



**Land South of Adisham
Station**

**Preliminary Ecological
Appraisal**

Prepared by:
**The Environmental Dimension
Partnership Ltd**

On behalf of:
**Church Commissioners for
England**

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PLANS

Plan EDP 1: Baseline Habitat Survey
(edp8727_d001a 29 May 2024 GYo/EDe)

Section 1

Introduction

- 1.1 This Preliminary Ecological Appraisal (PEA) has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of The Church Commissioners for England (CCE). The report has been prepared to support the promotion of Land South of Adisham Station (hereafter referred to as ‘the Site’) for residential led development through the emerging Canterbury District Local Plan To 2040. The local plan is at an early stage of preparation and this report is intended to inform Representations to Canterbury City Council (CCC) to assist the preparation of the draft plan and the supporting evidence base.
- 1.2 This report has been informed and prepared with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for PEA¹.
- 1.3 EDP is an independent environmental consultancy providing advice to landowner and property development clients in the public and private sectors in the fields of landscape, ecology, heritage, arboriculture and masterplanning. The Practice operates throughout the UK from offices in Cirencester, Cheltenham and Cardiff. Details of the Practice can be obtained at www.edp-uk.co.uk.

PLANNING CONTEXT

- 1.4 The Local Planning Authority (LPA), CCC, adopted the Canterbury District Local Plan in July 2017, providing the spatial strategy to develop Canterbury district until 2031. The Council is now progressing a new Local Plan to 2040 and is currently consulting on Regulation 18 of the draft Canterbury District Local Plan to 2040, and the supporting evidence base.

SITE CONTEXT

- 1.5 The Site is centred approximately at Ordnance Survey Grid Reference (OSGR) TR 23072 53693 and is located to the south-east of the village of Adisham, which is situated in Kent.
- 1.6 The Site comprises three arable fields, bound by field margins and hedgerows. An area of poor quality, other neutral grassland is present in the south-west of the Site, and small areas of tall forbs, bramble and mixed scrub are also present within the Site, with small patches of plantation woodland and scrub adjacent to the north and western boundaries of the Site. Cooting Lane intersects the Site, with the village of Adisham located to the north and west of the Site. Adisham Road forms the eastern boundary of the Site, and Adisham train station and railway line is located along the northern boundary. The wider landscape comprises agricultural fields, with the village of Aylesham to the south-east and large woodland blocks to the south-west.

¹ CIEEM (2017). Guidelines for Preliminary Ecological Appraisal, 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

Section 2 Methodology

DESK STUDY

- 2.1 This PEA has been informed by a desk study undertaken in May 2024, which involved collation of information from the following sources:
- Kent and Medway Biological Records Centre (KMBRC);
 - Multi-Agency Geographic Information for the Countryside (MAGIC²); and
 - National Biodiversity Network (NBN) Atlas website³.
- 2.2 The following information was obtained during the desk study:
- Internationally designated sites (15km radius around the Site);
 - Statutory designated sites (5km radius); and
 - Non-statutory designated sites (2km radius).
- 2.3 These search areas are considered sufficient to cover the potential Zone of Influence, in relation to designated sites, habitats and species, of any future development.
- 2.4 At this early stage in the Site's promotion records of protected/notable species held by KMBRC were not obtained. However, the NBN Atlas was searched for any pertinent wildlife records from the local area. In addition, a search of MAGIC for any granted European Protected Species mitigation licences or records of great crested newt (*Triturus cristatus*) was completed.

BASELINE HABITAT SURVEY

- 2.5 To assess the habitats present within the Site, and advise on any potential on-site constraints, a baseline habitat survey was undertaken by a suitably experienced ecologist on 02 May 2024.
- 2.6 During the baseline habitat survey the main habitats present within the Site were classified in accordance with the habitat types referred to in the Statutory Biodiversity Metric, which primarily relies on the habitat descriptions set out in the UK Habitat Classification⁴ system, with the addition of species mapping. This level of survey requires identification of principle habitat types and the dominant plant species present. In addition, evidence of protected, notable or priority species are recorded, and the Site was assessed for its potential to

² The Multi-Agency Geographic Information for the Countryside ("MAGIC") website (www.magic.gov.uk).

³ www.nbnatlas.org

⁴ UKHab Ltd (July 2023) UK Habitat Classification Version 2.0 [<https://www.ukhab.org>]

support such species. This level of survey does not aim to compile a complete floral and faunal inventory.

- 2.7 The results of the survey are illustrated on **Plan EDP 1** and described in **Section 3**.

PRELIMINARY BIODIVERSITY NET GAIN ASSESSMENT

- 2.8 To test the proposed development's ability to deliver net biodiversity gain an indicative calculation of the net biodiversity impact using the Statutory Biodiversity Metric⁵ has been completed for area-based habitats.
- 2.9 The pre-development (baseline) biodiversity value of the Site is derived from the baseline habitat survey completed on 02 May 2024. The habitat information gathered has been used to classify the habitats in accordance with the habitat types referred to in the Statutory Biodiversity Metric, which primarily relies on the habitat descriptions set out in the UK Habitat Classification⁶ system. The condition of existing habitats was assessed against the habitat condition assessment criteria detailed within the 'Statutory Biodiversity Metric - Technical Annex 1: Condition Assessment Sheets and Methodology'.
- 2.10 The predicted post-development biodiversity value of the Site has been calculated using illustrative material prepared at the promotional stage, as presented in the Vision Document. In the absence of a fully developed green and blue infrastructure strategy for the Site, reasonable assumptions have been made using professional judgement on the type, extent and condition of habitats to be retained, enhanced, and newly created. Furthermore, indicative estimates of new hedgerow planting are provided to demonstrate the quantity required to achieve a net linear gain, which is considered achievable for a development of this size. Given the proposals are at such an early stage in their design they remain subject to change as further technical assessment and stakeholder and community engagement is completed. The preliminary biodiversity metric calculations should therefore be treated as indicative and will need to be refined as the masterplan evolves.
- 2.11 The findings of the Biodiversity Net Gain (BNG) Assessment are discussed within **Section 4** of this report.

⁵ [Statutory biodiversity metric tools and guides - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

⁶ UKHab Ltd (July 2023) UK Habitat Classification Version 2.0 [<https://www.ukhab.org>]

Section 3 Results

DESIGNATED SITES

- 3.1 Information regarding designated sites was obtained during the ecological desk study. Statutory designations (those receiving legal protection) and non-statutory designations (those receiving planning policy protection only) are discussed in the sections below.

Statutory Designations

- 3.2 Statutory designations represent the most significant ecological receptors. Internationally important statutory designations include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites (including potential SPAs, possible SACs and proposed Ramsars). These designations are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations). These designations are referred to as 'habitats sites' in the National Planning Policy Framework (NPPF, December 2023) and development which would adversely affect a habitats site (alone or in combination) cannot benefit from the NPPF presumption in favour of sustainable development.
- 3.3 Nationally important statutory designations include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs). NNRs are also SSSIs, both of which are protected under the Wildlife and Countryside Act 1981 (as amended). The NPPF states that development which would adversely affect as SSSI should not normally be permitted.
- 3.4 Local level statutory designations include Local Nature Reserves (LNRs) and are generally considered to be of importance at the County level or lower. LNRs are designated under the National Parks and Access to the Countryside Act 1949, however protection of LNRs is given via local planning policies and/or by-laws.
- 3.5 No part of the Study Area is covered by any internationally or nationally important designations. However, there are 12 internationally important designations within 15km of the Site, one nationally important designation within a 5km radius, and no county important designations within 5km of the Site. These sites are summarised in **Table EDP 3.1**.

Table EDP 3.1: Statutory Designations Within the Site's potential Zone of Influence

Designation	Approx. distance from Site	Interest Feature(s)*
Internationally Important Statutory Designated Sites (within 15km of the Site)		
Stodmarsh SPA/Ramsar/SAC	6.6km north	<p>Stodmarsh SPA:</p> <ul style="list-style-type: none"> • Great bittern (Non- Breeding); • Gadwall (Breeding and Non-Breeding); • Northern Shoveler (Non-Breeding); • Hen Harrier (Non-Breeding); • Waterbird Assemblage; and • Breeding Bird Assemblage. <p>Stodmarsh Ramsar:</p> <ul style="list-style-type: none"> • Assemblage or British Red Data book invertebrate species; • Assemblage of rare and scarce plans species; and • A diverse assemblage of rare wetland birds. <p>Stodmarsh SAC:</p> <ul style="list-style-type: none"> • Desmoulin's whorl snail.
Thanet Coast & Sandwich Bay SPA	12km east	<ul style="list-style-type: none"> • Little tern (non-breeding); • Golden plover (non-breeding); and • Turnstone (non-breeding).
Thanet Coast & Sandwich Bay Ramsar	8.8km east	<ul style="list-style-type: none"> • Assemblage or British Red Data book wetland invertebrates; and • Ruddy turnstone (non-breeding).
Sandwich Bay SAC	11.5km north-east	<p>Annex I habitats:</p> <ul style="list-style-type: none"> • Embryonic shifting dunes; • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"); • Fixed dunes with herbaceous vegetation ('grey dunes'); and • Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>).
Blean Complex SAC	10.7km north north-west at closest point	<p>Annex I habitats:</p> <ul style="list-style-type: none"> • Sub-Atlantic and medio-European oak or oak-hornbeam forests of the (<i>Carpinion betuli</i>).
Parkgate Down SAC	9.4km south-west	<p>Annex I habitats:</p> <ul style="list-style-type: none"> • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), (* important orchid sites).

Designation	Approx. distance from Site	Interest Feature(s)*
Lydden & Temple Ewell Downs SAC	7.8km south south-east	Annex I habitats: <ul style="list-style-type: none"> Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>).
Wye & Crundale Downs SAC	14.1km west south-west	Annex I Habitats: <ul style="list-style-type: none"> Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites).
Folkestone to Etchinghill Escarpment SAC	14.5km south	Annex I Habitats: <ul style="list-style-type: none"> Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites).
Dover to Kingsdown Cliffs SAC	14.8km south-east	Annex I habitats: <ul style="list-style-type: none"> Vegetated sea cliffs of the Atlantic and Baltic Coasts.
Nationally Important Statutory Designated Sites (within 5km of the Site)		
Ileden and Oxenden Woods SSSI	0.4km west south-west	Ancient woodland supporting three distinct woodland stand types, including two which are nationally rare. The rotational coppicing of large areas, combined in a mosaic with high forest stands adds to the structural diversity of the wood and has resulted in the presence of a very rich breeding bird community, including nightingale (17 pairs in 1985) and hawfinch. Two nationally rare plants also occur.

*Interest features are described in full in the relevant citation for the designated site and are summarised in this table.

Non-statutory Designations

- 3.6 Non-statutory designations are also commonly referred to in planning policies as 'local sites', although in fact these designations are typically considered to be of importance at a county level. In Oxfordshire, such designations are named Local Wildlife Sites (LWSs). Additional designated sites which should be considered at this level include Local Nature Reserves (LNRs) and Ancient Semi-natural Woodland (ASNW) where these are not covered by other designations.
- 3.7 No part of the Site is covered by any non-statutory designations, and there is just a single LWS within a 2km radius, namely Holy Innocent's Churchyard, Adisham LWS. The churchyard supports unimproved calcareous grassland, and a rich diversity of lichens (with 65 species recorded).

- 3.8 In addition to LWSs, CCC identify Biodiversity Opportunity Areas (BOA), which facilitate a landscape scale approach to nature conservation and recovery. The Site is not located within a BOA.

HABITATS

- 3.9 The distribution of the different habitat types within the Site is illustrated on **Plan EDP 1**. In addition, descriptions of these habitat types, together with illustrative photographs, are provided below.

Other Neutral Grassland

- 3.10 An area of other neutral grassland (**Image EDP 3.1**) is present in the south-west of the Site, which is unmanaged and in poor condition. Due to the lack of management, scattered bramble scrub has colonised areas. Although the grassland is in declining condition and the sward comprises less than nine species per m², this parcel of grassland meets the UKHabs definition for other neutral grassland as it has greater than 20% cover of herbs, comprises red fescue (*Festuca rubra*), which is not typically sown for intensive agriculture, and rye grasses and white clover (*Trifolium repens*) comprise less than 30% of the cover. Species abundant within the sward included cock's foot (*Dactylis glomerata*), red fescue (*Festuca rubra*) and common hogweed (*Heracleum sphondylium*). Species frequently present within the sward included wild clematis (*Clematis vitalba*) and wild strawberry (*Fragaria vesca*), agrimony (*Agrimonia eupatoria*), white clover, common dandelion (*Taraxacum officinale* agg.), bulbous buttercup (*Ranunculus bulbosus*), field madder (*Sherardia arvensis*), common field speedwell (*Veronica persica*), common mugwort (*Artemisia vulgaris*) and yarrow (*Achillea millefolium*) were occasionally present within the sward. Species which were rarely present included common bird's-foot trefoil (*Lotus corniculatus*), red clover (*Trifolium pratense*) and red deadnettle (*Lamium purpureum*).



Image EDP 3.1: Other neutral grassland in the south-west of the Site.

- 3.11 This grassland is of no more than Site level importance owing to its limited extent and species diversity.

Modified Grassland

- 3.12 The field margins of **F1** and **F2** comprised modified grassland and were c.1-3m wide. The sward was unmanaged and comprised species indicative of nutrient enrichment, which in places was dominated by tall forbs (**Image EDP 3.2**). Species present included perennial rye grass, Yorkshire fog, cock's foot, barren brome (*Bromus sterilis*), soft brome (*Bromus hordeaceus*), red fescue, broad-leaved dock (*Rumex obtusifolius*), creeping buttercup (*Ranunculus repens*), common mugwort, cow parsley (*Anthriscus sylvestris*), common hogweed, common mallow (*Malva sylvestris*), cut leaved cranesbill (*Geranium dissectum*), cleavers (*Galium aparine*), common field speedwell, white dead nettle (*Lamium album*), common dandelion (*Taraxacum officinale* agg.), common nettle (*Urtica dioica*), white clover, hoary cress (*Lepidium draba*), yarrow (*Achillea millefolium*) and bristly oxtongue (*Helminthotheca echioides*).



Image EDP 3.2: F2 field margin.



Image EDP 3.3: F1 field margin.

- 3.13 This grassland is of no more than Site level importance owing to its limited extent and species diversity.

Arable

- 3.14 The majority of the fields present within the Site comprised arable fields (**Image EDP 3.4**), used to grow cereal crops, however, field **F2** and a 10m strip of the southern edge of **F1** comprised bare earth at the time of the survey. Arable habitats are considered of negligible intrinsic ecological value, although may be of value to protected or priority species as discussed in further detail below.



Image EDP 3.4: Arable field F1.

Tall Forbs

- 3.15 Tall forbs comprised areas of field margin in **F1**, **F2** and **F3**, likely attributed to higher levels of nutrients in these areas. Species present comprised common nettle, cow parsley, cleavers, honesty (*Lunaria annua*), green alkanet (*Pentaglottis sempervirens*), common mallow, white dead nettle, hemlock (*Conium maculatum*), barren brome, field madder, crosswort (*Cruciata laevipes*), common hogweed and cock's foot (**Image EDP 3.5**). Areas of tall ruderal are considered of less than Site level importance.



Image EDP 3.5: F3 field margin dominated by ruderal species.

Scrub

- 3.16 A patch of semi-mature mixed scrub had established in field **F2** around a telegraph pole (**Image EDP 3.6**), which may be the remnants of an old hedgerow. Species present included blackthorn (*Prunus spinosa*), common hawthorn (*Crataegus monogyna*), bramble, dog rose (*Rosa canina*), field maple (*Acer campestre*), ash (*Fraxinus excelsior*) and dogwood (*Cornus sanguinea*). This habitat is of Site level importance owing to high species diversity, but limited extent.
- 3.17 Sections of field margin in fields **F2** and **F3** has become dominated by bramble scrub. This habitat is of less than Site level importance given its limited diversity.



Image EDP 3.6: Mixed scrub in field **F2**.

Hedgerows and Treelines

3.18 The majority of the Site is bound by hedgerows including several which were species-rich, comprising hedgerows **H1**, **H2**, **H4**, **H8**, **H9** and **H11**. Hedgerows **H2** and **H4** comprised double hedgerows. Species present include hawthorn, bramble, field maple (*Acer campestre*), apple (*Malus sp.*), hazel (*Corylus avellana*), dogwood (*Cornus sanguinea*), dog rose (*Rosa canina*), elder (*Sambucus nigra*), blackthorn, oak (*Quercus robur*), goat willow

(*Salix caprea*), wild cherry (*Prunus avium*), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), holly (*Ilex aquifolium*), wild clematis, honeysuckle (*Lonicera periclymenum*), wayfaring tree (*Viburnum lantana*) and horse chestnut (*Aesculus hippocastanum*) (**Image EDP 3.7**).



Image EDP 3.7: H2 double hedgerow.

- 3.19 Overall, the hedgerow network is considered to be of Local importance, providing potential wildlife dispersal routes through the landscape, with many of the hedgerows qualifying as a priority habitat.

SPECIES

Birds

- 3.20 During the baseline habitat survey skylark (*Alauda arvensis*) were observed within the arable fields within the Site.
- 3.21 The habitats present within the Site are suitable to support a range of common and widespread breeding farmland bird species, including some conservation concern species.

Bats

- 3.22 A total of eight records within 6km relating to European Protected Species Mitigation Licenses (EPSML) issued for bats were returned from the data search on MAGIC. The closest

related to the damage and destruction of a resting place for common pipistrelle, soprano pipistrelle and brown long-eared bats in 2015, located c.1.9km east of the Site.

- 3.23 The ground level tree assessment identified four 'further assessment required' (FAR) trees, with features suitable for supporting roosting bats, within the Site as shown on **Plan EDP 1**.
- 3.24 The hedgerows, grassland, scrub and field margins, as well as the adjacent off-site woodland and scrub habitats, provide suitable foraging and commuting habitats for bats.

Badgers

- 3.25 During the baseline habitat survey, evidence of badgers utilising the Site was recorded in the form of badger setts and mammal pathways. The badger setts were situated along hedgerow **H2**, within the central section between the double hedgerow, as shown on **Plan EDP 1**. Numerous entrances were recorded, with many showing signs of active use and interconnecting pathways between them, however given the time of year the survey was undertaken, dense vegetation growth prevented further inspection of many of the sett entrances.
- 3.26 **BS1** comprises a single active outlier entrance, which appeared to be well used, with some fresh spoil around the entrance. Fox scat was recorded close to the entrance, so occupation by badgers cannot be confirmed. A second disused entrance was also present.
- 3.27 **BS2** is a mature sett comprised of three entrances, likely an annex to the nearby main sett (BS3), which showed signs of being inactive (leaf litter and plant growth within the entrances) at the time of the survey.
- 3.28 **BS3** comprised c.15 visible entrances (additional entrances may be present, which were not visible due to dense vegetation growth), with many showing signs of active use such as fresh spoil at the entrance. The sett extended along c.50m of the hedgerow length. Further assessment is required to accurately map and assess the extent of the sett, which should be undertaken in winter/early-spring, when there is greater visibility.
- 3.29 In addition to opportunities for badgers to build setts within the Site, there are also habitats present which are suitable for foraging including areas of grassland, hedgerows and cereal crops depending on the cropping regime at the time.

Otter and Water Vole

- 3.30 Owing to the lack of aquatic features situated within the Site and surrounding area, it is anticipated that otter and water vole are unlikely to be utilising the Site.

Dormouse

- 3.31 One EPSML issued for dormouse was returned from within 6km of the Site by the data search on MAGIC. The record was located c.2.9km south-west of the Site and related to the impact and destruction of a breeding site and destruction of a resting place, in 2009. The NBN Atlas also returned multiple records of hazel dormouse surrounding Adisham, indicating that this species is likely present within the area.

- 3.32 The hedgerow network, adjacent woodland and scrub habitats, and well connected nearby woodland, including Ileden and Oxenden Woods SSSI, would provide suitable habitat for hazel dormouse. It is therefore considered likely that hazel dormouse may be utilising the hedgerow network within the Site for dispersal, refuge, foraging and breeding, and further survey effort should be undertaken to confirm presence/likely absence within the Site, in line with standard guidance⁷.

Other Mammal Species

- 3.33 The grassland, hedgerows and arable habitat within the Site are suitable for polecat, brown hare (*Lepus europaeus*) and European hedgehog (*Erinaceus europaeus*)⁸, and there is a reasonable likelihood that these species are present within the Site. Owing to abundance of these species within the local area and the availability of similar habitats within the wider area, any populations present within the Site are unlikely to be important above Site level.

Great Crested Newt

- 3.34 The desk study undertaken using MAGIC did not identify any EPSML granted for great crested newt, any survey licence returns, or any pond survey data (2017 – 2019), within 2km of the Site. In addition to this, no waterbodies were identified within the Site, or within 250m of the Site, indicating that great crested newts are unlikely to be utilising the Site.

Other Amphibian Species

- 3.35 Other legally protected amphibians are rare and have a very restricted distribution⁹, however, common toad (*Bufo bufo*), common frog (*Rana temporaria*) and smooth newt (*Lissotriton vulgaris*) are widespread species. The grassland, hedgerows and adjacent woodland and scrub provide suitable habitat for the foraging, dispersal and refuge of these species if present in the Site, however given the lack of nearby waterbodies, it is unlikely that significant populations are present.

Reptiles

- 3.36 The Site offers suitable habitat for the dispersal, hibernation, foraging and breeding of common reptile species within the grassland, field margins, hedgerows and scrub, as well as within the habitats adjacent to the Site, including woodland, scrub and gardens.

Invertebrates

- 3.37 Owing to the nature of habitats present, and their intensive management, it is considered unlikely that the Site will support a significant invertebrate assemblage.

⁷ English Nature (2006). The dormouse conservation handbook. Second edition.

⁸ Hedgehogs are also protected from capture or killing by specific methods under Schedule 6 of the WCA.

⁹ Natterjack toad (*Epidalea calamita*) and Northern pool frog (*Pelophylax lessonae*) are EPS, protected under WCA and Priority Species.

Section 4 Constraints and Opportunities

DESIGNATED SITES

- 4.1 To inform the promotion of the Site a preliminary high-level review of potential impacts upon those designated sites described within **Section 3** has been undertaken. The review has relied heavily on the Local Plan 2040 Habitat Regulations Assessment¹⁰ (hereafter referred as 'Local Plan HRA'), prepared in February 2024. Whilst the HRA focused on significant effects at the 'plan-level', it assesses the potential impacts to international designations arising from draft housing allocations (including Policy R12 - 'Land west of Cooting Lane and south of Station Road', located immediately adjacent to the Site) and major projects located elsewhere within the district. It therefore provides useful, up to date, evidence upon which to undertake an initial assessment of potential effects arising from the proposed development.
- 4.2 The Local Plan HRA screened out significant effects alone, or in combination, for the following European sites located within the Site's potential Zone of Influence, principally due to their distance from the CCC area and absence of reasonable effect-receptor pathways:
- Sandwich Bay SAC;
 - Parkgate Down SAC;
 - Wye & Crundale Downs SAC; and
 - Folkestone to Etchinghill Escarpment SAC.
- 4.3 It is also considered that there will be no adverse effects on any of the above designations as a result of the proposed development of the Site, due to their geographical separation and lack of ecological connectivity with the Site.
- 4.4 Of those remaining international designations within the potential Zone of Influence of the Site, the Local Plan HRA identifies the potential for significant effects, alone or in combination, for the following international designations and pathways, as discussed in further detail below:
- Dover to Kingsdown Cliffs SAC – air quality;
 - Lydden and Temple Ewell Downs SAC – air quality;
 - Thanet Coast & Sandwich Bay SPA/Ramsar – recreational pressure, and functionally linked land;
 - Blean Complex SAC – air quality; and

¹⁰ WSP (February, 2024). 'Canterbury City Council – Local Plan 2040 Habitats Regulations Assessment. HRA Supporting Information for Regulation 18 Consultation.

- Stodmarsh SPA/Ramsar/SAC – urbanisation and water quality.

Dover to Kingsdown Cliffs SAC

Air Quality

- 4.5 The western end of the Dover to Kingsdown Cliffs SAC (approximately 0.6ha of the SAC) is located within 200m of the A2 was screened into the Local Plan HRA due to potential effects arising from atmospheric pollution. However, the SAC is located almost 15km away from the Site and at such a distance it is considered highly unlikely that the proposed development will result in significant changes to average annual daily traffic along this section of the A2, and therefore significant effects can likely be ruled out. Furthermore, the Local Plan HRA acknowledges that updated transport and air quality assessments for the CCC area are not currently available for the Local Plan Regulation 18 consultation, but it rules out adverse effects based on the air quality assessment (AQA) data provided along with the Habitat Regulations Assessment for the Dover Local Plan which includes anticipated housing numbers in nearby LPA area including Canterbury. The AQA prepared for the Dover Local Plan HRA found that no ecological receptors were found to exceed NO_x thresholds, and the process contribution of both nitrogen deposition and acid deposition from the Dover Local Plan was calculated to be less than 1% of the minimum critical load (and so 'not significant'). Therefore, the data available “...provides strong evidence that the air quality changes due to traffic growth linked to the CCC Local Plan provisions are likely to be negligible¹¹”. On this basis it is considered that significant adverse effects due to air quality changes arising from the proposed development can be ruled out.

Lydden and Temple Ewell Downs SAC

Air Quality

- 4.6 Similarly, Lydden and Temple Ewell Downs SAC is considered vulnerable to air quality changes with approximately 1.4ha of the SAC located within 200m of the A2 Stodmarsh SPA/Ramsar/SAC. Significant adverse effects are also ruled out on the basis of the findings of the Dover Local Plan AQA which, consistent with the assessment of Dover to Kingsdown Cliffs SAC referred to above, also found no evidence of a significant process contribution of either nitrogen deposition or acid deposition from the Dover Local Plan.

Blean Complex SAC

Air Quality

- 4.7 The majority of this SAC is located over 200m from any roads likely to receive significant additional traffic as a result of the Local Plan however, approximately 6.7ha of Ellenden Wood SSSI and Church Wood, Blean SSSI are within 200m of the A290 north of Canterbury. In the absence of LPA-specific data on traffic increases, the Local Plan HRA uses the AQA completed by the University of Kent to support its proposed allocation (Policy C12) which predicts that air quality changes due to traffic growth (including assumptions regarding housing growth in the CCC area) are likely to be negligible.

¹¹ WSP (February, 2024). 'Canterbury City Council – Local Plan 2040 Habitats Regulations Assessment. HRA Supporting Information for Regulation 18 Consultation.

- 4.8 It is also noted that the Blean Complex SAC is located 10.7km north north-west from the Site at its closest point, and beyond the City of Canterbury. The vast majority of daily commuter traffic associated with the proposed development is expected to be into Canterbury as the largest nearby city providing opportunities for employment and leisure. It is therefore expected that the proposed development will result in negligible additional traffic flows along the section of the A290 which lies within 200m of the SAC and north of Canterbury.
- 4.9 It is therefore very likely that there will be no adverse effects on the integrity of this SAC via air quality changes associated with the proposed development.

Thanet Coast and Sandwich Bay SPA/Ramsar

Urbanisation/Recreational Pressure

- 4.10 The proposed development lies beyond the identified Zone of Influence for recreational effects (7.2km) surrounding the Thanet Coast sites (namely Thanet Coast and Sandwich Bay SPA and Thanet Coast and Sandwich Bay Ramsar), as defined by the Thanet Coast Strategic Access Management and Monitoring Plan (SAMM)¹². The potential for significant adverse effects to arise as a result of the proposed development is ruled out due to the distance between the Site and the Thanet Coast SPA/Ramsar. The proposed development also incorporates a significant provision of on-site attractive, accessible semi-natural greenspace to provide recreational opportunities on-site.

Functionally Linked Land

- 4.11 The Site is not considered to support any functional linked habitat to the Thanet Coast and Sandwich Bay SPA or Ramsar based on the nature of the habitats present within the Site and their geographic location, and the habitat requirements of the qualifying features of the SPA/Ramsar, as stated in the Local Plan HRA:
- *“Turnstone and little tern are essentially coastal species and so only likely to be exposed to environmental changes associated with potential allocations that are in close proximity to their preferred coastal habitats”;* and
 - *“Golden plover are less dependent on the coastal SPA habitats than turnstone or little tern, and several studies suggest that some areas of lowland farmland may be as important for this species as the habitats of the coastal and wetland SPAs typically associated with wintering waders...”. However, “it appears that golden plover retain an association with wetland or coastal sites, typically remaining within a few kilometres of these...”.*
- 4.12 On this basis, likely significant effects upon the Thanet Coast sites due to loss or disturbance of functionally linked land due to the proposed development can be ruled out.

¹²<https://www.thanet.gov.uk/wp-content/uploads/2018/03/Thanet-DC-SAMM-MAIN-REPORT-Final-21st-April-2016.pdf>

Stodmarsh SPA/Ramsar/SAC

Urbanisation/Recreational Pressure

- 4.13 The Stodmarsh SPA/Ramsar/SAC is located 6.6km north of the Site at its closest point. The Stodmarsh Site Improvement Plan¹³ does not identify recreational pressure or urbanisation as a threat to site integrity, and no Zone of Influence for recreational pressure has been set for the Stodmarsh sites. At a distance of 6.6km from the SAC it is considered highly unlikely that the proposed development will result in adverse effects on the designated sites due to recreational pressure and the effects of urbanisation. Any potential effects could be readily mitigated through adherence to the publicly accessible open space requirements of Policy DS24 of the Draft Canterbury District Local Plan 2040.

Water Quality

- 4.14 The Stodmarsh sites (namely the Stodmarsh SPA, Ramsar and SAC) are vulnerable to changes in water quality arising from the proposed development alone, and in combination with other developments within the catchment of the River Stour. Increased levels of nitrogen and phosphorus input to the Stodmarsh water environment is causing eutrophication at part of these designated sites, leading to unfavourable conservation status. The principal nutrient that tends to drive eutrophication in the marine environment is nitrogen, the principal nutrient that drives eutrophication in flowing freshwaters is phosphorus. In still freshwaters and many estuaries both phosphorus and nitrogen can result in eutrophication (called co-limitation).
- 4.15 Wastewater discharges from existing housing and agricultural sources are considered to be the main contributors of excessive nitrogen and phosphorus inputs to the Stodmarsh sites. In November 2020, Natural England identified that there is a likely significant effect on several internationally designated sites in the Stour Valley due to the increase in wastewater from new developments coming forward, this includes Stodmarsh SAC/SPA/Ramsar¹⁴.
- 4.16 Consequently, new developments which have potential to result in increases of nitrogen or phosphorus entering the Stodmarsh sites, i.e. proposals for overnight accommodation within the Stour Catchment, or proposals where sewage would be treated at a wastewater treatment works discharging into the River Stour, are required to achieve 'nutrient neutrality' following the methodology published by Natural England. The Site lies within the Stodmarsh SAC/SPA/Ramsar catchment area, to which Natural England's nutrient neutrality advice applies.
- 4.17 CCC have identified five wastewater treatment works that treat sewage from the area that discharge into the River Stour catchment:
- Canterbury (Sturry) WwTW;
 - Herne Bay (Great Stour) WwTW;

¹³ <https://publications.naturalengland.org.uk/publication/5749196032311296>

¹⁴ Natural England (November, 2022) Advice on Nutrient Neutrality for New Development in the Stour Catchment in Relation to Stodmarsh Designated Sites - For Local Planning Authorities.

- Westbere WwTW;
- Chartham WwTW; and
- Newnham Valley Preston WwTW.

4.18 CCC have developed a Nutrient Neutrality Mitigation Strategy¹⁵ which calculated a nutrient budget for CCC based on existing allocations in the Canterbury District Local Plan 2017, emerging allocations in the draft Canterbury District Local Plan, and with an allowance for windfall developments. Options to mitigate the predicted nutrient load across the district are provided including onsite mitigation solutions and offsetting projects. There is a presumption that large developments (greater than 300 dwellings) will be able to implement foul sewerage infrastructure in the form of an onsite treatment works. However, the strategy acknowledges that *“it is proving difficult even for larger sites to achieve complete neutrality onsite in the district (primarily due to the soil types in this part of the catchment), with most schemes still potentially requiring some level of off-site offsetting in order to achieve neutrality”*. Taking this into consideration the nutrient budget calculated for the district has adopted *“...a precautionary approach... assuming that larger sites should be included in the determination of the scale of mitigation offsetting”*. The Strategy goes on to state that *“Offsetting through any CCC scheme will be made available to large sites provided a site-specific mitigation strategy showing a significant reduction in nutrient loading from the development has been submitted and approved”*. Therefore, offsetting the increased nutrient load from the proposed development using off-site measures (such as land use changes elsewhere, or new wetland construction) will only be a suitable option to address any residual nutrient loading after the provision of a suitable onsite solution.

4.19 This position is supported by Policy DS17 of the Draft Canterbury District Local Plan 2040 which states:

“Proposed development for new overnight accommodation within the Stour Catchment, or where sewage from a development will be treated at a Wastewater Treatment Works that discharges into the River Stour or its tributaries will need to ensure that it will not have an adverse effect on the integrity of Stodmarsh SAC/SPA/Ramsar site.

Applicants will be required to comply with the relevant Nutrient Mitigation Strategies and to demonstrate that the requirements of the Habitats Regulations will be met, such as by applying the advice on Nutrient Neutrality issued by Natural England.

New development will be expected to meet the following requirements, unless alternative, suitable mitigation can be clearly evidenced and approved by the council:

Proposals for more than 300 homes must provide high quality on-site regulated wastewater treatment facilities with permit levels set at Technically Achievable Limits (TAL), together with an on-site SUDS design which removes a minimum of 50% of P and N from the surface water;

¹⁵ [Draft Canterbury District Nutrient Mitigation Strategy 2024.pdf](#)

...

(c) All other developments must integrate an on-site SUDS design which removes a minimum of 50% of P and N from the surface water, having regard for Policy DS20.”

- 4.20 To inform an Appropriate Assessment of any forthcoming planning application for the Site, the nutrient budget for the proposed development will need to be calculated using the latest nutrient neutrality calculator approved by Natural England¹⁶. Appropriate mitigation to ensure nutrient neutrality will be provided. The precise details and location of the mitigation solution will be determined based on the nutrient budget. At the promotional stage, adequate space is retained within the proposed masterplan to deliver an on-site wastewater treatment works facility, if required.
- 4.21 In conclusion, subject to achieving nutrient neutrality following the guidance above, the proposed development is capable of mitigating adverse effects on the integrity of the Stodmarsh SAC/SPA/Ramsar due to increased nutrient loading, alone or in combination. This is consistent with the conclusion of The Local Plan HRA which states that “...the incorporated policy measures and Nutrient Mitigation Strategy provide sufficient safeguards to ensure that water quality changes do not adversely affect Stodmarsh SAC, Stodmarsh SPA or Stodmarsh Ramsar...”¹⁷.

National Designations

- 4.22 The Site lies in close proximity to the Ileden and Oxenden Woods SSSI. The biggest potential threat arising as a result of the proposed development is increased recreational pressure resulting in trampling (damaging valuable ground flora), disturbance of species through visual disturbance and disturbance from dogs.
- 4.23 Through an iterative design process, the Concept Masterplan has sought to mitigate potential recreational effects through sensitive design including several key masterplanning principles as follows:
- The provision of a significant ecological buffer between the development and the SSSI;
 - The creation of a range of new semi-natural habitats including extensive areas of new woodland, and scrub/grassland/wildflower meadow mosaic; and
 - The provision of new, attractive walking routes and trails internal within the Site, passing through new woodland and meadow habitats onsite, circling around new areas for community hops growing, and with retained views to the local church.
- 4.24 Collectively these measures will provide ample opportunities for onsite recreation thereby minimising the number of visitors to the SSSI. Whilst the potential for some additional recreational usage of the SSSI as a result of the proposed development cannot be entirely avoided it is anticipated that the provision of significant areas of new, attractive, accessible green space with internal footpaths, on the doorstep of new residents, will absorb a

¹⁶ Stodmarsh SAC, Ramsar: nutrient neutrality calculator - GOV.UK (www.gov.uk)

¹⁷ WSP (February, 2024). 'Canterbury City Council – Local Plan 2040 Habitats Regulations Assessment. HRA Supporting Information for Regulation 18 Consultation.

significant proportion of the increased recreational activity, thereby mitigating the negative effects upon the SSSI.

- 4.25 Furthermore, the provision of significant areas of new woodland, scrub, and meadow grassland habitat will create new habitats suitable to support some of the designated interest features of the SSSI, such as the breeding bird community, as well as other protected/notable species known to occur locally such as dormouse, bats, reptiles, and invertebrates. The location of new habitats provided by the proposed development has been targeted along the southern and western edge of the Site to connect existing habitats off-site and create ecological corridors for the movement of wildlife through the landscape.

HABITATS

- 4.26 The majority of the habitats across the Site are of low intrinsic value being dominated by intensive arable land, with the exception of the network of hedgerows and the grassland in the south-west of the Site. There is therefore a tangible opportunity to create and enhance habitats for the benefit of local biodiversity. To ensure the protection and enhancement of biodiversity, the following principles should be given consideration within any future designs for the development within the Site:

- Retention of hedgerows, where possible, and enhancement of the existing boundary network with new native tree/scrub/hedgerow planting;
- Retention and appropriate arboricultural management of the existing tree stock, to ensure long-term viability and health of trees;
- Tree planting for visual screening, in addition to street tree planting, which will create additional resting and foraging opportunities for a range of species;
- Creation of new woodland in the west and south of the Site, to be intersected with glades and footpaths, to create opportunities for biodiversity and recreational walking opportunities for residents;
- Appropriate design of Sustainable Drainage Scheme (SuDS) features (such as varying shelf profiles and aquatic planting) to create new aquatic habitats to support amphibian breeding and increase biodiversity value;
- Creation of new wildflower-rich grassland and scrub mosaic within areas of informal Public Open Space (POS) in the south of the Site, to provide new nectar and pollen sources and foraging habitat for a range of mammals, amphibians, and reptiles;
- Restoration of the grassland in the south-west of the Site, to improve its condition through appropriate management and the creation of additional grassland nearby to create additional connected habitat for biodiversity;
- Restoration of historic traditional orchard area in the north of the Site;
- Community growing spaces, including micro allotments, kitchen gardens, potting sheds and a community hop growing space; and

- Creation of new ponds to provide new breeding and foraging habitats for amphibians, and a range of aquatic biodiversity.

SPECIES

4.27 A focused suite of detailed 'Phase 2' ecology surveys will be required to support any planning application coming forward within the Site and to inform the design of a robust masterplan. Based on the nature of the habitats present, the following suite of protected species surveys would likely be required:

- Breeding bird surveys;
- Bat activity surveys;
- Bat roost surveys (trees);
- Badger surveys;
- Dormouse surveys; and
- Reptile surveys.

4.28 The suite of surveys required would be subject to review of the final development proposals and predicted impacts, and subject to agreement with the LPA ecologist.

4.29 At this stage, the above surveys are yet to be completed, however, following review of the desk study records and habitats on-site, it is considered unlikely that the Site will support significant or atypical species or assemblages. Whilst there will inevitably be some adverse effects, in the absence of mitigation, to any on-site populations (e.g. through habitat loss, damage, or degradation, or disturbance), it is considered that a development of this size, with a large provision of green infrastructure, can readily mitigate any effects on-site. Based on the current investigations, and subject to the findings of detailed 'Phase 2' surveys and review of the final masterplan for the development, it is considered that no off-site receptor sites or mitigation sites for protected species will be required.

4.30 Based on the findings of the preliminary ecological investigations, the following Phase 2 surveys are not considered necessary to inform any future planning application:

- Water vole and otter surveys – lack of suitable onsite habitat;
- Great crested newt surveys – there are no records of great crested newts or suitable habitat for breeding within 250m of the Site; and
- Invertebrate surveys – the Site is of poor quality for invertebrates, being dominated by arable, with limited extents of grassland which lacks habitat heterogeneity/structure/maturity.

PRELIMINARY BIODIVERSITY NET GAIN ASSESSMENT

- 4.31 At this stage in the Site's promotion the concept masterplan is illustrative and therefore subject to change following further technical assessment and stakeholder and community engagement. Biodiversity net gain calculations will be rerun concurrently with the progression of the masterplan through the planning stages. To inform the current promotion of the Site an assessment of the emerging concept layout and the predicted habitat retention, loss and creation has been undertaken using the Statutory Biodiversity Metric.
- 4.32 The preliminary biodiversity net gain calculations have confirmed that the proposed development is capable of delivering a significant biodiversity net gain, far in excess of the statutory 10% net gain requirement, and the 20% net gain required within the draft Local Plan, Policy DS21 – Supporting Biodiversity Recovery. The delivery of significant biodiversity net gain on the Site which exceeds any planning or legislative requirement, is considered an additional public benefit of the proposed development.
- 4.33 The calculations are based on the assumptions made within **Paragraph 4.26**, relating to habitat creation and enhancement within the Site. Owing to the high-level nature of the proposals, the quantity of new hedgerow planting has been assumed based on professional judgement on the reasonable extent to be provided. Through careful design to minimise hedgerow losses, new planting, and enhancement of retained hedgerows, it is considered that ample opportunities are present to achieve a net gain in hedgerow units.
- 4.34 The calculations prepared at this stage are purely indicative and have been prepared in the absence of a fully developed green and blue infrastructure strategy for the proposals. The assessment will therefore need to be revisited as the masterplan develops and additional technical information becomes available, and it is likely that the overall BNG score will alter.
- 4.35 However, the assessment undertaken demonstrates that the development is capable of achieving a net gain which far exceeds the statutory requirement to deliver 10% net gain, in addition to emerging Policy DS21 which requires a minimum 20% net gain.

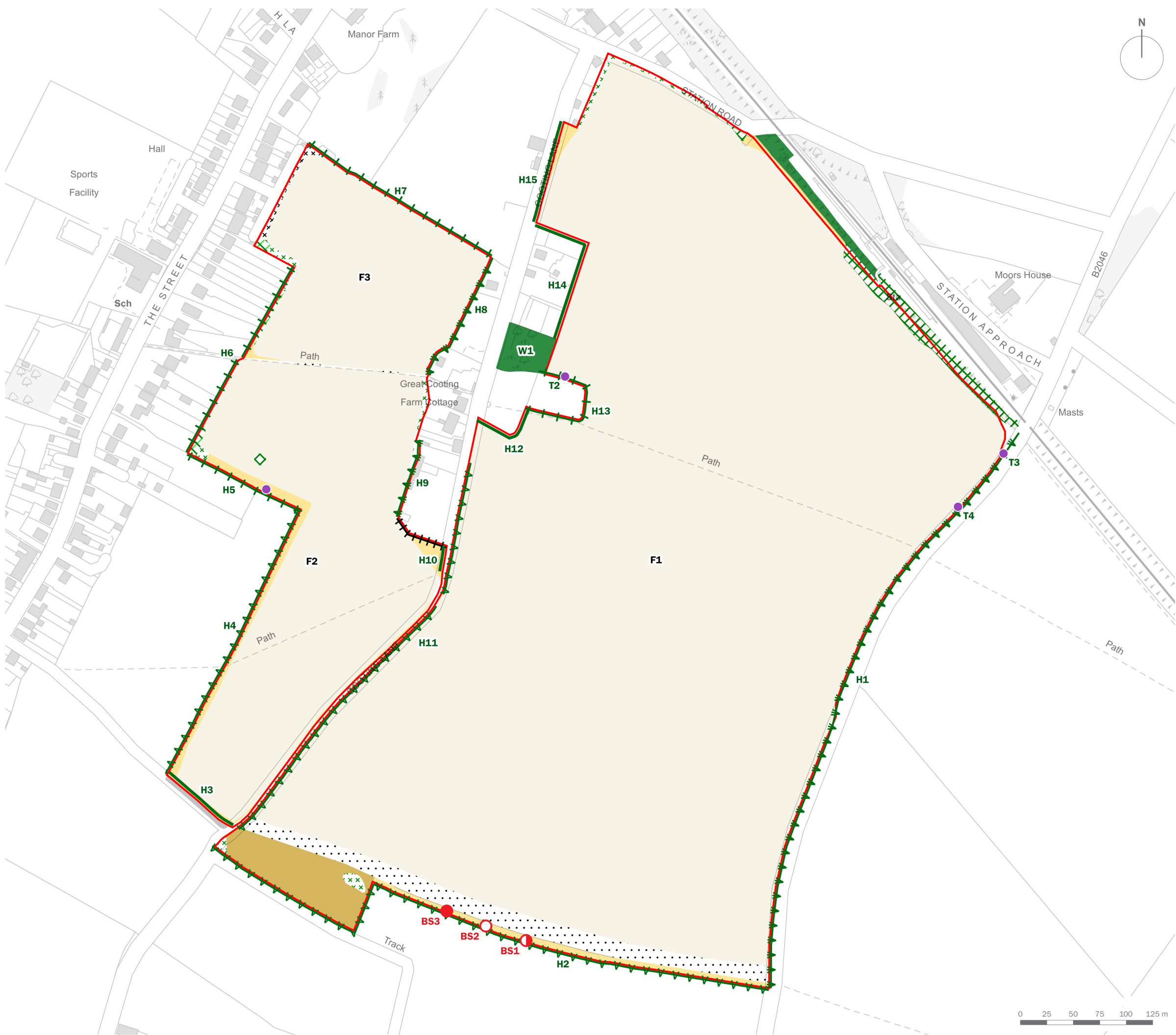
Section 5

Conclusions

- 5.1 Overall, the PEA has confirmed that the Site supports habitats of low intrinsic ecological value, with a typical suite of likely protected species interests (to be confirmed through further detailed survey). Subject to the delivery of an appropriate foul water drainage solution which achieves nutrient neutrality, there are considered to be no in-principle ecological constraints to the proposed development that cannot be mitigated.
- 5.2 Key masterplanning principles designed to safeguard the offsite Ileden and Oxenden Woods SSSI, including the provision of a sizeable buffer to development supporting semi-natural habitats and the provision of attractive on-site recreational opportunities, should be carried through to future design stages.
- 5.3 The scheme therefore has the potential to be delivered in accordance with current and emerging planning policy with regard to the natural environment. Finally, based on the indicative proposals it is anticipated that the scheme will be capable of delivering a significant net gain in biodiversity which far exceeds any statutory or policy requirement.

Plans

Plan EDP 1: Baseline Habitat Survey
(edp8727_d001a 29 May 2024 GYo/EDe)



- Site Boundary
 - Other Woodland; Broadleaved
 - Other Neutral Grassland
 - Modified Grassland
 - Cereal Crops
 - Mixed Scrub
 - Bramble Scrub
 - Ruderal/Ephemeral
 - Tall Forbs
 - Developed Land; Sealed Surface
 - Bare Ground
 - Species-rich Native Hedgerow with Trees
 - Species-rich Native Hedgerow
 - Native Hedgerow with Trees
 - Native Hedgerow
 - Fence
 - Active Main Sett
 - ◐ Active Outlier Sett
 - Annex Badger Sett
 - W1 Woodland Number
 - F1 Field Number
 - H1 Hedgerow Number
 - BS1 Badger Sett Number
- Ground Level Tree Assessment (GLTA)
- Further Assessment Required (FAR)
 - T1 Tree Number

client
Church Commissioners for England

project title
Land South of Adisham Station

drawing title
Baseline Habitat Survey

date	29 MAY 2024	drawn by	GYo
drawing number	edp8727_d001a	checked	EDE
scale	1:3,500 @ A3	QA	VMS



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