



SUNNICA ENERGY FARM


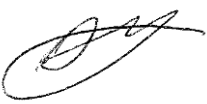

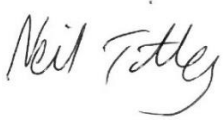
Appendix 8I: Wintering Bird Survey Report

Sunnica Ltd

August 2020



Quality information

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1. Introduction

1.1.1 AECOM was instructed by Sunnica Energy Limited to undertake a survey of wintering birds for the proposed Sunnica Energy Farm (hereafter referred to as the 'Scheme'). As part of the Preliminary Ecological Appraisal (PEA) (Ref 8I-1), a review of Ordnance Survey (OS) mapping of the Scheme identified that the habitat within the Scheme boundary (the Development Consent Order (DCO) Site) was suitable to support birds during the non-breeding (wintering) season and that surveys were required to determine the presence and any assemblages of protected or notable¹ wintering bird species within the DCO Site. Therefore, AECOM was instructed to undertake surveys of wintering birds within the DCO Site and an appropriate survey buffer to record the species, distributions and numbers of wintering birds within the DCO Site and adjacent habitat.

1.2 The Scheme

1.2.1 Sunnica Energy Farm is a new solar farm scheme that would connect to the national electricity transmission network. Sunnica will use ground mounted solar photovoltaic (PV) panel arrays to generate electricity energy from the sun and combine these with a Battery Energy Storage System (BESS). The Scheme will be connected to the national electricity transmission network by an underground cable.

1.2.2 The BESSs will consist of a compound and battery array to allow for the storage, importation and exportation of energy to the National Grid. Details of the design of the BESS elements, including their power and energy ratings, and their dimensions and appearance, are currently in development.

1.2.3 Supporting electrical infrastructure will include an on-site substation and on-site cabling between the different electrical elements of the Scheme. The generating equipment of the Scheme will be fenced and be protected via security measures such as CCTV and lighting. Inside the fenced areas, in addition to the generating equipment will be, internal access tracks, landscaping and habitat management and drainage.

1.2.4 The Scheme will be connected to the existing Burwell National Grid Substation, most likely using 132kV cables buried underground. The cables will run between Sunnica West and Sunnica East (Grid Connection Route A), and then on from Sunnica West to the Burwell National Grid Substation (Grid Connection Route B). Details of the cable route, dimensions of the cables, the depth and method of burial, and numbers of joints required are currently in development.

1.2.5 The Scheme qualifies as a Nationally Significant Infrastructure Project (NSIP) and will require a DCO from national government, due to its generating capacity.

1.2.6 The Scheme therefore comprises the following key areas:

- Solar Farm Sites:

¹ A notable species is a species with a conservation designation, but no legal protection.

- Sunnica East Site A;
 - Sunnica East Site B;
 - Sunnica West Site A; and
 - Sunnica West Site B.
- associated electrical infrastructure for connection to the national transmission system comprise:
 - Grid Connection Route A (connecting the Sunnica East Site A with the Sunnica East Site B and then connecting to the Sunnica West Site A);
 - Grid Connection Route B (connecting the Sunnica West Site A and Sunnica West Site B and the Burwell National Grid Substation); and
 - Burwell National Grid Substation Extension.

1.2.7 **Figure 8I-1** in **Sub-Appendix A** shows the locations of these key areas.

1.3 Site Descriptions

1.3.1 A description of the habitats within the Scheme boundaries are provided below and a more detailed description of the habitats is provided in the PEA report (Ref 8I-1). The extent of the Scheme is shown in **Figure 8I-1**.

Sunnica East Site

1.3.2 The Sunnica East is split into two sub-sites, one to the north of Freckenham (referred to as Sunnica East Site A) and the other to the south of Worlington (referred to as Sunnica East Site B). These two sites are approximately 1 km apart and are separated by agricultural fields. The Sunnica East Site A encompasses an area of approximately 231.7 ha and includes land within the county of Suffolk and Cambridgeshire. Sunnica East Site B lies within Suffolk and encompasses an area of approximately 323.1 ha (**Figure 8I-1**).

1.3.3 The landscape features within the Sunnica East Site A and Sunnica East Site B consist of arable agricultural fields interspersed with individual trees, hedgerows, linear tree belts, small woodland blocks, farm access tracks and local roads.

1.3.4 The landscape features immediately surrounding the Sunnica East Site A and Sunnica East Site B comprise small rural villages, including Worlington to the north, Barton Mills to the north-east, Red Lodge and Freckenham to the south and Isleham to the west. Industrial land uses adjoin the A11 to the south of the Sunnica East Site with an industrial installation of a 7.5 MW solar farm situated adjacent to the south-eastern extent of the Sunnica East Site and an anaerobic digestion (AD) plant located to the south of the Sunnica East Site.

Sunnica West Site

1.3.5 The Sunnica West Site is located within the East Cambridgeshire District Council administrative area, approximately 3 km north east of Newmarket and 6.5 km east of Burwell.

1.3.6 Sunnica West is split into two sub-sites, one to the south-east (referred to as Sunnica West Site A) and the other to the north-west of Snailwell (referred to as Sunnica West Site B). These two sites are approximately 1 km apart,

separated by agricultural fields and Chippenham Road. The Sunnica West Site A encompasses an area of approximately 485.5 ha and includes land to the east and west of the A11, consisting of agricultural fields bounded by trees, managed hedgerows, linear tree shelter belts, small woodland and copses and farm access tracks. Sunnica West Site B encompasses an area of approximately 68.8 ha and comprise of agricultural fields, grassland, small woodland and copses, farm access tracks and irrigation ditches fed by the River Snail which runs along the western and northern boundaries of the Site (**Figure 8I-1**).

- 1.3.7 The surrounding landscape comprises regularly shaped arable fields interspersed with managed hedgerows, tall shelter belts of trees and in the Chippenham Hall area, a parkland landscape with mature individual trees. Much of the area is also characterised by grazed paddocks, horse gallops and exercise tracks.

Cable Route Corridors

- 1.3.8 The Scheme will connect to the existing Burwell National Grid Substation via a cable route corridor. The cable route corridors under consideration are Grid Connection Route A, which connects the Sunnica East Site A with the Sunnica East Site B and then runs between the Sunnica West Site A and the Sunnica East Site B; and Grid Connection Route B, between the Sunnica West Site A and Sunnica West Site B and the Burwell National Grid Substation.

Grid Connection Route A

- 1.3.9 Grid Connection Route A connects the Sunnica East Site A with Sunnica East Site B and crosses two minor roads and arable farmland (**Figure 8I-1**).
- 1.3.10 Heading south from the Sunnica East Site B, the cable route corridor for Grid Connection Route A crosses the River Kennett, pastoral farmland, the Chippenham footpath 49/7 (a Public Right of Way (PRoW)) and B1085 (**Figure 8I-1**).

Grid Connection Route B

- 1.3.11 Heading east from the Burwell National Grid Substation, the cable route corridor for Grid Connection Route B crosses agricultural fields and a number of roads including the B1102 and A142. Grid Connection Route B also crosses a number of watercourses, including the Burwell Lode, New River, and the River Snail, as well as a number of drainage ditches associated with Burwell Fen, Little Fen, the Broads, and agricultural drains (**Figure 8I-1**).
- 1.3.12 The cable route corridor for Grid Connection Route B crosses a PRoW (footpath 92/19) before crossing the railway line and the A142 Newmarket / Fordham Road. The Route then runs alongside Snailwell Road and across the River Snail into Sunnica West Site B.

Burwell National Grid Substation Extension

- 1.3.13 The habitat within the Burwell National Grid Substation Extension (surrounding the existing substation) comprises small grassland fields to the east of the existing substation (bordered by hedgerows and mature trees) and arable land to the south and west of the existing substation (**Figure 8I-1**).

1.4 Scope of Report

1.4.1 The objective of the wintering bird survey, reported in this document, is to determine the presence and any assemblages of wintering bird species, including notable species, within the DCO Site and identify any potential impacts of the Scheme on wintering birds.

1.4.2 This report includes the following information:

- relevant legislation and policy;
- methods for desk and field-based assessments undertaken between 2018 and 2020;
- limitations to the surveys undertaken and any assumptions made as a result of incomplete data;
- survey results;
- the approach for determining the nature conservation importance of wintering bird populations recorded during the assessments; and
- conclusions and recommendations.

1.4.3 This report is a technical appendix to accompany the Preliminary Environmental Information report, reporting on and evaluating the baseline data collected as of August 2020.

2. Relevant Legislation and Policy

2.1 Legislation

Directive of the Conservation of Wild Birds

2.1.1 A number of bird species recorded within the UK (including those that are resident, overwintering and migratory) are protected under European legislation through the Directive of the Conservation of Wild Birds (Ref 8I-2), which lists 193 species, or sub-species, of birds in Annex 1 which are:

- in danger of extinction;
- are rare, or have restricted local distribution;
- are vulnerable to specific changes in their habitat; or
- require particular attention for reasons of the specific nature of habitat.

2.1.2 These species are afforded enhanced legal protection and EU member states have a responsibility to maintain the populations of these species at a level that corresponds to their ecological, scientific and cultural requirements (Article 2). This Directive is transposed into English law through the Conservation of Habitats and Species Regulations 2017 (as amended²) (Ref 8I-3).

2.1.3 Species listed on Annex 1 of the Wild Birds Directive are those for which the UK Government are also required to take special measures, including the designation of Special Protection Areas, to ensure the survival and reproduction of these species throughout their area of distribution. These sites are then automatically included within the Natura 2000, which is a network of core breeding and resting sites that are protected for rare and threatened species.

Wildlife and Countryside Act

2.1.4 The legislative provisions for the protection of wild birds in the UK are contained primarily in Sections 1-7 of the Wildlife and Countryside Act (WCA) 1981 (as amended) (Ref 8I-4). Under the WCA, a wild bird is defined as any bird of a species that occurs in a wild state as a resident or a visitor to the European Territory of any member state.

2.1.5 Reference is not made in this report to species afforded special protection under Schedule 1 of the Wildlife and Countryside Act (1981) as the protection measures in this Act only apply to bird species within the breeding season.

Priority Species

2.1.6 In addition to the above legislation, 49 bird species are listed as being Species of Principal Importance for conservation in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (Ref 8I-5). These species are of material consideration during the planning process. Section 41 of the NERC Act 2006 requires the Secretary of State to publish a

² As such, the requirements of the EC Birds Directive (2009/147/EC) are still applicable despite the UK no longer being a member state of the European Union

list of habitats and species which are of Principal Importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act. The Section 41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act, to have regard to the conservation of biodiversity in England when carrying out their normal functions.

- 2.1.7 The Joint Nature Conservation Committee (JNCC) UK Biodiversity Action Plan (UKBAP) (Ref 8I-6) was launched in 1994 and identified UK BAP priority species of conservation concern that are the most threatened in the UK and requiring action under the UKBAP and for which action plans have been published. However, the work undertaken for the UKBAP is now focussed at a country level, rather than UK level, and the UKBAP has subsequently been succeeded by the UK Post-2010 Biodiversity Framework (July 2012) (Ref 8I-7). However, the UK list of priority species remains an important reference source and has been used to help draw up statutory lists of priority species in England, Scotland, Wales and Northern Ireland. For the purpose of this assessment, the UK BAP is still used as one of the criteria to assist in assigning national value to any given ecological receptor.

2.2 Planning Policy

- 2.2.1 National and local planning policy relevant to nature conservation is provided in detail in the PEA report for the Scheme (Ref 8I-1).

2.3 Local Biodiversity Action Plan Species

- 2.3.1 The Scheme is located in two counties: Cambridgeshire and Suffolk (see Section 8.2 of this report). The Cambridgeshire and Peterborough Biodiversity Action Plan (Ref 8I-8) and Suffolk Biodiversity Action Plan (Ref 8I-9) provide the local nature conservation strategy for identifying threats to species within the county and setting out the actions necessary to conserve them. The Biodiversity Action Plans (BAPs) provide context to inform the identification of threatened and, or uncommon species within the district and, or county. The BAPs also identify priorities for conservation and enhancement but confer no particular legislative or policy protection to the species identified, however in some cases this is provided through related legislation and local planning policy.
- 2.3.2 The Cambridgeshire and Peterborough BAP and the Suffolk BAP list 26 priority bird species (plus three additional birds of interest); and 35 priority bird species respectively. These species are presented in **Table 8I-1**.

Table 8I-1 Priority bird species listed in the Cambridgeshire and Peterborough and Suffolk BAPs

<i>Common name</i>	<i>Scientific name</i>	<i>Cambridgeshire and Peterborough Biodiversity Action Plan Species</i>	<i>Suffolk Biodiversity Action Plan Species</i>
Barn Owl	<i>Tyto alba</i>	✓	-

<i>Common name</i>	<i>Scientific name</i>	<i>Cambridgeshire and Peterborough Biodiversity Action Plan Species</i>	<i>Suffolk Biodiversity Action Plan Species</i>
Bewick's Swan	<i>Cygnus columbianus</i>	✓	-
Bittern	<i>Botaurus stellaris</i>	✓	✓
Black-tailed Godwit	<i>Limosa limosa</i>	✓	✓
Bullfinch	<i>Pyrrhula pyrrhula</i>	✓	✓
Common Crane	<i>Grus grus</i>	✓	-
Cuckoo	<i>Cuculus canorus</i>	-	✓
Corn Bunting	<i>Emberiza calandra</i>	✓	✓
Corncrake	<i>Crex crex</i>	✓	-
Curlew	<i>Numenius arquata</i>	✓	✓
Dunnock	<i>Prunella modularis</i>	-	✓
Grasshopper Warbler	<i>Locustella naevia</i>	✓	✓
Grey Partridge	<i>Perdix perdix</i>	✓	✓
Hawfinch	<i>Coccothraustes coccothraustes</i>	✓	✓
Herring Gull	<i>Larus argentatus subsp. argentus</i>	✓	✓
House Sparrow	<i>Passer domesticus</i>	✓	✓
Lapwing	<i>Vanellus vanellus</i>	✓	✓
Lesser Redpoll	<i>Acanthis cabaret</i>	✓	✓
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	✓	✓
Linnet	<i>Linaria cannabina</i>	✓	✓
Little Tern	<i>Sterna albifrons</i>	-	✓
Marsh Tit	<i>Poecile palustris</i>	✓	✓
Nightjar	<i>Caprimulgus europaeus</i>	-	✓
Reed Bunting	<i>Emberiza schoeniclus</i>	✓	✓
Savi's Warbler	<i>Locustella luscinioides</i>	-	✓

<i>Common name</i>	<i>Scientific name</i>	<i>Cambridgeshire and Peterborough Biodiversity Action Plan Species</i>	<i>Suffolk Biodiversity Action Plan Species</i>
Skylark	<i>Alauda arvensis</i>	✓	✓
Song Thrush	<i>Turdus philomelos</i>	✓	✓
Spotted Flycatcher	<i>Muscicapa striata</i>	✓	✓
Starling	<i>Sturnus vulgaris</i>	-	✓
Stone-curlew	<i>Burhinus oedicnemus</i>	✓	✓
Swift	<i>Apus apus</i>	✓	-
Tree Pipit	<i>Anthus trivialis</i>	-	✓
Tree Sparrow	<i>Passer montanus</i>	✓	✓
Turtle Dove	<i>Streptopelia turtur</i>	✓	✓
Twite	<i>Carduelis flavirostris</i>	-	✓
Willow Tit	<i>Poecile montanus</i>	-	✓
Wood Lark	<i>Lullula arborea</i>	-	✓
Wood Warbler	<i>Phylloscopus sibilatrix</i>	-	✓
Yellow Wagtail	<i>Motacilla flava</i>	✓	✓
Yellowhammer	<i>Emberiza citrinella</i>	✓	✓

2.4 Birds of Conservation Concern

2.4.1 The Birds of Conservation Concern (BoCC) (Ref 8I-10) is an assessment of the conservation status of all regularly occurring British birds. The lists (Red, Amber and Green), that indicate the level of conservation importance for each species, are derived from quantitative assessments from standardised criteria. The assessment is based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. The lists are drawn together by the UK's leading bird conservation organisations, including the Royal Society for the Protection of Birds (RSPB) and British Trust for Ornithology (BTO).

2.4.2 The criteria for birds being included in the BoCC lists are as follows.

Red List:

- globally threatened;

- historical population decline in UK during 1800–1995; and
- severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period (the entire period used for assessments since the first BoCC review, starting in 1969). Severe (at least 50%) contraction of UK breeding range over last 25 years, or the longer-term period.

Amber List:

- species with unfavourable conservation status in Europe (SPEC = Species of European Conservation Concern);
- historical population decline during 1800–1995, but recovering; population size has more than doubled over last 25 years;
- moderate (25-49%) decline in UK breeding population over last 25 years, or the longer-term period;
- moderate (25-49%) contraction of UK breeding range over last 25 years, or the longer-term period;
- moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period;
- rare breeder; 1–300 breeding pairs in UK;
- rare non-breeders; less than 900 individuals;
- localised; at least 50% of UK breeding or non-breeding population in 10 or fewer sites, but not applied to rare breeders or non-breeders; and
- internationally important; at least 20% of European breeding or non-breeding population in UK (NW European and East Atlantic Flyway populations used for non-breeding wildfowl and waders respectively).

Green List:

- species that occur regularly in the UK but do not qualify under any of the above criteria.

2.4.3 Although the BoCC lists confer no legal status in themselves, they are useful in evaluating the conservation significance of bird assemblages, and for assessing the potential significance of impacts and informing appropriate levels of mitigation with respect to bird populations.

3. Methods

3.1 Desk Study

- 3.1.1 A desk study was undertaken in December 2018 through Cambridgeshire & Peterborough Environmental Records Centre (CPERC) and Suffolk Biodiversity Information Service (SBIS) to obtain records of protected and notable bird species within a 2 km radius of the DCO Site.
- 3.1.2 Only records up to ten years old were considered within the assessment, as any records older than ten years are unlikely to be still representative of bird species in the local area.

3.2 Field Survey

Survey Area

- 3.2.1 The survey area included all habitat within the DCO Site and a 50 m survey buffer. Standardised survey buffers for assessing the impacts of development on bird populations do not exist, however, the survey area used provides information on the wintering birds within the area immediately surrounding the Scheme and includes areas contiguous with the DCO Site, where birds may potentially be adversely affected. Depending on the sensitivity of the species, birds occurring outside of the survey area may also be adversely affected. The survey area is sufficient to determine the likely impacts of the Scheme on the wintering bird species occurring or likely to occur in the area.
- 3.2.2 For ease of analysis, in consideration of the size of the Scheme and geographical location, the survey area was split into compartment areas (see **Table 8I-2** and **Figure 8I-2**).

Table 8I-1 Survey Compartments within the DCO Site

<i>Scheme Area</i>	<i>Survey Compartment Reference</i>	<i>County</i>
Sunnica East Site A	Sunnica East Site A1	Cambridgeshire
	Sunnica East Site A2	Suffolk
Sunnica East Site B	Sunnica East Site B	Suffolk
Sunnica West Site A		Cambridgeshire
Sunnica West Site B		Cambridgeshire
Grid Connection Route A	Cable Route A1	Suffolk
	Cable Route A2	Cambridgeshire
Grid Connection Route B	Cable Route B1	Cambridgeshire
	Cable Route B2	

Scheme Area	Survey Compartment Reference	County
Burwell National Grid Substation Extension		Cambridgeshire

3.2.3 Modifications to the Scheme extent through the survey period resulted in minor modifications to the survey area used during the course of the wintering bird survey and reflected the extent of access at the time. However, the survey covered the DCO Site and provides a robust baseline of the wintering bird community present within the DCO Site and allows determination of the presence of any protected or sensitive ornithological receptors.

Walkover Survey

3.2.4 The wintering bird survey was broadly based on a transect methodology as detailed in Bibby *et al.* (2000) (Ref 8I-11) and Gilbert *et al.* (1998) (Ref 8I-12). The wintering bird survey was undertaken between November 2018 and March 2019; and October 2019 and March 2020.

3.2.5 The habitat within the DCO Site was surveyed either through walked routes or strategic viewing points where access was restricted.

3.2.6 The routes were walked by surveyors using suitable optical equipment to observe bird behaviour. Regular stopping points were included along the routes to record any species that may be passing through the survey area. Strategic viewing points were chosen on the basis of:

- the extent of view;
- access permission; and
- safety considerations.

3.2.7 A total of four viewing points were used to survey wintering birds within the cable corridors A2 and B2; and one viewing point was used to survey the habitat around the proposed Burwell National Grid Substation Extension (see **Figure 8I-2**). Each viewing point was surveyed for ten to 20 minutes. The survey duration was considered proportionate to the duration of undertaking a walkover survey over a similar area. Surveys did not start until five minutes after the surveyor had reached the point to allow birds to settle down from any disturbance caused by the surveyor's arrival. Survey routes were mapped, and the direction walked alternated on each visit, to ensure that all areas were covered at various times of day across the duration of the survey. Surveys were undertaken during a range of daylight hours, between sunrise and sunset.

3.2.8 On each visit, the route was walked at a slow pace with start and finish times noted. All birds seen and heard were recorded directly onto an ArcGIS base map using ESRI software on hand-held PDA devices, with a 1:10,000 scale Ordnance Survey base map of the survey area. Registrations of birds were recorded using standard British Trust for Ornithology (BTO) two letter species codes and all bird species were recorded and mapped across the whole survey area.

- 3.2.9 Each survey was undertaken during appropriate weather conditions for survey and avoided, where possible, days with adverse weather conditions such as heavy rain or strong winds as birds may be harder to detect in such conditions.
- 3.2.10 The weather conditions during each survey can be found in **Sub-Appendix B, Table 8I-B.1**.

3.3 Assessment of Ornithological Importance

- 3.3.1 The assessment of the ornithological importance of the survey area during the non-breeding (winter) season was made by evaluating any species afforded special statutory protection or those included on one, or more, of the lists of species of conservation interest, as detailed in Sections 2.1 to 2.4 of this appendix. These include:
- species listed on Annex 1 of the EU Birds Directive (Ref 8I-2);
 - priority bird species in the UK (Ref 8I-7);
 - species listed as priority species or additional species of interest on the Cambridgeshire and Peterborough BAP (**Table 8I-1**);
 - species listed as a priority species on the Suffolk BAP (**Table 8I-1**); and
 - species included in the Birds of Conservation Concern (BoCC) Red and Amber Lists (Ref 8I-7).

Species Abundance

- 3.3.2 In addition to evaluating a site based on its populations of wintering birds in relation to legal status, rarity and biodiversity importance, consideration has to be given to the value of the survey area for the population of individual species that it supports. This can be done by comparing the population present within the survey area with the national and county wintering population for certain species. National estimates for non-breeding birds are published in a paper: '*Population estimates of birds in Great Britain and the United Kingdom*' (Ref 8I-13). The BTO Bird Atlas 2007-2011 (Ref 8I-14) was also reviewed for species information on a national level.
- 3.3.3 Information on the population status of non-breeding bird species at a county level was sourced from the Cambridgeshire Bird Atlas 2007 - 2011 (Ref 8I-15) and the Suffolk Bird Atlas 2007 – 2011 (Ref 8I-16).
- 3.3.4 County-level estimates on the wintering bird populations of the majority of species in Cambridgeshire and Suffolk were also obtained from county avifauna reports, where this information was available.

Species Diversity

- 3.3.5 The number of species recorded in an area is a simple measure of diversity that can indicate its importance at each season of the year.
- 3.3.6 Local Wildlife Sites (LWS) (or County Wildlife Sites (CWS)) are among the most important places for wildlife in Cambridgeshire and Suffolk, together with legally protected land such as Sites of Special Scientific Interest (SSSIs).

3.3.7 In Cambridgeshire, an individual CWS can be selected for birds if it meets the criteria within ‘*Wildlife Trust, Cambridgeshire and Peterborough County Wildlife Sites Selection Guidelines*’ (Ref 8I-17). These guidelines state that the criterion for selection of County Wildlife Sites applies to a site “*which regularly contains 0.5 % or more of the total British non-breeding population of any bird species during any period*”. Additionally, the criteria relating to wintering birds are localities with 60 wintering species recorded in the last five years.

3.3.8 In Suffolk, CWSs are selected for their habitats and subsequently have no specific criteria for birds. Therefore, species diversity in Suffolk has been measured using professional judgement, considering species presence within distinct habitat types within the DCO Site, e.g. farmland passerines.

Importance of the Wintering Bird Population

3.3.9 To support a focussed assessment of the population of wintering birds within the DCO Site, their biodiversity value was defined with reference to the geographical level at which it matters. The frames of reference used in this report were made using the values presented in the ‘*Guidelines for Ecological Impact Assessment in the United Kingdom: Terrestrial, Freshwater, Coastal and Marine*’ (Ref 8I-18) (hereafter referred to as the CIEEM Guidelines); and professional judgement.

3.3.10 The evaluation uses a framework linked to a geographical scale at which the receptor has been valued (*i.e.* international, national, regional, county, local or site) and this method represents best practice guidance. These assessment criteria, set out in **Table 8I-2**, have been used in conjunction with species rarity, abundance and diversity within the survey area to assess the biodiversity importance of the wintering bird populations recorded during the field surveys.

Table 8I-2 Importance of Ornithological Features

<i>Importance of Ornithological Features</i>	<i>Descriptors and Examples of Criteria</i>
International or European	<p>Resident or regularly occurring populations of species which may be considered of value at an international or European level¹ where:</p> <ul style="list-style-type: none"> the loss of these populations would adversely affect the conservation status or distribution of the species at this geographic scale; the population forms a critical part² of a wider population at this scale; or the species is at a critical phase³ of its life cycle at this scale.
UK or National	<p>Areas of habitats with priority species identified in the UK Post-2010 Biodiversity Framework <i>i.e.</i> UK Biodiversity Action Plan (BAP), including those published in accordance with Section 41 of the Natural Environment and Rural Communities Act (2006) and those considered to be of principal importance for the conservation of biodiversity.</p> <p>Resident or regularly occurring populations of species which may be considered of value at a UK or a national level⁴ where:</p> <ul style="list-style-type: none"> the loss of these populations would adversely affect the conservation status or distribution of the species at this geographic scale;

<i>Importance of Ornithological Features</i>	<i>Descriptors and Examples of Criteria</i>
	<ul style="list-style-type: none"> • the population forms a critical part of a wider population at this scale; or • the species is at a critical phase of its life cycle at this scale.
Regional	<p>Populations of species of value at a regional level (<i>i.e.</i> East Anglia). Resident or regularly occurring populations of species which may be considered of value at a regional level⁵ where:</p> <ul style="list-style-type: none"> • the loss of these populations would adversely affect the conservation status or distribution of the species at this geographic scale; • the population forms a critical part of a wider population at this scale; or • the species is at a critical phase of its life cycle at this scale.
County or Unitary Authority or District	<p>Populations of species of value at a County (<i>i.e.</i> Cambridgeshire and Suffolk) level or District (<i>e.g.</i> East Cambridgeshire). Resident or regularly occurring populations of species which may be considered of value at a County (or District)⁶ level where:</p> <ul style="list-style-type: none"> • the loss of these populations would adversely affect the conservation status or distribution of the species at this geographic scale; • the population forms a critical part of a wider population at this scale; or, • the species is at a critical phase of its life cycle at this scale.
Local	<p>Species populations of value in a local (<i>i.e.</i> within ~ 2 km of the site) context.</p> <p>Populations and, or communities of species considered to appreciably enrich the habitat resource within the local context (such as veteran trees), including features of value for migration, dispersal or genetic exchange.</p>
Site	<p>Habitats and associated species that are of value in the context of the site only.</p> <p>Populations of common and widespread species.</p>

¹ Such species include those listed within the Directive 2009/147/EC on the Conservation of Wild Birds (*i.e.* EC Birds Directive) (codified version of Council Directive 79/409/EEC as amended) or animal or plant species listed within Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (*i.e.* Habitats Directive).

²Such populations include sub-populations that are essential to maintenance of metapopulation dynamics, *e.g.* critical emigration and, or immigration links between otherwise discrete populations.

³Seasonal activity or behaviour upon which survival or reproduction depends.

⁴Species which may be considered at the UK or national level mean: birds, other animals and plants which receive legal protection on the basis of their conservation interest (those listed within the Wildlife and Countryside Act 1981 (as amended) Schedule 1, 5 and 8); species listed for their principal importance for biodiversity (in accordance with the Natural Environment and Communities Act 2006 Section 41 England), priority species listed within the UK Post 2010 Biodiversity Framework (*i.e.* UK Biodiversity Action Plan (UKBAP)), or species listed within the Red Data Book.

⁵Such species include those listed in the appropriate Natural Character Area description.

⁶Such species include those at county level (*i.e.* Cambridgeshire and Suffolk) including unitary authority area *i.e.* District level (*i.e.* East of England); as listed on the LBAPs; and listed as a county designated site.

*As well as assigning importance there is also a need to identify all legally protected species that could be affected by the proposed scheme in order that measures can be taken to ensure that adherence to the relevant legislation is observed. This may include the adoption of mitigation and appropriate licensing which are acceptable to Natural England.

3.4 Assumptions and Limitations

Desk Study

- 3.4.1 The information collected from the desk study represents only those records submitted to records centres and is therefore not considered to be a definitive list of protected and priority bird species identified within the desk study area. If records have not been provided, this does not confirm absence of wintering birds from within the DCO Site.
- 3.4.2 The aim of a desk study was to help characterise the baseline context of the Scheme and provide valuable background information that would not be captured by site surveys alone. Information obtained during the course of a desk study was dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular species does not necessarily mean that the species does not occur in the study area. Likewise, the presence of records for particular species does not automatically mean that these still occurred within the area of interest or were relevant in the context of the Scheme.

Field Survey

- 3.4.3 During the course of the survey, there were a number of modifications to the Scheme alignment, which in turn resulted in minor modifications to the survey area used during the course of the wintering bird survey. However, it is considered that sufficient representatives of all habitat types were covered within the entirety of the survey period, to allow for a comprehensive assessment of bird species and assemblages present. The buffer around the DCO Site forming the survey area was such that it allowed for minor modifications to the Scheme without reducing efficacy of the survey. Any modifications to the Scheme during the course of the surveys are therefore, not considered to have significantly altered the conclusions drawn within this report.
- 3.4.4 It is considered that sufficient information has been gathered during the assessment to provide a representative sample of the wintering bird population present within the DCO Site.

4. Results

4.1 Desk Study

4.1.1 Records of 108 protected and, or notable bird species from the last ten years were returned within 2km of the DCO Site and a list of these species is included in **Sub-Appendix C**.

4.2 Field Survey

4.2.1 The following sections present the wintering bird data collected for the DCO Site and then broken down into the respective Scheme areas (see section 3.2.2 of this appendix). Species lists in the following tables are listed in taxonomic order, as defined by the British Ornithologists Union (BOU) British List³.

4.2.2 A total of 71 species were recorded within the survey area during the wintering bird surveys undertaken for the whole Scheme in 2018/2019 and 2019/2020.

4.2.3 A breakdown of the number of species recorded per Scheme area is presented in Table 8I-1.

Table 8I-1 Number of species recorded per Scheme area

<i>Sunnica East Site A</i>	<i>Sunnica East Site B</i>	<i>Sunnica West Site A</i>	<i>Sunnica West Site B</i>	<i>Grid Connection Route A1</i>	<i>Grid Connection Route A2</i>	<i>Grid Connection Route B1</i>	<i>Grid Connection Route B2</i>	<i>Burwell National Grid Substation Extension</i>
36	58	55	22	19	21	22	37	24

4.2.4 The 71 species, along with their respective peak counts and conservation status are presented in **Table 8I-2**. Given the surveys were undertaken over two winter periods (due to access arrangements and Scheme modifications), peak counts for the DCO Site have been derived from the summed peaks for a species recorded, irrespective of the survey date, at each component of the DCO Site. This represents the minimum number of individual species using the survey area during the survey period.

³ <https://www.bou.org.uk/wp-content/uploads/2019/02/British-List-2019-02-01.pdf> [accessed January 2020]

Table 8I-2 Peak count data and conservation status of birds recorded within the DCO Site

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Canada Goose	<i>Branta canadensis</i>	BoCC Amber	0	0	0	0	0	0	33	0	0	0	33
Pink-footed Goose	<i>Anser brachyrhynchus</i>	BoCC Amber	0	0	0	0	11	0	0	0	0	0	11
Mute Swan	<i>Cygnus olor</i>	BoCC Amber	0	0	1	0	0	0	0	0	2	0	3
Shelduck	<i>Tadorna tadorna</i>	BoCC Amber	0	0	2	0	0	3	2	0	2	0	9
Mallard	<i>Anas platyrhynchos</i>	BoCC Amber	0	2	0	0	0	0	0	0	0	0	2
Red-legged Partridge	<i>Alectoris rufa</i>	-	1	0	82	9	5	1	0	0	0	0	98
Pheasant	<i>Phasianus colchicus</i>	-	1	0	7	7	0	0	0	0	0	9	24
Grey Heron	<i>Ardea cinerea</i>	-	0	0	0	1	1	0	0	0	0	0	2
Little Egret	<i>Egretta garzetta</i>	Annex 1	0	0	0	0	0	0	0	0	2	0	2
Cormorant	<i>Phalacrocorax carbo</i>	-	0	0	1	4	0	0	0	0	1	0	6
Sparrowhawk	<i>Accipiter nisus</i>	-	1	0	1	2	0	0	0	0	0	0	4

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Red Kite	<i>Milvus milvus</i>	Annex 1	0	0	1	0	0	0	0	1	0	0	2
Buzzard	<i>Buteo buteo</i>	-	3	0	5	6	0	1	0	2	2	0	19
Moorhen	<i>Gallinula chloropus</i>	-	0	1	0	0	0	0	0	0	0	0	1
Lapwing	<i>Vanellus vanellus</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	29	0	128	11	5	0	0	0	0	0	173
Golden Plover	<i>Pluvialis apricaria</i>	Annex 1	0	0	2	59	0	0	0	1	0	0	62
Curlew	<i>Numenius arquata</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	0	0	0	1	0	0	0	0	0	0	1
Woodcock	<i>Scolopax rusticola</i>	BoCC Red	0	0	1	1	0	0	0	0	0	0	2
Snipe	<i>Gallinago gallinago</i>	BoCC Amber	0	0		1	7	0	0	0	0	0	8
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	BoCC Amber	150	50	279	201	0	20	125	0	11	0	836

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Common Gull	<i>Larus canus</i>	BoCC Amber	0	50	66	320	0	0	7	0	12	2	457
Great Black-backed Gull	<i>Larus marinus</i>	BoCC Amber	0	0	1	0	0	0	0	0	0	0	1
Herring Gull	<i>Larus argentatus</i>	Priority Species, BoCC Red, Cams BAP, Suffolk BAP	0	0	34	175	0	2	1	0	10	9	212
Lesser Black-backed Gull	<i>Larus fuscus</i>	BoCC Amber	25	20	16	102	0	4	17	0	0	0	184
Stock Dove	<i>Columba oenas</i>	BoCC Amber	4	0	25	8	17	0	0	0	4	5	54
Woodpigeon	<i>Columba palumbus</i>	-	16	0	612	421	0	1	1	47	1	14	1,113
Collared Dove	<i>Streptopelia decaocto</i>	-	0	0	4	0	0	0	0	1	3	1	9
Great Spotted Woodpecker	<i>Dendrocopos major</i>	-	0	0	12	2	1	0	0	0	1	0	16
Green Woodpecker	<i>Picus viridis</i>	-	0	0	1	1	0	0	0	0	0	1	3
Peregrine	<i>Falco peregrinus</i>	Annex 1	1	0	0	0	0	0	0	0	0	0	1

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Kestrel	<i>Falco tinnunculus</i>	BoCC Amber	0	0	2	2	0	1	0	0	0	1	6
Jay	<i>Garrulus glandarius</i>	-	0	0	3	6	0	0	0	1	1	0	11
Magpie	<i>Pica pica</i>	-	0	0	5	6	0	0	0	0	6	2	19
Jackdaw	<i>Coloeus monedula</i>	-	5	0	50	100	0	246	1	0	0	0	402
Rook	<i>Corvus frugilegus</i>	-	10	0	100	300	0	0	2	0	25	0	437
Carrion Crow	<i>Corvus corone</i>	-	3	10	20	5	0	0	2	0	3	1	44
Raven	<i>Corvus corax</i>	-	0	0	3	0	0	0	0	0	0	0	3
Coal Tit	<i>Parus ater</i>	-	0	0	12	8	0	0	0	3	1	1	25
Marsh Tit	<i>Poecile palustris</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	0	0	2	1	0	0	0	0	0	0	3
Blue Tit	<i>Cyanistes caeruleus</i>	-	1	1	29	44	3	2	2	5	4	8	99
Great Tit	<i>Parus major</i>	-	2	1	23	30	3	1	1	1	4	3	69

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Skylark	<i>Alauda arvensis</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	32	2	70	133	16	1	30	3	1	0	288
Long-tailed Tit	<i>Aegithalos caudatus</i>	-	0	0	49	97	0	0	11	0	5	5	167
Chiffchaff	<i>Phylloscopus collybita</i>	-	0	0	1	0	0	0	0	0	0	0	1
Blackcap	<i>Sylvia atricapilla</i>	-	0	0	1	0	0	0	0	0	0	0	1
Goldcrest	<i>Regulus regulus</i>	-	0	2	20	11	0	0	1	2	0	1	37
Wren	<i>Troglodytes troglodytes</i>	-	0	1	5	11	0	1	1	1	3	4	27
Treecreeper	<i>Certhia familiaris</i>	-	0	0	2	2	0	0	0	0	0	0	4
Starling	<i>Sturnus vulgaris</i>	Priority Species, BoCC Red, Suffolk BAP	9	1,000	267	110	0	0	0	0	41	0	1,427
Blackbird	<i>Turdus merula</i>	-	2	0	30	24	1	1	2	6	6	4	76
Fieldfare	<i>Turdus pilaris</i>	BoCC Red	85	45	50	311	2	8	0	101	2	0	604

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Redwing	<i>Turdus iliacus</i>	BoCC Red	2	10	48	220	2	0	0	14	6	2	304
Song Thrush	<i>Turdus philomelos</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	0	0	5	17	3	0	1	2	3	1	32
Mistle Thrush	<i>Turdus viscivorus</i>	BoCC Red	0	0	6	0	0	0	0	0	1	0	7
Robin	<i>Erithacus rubecula</i>	-	1	1	18	25	1	2	2	2	5	2	59
Stonechat	<i>Saxicola rubicola</i>	-	0	0	0	2	0	0	0	0	0	0	2
Duncock	<i>Prunella modularis</i>	Priority Species, BoCC Amber, Suffolk BAP	1	1	17	14	1	1	0	1	2	3	41
Grey Wagtail	<i>Motacilla cinerea</i>	BoCC Red	0	0	1	0	0	0	0	0	0	0	1
Pied Wagtail	<i>Motacilla alba</i>	-	7	0	4	27		0	0	0	60	1	99
Meadow Pipit	<i>Anthus pratensis</i>	BoCC Amber	28	4	6	63	3	0	0	0	2	0	106
Chaffinch	<i>Fringilla coelebs</i>	-	21	0	97	16	6	0	0	1	4	2	147

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
Brambling	<i>Fringilla montifringilla</i>	-	0	0	15	6	0	0	0	0	0	0	21
Bullfinch	<i>Pyrrhula pyrrhula</i>	Priority Species, BoCC Amber, Cambs BAP, Suffolk BAP	0	0	1	2	2	0	0	2	0	0	7
Greenfinch	<i>Chloris chloris</i>	-	0	0	4	1	2	0	0	0	5	0	12
Linnet	<i>Linaria cannabina</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	2	3	69	255	4	0	0	0	3	0	336
Lesser Redpoll	<i>Acanthis cabaret</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	0	0	0	2	0	0	0	0	0	0	2
Goldfinch	<i>Carduelis carduelis</i>	-	2	0	60	75	3	2	2	3	16	9	172
Siskin	<i>Spinus spinus</i>	-	0	0	0	1	0	0	0	0	0	0	1
Yellowhammer	<i>Emberiza citrinella</i>	Priority Species, BoCC Red,	0	2	4	13	0	0	0	4	4	0	27

Species (English name)	Scientific name	Conservation Status	Sunnica East Site A		Sunnica East Site B	Sunnica West Site A	Sunnica West Site B	Grid Connection Route A1	Grid Connection Route A2	Grid Connection Route B1	Grid Connection Route B2	Burwell National Grid Substation Extension	Summed Peak
			A1	A2									
		Cambs BAP, Suffolk BAP											
Reed Bunting	<i>Emberiza schoeniclus</i>	Priority Species, BoCC Amber, Cambs BAP, Suffolk BAP	1	0	4	7	0	0	0	0	0	0	12
Corn Bunting	<i>Emberiza calandra</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	2	0	0	0	0	0	0	0	0	0	2
TOTAL NUMBER OF SPECIES			29	19	58	54	22	19	21	22	37	24	71

5. Evaluation

5.1 Desk Study

5.1.1 Records of 108 protected and, or, notable species were returned from the CPERC and SBIS desk study. Of these 108 species:

- 32 are listed on Annex 1 of the EU Birds Directive;
- 34 are listed as Priority Species;
- 37 species are included on the BoCC Red List;
- 56 species are included on the BoCC Amber List;
- 24 species are included on the Cambridgeshire and Peterborough Priority Species and three species listed on the Cambridgeshire and Peterborough Additional Species of Interest; and
- 15 species are listed as Suffolk Biodiversity Action Plan species.

5.2 Field Survey

5.2.1 A total of 71 bird species were recorded during wintering bird surveys for the Scheme. Of these 71 bird species, 36 species (see **Table 8I-2**) meet at least one of a range of criteria relating to conservation importance, as listed in Sections 2.1-2.4 of this report.

5.2.2 Four species (Little Egret, Red Kite, Peregrine and Golden Plover), listed on Annex I of the EC Birds Directive (2009) were recorded within the DCO Site.

5.2.3 A total of 14 priority species were recorded within the DCO Site. These were: Lapwing, Curlew, Herring Gull, Marsh Tit, Skylark, Starling, Song Thrush, Dunnock, Bullfinch, Linnet, Lesser Redpoll, Yellowhammer, Reed Bunting and Corn Bunting.

5.2.4 Sixteen species, included on the BoCC Red List and 16 species, included on the BoCC Amber list, were recorded within the DCO Site. The remaining species are all included on the Green list and are of least conservation concern.

5.2.5 Twelve species, listed as action plan species or additional species of interest in Cambridgeshire, were recorded within the survey area.

5.2.6 Fourteen species, listed as Suffolk Biodiversity Action Plan species, were recorded within the survey area.

5.3 Species Abundance

5.3.1 In addition to evaluating a site based on its populations of wintering birds in relation to legal status, rarity and conservation value, consideration has to be given to the value of the site for the population of individual species that it supports. This can be done by comparing the population present on site with the national and county wintering population for certain species.

- 5.3.2 No peak counts of any species form a significant proportion (*i.e.* 1% or more) of the national wintering population estimates as detailed in Woodward *et al.* (2020) (Ref 8I-13).
- 5.3.3 Pink footed Goose was recorded in numbers exceeding 1% of the county level, when compared to the wintering population estimates for the county as detailed in Cambridgeshire Bird Atlas 2007-2011 (Ref 8I-15). The species is an uncommon winter visit and passage migrant in Cambridgeshire with a wintering population estimate/number of annual records in the county of 5 – 50 individuals. Eleven Pink-footed Geese were recorded flying high (at a height of greater than 100 m) in a north-westerly direction over the Sunnica West Site B on 5th February 2019 and were not recorded using the habitat within the DCO Site.
- 5.3.4 Golden Plover were observed flying over Sunnica East Site B (two birds on 3rd December 2018) and in Sunnica West Site A (counts of 18 and one in November and December 2018, respectively). A larger count of 39 Golden Plover was recorded flying over Sunnica West Site A in October 2019, with a further 20 birds recorded settled in a ploughed field to the east of the Sunnica West Site A. Similarly, Lapwing were recorded in the Sunnica East Sites A and B (peaking at 128 birds settled in Sunnica East Site B in January 2019); and in Sunnica West Sites A and B. Numbers of Golden Plover and Lapwing within the DCO Site did not form a significant proportion of the county population in Cambridgeshire, which often exceeds 3,000 birds (for both species) during winter and with counts of over 500 birds at many sites, such as the Ouse Washes and Nene Washes (Cambridgeshire Bird Club, Cambridgeshire Bird Reports 2015-18). Given the nomadic status of Golden Plover and Lapwing flocks, in response to annual variations in crop rotations, and the limited observations of both species utilising the fields within the DCO Site, the habitat within the DCO Site is considered to be of local importance only to Golden Plover and Lapwing, particularly in consideration of similar habitats in the surrounding arable landscape.
- 5.3.5 A summed peak of 288 Skylark was recorded across the survey area, predominantly within the arable fields of Sunnica East Sites A and B; and Sunnica West Sites A and B. Whilst this peak across the DCO Site is considered as being of district importance, the individual sites are of local importance only.
- 5.3.6 The summed peak of Starling within the DCO Site was 1,427 birds, with 1,000 birds recorded in the Sunnica East Site A in December 2018 and February 2019. However, the surveys on these dates coincided with overhead passage of migrating Starling, when every winter thousands of Starling head westwards from Eastern Europe in search of food. Therefore, these Starlings were not using the habitat within the DCO Site and the peak count of Starling, when factoring in usage of the habitat within the DCO Site by Starlings observed on the ground within the Scheme areas is not considered to represent a significant proportion of the county populations.
- 5.3.7 Fieldfare was present in a number approaching 1% of the county level, when compared to the wintering population estimates for the county as detailed in the Cambridgeshire Bird Atlas 2011-2017 (Ref 8I-15). The peak count recorded in Sunnica West Site A was 311, with a wintering population estimate

in Cambridgeshire of between 5,000 and 30,000 individuals. Fieldfare is a transient species of thrush which reacts to cold weather conditions and availability of food resources, e.g. berries. Whilst a count of 311 represents a good count at county level, it is likely that the surrounding landscape also provides sufficient foraging opportunities for this species and that the habitat within the Sunnica West Site A is of local importance only to wintering Fieldfare.

- 5.3.8 A summed peak of 336 Linnet was recorded across the survey area, predominantly within areas of set-aside or game cover crops within the Sunnica West Site A (peaking at 255 birds in November 2018). Whilst a summed peak of 336 represents a good count at county level, it is likely that the surrounding landscape also provides sufficient foraging opportunities for this species and that the habitat on Site is of local importance only to wintering Linnet.
- 5.3.9 No other species recorded in the survey area were recorded in a figure approaching 1% of the county wintering population estimates in Cambridgeshire or Suffolk. The numbers of individuals of the majority of each species recorded were all relatively low and did not represent significant proportions (*i.e.* 1 % or more) of the county populations in Cambridgeshire or Suffolk. Therefore, the majority of species populations, with the exception of those mentioned above, across the Scheme are considered to be of no more than local importance.

5.4 Species Diversity

- 5.4.1 Professional judgement was used to evaluate the number of species recorded within the survey area and in each discrete habitat type (as described in section 3.3.5 of this appendix) to assess species diversity.
- 5.4.2 The number of species recorded across the DCO Site was 71 and would place the importance of the species diversity occurring within the whole DCO Site as being of county importance. However, when evaluating the number of species recorded within each Scheme Area (Sunnica West Site A and Site B, Sunnica East Site A and Site B, the cable corridors and the Burwell National Grid Substation Extension), the number of species occurring within each Scheme area is lower.
- 5.4.3 Evaluation was also made of the species assemblage and numbers recorded during surveys of the Scheme Sites that are located in Cambridgeshire, with respect to criteria for selection of County Wildlife Sites (as detailed in Section 3.3.7 of this appendix). None of the criterion for inclusion of any individual site within the Scheme is met.
- 5.4.4 In Suffolk, there is no specific criteria for birds, with regards to CWS selection. Whilst the number of species occurring on the Sunnica East Site B (58) is high, in consideration of the size of the Sunnica East Site B and the inclusion of many different habitats within this area (woodland, arable farmland, hedgerows, small waterbodies *etc.*), none of the criteria is likely to be met when individually evaluating each discrete habitat by the species it supports.

5.5 Species distribution

5.5.1 The location of Annex 1 species, Priority species and, or BoCC Red and Amber-listed bird species, (see **Table 8I-2**) are shown in **Figures 8I-3**. In general, concentrations of species were found within the most suitable habitats to support each individual species' needs (*i.e.* species reliant on waterbodies were found on Site close to water, species that require woodland habitat, were found within woodland habitat on Site, *etc.*). A summary of the distribution of protected (Annex 1) and notable (Priority listed species) is provided in the following text.

Annex 1 species

5.5.2 Little Egret was recorded on a single occasion, with two birds flying over Grid Connection Route B2 in January 2019. Single Red Kite were observed flying over Sunnica East Site B in November 2018; and over Grid Connection Route B1 in February 2019. Peregrine was recorded on a single occasion in Sunnica East Site A1, perched in a dead tree, in February 2020. The distribution of Golden Plover is described in section 5.3.4 of this appendix.

Priority Species

5.5.3 A total of 14 priority species were recorded within the DCO Site. The distribution of priority species, not including those species already mentioned earlier in this report (Lapwing, Skylark, Starling and Linnet) were:

- Curlew – a single bird was heard calling from Sunnica West Site A in March 2019 on a single occasion;
- Herring Gull – this species was observed flying over the DCO Site, with birds often recorded foraging in Sunnica West Site A, peaking at 175 birds in November 2018;
- Marsh Tit –recorded occasionally throughout the survey period (November 2018 to March 2019) in woodland within Sunnica East Site B and in Sunnica West Site A on a single occasion in November 2018;
- Song Thrush - this species was recorded in low numbers within the DCO Site, associated with hedgerows and scrub;
- Dunnock - this species was recorded in low numbers within the DCO Site, associated with hedgerows and scrub;
- Bullfinch – this species was recorded in very low numbers within the DCO Site, associating with hedgerows and scrub;
- Lesser Redpoll – this species was recorded on two occasions, flying over Sunnica West Site A;
- Yellowhammer – this species was recorded within arable field margins, hedgerows and scrub within the DCO Site;
- Reed Bunting - this species was recorded within arable field margins, hedgerows and scrub within the DCO Site; and
- Corn Bunting - this species was recorded within arable field margins, hedgerows and scrub within the Sunnica East Site A.

5.6 Evaluation of key habitat types for wintering birds

5.6.1 A summary of the broad habitat types present in the survey area and their key ornithological features, are presented in **Table 8I-1**.

Table 8I-1 Key Ornithological Features of habitat within the Survey Area

<i>Broad Habitat Type</i>	<i>Key Ornithological Features</i>
Small waterbodies / ponds	Supports species associated with wetland features, such as Mallard (and other waterfowl) and gulls. Also support species associated with wetland margins, including Lapwing.
Arable farmland	The predominant habitat type occurring within the DCO Site and wider landscape beyond the survey area. Supports wintering flocks of Golden Plover and Lapwing in large, open compartments. Seed-eating passerines, including Skylark, Yellowhammer and Linnet, found throughout. Individual species of conservation interest, but limited species abundance and diversity.
Scrub / hedgerows	Frequently occurring habitat within the DCO Site of varying quality. Supports species such as Yellowhammer, Dunnock, Song Thrush and Bullfinch. Where fruiting species of tree / scrub were found, Fieldfare and Redwing were present. Individual species of conservation interest, but limited species abundance and diversity.
Mature trees / woodland	Parcels of woodland and individual trees scattered within the DCO Site. Supports species such as Woodcock and Green Woodpecker, as well as species often found in scrub / hedgerows. Individual species of conservation interest, but limited species abundance and diversity.
Game cover crops	Occasional habitat feature occurring within the DCO Site, particularly in Sunnica East Area B, Sunnica East Area A and Sunnica East Area B. Supports flocks of farmland seed-eating passerines, such as Linnet, Yellowhammer, Reed Bunting and Dunnock. Individual species of conservation interest, but limited species abundance and diversity.

6. Conclusions

- 6.1.1 A total of 71 bird species were recorded during wintering bird surveys for the Scheme. Of these 71 bird species, 36 species meet at least one of a range of criteria relating to conservation importance (see **Table 8I-2**), as detailed in sections 2.1-2.4 of this appendix.
- 6.1.2 Species diversity for the whole Scheme is of county importance. However, individually, the component sites of DCO Site are only of Local value. The wintering population of Skylark is of district importance.
- 6.1.3 The majority of ecological data is valid only for short periods due to the inherently transient nature of the subject (CIEEM, 2019⁴). On this basis, it is recommended that the surveys for wintering birds will need repeating in two years (i.e. in 2021/2022) if a DCO application has not been submitted by this time or if valid data is needed to support the construction activities.

⁴ CIEEM: Advice Note on the lifespan of ecological surveys and reports <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf> (Accessed January 2020)

7. Outline Mitigation Proposals

- 7.1.1 This section presents outline mitigation proposals. Where recommendations are made, these will be taken forward as part of the EIA process and presented in the Environmental Statement supporting the DCO application
- 7.1.2 A number of measures can be included within the design of the Scheme to mitigate for any potential effects on the wintering bird assemblage recorded within the DCO Site in 2018 / 2019 and 2019 / 2020.
- 7.1.3 The Scheme will seek to avoid the loss of woodland and hedgerow habitat within the DCO Site, although small areas of such habitats may be removed to facilitate access. Where any such habitats are removed, these should be replaced or restored.
- 7.1.4 The construction of the Scheme will incur loss of arable habitat and therefore it is important that mitigation measures are included to alleviate these effects and include enhancement where possible. It is recommended that, wherever possible, any habitat loss should be mitigated for with the objective of conserving a similarly diverse assemblage of wintering birds to what is already present within the Scheme Sites.
- 7.1.5 To achieve this, the mitigation package should include habitat creation that will minimise the impacts of the Scheme on the wintering bird assemblage. Habitat creation should include the planting of mixed native species of trees and scrub, including fruiting species such as Hawthorn and Blackthorn that, through the provision of berries will, provide foraging and roosting habitat for wintering birds.
- 7.1.6 The creation of areas of set-aside or cover crops would benefit a range of arable farmland passerines present within the DCO Site, including Yellowhammer, Linnet and Skylark. These species are reliant on such habitats during winter months for feeding and shelter.
- 7.1.7 There are no established guidelines for the assessment of noise on bird populations and different noise events during construction are considered likely to generate different responses from birds. Such events (that could occur during construction and operation of the Scheme) include percussive noise, loud noise and continuous noise.
- 7.1.8 It is presumed that the construction of the Scheme will be undertaken in a phased approach over many months. Therefore, vegetation clearance works should be timed to be undertaken outside of the bird breeding season (i.e. between September and February) to avoid any additional constraints associated with this activity.

8. References

- Ref 8I-1 AECOM, 2020. Sunnica Energy Farm Preliminary Ecological Appraisal.
- Ref 8I-2 EC (2009) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version). EC, Brussels.
- Ref 8I-3 HMSO (2018). Conservation of Habitats and Species Regulations 2017 (as amended). HMSO, London.
- Ref 8I-4 Anon. (1981). The Wildlife & Countryside Act. HMSO, London.
- Ref 8I-5 Anon. (2006). The Natural Environment and Rural Communities Act. HMSO, London.
- Ref 8I-6 Anon. (2008). UK Biodiversity Action Plan.
- Ref 8I-7 JNCC, UK Post-2010 Biodiversity Framework, 2012, available at <http://jncc.defra.gov.uk/page-6189> (Accessed July 2020)
- Ref 8I-8 Cambridgeshire and Peterborough Biodiversity Group (2008). Priority Species and Habitats. Available from: <http://www.cpbiodiversity.org.uk/biodiversity-action-plans/priority-species> (Accessed July 2020).
- Ref 8I-9 SBIS (2015). Priority species and habitats. Available from: <http://www.suffolkbis.org.uk/biodiversity/speciesandhabitats#:~:text=The%20Suffolk%20Planning%20Biodiversity%20Action%20Plan%20%282012%29%20is,departments%20to%20meet%20their%20legal%20obligations%20towards%20biodiversity> (Accessed July 2020).
- Ref 8I-10 Eaton, M., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove A., Noble D., Stroud, D. and Gregory, R. (2015). Birds of Conservation Concern 4. The population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108: 708-746
- Ref 8I-11 Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000). *Bird Census Techniques: 2nd edition*. Academic Press, London.
- Ref 8I-12 Gilbert G., Gibbons D.W., and Evans J. (1998) *Bird Monitoring Methods: A manual of techniques for key UK species*. RSPB, Bedfordshire
- Ref 8I-13 Woodward, I., Aebischer, N., Burnell, D., Eaton, M., Frost, T., Hall, C., Stroud, D.A. & Noble, D. (2020). Population estimates of birds in Great Britain and the United Kingdom. *British Birds* 113: 69–104.
- Ref 8I-14 Balmer, D., Gillings, G., Caffrey, B., Swann, B., Downie, I. and Fuller, R., 2013. *Bird Atlas 2007-11: The Breeding and Wintering Birds of Britain and Ireland*. BTO.
- Ref 8I-15 Bacon, L., Cooper, A. and Venables, H., 2013. *Cambridgeshire Bird Atlas 2007 – 2011*. Cambridgeshire Bird Club.
- Ref 8I-16 Regnault, M., 2014. *Suffolk Bird Atlas 2007 – 2011*. Suffolk.
- Ref 8I-17 Cambridgeshire and Peterborough County Wildlife Sites Panel., 2014. *Cambridgeshire and Peterborough County Wildlife Sites Selection Guidelines*. The Wildlife Trust.
- Ref 8I-18 CIEEM, 2018. *Guidelines for Ecological Impact Assessment in the United Kingdom: Terrestrial, Freshwater, Coastal and Marine*.

Sub-Appendix A Figures

Figure 8I-1 DCO Site Boundary

560000

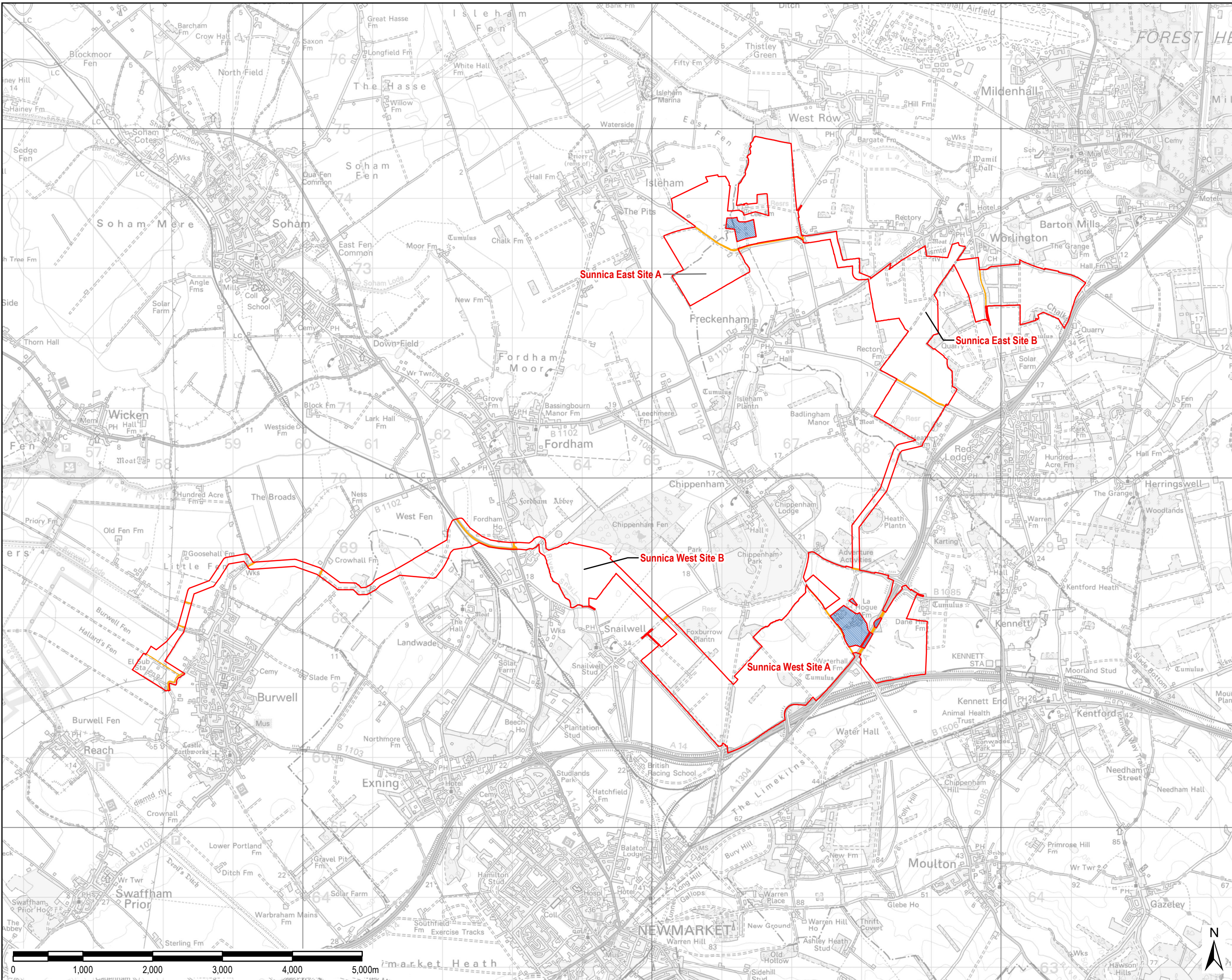
565000

570000

275000

270000

265000



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LEGEND

- Scheme Boundary
- Not Included in the DCO Site
- Public Highway within Scheme

NOTE:
Public highways run through the Sunnica East Site, which are not part of the site boundary. These have been digitised based on the 1:1250 scale OS Mastermap.

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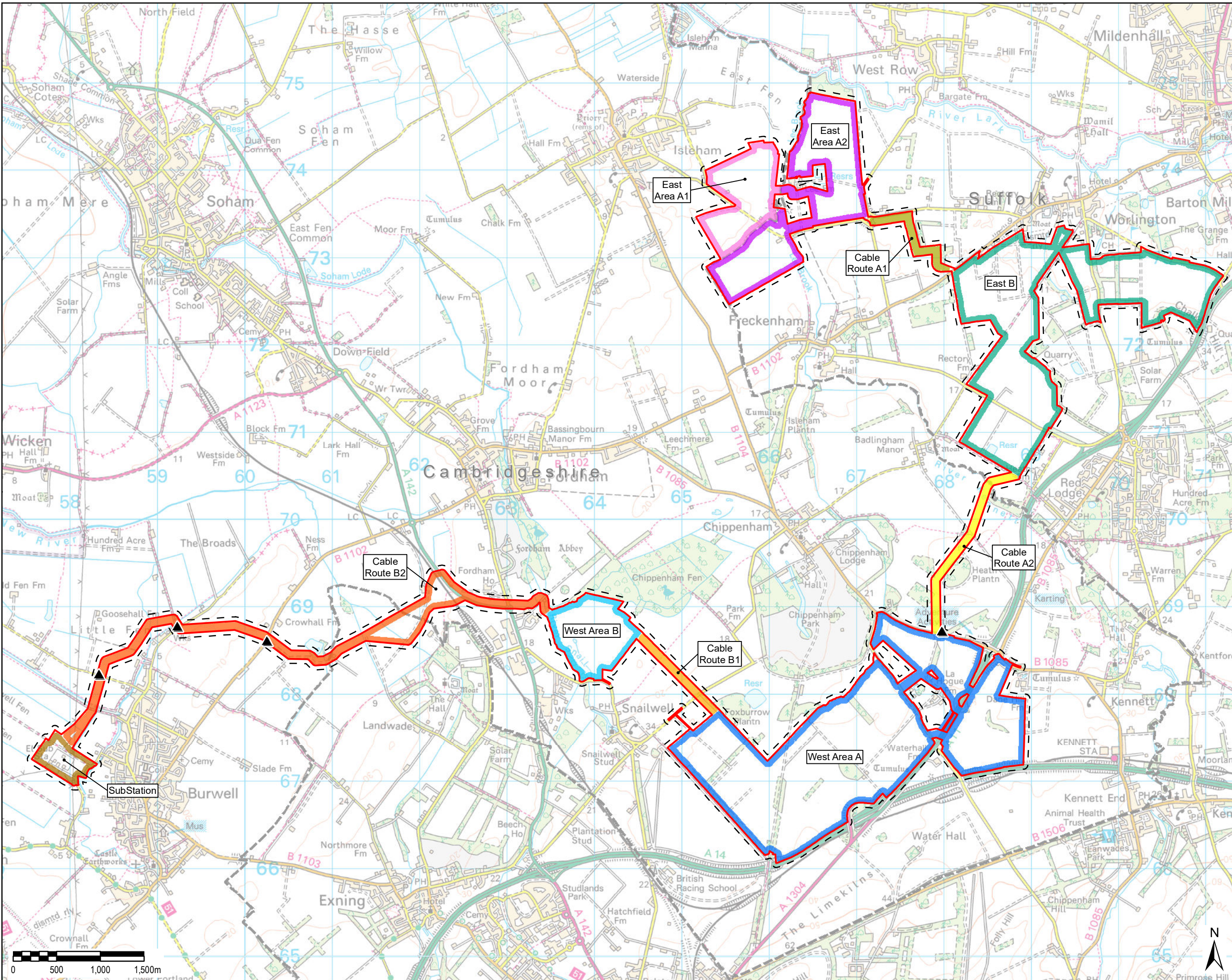
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Drawing Number
Figure 8C-1

File Name: C:\Users\Anna.Dillio\AECOM Directory\Sunnica Energy Farm - GIS - General\Layout\PEIR\Chapter_2_Site_Description_Surrounds\200902_SunnicaEnergyFarm_Figure2_1_SchemeBoundary.mxd

Figure 8I-2 Survey area used for wintering birds and locations of viewing points



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LEGEND

- DCO Boundary
- 50m survey buffer

Survey compartments

- Sunnica East Area
- Sunnica East Area
- Sunnica East B
- Sunnica West Area
- Sunnica West Area B

Cable Routes

- Cable Route A1
- Cable Route A2
- Cable Route B1
- Cable Route B2

Sub Station

- Sub Station

Viewing point

- ▲ Viewing point

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Drawing Title: **SURVEY AREA USED FOR WINTERING BIRDS AND LOCATIONS OF VIEWING POINTS**

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File Name: W:\Active Projects\Solar Associates\GIS\02_Maps\SEF_BirdSurvey\Compartments.mxd

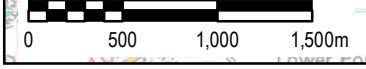


Figure 8I-3 Distribution of species of conservation concern

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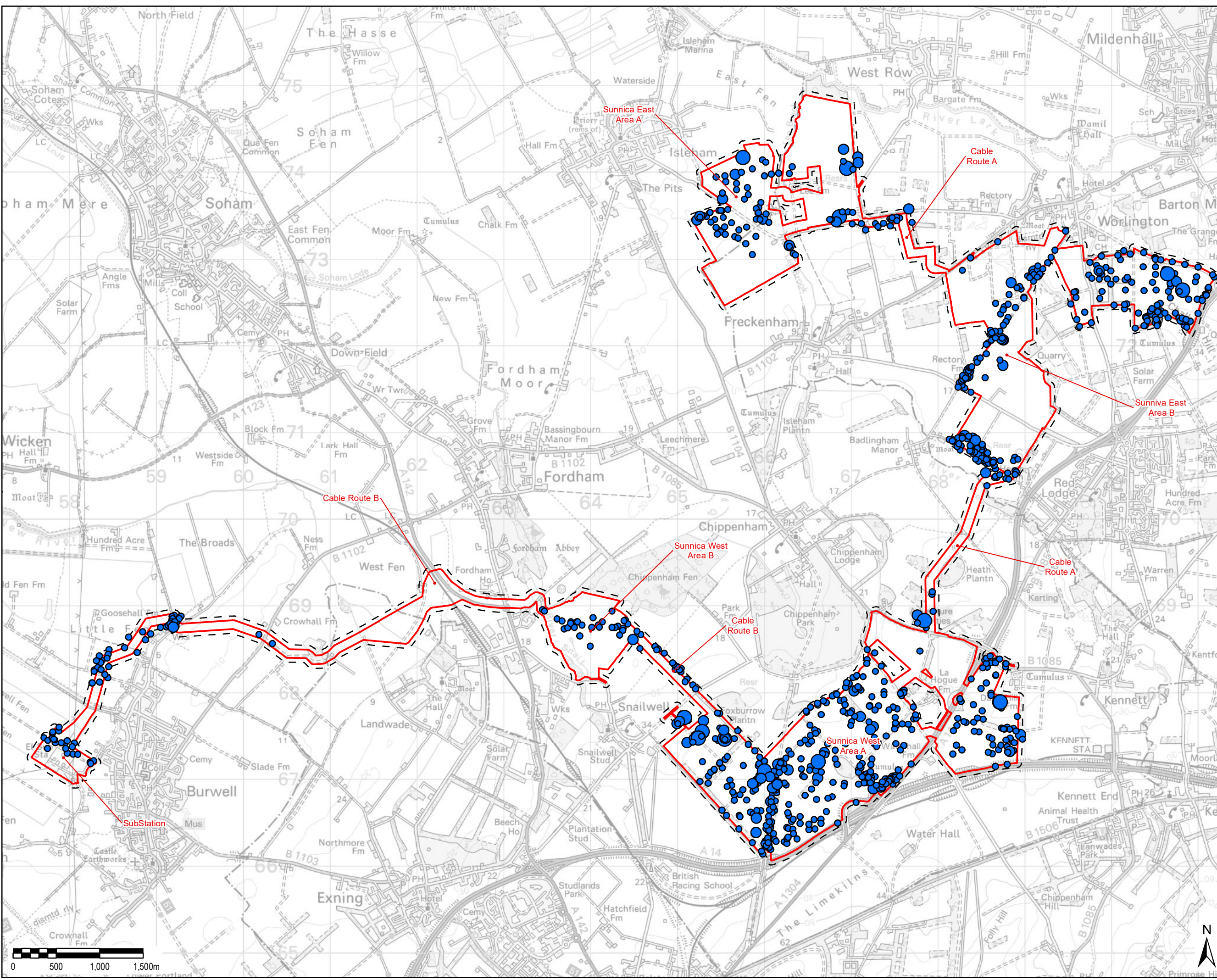
LEGEND

- DCO Boundary
- 50m survey buffer

Winter bird survey registrations of species of conservation concern

Number of birds

- 1 - 24
- 25 - 100
- 101 - 1000



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Drawing Number
FIGURE 8C-3

File Name: W:\Active Projects\Solar Associates\GIS\02_Maps\SEF_WinterBirds_Distribution.mxd

Sub-Appendix B Survey Details

Table 8I-B.1 Survey date and weather conditions for each wintering bird survey

<i>Visit</i>	<i>Scheme area</i>	<i>Date (s)</i>	<i>Weather Conditions</i>
1	Sunnica East Site B	5 th November 2018	Dry, Cloud 1/8, Wind F1, Temp 1°C
	Sunnica West Site A	6 th November 2018	Dry, Cloud 1/8, Wind F1, Temp -1°C
		30 th October 2019	Dry, Cloud 3/8, Wind F1, Temp 8 °C
	Sunnica West Site B	14 th November 2018	Dry, Cloud 3/8, Wind F1, Temp 4°C
	Grid Connection Routes and Burwell National Grid Substation Extension	15 th November 2018	Dry, Cloud 3/8, Wind F1, Temp 4°C
	Sunnica East Site A2	15 th November 2018	Dry, Cloud 3/8, Wind F1, Temp 4°C
	Sunnica East Site A1	30 th October 2019	Dry, Cloud 3/8, Wind F1, Temp 8 °C
2	Sunnica West Site A	26 th November 2018	Dry, Cloud 7/8, Wind F1, Temp 5 °C
		19 th November 2019	Dry, Cloud 5/8, Wind F2, Temp 7 °C
	Sunnica West Site B	26 th November 2018	Dry, Cloud 7/8, Wind F1, Temp 5C
	Sunnica East Site B	27 th November 2018	Dry, Misty, No wind, Temp 4 °C
	Sunnica East Site A2	27 th November 2018	Dry, Misty, No wind, Temp 4C
	Grid Connection Routes and Burwell National Grid Substation Extension	30 th November 2018	Dry, Cloud 3/8, Wind F2, Temp 7 °C
	Sunnica East Site A1	19 th November 2019	Dry, Cloud 5/8, Wind F2, Temp 7 °C
3	Sunnica East Site B	12 th December 2018	Dry, Cloud 6/8, Wind F1, Temp 4 °C
	Sunnica East Site A2	12 th December 2018	Dry, Cloud 6/8, Wind F1, Temp 4 °C
	Sunnica West Site A	13 th December 2018	Dry, Cloud 7/8, Wind F2-3, Temp 4 °C
		16 th December 2019	Dry, Cloud 3/8, Wind F3, Temp 5°C
	Sunnica West Site B	13 th December 2018	Dry, Cloud 7/8, Wind F2-3, Temp 4 °C
	Grid Connection Routes and Burwell National Grid Substation Extension	14 th December 2018	Dry, Cloud 7/8, No wind, Temp 2 °C

<i>Visit</i>	<i>Scheme area</i>	<i>Date (s)</i>	<i>Weather Conditions</i>
	Sunnica East Site A1	16 th December 2019	Dry, Cloud 3/8, Wind F3, Temp 5°C
4	Sunnica East Site B	15 th January 2019	Dry, Cloud 3/8, Wind F3, Temp 9 °C
	Sunnica East Site A2	15 th January 2019	Dry, Cloud 3/8, Wind F3, Temp 9 °C
	Sunnica West Site A	16 th January 2019	Raining, Overcast, Wind F2, Temp 10 °C
		13 th January 2020	Dry, Cloud 2/8, Wind F2, Temp 4 °C
	Sunnica West Site B	16 th January 2019	Raining, Overcast, Wind F2, Temp 10C
	Grid Connection Routes and Burwell National Grid Substation Extension	17 th January 2019	Dry, Cloud 0/8, Wind F4-5, Temp 2 °C
	Sunnica East Site A1	13 th January 2020	Dry, Cloud 2/8, Wind F2, Temp 4 °C
5	Sunnica East Site B	11 th February 2019	Dry, Cloud 2/8, Wind F1, Temp 3 °C
	Sunnica East Site A2	11 th February 2019	Dry, Cloud 2/8, Wind F1, Temp 3 °C
	Sunnica West Site A	12 th February 2019	Dry, Cloud 2/8, Wind F1, Temp 2 °C C
		7 th February 2020	Dry, Cloud 2/8, Wind F0-1, Temp 6 °C
	Sunnica West Site B	11 th February 2019	Dry, Cloud 2/8, Wind F1, Temp 3 °C
	Grid Connection Routes and Burwell National Grid Substation Extension	13 th February 2019	Dry, Overcast, Wind F2, Temp 7 °C
	Sunnica East Site A1	7 th February 2020	Dry, Cloud 2/8, Wind F0-1, Temp 6 °C
6	Sunnica East Site B	4 th March 2019	Dry, Misty, Wind F2, Temp 3 °C
	Sunnica East Site A2	4 th March 2019	Dry, Misty, Wind F2, Temp 3 °C
	Sunnica West Site A	5 th March 2019	Dry, Cloud 4/8, Wind F2, Temp 7 °C
		6 th March 2020	Dry, Cloud 2/8, Wind F0-1, Temp 2 °C
	Sunnica West Site B	5 th March 2019	Dry, Cloud 4/8, Wind F2, Temp 7 °C
	Grid Connection Routes and Burwell National Grid Substation Extension	6 th March 2019	Dry, Cloud 7/8, Wind F2, Temp 6 °C
	Sunnica East Site A1	6 th March 2020	Dry, Cloud 2/8, Wind F0-1, Temp 2 °C

Sub-Appendix C Records of Protected or Notable Species

Table 8I-C.1 Records of protected or notable species returned from the desk study

<i>Common name</i>	<i>Scientific name</i>	<i>Designation</i>
Arctic Tern	<i>Sterna paradisaea</i>	BD1, BAmb
Avocet	<i>Recurvirostra avosetta</i>	BD1, WCA1i, BAmb
Barn Owl	<i>Tyto alba</i>	CPASI, SBAP, WCA1i
Barnacle Goose	<i>Branta leucopsis</i>	BD1, BAmb
Barred Warbler	<i>Sylvia nisoria</i>	BD1
Bewick's Swan	<i>Cygnus columbianus</i>	BD1, UKBAP, CPPS, WCA1i, BAmb
Bittern	<i>Botaurus stellaris</i>	BD1, Sect.41, UKBAP, SBAP, CPPS, WCA1i, BAmb
Black Redstart	<i>Phoenicurus ochruros</i>	Bern2, BRed, WCA1i
Black Stork	<i>Ciconia nigra</i>	BD1
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	BAmb
Black-necked Grebe	<i>Podiceps nigricollis</i>	WCA1i, BAmb
Black-tailed Godwit	<i>Limosa limosa</i>	WCA1i, CPPS, BRed
Black-winged Stilt	<i>Himantopus himantopus</i>	BD1, WCA1i
Brent Goose	<i>Branta bernicla</i>	Sect.41, UKBAP, BAmb
Bullfinch	<i>Pyrrhula pyrrhula</i>	Sect.41, UKBAP, SBAP, CPPS, BAmb
Caspian Gull	<i>Larus cachinnans</i>	BAmb
Common Gull	<i>Larus canus</i>	BAmb
Common (Mealy) Redpoll	<i>Acanthis flammea</i>	BAmb
Common Sandpiper	<i>Actitis hypoleucos</i>	BAmb
Common Scoter	<i>Melanitta nigra</i>	Sect.41, UKBAP, WCA1i, Bred
Common Tern	<i>Sterna hirundo</i>	BD1, BAmb
Corn Bunting	<i>Emberiza calandra</i>	Sect.41, UKBAP, SBAP, CPPS, BRed
Crane	<i>Grus grus</i>	BD1, CPASI, BAmb

<i>Common name</i>	<i>Scientific name</i>	<i>Designation</i>
Cuckoo	<i>Cuculus canorus</i>	Sect.41, UKBAP, BRed
Curlew	<i>Numenius arquata</i>	Sect.41, UKBAP, CPPS, BRed
Dunnock	<i>Prunella modularis</i>	Sect.41, UKBAP, BAmb
Fieldfare	<i>Turdus pilaris</i>	WCA1i, Bred
Firecrest	<i>Regulus ignicapilla</i>	BD1
Gadwall	<i>Anas strepera</i>	BAmb
Garganey	<i>Anas querquedula</i>	WCA1i, BAmb
Golden Plover	<i>Pluvialis apricaria</i>	BD1
Grasshopper Warbler	<i>Locustella naevia</i>	Sect.41, UKBAP, CPPS, BRed
Great Black-backed Gull	<i>Larus marinus</i>	BAmb
Green Sandpiper	<i>Tringa ochropus</i>	WCA1i, BAmb
Greenshank	<i>Tringa nebularia</i>	WCA1i, BAmb
Grey Partridge	<i>Perdix perdix</i>	Sect.41, UKBAP, SBAP, CPPS
Grey Plover	<i>Pluvialis squatarola</i>	BAmb
Grey Wagtail	<i>Motacilla cinerea</i>	Bred
Greylag Goose	<i>Anser anser</i>	BAmb
Hen Harrier	<i>Circus cyaneus</i>	BD1, Sect.41, WCA1i
Herring Gull	<i>Larus argentatus</i>	CPPS, BRed
Honey-buzzard	<i>Pernis apivorus</i>	BD1, WCA1i, BAmb
House Martin	<i>Delichon urbicum</i>	BAmb
House Sparrow	<i>Passer domesticus</i>	Sect.41, UKBAP, CPPS, BRed
Kestrel	<i>Falco tinnunculus</i>	BAmb
Kingfisher	<i>Alcedo atthis</i>	BD1, WCA1i
Lapwing	<i>Vanellus vanellus</i>	Sect.41, UKBAP, CPPS, BRed
Lesser Black-backed Gull	<i>Larus fuscus</i>	BAmb
Lesser Redpoll	<i>Acanthis cabaret</i>	Sect.41, UKBAP, CPPS, BRed
Lesser Spotted Woodpecker	<i>Dendrocopos minor</i>	Sect.41, UKBAP, CPPS, BRed
Linnet	<i>Linaria cannabina</i>	Sect.41, UKBAP, SBAP, CPPS, BRed

<i>Common name</i>	<i>Scientific name</i>	<i>Designation</i>
Little Egret	<i>Egretta garzetta</i>	BD1
Mallard	<i>Anas platyrhynchos</i>	BAmb
Marsh Harrier	<i>Circus aeruginosus</i>	BD1, WCA1i, BAmb
Marsh Tit	<i>Poecile palustris</i>	Sect.41, UKBAP, CPPS, BRed
Meadow Pipit	<i>Anthus pratensis</i>	BAmb
Mediterranean Gull	<i>Larus melanocephalus</i>	BD1, WCA1i, BAmb
Merlin	<i>Falco columbarius</i>	BD1, WCA1i, Bred
Mistle Thrush	<i>Turdus viscivorus</i>	Bred
Mute Swan	<i>Cygnus olor</i>	BAmb
Nightingale	<i>Luscinia megarhynchos</i>	Bred
Nightjar	<i>Caprimulgus europaeus</i>	BD1, Sect.41, UKBAP, SBAP, BAmb
Osprey	<i>Pandion haliaetus</i>	BD1, WCA1i
Oystercatcher	<i>Haematopus ostralegus</i>	BAmb
Parrot Crossbill	<i>Loxia pytyopsittacus</i>	WCA1i, BAmb
Peregrine	<i>Falco peregrinus</i>	BD1, WCA1i
Pintail	<i>Anas acuta</i>	BAmb
Quail	<i>Coturnix coturnix</i>	WCA1i, BAmb, BRCC
Red Kite	<i>Milvus milvus</i>	BD1, WCA1i
Redshank	<i>Tringa totanus</i>	BAmb
Redwing	<i>Turdus iliacus</i>	WCA1i, Bred
Reed Bunting	<i>Emberiza schoeniclus</i>	Sect.41, UKBAP, SBAP, CPPS, BAmb
Ring Ouzel	<i>Turdus torquatus</i>	Sect.41, UKBAP, Bred
Ringed Plover	<i>Charadrius hiaticula</i>	Bred
Ruff	<i>Calidris pugnax</i>	BD1, WCA1i, Bred
Sandwich Tern	<i>Sterna sandvicensis</i>	BD1, BAmb
Shelduck	<i>Tadorna tadorna</i>	BAmb
Short-eared Owl	<i>Asio flammeus</i>	BD1, BAmb
Shoveler	<i>Anas clypeata</i>	BAmb
Skylark	<i>Alauda arvensis</i>	Sect.41, UKBAP, SBAP, CPPS, BRed
Snipe	<i>Gallinago gallinago</i>	BAmb

<i>Common name</i>	<i>Scientific name</i>	<i>Designation</i>
Song Thrush	<i>Turdus philomelos</i>	Sect.41, UKBAP, SBAP, CPPS, BRed
Spoonbill	<i>Platalea leucorodia</i>	BD1, WCA1i, BAmb
Spotted Crake	<i>Porzana porzana</i>	BD1, WCA1i, BAmb
Spotted Flycatcher	<i>Muscicapa striata</i>	Sect.41, UKBAP, SBAP, CPPS, BRed
Starling	<i>Sturnus vulgaris</i>	Sect.41, UKBAP, Bred
Stock Dove	<i>Columba oenas</i>	BAmb
Stone-curlew	<i>Burhinus oedichnemus</i>	BD1, Sect.41, UKBAP, SBAP, CPPS, WCA1i, BAmb
Swift	<i>Apus apus</i>	CPASI, BAmb
Tawny Owl	<i>Strix aluco</i>	BAmb
Teal	<i>Anas crecca</i>	BAmb
Tree Pipit	<i>Anthus trivialis</i>	Sect.41, UKBAP, BRed
Tree Sparrow	<i>Passer montanus</i>	Sect.41, UKBAP, SBAP, CPPS, BRed
Turtle Dove	<i>Streptopelia turtur</i>	Sect.41, UKBAP, SBAP, CPPS, BRed
Whimbrel	<i>Numenius phaeopus</i>	WCA1i, BRed
Whinchat	<i>Saxicola rubetra</i>	BRed
White-fronted Goose	<i>Anser albifrons</i>	Sect.41, UKBAP, BRed
Whooper Swan	<i>Cygnus cygnus</i>	BD1, WCA1i, BAmb
Wigeon	<i>Anas penelope</i>	BAmb
Willow Tit	<i>Poecile montana</i>	Sect.41, UKBAP, BRed
Willow Warbler	<i>Phylloscopus trochilus</i>	BAmb
Wood Sandpiper	<i>Tringa glareola</i>	BD1, WCA1i, BAmb
Woodcock	<i>Scolopax rusticola</i>	BRed
Woodlark	<i>Lullula arborea</i>	BD1, Sect.41, UKBAP, SBAP, WCA1i
Wryneck	<i>Jynx torquilla</i>	UKBAP, WCA1i
Yellow Wagtail	<i>Motacilla flava</i>	Sect.41, UKBAP, CPPS, BRed
Yellowhammer	<i>Emberiza citrinella</i>	Sect.41, UKBAP, CPPS, BRed
Yellow-legged Gull	<i>Larus michahellis</i>	BAmb

