



**CLEARSTONE
ENERGY**

DARTFORD ENERGY HUB

BREEDING BIRD SURVEY REPORT

Prepared by Clearstone Energy & RSK Biocensus |
December 2024 | Document Reference: R005



Clearstone Energy

Dartford Energy Hub

Breeding Bird Survey Report

2487210-D01 (01)

NOVEMBER 2024

RSK GENERAL NOTES

Project No.: 2487210

Title: Dartford Energy Hub – Breeding Bird Survey Report

Client: Clearstone Energy

Date: November 2024

Office: Tonbridge

Status: Rev 01

	Thomas Webb,	Nick Henson
Author:		
Signature:		
Date:		
Project manager:		
Signature		
Date:	25 November 2024	Date: 25 November 2024

RSK Biocensus (RSK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and RSK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by RSK Biocensus for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of RSK and the party for whom it was prepared.

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Biocensus.

Switchboard: +44 (0)330 223 1074 Company contact: Enquiries@biocensus.co.uk

EXECUTIVE SUMMARY

This report presents the results of breeding bird surveys undertaken in relation to the proposed Dartford Energy Hub on land west of Millbrook Garden Centre, Southfleet, Kent, DA13 9PA.

The proposed development is to construct a battery energy storage system (BESS), with battery units and a substation compound with associated infrastructure, security fencing and cameras, access tracks (the 'BESS site') and associated cable connection to the national grid. The site is the area within which development would take place (and includes the proposed BESS site and cable connection) and is denoted by the planning application boundary shown in *Figure 1*.

The ecological 'survey area' included the 6.58 ha BESS site and an offsite area where habitat enhancements could take place as part of the biodiversity net gain (BNG) proposals and is shown in *Figure 2*. The survey area comprised two fields: Field 1 was identified as species-poor pasture, cut for hay and sheep-grazed; Field 2 was identified as neutral grassland managed by occasional mowing. Both fields were bounded by hedgerows with trees and woodland strips or tree lines.

These surveys were carried out to record the breeding bird populations present within the survey area, in order to inform an evaluation of the breeding bird assemblage.

Background data obtained from the Kent and Medway Biological Records Centre identified records of relevant specially protected and notable species from within 1 km of the survey area. The three field visits of the survey area and adjacent land undertaken between May and June 2024 inclusive recorded a combined total of 32 species, 24 of which were potentially breeding. Based on the species recorded, the breeding bird assemblage on the survey area is assessed as being of local level importance.

Regarding individual species, the breeding population of hobby (peak count of two, with one nest recorded) are assessed as being of up to county level importance. Breeding populations of the other bird species recorded on survey area in 2024 are considered to be of up to local level importance. Boundary features of the survey area including hedgerows with trees and woodland were of greatest value to breeding birds.

In the absence of any mitigation, the proposed development has the potential to adversely affect breeding birds through the loss, alteration and fragmentation of suitable habitat, both in the short-term and long-term. In addition, the proposed development has the potential to adversely affect breeding birds through increased disturbance. These impacts could occur during the construction and operation of the proposed development. Mitigation measures should therefore be adopted as necessary to minimise the potential for adverse effects, with the most important habitats for breeding birds within the survey area retained where reasonably practical.

Any construction works that will impact breeding habitat for bird species within the breeding season (March – August inclusive) will need to be subjected to pre-construction nesting bird checks and ECoW supervision. For those species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), disturbance buffer zones should be enacted and determined by an onsite ECoW using professional judgement. This may result in a disturbance buffer zone of 200-450 m

for any nesting hobby and potentially up to a c.50 m disturbance buffer zone for any nesting Cetti's warblers.

Habitat creation and enhancement measures should be incorporated into the design of the proposed development to account for any removal or alteration of breeding bird habitat, and to ensure the proposed development has a beneficial effect on breeding birds during operation; notably for focal species identified in this report such as hobby, dunnock, song thrush, and whitethroat.

CONTENTS

1.0 INTRODUCTION	1
1.1 Purpose of this report	1
1.2 Landscape context	1
1.3 Project background.....	2
1.4 Structure of this report.....	2
2.0 LEGISLATION AND GUIDANCE	3
2.2 Legislation	3
2.3 Guidance	4
3.0 METHODS.....	7
3.1 Desk study	7
3.2 Field surveys	7
3.3 Interpretation of survey results	8
3.4 Assumptions and limitations	10
3.5 Quality assurance.....	11
4.0 RESULTS	12
4.1 Desk study	12
4.2 Species records	12
4.3 Field surveys	13
5.0 EVALUATION	17
5.1 Overview.....	17
5.2 Designated sites	17
5.3 Conservation status.....	17
5.4 Species abundance	18
5.5 Species diversity.....	19
5.6 Survey area usage by breeding birds.....	19
5.7 Recommended mitigation.....	19
6.0 CONCLUSIONS	21
REFERENCES.....	22
FIGURES	23
APPENDIX A – SURVEY DATA	27
APPENDIX B – SURVEY AREA PHOTOGRAPHS.....	29
TABLES	
Table 1. Survey dates and weather conditions.	8
Table 2. Breeding bird assemblage importance criteria.	10
Table 3. Relevant specially protected bird species recorded within 2 km of the survey area.	12
Table 4. Summary of species recorded during the 2024 breeding bird surveys.	14
Table 5. Specially protected/notable species recorded during the 2024 breeding bird surveys.	18

FIGURES

Figure 1. Site layout plan.....	24
Figure 2. Survey area and transect route	25
Figure 3. Summary of 2024 bird survey results	236

1.0 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 This report presents the results of surveys for breeding birds undertaken in relation to the proposed Dartford Energy Hub development (hereafter referred to as 'the proposed development') on land west of Millbrook Garden Centre, Southfleet, Kent, DA13 9PA.
- 1.1.2 The proposed development is to construct a battery energy storage system (BESS), with battery units and a substation compound with associated infrastructure, security fencing and cameras, access tracks (the 'BESS site') and associated cable connection to the national grid (see section 1.2). The site is the area within which development would take place (and includes the proposed BESS site and cable connection) and is denoted by the planning application boundary shown in drawing CST010-DF4.0_rev10 Proposed Site Layout Plan (*Figure 1*).
- 1.1.3 The ecological 'survey area' included the 6.58 hectares (ha) BESS site and an offsite area where habitat enhancements could take place as part of the biodiversity net gain (BNG) proposals and is shown in *Figure 2*. The cable connection was not included in the field surveys as the route was decided after surveys started and the majority of which will be underground or within roads.
- 1.1.4 These surveys were carried out to record the breeding bird populations present within the survey area, to inform an evaluation of the breeding bird assemblage. These surveys were conducted by RSK Biocensus on behalf of Clearstone Energy.

1.2 Landscape context

- 1.2.1 The survey area comprises approximately 6.58 ha of land located either side of B262 Station Road and west of Millbrook Garden Centre at Southfleet in north Kent. The A2 dual carriageway is 200m to the north of the survey area, with the town of Northfleet and the urban Thames Estuary development corridor immediately beyond.
- 1.2.2 The survey area lies on the northern edge of the semi-rural patchwork of fields, hedgerow, woodland and settlements to the south of the A2 dual carriageway. The village of Southfleet is 800m to the south of the survey area and the hamlet of Betsham is 960m to the south-west, the villages of Bean and Instead Rise are 2km to the west and south-east respectively.
- 1.2.3 The survey area comprised two fields of permanent pasture. The field to the north of Station Road (field 1) was grazed, improved pasture and bounded by Millbrook Garden Centre to the east and DGP Logistics yard to the west. A narrow woodland corridor runs along the northern survey area boundary with Springhead Scheduled Ancient Monument (SAM) immediately beyond. Springhead SAM is designated as a nationally important Roman site.

- 1.2.4 The field to the south of Station Road (field 2) is an area of managed neutral grassland. A railway line and its associated wooded embankments lies immediately to the south of the survey area with farmland and 9 ha of horticultural polytunnels 250m beyond. High voltage power cables cross both fields.

1.3 Project background

- 1.3.1 The proposed development is the construction and operation of an Energy Hub. The project proposals comprise the installation of a battery energy storage system (BESS), with a substation area, inverter/transformer stations, site access, access gates, internal access tracks, security measures, grid connection cables and other ancillary infrastructure, together with landscaping and biodiversity enhancement measures. The development proposals are presented in drawing number CST010 – DF4.0 rev10 shown in *Figure 1*.
- 1.3.2 Breeding bird surveys undertaken on land south of the survey area and associated with the proposed Dartford Solar farm development recorded a breeding bird assemblage of district level importance (RSK 2024, unpublished). County notable populations of corn bunting (*Emberiza calandra*), and skylark (*Alauda arvensis*) were recorded along with district notable populations of linnet (*Linaria cannabina*), and yellow wagtail (*Motacilla flava*).

1.4 Structure of this report

- 1.4.1 This report is structured as follows:
- *Section 2* presents legislation and guidance relevant to breeding birds;
 - *Section 3* describes the methods adopted for data collection and interpretation;
 - *Section 4* presents the results of the desk study and field surveys;
 - *Section 5* evaluates the results of the desk study and field surveys and assesses the importance of the breeding bird populations recorded;
 - *Section 6* summarises the conclusions of the breeding bird survey report; and
 - *Figures section and appendices A-B* provide accompanying figures, field survey data and survey area photographs.

2.0 LEGISLATION AND GUIDANCE

- 2.1.1 Relevant legislation and guidance relating to breeding birds is summarised below. Such legislation and guidance have been used to inform the evaluation of the conservation statuses of the species recorded during the desk study and field surveys, and when assessing the importance of the breeding bird populations present.

2.2 Legislation

European Commission Birds Directive (2009/147/EC)

- 2.2.1 Certain UK bird species are protected at an international level under the European Commission (EC) Directive on the Conservation of Wild Birds 2009 (2009/147/EC). These species are afforded enhanced legal protection and European Union member states have a responsibility to maintain populations of these species. This Directive is transposed into English law through the Conservation of Habitats and Species Regulations 2017 (as amended)¹.
- 2.2.2 Species listed on Annex 1 of the Directive are those for which the UK Government is required to take special conservation measures (including the designation of land as Special Protection Areas) to conserve populations of these species throughout their distributions. These sites form part of the UK's national site network of core sites that are protected for rare and threatened species.
- 2.2.3 Bird species listed on Annex 1 of the Directive are those which are deemed to be:
- in danger of extinction;
 - vulnerable to specific changes to their habitats;
 - considered rare due to their small population sizes and/or restricted local distributions; and
 - in need of particular attention due to the specific nature of their habitat requirements.

Wildlife and Countryside Act 1981 (as amended)

- 2.2.4 Wild birds are protected in the UK under Section 1 of the Wildlife and Countryside Act (WCA) 1981 (as amended). This protection was extended by the Countryside Rights of Way (CROW) Act 2000. Under this legislation it is an offence to intentionally:
- kill, injure or take any wild bird;
 - take, damage or destroy the nest of any wild bird while that nest is in use or being built; and

¹ As such, the requirements of the EC Birds Directive (2009/147/EC) apply despite the UK no longer being a member state of the European Union.

- take or destroy an egg of any wild bird.

2.2.5 In addition, certain species are listed on Schedule 1 of the WCA and receive special protection under Sections 1(4) and 1(5), which confer penalties where the above-mentioned offences are committed, in addition to making it an offence to intentionally or recklessly:

- disturb any such bird whilst building its nest or whilst it is in or near a nest containing eggs or dependent young; and
- disturb the dependent young of such a bird.

Natural Environment and Rural Communities Act 2006

2.2.6 The Natural Environment and Rural Communities (NERC) Act 2006 requires local and governmental authorities and departments to have regard to the conservation of biodiversity and measures associated with public rights of way and other rural affairs.

2.2.7 Forty-nine bird species are listed as being Species of Principal Importance for conservation in England under Section 41 (S41) of the NERC Act 2006, and as such they are a material consideration during the planning process. These Species of Principal Importance are those identified as requiring action under the UK Biodiversity Action Plan (UKBAP), which continue to be regarded as species of conservation priority under the UK Post-2010 Biodiversity Framework (which succeeded the UKBAP in June 2012).

2.3 Guidance

National Planning Policy Framework

2.3.1 The National Planning Policy Framework (NPPF, 2023) sets out the Government's planning policies for England and how these are expected to be applied. This includes requirements for the contribution to and enhancement of the natural environment, including habitats and biodiversity. The NPPF specifies the obligations that local authorities and the UK Government have regarding statutory designated sites and protected species under UK and international legislation and how these are to be delivered in the planning system.

Birds of Conservation Concern

2.3.2 The Birds of Conservation Concern (BoCC) Red, Amber and Green lists categorise the UK's regularly occurring bird species according to their level of conservation concern (Stanbury *et al.*, 2021). Although these listings confer no legal protection, they are useful in guiding conservation action for individual species when birds may be affected by plans or projects.

Red list species

2.3.3 These are species of high conservation concern, including:

- species that are globally threatened according to the International Union for the Conservation of Nature (IUCN) criteria;
- species with a historical breeding decline that have not shown a substantial recent recovery;
- species that have shown a severe breeding decline over the last 25 years or longer term;
- species that have shown a severe breeding range decline over the last 25 years or longer term; and
- species whose non-breeding populations have declined over the last 25 years or longer term.

Amber list species

2.3.4 These are species of medium conservation concern, including:

- species of European Conservation Concern;
- species whose populations have declined historically but which have made a substantial recent recovery;
- species whose breeding populations have declined moderately over the last 25 years or longer term;
- species that have shown a moderate breeding range decline over the last 25 years or longer term;
- species whose non-breeding populations have declined moderately over the last 25 years or longer term; and
- rare breeders or non-breeding rarity species with internationally important or localised populations.

Green list species

2.3.5 Green list species fulfil none of the criteria detailed above. As such, they have stable or increasing populations and are not currently of conservation concern.

2.3.6 Non-native species such as Canada goose (*Branta canadensis*) are not afforded Red, Amber or Green list status.

Kent Biodiversity Action Plan

- 2.3.7 The Kent Biodiversity Action Plan (BAP) set out habitats and species of particular conservation value within the county in order to raise awareness of biodiversity issues and provide a mechanism through which conservation targets for these habitats and species could be delivered within the county (Kent Biodiversity Action Plan Steering Group, 1997). The Kent BAP included Habitat Action Plans for woodland and scrub, hedgerows and lowland farmland. It also included a specific Species Action Plan for nightingale (*Luscinia megarhynchos*).
- 2.3.8 The Kent BAP has since been superseded by the adoption of the Habitats and Species of Principal Importance covered under S41 of the NERC Act 2006 (as described in *Section 2.2.7*).

3.0 METHODS

3.1 Desk study

- 3.1.1 A desk-based review was undertaken to identify any international statutory designated sites with features of ornithological interest (e.g. Special Protection Areas (SPAs) or Ramsar sites) within 10 km of the survey area, and any relevant national statutory designated sites (e.g. Sites of Special Scientific Interest (SSSIs)) within 2 km of the survey area. This review was undertaken using the Multi-Agency Geographic Information for the Countryside (MAGIC) website.
- 3.1.2 To provide supplementary data on bird species known to be present in the vicinity, ornithological records from within the survey area and a 1 km buffer were obtained from the Kent and Medway Biological Records Centre (KMBRC) in March 2023.

3.2 Field surveys

- 3.2.1 The field surveys for breeding birds were undertaken between May and June 2024 inclusive in accordance with the *Bird Survey Guidelines for Assessing Ecological Impacts* (BSG) (Bird Survey and Assessment Steering Group, 2023). These comprised a series of three visits during which suitably experienced ornithologists walked a pre-determined transect route throughout the survey area. This differs slightly from the guidance which recommends six visits, but due to the size of the survey area, its location, and the relatively low value habitats present, three visits were deemed sufficient and appropriate to assess the breeding bird assemblage within the survey area.
- 3.2.2 The transect route followed during the surveys is indicated in *Figure 12*. The transect route extended throughout both fields, following the field margins, woodland and hedgerows. Any specially protected and notable bird species encountered within 50 m of the survey area boundary were also recorded. The transect route was interspersed with stops, during which the ornithologist scanned for birds using optical equipment. The direction in which the transect route was walked was alternated between survey visits so that different areas of the survey area were surveyed at different times of day.
- 3.2.3 All bird species encountered (either visually or through their vocalisations) were recorded onto ArcGIS Field Maps software using standard British Trust for Ornithology (BTO) species codes and behaviour notation (Marchant, 1983). Any noteworthy observations within 50 m of the survey area boundary were recorded. Particular attention was paid to recording evidence of breeding by specially protected and notable species (see *Section 3.3.6*).
- 3.2.4 Survey visits were scheduled to take place throughout the breeding season, focusing on times at which relevant specially protected and notable species were most likely to be recorded. Survey visits were predominantly undertaken in suitable weather conditions, avoiding extreme temperatures, heavy rain, snow, or fog during which bird activity may

be atypical and surveying may be impractical. The dates, timings, and weather conditions for the six survey visits are indicated in *Table 1*.

Table 1. Survey dates and weather conditions.

Visit no.	Date	Timing	Temp. (°C)	Weather conditions
1	08/05/24	5:00-6:55	9-10	Overcast (8 oktas), light air (BF1), dry, good visibility
2	28/05/24	4:30-6:25	11-12	Largely overcast (7 oktas), light breeze (BF2), dry, good visibility
3	18/06/24	4:15-6:50	11-14	Partly cloudy (5 oktas), light air (BF1), dry, good visibility

3.3 Interpretation of survey results

Assessment of breeding status

- 3.3.1 The results from the three survey visits were used to assess the breeding statuses of the bird species recorded, in accordance with the criteria presented in Gilbert *et al.* (1998)² and taking into consideration understanding of the breeding ecology of the species in question. These criteria are based on the principle that many species are territorial during the breeding season and, as such, observation of certain behaviours (e.g. singing, displaying, aggressive interactions) can be used to infer breeding or likely breeding by a given species.
- 3.3.2 Breeding by a particular species within the survey area can be assessed as being 'Confirmed' if:
- a nest or used nest was found;
 - a nest with young was seen or heard;
 - recently-fledged young were seen or heard;
 - adults were seen entering or leaving a nest site, or an adult was seen incubating; or
 - a territory was positively identified due to the number and type of observations recorded (i.e. a combination of observations of a male singing from the same area of suitable nesting habitat on multiple occasions, adults seen visiting a probable nest site at that location and/or observation of a pair at that location).
- 3.3.3 Breeding by a particular species within the survey area can be assessed as being 'Probable' if:
- nest-building was observed;
 - a bird was seen visiting a probable nest site on a single occasion;

² As summarised at: <https://www.bto.org/our-science/projects/birdatlas/methods/breeding-evidence> [accessed 23/07/2024].

- agitated behaviour or alarm calls were observed in or near suitable nesting habitat;
- a pair was seen in suitable nesting habitat during the breeding season;
- courtship and/or display were seen; or
- a male was heard singing in the same location on two or more occasions;

3.3.4 Breeding by a particular species within the survey area can be assessed as being 'Possible' if:

- birds were seen in or near suitable nesting habitat during the breeding season; or
- a male was heard singing on one occasion during the breeding season.

3.3.5 Species not observed exhibiting the behaviours above are assessed as 'Non-breeding'.

Conservation status

3.3.6 The assessment of the importance of the breeding bird populations recorded took into consideration the conservation statuses of the species recorded. Species afforded special statutory protection or included on lists of species of conservation interest were evaluated. These included:

- Wildlife and Countryside Act 1981 (as amended) Schedule 1 species;
- EC Birds Directive (2009/147/EC) Annex 1 species;
- NERC Act 2006 S41 Species of Principal Importance; and
- BoCC Red and Amber list species.

Species abundance

3.3.7 The importance of the breeding bird populations recorded was assessed in the context of the sizes of those populations relative to international, national, and regional population estimates for the species in question.

3.3.8 International 1% population thresholds (i.e., the size at which a population is assessed as being of international importance, as it comprises over 1% of the international population for a given species) were obtained from Wetlands International³.

3.3.9 National 1% population thresholds (i.e., the size at which a population is assessed as being of national importance, as it comprises over 1% of the national population for a given species) were calculated from the national population estimates detailed by Woodward *et al.* (2020).

3.3.10 Assessment of county, district or local importance was based on professional judgement and in reference to county population data detailed within the *Kent Bird Report 2021* (Kent Ornithological Society, 2023).

³ As detailed by Wetlands International. Available at: [Waterbird Population Estimates \(wetlands.org\)](https://www.wetlands.org/) (accessed 22/12/2023).

Species diversity

- 3.3.11 The importance of the breeding bird assemblage recorded within the survey area was assessed according to its level of species diversity, in reference to the criteria described by Fuller (1980), as indicated in *Table 2* below.
- 3.3.12 It should be recognised that breeding birds have undergone widespread decline since these criteria were devised. As such, the qualifying number of species for a given importance category proposed by Fuller (1980) is now considered to be relatively high. This disparity is taken into account within the adapted importance criteria indicated in *Table 2* below.

Table 2. Breeding bird assemblage importance criteria.

Breeding bird assemblage importance category	Number of breeding bird species recorded	
	Fuller (1980) criteria	Adapted criteria
National	More than 85	More than 85
Regional	70-84	70-84
County	50-69	50-69
District	-	25-49
Local	25-49	Fewer than 25

3.4 Assumptions and limitations

- 3.4.1 Field surveys for breeding birds were undertaken at appropriate times of day and in predominantly suitable weather conditions. Considering the extents and types of the habitats present within and immediately adjacent to the survey area, and the species for which the survey area is potentially suitable, the three visits conducted between May and June 2024 are considered sufficient to record the breeding bird populations present.
- 3.4.2 Whilst desk study data are useful in providing supplementary ecological information for a survey area, it should be acknowledged that these data are dependent on the submission of records to the relevant organisation. As such, a lack of records for a particular species does not necessarily mean that the species is absent from the survey area and/or wider search area. Similarly, records of a particular species do not necessarily mean that the species is still present within the survey area and/or wider search area.
- 3.4.3 It should be noted that ecological features (e.g., bird populations) are transient, and that the distributions of habitats and species may be subject to change. As such, in line with Chartered Institute of Ecology and Environmental Management (CIEEM) guidance, the ecological survey data presented in this report are considered valid for two years (CIEEM, 2019), after which it may be necessary for further field surveys to be undertaken.

3.5 Quality assurance

- 3.5.1 These surveys and reporting were undertaken by RSK Biocensus ornithologists who are experienced in conducting ornithology work in relevant habitats. These ornithologists are CIEEM members at the appropriate level and follow their code of professional conduct when undertaking ecological work.
- 3.5.2 This work was led by Thomas Webb BSc (Hons.), MSc, Ornithologist at RSK Biocensus. Thomas has over three years of consultancy experience and over seven years of birdwatching experience. His work has primarily focused on ornithological surveys, impact assessment and habitat management in the UK, during which he has frequently led ornithological assessments and surveys for a variety of species.

4.0 RESULTS

4.1 Desk study

Designated sites

- 4.1.1 The desk study identified one internationally designated site with features of ornithological interest within 10 km of the survey area: Thames Estuary and Marshes SPA and Ramsar site, located approximately 5.5 km east of the survey area. This internationally designated site qualifies on account of its wintering and passage bird populations and is therefore not relevant to the survey area in a breeding context.
- 4.1.2 The desk study identified one nationally designated site with features of ornithological interest within 2 km of the survey area: Swanscombe Peninsula SSSI, located approximately 0.5 km north of the survey area. This nationally designated site is notified, in part, for its breeding bird assemblage, characteristic of lowland open water and lowland scrub. Notable species recorded include bullfinch (*Pyrrhula pyrrhula*), Cetti's warbler (*Cettia cetti*), garden warbler (*Sylvia borin*), grasshopper warbler (*Locustella naevia*), lesser whitethroat (*Sylvia curruca*), linnet (*Linaria cannabina*), and nightingale.

4.2 Species records

Data obtained from KMBRC in March 2023 and updated in November 2024 included records of various bird species which could potentially be present within or in close proximity to the survey area in a breeding context (see *Table 3* below). These included species listed on WCA Schedule 1, Annex 1 of the EC Birds Directive, NERC S41 Species of Principal Importance and BoCC Red and Amber listed species.

Table 3. Relevant specially protected bird species recorded within 2 km of the site.

Common name	Scientific name	Conservation status	Most recent record
Greylag goose	<i>Anser anser</i>	Amber	2018
Hobby	<i>Falco subbuteo</i>	Schedule 1	2016
Peregrine	<i>Falco peregrinus</i>	Schedule 1, Annex 1	2018

Annex 1: EC Birds Directive (2009/147/EC) Annex 1 species

Schedule 1: Wildlife and Countryside Act 1981 (as amended) Schedule 1 species

GB RDB: IUCN Red list species

S41: NERC Act 2006 S41 Species of Principal Importance

Red: BoCC Red list species.

Amber: BoCC Amber list species

4.3 Field surveys

4.3.1 A total of 32 bird species were recorded during the field surveys undertaken between May and June 2024 inclusive. Peak counts (i.e., the maximum number of birds recorded during a single survey visit) are summarised in *Table 4*, with descriptions provided for specially protected and notable species. Full breeding bird survey data are provided in *Appendix A*.

4.3.2 In summary, in reference to the criteria described in *Section 3.3*, the breeding statuses of the species recorded within and adjacent to the survey area were as follows:

- Confirmed: seven species;
- Probable: nine species;
- Possible: eight species; and
- Non-breeding: eight species.

Table 4. Summary of species recorded during the 2024 breeding bird surveys.

BTO code	Species		Breeding status	Peak count	Description
	Common name	Scientific name			
B.	Blackbird	<i>Turdus merula</i>	Probable	6	
BC	Blackcap	<i>Sylvia atricapilla</i>	Probable	7	
BH	Black-headed gull	<i>Chroicocephalus ridibundus</i>	Non-breeding	3	Recorded flying over the site in small numbers.
BT	Blue tit	<i>Cyanistes caeruleus</i>	Confirmed	18	A family group with at least four juveniles was recorded on visit two (28.05.24).
BZ	Buzzard	<i>Buteo buteo</i>	Possible	2	One recorded flying over the site calling and one recorded perching within the small section of woodland on the northern boundary of field 1.
C.	Carrion crow	<i>Corvus corone</i>	Possible	7	
CA	Cormorant	<i>Phalacrocorax carbo</i>	Non-breeding	1	Recorded flying over the site on one occasion (visit three: 18.06.24).
CC	Chiffchaff	<i>Phylloscopus collybita</i>	Probable	4	
CH	Chaffinch	<i>Fringilla coelebs</i>	Possible	1	
CW	Cetti's warbler	<i>Cettia cetti</i>	Possible	1	One individual recorded singing within scrub on the northern boundary of field 1 on visit one (08.05.24).
D.	Dunnock	<i>Prunella modularis</i>	Probable	11	Seven territories confirmed within hedgerow, scrub, and woodland on the boundaries of both fields. Peak of 11 singing males on visit one (08.05.24).
GC	Goldcrest	<i>Regulus regulus</i>	Possible	1	
GO	Goldfinch	<i>Carduelis carduelis</i>	Probable	23	
GR	Greenfinch	<i>Chloris chloris</i>	Possible	1	One male recorded singing within a hedgerow on the entrance to the Millbrook Garden Centre on visit three (18.06.24).
GS	Great spotted woodpecker	<i>Dendrocopos major</i>	Possible	1	

BTO code	Species		Breeding status	Peak count	Description
	Common name	Scientific name			
GT	Great tit	<i>Parus major</i>	Confirmed	6	A family group with at least three juveniles was recorded within woodland on the northern boundary of field 1 (18.06.24).
HG	Herring gull	<i>Larus argentatus</i>	Non-breeding	14	Recorded flying over the site in small numbers.
HY	Hobby	<i>Falco subbuteo</i>	Confirmed	2	A pair was recorded displaying courtship behaviour on visit one (08.05.24) with a nest confirmed on the subsequent visits within woodland on the northern boundary of field 1. One adult was recorded landing on the nest on visit three (08.06.24).
JD	Jackdaw	<i>Coloeus monedula</i>	Confirmed	5	A family group recorded within trees towards the very western end of field 1 on visit two (28.05.24). Juveniles were heard calling with adults seen feeding young.
K	Kestrel	<i>Falco tinnunculus</i>	Non-breeding	1	One individual was recorded hunting over field 1 on one occasion (18.06.24).
LT	Long-tailed tit	<i>Aegithalos caudatus</i>	Confirmed	5	A family group was recorded within a tree in field 1 on visit three (18.06.24).
MG	Magpie	<i>Pica pica</i>	Confirmed	10	A family group was recorded foraging in field 2 on visit three (18.06.24).
PW	Pied wagtail	<i>Motacilla alba</i>	Non-breeding	3	Recorded flying over the site on visit two (28.05.24).
R.	Robin	<i>Erithacus rubecula</i>	Confirmed	14	Recorded singing across all boundary habitats within the site, with a juvenile recorded on visit two (28.05.24).
RI	Ring-necked parakeet	<i>Psittacula krameri</i>	Non-breeding	1	
RL	Red-legged partridge	<i>Alectoris rufa</i>	Possible	1	
SD	Stock dove	<i>Columba oenas</i>	Non-breeding	1	Recorded flying over the site on one occasion (08.05.24).
SG	Starling	<i>Sturnus vulgaris</i>	Non-breeding	17	Recorded flying over the site on multiple occasions, one of which was recorded carrying nest material (08.05.24).

BTO code	Species		Breeding status	Peak count	Description
	Common name	Scientific name			
ST	Song thrush	<i>Turdus philomelos</i>	Probable	4	Two confirmed territories within woodland blocks the boundaries of field 1 and 2. A peak of four singing males was recorded on 08.05.24.
WH	Whitethroat	<i>Sylvia communis</i>	Probable	4	Three confirmed territories recorded within scrub and hedges. Peak of four singing males recorded on 18.06.24.
WP	Woodpigeon	<i>Columba palumbus</i>	Probable	36	Four confirmed territories recorded within wooded areas.
WR	Wren	<i>Troglodytes troglodytes</i>	Probable	10	11 confirmed territories recorded within woodland and hedgerows on the boundaries of field 1 and 2.

5.0 EVALUATION

5.1 Overview

- 5.1.1 The assessment of the importance of the breeding bird populations recorded within and adjacent to the survey area during the field surveys undertaken between May and June 2024 is provided below, taking into consideration:
- Their relevance to any nearby designated sites with features of ornithological interest;
 - The conservation statuses of the species recorded (i.e., their inclusion on the legislation and guidance described in *Section 2* of this report);
 - The sizes of the populations of the species recorded (i.e., species abundance);
 - The overall diversity of the breeding bird assemblage (i.e., species diversity); and
 - The spatial patterns of breeding bird usage of the survey area, including any areas of particular importance to breeding bird populations.

5.2 Designated sites

- 5.2.1 As described in *Section 4.1.1*, no relevant internationally designated sites with features of ornithological interest (breeding) were identified within 10 km of the survey area.
- 5.2.2 The desk study identified one nationally designated site with features of ornithological interest within 2 km of the survey area: Swanscombe Peninsula SSSI, located approximately 0.5 km north of the survey area. One of the breeding bird species that form part of the breeding bird assemblage that gives the SSSI its designation was recorded possibly breeding within the survey area in 2024; Cetti's warbler (peak count of 1, with one possible territory recorded). Considering the numbers recorded within the survey area, the distance between the survey area and the Swanscombe Peninsula SSSI, and the typical movement patterns of this species, the breeding Cetti's warbler population using the survey area is not considered to potentially be integral to the Cetti's warbler population of the SSSI.

5.3 Conservation status

- 5.3.1 Of the 32 species recorded during the 2024 field surveys for breeding birds, the majority comprised common and widespread species typical of lowland farmland. Thirteen of the 32 species are included within the legislation and guidance described in *Section 2* of this report (as indicated in *Table 5* below).

Table 5. Specially protected/notable species recorded during the 2024 breeding bird surveys.

Species	Breeding status	Conservation status category				
		Annex 1	Sch. 1	S41	Red	Amber
Black-headed gull	Non-breeding	-	-	-	-	✓
Cetti's warbler	Possible	-	✓	-	-	-
Dunnoch	Probable	-	-	✓	-	✓
Greenfinch	Possible	-	-	-	✓	-
Herring gull	Non-breeding	-	-	✓	✓	-
Hobby	Confirmed	-	✓	-	-	-
Kestrel	Non-breeding	-	-	-	-	✓
Stock dove	Non-breeding	-	-	-	-	✓
Starling	Non-breeding	-	-	✓	✓	-
Song thrush	Probable	-	-	✓	-	✓
Whitethroat	Probable	-	-	-	-	✓
Woodpigeon	Probable	-	-	-	-	✓
Wren	Probable	-	-	-	-	✓

5.3.2 In summary, the 32 species recorded included:

- Two WCA Schedule 1 species;
- Four NERC S41 Species of Principal Importance;
- Three BoCC Red list species; and
- Eight BoCC Amber list species.

5.4 Species abundance

5.4.1 Based on the peak counts and the number of territories recorded for the species encountered during the 2024 field surveys, no species are assessed as being present within the survey area in numbers of international or national importance.

5.4.2 In reference to the Kent Bird Report 2021 and professional judgement, the populations of the following species recorded in 2024 are considered to potentially be of county level importance:

- **Hobby** (peak count of two; with one pair and a nest recorded): breeding summer visitor and passage migrant in Kent. Birds recorded throughout the summer in Kent suggesting at least 22 pairs at 20 sites. Considering the confirmed pair/nest recorded on survey area in the context of the 2021 counts for important sites for this species, the breeding population of hobby recorded on survey area is considered to be of **up to county level importance**.

- 5.4.3 Considering their conservation statuses and the numbers recorded during the field surveys, populations of the other bird species recorded on survey area in 2024 are considered to be of up to local level importance.

5.5 Species diversity

- 5.5.1 A total of 24 species were recorded breeding or potentially breeding during the 2024 surveys for breeding birds. In accordance with the guidance described in *Section 3.3.11*, the breeding bird assemblage recorded is considered to be of **local level importance**. This assemblage included a range of common and widespread birds with a limited number of scarce and/or declining bird species including hobby, dunnock, song thrush, and whitethroat.

5.6 Survey area usage by breeding birds

- 5.6.1 Observations of focal breeding bird species (i.e., those of particular relevance to the proposed development due to their conservation status and/or abundance) are indicated in *Figure 3*. Survey area photographs are provided in *Appendix B*.
- 5.6.2 The margins of field 1 and 2 were used by the majority of the breeding species recorded over the surveys. The hedgerows, scrub, and woodland were of particular value to song thrush, Cetti's warbler, whitethroat, and dunnock with more mature trees being used by a nesting pair of hobby.
- 5.6.3 The grassland that made up the majority of the survey area in field 1 and 2 was not utilised by ground nesting bird species. The proximity of the fields to tall structures (such as woodland edges, hedgerows, and pylons), and urban areas and associated infrastructure may explain the absence of nesting skylark (*Alauda arvensis*). Both fields are additionally subject to frequent anthropogenic disturbance as field 1 was used for a circus just prior to the beginning of the surveys and the eastern part of field 2 was used as a car park during the course of the surveys.

5.7 Recommended mitigation

- 5.7.1 In the absence of any mitigation, the proposed development has the potential to adversely affect breeding birds through the loss, alteration and fragmentation of suitable habitat, both in the short-term and long-term. In addition, the proposed development has the potential to adversely affect breeding birds through increased disturbance. These impacts could occur during the construction, and operation of the proposed development. Mitigation measures should therefore be adopted as necessary to minimise the potential for adverse effects.
- 5.7.2 All important sites for breeding birds should, where possible, be maintained as part of the proposals including the boundary hedgerows and associated scrub, treelines and woodland. Any construction works that will impact breeding habitat for bird species within the breeding season (March – August inclusive) will need to be subject to nesting bird checks and Ecological Clerk of Works (ECoW) supervision in order to comply with the

Wildlife and Countryside Act 1981 (as amended). Some species are afforded additional protection against disturbance under Schedule 1 of said legislation (i.e., hobby and Cetti's warbler) which will need to be considered further during construction with any disturbance buffer zones enacted where required.

- 5.7.3 According to a review of disturbance distances for selected bird species (Goodship & Furness, 2022), the disturbance buffer zone for construction works during the breeding season for hobby is 200-450 m. It should be noted that the upper value from this range is taken as the default distance unless there are sufficient justifications for lowering it. This would include the presence of an already high baseline of disturbance, good screening between the development and the nest site, low noise and dust from construction activities etc. The buffer zone should be determined by an onsite ECoW using professional judgement. If disturbance as a result of the proposed development is unavoidable, then a relevant licence will need to be obtained from Natural England to continue with the works.
- 5.7.4 There is currently no guidance in relation to disturbance buffer zones for Cetti's warbler and so the distance will depend on the scale and invasiveness of the works. The buffer zone should be determined by an onsite ECoW using professional judgement and could extend to c.50 m. Cetti's warbler licences are rare and are generally for conservation or scientific projects and as such a licence is unlikely to be required. Where a Cetti's warbler nest/territory is identified, all efforts should be made to safeguard against disturbance.
- 5.7.5 Habitat creation and enhancement measures should be incorporated into the design of the proposed development to account for any removal or alteration of breeding bird habitat, and to ensure the proposed development has a beneficial effect on breeding birds during operation; notably for focal species identified in this report such as Cetti's warbler, dunnock, hobby, song thrush, and whitethroat.

6.0 CONCLUSIONS

- 6.1.1 The surveys for breeding birds undertaken between May and June 2024 inclusive to inform the proposed development recorded a total of 32 bird species, 24 of which were breeding or potentially breeding within or in close proximity to the survey area. These included two species included on WCA Schedule 1 (Cetti's warbler and hobby), four NERC S41 Species of Principal Importance, three species included on the BoCC Red list, and eight species included on the BoCC Amber list.
- 6.1.2 Based on the breeding bird species diversity recorded in 2024, the breeding bird assemblage is considered to be of local level importance. Breeding populations of hobby recorded within the survey area are considered to be of county level importance. Breeding populations of the other bird species recorded within the survey area in 2024 are considered to be of up to local level importance.
- 6.1.3 In the absence of any mitigation, the proposed development has the potential to adversely affect breeding birds through the loss, alteration and fragmentation of suitable habitat, both in the short-term and long-term. In addition, the proposed development has the potential to adversely affect breeding birds through increased disturbance. These impacts could occur during the construction and operation of the proposed development. Mitigation measures should therefore be adopted as necessary to minimise the potential for adverse effects, with the most important habitats for breeding birds within the survey area retained where reasonably practical.
- 6.1.4 Any construction works that will impact breeding habitat for bird species within the breeding season (March – August inclusive) will need to be subjected to pre-construction nesting bird checks and ECoW supervision. For those species listed under Schedule 1 of the Wildlife and Countryside Act 1981, disturbance buffer zones should be enacted and determined by an onsite ECoW using qualified and professional judgement. This will likely result in a disturbance buffer zone of 200-450 m for any nesting hobbys and up to c.50 m disturbance buffer zone for any nesting Cetti's warblers.
- 6.1.5 Habitat creation and enhancement measures should be incorporated into the design of the proposed development to account for any removal or alteration of breeding bird habitat, and to ensure the proposed development has a beneficial effect on breeding birds during operation; notably for focal species identified in this report such as hobby, dunnock, song thrush, and whitethroat.

REFERENCES

- Bird Survey and Assessment Steering Group. (2023) *Bird Survey Guidelines for assessing ecological impacts*, v.0.1.6. [Available at: [Bird Survey Guidelines | for ecological impact assessment](#) – accessed 23/07/2024].
- CIEEM. (2018) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1 – Updated September 2019*. [Available at: [Guidelines for Ecological Impact Assessment \(EcIA\) | CIEEM](#) – accessed 23/07/2024].
- CIEEM. (2019) *Advice Note on the lifespan of ecological surveys and reports*. [Available at: [Advice-Note.pdf \(cieem.net\)](#) – accessed 23/07/2024].
- The Conservation of Habitats and Species Regulations 2017 (as amended). London: HMSO.
- Council of the European Communities. (2009) *Directive 2009/147/EC of the European Parliament and of the Council of 20 November 2009 on the conservation of wild birds (codified version)*. Official Journal of the European Communities, 20 (2009), 7-25.
- Gilbert, G., Gibbons, D. W., & Evans, J. (1998) *Bird Monitoring Methods: a manual of techniques for key UK species*. RSPB.
- Goodship, N.M. & Furness, R.W. (MacArthur Green) (2022) *Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species*. NatureScot Research Report, 1283.
- Kent Biodiversity Action Plan Steering Group (1997) *The Kent Biodiversity Action Plan: a framework for the future of Kent's Wildlife*. Kent County Council, Maidstone.
- Kent Ornithological Society (KOS) (2023) *Kent Bird Report 2021*. 70th Annual Report. Published by KOS.
- Marchant, J.H. (1983) *BTO Common Birds Census instructions*. BTO, Tring.
- National Planning Policy Framework. (2023) London: HMSO. [Available at: [National Planning Policy Framework - GOV.UK \(www.gov.uk\)](#) – accessed 23/07/2024].
- Natural Environment and Rural Communities Act (2006). [Available at: <https://www.legislation.gov.uk/ukpga/2006/16/contents> – accessed 23/07/2024].
- RSPB. (2010) *Wild birds and the law, England, and Wales*. RSPB.
- RSK Biocensus (2024) *North Kent Solar Farm Ecological Appraisal – February 2024*, RSK Biocensus
- Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I. (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114: 723-747. [Available at: <https://bou.org.uk/blog-birds-of-conservation-concern-5/> – accessed 23/07/2024].
- Wildlife and Countryside Act 1981 (as amended). London: HMSO.
- Woodward, I., Aebischer, N., Burnell, D., Eaton, M., Frost, T., Hall, C., Stroud, S. & Noble, D. (2020) *APEP 4 Population estimates of birds in Great Britain and the United Kingdom*. British Birds: 113, BTO. [Available at: <https://www.bto.org/our-science/publications/peer-reviewed-papers/appep-4-population-estimates-birds-great-britain-and> – accessed 23/07/2024].

FIGURES

Figure 1. Site layout plan (drawing number CST010 DF4.0rev10, provided by Clearstone Energy)

Figure 2: Survey area and transect route

Figure 3: Summary of 2024 bird survey results



This drawing is the copyright of CLEARSTONE ENERGY Limited and must not be reproduced in whole or in part or used in any manner without their written permission.
Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	07.11.23	First Issue	JM	DW
02	18.12.23	Revised	JM	DW
03	19.01.24	Revised	JM	DW
04	08.07.24	Amendments to Site Technology and Layout	JM	ST
05	30.08.24	Amendments to Layout, Substation relocated	JM	ST
06	10.09.24	Technology and Duration revised	JM	ST
07	28.10.24	Overhead HV Lines Added	GM	ST
08	28.11.24	Amended as per Comments	OB	ST
09	29.11.24	Amended as per Comments	OB	ST
10	06.12.24	Amended as per Comments	OB	ST

LEGEND:

	PLANNING APPLICATION BOUNDARY
	SITE ACCESS
	INTERNAL SITE ROADS
	EMERGENCY/FIRE ACCESS
	DNO ACCESS
	BESS SECURITY FENCE
	EXISTING UNDERGROUND POWER LINES
	EXISTING OVERHEAD POWER LINES
	EXISTING THOROUGHFARE
	FOOT ACCESS
	EXISTING VEGETATION

SITE INFRASTRUCTURE

	SECURITY GATE		BATTERY UNIT
	PEDESTRIAN GATE		PCSK INVERTER
	CUSTOMER SUBSTATION		MV SKID
	FIRE HYDRANT		AC/DCC PANEL
	120,000L WATER TANK		FIRST RESPONDER PANEL
	FIRST RESPONDER REPEATER PANEL		CCTV COLUMN

Project:

Dartford Energy Hub

Developer:



CLEARSTONE ENERGY Limited
8 Devonshire Square, London
United Kingdom, EC2M 4PL
www.clearstoneenergy.com/

Drawn by:



Status:

FOR PLANNING

Drawing Title:

Dartford Energy Hub
Proposed Site Layout Plan

Drawn: JM	Checked: DW	First Issued: 07.11.2023
--------------	----------------	-----------------------------

Project Code: CST010- DF4.0	Drawing Number:
---------------------------------------	-----------------

Sheet Size: A1	Scale: 1:1250	Revision: 10
--------------------------	-------------------------	------------------------

DARTFORD ENERGY HUB PROPOSED SITE LAYOUT PLAN

Scale: 1:1250@A1



Legend:

- Survey area boundary
- Survey transect

00	29/11/2024	2487210	TG	SP	TW
Rev	Date	Description	Drn	Chk	App

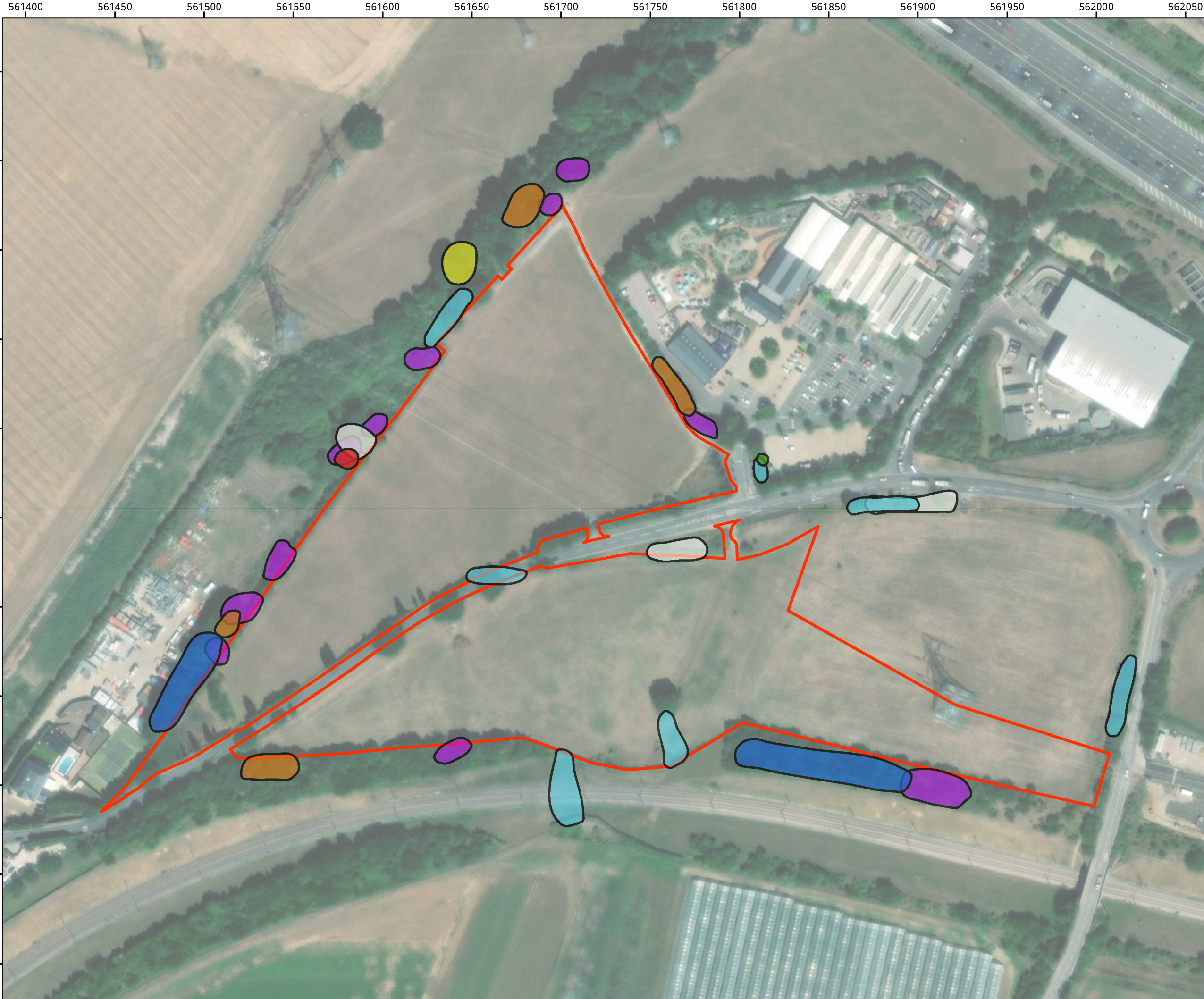
North Kent BESS Further Surveys

EXPERTS IN ECOLOGY

TITLE: Figure 2:
Survey Area and Bird Survey
Transect Route

Metres
SCALE: 1:2,500 @ A3

REV 00



- Legend:**
- Survey area boundary
 - Breeding Territory**
 - Cetti's warbler
 - Dunnock
 - Greenfinch
 - Hobby
 - Song thrush
 - Whitethroat
 - Woodpigeon
 - Wren

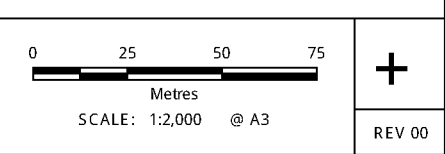


00	29/11/2024	2487210	TG	SP	TW
Rev	Date	Description	Drn	Chk	App

North Kent BESS Further Surveys



TITLE: Figure 3:
Breeding Areas of Notable Species



APPENDIX A – SURVEY DATA

Full breeding bird survey data for the transect surveys of the site and wider survey area undertaken between May and June 2024 inclusive are provided below.

BTO code	Common name	Species		Number of individuals recorded		
		Scientific name	Conservation status	V1 (08.05.24)	V2 (28.05.24)	V3 (18.06.24)
B.	Blackbird	<i>Turdus merula</i>	Green	6	5	2
BC	Blackcap	<i>Sylvia atricapilla</i>	Green	2	1	7
BH	Black-headed gull	<i>Chroicocephalus ridibundus</i>	Amber	3	2	-
BT	Blue tit	<i>Cyanistes caeruleus</i>	Green	4	18	8
BZ	Buzzard	<i>Buteo buteo</i>	Green	-	-	2
C.	Carrion crow	<i>Corvus corone</i>	Green	5	7	5
CA	Cormorant	<i>Phalacrocorax carbo</i>	Green	-	-	1
CC	Chiffchaff	<i>Phylloscopus collybita</i>	Green	3	2	4
CH	Chaffinch	<i>Fringilla coelebs</i>	Green	1	1	-
CW	Cetti's warbler	<i>Cettia cetti</i>	Schedule 1, Green	1	-	-
D.	Dunnock	<i>Prunella modularis</i>	S41, Amber	11	6	4
GC	Goldcrest	<i>Regulus regulus</i>	Green	1	-	-
GO	Goldfinch	<i>Carduelis carduelis</i>	Green	7	23	8
GR	Greenfinch	<i>Chloris chloris</i>	Red	-	-	1
GS	Great spotted woodpecker	<i>Dendrocopos major</i>	Green	1	1	1
GT	Great tit	<i>Parus major</i>	Green	4	1	6
HG	Herring gull	<i>Larus argentatus</i>	S41, Red	-	4	14
HY	Hobby	<i>Falco subbuteo</i>	Schedule 1, Green	2	1	1

BTO code	Common name	Species		Number of individuals recorded		
		Scientific name	Conservation status	V1 (08.05.24)	V2 (28.05.24)	V3 (18.06.24)
JD	Jackdaw	<i>Coloeus monedula</i>	Green	-	5	2
K	Kestrel	<i>Falco tinnunculus</i>	Amber	-	-	1
LT	Long-tailed tit	<i>Aegithalos caudatus</i>	Green	4	5	4
MG	Magpie	<i>Pica pica</i>	Green	3	4	10
PW	Pied wagtail	<i>Motacilla alba</i>	Green	-	3	-
R.	Robin	<i>Erithacus rubecula</i>	Green	14	12	6
RI	Ring-necked parakeet	<i>Psittacula krameri</i>	-	-	1	1
RL	Red-legged partridge	<i>Alectoris rufa</i>	-	1	-	-
SD	Stock dove	<i>Columba oenas</i>	Amber	1	-	-
SG	Starling	<i>Sturnus vulgaris</i>	S41, Red	17	1	2
ST	Song thrush	<i>Turdus philomelos</i>	S41, Amber	4	2	-
WH	Whitethroat	<i>Sylvia communis</i>	Amber	2	3	4
WP	Woodpigeon	<i>Columba palumbus</i>	Amber	36	17	20
WR	Wren	<i>Troglodytes troglodytes</i>	Amber	10	10	9

Annex 1: EC Birds Directive (2009/147/EC) Annex 1 species

Schedule 1: Wildlife and Countryside Act 1981 (as amended) Schedule 1 species

S41: NERC Act 2006 S41 Species of Principal Importance

Red: BoCC Red list species

Amber: BoCC Amber list species

Green: BoCC Green list species

- None of the above conservation status categories apply

APPENDIX B – SITE PHOTOGRAPHS



Photograph 1. View of field 1 from the east. The boundary features (hedgerows and woodland) supported breeding Cetti's warbler, whitethroat, song thrush, dunnock, wren etc.



Photograph 2. View of field 2 from the west. The scrub, hedgerows, and woodland edges supported breeding whitethroat, song thrush, dunnock, and wren.



Photograph 3. Woodland edge on the northern boundary of field 1 where a hobby nest was recorded.



**INVESTORS
IN PEOPLE**

RSK Biocensus is owned by RSK Environment Ltd

Registered office

Spring Lodge, 172, Chester Road, Helsby, Frodsham, England, WA6 0AR, UK

Registered in England No. 04364279

www.rsk.co.uk