

# Rosefield Solar Farm

## Environmental Statement

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(2024)  
(Clean)

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## Foreword

Survey information contained within **ES Volume 4, Appendix 7.11: Wintering Bird Survey Report (2024) [EN010158/APP/6.4]** forms part of the Environmental Statement for information only. The wintering bird surveys detailed within this appendix were undertaken between November 2023 and February 2024 and were based on a superseded version of the Order Limits. The results detailed within this appendix were correct at the time of writing; however, this has not impacted the assessment undertaken for wintering birds, with the results of these surveys considered satisfactory to provide a sufficient baseline in which to base the assessment upon. Further details are provided within **ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2]**.

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# 1. Introduction

## 1.1. Purpose of this report

1.1.1. This document has been updated at Deadline 1 in response to the Relevant Representations received from East Claydon Parish Council. The document references have not been updated from the original submission. Please refer to the **Guide to the Application [EN010158/APP/1.2.6]** for the list of current versions of documents.

1.1.1. This report presents the results of surveys for wintering birds undertaken in relation to the proposed Rosefield Solar Farm development between November 2023 and February 2024 inclusive. These surveys were conducted to inform an assessment of the wintering bird assemblage in connection with the Proposed Development.

## 1.2. Ecological context

1.2.1. The site of the Proposed Development (hereafter referred to as ‘the Site’) in which these wintering bird surveys were undertaken consists of four areas covering a combined total of approximately 473 hectares (ha) (**Figure 1**). These areas comprise:

- Parcel 1: c. 180ha, centred at Ordnance Survey (OS) grid reference SP 70134 24353;
- Parcel 1a: c. 17ha, centred at OS grid reference SP 70711 23083;
- Parcel 2: c. 225ha, centred at OS grid reference SP 72900 23100; and
- Parcel 3: c. 51ha, centred at OS grid reference SP 75027 25125.

1.2.2. The Site predominantly comprises arable fields interspersed with hedgerows, ditches, lines of trees and smaller areas of woodland, with occasional small buildings. The wider landscape is largely arable with occasional villages, farm complexes, scattered residential properties and woodland.

## 1.3. Project overview

1.3.1. Rosefield Solar Farm is a proposed solar farm with energy storage which will generate and store renewable electricity for export to the National Grid. The main features of the Proposed Development consists of the following elements:

- Solar PV development consisting of:
  - Ground mounted Solar PV generating station. The generating station would include Solar PV modules and mounting structures; and

- Balance of Solar System (BoSS) which comprises: Inverters; Transformers; Switchgear; Combiner Boxes; acoustic barriers and cabling.
- A project substation (the ‘Rosefield Substation’) compound comprising: Transformers; Switchgear; reactive power compensation bays; disconnectors; circuit breakers; busbars; control equipment; lightning surge arrestors; building(s) including office, control, functions, material storage, material laydown areas and welfare facilities; firewalls; fencing and acoustic barriers; a security cabin; parking as well as wider monitoring, maintenance and emergency equipment;
- A Main Collector Compound and two Satellite Collector Compounds comprising: Switchgear; Transformers; ancillary equipment; operation and maintenance and welfare facilities; material storage; material laydown areas; fencing and acoustic barriers; and security cabins;
- Battery Energy Storage System (BESS) compound comprising: batteries and associated Inverters; Transformers; Switchgear, ancillary equipment and their containers; office, control and welfare buildings; fencing and acoustic barriers; monitoring, maintenance and emergency systems; air conditioning; electrical cables; fire safety infrastructure; operation (including maintenance) security facilities; material storage; and material laydown areas;
- Interconnecting Cabling Corridor(s) to connect the Solar PV modules and the BESS to the Satellite and Main Collector Compounds to the Rosefield Substation;
- A Grid Connection Cable Corridor to connect the Rosefield Substation to the National Grid East Claydon Substation via 400kV cabling;
- Ancillary infrastructure works comprising: boundary treatment; security equipment; lighting; fencing; landscaping; internal access tracks; works to facilitate vehicular access; earthing devices; earthworks; surface water management; utility connections and diversions; and any other works identified as necessary to enable the Proposed Development;
- Green and blue infrastructure, recreation and amenity works comprising: landscaping; habitat management; biodiversity enhancement; the creation of three permissive footpaths; and works to permanently divert four public right of way footpaths in five instances;
- Site-wide operational monitoring and security equipment; and
- Highways infrastructure improvements and safety works comprising: minor junction improvement works; road widening; passing places; and works to facilitate vehicular access to the Site.

## 2. Legislation and guidance

### 2.1. Overview

2.1.1. Relevant legislation and guidance relating to wintering birds are summarised below. This legislation and guidance have been used to inform the evaluation of the conservation statuses of the species recorded, and when assessing the importance of the wintering bird populations present.

### 2.2. Legislation

#### European Commission Birds Directive (2009/147/EC)

2.2.1. Certain UK bird species (including some wintering 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)<sup>1</sup>.

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 (SPAs)) 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 their specific 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:

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<sup>1</sup> 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.

- 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
- 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.

2.2.6. As this legislation relates to offences and penalties during the breeding season only, no further reference to Schedule 1 of the WCA is made in this report.

## Natural Environment and Rural Communities Act 2006

2.2.7. 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.

2.2.8. 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 July 2012).

## 2.3. Guidance

### Birds of Conservation Concern

2.3.1. 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

2.3.2. 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

2.3.3. 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

2.3.4. 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.

2.3.5. Non-native species are not afforded Red, Amber or Green list status.

### Buckinghamshire guidance

2.3.6. *Forward to 2030: Biodiversity Action Plan*<sup>2</sup> sets out habitats and species of particular conservation value in Buckinghamshire and Milton Keynes in order to raise awareness of biodiversity issues and provide a mechanism

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<sup>2</sup> [Forward to 2030 – Buckinghamshire & Milton Keynes Natural Environment Partnership \(bucksmpnep.co.uk\)](https://www.bucksmpnep.co.uk) (accessed 20/03/2024).

through which conservation targets for these habitats and species can be delivered.

2.3.7. Whilst not providing lists of specific bird species identified as being of conservation priority in Buckinghamshire and Milton Keynes, this document highlights certain habitats of importance to wintering birds in the county:

- arable fields supporting nationally important farmland bird assemblages;
- arable field margins used by declining species such as corn bunting (*Emberiza calandra*), grey partridge (*Perdix perdix*) and skylark (*Alauda arvensis*);
- winter stubble supporting wintering farmland birds;
- hedgerows used by farmland birds for feeding, sheltering and nesting;
- ancient woodlands supporting locally and nationally declining bird species; and
- valley meadows and pastures used by wintering golden plover (*Pluvialis apricaria*) and lapwing (*Vanellus vanellus*).

## 3. 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., SPAs, Special Areas of Conservation (SACs) or Ramsar sites) within 10km of the Site, and any relevant national statutory designated sites (e.g., Sites of Special Scientific Interest (SSSIs)) within 2km of the Site. 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 of the Site, ornithological records from within the Site boundary and a 2km buffer were obtained from Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC) in August 2023.
- 3.1.3. Wintering bird surveys covering the majority of the Site were undertaken in 2021/22. The results of these surveys were reviewed and evaluated in the context of the winter 2023/24 field survey data.

### 3.2. Field surveys

- 3.2.1. The field surveys for wintering birds were undertaken between November 2023 and February 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 four survey visits (i.e., one per month) during which suitably experienced ornithologists walked pre-determined transect routes throughout the Site. The transect routes were interspersed with stops, during which the ornithologists scanned for birds using optical equipment.
- 3.2.2. 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 100m of the Site (e.g., wader flocks) were also recorded. Particular attention was given to undertaking counts of any notable aggregations of feeding and roosting birds such as waders, finches and thrushes.
- 3.2.3. Due to its large size, for the purpose of these wintering bird surveys the Site was divided into five transect routes (as indicated in **Figure 2**). These five transect routes surveyed covered all fields within Parcels 1, 1a and 2, and walked to within 50m of all hedgerows and woodland. The five transect routes surveyed were as follows:
  - Transect 1-1: extending throughout the north of Parcel 1 for c.9.3km;
  - Transect 1-2: extending throughout the south of Parcel 1 for c.7.3km;
  - Transect 1a: extending throughout Parcel 1a for c.2.6km;

- Transect 2-1: extending throughout the north of Parcel 2 for c.7.7km; and
  - Transect 2-2: extending throughout the south of Parcel 2 for c.9.8km.
- 3.2.4. No access was granted to Parcel 3 between November 2023 and February 2024 inclusive. As such, it was not possible to survey Parcel 3 during these wintering bird surveys of the Site (see **Paragraph 3.4.2**).
- 3.2.5. Survey visits were undertaken at a range of times of day and in suitable weather conditions, avoiding extreme temperatures, heavy rain, snow or fog during which bird activity may be atypical and/or surveying may be impractical. The dates, timings and weather conditions for all survey visits are provided in **Annex B**.

### 3.3. Interpretation of survey results

#### Overview

- 3.3.1. To assess the importance of the wintering bird populations recorded during the field surveys, interpretation of the survey results considered the following:
- The importance of the populations recorded in the context of any nearby designated sites with features of ornithological interest;
  - The conservation statuses of the species recorded (i.e., their inclusion on any of the legislation or conservation status categories described in **Section 2**);
  - The sizes of the populations recorded (i.e., species abundance);
  - The overall diversity of the wintering bird assemblage recorded; and
  - The spatial patterns of wintering bird usage within the Site, including areas and habitat types of particular importance to wintering birds.

#### Conservation status

- 3.3.2. The assessment of the importance of the 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:
- EC Birds Directive (2009/147/EC) Annex 1 species;
  - NERC S41 Species of Principal Importance;
  - BoCC Red and Amber list species; and
  - Species referred to specifically in *Forward to 2030: Biodiversity Action Plan* for Buckinghamshire and Milton Keynes.

## Species abundance

- 3.3.3. The importance of the wintering 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.
- 3.3.4. 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 International<sup>3</sup>.
- 3.3.5. 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).
- 3.3.6. Assessment of county, district or local importance was based on professional knowledge of the species in question and any available population data.

## Species diversity

- 3.3.7. The overall diversity of the wintering bird assemblage was assessed, taking into consideration the number of species recorded.

## 3.4. Constraints and limitations

- 3.4.1. Field surveys for wintering birds were undertaken at appropriate times of day and in suitable weather conditions. Considering the extents and types of the habitats present, and the species for which the Site is potentially suitable, the four visits completed between November 2023 and February 2024 are considered sufficient to record the wintering bird populations present.
- 3.4.2. No access was granted to Parcel 3 between November 2023 and February 2024 inclusive. As such, it was not possible to undertake any wintering bird surveys of Parcel 3 during this period. Considering the extent of Parcel 3 and the habitats present (predominantly comprising arable fields separated by hedgerows), the wintering bird populations using Parcel 3 in winter 2023/24 are considered likely to have included the same species as those recorded elsewhere in the Site, and to have been of similar or lower significance than those present elsewhere within the Site (i.e., compared with Parcels 1 and 2). However, without conducting field surveys it was not possible to undertake a detailed assessment of wintering bird use of Parcel 3 in 2023/24. This is taken into consideration

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<sup>3</sup> As detailed by Wetlands International. Available at: [Waterbird Population Estimates \(wetlands.org\)](https://www.wetlands.org) (accessed 20/03/2023).

in **Section 5**, with the results of wintering bird surveys of Parcel 3 undertaken in winter 2021/22 used for context.

- 3.4.3. Transect routes were designed to maximise coverage of the Site. Where transect routes extended near to each other (e.g., transects 1-1 and 1-2, transects 2-1 and 2-2) they were surveyed simultaneously, with surveyors keeping in regular contact to avoid double-counting of any notable sightings. The potential for double-counting of mobile species (notably waders and raptors) has been taken into consideration when evaluating species abundance and habitat use in **Section 5**.
- 3.4.4. Whilst birds using woodland edges adjacent to the Site (e.g., within Finemere Wood SSSI and Sheephouse Wood SSSI) were recorded, considering the limited potential scope of impacts from the Proposed Development on wintering birds using woodland off-site, no detailed surveys of these areas of woodland for wintering birds were undertaken. Where any notable observations (e.g., scarcer species or larger aggregations of birds) were recorded in woodland further off-site (i.e., >50m from the Site boundary), these were recorded on a precautionary basis.
- 3.4.5. Whilst desk study data are useful in providing supplementary ecological information for a site, 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 Site and/or wider search area. Similarly, records of a particular species do not necessarily mean that the species is still present within the Site.
- 3.4.6. 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 at least two years (CIEEM, 2019), after which it may be necessary for further field surveys to be undertaken.

## 4. Results

### 4.1. Desk study

#### Designated sites

- 4.1.1. The desk study identified no internationally designated sites with features of ornithological interest within 10km of the Site. As such, internationally designated sites are not discussed further in this report.
- 4.1.2. The desk study identified three nationally designated sites with features of ornithological interest within 2km of the Site, as presented in **Table 1** below.

**Table 1: Relevant nationally designated sites**

Designated site	Distance from the Site	Description
<b>Finemere Wood SSSI</b>	<5m (i.e., immediately adjacent to the Site boundary)	c.46 ha woodland site supporting a wide range of bird species, many of which are local in the county. Resident woodland specialists include nuthatch ( <i>Sitta europaea</i> ), treecreeper ( <i>Certhia familiaris</i> ), woodpeckers and tits. The scrub habitats support breeding nightingale ( <i>Luscinia megarhynchos</i> ) and various warblers. Other noteworthy species include tawny owl ( <i>Strix aluco</i> ), sparrowhawk ( <i>Accipiter nisus</i> ), turtle dove ( <i>Streptopelia turtur</i> ) and woodcock. The site is visited by large numbers of wintering birds; notably thrushes such as redwing ( <i>Turdus iliacus</i> ) and fieldfare ( <i>Turdus pilaris</i> ), and finches.
<b>Sheephouse Wood SSSI</b>	<5m (i.e., immediately adjacent to the Site boundary)	c.59 ha woodland site within which 40 bird species have been recorded including woodcock, as well as breeding sparrowhawk, all three woodpecker species (i.e., including lesser spotted woodpecker ( <i>Dryobates minor</i> )), nuthatch and treecreeper.
<b>Grendon and Doddershall Woods SSSI</b>	1,360m south-west	c.70 ha woodland site with considerable ornithological interest; notably breeding nightingale.

- 4.1.3. The desk study also identified non-statutory designated sites with features of ornithological interest within 2km of the Site, as presented in **Table 2** below.

Table 2: Relevant non-statutory designated sites

Designated site	Distance from the Site	Description
<b>Shrub Woods 62X03 LWS</b>	<5m (i.e., immediately adjacent to the Site boundary)	Woodland with various typical bird species recorded including bullfinch ( <i>Pyrrhula pyrrhula</i> ), lesser whitethroat ( <i>Curruca curruca</i> ) and song thrush ( <i>Turdus philomelos</i> ).
<b>Romer Wood 72B03 LWS</b>	<5m (i.e., immediately adjacent to the Site boundary)	Woodland with various typical bird species recorded including cuckoo ( <i>Cuculus canorus</i> ), garden warbler ( <i>Sylvia borin</i> ) and marsh tit ( <i>Poecile palustris</i> ).
<b>Runts Wood 72G01 LWS</b>	<5m (i.e., immediately adjacent to the Site boundary)	Woodland with various typical bird species recorded including bullfinch, garden warbler and song thrush.
<b>Finemere Wood 058 Wildlife Trust Reserve</b>	<5m (i.e., immediately adjacent to the Site boundary)	Woodland with notable bird species recorded including barn owl ( <i>Tyto alba</i> ), cuckoo and woodcock.
<b>Home Wood, Middle Claydon 72C01 LWS</b>	52m east	Woodland with various typical bird species recorded including cuckoo, mistle thrush ( <i>Turdus viscivorus</i> ) and red kite.
<b>Balmore Wood 72B04 LWS</b>	93m west	Woodland with various typical bird species recorded including cuckoo, song thrush and treecreeper.
<b>Greatsea Wood 72B02 LWS</b>	207m east	Woodland with various typical bird species recorded including bullfinch, cuckoo and marsh tit.
<b>Calvert Jubilee 055 Wildlife Trust Reserve</b>	360m west	Deep lake forming part of a large disused clay pit. Especially important as an overwintering site for wildfowl, with total bird counts reaching four figures including various duck species. Scrub on site is used by nightingale.
<b>Calvert Jubilee Nature Reserve LWS</b>	365m west	See Calvert Jubilee Wildlife Trust Reserve above.
<b>Grendon and Doddershall</b>	804m south	Dry meadow, pond, ditch habitats and scrub habitats providing important roosting and

Designated site	Distance from the Site	Description
<b>Meadows 72F09 LWS</b>		breeding sites for various bird species including yellowhammer.
<b>Calvert Brick Pits, Great Moor Sailing Club 62S07 LWS</b>	986m west	Open standing water and surrounding habitats in which various bird species have been recorded including bullfinch, common tern ( <i>Sterna hirundo</i> ), grey wagtail ( <i>Motacilla cinerea</i> ), linnet ( <i>Linaria cannabina</i> ) and turtle dove.
<b>Wood between Lawn Hill and Dunsty Hill 62W01 LWS</b>	1,370m south-west	Woodland supporting various common wintering and breeding bird species.
<b>Grendon Underwood Meadows 62V11 LWS</b>	1,450m south-west	Fields and tall hedgerows used by a range of wintering and breeding bird species.

## Species records

- 4.1.4. Data obtained from BMERC included records of various bird species which could potentially be present within the Site and surrounding land in winter. Species recorded within the Site and a 2km buffer during the last ten years include the following (full details are provided in **ES Volume 4, Appendix 7.7: Preliminary Ecological Appraisal [EN010158/APP/6.4]**):
- Raptors such as goshawk (*Accipiter gentilis*), hen harrier (*Circus cyaneus*), marsh harrier (*Circus aeruginosus*), peregrine (*Falco peregrinus*) and red kite;
  - Waders such as golden plover, lapwing and snipe;
  - Waterfowl such as whooper swan (*Cygnus cygnus*); and
  - Declining farmland species such as fieldfare, grey partridge and redwing.
- 4.1.5. Wintering bird surveys undertaken in winter 2021/22 covering the majority of the Site recorded a total of 59 bird species including 34 specially protected and notable species. This wintering bird assemblage was assessed as being of county importance, whilst Parcels 1 and 2 were individually each considered to potentially support wintering bird assemblages of district level importance. Snipe was recorded in numbers of county importance, whilst all other species were present in numbers of local importance. Noteworthy observations included:

- Fieldfare: recorded in all Parcels of the Site, with peak counts for each Parcel ranging between 19 and 45 birds<sup>4</sup>;
- Golden plover: peak count of one in Parcel 1 only;
- Grey partridge: peak count of two in Parcel 1 only;
- Lapwing: peak counts of six and 90 in Parcels 1 and 2 respectively;
- Marsh tit: peak counts of two in Parcels 1 and 2;
- Red kite: recorded in all Parcels of the Site, with peak counts for each Parcel ranging between two and nine birds;
- Redwing: recorded in all Parcels of the Site, with peak counts for each Parcel ranging between 97 and 204 birds;
- Snipe: peak counts of 104 and 40 in Parcels 1 and 2 respectively; and
- Yellowhammer: recorded in all Parcels of the Site, with peak counts for each Parcel ranging between 1 and 14 birds.

## 4.2. Field surveys

- 4.2.1. A total of 60 bird species were recorded during the wintering bird surveys of the Site undertaken between November 2023 and February 2024 inclusive. Peak counts (i.e., the maximum number of birds recorded in a single survey visit) for each transect route are summarised in **Table 3** below, with descriptions provided for specially protected and notable species. Full wintering bird survey data are provided in **Annex C**.
- 4.2.2. In addition to the observations listed in **Table 3**, the following noteworthy observations adjacent to the Site were recorded:
- Golden plover: a flock of 260 was observed circling over and landing in an arable field c.400m north-west of Parcel 1 on 25/01/2024; and
  - Lapwing: a flock of 180 was observed circling over and landing in an arable field (i.e., the same field used by golden plover above) c.450m north-west of Parcel 1 on 25/01/2024.
- 4.2.3. Several features were identified which could be suitable for use by barn owl as breeding and roosting sites. These predominantly comprised mature trees with large exposed cavities, such as a tree towards the north of Parcel 2 (OS grid reference SP 73021 24182). No evidence of barn owl

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<sup>4</sup> Whilst fieldfare, redwing, snipe and woodcock are scarce breeding species in the UK (hence the inclusion of fieldfare and redwing on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)), these are widespread wintering species in UK. Individuals of these species recorded during wintering bird surveys of the Site are considered to have been wintering migrants to the Site, rather than resident/breeding individuals. The Site is highly unlikely to be used for breeding by these species.

activity was recorded during the wintering bird surveys, although no detailed barn owl surveys were undertaken.

**Table 3: Summary of species recorded during the 2023/24 wintering bird surveys**

Species		Peak count for each transect					Description
Common name	Scientific name	1-1	1-2	1a	2-1	2-2	
<b>Blackbird</b>	<i>Turdus merula</i>	17	14	4	12	15	
<b>Black-headed gull</b>	<i>Chroicocephalus ridibundus</i>	0	0	0	6	0	
<b>Blue tit</b>	<i>Cyanistes caeruleus</i>	44	46	4	39	36	
<b>Bullfinch</b>	<i>Pyrrhula pyrrhula</i>	0	0	0	0	2	
<b>Buzzard</b>	<i>Buteo buteo</i>	4	1	1	3	2	
<b>Canada goose</b>	<i>Branta canadensis</i>	13	13	10	0	0	
<b>Carrion crow</b>	<i>Corvus corone</i>	50	41	13	102	13	
<b>Chaffinch</b>	<i>Fringilla coelebs</i>	39	22	60	25	5	
<b>Coal tit</b>	<i>Periparus ater</i>	0	0	2	0	0	
<b>Collared dove</b>	<i>Streptopelia decaocto</i>	0	0	0	1	0	
<b>Cormorant</b>	<i>Phalacrocorax carbo</i>	2	0	0	0	0	
<b>Dunnock</b>	<i>Prunella modularis</i>	16	13	1	9	6	Frequently singing, calling and foraging in hedgerows and scrub.
<b>Fieldfare</b>	<i>Turdus pilaris</i>	88	111	22	401	260	Foraging in fields, hedgerows and woodland throughout the Site; particularly in Parcel 1 and the north of Parcel 2.
<b>Gadwall</b>	<i>Mareca strepera</i>	0	0	0	0	4	Four loafing on a small pond in the south of Parcel 2.
<b>Goldcrest</b>	<i>Regulus regulus</i>	2	0	1	2	1	
<b>Golden plover</b>	<i>Pluvialis apricaria</i>	0	0	0	0	22	One flock of 22 circling over arable fields towards the

Species		Peak count for each transect					Description
Common name	Scientific name	1-1	1-2	1a	2-1	2-2	
							north-west of Parcel 2.
<b>Goldfinch</b>	<i>Carduelis carduelis</i>	4	17	0	4	10	
<b>Great spotted woodpecker</b>	<i>Dendrocopos major</i>	1	2	0	3	1	
<b>Great tit</b>	<i>Parus major</i>	19	17	6	12	6	
<b>Green woodpecker</b>	<i>Picus viridis</i>	1	1	0	3	2	
<b>Greenfinch</b>	<i>Chloris chloris</i>	1	0	0	0	1	
<b>Greylag goose</b>	<i>Anser anser</i>	2	0	0	0	0	
<b>Herring gull</b>	<i>Larus argentus</i>	27	6	0	0	33	Flying over arable fields throughout Parcel 1 and in the north-west of Parcel 2. One flock of 30 loafing in a field c.180m north-east of Parcel 2.
<b>House sparrow</b>	<i>Passer domesticus</i>	9	35	0	7	0	Groups around buildings in the south-east of Parcel 1 and the north of Parcel 2.
<b>Jackdaw</b>	<i>Coloeus monedula</i>	181	286	20	25	76	Foraging and roosting in fields and woodland throughout Parcels 1 and 2, with larger aggregations roosting around farm buildings in the south-east of Parcel 1.
<b>Jay</b>	<i>Garrulus glandarius</i>	4	8	2	1	4	
<b>Kestrel</b>	<i>Falco tinnunculus</i>	1	0	0	1	1	Occasional foraging activity in the east of Parcel 1 and the north-west of Parcel 2.
<b>Lapwing</b>	<i>Vanellus vanellus</i>	0	0	0	64	0	Flocks of 43-64 in arable fields in the

Species		Peak count for each transect					Description
Common name	Scientific name	1-1	1-2	1a	2-1	2-2	
							east of Parcel 2 between November and January. One flock of seven recorded in the north-west of Parcel 2 on 26/02/24.
<b>Lesser black-backed gull</b>	<i>Larus fuscus</i>	2	16	0	12	20	Flying over and loafing in arable fields, predominantly towards the south of Parcel 1 and the north-east of Parcel 2. One flock of 20 loafing in a field c.180m north-east of Parcel 2
<b>Linnet</b>	<i>Linaria cannabina</i>	25	101	12	10	2	Foraging in arable fields and hedgerows in Parcel 1 and towards the north of Parcel 2. Included a flock of 78 foraging towards the west of Parcel 1.
<b>Little owl</b>	<i>Athene noctua</i>	0	0	0	1	0	
<b>Long-tailed tit</b>	<i>Aegithalos caudatus</i>	16	8	7	9	30	
<b>Magpie</b>	<i>Pica pica</i>	6	1	3	7	0	
<b>Mallard</b>	<i>Anas platyrhynchos</i>	2	10	0	3	0	
<b>Marsh tit</b>	<i>Poecile palustris</i>	0	1	0	0	0	One calling in woodland c.25m from the boundary of Parcel 1.
<b>Meadow pipit</b>	<i>Anthus pratensis</i>	6	18	0	3	0	Occasionally recorded foraging, most frequently towards the south-east of Parcel 1.
<b>Mistle thrush</b>	<i>Turdus viscivorus</i>	1	1	0	1	0	

Species		Peak count for each transect					Description
Common name	Scientific name	1-1	1-2	1a	2-1	2-2	
<b>Moorhen</b>	<i>Gallinula chloropus</i>	0	1	0	1	0	
<b>Nuthatch</b>	<i>Sitta europaea</i>	0	0	1	0	0	
<b>Peregrine</b>	<i>Falco peregrinus</i>	0	0	0	0	1	One scanning for food over the north-west of Parcel 2.
<b>Pheasant</b>	<i>Phasianus colchicus</i>	4	8	8	5	3	
<b>Pied wagtail</b>	<i>Motacilla alba</i>	3	18	0	1	1	
<b>Raven</b>	<i>Corvus corax</i>	1	0	0	2	1	
<b>Red kite</b>	<i>Milvus milvus</i>	4	7	3	5	20	Frequently foraging over arable fields and grassland throughout the Site and observed perching in isolated trees and at woodland edges. Observed calling over woodland comprising suitable breeding habitat.
<b>Red-legged partridge</b>	<i>Alectoris rufa</i>	12	0	0	1	5	
<b>Redwing</b>	<i>Turdus iliacus</i>	60	374	21	130	45	Foraging in fields, hedgerows and woodland throughout the Site; particularly towards the south-west of Parcel 1 and the south of Parcel 2.
<b>Robin</b>	<i>Erithacus rubecula</i>	17	24	2	9	13	
<b>Rook</b>	<i>Corvus frugilegus</i>	0	50	0	3	92	Foraging and loafing towards the south of Parcel 1 and in the far north and south of Parcel 2. Rookery present in woodland edge on the south-western boundary of Parcel 2.

Species		Peak count for each transect					Description
Common name	Scientific name	1-1	1-2	1a	2-1	2-2	
<b>Siskin</b>	<i>Spinus spinus</i>	0	10	0	0	0	
<b>Skylark</b>	<i>Alauda arvensis</i>	148	25	13	20	10	Frequently singing, calling and foraging in arable fields; especially towards the north of Parcel 1 and in the north and centre of Parcel 2.
<b>Snipe</b>	<i>Gallinago gallinago</i>	19	1	0	30	0	In arable fields and around field margins towards the north-east of Parcel 2. 30 flushed from a field towards the centre of Parcel 2.
<b>Song thrush</b>	<i>Turdus philomelos</i>	5	18	0	3	11	Foraging along field margins throughout Parcel 1 and Parcel 2.
<b>Sparrowhawk</b>	<i>Accipiter nisus</i>	1	1	0	0	0	
<b>Starling</b>	<i>Sturnus vulgaris</i>	295	470	13	69	14	Frequently feeding in fields in Parcel 1 (particularly towards the north-west) and foraging towards the north of Parcel 2.
<b>Stock dove</b>	<i>Columba oenas</i>	9	33	0	0	6	Foraging in and flying over arable fields, especially in Parcel 1.
<b>Stonechat</b>	<i>Saxicola rubicola</i>	0	0	0	2	0	
<b>Woodcock</b>	<i>Scolopax rusticola</i>	1	0	0	0	0	One flushed from a field margin in the north-east of Parcel 1.
<b>Woodpigeon</b>	<i>Columba palumbus</i>	62	174	45	35	17	
<b>Wren</b>	<i>Troglodytes troglodytes</i>	20	16	2	10	11	
<b>Yellowhammer</b>	<i>Emberiza citrinella</i>	37	21	7	4	6	Foraging, calling and perching in arable

Species		Peak count for each transect					Description
Common name	Scientific name	1-1	1-2	1a	2-1	2-2	
							fields and hedgerows throughout the Site; especially towards the east of Parcel 1.

## 5. Evaluation

### 5.1. Designated sites

- 5.1.1. Three nationally designated sites with features of ornithological interest are present within 2km of the Site; notably Finemere Wood SSSI and Sheephouse Wood SSSI, both of which are immediately adjacent to the Site. Notable wintering bird species known to use these sites are primarily woodland species which were recorded in relatively low numbers in the (largely arable) habitats present on Site during the 2023/24 wintering bird surveys. Species recorded within the Site in larger numbers in winter 2023/24 which potentially belong to the wintering populations using these SSSIs include fieldfare, redwing, woodcock and finches.
- 5.1.2. Similarly, species of woodland and woodland edge recorded using the Site in winter 2023/24 also potentially use woodland habitat within nearby non-statutory designated sites; notably Shrub Woods LWS, Romer Wood LWS, Runts Wood LWS and Finemere Wood Wildlife Trust Reserve, all of which are immediately adjacent to the Site.

### 5.2. Conservation status

- 5.2.1. Of the 60 species recorded during the 2023/24 field surveys for wintering birds, the majority comprised typical common and widespread species of lowland farmland. Thirty two of the 60 species recorded are included on the legislation and guidance described in **Section 2** (as indicated in **Table 4** below).

Table 4: Specially protected and notable bird species recorded during the 2023/24 wintering bird surveys

Species	Conservation status category			
	Annex 1	S41	Red	Amber
<b>Black-headed gull</b>	-	-	-	ü
<b>Bullfinch</b>	-	ü	-	ü
<b>Dunnock</b>	-	ü	-	ü
<b>Fieldfare</b>	-	-	ü	-
<b>Gadwall</b>	-	-	-	ü
<b>Golden plover</b>	ü	-	-	-
<b>Greenfinch</b>	-	-	ü	-
<b>Greylag goose</b>	-	-	-	ü
<b>Herring gull</b>	-	ü	ü	-
<b>House sparrow</b>	-	ü	ü	-
<b>Kestrel</b>	-	-	-	ü

Species	Conservation status category			
	Annex 1	S41	Red	Amber
Lapwing	-	ü	ü	-
Lesser black-backed gull	-	-	-	ü
Linnet	-	ü	ü	-
Mallard	-	-	-	ü
Marsh tit	-	ü	ü	-
Meadow pipit	-	-	-	ü
Mistle thrush	-	-	ü	-
Moorhen	-	-	-	ü
Peregrine	ü	-	-	-
Red kite	ü	-	-	-
Redwing	-	-	-	ü
Rook	-	-	-	ü
Skylark	-	ü	ü	-
Snipe	-	-	-	ü
Song thrush	-	ü	-	ü
Sparrowhawk	-	-	-	ü
Starling	-	ü	ü	-
Stock dove	-	-	-	ü
Woodcock	-	-	ü	-
Woodpigeon	-	-	-	ü
Wren	-	-	-	ü
Yellowhammer	-	ü	ü	-

5.2.2. In summary, the 60 species recorded included:

- Three EC Birds Directive Annex 1 species;
- 11 NERC S41 Species of Principal Importance;
- 12 BoCC Red list species; and
- 18 BoCC Amber list species.

### 5.3. Species abundance

5.3.1. Based on the peak counts for the species recorded during the wintering bird surveys, no species were present in numbers of international or national level importance.

5.3.2. Based on their conservation statuses and the numbers recorded during the field surveys, the populations of the following bird species recorded on Site in winter 2023/24 are considered to potentially be of district level importance:

- Fieldfare: peak count of 742<sup>5</sup>;
- Lapwing: peak count of 64;
- Red kite: peak count of 32;
- Redwing: peak count of 587;
- Skylark: peak count of 187<sup>6</sup>;
- Snipe: peak count of 49;
- Starling: peak count of 559; and
- Yellowhammer: peak count of 58.

5.3.3. Considering their conservation statuses and the numbers recorded during the field surveys, populations of the other bird species recorded on Site in winter 2023/24 are considered to be of up to local level importance.

## 5.4. Species diversity

5.4.1. A total of 60 species were recorded within or in close proximity to the Site during the 2023/24 field surveys. In the context of similar habitats within this region (i.e., lowland farmland in Buckinghamshire) this is considered to be a relatively diverse lowland farmland wintering bird assemblage and is potentially of county level importance. Species diversity was higher in Parcels 1 and 2, whilst the assemblage recorded in Parcel 1a (26 species) is considered to be of local importance only.

## 5.5. Site usage by wintering birds

5.5.1. Use of the Site by specially protected and notable species including waders, raptors, gulls and passerines is indicated in **Figure 2**. Site photographs are provided in **Annex D**.

5.5.2. Arable fields covering the majority of the Site were used by a range of notable species including lapwing, red kite, skylark and yellowhammer.

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<sup>5</sup> Due to the mobile nature of the species described in **Paragraph 5.3.2**, for the purposes of analysis the peak counts for the Site stated here represent the highest number of birds of that species recorded across all five transects during a single survey visit.

<sup>6</sup> This peak count was largely due to unusually large numbers of skylark in the north of Parcel 1 during visit 1, with peak counts for the Site otherwise ranging between 59 and 76 skylarks. As such, the skylark population recorded is considered to be of up to district level importance.

These fields were also suitable for golden plover, which were observed circling over Parcel 2 (Photographs 7-8). Hedgerows separating these fields were generally of relatively poor quality due to their size and species composition, although these were used by notable species including dunnock, linnet, song thrush and yellowhammer. Trees in these hedgerows and arable fields provided suitable sheltering and (during the breeding season) nest sites for notable species including barn owl.

- 5.5.3. Grazed grassland fields generally supported a relatively narrow assemblage of wintering birds but were used by larger foraging flocks of notable species including fieldfare, redwing and starling. Rougher areas of grassland such as those at field margins were used by snipe and woodcock.
- 5.5.4. Woodland edges were frequently used by red kite, starling and thrushes, and supported additional species including marsh tit, siskin and woodpeckers. Woodland immediately adjacent to the Site was suitable for notable species including lesser spotted woodpecker, tawny owl and woodcock.
- 5.5.5. Waterbodies (e.g., ponds) were small and generally of relatively low value, with low numbers of waterfowl recorded including gadwall, mallard and moorhen.
- 5.5.6. Habitats present within the Site which are cited in *Forward to 2030: Biodiversity Action Plan* for Buckinghamshire and Milton Keynes as being important to wintering birds included arable fields and their margins, hedgerows and pasture.
- 5.5.7. Considering their quality and extent, Parcels 1 and 2 were the most suitable areas for wintering birds, as reflected by the species diversity and abundance recorded in winter 2023/24. Parcel 1a was of comparatively low value for wintering birds.
- 5.5.8. Whilst no access to Parcel 3 was possible, considering the habitat types and extents present, and in the context of the results of the 2023/24 wintering bird surveys of the rest of the Site, Parcel 3 is considered likely to be of lower value to wintering birds than Parcels 1 and 2. This reflects the findings of the 2021/22 wintering bird surveys.

## 5.6. Comparison with 2021/22 wintering bird survey results

- 5.6.1. The results of the 2023/24 wintering bird surveys were broadly consistent with those from surveys covering the majority of the Site completed in winter 2021/22. Fifty-nine bird species were recorded during the 2021/22 surveys, compared with 60 bird species recorded during the 2023/24 species. The species recorded were broadly consistent between these two winter seasons, although kestrel, little owl and woodcock were not recorded on Site in winter 2021/22, whilst grey partridge, grey wagtail and reed bunting were not recorded on Site in winter 2023/24.

5.6.2. The abundances and distributions of the species recorded were broadly consistent between winter 2021/22 and winter 2023/24, with the following notable exceptions:

- Fieldfare: significantly higher counts in winter 2023/24 (peak count of 742) than in winter 2021/22 (peak count of 149);
- Linnet: significantly higher counts in winter 2023/24 (peak count of 133) than in winter 2021/22 (peak count of 5);
- Meadow pipit: significantly higher counts in winter 2021/22 (peak count of 45) than in winter 2023/24 (peak count of 24);
- Skylark: significantly higher counts in winter 2023/24 (peak count of 187) than in winter 2021/22 (peak count of 45);
- Snipe: significantly higher counts in Parcel 1 in winter 2021/22 (peak count of 104) than in winter 2023/24 (peak count of 49); and
- Yellowhammer: significantly higher counts in winter 2023/24 (peak count of 58) than in winter 2023/24 (peak count of 32).

## 6. Conclusions

- 6.1.1. The wintering bird surveys undertaken between November 2023 and February 2024 inclusive to inform the Proposed Development recorded a total of 60 bird species. These included three species included on Annex 1 of the EC Birds Directive, 11 NERC S41 Species of Principal Importance, 12 species included on the BoCC Red list and 18 species included on the BoCC Amber list. These species included a range of farmland bird species which have been identified as being of conservation priority in Buckinghamshire.
- 6.1.2. The wintering bird assemblage recorded within and in close proximity to the Site is considered to potentially be of county level importance. Wintering populations of eight species recorded within the Site are considered to potentially be of district level importance (including lapwing, snipe and yellowhammer).
- 6.1.3. Arable fields and woodland edges within Parcels 1 and 2 were of greatest value to wintering birds, whilst rough grassland was of value to notable species including snipe. Parcel 1a was of comparatively low value for wintering birds, and whilst no detailed surveys of Parcel 3 were undertaken, Parcel 3 is considered likely to also be of relatively low value to wintering birds (i.e., compared with Parcels 1 and 2).
- 6.1.4. The wintering bird surveys undertaken of Parcel 1, 1a and 2 are considered sufficient to inform the Proposed Development. As detailed wintering bird surveys of Parcel 3 have not been undertaken since winter 2021/22, it is recommended that further wintering bird surveys of Parcel are conducted to provide current data regarding wintering bird use of Parcel 3.

## 7. References

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Available at: <https://www.bto.org/our-science/publications/peer-reviewed-papers/aep-4-population-estimates-birds-great-britain-and>

# Annex A: Figures





Legend:  
 Site Boundary

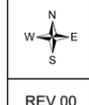
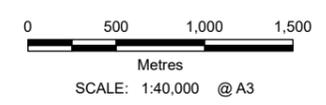


Rev	Date	Description	Drn	Chk	App
00	15/07/2024	2485353	EC	RS	PT

**Rosefield Solar Farm**

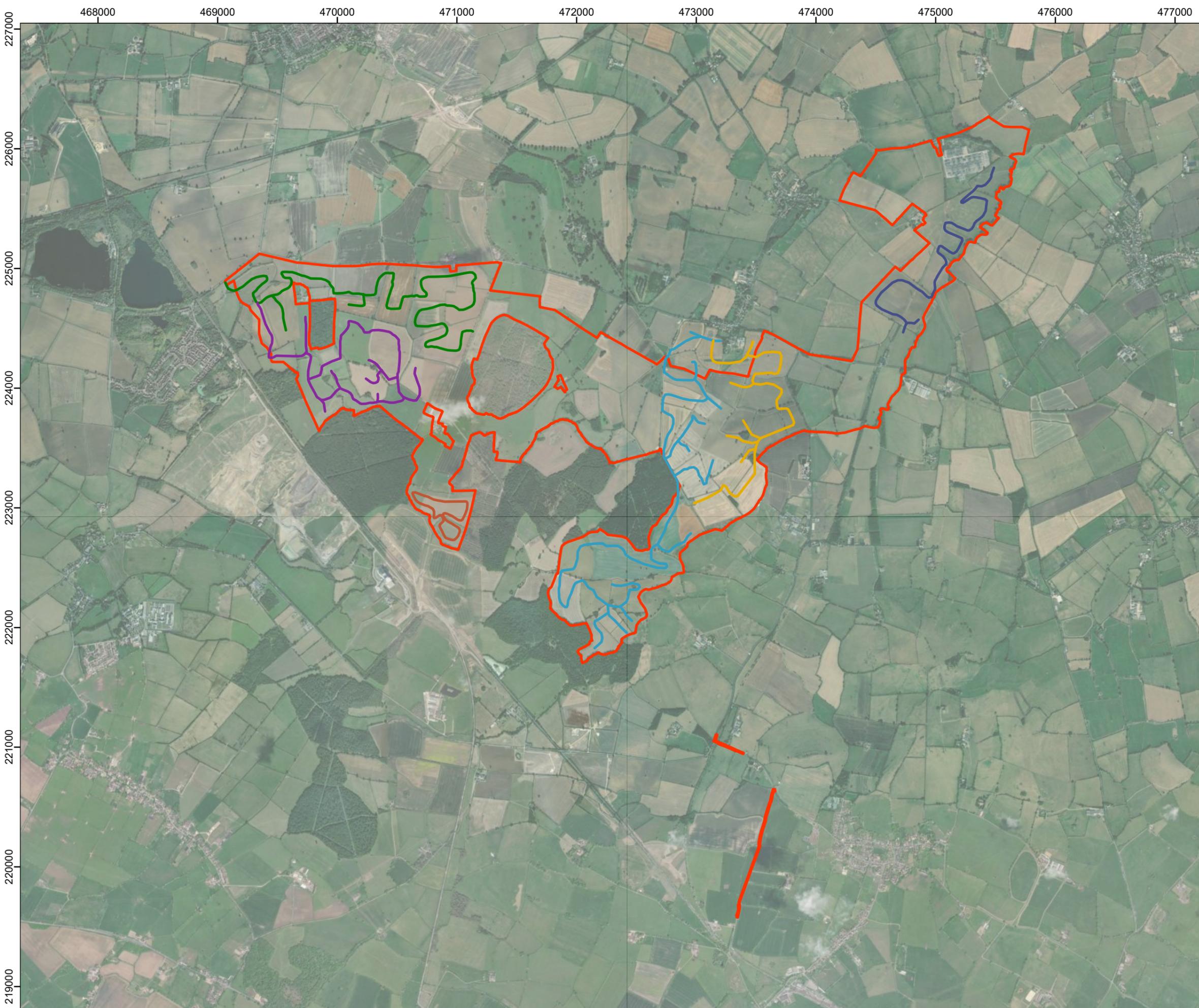


TITLE: Figure 1:  
 Site Location Plan



REV 00

Contains Ordnance Survey data © Crown copyright and database right 2024  
 World Imagery: Maxar, Microsoft  
 Hybrid Reference Layer: Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS  
 OS Open Rasters: Contains OS data © Crown Copyright and database right 2022



- Legend:**
- Site Boundary
  - Area 1 Transect 1
  - Area 1 Transect 2
  - Area 1a Transect
  - Area 2 Transect 1
  - Area 2 Transect 2
  - Area 3 Transect

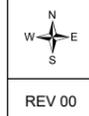
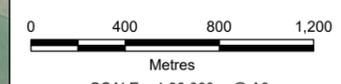


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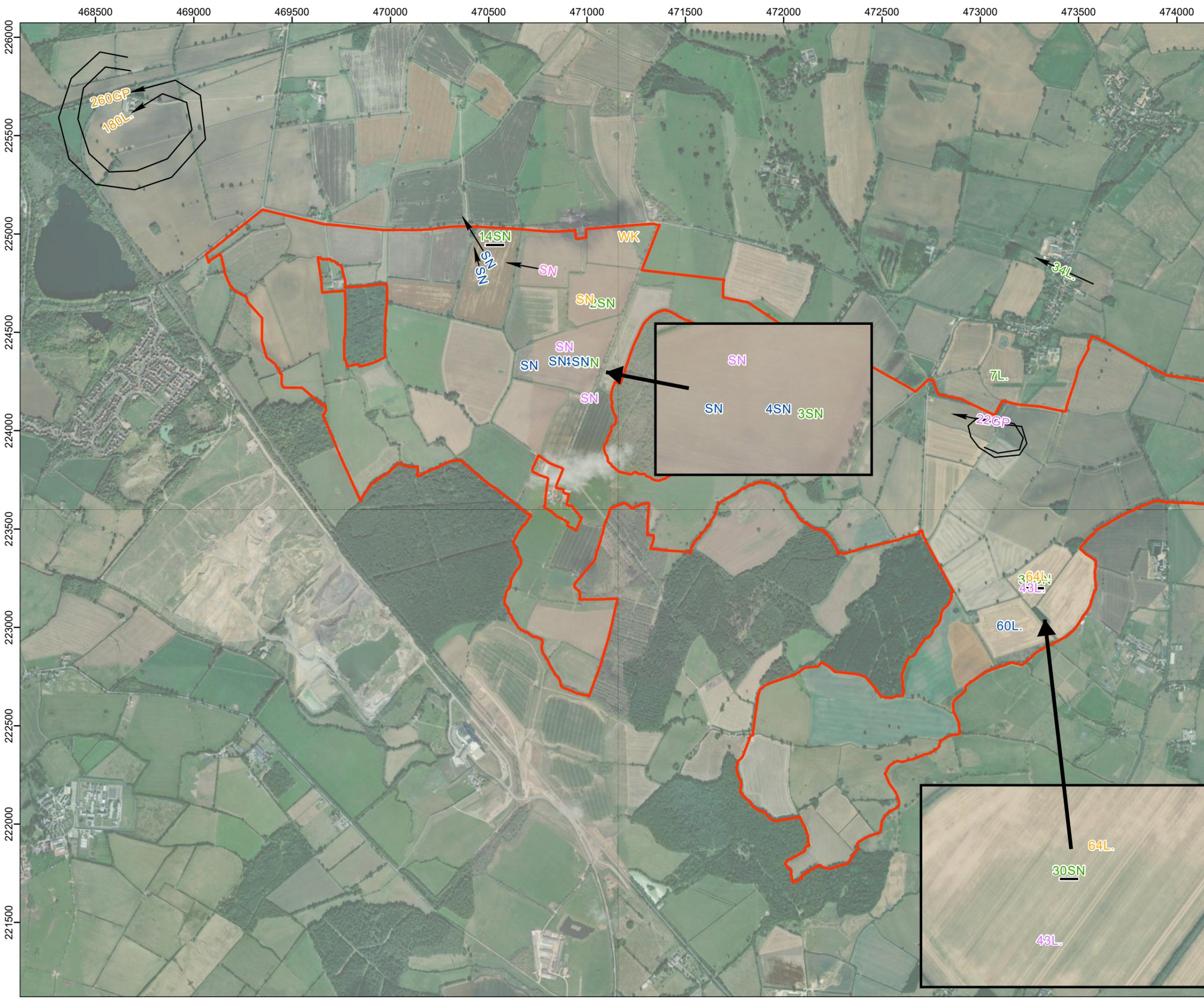
**Rosefield Solar Farm**



TITLE: Figure 2:  
Wintering Bird Survey Transect Routes



REV 00



**Legend:**

- Site Boundary
- Bird Activity
  - Taking off
  - Flying over
  - Landing
  - Calling
- Visit
  - 1
  - 2
  - 3
  - 4

Code	Name
GP	Golden plover
L.	Lapwing
SN	Snipe
WK	Woodcock



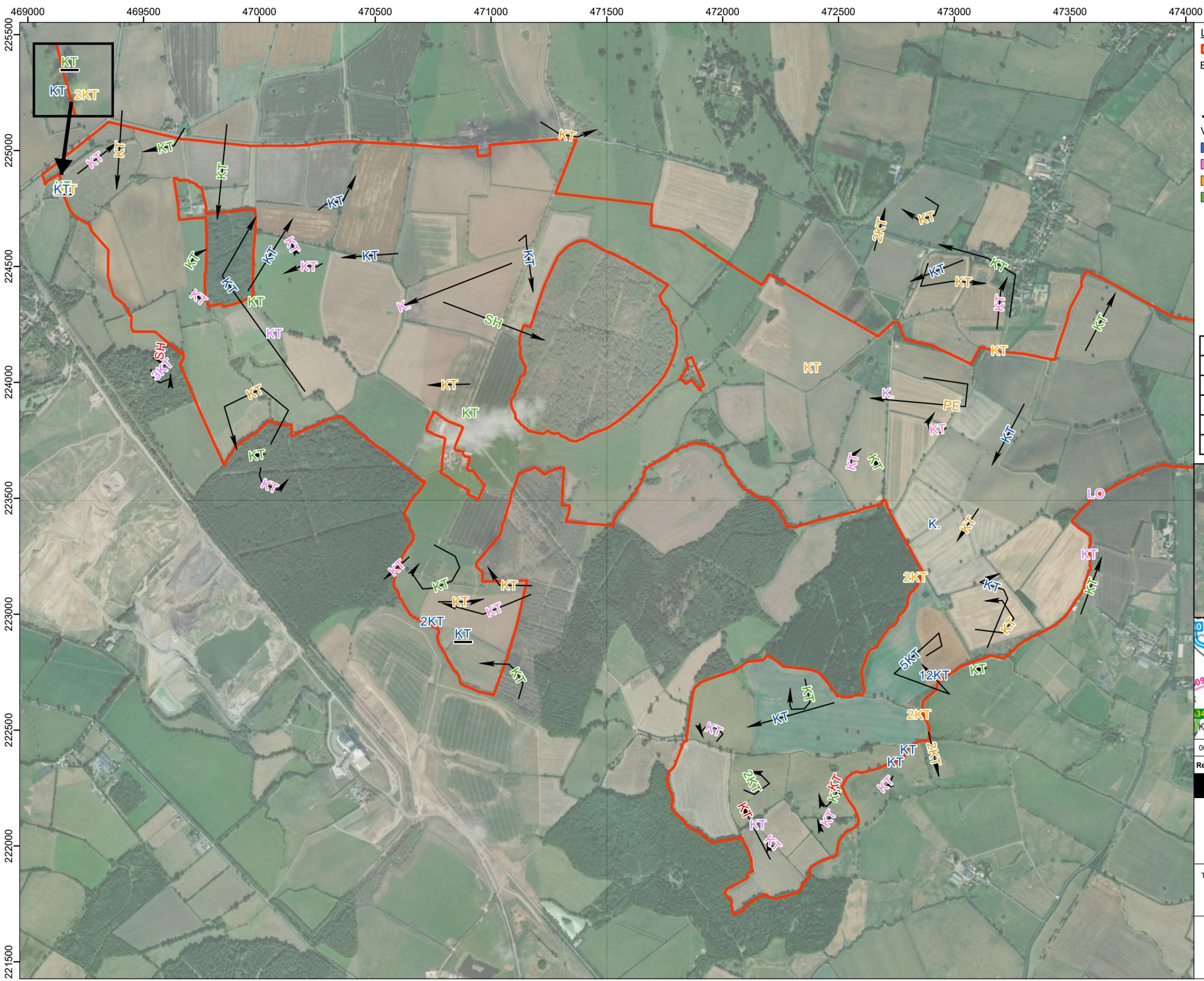
Rev	Date	Description	Drn	Chk	App
00	15/07/2024	2485353	TG	EC	GW

**Rosefield Solar Farm**

TITLE: Figure 2.1:  
Summary of 2023/24 results for specially protected and notable species - Waders

0 200 400 600  
Metres  
SCALE: 1:18,000 @ A3

REV 00



**Legend:**

- Site Boundary
- Bird Activity
  - Flying over
  - Landing
  - Calling
- Visit
  - 1
  - 2
  - 3
  - 4

Code	Name
K.	Kestrel
KT	Red kite
LO	Little owl
PE	Peregrine
SH	Sparrowhawk



Rev	Date	Description	Drn	Chk	App
00	15/07/2024	2485353	TG	EC	GW

**Rosefield Solar Farm**



TITLE: Figure 2.2:  
Summary of 2023/24 results for specially protected and notable species - Raptors

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Metres  
SCALE: 1:15,000 @ A3

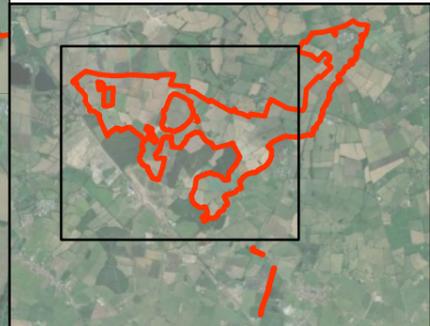
REV 00



**Legend:**

- Site Boundary
- Bird Activity
- Flying over
- Visit
- 2
- 3
- 4

Code	Name
BH	Black-headed Gull
HG	Herring Gull
LB	Lesser Black-backed Gull



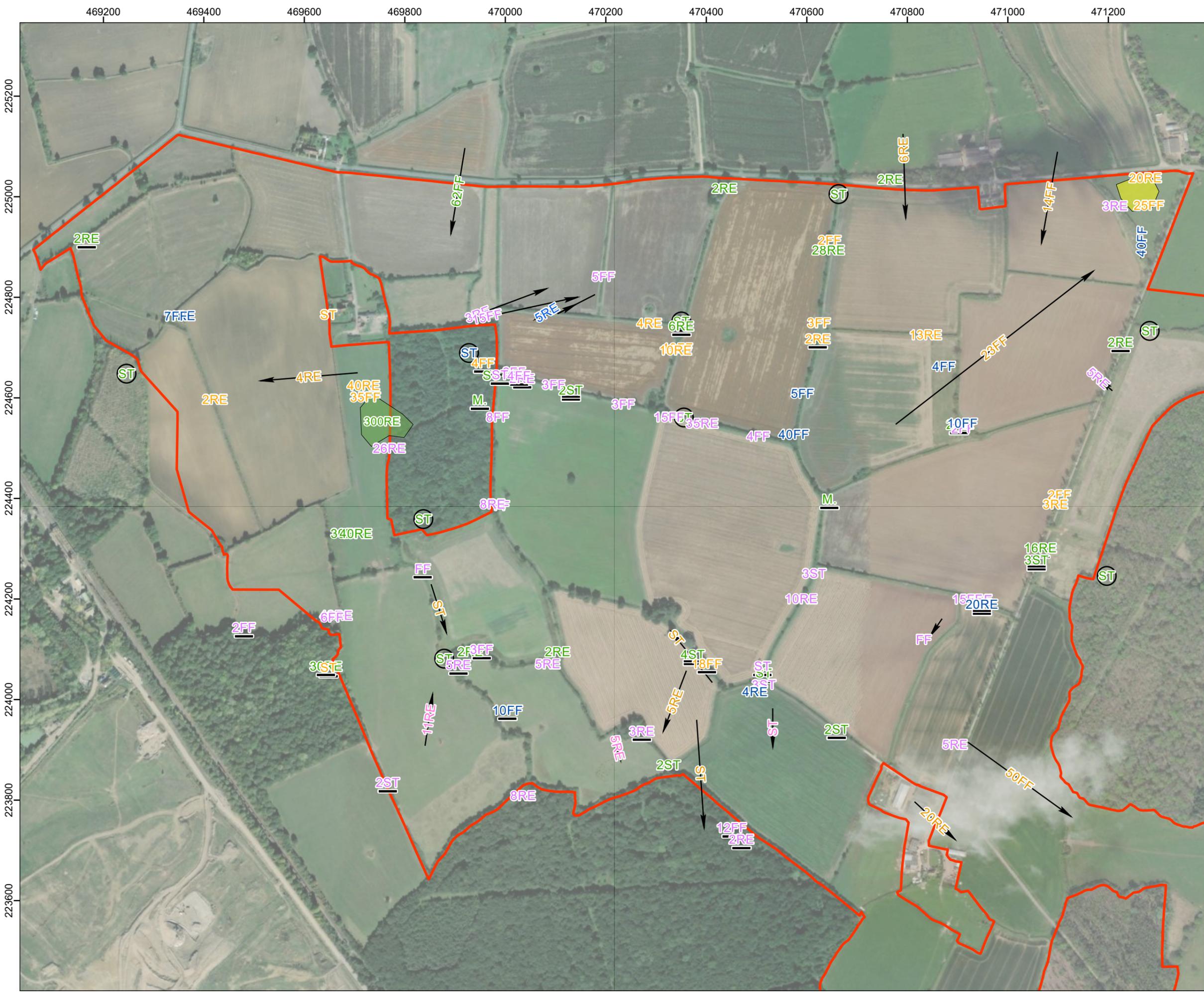
Rev	Date	Description	Drn	Chk	App
00	15/07/2024	2485353	TG	EC	GW

**Rosefield Solar Farm**

TITLE: Figure 2.3:  
Summary of 2023/24 results for specially protected and notable species - Gulls

0 200 400 600  
Metres  
SCALE: 1:16,000 @ A3

REV 00



**Legend:**

- Site Boundary
- Bird Activity
  - Flying over
  - Taking off
  - Landing
  - Singing
  - Calling
  - Alarm Call
- Visit
  - 1
  - 2
  - 3
  - 4

Coloured polygons denote the area where the species listed on them were observed

Code	Name
FF	Fieldfare
M.	Mistle thrush
RE	Redwing
ST	Song thrush

Page 1 of 4



00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

TITLE: Figure 2.4a:  
Summary of 2023/24 results for specially protected and notable species - Passerines - Thrushes

0 80 160 240  
Metres  
SCALE: 1:7,000 @ A3

REV 00

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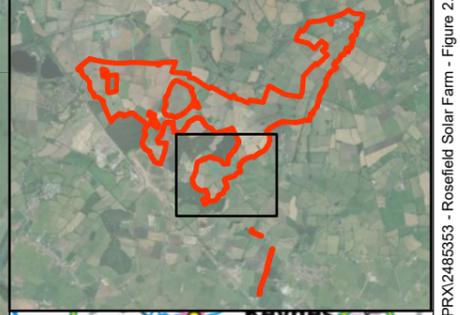
**Legend:**

- Site Boundary
- Bird Activity
  - Flying over
  - Taking off
  - Landing
  - Calling
  - Alarm Call
- Visit
  - 1
  - 2
  - 3
  - 4

Coloured polygons denote the area where the species listed on them were observed

Code	Name
FF	Fieldfare
M.	Mistle thrush
RE	Redwing
ST	Song thrush

Page 3 of 4



00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

TITLE: Figure 2.4a:  
Summary of 2023/24 results for specially protected and notable species - Passerines - Thrushes

0 80 160 240  
Metres  
SCALE: 1:7,000 @ A3

00



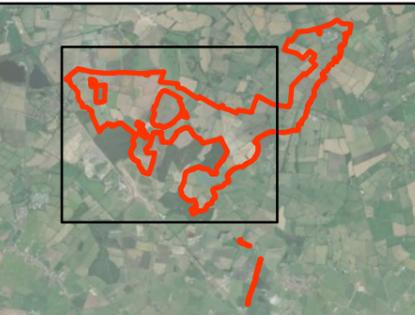
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**Legend:**

- Site Boundary
- Bird Activity**
- Flying over
- Singing
- Calling
- Visit**
- 1
- 2
- 3
- 4

Code	Name
BF	Bullfinch
GR	Greenfinch
LI	Linnet
Y.	Yellowhammer



00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

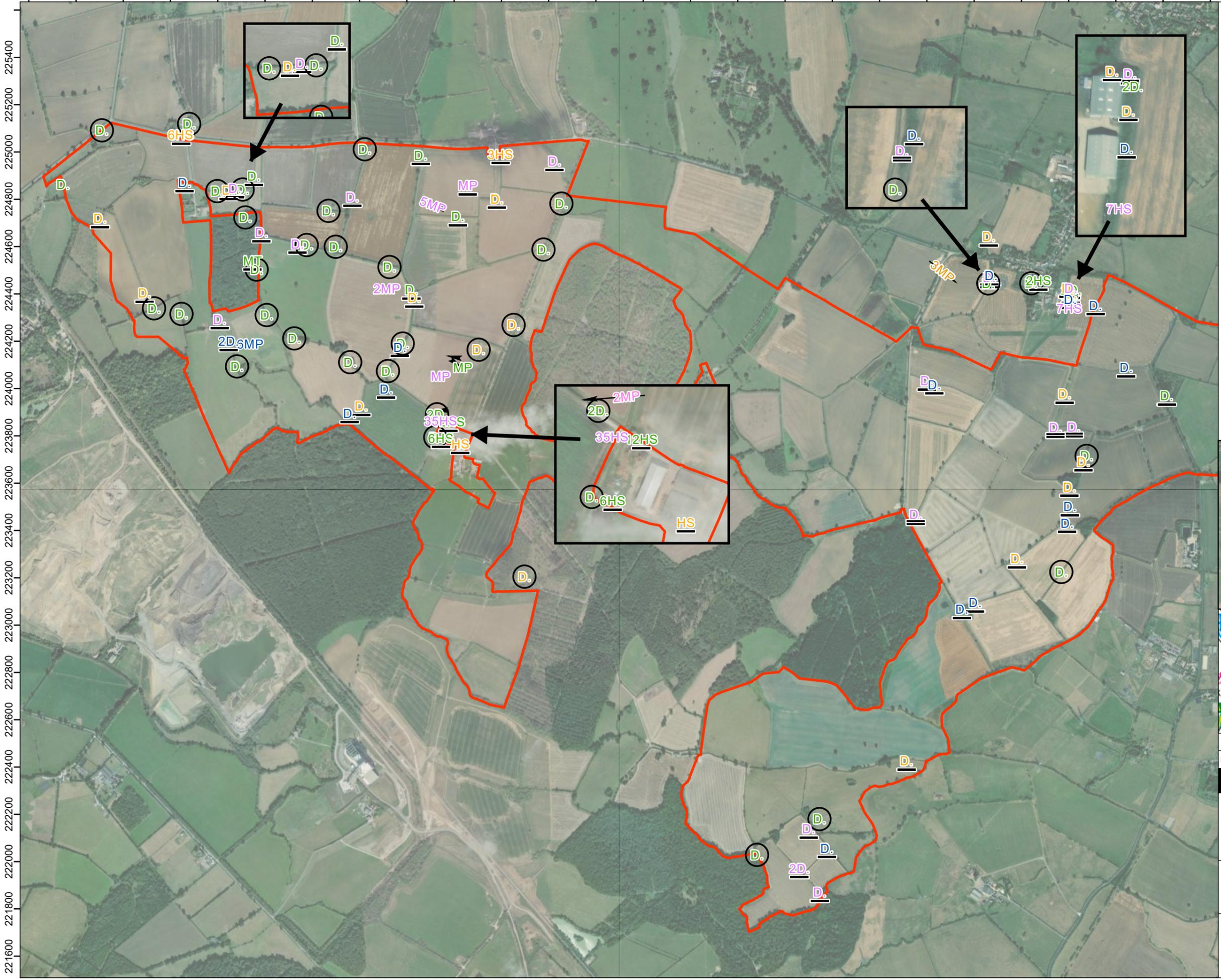
**Rosefield Solar Farm**

TITLE: Figure 2.4b:  
Summary of 2023/24 results for specially protected and notable species - Passerines - Finches and Buntings

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Metres  
SCALE: 1:15,000 @ A3

REV 00

469000 469200 469400 469600 469800 470000 470200 470400 470600 470800 471000 471200 471400 471600 471800 472000 472200 472400 472600 472800 473000 473200 473400 473600 473800 474000



**Legend:**

- Site Boundary
- Bird Activity**
- Flying over
- Singing
- Calling
- Alarm Call
- Visit**
- 1
- 2
- 3
- 4

Code	Name
D.	Dunnock
HS	House sparrow
MP	Meadow pipit
MT	Marsh tit



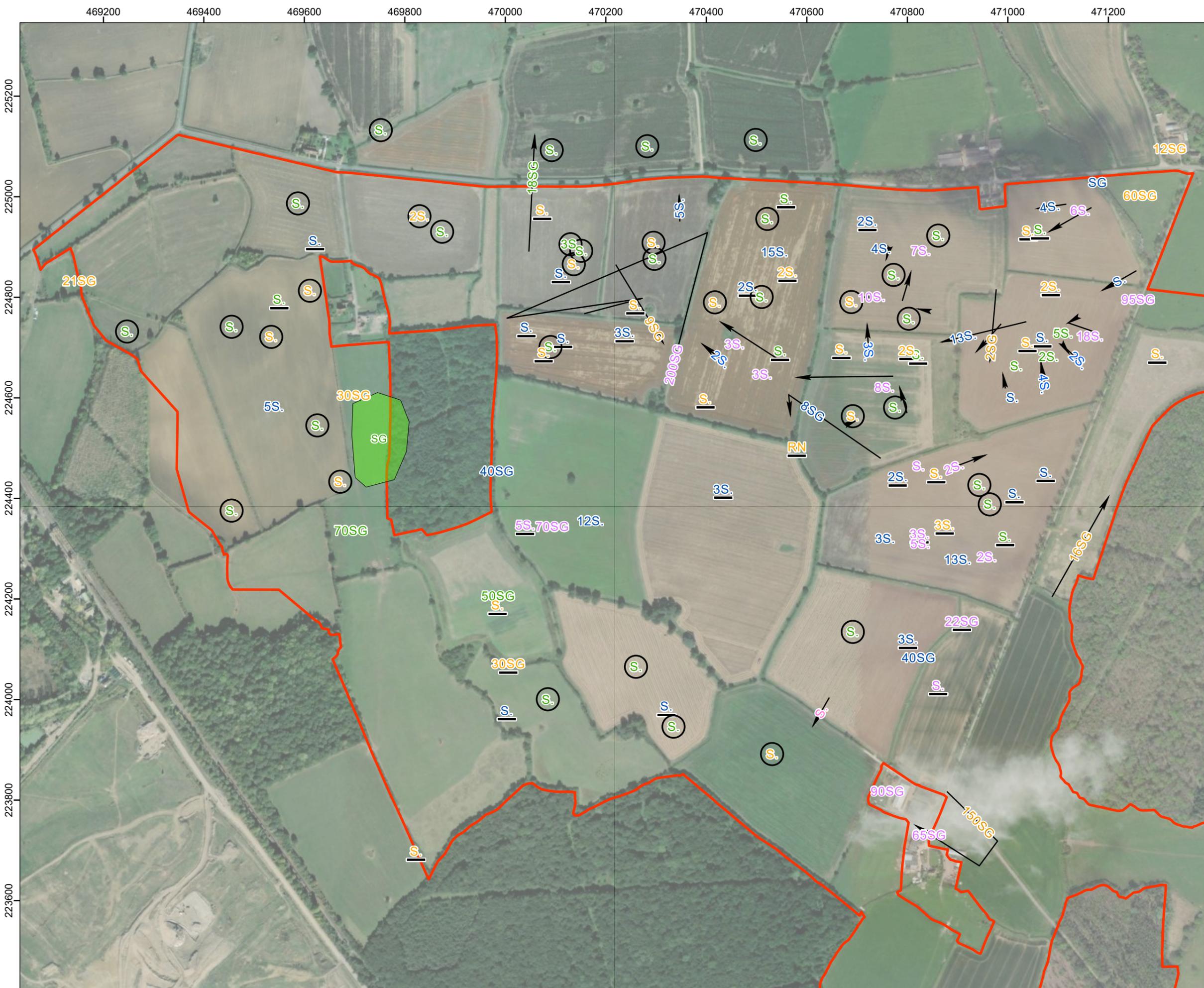
Rev	Date	Description	Drm	Chk	App
00	19/07/2024	2485353	TG	EC	GW

**Rosefield Solar Farm**

TITLE: Figure 2.4c:  
Summary of 2023/24 results for specially protected and notable species - Passerines

SCALE: 1:15,000 @ A3

REV 00



- Legend:**
- Site Boundary
  - Bird Activity**
  - Flying over
  - Taking off
  - Landing
  - S. Singing
  - Calling
  - Visit**
  - 1
  - 2
  - 3
  - 4

Coloured polygons denote the area where the species listed on them were observed

Code	Name
RN	Raven
S.	Skylark
SG	Starling

Page 1 of 4

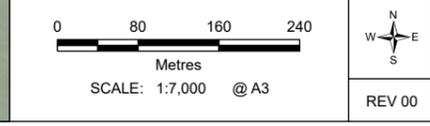


00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

Rosefield Solar Farm



TITLE: Figure 2.4d:  
Summary of 2023/24 results for specially protected and notable species - Passerines



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**Legend:**

- Site Boundary
- Bird Activity
  - Flying over
  - Taking off
  - Landing
  - Singing
  - Calling
- Visit
  - 1
  - 2
  - 3
  - 4

Coloured polygons denote the area where the species listed on them were observed

Code	Name
RN	Raven
S.	Skylark
SG	Starling

Page 2 of 4



00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

TITLE: Figure 2.4d:  
Summary of 2023/24 results for specially protected and notable species - Passerines

0 30 60 90  
Metres  
SCALE: 1:3,000 @ A3

REV 00

471400 471600 471800 472000 472200 472400 472600 472800 473000 473200 473400 473600



**Legend:**

- Site Boundary
- Bird Activity
  - Flying over
  - Taking off
  - Landing
  - Singing
  - Calling
- Visit
  - 1
  - 2
  - 3
  - 4

Coloured polygons denote the area where the species listed on them were observed

Code	Name
RN	Raven
S.	Skylark
SG	Starling

Page 3 of 4

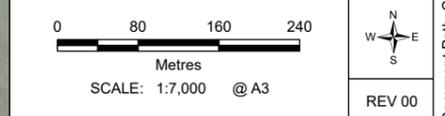


00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**



TITLE: Figure 2.4d:  
Summary of 2023/24 results for specially protected and notable species - Passerines



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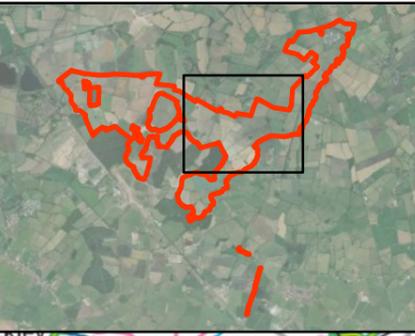
**Legend:**

- Site Boundary
- Bird Activity
  - Flying over
  - Taking off
  - Landing
  - Singing
  - Calling
- Visit
  - 1
  - 2
  - 3
  - 4

Coloured polygons denote the area where the species listed on them were observed

Code	Name
RN	Raven
S.	Skylark
SG	Starling

Page 4 of 4



00	19/07/2024	2485353	TG	EC	GW
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**



TITLE: Figure 2.4d:  
Summary of 2023/24 results for specially protected and notable species - Passerines

0 100 200 300  
Metres  
SCALE: 1:8,000 @ A3

REV 00

# Annex B: Survey Details



## Annex B – Survey Details

Dates, timings and weather conditions for the wintering bird surveys of the Site undertaken between November 2023 and February 2024 inclusive are provided below.

Visit no.	Date	Timing	Temp. (°C)	Weather conditions
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### Transect 1-1

1	28/11/23	08:50-12:50	4-6	Light cloud (0-3 oktas), very light breeze (BF1), dry, excellent visibility
2	19/12/23	12:15-15:40	10	Overcast (8 oktas), very light breeze (BF1), intermittent showers, good visibility
3	25/01/24	08:30-12:20	8-11	Heavy cloud (6-8 oktas), fairly light breeze (BF2-3), intermittent showers then dry from 10:30, good visibility
4	27/02/24	08:30-12:20	1-7	Heavy cloud (7-8 oktas), light breeze (BF1-2), dry, good visibility

### Transect 1-2

1	28/11/23	09:00-11:30	4-5	Light cloud (0-2 oktas), very light breeze (BF1), dry, excellent visibility
2	19/12/23	11:55-15:25	10	Heavy cloud (7-8 oktas), very light breeze (BF1), intermittent showers, good visibility
3	25/01/24	08:00-12:25	6-11	Heavy cloud (6-8 oktas), moderate breeze (BF3-4), largely dry with some light rain, good visibility
4	27/02/24	08:30-12:15	1-7	Heavy cloud (7-8 oktas), light breeze (BF1-2), dry, largely good visibility but with fog for first hour

### Transect 1a

1	27/11/23	12:30-13:15	7-8	Overcast (8 oktas), light breeze (BF2), largely dry with brief shower, moderate visibility
2	20/12/23	12:30-13:30	10-11	Heavy cloud (7-8 oktas), light-moderate breeze (BF2-4), dry, excellent visibility
3	24/01/24	12:35-13:45	11	Moderate-heavy cloud (5-7 oktas), light-moderate breeze (BF2-4), dry, good visibility
4	26/02/24	15:15-16:05	8	Scattered cloud (4 oktas), light-moderate breeze (BF2-4), brief light showers, good visibility

Visit no.	Date	Timing	Temp. (°C)	Weather conditions
<b>Transect 2-1</b>				
1	29/11/23	10:50-15:20	2-4	Moderate cloud (3-6 oktas), light breeze (BF1), dry, excellent visibility
2	20/12/23	08:15-11:40	5-9	Heavy cloud (6-8 oktas), light breeze (BF1-2), dry, excellent visibility
3	24/01/24	08:15-11:50	8-10	Light cloud (2-4 oktas), light-moderate breeze (BF2-4), dry, good visibility
4	26/02/24	11:40-14:35	6-8	Moderate cloud (4-5 oktas), fairly windy (BF3-5), dry, excellent visibility
<b>Transect 2-2</b>				
1	27/11/23	13:00-15:00	8-9	Overcast (8 oktas), light breeze (BF2), dry, good visibility
2	20/12/23	08:15-12:45	5-10	Moderate cloud-overcast (3-8 oktas), fairly light breeze (BF1-3), dry, excellent visibility
3	24/01/24	08:00-13:15	7-13	Moderate cloud (4-6 oktas), light breeze-fairly windy (BF2-5), dry, good visibility
4	26/02/24	11:40-17:25	6-11	Moderate cloud (3-7 oktas), fairly windy (BF3-5), largely dry with brief shower, excellent visibility

# Annex C: Survey Data



## Annex C – Survey Data

Full wintering bird survey data for the transect surveys of the Site undertaken between November 2023 and February 2024 inclusive are provided below.

### Transect 1-1

Species		Count for each visit					
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Blackbird</b>	<i>Turdus merula</i>	B.	Green	0	17	10	17
<b>Blue tit</b>	<i>Cyanistes caeruleus</i>	BT	Green	0	6	35	44
<b>Buzzard</b>	<i>Buteo buteo</i>	BZ	Green	0	0	2	4
<b>Canada goose</b>	<i>Branta canadensis</i>	CG	-	0	13	0	2
<b>Carrion crow</b>	<i>Corvus corone</i>	C.	Green	0	3	44	50
<b>Chaffinch</b>	<i>Fringilla coelebs</i>	CH	Green	0	2	15	39
<b>Cormorant</b>	<i>Phalacrocorax carbo</i>	CA	Green	0	0	2	0
<b>Dunnock</b>	<i>Prunella modularis</i>	D.	S41, Amber	1	4	7	16
<b>Fieldfare</b>	<i>Turdus pilaris</i>	FF	Schedule 1, Red	88	25	61	62
<b>Goldcrest</b>	<i>Regulus regulus</i>	GC	Green	0	0	1	2
<b>Golden plover</b>	<i>Pluvialis apricaria</i>	GP	Annex 1, Green	0	0	*0	0
<b>Goldfinch</b>	<i>Carduelis carduelis</i>	GO	Green	0	0	1	4
<b>Great spotted woodpecker</b>	<i>Dendrocopos major</i>	GS	Green	0	0	1	1
<b>Great tit</b>	<i>Parus major</i>	GT	Green	0	0	7	19
<b>Green woodpecker</b>	<i>Picus viridis</i>	G.	Green	0	0	1	1
<b>Greenfinch</b>	<i>Chloris chloris</i>	GR	Red	0	0	0	1
<b>Greylag goose</b>	<i>Anser anser</i>	GJ	Amber	0	0	0	2

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Herring gull</b>	<i>Larus argentus</i>	HG	S41, Red	0	0	27	4
<b>House sparrow</b>	<i>Passer domesticus</i>	HS	S41, Red	0	0	9	4
<b>Jackdaw</b>	<i>Coloeus monedula</i>	JD	Green	0	0	14 0	18 1
<b>Jay</b>	<i>Garrulus glandarius</i>	J.	Green	0	0	4	0
<b>Kestrel</b>	<i>Falco tinnunculus</i>	K.	Amber	0	1	0	0
<b>Lapwing</b>	<i>Vanellus vanellus</i>	L.	S41, Red	0	0	*0	0
<b>Lesser black-backed gull</b>	<i>Larus fuscus</i>	LB	Amber	0	0	2	1
<b>Linnet</b>	<i>Linaria cannabina</i>	LI	S41, Red	9	20	25	3
<b>Long-tailed tit</b>	<i>Aegithalos caudatus</i>	LT	Green	0	0	4	16
<b>Magpie</b>	<i>Pica pica</i>	MG	Green	0	0	4	6
<b>Mallard</b>	<i>Anas platyrhynchos</i>	MA	Amber	0	2	2	0
<b>Meadow pipit</b>	<i>Anthus pratensis</i>	MP	Amber	0	6	0	0
<b>Mistle thrush</b>	<i>Turdus viscivorus</i>	M.	Red	0	0	0	1
<b>Pheasant</b>	<i>Phasianus colchicus</i>	PH	-	0	1	2	4
<b>Pied wagtail</b>	<i>Motacilla alba</i>	PW	Green	0	1	3	0
<b>Raven</b>	<i>Corvus corax</i>	RN	Green	0	0	1	0
<b>Red kite</b>	<i>Milvus milvus</i>	KT	Schedule 1, Annex 1, Green	4	2	4	3
<b>Red-legged partridge</b>	<i>Alectoris rufa</i>	RL	-	0	0	12	0
<b>Redwing</b>	<i>Turdus iliacus</i>	RE	Schedule 1, Amber	16	11	44	60

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Robin</b>	<i>Erithacus rubecula</i>	R.	Green	0	8	17	13
<b>Skylark</b>	<i>Alauda arvensis</i>	S.	S41, Red	14 8	65	26	35
<b>Snipe</b>	<i>Gallinago gallinago</i>	SN	Amber	8	2	1	19
<b>Song thrush</b>	<i>Turdus philomelos</i>	ST	S41, Amber	0	0	1	5
<b>Sparrowhawk</b>	<i>Accipiter nisus</i>	SH	Amber	0	0	0	1
<b>Starling</b>	<i>Sturnus vulgaris</i>	SG	S41, Red	9	29 5	60	18
<b>Stock dove</b>	<i>Columba oenas</i>	SD	Amber	9	0	2	3
<b>Woodcock</b>	<i>Scolopax rusticola</i>	WK	Red	0	0	1	0
<b>Woodpigeon</b>	<i>Columba palumbus</i>	WP	Amber	4	7	62	57
<b>Wren</b>	<i>Troglodytes troglodytes</i>	WR	Amber	4	1	7	20
<b>Yellowhammer</b>	<i>Emberiza citrinella</i>	Y.	S41, Red	1	5	24	37

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

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

\* During visit 3 a flock of 260 golden plovers was observed circling over and landing c.400m north-west of Parcel 1., and a flock of 180 lapwings was observed circling over and landing c.450m north-west of Parcel 1 in the same field.

## Transect 1-2

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Blackbird</b>	<i>Turdus merula</i>	B.	Green	2	14	5	5
<b>Blue tit</b>	<i>Cyanistes caeruleus</i>	BT	Green	3	8	25	46
<b>Buzzard</b>	<i>Buteo buteo</i>	BZ	Green	1	1	0	1
<b>Canada goose</b>	<i>Branta canadensis</i>	CG	-	0	13	0	5
<b>Carrion crow</b>	<i>Corvus corone</i>	C.	Green	5	33	10	41
<b>Chaffinch</b>	<i>Fringilla coelebs</i>	CH	Green	6	11	4	22
<b>Dunnock</b>	<i>Prunella modularis</i>	D.	S41, Amber	5	2	1	13
<b>Fieldfare</b>	<i>Turdus pilaris</i>	FF	Schedule 1, Red	60	111	103	30
<b>Goldfinch</b>	<i>Carduelis carduelis</i>	GO	Green	0	7	0	17
<b>Great spotted woodpecker</b>	<i>Dendrocopos major</i>	GS	Green	0	2	2	1
<b>Great tit</b>	<i>Parus major</i>	GT	Green	1	4	5	17
<b>Green woodpecker</b>	<i>Picus viridis</i>	G.	Green	1	1	1	1
<b>Herring gull</b>	<i>Larus argentus</i>	HG	S41, Red	0	6	5	4
<b>House sparrow</b>	<i>Passer domesticus</i>	HS	S41, Red	0	35	1	18
<b>Jackdaw</b>	<i>Coloeus monedula</i>	JD	Green	64	108	95	286
<b>Jay</b>	<i>Garrulus glandarius</i>	J.	Green	0	8	3	3
<b>Lesser black-backed gull</b>	<i>Larus fuscus</i>	LB	Amber	0	0	16	1
<b>Linnet</b>	<i>Linaria cannabina</i>	LI	S41, Red	8	101	0	2

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Long-tailed tit</b>	<i>Aegithalos caudatus</i>	LT	Green	0	3	3	8
<b>Magpie</b>	<i>Pica pica</i>	MG	Green	0	0	0	1
<b>Mallard</b>	<i>Anas platyrhynchos</i>	MA	Amber	0	8	0	10
<b>Marsh tit</b>	<i>Poecile palustris</i>	MT	S41, Red	0	0	0	1
<b>Meadow pipit</b>	<i>Anthus pratensis</i>	MP	Amber	6	18	0	1
<b>Mistle thrush</b>	<i>Turdus viscivorus</i>	M.	Red	0	0	0	1
<b>Moorhen</b>	<i>Gallinula chloropus</i>	MH	Amber	0	1	0	1
<b>Pheasant</b>	<i>Phasianus colchicus</i>	PH	-	8	2	6	7
<b>Pied wagtail</b>	<i>Motacilla alba</i>	PW	Green	5	0	1	18
<b>Red kite</b>	<i>Milvus milvus</i>	KT	Schedule 1, Annex 1, Green	2	7	2	4
<b>Redwing</b>	<i>Turdus iliacus</i>	RE	Schedule 1, Amber	24	179	65	374
<b>Robin</b>	<i>Erithacus rubecula</i>	R.	Green	5	8	8	24
<b>Rook</b>	<i>Corvus frugilegus</i>	RO	Green	30	0	50	0
<b>Siskin</b>	<i>Spinus spinus</i>	SK	Green	0	0	0	10
<b>Skylark</b>	<i>Alauda arvensis</i>	S.	S41, Red	25	10	5	7
<b>Snipe</b>	<i>Gallinago gallinago</i>	SN	Amber	0	1	0	0
<b>Song thrush</b>	<i>Turdus philomelos</i>	ST	S41, Amber	1	11	4	18
<b>Sparrowhawk</b>	<i>Accipiter nisus</i>	SH	Amber	0	1	0	0
<b>Starling</b>	<i>Sturnus vulgaris</i>	SG	S41, Red	80	247	210	470

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Stock dove</b>	<i>Columba oenas</i>	SD	Amber	10	33	1	0
<b>Woodpigeon</b>	<i>Columba palumbus</i>	WP	Amber	0	18	19	174
<b>Wren</b>	<i>Troglodytes troglodytes</i>	WR	Amber	1	3	7	16
<b>Yellowhammer</b>	<i>Emberiza citrinella</i>	Y.	S41, Red	0	4	21	2

### Transect 1a

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Blackbird</b>	<i>Turdus merula</i>	B.	Green	3	3	4	1
<b>Blue tit</b>	<i>Cyanistes caeruleus</i>	BT	Green	0	4	4	4
<b>Buzzard</b>	<i>Buteo buteo</i>	BZ	Green	1	0	0	0
<b>Canada goose</b>	<i>Branta canadensis</i>	CG	-	10	0	0	0
<b>Carrion crow</b>	<i>Corvus corone</i>	C.	Green	0	2	13	1
<b>Chaffinch</b>	<i>Fringilla coelebs</i>	CH	Green	1	1	60	16
<b>Coal tit</b>	<i>Periparus ater</i>	CT	Green	0	0	2	0
<b>Dunnock</b>	<i>Prunella modularis</i>	D.	S41, Amber	0	0	1	0
<b>Fieldfare</b>	<i>Turdus pilaris</i>	FF	Schedule 1, Red	0	0	22	0
<b>Goldcrest</b>	<i>Regulus regulus</i>	GC	Green	0	0	1	1
<b>Great tit</b>	<i>Parus major</i>	GT	Green	0	0	0	6
<b>Jackdaw</b>	<i>Coloeus monedula</i>	JD	Green	0	0	20	0
<b>Jay</b>	<i>Garrulus glandarius</i>	J.	Green	1	2	2	1

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Linnet</b>	<i>Linaria cannabina</i>	LI	S41, Red	0	0	12	0
<b>Long-tailed tit</b>	<i>Aegithalos caudatus</i>	LT	Green	0	0	4	7
<b>Magpie</b>	<i>Pica pica</i>	MG	Green	1	0	3	0
<b>Nuthatch</b>	<i>Sitta europaea</i>	NH	Green	0	0	1	1
<b>Pheasant</b>	<i>Phasianus colchicus</i>	PH	-	8	6	1	1
<b>Red kite</b>	<i>Milvus milvus</i>	KT	Schedule 1, Annex 1, Green	3	2	2	0
<b>Redwing</b>	<i>Turdus iliacus</i>	RE	Schedule 1, Amber	10	6	8	21
<b>Robin</b>	<i>Erithacus rubecula</i>	R.	Green	0	0	1	2
<b>Skylark</b>	<i>Alauda arvensis</i>	S.	S41, Red	13	0	0	2
<b>Starling</b>	<i>Sturnus vulgaris</i>	SG	S41, Red	0	0	13	0
<b>Woodpigeon</b>	<i>Columba palumbus</i>	WP	Amber	20	0	45	16
<b>Wren</b>	<i>Troglodytes troglodytes</i>	WR	Amber	0	0	0	2
<b>Yellowhammer</b>	<i>Emberiza citrinella</i>	Y.	S41, Red	0	2	7	2

### Transect 2-1

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Blackbird</b>	<i>Turdus merula</i>	B.	Green	0	5	12	7
<b>Black-headed gull</b>	<i>Chroicocephalus ridibundus</i>	BH	Amber	0	0	6	0
<b>Blue tit</b>	<i>Cyanistes caeruleus</i>	BT	Green	0	15	39	10
<b>Buzzard</b>	<i>Buteo buteo</i>	BZ	Green	0	2	3	1

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Carrion crow</b>	<i>Corvus corone</i>	C.	Green	0	8	10	63
						2	
<b>Chaffinch</b>	<i>Fringilla coelebs</i>	CH	Green	0	9	25	3
<b>Collared dove</b>	<i>Streptopelia decaocto</i>	CD	Green	0	0	1	0
<b>Dunnock</b>	<i>Prunella modularis</i>	D.	S41, Amber	9	4	6	7
<b>Fieldfare</b>	<i>Turdus pilaris</i>	FF	Schedule 1, Red	6	80	29	40
						6	1
<b>Goldcrest</b>	<i>Regulus regulus</i>	GC	Green	0	0	0	2
<b>Goldfinch</b>	<i>Carduelis carduelis</i>	GO	Green	0	4	4	3
<b>Great spotted woodpecker</b>	<i>Dendrocopos major</i>	GS	Green	0	2	3	0
<b>Great tit</b>	<i>Parus major</i>	GT	Green	0	2	12	8
<b>Green woodpecker</b>	<i>Picus viridis</i>	G.	Green	0	0	3	0
<b>Herring gull</b>	<i>Larus argentus</i>	HG	S41, Red	0	0	0	0
<b>House sparrow</b>	<i>Passer domesticus</i>	HS	S41, Red	0	7	0	2
<b>Jackdaw</b>	<i>Coloeus monedula</i>	JD	Green	0	0	25	23
<b>Jay</b>	<i>Garrulus glandarius</i>	J.	Green	0	0	0	1
<b>Kestrel</b>	<i>Falco tinnunculus</i>	K.	Amber	1	0	0	0
<b>Lapwing</b>	<i>Vanellus vanellus</i>	L.	S41, Red	60	43	64	7*
<b>Lesser black-backed gull</b>	<i>Larus fuscus</i>	LB	Amber	0	0	12	8
<b>Linnet</b>	<i>Linaria cannabina</i>	LI	S41, Red	5	10	6	1
<b>Little owl</b>	<i>Athene noctua</i>	LO	-	0	1	0	0
<b>Long-tailed tit</b>	<i>Aegithalos caudatus</i>	LT	Green	0	5	9	0
<b>Magpie</b>	<i>Pica pica</i>	MG	Green	0	4	7	7
<b>Mallard</b>	<i>Anas platyrhynchos</i>	MA	Amber	0	0	2	3

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Meadow pipit</b>	<i>Anthus pratensis</i>	MP	Amber	0	0	3	0
<b>Mistle thrush</b>	<i>Turdus viscivorus</i>	M.	Red	0	0	0	1
<b>Moorhen</b>	<i>Gallinula chloropus</i>	MH	Amber	1	0	1	1
<b>Pheasant</b>	<i>Phasianus colchicus</i>	PH	-	0	5	1	3
<b>Pied wagtail</b>	<i>Motacilla alba</i>	PW	Green	0	5	1	3
<b>Raven</b>	<i>Corvus corax</i>	RN	Green	0	0	2	0
<b>Red kite</b>	<i>Milvus milvus</i>	KT	Schedule 1, Annex 1, Green	3	2	5	5
<b>Red-legged partridge</b>	<i>Alectoris rufa</i>	RL	-	0	0	1	0
<b>Redwing</b>	<i>Turdus iliacus</i>	RE	Schedule 1, Amber	0	17	13	10
<b>Robin</b>	<i>Erithacus rubecula</i>	R.	Green	0	1	9	5
<b>Rook</b>	<i>Corvus frugilegus</i>	RO	Green	0	0	0	3
<b>Skylark</b>	<i>Alauda arvensis</i>	S.	S41, Red	1	0	20	8
<b>Snipe</b>	<i>Gallinago gallinago</i>	SN	Amber	0	0	0	30
<b>Song thrush</b>	<i>Turdus philomelos</i>	ST	S41, Amber	3	0	0	1
<b>Starling</b>	<i>Sturnus vulgaris</i>	SG	S41, Red	0	3	69	2
<b>Stock dove</b>	<i>Columba oenas</i>	SD	Amber	0	0	0	0
<b>Stonechat</b>	<i>Saxicola rubicola</i>	SC	Green	2	0	0	0
<b>Woodpigeon</b>	<i>Columba palumbus</i>	WP	Amber	15	32	35	33
<b>Wren</b>	<i>Troglodytes troglodytes</i>	WR	Amber	10	2	8	2
<b>Yellowhammer</b>	<i>Emberiza citrinella</i>	Y.	S41, Red	0	0	4	1

\* During visit 4 a flock of 34 lapwings was observed flying westwards c.270m north of Parcel 2.

## Transect 2-2

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Blackbird</b>	<i>Turdus merula</i>	B.	Green	0	10	15	15
<b>Blue tit</b>	<i>Cyanistes caeruleus</i>	BT	Green	0	19	22	36
<b>Bullfinch</b>	<i>Pyrrhula pyrrhula</i>	BF	S41, Amber	2	0	0	0
<b>Buzzard</b>	<i>Buteo buteo</i>	BZ	Green	0	2	1	2
<b>Carrion crow</b>	<i>Corvus corone</i>	C.	Green	0	13	6	11
<b>Chaffinch</b>	<i>Fringilla coelebs</i>	CH	Green	0	5	1	4
<b>Dunnock</b>	<i>Prunella modularis</i>	D.	S41, Amber	1	6	2	2
<b>Fieldfare</b>	<i>Turdus pilaris</i>	FF	Schedule 1, Red	1	72	260	0
<b>Gadwall</b>	<i>Mareca strepera</i>	GA	Amber	0	0	0	4
<b>Goldcrest</b>	<i>Regulus regulus</i>	GC	Green	0	0	0	1
<b>Golden plover</b>	<i>Pluvialis apricaria</i>	GP	Annex 1, Green	0	22	0	0
<b>Goldfinch</b>	<i>Carduelis carduelis</i>	GO	Green	0	10	0	9
<b>Great spotted woodpecker</b>	<i>Dendrocopos major</i>	GS	Green	0	1	1	1
<b>Great tit</b>	<i>Parus major</i>	GT	Green	0	4	6	4
<b>Green woodpecker</b>	<i>Picus viridis</i>	G.	Green	0	2	2	0
<b>Greenfinch</b>	<i>Chloris chloris</i>	GR	Red	0	1	0	0
<b>Herring gull</b>	<i>Larus argentus</i>	HG	S41, Red	0	33	0	2
<b>Jackdaw</b>	<i>Coloeus monedula</i>	JD	Green	0	25	76	34
<b>Jay</b>	<i>Garrulus glandarius</i>	J.	Green	0	2	1	4
<b>Kestrel</b>	<i>Falco tinnunculus</i>	K.	Amber	0	1	0	0

Species				Count for each visit			
Common name	Scientific name	BTO code	Conservation status	1	2	3	4
<b>Lesser black-backed gull</b>	<i>Larus fuscus</i>	LB	Amber	0	20	1	0
<b>Linnet</b>	<i>Linaria cannabina</i>	LI	S41, Red	0	2	2	0
<b>Long-tailed tit</b>	<i>Aegithalos caudatus</i>	LT	Green	0	2	5	30
<b>Peregrine</b>	<i>Falco peregrinus</i>	PE	Schedule 1, Annex 1, Green	0	0	1	0
<b>Pheasant</b>	<i>Phasianus colchicus</i>	PH	-	0	2	3	2
<b>Pied wagtail</b>	<i>Motacilla alba</i>	PW	Green	0	1	0	1
<b>Raven</b>	<i>Corvus corax</i>	RN	Green	0	1	0	0
<b>Red kite</b>	<i>Milvus milvus</i>	KT	Schedule 1, Annex 1, Green	20	8	10	6
<b>Red-legged partridge</b>	<i>Alectoris rufa</i>	RL	-	0	0	5	0
<b>Redwing</b>	<i>Turdus iliacus</i>	RE	Schedule 1, Amber	41	45	20	32
<b>Robin</b>	<i>Erithacus rubecula</i>	R.	Green	0	3	11	13
<b>Rook</b>	<i>Corvus frugilegus</i>	RO	Green	24	19	92	1
<b>Skylark</b>	<i>Alauda arvensis</i>	S.	S41, Red	0	1	10	7
<b>Song thrush</b>	<i>Turdus philomelos</i>	ST	S41, Amber	0	11	10	8
<b>Starling</b>	<i>Sturnus vulgaris</i>	SG	S41, Red	0	14	0	0
<b>Stock dove</b>	<i>Columba oenas</i>	SD	Amber	0	6	1	1
<b>Woodpigeon</b>	<i>Columba palumbus</i>	WP	Amber	0	13	16	17
<b>Wren</b>	<i>Troglodytes troglodytes</i>	WR	Amber	2	11	7	8
<b>Yellowhammer</b>	<i>Emberiza citrinella</i>	Y.	S41, Red	0	0	2	6

# Annex D : Site Photographs



## Annex D – Site Photographs



Photograph 1. Typical arable field in Parcel 1 used by notable species including skylark



Photograph 2. Grassland towards the west of Parcel 1 used by foraging thrushes and starling



Photograph 3. Typical hedgerow and arable field margin within Parcel 1



Photograph 4. Arable fields towards the north of Parcel 2 used by skylark and circled over by golden plover



Photograph 5. Typical arable field towards the centre of Parcel 2 with relatively low wintering bird activity



Photograph 6. Typical grazed grassland fields in the south of Parcel 2 with relatively low wintering bird activity



Photograph 7. Flock of 22 golden plovers circling over arable fields towards the north-west of Parcel 2 on 20 December 2023



Photograph 8. Golden plovers circling over arable fields towards the north-west of Parcel 2 on 20 December 2023



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