertaken in the spring between April and May.</li> </ul> |

- The following seed rates are recommended: 40kg/ha or 4g/m<sup>2</sup>

**Proposed seed mix:**

- It is proposed to seed the garden grassland with Emorsgate EL1F Wild Flowers for Lawns. This seed mix contains 14no. wildflower species. The mixture contains no dominant species. Due to this diversity and absence of dominant species, the number of grass and wildflower species present per m<sup>2</sup> is increased; it is therefore considered reasonable to assume a species diversity of 6-8 species per m<sup>2</sup>.

**Table 2.1** Modified Grassland Management Prescriptions

| Management                                                                 | When                                 | Rationale                                                                                                                                                                      |
|----------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cut monthly during the growing season                                      | Between April and October            | Cutting monthly will allow a neat a tidy appearance whilst allowing more species to effectively colonise. Grass will but cut in accordance to the method outlined in figure 1. |
| Turn and dry the cut grass over 3-5 days before removing arisings off Site | Following cuts in May and September. | This allows any seeds present seeds to drop encouraging species diversity and invertebrates to relocate unharmed.                                                              |
| Do not apply chemical fertilisers                                          | At all times.                        | The use of chemical fertilisers will encourage vigorous grasses and weeds to grow or cause large areas of bare ground due to inhospitable growing conditions,                  |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | <div></div> <p><b>Figure 1.</b> A schematic representation of vegetation cutting patterns best suited for fauna to allow escape and avoid harm.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Bat Boxes</b> | <p><b>Overview:</b></p> <p>The buildings on site were identified as roosts during a Bat Emergence and Re-Entry Survey (BERS) conducted by Arbtech Ltd. The BERS report, produced on the 29<sup>th</sup> July 2024, concluded that the site would require a European Protected Species License (EPSL) to be acquired from Natural England in order to conduct the demolition works.</p> <p>The enhancement of grassland (above) will provide additional value for invertebrates on the developed site, thus improving bat foraging opportunities. Further requirements regarding bats such as bat boxes, lighting mitigation plans and management precautions will be outlined within the EPSL.</p> |

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| <b>Bird Boxes</b> | <p>Two bird boxes will be installed on site, one upon on a retained mature tree and one integrated within the new extension.</p> <p><b><i>Bird box specification:</i></b></p> <ul style="list-style-type: none"><li>• The recommended bird boxes will be constructed of woodcrete/woodstone. Boxes of this construction are designed to require no maintenance and a lifespan of 25 years plus.</li><li>• 1x Woodstone Nest Boxes (or a similar alternative brand) with 28mm entrance holes are proposed on a retained mature tree, as shown in <b>Figure 2</b>.</li><li>• The Woodstone Nest Box will be positioned approximately 1.5-3m above ground level where it will be sheltered from prevailing wind, rain and strong sunlight. The box will not be facing south as a result.</li><li>• Ensure the bird box is installed the correct way up as per the instructions and that all packaging is removed.</li><li>• The bird box will be installed in a suitable position on the tree, in an unobstructed area and checked by the ECoW once installed.</li></ul> <div>A photograph of a Woodstone Nest Box. It is a small, rectangular box with a green, gabled roof and a white front panel. A circular entrance hole is visible in the center of the white panel. The box is mounted on a tree trunk.</div> <p><b>Figure 2.</b> Woodstone Nest Box – source <a href="http://arkwildlife.co.uk">arkwildlife.co.uk</a></p> <p><b><i>Integrated bird box to be integrated into the façade of new buildings</i></b></p> <ul style="list-style-type: none"><li>• The bird box will be constructed of woodcrete/ woodstone. Boxes of this construction are known to have minimal maintenance and have a lifespan of 25 years plus.</li><li>• 1x. Vivara Pro WoodStone House Sparrow Nest Bos (or similar) (<b>Figure 3</b>) will be installed into the façade of new buildings. This bird box type is designed to provide enhanced nesting opportunities for house sparrow <i>Passer</i></li></ul> |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

*domesticus*. House sparrows are priority species listed on Section 41 of the NERC Act. However alternative species like tits will also utilise these boxes if sparrows are not present.

- The bird box will be positioned approximately 3m above ground level facing a northern elevation where they will be sheltered from prevailing wind, rain and strong sunlight.
- Ensure the bird box is installed the correct way up as per the instructions and that all packaging is removed.
- The bird box will be installed in a suitable position, in an unobstructed area and checked by the ECoW once installed.



**Figure 3.** Vivara Pro WoodStone House Sparrow Nest Box Nest Box - source [arkwildlife.co.uk](http://arkwildlife.co.uk)

**Recommended Management:**

The proposed bird boxes are designed to require no management or maintenance. Furthermore, preventing physical disturbance of bird boxes will increase the chances of occupation by nesting birds. However, it is recommended that the bird boxes are inspected annually for the first five years outside of the typical nesting bird season (March to September inclusive) following installation. External bird boxes must be replaced if they are damaged, removed, or have fallen from their recommended location. Internal bird boxes will not be blocked or removed.

#### **Invertebrate house**

An insect box will be installed adjacent to the retained trees on the northern boundary (**Figure 4**). An insect box suitable for the site (or a similar alternative brand) can be found here: <https://www.nhbs.com/national-trust-apex-insect-house>. The insect box will be installed on a tree at a height between 1-1.5m to allow access from a variety of invertebrates.



**Figure 4.** Insect box – source <https://www.nhbs.com/national-trust-apex-insect-house>

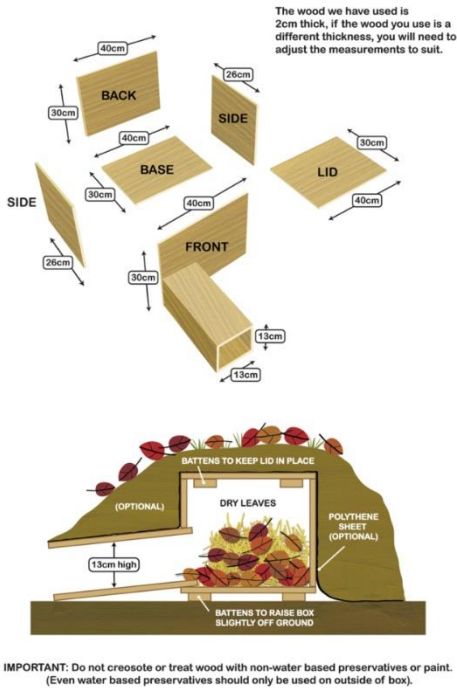
#### ***Provision of bee bricks***

Bee bricks will be installed into the fabric of the walls of the new extension during construction. Two bee bricks will be placed in the walls. These will be installed around 1m in height, on a southern-facing elevation which receives sun at some part during the day. Any additional bricks that are to be installed will continue to provide additional opportunities. The colour of the bee bricks can be chosen to match brickwork of new walls. as show in in **Figure 5**

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |  <p><b>Figure 5.</b> Variety of bee brick colours - source <a href="https://www.nhbs.com/">https://www.nhbs.com/</a></p>                                                                                                                                                                                                                                                                                                                                                        |
| <b>Hedgehog House</b> | <p>A hedgehog house will be installed to the north of the site (<b>Figure 6</b>). A hedgehog house suitable for the site (or a similar alternative brand) can be found here: <a href="https://www.nhbs.com/hedgehog-house">https://www.nhbs.com/hedgehog-house</a>. This is to be installed in a quiet area, near retained shrub and hedgerows. This will be an area where it will not be regularly disturbed. Hedgehog houses can also be partially buried underneath the grass to provide additional protection and long term viability. (<b>Figure 7</b>).</p> |



**Figure 6.** Hedgehog house - soure [www.nhbs.co.uk](http://www.nhbs.co.uk)



**Figure 7.** Permanent buried hedgehog house - source [www.Britishhedgehogs.org.uk](http://www.Britishhedgehogs.org.uk)

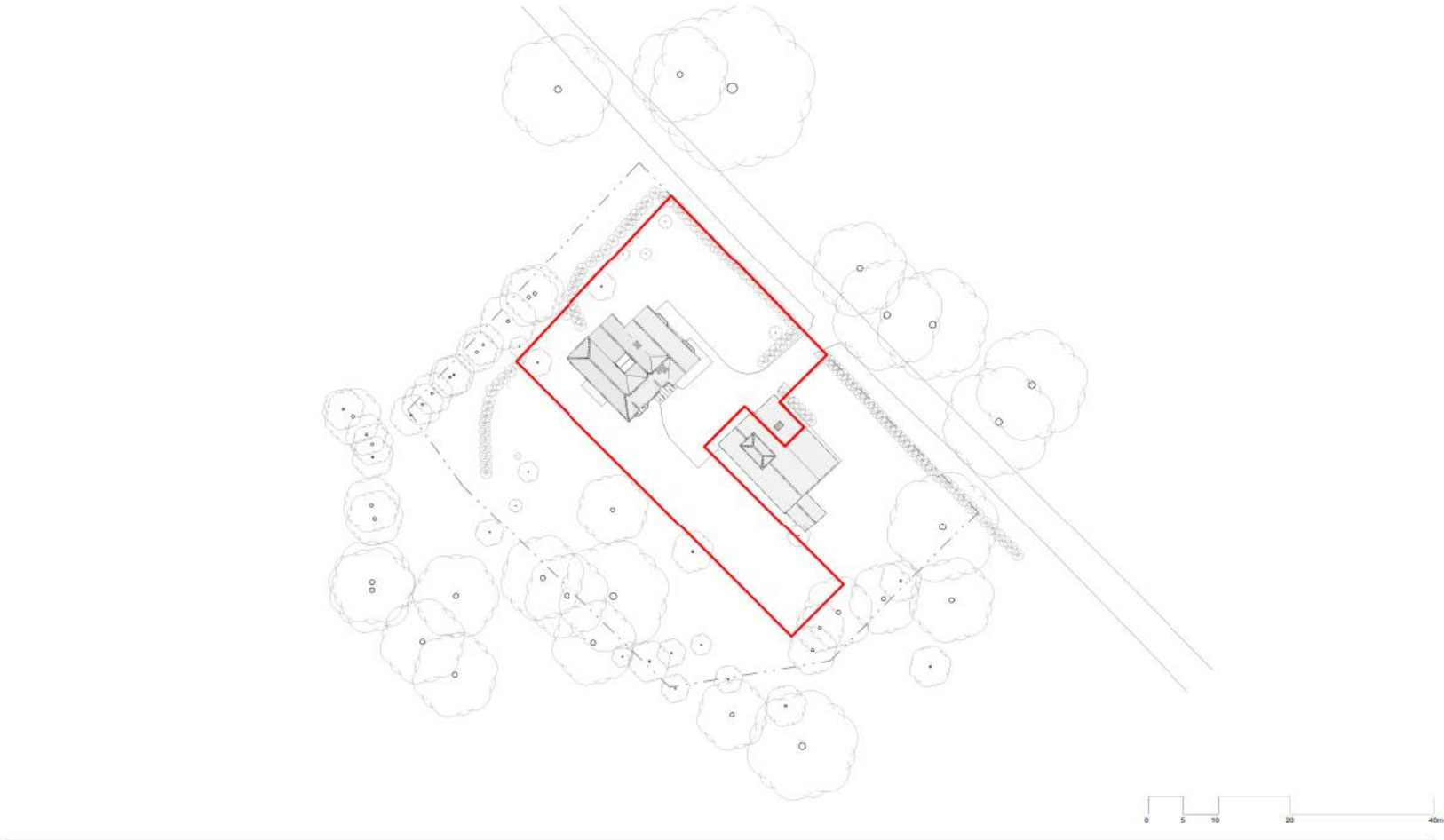
## **Compliance and Reporting**

The EMEMP requires stakeholders to comply fully with the pre-construction and construction-related elements of any mitigation strategies agreed with the Local Planning Authority and Natural England under any license requirements. Construction activities will therefore be conducted strictly in accordance with the approved EMEMP. Regular inspections and monitoring will be undertaken to ensure compliance with the plan's requirements.

Any deviations or incidents that may affect ecological receptors will be immediately reported to the ECoW. Updates to the EMEMP will be relayed to the Local Planning Authority.

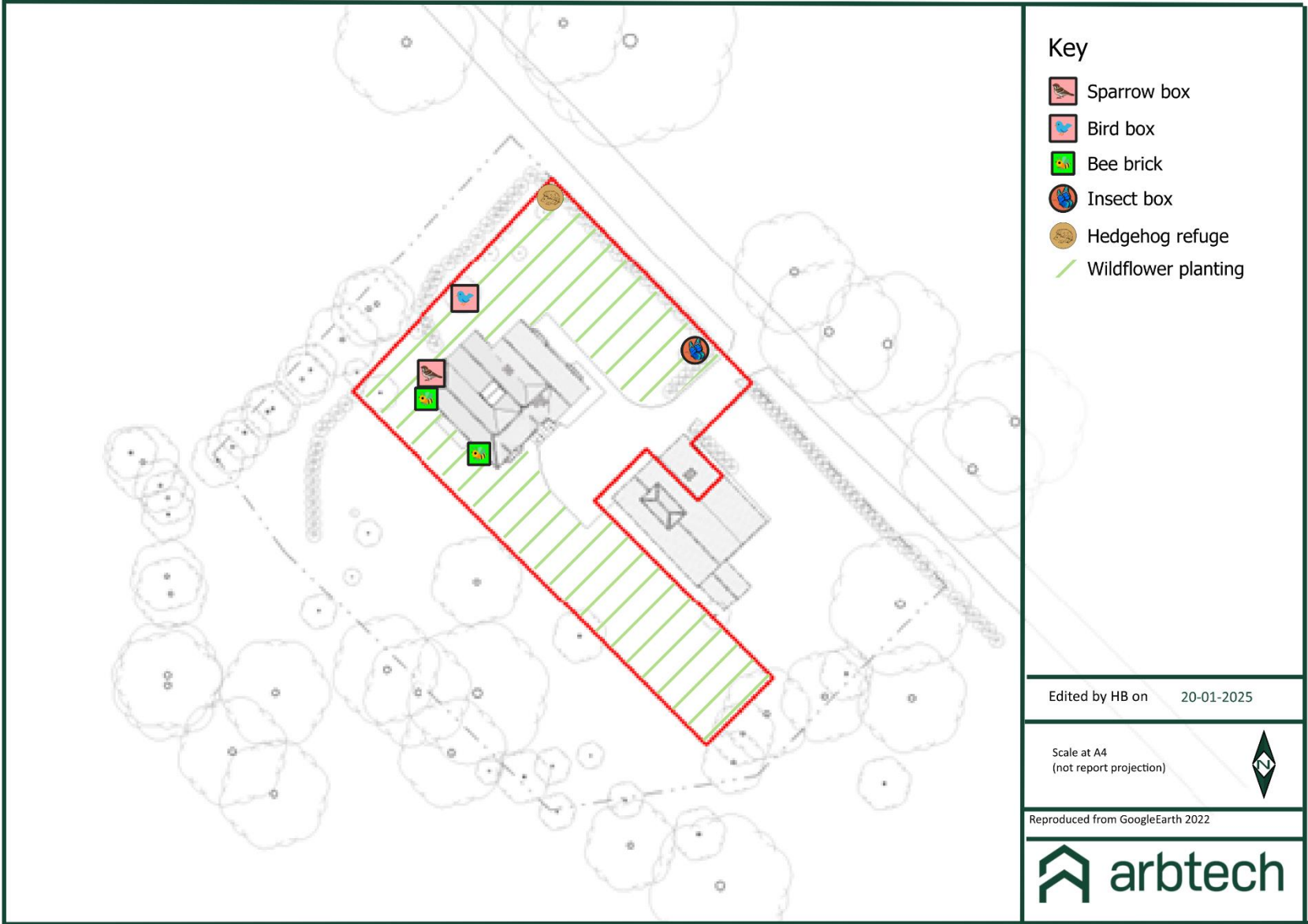
The EMEMP will be periodically reviewed and updated as necessary throughout the construction phase to address changing site conditions and evolving ecological considerations.

Appendix 1: Site Landscape master plan



|                 |                     |
|-----------------|---------------------|
| Project name:   | Springfield House   |
| Drawing Title:  | Proposed Site Plans |
| Drawing Number: | SFH.SITE.PROP.01    |
| Scale:          | 1:500 @A3           |
| Date:           | November 2024       |

Appendix 2: Site habitat and species enhancement



Cayton Park Ltd  
Springfield House, Hatch Gate Lane, Wargrave, RG10 8QD

## **Limitations and Copyright**

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### Validity

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion

Cayton Park Ltd  
Springfield House, Hatch Gate Lane, Wargrave, RG10 8QD

| Version control |       |                                                                                  |            |
|-----------------|-------|----------------------------------------------------------------------------------|------------|
| Status          | Issue | Name                                                                             | Date       |
| Draft           | 0.1   | Harry Brindle BSc (Hons), Graduate Ecologist                                     | 20/01/2025 |
| Review          | 0.2   | Nicole Gullan BSc (Hons) MRSB TechArborA, Senior Ecologist and Arboriculturalist | 21/01/2025 |
| Final           | 1.0   | Harry Brindle BSc (Hons), Graduate Ecologist                                     | 21/01/2025 |