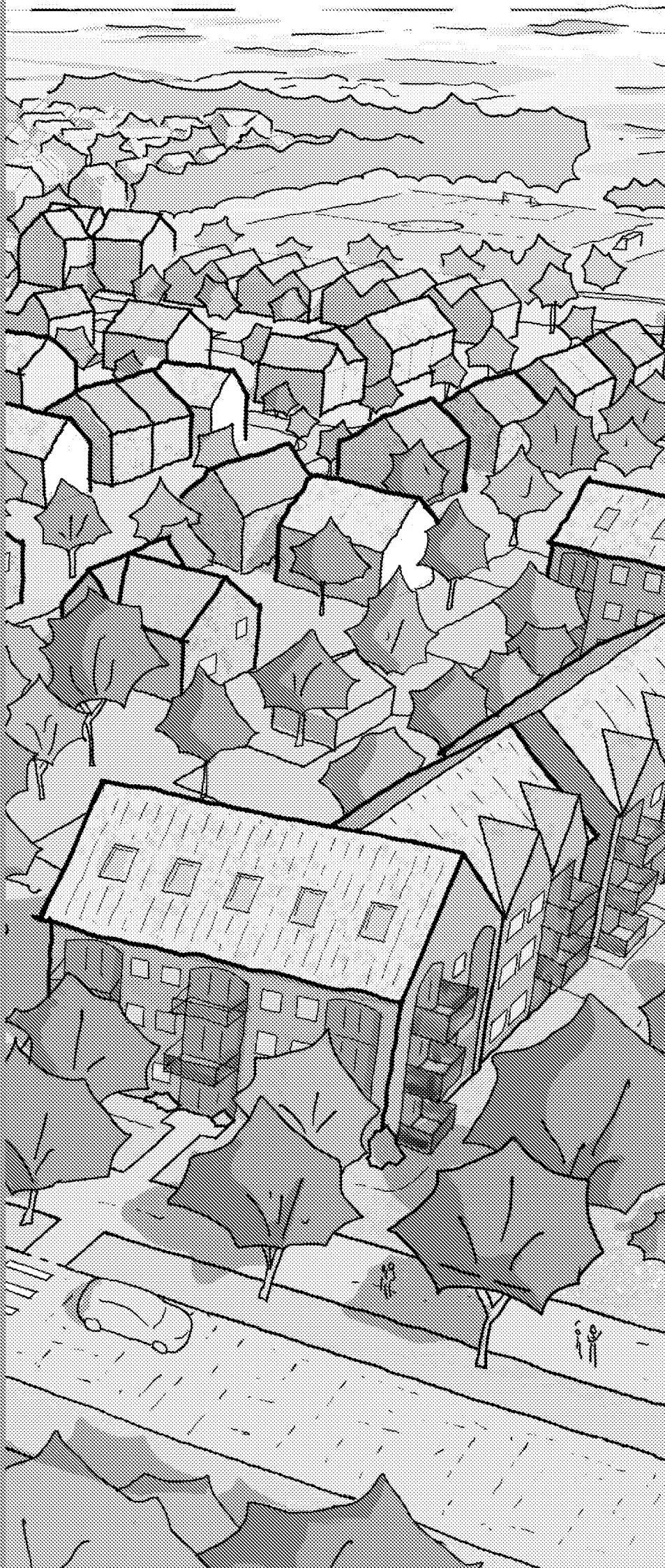
The Landings, Ford Airfield

Phase RM4 (South)

Ecological Protection and Enhancement Plan
RM4_06.A
August 2024



Vistry Group

ARUN DISTRICT COUNCIL FP/B24/REE

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ECOLOGICAL PROTECTION AND ENHANCEMENT PLAN – RESERVED MATTERS PHASE 4 (SOUTH)

At

Land at Ford Airfield
Ford
Arundel
BN17 5QZ

NGR: SU 99164 03571

Prepared for: Vistry Homes Ltd
Written by: Ysobella Cox, UES Ecologist
Approved by: Kathryn James, UES Senior Project Manager
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CIEEM REGISTERED PRACTICE 2024-2025

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1 INTRODUCTION

1.1 Author and qualifications

This report is compiled and written by Ysobella Cox BSc MBiol, Ecologist for United Environmental Services Ltd (UES).

It has been verified by Kathryn James BSc MRes MCIEEM, UES Senior Project Manager.

1.2 Proposed development

Outline planning permission was granted by Arun District Council (F/4/20/OUT) on 14th July 2023 for:

'Outline planning application (with all matters reserved except for access) for the development of up to 1,500 dwellings (Use Class C3), 60-bed care home (Use Class C2), up to 9,000 sqm of employment floorspace (Use Classes B1), local centre of up to 2,350 sqm including up to 900 sqm retail / commercial (Use Classes A1 – A5) and 1,450 sqm community / leisure floorspace (Use Classes D1-D2), land for a two-form entry primary school (Use Class D1), public open space, allotments, new sports pitches and associated facilities, drainage, parking and associated access, infrastructure, landscape, ancillary and site preparation works, including demolition of existing building and part removal of existing runway hardstanding. This application affects a Public Right of Way. This application is the subject of an Environmental Statement. This application may affect the setting of a Listed Building. This application falls within CIL Zone 1 – Zero Rated.'

This report has been prepared to support the following application due to be submitted to Arun District Council in August 2024:

'Approval of reserved matters (layout, scale, appearance and landscaping) following outline consent F/4/20/OUT for phase RM4 (South), for the erection of 357 no. residential dwellings plus associated roads, infrastructure, parking, landscaping, open space & play areas, and associated works.'

1.3 Objectives and scope

UES was commissioned by Vistry Homes Ltd to produce an ecological protection and enhancement plan (EPEP) to partially discharge condition 18 of planning permission F/4/20/OUT in relation to RM4:

'Details for the delivery of the approved measures through the Ecological Protection and Enhancement Plan (Condition 17) shall accompany each reserved matters application for each phase as identified within the Phasing Strategy under Condition 5. This shall include details of how and where the measures approved through Condition 17 are to be delivered as part of each phase.

Reason: To ensure the retention, protection and enhancement of biodiversity in accordance with Policies ENV SP1, ENV DM1 and ENV DM5 of the Arun Local Plan 2011-2031. It is considered necessary for this to be a pre-commencement condition to prevent harm to potentially vulnerable species.The approved plan shall be implemented in full in accordance

with the agreed timings and details on a phase by phase basis as defined by the Phasing Strategy under Condition 5, where relevant.'

1.4 Structure of the report

This EPEP presents a scheme for protecting and enhancing the biodiversity and opportunities for wildlife onsite. It details the habitat creation and enhancement measures which will promote protected or otherwise notable species and enhance the overall biodiversity and ecology of the site.

This report should be read in conjunction with Appendices 1 and 2.

2 LANDSCAPING AND HABITAT ENHANCEMENT

A detailed landscape masterplan has been produced by Tor & Co for RM4 (see Appendix 1 – Landscape masterplan).

2.1 Parkland

Four areas of parkland will be incorporated into the wider development, one of which, Runway Park, is located in RM4. Runway Park comprises country parkland with allotments along the southern edge. The retention of existing hedgerows coupled with native woodland structure and scrub planting will provide an area of high biodiversity value.

Runway Park connects with Ryebank Park along the southern site boundary; these two parks form a significant green corridor around the southern land parcel which will provide foraging and commuting opportunities for wildlife.

2.2 Tree and hedgerow planting

To compensate for the loss of trees onsite the planting scheme includes areas of tree and hedgerow planting throughout the proposed development site to enhance biodiversity and provide connectivity. In particular, the proposed tree planting within Runway Park will enhance connectivity on site as well as in the wider landscape. Native tree species to be planted include:

- Beech *Fagus sylvatica*
- Bird cherry *Prunus padus*
- Black poplar *Populus nigra*
- Crab apple *Malus sylvestris*
- Downy birch *Betula pubescens*
- Field maple *Acer campestre*
- Hawthorn *Crataegus monogyna*
- Hazel *Corylus avellana*
- Hornbeam *Carpinus betulus*
- Horse chestnut *Aesculus hippocastanum*
- Midland hawthorn *Crataegus laevigate*
- Pedunculate oak *Quercus robur*
- Rowan *Sorbus aucuparia*
- Scots pine *Pinus sylvestris*
- Small-leaved lime *Tilia cordata*
- Whitebeam *Sorbus aria*
- Wild cherry *Prunus avium*

Additional tree planting will provide foraging opportunities for invertebrates including larval stages, adult herbivorous species and pollinators. Providing a range of planted species will support a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds. In addition, the trees will provide increased nesting opportunities for birds and sheltered commuting opportunities for amphibians and mammals. Once fully mature, the trees may also develop fissures and crevices which can be used by roosting bats.

Once planted and established, the proposed trees should not require any management in the long-term, unless addressing issues with disease or damaged limbs that cause health and safety concerns. If any intensive pruning, or ongoing management, of trees and hedgerows is to be undertaken, it should be avoided during the nesting bird season (avoid during March to August inclusive), or alternatively a check for nesting birds can be undertaken immediately prior to the works.

2.3 Woodland

Areas of woodland structure planting have been incorporated into the landscape design strategy to enhance biodiversity by providing connectivity between different habitats onsite and through green corridors.

The new areas of woodland will be created through planting native tree and shrub species as detailed within the landscaping plan, including:

- Blackthorn
- Common dogwood
- Common holly *Ilex aquifolium*
- Field maple
- Guelder rose
- Hawthorn
- Hazel
- Hornbeam
- Horse chestnut
- Small-leaved lime
- Wild cherry

The additional woodland creation will provide nesting habitat for birds, and once fully mature, the trees may develop potential roosting features for bats such as cavities and crevices. The woodland will also provide foraging opportunities for invertebrates. Providing a range of planted species will support a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds.

Any tree felling or arboricultural works that are required will only be undertaken outside of the breeding bird season and these works will be avoided between March and August inclusive. If this isn't possible and works need to take place during this period, a nesting bird check will be undertaken immediately prior to the works by a suitability qualified ecologist and an ecological clerk of works will be appointed to oversee the works if considered necessary. If any specialist works are required, then an arboriculturalist should be appointed.

2.4 Wildflower grassland

Areas of wildflower grassland will be incorporated into areas of public open space (POS), as detailed at Appendix 1. The margins of the wildflower meadows will be mown to provide a minimum 1m buffer to footpaths, roads and infrastructure. The wildflower grasslands will be created by sowing the Emorsgate EM3 special general purpose meadow mixture. The composition of the Emorsgate EM3 mixture is detailed below:

<u>Wildflowers</u>

- Agrimony *Agrimonia eupatoria*
- Black medick *Medicago lupulina*
- Bladder campion *Silene vulgaris*
- Bulbous buttercup *Ranunculus bulbosus*
- Common knapweed *Centaurea nigra*
- Common vetch *Vicia sativa ssp. Segetalis*
- Cowslip *Primula veris*
- Meadow cranesbill *Geranium pratense*
- Meadow vetchling *Lathyrus pratensis*
- Musk mallow *Malva moschata*
- Oxeye daisy *Leucanthemum vulgare*
- Red campion *Silene dioica*
- Ribwort plantain *Plantago lanceolata*
- Rough chervil *Chaerophyllum temulum*
- Sainfoin *Onobrychis viciifolia*

- Crosswort *Cruciata laevipes*
- Field scabious *Knautia arvensis*
- Great burnet *Sanguisorba officinalis*
- Greater knapweed *Centaurea scabiosa*
- Hedge bedstraw *Galium album*
- Hoary plantain *Plantago media*
- Kidney vetch *Anthyllis vulneraria*
- Lady's bedstraw *Galium verum*
- Salad burnet *Poterium sanguisorba ssp sanguisorba*
- Selfheal *Prunella vulgaris*
- Tufted vetch *Vicia cracca*
- Viper's-bugloss *Echium vulgare*
- Wild carrot *Daucus carota*
- Wild marjoram *Origanum vulgare*

Grasses

- Common bent *Agrostis capillaris*
- Crested dog's-tail *Cynosurus cristatus*
- Red fescue *Festuca rubra*
- Smaller cat's-tail *Phleum bertolonii*
- Smooth-stalked meadow-grass *Poa pratensis*

Alternative wildflower grassland mixtures could be used; however, these will be agreed with the project ecologist to ensure they contain similar and appropriate native species.

The provision of wildflower grassland will provide immediate benefits for wildlife in the form of foraging, breeding and sheltering opportunities. In the longer term, the grassland will also be colonised naturally by additional native plant species.

2.5 Scrub planting

Areas of native scrub planting are proposed along the site boundaries and within Runway Park, which forms part of the green corridor linking the site to Ryebank Park and the wider landscape. Native scrub species will be incorporated into the landscape design including:

- Blackthorn
- Common dogwood
- Hawthorn
- Hazel
- Holly

The areas of shrub planting will also be sown with Emorsgate EG1 general purpose meadow grass mixture to create the ground flora of the shrub habitat.

The provision of shrub planting will ensure that foraging opportunities (for both larval stages and adult pollinators) are available for a greater diversity of invertebrate species, which will in turn benefit other faunal species that will predate these invertebrates, such as bats and birds. In addition, the shrubs will provide increased nesting opportunities for birds and sheltered commuting opportunities for amphibians and mammals.

2.6 Amenity gardens and ornamental planting

As the proposed development is a housing scheme, numerous areas of amenity garden will be created onsite most of which will be associated with the residential properties and access roads. In addition, there will be areas of ornamental planting throughout the proposed

development site. Ornamental structural and accent planting will occur around the plots and mainly comprise either evergreen or flowering species.

3 PROTECTED SPECIES

3.1 Bats

The hedgerows, treelines, grassland and dense scrub habitats will provide commuting and foraging opportunities for bats, whilst the buildings and trees onsite may provide roosting opportunities. In addition, the connectivity between the different habitats onsite through hedgerows and treelines further improves the quality for bats.

A suite of bat surveys has been undertaken onsite by Ecological Survey and Assessment (ECOSA) between 2017 and 2018, including bat scoping surveys of the buildings onsite, a ground-level tree assessment, emergence / re-entry surveys, bat transect surveys and bat automated detector surveys. The results of which are detailed within the associated ECOSA report - Environmental Statement – Technical Appendix 9.3 – Ecological Baseline (Report Reference 2921-9.3.F0).

UES carried out updated bat scoping survey in June 2024 and are currently undertaking an updated bat presence / absence surveys, ground-level tree assessment and aerial tree assessment, to determine the suitability of the buildings and trees onsite to support roosting bats.

3.1.1 Mitigation measures

Bats in buildings

ECOSA carried out a bat scoping survey of the buildings onsite, which determined two buildings as having low potential to support roosting bats and seven buildings as having negligible potential. Emergence and re-entry surveys were undertaken of the low potential buildings by ECOSA in August 2018, and no bats were recorded roosting within the buildings during these surveys.

Due to the number of years since the original surveys were undertaken and the potential for bats to utilise the buildings within previously identified features or those which have developed overtime, UES carried out an updated bat scoping survey in June 2024. The survey identified that the buildings onsite have varied potential to support roosting bats due to the presence of potential roosting features. Building 1, which is located within RM4, was assessed as having low potential to support roosting bats.

As per Bat Conservation Trust survey guidelines, a further bat presence / absence survey comprising a single emergence survey is required in order to determine whether bats are roosting within the building, and if so, to determine the species and numbers of bats. This survey should be undertaken by an appropriately licenced ecologist during the peak bat survey season, May to August inclusive. This survey is currently being undertaken by UES; further mitigation measures may be required depending on the findings of the survey.

Bats in trees

ECOSA carried out bat ground-level tree assessments of all trees located within the development boundary in August 2018. A single tree was identified as having moderate potential to support roosting bats due to the presence of a woodpecker hole, whilst seven trees were assessed as having low potential due to dense ivy *Hedera helix*. All other trees onsite were assessed as having negligible potential to support roosting bats.

Due to the number of years since the original surveys were undertaken and the potential for bats to roost within previously identified features or those which have developed overtime, UES were commissioned to undertake updated bat ground-level and aerial tree assessments to determine the suitability of the trees onsite to support roosting bats. These surveys are currently being undertaken by UES; further mitigation measures may be required depending on the findings of the survey.

3.1.2 Compensation and enhancement measures

Bat boxes will be provided onsite to provide an enhancement in the availability of roosting opportunities. Approximately half of the newly constructed buildings will contain a biodiversity enhancement, in the form of either a bat, bird or insect box. Bat boxes will be installed on a south facing aspect in close proximately to good quality habitat for bats such as hedgerows, tree lines, woodland and waterbodies. See Appendix 2 for mapped locations.

The proposed make and model of bat box has been chosen to target species likely to be present on site or within the local area. If the proposed model of bat box is not available due to stock shortages, an alternative model can be used instead. All proposed changes must be discussed and agreed with the project ecologist to ensure that they provide similar roosting opportunities. The use of woodcrete or woodstone boxes will be prioritised due to their durability and longevity. The following bat boxes will be installed onsite:

- Vivaro Pro build-in woodstone bat boxes – integrated within the external wall of the newly constructed buildings. The bat boxes should be positioned as high as possible on the southerly aspect to expose the boxes to high levels of sunlight.

It should be noted that once inhabited by a bat, boxes may only be inspected or disturbed by a licenced bat ecologist. Once installed, the bat boxes should not require any management in the long-term.

Bat boxes can be installed any time of year. Artificial lighting will be designed and directed to avoid overspill on all bat boxes, in order to minimise disturbance and increase the likelihood of occupancy. Where necessary, this may require the use of cowling or the relocation of light sources or bat boxes if necessary. A sensitive lighting strategy will be developed in accordance with the Bat Conservation Trust's (BCT) bats and artificial lighting at night guidance note (08/23), as per condition 15 of F/4/20/OUT.

Further compensation measures may be required depending on the findings of the bat surveys currently being undertaken by UES on site.

3.2 Birds

ECOSA's Environmental Statement – Technical Appendix 9.3 – Ecological Baseline (Report Reference 2921-9.3.F0), indicates that wintering bird surveys were undertaken by Artemis between November 2015 and February 2016. UES have not been provided with a copy of the wintering bird survey report produced by Artemis at this stage, but the ECOSA Environmental Statement indicates that 56 bird species were recorded within the proposed development site during the wintering bird surveys; no species associated with the Arun Valley Special Protection Area (SPA) were found to be associated with the proposed development site.

ECOSA also undertook breeding bird surveys of the proposed development site between May and June 2017, which recorded species on both the red and amber lists breeding onsite

including skylark *Alauda arvensis*, song thrush *Turdus philomelos*, dunnock *Prunella modularis*, and stock dove *Columba oenas*. Additional red and amber listed species were also recorded using the site during the wintering bird surveys undertaken by ECOSA between December and February 2019. These surveys also determined that the habitats onsite may be suitable for species associated with the designation of Arun Valley SPA but recognised that regular disturbance across the site may reduce the suitability and conditions for these species.

There are a number of habitats onsite which are suitable to support nesting birds including woodland, hedgerows, trees, dense scrub, scattered scrub, tall ruderal, arable fields and buildings. Bird's nests were identified within some of the buildings during the updated bat scoping survey undertaken by UES in June 2024, and the other buildings have potential to support nesting birds.

3.2.1 Mitigation measures

General

Building demolition, tree felling, arboricultural works and vegetation removal could result in the direct loss of nests, any individuals within the nests and of available nesting territories if conducted during the breeding season. As such, building demolition, site clearance, tree felling, arboricultural works and vegetation removal (including enabling works) are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works. This is in accordance with condition 24 of F/4/20/OUT.

Bewick's swan

A Shadow Habitats Regulations Assessment (sHRA) was produced for the proposed development site by ECOSA in October 2019 (see report reference: 4406.F0). Section 5.2 of the report details how increased footfall of humans and dogs along the proposed public footpaths, and how this may lead to increased disturbance for Bewick's swan *Cygnus columbianus bewickii*. It also details the required mitigation and compensation measures to be implemented to protect Bewick's swans and their habitat.

As the fields to the north and east of the site are suitable for Bewick's swan, screening will be implemented along the public rights of way (PRoW) in the form of stockproof fencing and low-lying hedgerows, to minimise potential disturbance by humans and dogs. A Bewick's swan mitigation strategy will be prepared which will provide further details on the location and type of screening to be implemented. Outline screening measures are detailed on Map 3 in ECOSA's sHRA.

3.2.2 Compensation and enhancement measures

Bird boxes will be provided onsite to provide an enhancement in the availability of nesting opportunities. Approximately half of the newly constructed buildings will contain a biodiversity enhancement, in the form of either a bat, bird or insect box. Bird boxes will be installed on a north facing aspect in close proximately to good quality habitat for birds such as hedgerows, tree lines, woodland, parkland and waterbodies. See Appendix 2 for mapped locations.

The proposed makes and models of bird boxes have been chosen to target species likely to be present on site or within the local area. If the proposed model of bird box is not available

due to stock shortages, an alternative model can be used instead. All proposed changes must be discussed and agreed with the project ecologist to ensure that they provide similar nesting opportunities. The use of woodcrete or woodstone boxes will be prioritised due to their durability and longevity. The following bird boxes will be installed onsite:

- Schwegler 1B bird nest box (26mm, 32mm and oval entrances) – affixed to semi-
- Vivara Pro woodstone house sparrow nest box - integrated within the external wall of the newly constructed buildings, below the eaves on the northern elevation.

- Vivara Pro woodstone swift nest box – integrated within the external wall of the newly constructed buildings, below the eaves on the northern elevation. The box should be installed at a minimum height of 5m with an unobstructed entry point beneath the box.

- Vivara Pro woodstone house martin nest – integrated within the external wall of the newly constructed buildings, below the eaves on the northern elevation.

Once installed, the bird boxes should not require any management in the long-term.

3.3 Amphibians

GCN impact assessments and environmental DNA (eDNA) analysis were carried out of ponds that were accessible within 500m of the site by ECOSA in 2017 (see corresponding report reference: 2921-9.3.F0). Of the ten ponds located within 500m of the site during the previous surveys, four (Ponds 6 – 9) were subject to eDNA analysis which returned negative results, indicating the absence of GCNs.

Whilst there are no waterbodies onsite, the terrestrial habitats have some suitability to be used by GCNs including woodland, hedgerows and tall ruderal habitats. In addition, there are several ponds and ditches within 500m of the proposed development site.

Given the lack of access to some of the offsite ponds in 2017 and the amount of time that has passed since the previous surveys, UES carried out updated GCN HSI and eDNA surveys in June 2024. Access was provided to Pond 1 and Ditches 1, 2, 5, 6, 7 and 8. Pond 1 and Ditches 5 and 8 were subject to eDNA analysis which returned negative results, indicating the absence of GCNs; Ditches 1, 2 6 and 7 were dry at the time of survey and therefore could not be subject to eDNA analysis.

Given the results of the surveys undertaken to date, GCN are considered as likely absent from the proposed development site. However, due to the potential presence of common amphibian species, the following reasonable avoidance measures (RAMs) will be implemented during the construction phase of the development to protect amphibians on the chance they are present onsite during the works:

- Vegetation is to be mown / cleared to have a sward length below 10cm. The sward length is to be reduced gradually in order to give any amphibians present time to move off site of their own accord. The mown / cleared area will then be maintained with a short sward until the works on site have been completed.

- Any potential hibernacula will be removed from the working area by a suitably experienced ecologist, and placed in a suitable area close to site. Hibernacula could include piles of rubble, bricks, loose soil, debris, brash piles etc.

- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45 degree angle to allow amphibians to escape. Any open excavations should be checked for amphibians in the morning prior to start of works on site.

- Materials will be stored on pallets off the ground in order to reduce the risk of amphibians sheltering underneath them.

- UES will remain on-call throughout the development and if any newts are encountered, work on site is to stop immediately and ecological advice is to be sought.

The provision of native tree, hedgerow and scrub planting along with the wildflower grassland will provide commuting and foraging opportunities for amphibians. In addition, a number of hibernacula and log / brash piles will be installed within Runway Park which will provide sheltering opportunities. See detailed landscaping plans for precise locations.

3.4 Reptiles

Artemis Ecological Consulting Limited carried out a Phase 1 Habitat Survey in July and August 2015, and August 2016, which identified a single, adult common lizard *Zootoca vivipara* within a grassland in the eastern section of the proposed development site.

A full suite of reptile surveys were undertaken by ECOSA in 2017 (see report reference: 2921-9.3.F0). A single adult common lizard was identified in July 2017 within the northern section of the northern land parcel. In addition, two slow-worms *Anguis fragilis* were identified offsite but directly adjacent to the eastern boundary of the proposed development site during the GCN impact assessment and eDNA survey undertaken by UES in June 2024.

Habitats onsite which are suitable for common reptile species, such as grassland, dense scrub and woodland edges, will be lost in areas to facilitate the proposed development. The provision of native tree, hedgerow and scrub planting along with the wildflower grassland will provide commuting and foraging opportunities for reptiles present in the local area. In addition, a number of hibernacula and log / brash piles will be installed within Runway Park which will provide sheltering opportunities. See detailed landscaping plans for precise locations.

Due to the known presence of reptiles within the surrounding area, the following RAMs will be implemented during the construction phase of the development to protect reptiles on the chance they are present onsite during the works.

- The unmanaged arable fields, tall ruderal and any areas of grassland within the proposed working area are to be mown to have a sward length below 10cm. This mowing is to take place at least 24 hours prior to the start of development works. This is to give any reptiles present time to move off site of their own accord. The mown / cleared areas will then be maintained with a short sward until the works on site have been completed.

- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45-degree angle to allow trapped wildlife to escape. Any open excavations should be checked for trapped wildlife in the morning prior to start of works on site.

- Where possible, materials will be stored on pallets off the ground in order to reduce the risk of reptiles sheltering underneath them.

3.5 Badgers

Artemis Ecological Consulting Limited undertook a Phase 1 Habitat Survey of the proposed development site in July and August 2015, and August 2016. No evidence of badger *Meles meles* activity was identified onsite during the survey but suitable habitats for badger were identified.

ECOSA undertook a walkover survey of the proposed development site in May 2017. Although no evidence of badger setts, latrines or foraging activity was identified onsite during the survey, mammal runs were located which indicated that badgers may be using the proposed development site on a transient basis. The results from the survey are detailed within the associated ECOSA report - Environmental Statement – Technical Appendix 9.3 – Ecological Baseline (Report Reference 2921-9.3.F0).

During the walkover survey undertaken by UES in July 2023, a mammal burrow was identified approximately 30m to the east of RM4 (offsite) which could be used by badgers. The hedgerows and woodland may provide commuting, foraging and sett building opportunities for badgers. To facilitate the proposed development, some of these habitats will be lost onsite. However, the retained woodland as well as the proposed native tree, hedgerow and scrub planting and wildflower grassland will provide a connected landscape for commuting and foraging badgers in the local area.

A pre-commencement badger scoping survey will also be undertaken prior to the start of the RM4 phase to confirm the presence or absence of badgers, in accordance with condition 16 of F/4/20/OUT.

In addition, the following RAMs will be implemented during the construction phase of the development to protect badgers on the chance they are present onsite during the works.

- No trenches or excavations will be left open overnight. They will be backfilled or covered with board, or alternatively fitted with a means of escape for any badger (or other animal) which may become trapped within, such as a plank or slope leading out of the bottom of the excavation at an angle of 45°.

- Excavations will be checked before they are backfilled to ensure that no animals have become trapped.

- Any pipes will be stored with caps on to prevent entry by badgers and other animals, and materials such as barbed wire will be stored so that animals cannot become entangled in them.

- Any chemicals or harmful materials will be stored so that they cannot be accessed by badgers or other animals.

3.6 Hedgehogs

To allow continued use of the site by hedgehogs *Erinaceus europaeus* and to ensure commuting routes are not blocked, any fences installed onsite will be designed to allow

passage of hedgehogs. This can either be through the choice of material e.g. choosing a fence style that naturally contains suitable sized holes at the base or through the inclusion of hedgehog highways. Hedgehog highways are small 13cm x 13cm holes at the base of fences. Hedgehog highways will be incorporated at a distance of every 15m in all installed fences.

Brash / deadwood piles will also be created across the site, including within the woodlands, to provide sheltering and hibernating opportunities for a variety of wildlife onsite including small mammals, invertebrates and amphibians. The brash / deadwood piles will be created using arisings from any vegetation clearance works undertaken onsite. The arisings will be cut into different shapes and sizes and will be stacked in loose and randomly created piles, measuring approximately 0.5m x 0.5m x 0.5m to 1m x 1m x 1m in dimension. The brash and deadwood piles will be created as and when material becomes available during the vegetation clearance works. See detailed landscaping plans for precise locations. In addition, hedgehog nesting boxes will be provided onsite to provide sheltering opportunities for hedgehogs. See Appendix 2 for mapped locations.

3.7 Hazel dormice

ECOSA carried out hazel dormouse *Muscardinus avellanarius* surveys in June-September 2017 (see report reference: 2921-9.3.F0). No evidence of hazel dormice was identified during these surveys and as such, they were considered likely absent from the site.

There are limited areas of suitable habitat within the surrounding landscape and the majority of the proposed development site is unsuitable to support hazel dormice. The relatively small areas of woodland and hedgerows onsite provide somewhat suitable habitat for hazel dormice; however, they are isolated from the wider landscape and the site is unlikely to be colonised by hazel dormice in the future. Despite this, the works should be completed under RAMs to reduce the risk to the lowest practicable level and to adhere to good practice guidelines. The below RAMs will be implemented during the construction phase of the development, including a pre-commencement check, to protect hazel dormice on the chance they are present onsite during the works.

- No woodland, scrub or hedgerow clearance will take place between June and September inclusive when females would have dependent young, or between December and March inclusive when dormice would be hibernating.

- Phased vegetation clearance of any existing hedgerows, woodland or scrub that will be impacted by the works. These habitats should be removed in a way that directs individuals in the direction of remaining suitable habitat such as retained hedgerows at the site boundaries.

3.8 Invertebrates

Insect boxes will be provided onsite to provide an enhancement in the availability of breeding and sheltering opportunities. Approximately half of the newly constructed buildings will contain a biodiversity enhancement, in the form of either a bat, bird or insect box. Insect boxes will be installed on a south facing aspect in close proximately to good quality habitat for insects such as hedgerows, tree lines, woodland, parkland, wildflower grassland, as well as ornamental planting. See Appendix 2 for mapped locations.

The proposed make and model of insect box has been chosen to target species likely to be present on site or within the local area. If the proposed model of insect box is not available due to stock shortages, an alternative model can be used instead. All proposed changes must be discussed and agreed with the project ecologist to ensure that they provide similar nesting opportunities. The use of woodcrete or woodstone boxes will be prioritised due to their durability and longevity. The following insect boxes will be installed onsite:

- Bee brick – integrated within the external wall of the newly constructed buildings. The bee bricks should be a minimum of 1m high on a southerly aspect to expose the boxes to high levels of sunlight.

The insect boxes installed will provide breeding and sheltering opportunities for solitary Hymenopterans species that are known to be present onsite or are likely to be present within the local area.

Once installed, the insect boxes should not require any management in the long-term.

4 LANDSCAPING AND HABITAT MANAGEMENT

The responsibility for ensuring that the initial habitat creation and enhancement measures are implemented lies with the developer and any contractors appointed to carry out those works at the time of the development. They will be responsible for ensuring that the habitat creation works are carried out to in accordance with this EPEP.

A compliance visit should be undertaken by a suitability qualified ecologist prior to occupation to confirm that the biodiversity enhancements onsite have been implemented as per this EPEP.

Subsequent management of the habitats on site will be the responsibility of the appointed management company. A habitat management and maintenance plan (HMMP) for the POS and green infrastructure will be prepared for RM4 prior to occupation, in accordance with condition 23 of F/4/20/OUT. The management company will ensure that the ongoing measures detailed within this HMMP are implemented. They will also be responsible for monitoring the establishment of habitats as well as monitoring them for any changes affecting their quality or function. An annual meeting will be held to discuss these issues and whether any remedial works are necessary to restore the habitats to a satisfactory standard.

5 CONCLUSION

The mosaic of native species-rich hedgerow, native tree planting, native dense scrub, long grass margins and wildflower grassland will provide a biologically diverse landscape and deliver a net benefit for biodiversity. The green infrastructure, particularly along the western site boundary, will provide a green corridor which will promote the natural distribution of species, ensuring that ecological resilience is maintained within the wider landscape.

Provided the measures within this report are followed, it is considered that the proposed development will be compliant with all relevant legislation and planning policy and will result in a positive outcome for biodiversity.

APPENDICES

Appendix 1 – Landscape masterplan

180641-TOR-RM4-XX-DR-L-P-002 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-012 Softworks

180641-TOR-RM4-XX-DR-L-P-022 POS Runway Park

180641-TOR-RM4-XX-DR-L-P-003 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-013 Softworks

180641-TOR-RM4-XX-DR-L-P-023 POS Runway Park

180641-TOR-RM4-XX-DR-L-P-024 POS Runway Park

180641-TOR-RM4-XX-DR-L-P-004 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-014 Softworks

180641-TOR-RM4-XX-DR-L-P-005 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-015 Softworks

180641-TOR-RM4-XX-DR-L-P-006 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-016 Softworks

180641-TOR-RM4-XX-DR-L-P-025 POS Runway Park

180641-TOR-RM4-XX-DR-L-P-007 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-017 Softworks

180641-TOR-RM4-XX-DR-L-P-008 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-018 Softworks

180641-TOR-RM4-XX-DR-L-P-026 POS Climping Edge

180641-TOR-RM4-XX-DR-L-P-009 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-019 Softworks

180641-TOR-RM4-XX-DR-L-P-010 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-020 Softworks

180641-TOR-RM4-XX-DR-L-P-011 Hardworks and Boundaries
180641-TOR-RM4-XX-DR-L-P-021 Softworks

180641-TOR-RM4-XX-DR-L-P-027 POS Climping Edge

Notes/Revisions

Ford Airfield
Vistry

0 10 20 30 40 50 m

N

Landscape Key Plan
RM4

Status:		Drawn by:	Checked by:
For Planning		DL	TF
Project Number:	Scale @ A1:		Date:
180641	(1:1250)		08/2024
Drawing Number:			Revision:
TOR-RM4-XX-DR-L-P-001			A

 Do not scale from this drawing

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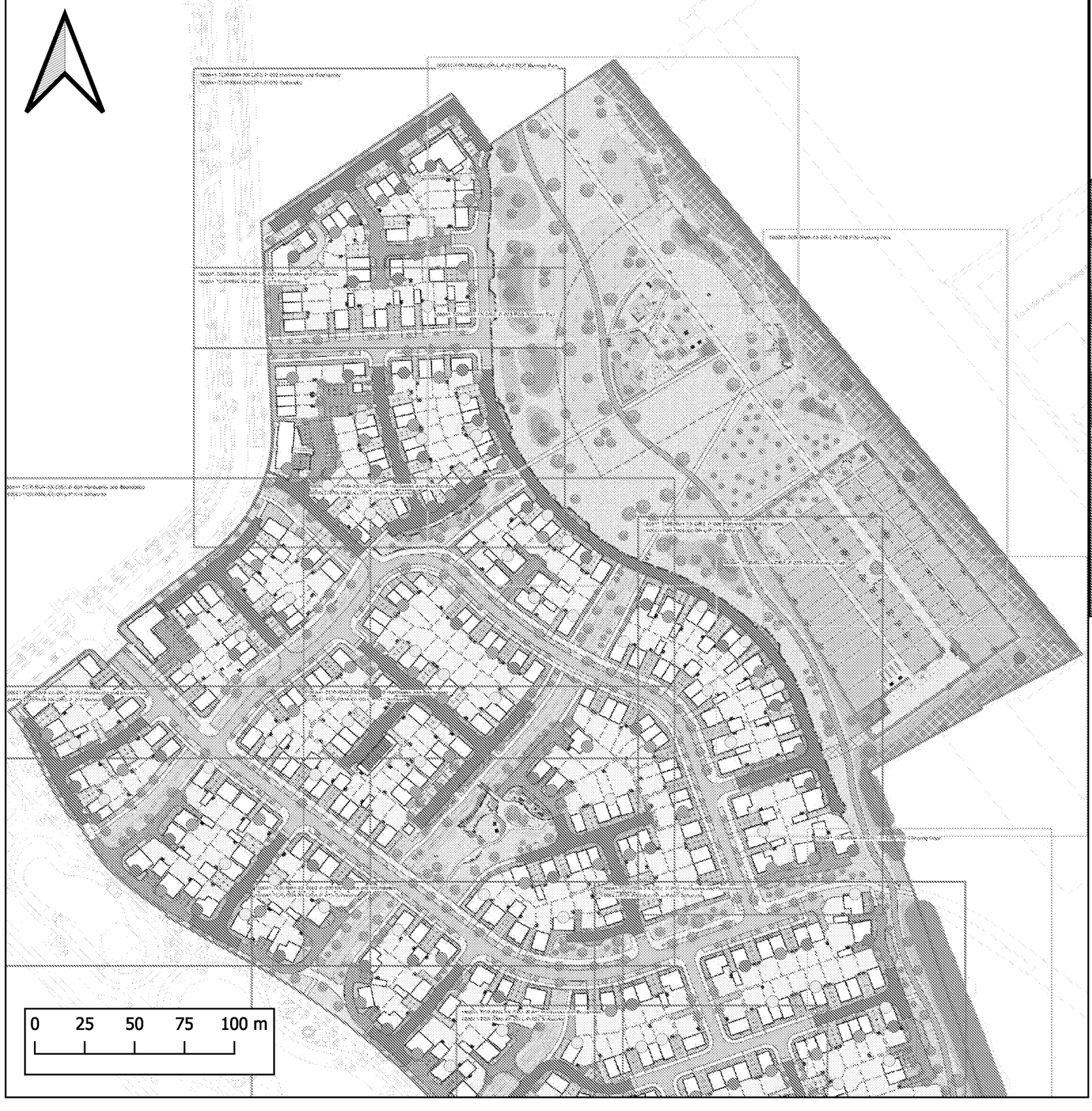
Appendix 2 – Biodiversity enhancements

RM4 Biodiversity Enhancements

Site: Land at Ford Airfield
NGR: SU 99164 03571
Author: Kathryn James
Date: 22/08/24



KEY:

- Bee brick
- Vivaro Pro build-in woodstone bat box
- Vivara Pro woodstone house sparrow nest box
  Vivara Pro woodstone swift nest box
  Vivara Pro woodstone house martin nest
- Hedgehog nest box

RM4 Biodiversity Enhancements

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