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Ecological Consultants - Mitigation Solutions - Habitat Management

Registered in England and Wales 07571819

Biodiversity Enhancements, Management and Maintenance Plan for Orchard Cottage, Birds Drove, Surfleet, Lincolnshire

March 2022

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Introduction

Planning permission has been granted with Condition 6 (ecological enhancement and management scheme) by South Holland District Council on Orchard Cottage, Birds Drove, Surfleet, Lincolnshire.

The objective of this report is to discharge the condition.

Biodiversity Enhancements

Insect Boxes



A durable woodstone brick filled with bamboo canes of a variety of sizes to attract beneficial insects such as wild bees, lacewings and ladybirds.

Dimensions: 18 x 9 x 26 cm.

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The different floors of this Insect Tower offer shelter for a variety of insect species. The tubes at the top are designed for solitary bees, such as Red Mason Bees, to lay their eggs. There is also a floor with vertical slots to encourage butterflies, a section that has openings for ladybirds and lacewings, and other insects will happily take refuge within the pine cones.

Dimensions: 21 x 65 x 12.5 cm

Insects are important as pollinators of plants and a food source for birds and bats

The location of the insect boxes is shown in (Appendix 1)

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Bat Boxes

Vivara Pro Build-in WoodStone Bat Box x 2





The Vivara Pro Build-in WoodStone Bat Box has been specifically designed to fit into the cavity of house walls. It features a slim sized entrance hole which can sit flush in a course of bricks to provide a discreet entry way for bats. It is manufactured from hard-wearing WoodStone and plywood with removable side panels so that several boxes can be placed side by side. Position the box at least 2m above ground level away from artificial light sources. WoodStone is a mixture of sawdust from FSC wood sources and concrete, and it is designed to last for years. It is breathable so there will be no problems with condensation and Woodstone maintains a consistent temperature inside, providing excellent insulation for roosting bats.

The Location of Bat Boxes is shown in Appendix 2

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Bird Boxes

Woodstone Sparrow Nest Box x 2



The House Sparrow Nest Box is from the Vivara Pro range and is manufactured from WoodStone - a mix of concrete and FSC wood fibres. This material is strong and highly insulating which helps to provide a thermally stable environment within the box. It also protects against damage from predators such as woodpeckers, squirrels and cats. It has two breeding chambers making it particularly suitable for house sparrows as they prefer to nest in colonies.

The House Sparrow Nest Box can be integrated into the masonry of a new house or fixed onto an external wall using strong screws and wall plugs (not included). If possible, it should be positioned near to vegetation and at a minimum of 2 m above ground.

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Cambridge Swift Nest Box System (groups of three)



The Cambridge Swift Nest Box system comprises a nesting block built into a standard block or brick wall and faced with either a red or buff brick entrance. The nesting block has two nesting depressions and a large space for the young to exercise. Cost-effective concrete construction.

House Martin Nest Box



A double House Martin nest box made from a mixture of concrete and wood fibres, suited for placing in the eaves.

The location of the bird boxes is shown in Appendix 3.

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Hedgehog Nest Box





A completely redesigned hedgehog nest that incorporates all the best features of previous nests, is far safer for the hedgehog, and eliminates loose entrance tunnels and plastic pipes by building all these features into one robust design.

This nest box has been designed and ultimately tested extensively with great success over a period of 12 months by the Hedgehog Preservation Society and their hedgehog "carers", whose help is much appreciated.

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The final nest design has also been approved by Dr Pat Morris of London University who has contributed to its development.

Features:

* Fully built-in tunnel with 5" square access for even the largest hedgehog to avoid unwanted visitors.
* Raised 'step' at entrance to enable the box to be partly buried.
* Totally safe nesting area well away from the tunnel entrance.
* Lower roof to enable the hedgehog to build a snug nest.
* Specially designed inbuilt "unlockable" ventilation to provide just the right temperature and humidity without draughts.
* Totally removable roof for easy inspection and cleaning.
* Underfloor runners letting air to the underside of the box but allowing the box to be pushed easily into place in undergrowth, etc.
* Reinforced and strengthened corners making a sturdy nest box.
* One compact unit easy to position.

Specification

Exterior quality 12mm resin bonded ply. The box remains untreated on the inside. Best situated in a quiet corner of the garden and covered with leaves and other garden debris. Removable lid for cleaning purposes and reinforced corners, manufactured with surface sunk nails to resist rusting.

Nest box size: Height 22cm x Width 38cms x Length 47cm

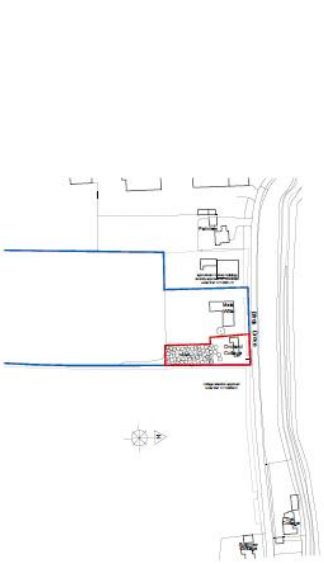
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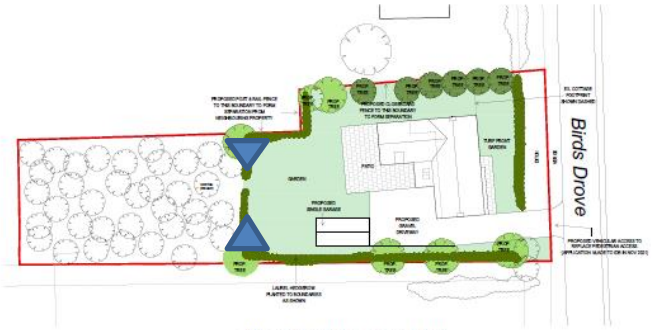
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Appenx 1 Location of Insect Boxes

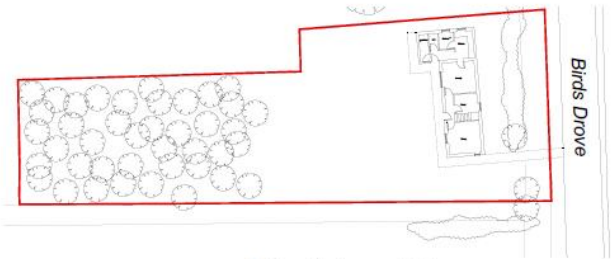
Insect Boxes



Location Plan
at 1:1250



Proposed Site Layout 1:200



Existing Site Layout 1:200

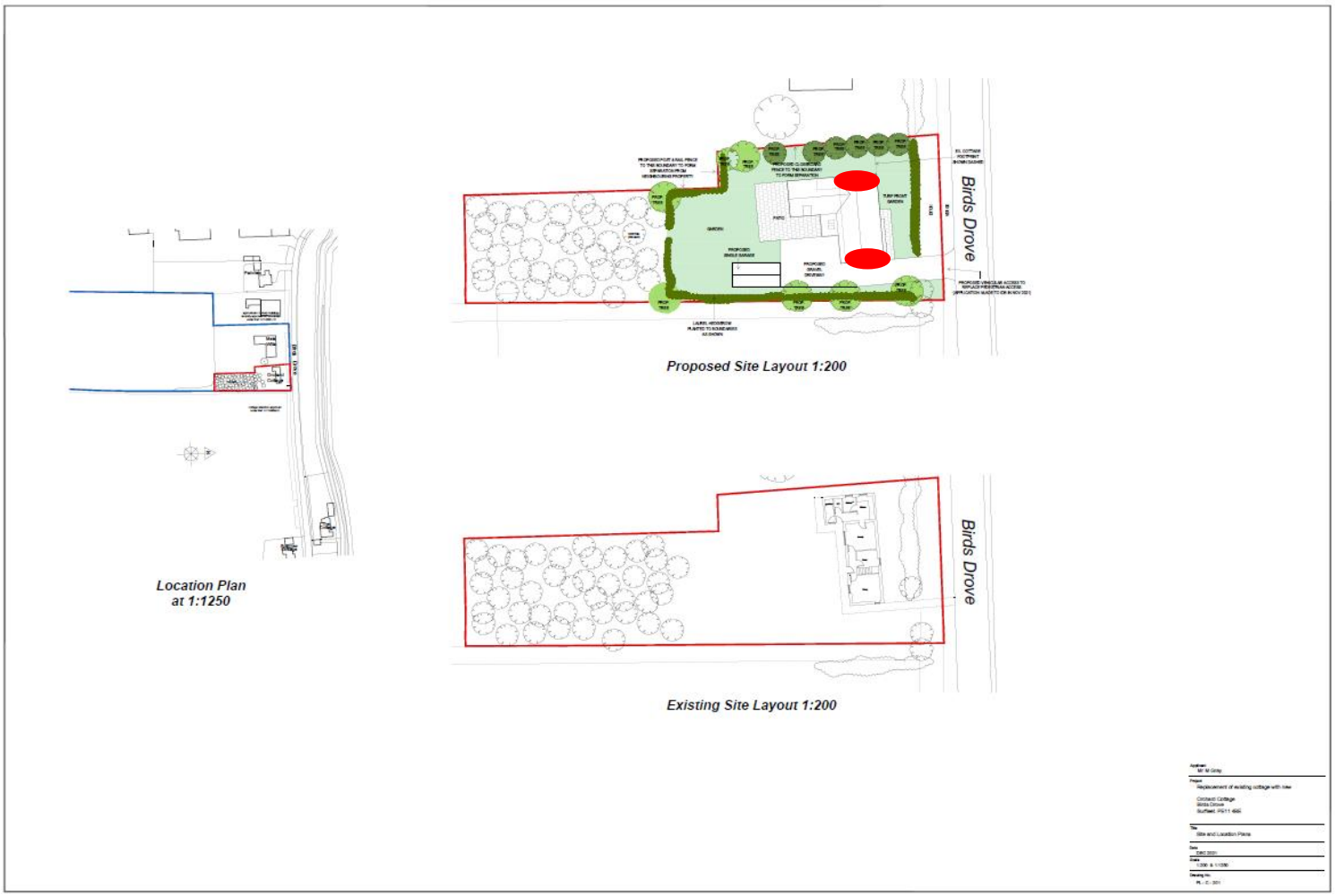
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Appendix 2 Location of Bat Boxes

Bat Boxes



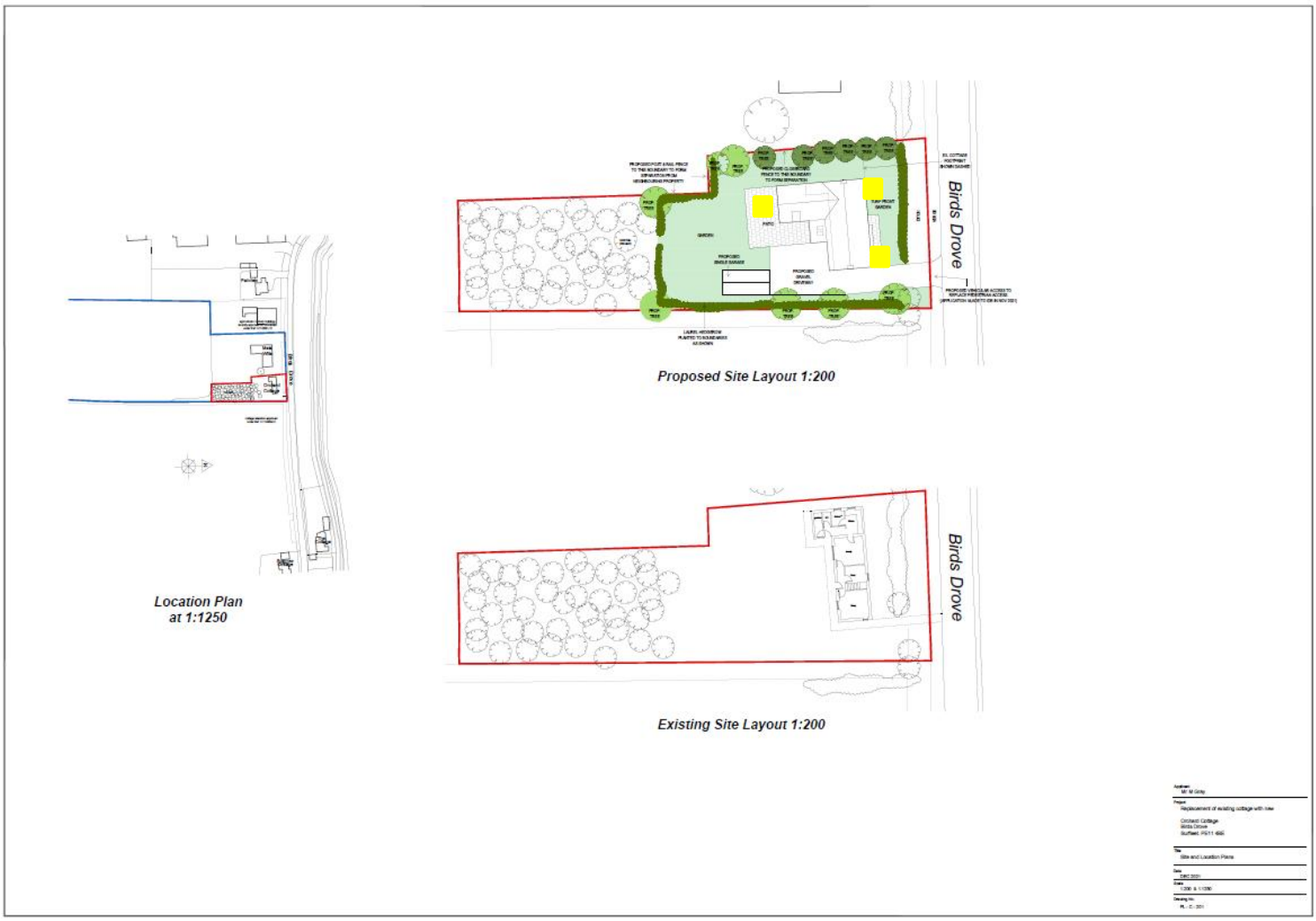
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Appeddix 3 Location of Bird Boxes

Bird Boxes



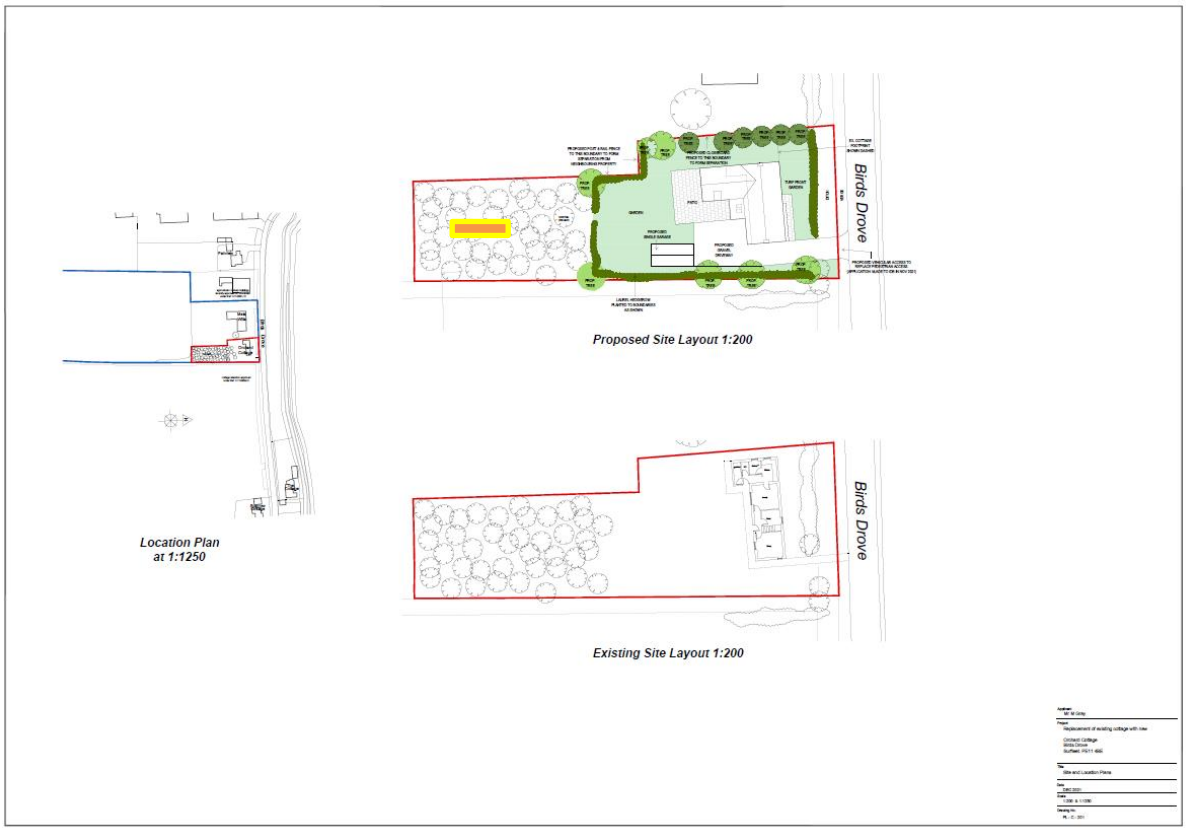
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Appendix 4 Location of Hedgehog Home

Hedgehog Home



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Appendix 5 Maintenance and Monitoring Plan

Year 1

- Check Insect Boxes carry out any necessary maintenance.
- Check Bird Boxes and clean out old nests
- Bat Boxes are self-cleaning, check for usage.
-

Year 2

- Check Insect Boxes carry out any necessary maintenance.
- Check Bird Boxes and clean out old nests
- Bat Boxes are self-cleaning, check for usage.
- Hedgehog Box and carry out any necessary maintenance.
-

Year 3

- Check Insect Boxes carry out any necessary maintenance.
- Check Bird Boxes and clean out old nests
- Bat Boxes are self-cleaning, check for usage.
- Hedgehog Box and carry out any necessary maintenance.
-

Year 4

- Check Insect Boxes carry out any necessary maintenance.
- Check Bird Boxes and clean out old nests
- Bat Boxes are self-cleaning, check for usage.
- Hedgehog Box and carry out any necessary maintenance.
-

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Year 5

- Check Insect Boxes carry out any necessary maintenance.
- Check Bird Boxes and clean out old nests
- Bat Boxes are self-cleaning, check for usage.
- Hedgehog Box and carry out any necessary maintenance.

If any additional work is required, this will be carried out as and when.

Any damage to insect, bat. bird or Hedgehog boxes will either be repaired or replaced.