

Ecological Mitigation and Enhancement Strategy

June 2026

**Land at West Sompting,
Sussex**

Prepared by
CSA Environmental

On behalf of
Persimmon Homes

Report No: CSA/2134/13/G

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

Report Reference	Date	Revision	Prepared by	Approved by	Comments
CSA/2134/13	03/11/2022	-	NI	AW/CC	First Issue
CSA/2134/13	07/02/2023	A	NI	AW	Bat box location altered on EMES Plan
CSA/2134/13	23/02/2023	B	JMT	JMT	Formatting updates
CSA/2134/13	09/08/2023	C	JMT	CC	Planning conditions update
CSA/2134/13	22/09/2023	D	NI	CC	Bat and bird box location altered on EMES Plan
CSA/2134/13	16/09/2024	E	JMT	CC	Addition of Phase 2 specifications
CSA/2134/13	22/10/2024	F	JMT	CC	Update to Appendix D
CSA/2134/13	22/06/2026	G	WC	JMT	Addition of Phase 3 specifications.



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EXECUTIVE SUMMARY

This report has been prepared by CSA Environmental on behalf of Persimmon Homes. It sets out ecological mitigation and enhancement measures to be implemented in association with residential development consented at Land at West Sompting (hereafter 'the Site') (planning reference: AWDM/0323/19; hybrid planning consent).

The Site is c. 43.2ha in size and is comprised of four identifiable compartments of land situated north and south of West Street, located to the west of Sompting at central grid reference TQ 164 048. A Site Compartments Plan is provided in Appendix A. Development will be progressed in three phases. A Development Phasing Plan is provided in Appendix F.

This document has been prepared to specify ecological mitigation and enhancement measures to be delivered alongside Phases 1,2 and 3 of development within land compartments north and south of West Street. Ecological mitigation and enhancement measures specific to Phase 3 when details come forwards as part of a final Reserved Matters application for that phase of development. It has been prepared in line with the Landscape Strategy Plan (CSA/2134/133/E) and taking account of measures set out within Ecological Impact Assessment (CSA/2134/04/C) submitted in support of the consented scheme, and pursuant to Condition 31 of the hybrid planning consent (Phase 1 consented in detail).

Condition 31

'No development, other than archaeology and drainage works, of the residential dwellings hereby granted outline planning permission shall take place until a scheme for nature conservation enhancement has been submitted to and approved by the Local Planning Authority. The scheme shall be fully implemented in accordance with the approved details and retained as such thereafter.'

1.0 INTRODUCTION

- 1.1 This Ecological Mitigation and Enhancement Strategy (EMES) has been prepared by CSA Environmental on behalf of Persimmon Homes, in relation to Land at West Sompting, Sussex where a hybrid planning application for up and including 469 homes has been approved at Planning Committee by Adur District Council (Ref; AWDM/0323/19).
- 1.2 The Site covers c. 43.2ha and is comprised of four identifiable compartments of land situated north and south of West Street, located to the west of Sompting at central grid reference TQ 164 048. A Site Compartments Plan is provided in Appendix A, which displays the compartments described below. A Development Phasing Plan is provided in Appendix F. The Site compartments comprise:

Compartment A

Land north of West Street: comprised of improved grassland fields used for pony grazing and/or hay production, bounded by hedgerows with associated buildings, predominantly outbuildings / stables. Residential development of up to 95 units (**'Phase 2'**) is proposed within the eastern part of this compartment; with land to the west being retained for public open space (POS) / community orchard project.

Compartment B

Land south of West Street: predominantly comprised of arable land with some hedgerows and scrub / tall ruderals / rough grassland along field boundaries. Residential development of up to 96 units (**'Phase 1'**) to the west and up to 278 units (**'Phase 3'**) to the east is proposed within this compartment. See Appendix F for an illustration of how this compartment is divided into Phases 1 and 3.

Compartment C

Land to the East: comprising of a former scrap yard, horse paddocks with associated scrub, hedgerows and mature trees. This area is proposed as a Community Farm, and will be subject to a separate Reserved Matters Planning application to be submitted by Sustainable Sussex.

Compartment D

Lower Cokeham Reedbed and Ditches Local Wildlife Site (LWS): comprised semi-improved grassland, fen / swamp and reedbed habitats, reedbeds, Cokeham Brook and a network of ditches which form part of the catchment of the Teville Stream to the south. Hedgerows and mature poplar trees are present along compartment boundaries, with a small area of broadleaved woodland to the east. A Landscape and Ecology Management Plan (CSA/2134/08/G) was

agreed for the LWS as part of the planning consent (secured by Condition 31)

- 1.3 This document has been prepared to set out ecological mitigation and enhancement measures to be delivered alongside Phases 1, 2 and 3 of development within land compartments north and south of West Street. It has been prepared in line with the Landscape Strategy Plan (CSA/2134/133/E) and taking account of measures set out within Ecological Impact Assessment (CSA/2134/04/C) submitted in support of the consented scheme, and pursuant to Condition 31 of the hybrid planning consent (Phase 1 consented in detail).

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- 1.4 Production of this EMES has been informed by ecological survey information collected between 2013 and 2022, as reported within the Ecological Impact Assessment (EclA; CSA/2134/94/C) and Update Site Walkover Briefing Note (CSA/2134/14), which should be read in conjunction with this report. Important Ecological Features (IEFs) considered within this report comprise the following:
- **Habitats and Flora** – Trees, hedgerows, scrub and semi-improved grassland
 - **Fauna** – bats, badger, nesting birds, reptiles and invertebrates
- 1.5 This report sets out a strategy for avoidance, mitigation, as well as provision of ecological enhancement measures to be delivered alongside the proposed scheme.
- 1.6 An outline of management and monitoring prescriptions has been set out to ensure delivery of the above measures is successful, and identify remedial actions where required. Responsible parties are identified so as to aid enactment.
- 1.7 This EMES has been prepared in accordance with the measures proposed within the EclA (CSA/2134/04/D) and the Landscape Strategy (CSA/2134/133/E) submitted to support the hybrid application. It sets out an overarching strategy for ecological mitigation and enhancement to be delivered alongside Phases 1, 2 and 3 of development. Detailed specifications for wildlife enhancement measures to be delivered alongside Phases 1 (consented in full under the extant hybrid planning permission), 2 and 3 of development are set out within Appendix C, D and E.

1.8 This document has been prepared with due regard to the 'mitigation hierarchy' set out within the British Standard BS 42020:2013, which involves the following step-wise process:

- **Avoidance** – avoiding adverse effects through good design;
- **Mitigation** – where impacts are unavoidable, mitigation should be employed to minimise adverse effects;
- **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm;
- **Enhancement** – maximise opportunities to deliver biodiversity benefits, which can be delivered alongside the above to resolve potential adverse effects.

2.0 LEGISLATION, PLANNING POLICY & STANDING ADVICE

Legislation

2.1 Key wildlife legislation of relevance to ecological features identified within this Strategy are listed below:

- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Wildlife and Countryside Act 1981 (as amended)
- Protection of Badgers Act 1992
- Natural Environment and Rural Communities (NERC) Act 2006

Protected Species

2.2 The **Conservation of Habitats and Species Regulations 2017** (as amended). The Regulations allow for the designation of Statutory Nature Conservation-Sites (SACs and SPAs) and European Protected Species ('EPS' including all UK bat species, great crested newt, hazel dormouse and otter) which are assigned a greater level of protection than under other legislation.

2.3 These regulations make it an offence to deliberately capture, injure, kill or disturb (impairing their ability to survive, breed reproduce or rear/nurture their young) an EPS or to damage or destroy a breeding site or resting place of an EPS. Where development is proposed that would result in an offence under the Habitats and Species Regulations an EPS licence needs to be granted by Natural England to permit an act that would otherwise be unlawful. This provides for a specific derogation from the legislation, to prevent a legal infringement occurring.

2.4 European Protected Species of relevance to the proposed scheme and this EMES comprise the following;

- **Bats**
- **Badgers**

2.5 The **Wildlife and Countryside Act 1981** (as amended) forms the primary piece of UK legislation relating to the protection of habitats and species. The following fauna protected by this legislation, of relevance to construction and operational phases of development are as follows:

2.6 With regards to wild birds the Act makes it an offence to kill, injure or take any wild bird, or to take, damage or the nest of a wild bird, or to take or destroy eggs. Potential for impacts to nesting birds nesting during vegetation clearance. Species listed on Schedule 1 of the Wildlife and Countryside Act, 1981; therefore, the birds, their nests, eggs and young are fully protected at all times throughout the UK. It is also an offence to intentionally or recklessly disturb Schedule 1 species at an active nest site

with eggs or young or before eggs are laid, or to disturb the dependent young.

- **Nesting Birds** – Surveys conducted in 2017 recorded a total of 32 species, of these, 13 were recorded to have a breeding status of either 'confirmed', 'probable' or 'possible' and are therefore considered to be breeding species. A total of 20 species of conservation interest were recorded including nine Red-listed, six Amber-listed and four Green-listed species. Of these, seven are also listed under Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act as species of principal importance for conservation in England. Three species that are afforded extra protection against disturbance under Schedule 1 of the Wildlife and Countryside Act (1981) were also recorded, which include barn owl *Tyto alba*, peregrine *Falco peregrinus* and hobby *Falco subbuteo*. Incidental sightings during reptile translocation works in 2022 recorded peak counts of 21 corn buntings *Emberiza calandra*, singing and flocking together within the arable field at the north of the Phase 1 boundary. This species is also Red-listed and an S41 species, and is considered to be a 'probable' breeder on-Site.

2.7 Under Section 5, Schedule 9(1) of the Act is an offence to intentionally or recklessly kill or injure a species listed under this schedule. This schedule will be of relevance to the following:

- **Reptiles** – A low population of slow worm have been recorded within Land to the north of West Street (Phase 2). A high population of slow worm and a low population of grass snake have been recorded within land to the south of West Street (Phases 1 and 3).

2.8 A mitigation strategy detailing the on-Site provision for slow worm is provided herein, along with measures for the capture and exclusion of reptiles from the construction area, and prescriptions for future management. Full details can be found within the Reptile Mitigation Strategy (CSA/2134/07/E) submitted alongside the planning proposals.

2.9 The **Protection of Badgers Act, 1992** affords protection to badgers and their setts.

Priority Species for Conservation

2.10 Section 40(1) of the **Natural Environment and Rural Communities (NERC) Act 2006** states that each public authority "must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". This legislation makes it clear that planning authorities should consider impacts to biodiversity when determining planning applications, with particular regard to the Section 41 list of 56 habitats and 943 species of principal importance, irrespective of whether they are covered by other legislation.

- 2.11 The S41 list was taken forward for action under the UK BAP (first published in 1994). The UK BAP has now been superseded by the Biodiversity 2020 Strategy, which continues to prioritise the S41 list, setting national targets for the period to 2020, and the UK Post-2010 Biodiversity Framework, which shows how these contribute to targets at the European level. Whilst BAPs are therefore no longer formally recognised, many of the tools and resources originally developed for the BAP remain in use, such as the background information which still forms the basis of work at national level.
- 2.12 The following S41 list habitats and species and Birds of Conservation Concern (BoCC) are considered to be present/make use of resources on Site or be immediately adjacent to Site:
- **S41 habitats** – hedgerows
 - **S41 and Schedule 1 bird species** - habitats at the Site support a range of S41 and Schedule 1 species, including, skylark *Alauda arvensis*, song thrush *Turdus philomelos*, linnet *Linaria cannabina* and corn bunting.
 - **Birds of Conservation Concern (BoCC) species** - habitats at the Site support a range of BoCC species, including those listed above as well as greenfinch *Chloris chloris* and swift *Apus apus*.
 - **Notable invertebrates**

Planning Policy and Guidance

- 2.13 Relevant national and local planning policy and guidance considered within the Strategy document are listed below:
- National Planning Policy Framework (NPPF) (2025)
 - Adur Local Plan (2017)

National Planning Policy Framework

- 2.14 The NPPF (Ministry of Housing, Communities and Local Government, 2025) sets out the government planning policies for England and how they should be applied. Chapter 15: Conserving and Enhancing the Natural Environment, is of particular relevance to this report as it relates to ecology and biodiversity
- 2.15 Accompanying the NPPF, central government guidance on the implementation of planning policies is set out within online Planning Policy Guidance (PPG). The Natural Environment PPG addresses biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services. Further guidance in respect of statutory obligations for biodiversity conservation within the planning system is provided by Government Circular 06/2005.

Local Planning Policy

- 2.16 Local planning policies of relevance to the Site, ecology, biodiversity and/or nature conservation within the Adur Local Plan (2017) has been set out in Table 1 in Appendix H, and comprise the following:

Adur Local Plan (2017)

- Policy 6: Land at West Sompting
- Policy 10: Sompting
- Policy 30: Green Infrastructure
- Policy 31: Biodiversity

3.0 AIMS AND OBJECTIVES

Overview

- 3.1 The potential impacts of both the construction and operational phases of the proposed development have been assessed in detail within the Ecological Impact Assessment (CSA/2134/04/C).
- 3.2 In line with national and local planning policy, this strategy aims to minimise adverse effects on notable/protected habitats and species during the Site clearance, construction, and operation phases of development. To meet this aim, objectives have been set out for each of the IEFs of relevance to the Site below.

Habitats and Flora

Aim

- 3.3 The Strategy aims to, where possible retain, protect and reinstate semi-natural habitat resources (with a focus on S41 habitats in respect of the NERC Act 2006) across the Site.

Objectives

- **Retain and protect ecologically valuable habitats**, wherever possible within the constraints of the proposed scheme.
- **Enhance and create new semi-natural habitats**, through appropriate management of habitats (grassland, hedgerows, native trees, scrub and woodland).

Fauna

Aim

- 3.4 This strategy will aim to avoid or minimise adverse effects on protected/notable species, or where this is not possible provide suitable mitigation, and finally compensate for adverse effects if they cannot be avoided.

Objectives

- **Retain and protect habitat** which is suitable to support protected/notable species on-Site, where possible.
- Where habitat is lost as a result of development **seek to avoid potential direct impacts to wildlife/protected species** (e.g. killing/injury/disturbance) through sensitive working practices, timing of works and mitigation provision (e.g. new habitat creation and enhancement) to ensure that the favourable conservation status of local wildlife populations is maintained.
- **Ensure that mitigation is legally compliant** and subject to Natural England licencing as appropriate.

4.0 IMPACT AVOIDANCE AND MITIGATION MEASURES

Habitats and Flora

Trees

- 4.1 The proposals have been carefully designed to avoid impacts to broadleaved woodland where possible and no woodland is to be lost. Some tree removal has occurred to facilitate development, specifically the removal of a treeline alongside Dankton Lane near to the eastern boundary of Phase 2.
- 4.2 To prevent accidental damage of retained vegetation during construction, works will be undertaken in-line with BS5837:2012 "Trees in relation to design, demolition and construction. Recommendations." The Root Protection Areas (RPAs) of retained trees and hedgerows will be respected during the preparation of detailed designs and subsequent construction works.
- 4.3 New tree planting is to be provided across the Site, particularly within POS areas. This will help to create a commuting resource for bats. A range of native species including English oak *Quercus robur*, field maple *Acer campestre* hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, spindle *Euonymus europaeus*, blackthorn *Prunus spinosa* and crab apple *Malus sylvestris*, will be planted, in addition to other ornamental tree varieties within the community orchard area (Landscape Strategy in Appendix G). New tree planting will be undertaken during the winter months (November to February) during a period free from frost and will be secured and protected through the use of stakes and guards. Scrubs and weeds will be controlled to prevent competition with newly planted trees. Newly planted trees will require watering regularly in the first weeks after planting.
- 4.4 In addition to this any standing deadwood/monoliths following tree surgery works will be retained in order to provide resources for bats/birds and invertebrates. Felled timber will be used to create log piles, although it should be noted this did not occur with the majority of timber felled for road-widening along the eastern edge of Phase as the timber was diseased. However, a small log pile was created when stag beetle *Lucanus cervus* larvae were discovered during clearance. The location of this log pile is provided at Appendix D.

Hedgerows/Scrub

- 4.5 The development will result in minor loss of patches of scrub and hedgerow habitat.
- 4.6 Loss of hedgerow and scrub will in part be mitigated by the creation and management of existing hedgerow in order to create a functional hedgerow network. New hedgerow planting will use a mix of at least six

native species in order to create 'species rich' hedgerows. Native species will include hawthorn, hazel, blackthorn and crab apple.

- 4.7 To prevent accidental damage of retained vegetation during construction, works will be undertaken in-line with BS5837:2012 "Trees in relation to design, demolition and construction. Recommendations." The Root Protection Areas (RPAs) of retained trees and hedgerows will be respected during the preparation of detailed designs and subsequent construction works.

Arable Fields

- 4.8 The entirety of the arable habitat in fields F6, F7, F8 and F9 will be lost to development. The land change from arable land to housing development and POS is likely to have a residual adverse effect that cannot be easily mitigated, particularly in relation to farmland birds such as skylark and corn bunting. However, this is likely to be offset by the enhancements and future management proposed to the adjacent LWS which will provide enhanced opportunities for other bird species, including wetland birds.

Grassland

- 4.9 There will be significant loss of improved grassland within Field F2, to facilitate the proposal within Phase 2 of development. Improved grassland is not very floristically diverse. However, this loss will be compensated for through the creation of new amenity grassland areas within POS within all Phases, particularly as Phases 1 and 3 will be constructed where arable farmland currently exists.
- 4.10 There will also be some loss of more florally diverse semi-improved grassland from arable field margins in Phases 1 and 3. In order to mitigate for this retained grassland will be seeded with a native grassland mix to promote floral diversity. Appropriate management techniques will be employed in order to encourage the development of a dense swards.

Fauna

Bats

- 4.11 There will be a major loss of improved grassland currently used for hay cutting and grazing, arable fields and associated semi-improved margins to facilitate residential development and associate POS. However, many of the hedgerow features will be retained and buffered during construction by fencing and post construction by POS within land to the south of West Street and community facilities within land north of West Street and land to the east. A significant amount of new planting in the form of hedgerows, trees and a community orchard will be created, which will support invertebrate prey species and allow habitat connectivity for commuting/foraging bats.

- 4.12 Surveys undertaken in 2014 concluded that seven trees had moderate bat roost potential, although none of these trees exhibited significant opportunities for bat roosting. Two trees were assessed as having high bat roost potential although no evidence of bats was found during subsequent aerial inspections.
- 4.13 A ground-based tree assessment was undertaken in May 2014 for evidence of bat activity and Potential Roosting Features (PRFs). This was in-line with the current best-practice guidelines at the time. In summary, seven trees had 'moderate' bat roost potential although none of these trees exhibited significant opportunities for bat roosting. Two trees were assessed to have 'high' bat roost potential although no evidence of bats was found during subsequent aerial inspections. Due to the time that has elapsed since these earlier surveys, trees with bat roost potential will be subject to the appropriate level of update survey work (ground-level tree assessments and subsequent dusk emergence surveys and/or climbing inspections, if required) prior to any removal work, in line with the Bat Conservation Trust Good Practice Guidelines (2023).
- 4.14 A sensitive lighting design will be required such that minimal light spill falls into the woodland or commuting hedgerows.

Badger

- 4.15 No badger setts were noted within land designated for Phases 1 or 2 of the development, however there was evidence of badgers using the Site through the presence of latrines.
- 4.16 Phase 3 of the development contains an active main badger sett on its eastern boundary, identified as Sett A in the associated Badger Mitigation Strategy (CSA/2134/22), along with four outlier setts (Setts B – E). If found to be active, the outlier badger setts within Phase 3, may need to be closed under licence from Natural England where they are to be directly impacted by the development. The main badger sett and retained outlier setts will require a minimum 20m buffer from development. This buffer is to be marked out by Heras fencing during construction to avoid any damage to the setts.
- 4.17 Construction-phase precautionary impact avoidance measures are detailed within the CEMP for each Phase and include measures such as fencing off any open excavations if left overnight or allowing a means of escape (e.g. ramps). The 30m buffer will be marked out by Heras fencing during construction to avoid any damage to the setts and to prevent any badgers from entering the construction site.
- 4.18 Due to the presence of badgers within the local landscape and across the Site, a Site-wide update badger survey should be undertaken prior to the commencement of development in each Phase in order to identify any new signs of badger activity or sett creation. This will be required to inform any badger sett closure licence application from

Natural England, which will be informed by a Badger Mitigation Strategy, and will ensure that legal obligations are met.

- 4.19 Retained hedges, scrub and grassland will continue to provide viable dispersal corridors for badgers.

Birds

- 4.20 Development of the Site will result in the loss of large areas of arable habitat which may impact species such as corn bunting and skylark. Small areas of scrub and hedgerow which are suitable for nesting birds will also be lost. The loss of these habitats may also impact local farmland bird populations by reducing breeding and foraging habitats. Given the conservation importance of these species, in the absence of mitigation, it is expected that this loss of breeding habitat will result in significant negative effects.
- 4.21 Increased predation during the operational phase of the development may be likely due to a possible increase in the number of house cats in the area. The minor loss of arboreal nesting and foraging resources resulting from the proposed clearance of small sections of hedgerow and mature trees will be compensated by new habitat creation.
- 4.22 Whilst like-for-like farmland opportunities cannot be replicated on-Site, the provision of a diverse alternative foraging resource adjacent to retained arable land to the south is anticipated to reduce the effect of on-Site habitat loss for a small number of corn bunting and skylark, by providing opportunities for local individuals of these species.
- 4.23 The removal of suitable nesting habitat including arable land, as well as future management within retained areas of suitable nesting habitat will ideally be undertaken outside of the main bird nesting season, taken to run from mid-March to August inclusive. This will prevent destruction and disturbance to nests of both early nesting species, and those which continue to breed into August, including song thrush. These timeframes will also be applicable to clearance of habitat within proposed construction zones. Where this is not possible a nesting bird check by a suitably qualified ecologist of the areas due to be cleared should be conducted in order to identify any active nests and to identify any exclusion zones, prior to works taking place. Exclusion zones will remain in place until the birds have fledged.
- 4.24 The above measures will ensure compliance with the Wildlife and Countryside Act 1981 (as amended), which affords all wild birds' nests protection from destruction whilst in use; with those species listed on Schedule 1 also being afforded protection from disturbance.

Reptiles

- 4.25 A reptile trapping and translocation exercise has been undertaken on-Site between August-October 2021 in Phase 1, May-September 2022 in

all three Phases and alongside Dankton Lane adjacent to Phase 2 in August – September 2023 to reduce the risk of killing/injury during the construction phase. Reptiles have been moved to the LWS in accordance with the Reptile Mitigation Strategy (CSA/2134/07).

- 4.26 The translocation consisted of a total of 114 trapping days for Phase 1 across 2021/22, and 75 days in Phases 2 across 2022/23. A total of 60 days of trapping were completed in 2022 for Phase 3. Although a minimum of 90 days were prescribed for Phase 3, the lower numbers caught and capture depletion trends meant that a total of 60 days was appropriate in sufficiently translocating the reptile population from this phase. Table 1 below provides a summary of reptiles captured and translocated across all three phases. A reptile translocation report has been provided to give full methods and results for this work (CSA/2134/09).

Table 1. Summary of results from the reptile translocation in 2021 and 2022 across all three phases.

Phase	Slow worm adult total	Slow worm sub-adult/juvenile total	Grass snake sub-adult/juvenile total
1 (2021)	354	325	4
1 (2022)	60	33	3
2 (2022)	152	257	1
2 (2023)	4	4	0
3 (2022)	135	150	10
Total	705	769	18

- 4.27 Capture efforts were augmented through phased habitat clearance during the translocation, through the use of hand-held tools including trimmers/brushcutters under close supervision and an Ecological Clerk of Works (ECoW). This aided encouragement of reptiles that were present to disperse where they could be captured and relocated to the receptor areas within the LWS.
- 4.28 Reptile exclusion fencing has been installed and should be protected from the construction zone using Heras fencing where appropriate; and checked on a regular basis during the construction period for any signs of damage which could reduce the effectiveness of the exclusion barrier. Once construction is complete, exclusion fencing may be removed (during the reptile active season) and final landscaping and path creation be completed.
- 4.29 A detailed mitigation strategy is provided in the Reptile Mitigation Strategy (CSA/2134/07/E), and reptile mitigation work completed is provided in the Reptile Translocation Report (CSA/2134/09). These reports can be provided if requested.
- 4.30 On-Site mitigation has been proposed for land to the north of West Street (Phase 2 of the development), with any reptiles to be relocated to the proposed community orchard area.

Invertebrates

- 4.31 New SuDS creation, native grassland seeding, and tree planting will provide new breeding and foraging opportunities for a wide range of invertebrate species to mitigate for any loss of habitat.
- 4.32 Key habitats that offer opportunities/resources for important invertebrate species, such as hedgerows and grassland are retained where possible.

5.0 ENHANCEMENT MEASURES

Aims and Objectives

- 5.1 Enhancement measures for protected species and IEFs, relevant to the construction and operation phases of development, are set out herein to address the following aims and objectives:
- Undertake habitat creation which will be in line with national and local planning policy;
 - Provision of habitat enhancement features of benefit to fauna known to be present onsite / locally;
 - Provide long-term benefits for wildlife during the operational phases through suitable habitat provision and management;

Enhancement Measures

Habitat Creation and Enhancement

- 5.2 Inclusion of plant species of known wildlife value within the landscaping scheme, including locally appropriate tree, shrub and grassland species (see Landscape Strategy Plan in appendix G). Specific recommendations in regards to protected and notable species are discussed below under the relevant headings.

Bats

- 5.3 At least 10 no. bat boxes will be incorporated into the fabric of new builds (Habibat tube or equivalent) and 10 no. bat boxes will be erected on retained trees and woodland (Schwegler 2FN or equivalent) across the entire development.
- Three of these will be incorporated into buildings within Phase 1 of the development.
 - Four will be incorporated into buildings within Phase 2 and an additional five bat boxes will be erected on mature trees within Phase 2.
 - Three will be incorporated into buildings within Phase 3 and an additional x5 bat boxes will be erected on mature trees within Phase 3.
- 5.4 The approximate locations of these boxes are shown on the Phase 1 Ecological Mitigation and Enhancement Plan (CSA/2134/145/C), the Phase 2 Ecological Mitigation and Enhancement Plan (CSA/2134/158) and the Phase 3 Ecological Mitigation and Enhancement Plan (CSA/2134/318) respectively.
- 5.5 Bat boxes will be placed at least 4m from the ground with at least one box per tree sited with the front facing SW to SE. Boxes will be placed

with different aspects, providing a choice of roost sites with different environmental conditions.

Badgers

- 5.6 New areas of native grassland planting and maintenance of existing grassland will provide new foraging opportunities for badger across areas of POS.

Birds

General

- 5.7 A total of at least 15 bird nesting boxes will be provided across all phases on new builds as follows:
- 5x generic bird boxes (Aviannex or equivalent)
 - 5x swift/sparrow bricks (S Brick or equivalent)
 - 5 x house martin / swallow cups (Schwegler or equivalent)
- 5.8 Of these 15 bird nesting boxes, Phases 1 and 2 of the development will each incorporate:
- 1 x generic bird box
 - 2 x swift/sparrow bricks
 - 2 x house martin / swallow cups
- 5.9 In addition, to provide some mitigation for the loss of potential nesting opportunities, a selection of bird boxes will be provided within retained woodland areas in Phase 2, with 8 x boxes being provided within retained woodland/trees. These boxes will include species-targeted nest boxes, including 2 x treecreeper boxes, 2 x stock dove/tawny owl boxes, 2 x starling boxes and 2 x robin/open boxes.
- 5.10 Indicative locations and specifications for box provision within Phases 1, 2 and 3 of the development are shown on the Phase 1 Ecological Mitigation and Enhancement Plan (CSA/2134/145/C) and Phase 2 Ecological Mitigation and Enhancement Plan (CSA/2134/158) and Phase 3 Ecological Mitigation and Enhancement Plan (CSA/2134/318), respectively. These boxes should be located in areas where natural nesting opportunities, such as crevices and holes, within retained or newly planted trees are scarce or absent, allowing wider dispersal and reducing territorial competition between and within species (Blakesley and Buckley, 2010).
- 5.11 New tree and hedgerow planting shall consist mainly of native species beneficial to birds, which will provide greater foraging, sheltering and nesting opportunities for birds utilising the Site. House martin cups are to be installed at a distance to sparrow bricks in order to minimise competition.

Ground nesting farmland species

- 5.12 The proposed mitigation area in Phase 3 should be allowed to colonise with grassland and ruderal species with an over-sowing of tussock-forming grasses and wildflowers, if required. No ground-clearance or specific seed bed preparation (other than harvesting of any existing crop) is suggested as natural colonisation would allow farmland weed species and 'volunteer' crop plants of value to the target bird species, to grow in the short-term.
- 5.13 The area will subsequently be managed infrequently to promote rough tussocky grassland and dense native scrub will be planted along the boundary to reinforce the existing hedgerow. These habitats are intended to provide a foraging resource for farmland bird species present in the surrounding arable fields; corn bunting and skylark which will have been displaced from the Site, though the area may also be utilised by these species for nesting. The mitigation area could be excluded from public use to reduce disturbance, with information boards provided to highlight its importance.
- 5.14 More specific details on this proposed bird mitigation area will be submitted with a Phase 3 Reserved Matter application.

Reptiles

- 5.15 Receptor habitats were established within the LWS prior to the translocation exercise commencing and are being managed to enhance their suitability. Management prescriptions are detailed within the Cokeham Brooks Local Wildlife Site Extension: Landscape and Ecology Management Plan (CSA/2134/08/G), submitted alongside the hybrid planning proposals.
- 5.16 The community orchard in Phase 2 will be managed and monitored for reptiles through the retention of longer grassland swards and appropriate planting in addition to the provision of log piles and hibernacula. Implementation of the Reptile Mitigation Strategy and associated long-term management could be secured through planning condition, with any funding to be secured through a S106 agreement / planning obligations as appropriate. Receptor areas are considered likely to increase habitat suitability and security in the long term.
- 5.17 The majority of existing hedgerow networks will be retained, with the exception of the treeline alongside Dankton Lane by Phase 2 which has been removed for road-widening purposes. Retained hedgerows will maintain connectivity to other areas of suitable reptile habitat within the wider landscape. Opportunities for reptile refuge and hibernation shall be created through the provision of log piles and hibernaculum.
- Phase 1 of the development will incorporate 1 x log pile and 1 x hibernaculum within areas of POS.

- Phase 2 will incorporate 2 x log piles and 2 x hibernaculum.
- Phase 3 will incorporate 1x log pile and 1x hibernaculum within areas of POS.

Invertebrates

5.18 New opportunities for invertebrates will be created through utilising any fallen deadwood along the hedgerows/tree lines to provide opportunities for saproxylic invertebrates. The SuDS scheme enhancements will provide opportunities for aquatic invertebrates. At least 15 no. insect boxes will be erected on mature trees and/or new builds. These will be a purpose-built, durable and long-lasting variety i.e. concrete bee bricks, Schwegler clay and reed insect nests.

- Phase 1 will involve the incorporation of three insect boxes into new builds and mature trees within the retained hedgerow at the Site's western boundary.
- Phase 2 will incorporate seven insect boxes into new builds and on mature trees
- Phase 3 will incorporate five insect boxes into new builds and on mature trees.

Other

5.19 Timber generated from tree clearance works at the Site will be used to make at least five log piles and three hibernacula for wildlife benefit across all phases of the development.

- Phase 1 of the development will incorporate one log pile and one hibernaculum within areas of POS, materials for these will need to be outsourced due to limited vegetation clearance as part of this stage of development proposals.
- Phase 2 of the development will incorporate two log piles and two hibernaculum within areas of POS. Materials for these will also need to be outsourced as the trees cleared along Dankton Lane were diseased and the timber needed to be removed from Site.
- Phase 3 of the development will incorporate one log pile and one hibernaculum with areas of POS. Materials for these will also need to be outsourced due to limited vegetation on the site.

5.20 Log piles and hibernacula will be situated within boundary vegetation where they will be least disturbed, they should be located on a slope with a southerly aspect to facilitate drainage and provide basking opportunities. New material can be added as required following any future management works. For specific enhancements for hedgehogs *Erinaceus europaeus*, dead leaves will be added to the log piles to provide additional nesting material.

5.21 Covers will be provided for open drains and gullies as well as provide access points in/out of any wildlife ponds/flood attenuation features.

This would also ensure any small mammals, such as hedgehogs, and amphibians do not get stuck.

6.0 MANAGEMENT AND MONITORING

Management

- 6.1 The main aims for habitat management of retained and newly created semi-natural habitats have been set out within this report, as appropriate. The main aims and objectives are as follows:
- to maintain the existing wildlife and nature conservation interest and provide replacement wildlife habitat for that lost within the development areas;
 - to create additional wildlife habitats and enhancements to biodiversity;
 - to maintain and reinforce the landscape and ecology structure of the site;
 - to manage, retain and provide the opportunities to improve areas of existing ecological interest.

Hedgerows and trees

- 6.2 Hedgerows and trees will be maintained and managed to maintain native woodland flora and habitat value for local wildlife. This will be achieved through the implementation of management actions (e.g. selective felling/coppice/systematic removal of non-native species such as sycamore *Acer pseudoplatanus*) to increase ground flora and hedgerow regeneration.

Grassland

- 6.3 New habitats will be created in order to improve biodiversity, through the provision of grassland habitats seeded with native species mixes in areas of POS, which will provide opportunities for a range of invertebrates, reptiles and birds. Grassland where possible should be managed for reptile populations i.e. low intervention cutting, on rotational cycle, to no lower than 150mm in later summer (August/September) and carefully raking away the arisings.
- 6.4 The proposed ground nesting farmland bird mitigation area should be allowed to colonise with grassland and ruderal species with an over-sowing of tussock-forming grasses and wildflowers, if required. No ground-clearance or specific seed bed preparation (other than harvesting of any existing crop) is suggested to allow natural colonisation and enabling farmland weed species and 'volunteer' crop plants of value to the target bird species, to grow in the short-term.
- 6.5 The area will subsequently be managed infrequently to promote rough tussocky grassland and dense native scrub. These habitats are intended

to provide a foraging resource for farmland bird species present in the surrounding arable fields, corn bunting and skylark which will have been displaced from the Site, though the area may also be utilised by these species for nesting. The mitigation area could be excluded from public use to reduce disturbance, with information boards provided to highlight its importance.

Cokeham Brooks LWS

- 6.6 Key management objectives for the LWS comprise the following:
- Management of grassland to provide habitats for native flora and fauna, in particular rare and threatened species (e.g. whorl grass), invertebrate species (soldier beetle *Crudosilis ruficollis*, cinnabar moth *Tyria jacobaeae*, soldierfly *Stratiomys potamida* and hoverfly *Cheilosia soror*) and farmland bird species (skylark)
 - Undertake specific habitat creation and management of grassland/scrub mosaic areas which shall form a reptile receptor site
 - Management of scrub and woodland for both their native flora and also as habitats for fauna
 - Management of wetland habitats including wet grassland for the native flora and fauna they support/provide resources for (e.g. bird species such as Cetti's warbler *Cettia cetti* and water-rail *Rallus aquaticus*, and harvest mouse *Micromys minutus* recorded within fen/reedbed habitats)
- 6.7 Full details of enhancement and management works in relation to the LWS can be found in the Landscape and Ecology Management Plan (CSA/2134/08/G).

Monitoring

Badgers

- 6.8 Monitoring checks of the Site during construction will be made regularly by an ecologist to ensure that new setts are not created within areas to be impacted. A toolbox talk will be provided at the start of construction to alert workers to the various ecological constraints and what protection measures are in place. This will include details on identifying and protecting badger setts.

Reptiles

- 6.9 As per the Reptile Mitigation Strategy (CSA/2134/07/E), reptile populations within the receptor site in the LWS will be monitored in years 1 and 3 following completion of the translocation, to record the reptile populations present. Artificial refugia will be distributed to monitor the numbers of reptiles present. The findings will be used to inform any

management changes if required. It is hoped that local volunteers can be involved and trained to help with monitoring and contribute to long-term data collection.

7.0 REFERENCES

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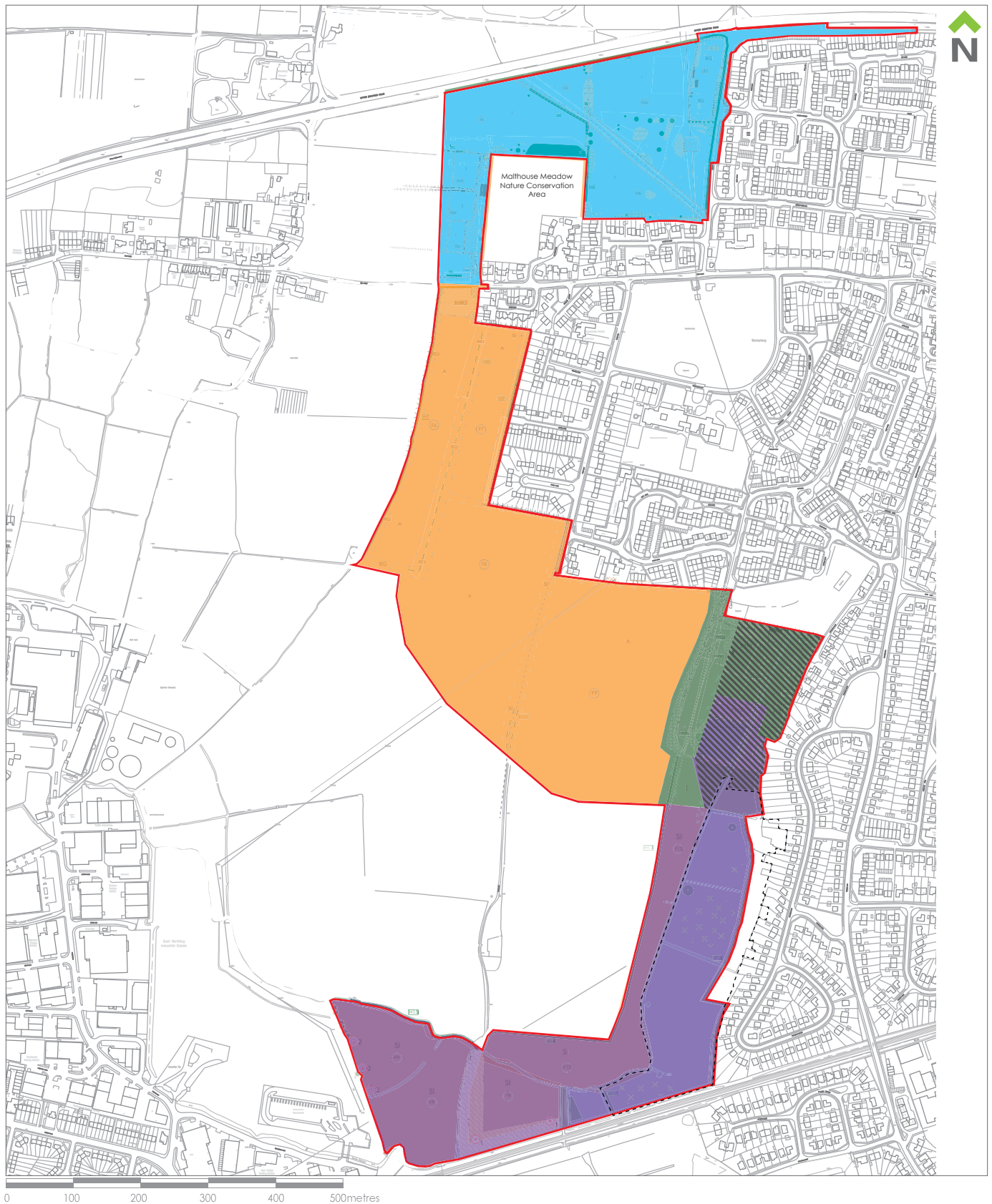
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Appendix A

Site Compartments Plan (CSA/2134/132/C)



Legend

Site Boundary

Compartment A: Land north of West street

Compartment B: Land south of West Street

Compartment C: Land to the east

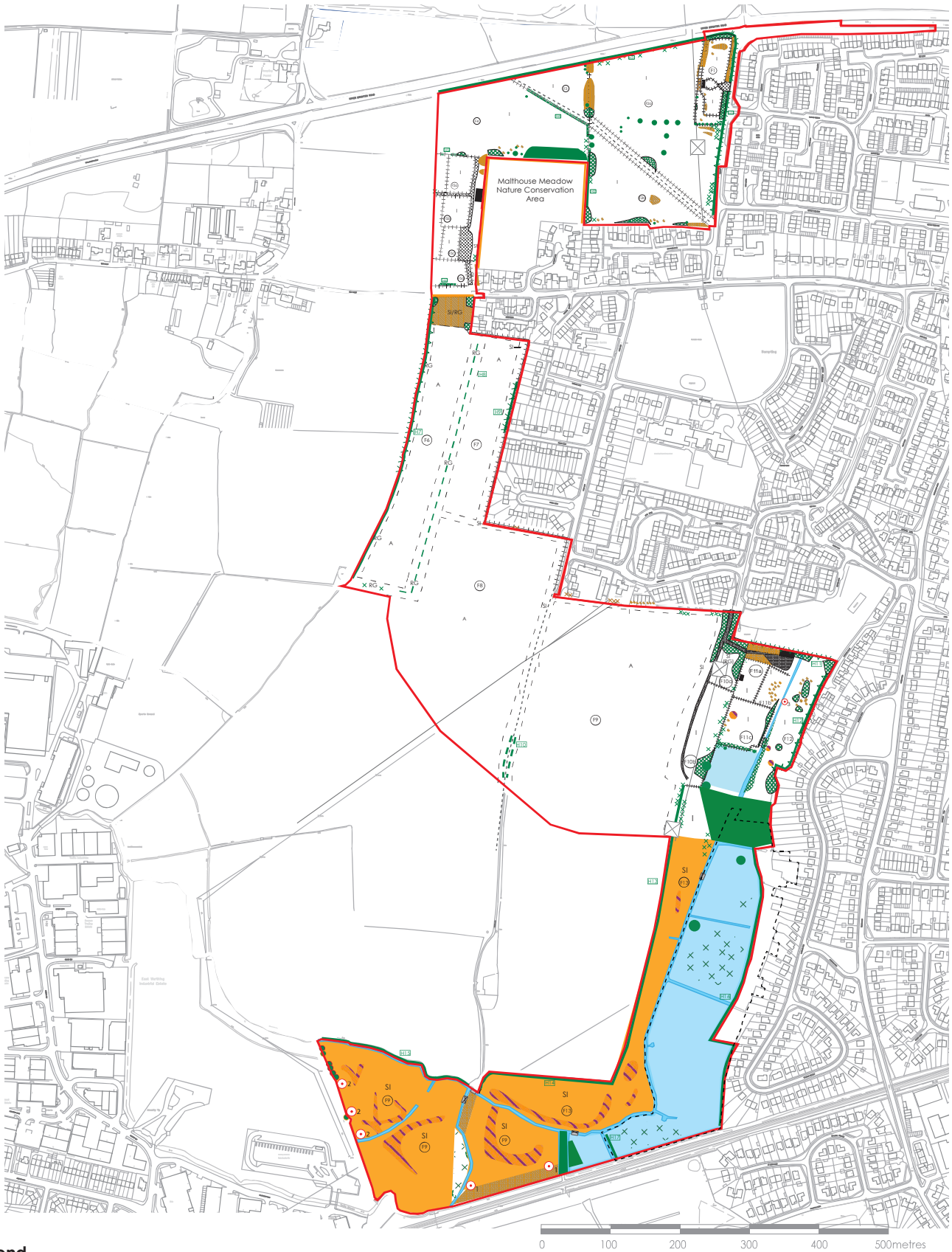
Compartment D: Extended Cokeham Brooks LWS (Confirmed July 2019)

Former Lower Cokeham Brooks Reedbed and Ditches LWS

Originally Proposed LWS Extension Based on the Adur Local Plan, 2017

Appendix B

Habitats Plan (CSA/2134/129/F)



Legend

Site Boundary	Allotment / ornamental planting	Broadleaved tree	Marshy grassland	Building
Arable	Scattered tall ruderal	Broadleaved woodland	Drain	Bridge
Improved grassland	Dense tall ruderal	Intact species-poor hedgerow	Bare ground/ hard standing	Fence
Species-poor semi-improved grassland	Ornamental shrubs	Intact species-poor hedgerow with trees	Wall	Target Notes
Species-rich semi-improved grassland	Scattered scrub	Gappy species-poor hedgerow	Lower Cokeham Reedbed and Ditches Local Wildlife Site	1 Log Pile
Rough grassland	Dense scrub	Swamp	Footpath	2 Giant hogweed
				3 Giant hogweed

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Project Land at West Sampling, West Sussex

Drawing Title Habitats Plan

Client Persimmon Homes (Thames Valley)

Date Sept 2022

Scale @ A3
See Scale Bar

Drawn AS/AW

Drawing No. CSA/2134/129

Rev E

Checked CC

Appendix C

Phase 1 Ecological Mitigation & Enhancement Plan (CSA/2134/145/C)



Site boundary	Insect box (CJ Wildlife Insect Tower or equivalent) x3 total	Hibernaculum x 1 total	House martin/swallow cup (Schwegler or equivalent) x 2 total
Bat tubes (Habitat tube or equivalent) x 3 total	Log pile / reptile refugia x 1 total	Generic bird box (Aviannex or equivalent) x1 total	Swift/sparrow brick (S Brick or equivalent) x 2 total

Appendix D

Phase 2 Ecological Mitigation & Enhancement Plan (CSA/2134/158)



Appendix E

Phase 3 Ecological Mitigation & Enhancement Plan (CSA/2134/318)