

SUNNICA ENERGY FARM

EN010106

Environmental Statement

Volume 6

6.2 Appendix 8I: Report on surveys for breeding birds

APFP Regulation 5(2)(a)

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Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and

Procedure) Regulations 2009

Sunnica Energy Farm

Appendix 8I: Report on surveys for breeding birds

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Sunnica Energy Farm
Environmental Statement
Appendix 8I Report on Surveys for Breeding Birds



Executive summary

Sunnica Ltd (hereafter referred to as the 'Applicant') commissioned a survey of breeding birds for the proposed Sunnica Energy Farm (hereafter referred to as the 'Scheme').

The objective of the surveys for breeding birds was to determine the presence and assemblage of breeding bird species within 50m of the Order limits, with emphasis on species of conservation concern. The surveys were undertaken between April and June 2019 (six survey visits) and, following updates to the Order limits, areas previously unsurveyed were surveyed between March and June 2020 (six survey visits). Surveys across the Order limits were repeated between April and June 2021, with six survey visits being undertaken. Species-specific surveys for species listed on Schedule 1 of the Wildlife and Countryside Act (as amended), 1981 were also undertaken within this period.

Confidential information regarding the locations of any sensitive breeding species recorded, which are included on Schedule 1 of the Wildlife and Countryside Act (1981, as amended) are included separately as confidential Annex D and will be provided to key stakeholders separately.

A total breeding bird assemblage of 73 species was recorded within the Order limits between 2019 and 2021. However, the maximum breeding assemblage in any given year is 66 species as there are fluctuations in the species assemblages within the survey area over the three-year survey period. From the breeding assemblages of 66 bird species (2019/2021) and 59 species (2021), 31 species (including specially protected species as presented in Annex D) meet at least one of a range of criteria relating to conservation importance. The breeding assemblages would place the value of the Order limits as being of county importance for breeding birds. However, individually, the component sites of the Order limits are of local importance only.

Eighteen species are listed as a priority species in the UK Biodiversity Action Plan and as a species of principal importance under Section 41 of the NERC Act, 16 species are included on the Birds of Conservation Concern Red list and 12 species are included on the Birds of Conservation Concern Amber list.

No species were present within the survey area in numbers of national significance, i.e. 1% or more of the UK population, when compared to national population estimates as given in a paper by Woodward et al. (2020).

The population of Curlew *Numenius arquata* within the survey area is likely to be of county importance in Cambridgeshire. The population of Lapwing in Suffolk and Skylark in both Suffolk and Cambridgeshire are likely to be of district importance. No other species recorded in the survey area were recorded in a figure approaching 1% of the county breeding population estimates in Cambridgeshire or Suffolk. The numbers of individuals for other species recorded were all relatively low and did not represent significant proportions (i.e. 1 % or more) of the county populations in both counties.



Table of contents

Cna	pter		Pages	
Exec	cutive s	summary	2	
1 1.2 1.3	The S	duction scheme escription	1 1 3	
1.4	Scope	e of the report	4	
2 2.1 2.2	Legisl	rant Legislation and Policy ation nal and local planning policy	6 6 7	
2.3	Other	guidance	7	
3 3.1	Metho Desk	study	11 11 11	
3.2 3.3	Field survey Assessment of ornithological importance			
3.4	Assumptions and limitations			
4 4.1 4.2	Resul Desk Field		21 21 21	
5 5.1 5.2	Evalu Desk Field		36 36 36	
6	Conc	lusions	43	
7	Refer	ences	44	
Ann	ex 8A	Figures	46	
Ann	ex 8B	Survey Details	51	
Ann	ex 8C	Records of Protected and Notable Species	52	
Ann	ex 8D	CONFIDENTIAL	55	

Sunnica Energy Farm Environmental Statement Appendix 8I Report on Surveys for Breeding Birds



Table of Tables

Table 2-1: Priority bird species listed in the Cambridgeshire and Peterborough and BAPs	
Table 3-1: Survey compartments within the Order limits	
Table 3-2: Stone-curlew survey dates	15
Table 3-3: Breeding species diversity criteria (Fuller, 1980)	
Table 3-4: Importance of ornithological features	18
Table 4-1: Breeding status, number of territories and conservation status of birds r within the Order limits (excluding species on Schedule 1 of the WCA and Annex 1 EU Birds Directive) in 2019 and 2020	of the
Table 4-2: Breeding status, number of territories and conservation status of birds r within the Order limits (excluding species on Schedule 1 of the WCA and Annex 1 EU Birds Directive) in 2021	ecorded of the
Table 5-1: Number of species of conservation interest recorded within each Schen	
Table 5-2: Key ornithological features of habitat within the Order limits	



1 Introduction

- 1.1.1 In March 2019, Sunnica Ltd (hereafter referred to as the 'Applicant') commissioned a Preliminary Ecological Appraisal (PEA) (Ref 1) for the construction, operation (including maintenance), and decommissioning of Sunnica Energy Farm (hereafter referred to as the 'Scheme'). The PEA identified that the habitat within the Order limits was suitable to support birds during the breeding season and that further surveys were required to determine the presence or absence of protected or notable¹ bird species and the assemblage of breeding bird species. Therefore, the Applicant commissioned surveys of breeding birds within the Order limits and an appropriate survey buffer to record the species, distribution and numbers of breeding birds within the Order limits and adjacent habitat.
- 1.1.2 Breeding territory information for breeding species that are included on Annex 1 of the EU Birds Directive, or listed on Schedule 1 of the WCA, is not included within this appendix. This information is confidential and therefore relevant species summaries and territory location information has been redacted but is included as a separate Annex (Annex D) to this report. This Annex will be provided separately to key stakeholders with a legitimate need to view the information.

1.2 The Scheme

- 1.2.1 Sunnica Energy Farm (the Scheme) is a new solar energy farm proposal that will deliver electricity to the national electricity transmission network. Sunnica Limited is proposing to install ground mounted solar photovoltaic (PV) panel arrays to generate electrical energy from the sun and combine these with a Battery Energy Storage System (BESS) which will connect to Burwell National Grid Substation in Cambridgeshire.
- 1.2.2 Electricity will be generated at Sunnica East Site A, near Isleham in Cambridgeshire; Sunnica East Site B, near Worlington and Freckenham in Suffolk; Sunnica West Site A near Chippenham and Kennett in Cambridgeshire; and Sunnica West Site B, near Snailwell in Cambridgeshire. All locations will comprise ground mounted solar PV panel arrays, supporting electrical infrastructure and, with the exception of Sunnica West Site B, a BESS.
- 1.2.3 Supporting electrical infrastructure will include on-site substations on Sunnica East Site A and Sunnica East Site B and Sunnica West Site A, and on-site cabling between the different electrical elements across the Scheme. The generating equipment of the Scheme will be fenced and protected via security measures such as Closed Circuit Television. Inside the fenced areas, in addition to the generating equipment will be, internal access tracks, and drainage. It is not proposed for any area to be continuously lit.
- 1.2.4 Visual, ecological and archaeological mitigation is proposed which includes proposed grassland planting and new woodland; retention of existing woodland, wetlands and other vegetation; provision of replacement habitat; and offsetting areas, where there will be no development. The BESSs will consist of a

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



compound and battery array to allow for the importation, storage and exportation of energy to the National Grid. There will also be areas at Sunnica East Site A and Sunnica East Site B for office and storage facilities for use during the Scheme's operation.

- 1.2.5 The Scheme will be connected to a new substation extension at the existing Burwell National Grid Substation, using 132 kilovolt (kV) cables buried underground. The cables will run between Sunnica East Site A, Sunnica East Site B and Sunnica West Site A (Grid Connection Route A), and then from Sunnica West Site A to Sunnica West B and onwards to the Burwell National Grid Substation (Grid Connection Route B). The Burwell National Grid Substation Extension will convert the 132kV to 400kV. The 400kV cables will be buried and will connect the Scheme to the existing Burwell National Grid Substation to allow distribution to the national transmission network.
- 1.2.6 The Scheme will have two main access points, one north of Elms Road at Sunnica East Site B and one south of La Hogue Road at Sunnica West Site A. The main access route to Sunnica West Site A will be via the Chippenham junction of the A11, to the north of junction 38 of the A14. Sunnica East Site B will be accessed via the A11 and B1085. A number of secondary access points are proposed to access the individual land parcels through construction, operation, and decommissioning phases.
- 1.2.7 The Scheme is defined as a Nationally Significant Infrastructure Project (NSIP) and will require a Development Consent Order (DCO) from the Secretary of State for Business, Energy and Industrial Strategy (Secretary of State), due to its generating capacity exceeding 50 megawatts (MW).
- 1.2.8 The Scheme comprises the following key areas:
 - a. Solar Farm Sites (including onsite substations and Battery Energy Storage System (BESS) and associated infrastructure):
 - i. Sunnica East Site A;
 - ii. Sunnica East Site B;
 - iii. Sunnica West Site A; and
 - iv. Sunnica West Site B.
 - b. associated electrical infrastructure areas for connection to the national transmission system:
 - i. Grid Connection Route A ('A1' connecting Sunnica East Site A with the Sunnica East Site B and then 'A2' connecting to Sunnica West Site A);
 - ii. Grid Connection Route B ('B1' connecting Sunnica West Site A and Sunnica West Site B and 'B2' connecting to Burwell National Grid Substation); and
 - iii. Burwell National Grid Substation Extension.
- 1.2.9 **Figure 1** in Annex A shows the locations of these key areas.



1.3 Site description

1.3.1 A summary description of the habitats within the Order limits (made up of the four Sites (see section 1.2.8) are provided below and a more detailed description of the habitats is provided in the PEA report (Ref 1). The extent of the Scheme is shown in **Figure 1**.

Sunnica East Site

- 1.3.2 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 1km apart and are separated by agricultural fields. Sunnica East Site A encompasses an area of approximately 223ha and includes land within the county of Suffolk and Cambridgeshire. Sunnica East Site B lies within Suffolk and encompasses an area of approximately 319ha (Figure 1).
- 1.3.3 The landscape features within 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 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 Sunnica East Site B with an industrial installation of a 7.5MW solar farm situated adjacent to the south-eastern extent of Sunnica East Site B and an anaerobic digestion (AD) plant located to the south of Sunnica East Site B.

Sunnica West Site

- 1.3.5 Sunnica West Site is located within the East Cambridgeshire District Council administrative area, approximately 3km north east of Newmarket and 6.5km east of Burwell.
- 1.3.6 Sunnica West is split into two sub-sites, referred to as Sunnica West Site A and Sunnica West Site B. These two sites are approximately 1km apart, separated by agricultural fields and Chippenham Road. Sunnica West Site A encompasses an area of approximately 373ha 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 66ha 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 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 Extension via a cable route corridor. The cable route corridors under consideration are Grid Connection Route A, which connects Sunnica East Site A with Sunnica East Site B and then runs to the onsite substation within Sunnica West Site A and Grid Connection Route B, between Sunnica West Site A and Sunnica West Site B and Burwell National Grid Substation Extension.

Grid Connection Route A

- 1.3.9 Grid Connection Route A connects Sunnica East Site A with Sunnica East Site B and crosses two minor roads and arable farmland (**Figure 1**).
- 1.3.10 Heading south from 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 the B1085 (**Figure 1**) and connects to the onsite substation at Sunnica West Site A.

Grid Connection Route B

- 1.3.11 Heading east from the Burwell National Grid Substation Extension, 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 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 and on to the onsite substation within Sunnica West Site A.

Burwell National Grid Substation Extension

- 1.3.13 There are two options for the Substation Extension. Option 1 is located within National Grid land ownership to the east of the existing substation, adjacent to Weirs Drove, approximately 200m west of Burwell. Option 2 is located to the north of the existing substation approximately 450m from Burwell. The footprint of the substation extension will be the same within both locations; however, the area identified for Option 2 is larger to allow greater flexibility to avoid environmental and technical constraints. Access to Option 1 will be from Weirs Drove to the south. Access to Option 2 will be from Newnham Drove to the south of Option 2 and to the north of the existing Burwell Substation.
- 1.3.14 The habitat within Option 1 comprises small grassland fields bordered by hedgerows and mature trees; while Option 2 comprises arable land t (**Figure 1**).

1.4 Scope of the report

1.4.1 The objective of the surveys for breeding birds, reported in this document, is to determine the presence, assemblage and distribution of breeding bird species,



within the Order limits and relevant zones of influence to determine any potential impacts of the Scheme on breeding birds.

1.4.2 This report includes the following information:

- a. relevant legislation and policy;
- b. methodologies for desk and field-based assessments undertaken between 2018 and 2021;
- c. limitations to the surveys undertaken and any assumptions made as a result of incomplete data;
- d. survey results;
- e. the approach for determining the nature conservation importance of breeding bird populations recorded during the assessments; and
- f. conclusions and recommendations.



2 Relevant Legislation and Policy

2.1 Legislation

Wildlife and Countryside Act

- 2.1.1 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 2). 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.
- 2.1.2 When breeding, all birds, their nest, eggs and nestlings are afforded protection under the Wildlife and Countryside Act 1981, as updated by the 'Countryside Right of Way Act 2000' (Ref 3). Therefore, during the bird breeding season (typically March-August inclusive) it is an offence to:
 - a. intentionally kill, injure or take any wild bird;
 - b. intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; and
 - c. intentionally take or destroy the eggs of any wild bird.
- 2.1.3 Additionally, special penalties exist for offences related to species listed on Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended) (Ref 2), for which there are additional offences for disturbing these birds at their nest, or their dependent young. Schedule 1 birds cannot be intentionally or recklessly disturbed when nesting and there are increased penalties for doing so. No licences are available for disturbance during a development even in circumstances where that development is fully authorised by consents such as a valid planning permission.

Directive of the Conservation of Wild Birds

- 2.1.4 A number of bird species recorded within the UK (including those that are resident, overwintering and migratory) are protected under European legislation under the Directive of the Conservation of Wild Birds (EU Birds Directive) (Ref 4), which lists 193 species, or sub-species, of birds in Annex 1 which are:
 - a. in danger of extinction;
 - b. are rare, or have restricted local distribution;
 - c. are vulnerable to specific changes in their habitat; or
 - d. require particular attention for reasons of the specific nature of habitat.
- 2.1.5 This Directive is reflected in English law by the Conservation of Habitats and Species Regulations 2017 (as amended) (Ref 5). Although the UK is no longer a member state of the European Union, the 2019 amendments to the Conservation of Habitats and Species Regulations 2017 (Ref 5) make it clear that provisions regarding the protection and designation of Special Protection Areas (SPAs) are maintained. Species listed on Annex 1 are those for which the UK Government takes special conservation measures including the designation of land as SPAs to ensure the survival and reproduction of these species throughout their distributions. These sites are automatically included within the National Site



Network; a network of core breeding and resting sites that are protected for rare and threatened species.

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 6). 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 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. The Environmental Bill which is expected to be made into legislation in late 2021 / early 2022, will strengthen the wording of Section 40 of the NERC Act for public authorities 'to further' the conservation and enhancement of biodiversity.
- 2.1.7 The Joint Nature Conservation Committee (JNCC) UK Biodiversity Action Plan (UKBAP) (Ref 7) 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 8). 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 National and local 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 1), which is included as **Appendix 8B** of this Environmental Statement (ES) **[EN010106/APP/6.2]**.

2.3 Other guidance

Local biodiversity action plan species

2.3.1 The Scheme is located in two counties: Cambridgeshire and Suffolk. The Cambridgeshire and Peterborough Biodiversity Action Plan (Ref 9) and Suffolk Biodiversity Action Plan (Ref 10) 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 2-1**.

Table 2-1: Priority bird species listed in the Cambridgeshire and Peterborough and Suffolk BAPs

Common name	Scientific name	Cambridgeshire Biodiversity Action Plan species	Suffolk Biodiversity Action Plan species
Barn Owl	Tyto alba	V	-
Bewick's Swan	Cygnus columbianus	V	-
Bittern	Botaurus stellaris	V	✓
Black-tailed Godwit	Limosa limosa	V	√
Bullfinch	Pyrrhula pyrrhula	✓	✓
Common Crane	Grus grus	V	-
Cuckoo	Cuculus canorus	-	✓
Corn Bunting	Emberiza calandra	V	✓
Corncrake	Crex crex	V	-
Curlew	Numenius arquata	✓	✓
Dunnock	Prunella modularis	-	✓
Grasshopper Warbler	Locustella naevia	V	√
Grey Partridge	Perdix perdix	✓	✓
Hawfinch	Coccothraustes coccothraustes	V	V
Herring Gull	Larus argentatus subsp. argenteus	V	√
House Sparrow	Passer domesticus	✓	✓
Lapwing	Vanellus vanellus	✓	✓
Lesser Redpoll	Acanthis cabaret	V	✓
Lesser Spotted Woodpecker	Dryobates minor	V	√
Linnet	Linaria cannabina	V	✓
Little Tern	Sternula albifrons	-	✓
Marsh Tit	Poecile palustris	V	✓
Nightjar	Caprimulgus europaeus	-	√
Reed Bunting	Emberiza schoeniclus	V	√
Savi's Warbler	Locustella luscinioides	-	√
Skylark	Alauda arvensis	✓	✓
Song Thrush	Turdus philomelos	V	✓
Spotted Flycatcher	Muscicapa striata	V	√
Starling	Sturnus vulgaris	-	✓



Common name	Scientific name	Cambridgeshire Biodiversity Action Plan species	Suffolk Biodiversity Action Plan species
Stone-curlew	Burhinus oedicnemus	✓	√
Swift	Apus apus	✓	-
Tree Pipit	Anthus trivialis	-	✓
Tree Sparrow	Passer montanus	V	✓
Turtle Dove	Streptopelia turtur	✓ ·	✓
Twite	Carduelis flavirostris	-	✓
Willow Tit	Poecile montanus	-	✓
Woodlark	Lullula arborea	-	✓
Wood Warbler	Phylloscopus sibilatrix	-	√
Yellow Wagtail	Motacilla flava	V	✓
Yellowhammer	Emberiza citrinella	✓	✓

Birds of conservation concern

- 2.3.3 The Birds of Conservation Concern (BoCC) (Ref 11) 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 UKs leading bird conservation organisations, including the Royal Society for the Protection of Birds (RSPB) and British Trust for Ornithology (BTO).
- 2.3.4 The criteria for birds being included in the BoCC lists are as follows:

Red list:

- a. globally threatened;
- b. historical population decline in UK during 1800–1995; and
- c. 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:

- a. species with unfavourable conservation status in Europe (SPEC = Species of European Conservation Concern);
- b. historical population decline during 1800–1995, but recovering; population size has more than doubled over last 25 years;
- c. moderate (25-49%) decline in UK breeding population over last 25 years, or the longer-term period;



- d. moderate (25-49%) contraction of UK breeding range over last 25 years, or the longer-term period;
- e. moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period;
- f. rare breeder; 1-300 breeding pairs in UK;
- g. rare non-breeders; less than 900 individuals;
- h. 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:

- a. species that occur regularly in the UK but do not qualify under any of the above criteria.
- 2.3.5 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 2km radius of the Order limits.
- 3.1.2 Only records up to ten years old from the request date 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.
- 3.1.3 Furthermore, breeding locations and nest records of Stone-curlew, within 500m of the Order limits and within the preceding ten years, were requested from the RSPB in May 2019. Further information on breeding locations and records of Stone-curlew from 2020 were provided directly from the RSPB.

3.2 Field survey

Survey area

- 3.2.1 The survey area included all habitat within the Order limits and a 50m 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 breeding birds within the area immediately surrounding the Order limits and includes areas contiguous with the Order limits, 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 (such as those listed on Schedule 1 of the WCA) and therefore where any such species were recorded beyond the 50m survey buffer (up to 200m from the Order limits), these were also recorded. However, the 50m survey buffer is sufficient to determine the likely impacts of the Scheme on the majority of breeding bird species occurring or likely to occur in the area.
- 3.2.2 For ease of analysis in consideration of the size and geographical locations of the Scheme, the survey area was split into compartment areas (see **Table 3-1** and **Figure 2**).

Table 3-1: Survey compartments within the Order limits

Scheme area	Survey compartment reference (See Figure 2)	County
Sunnica East Site A	Sunnica East Site A1	Cambridgeshire
Suffilled East Site A	Sunnica East Site A2	Suffolk
Sunnica East Site B		Suffolk
Sunnica West Site A		Cambridgeshire
Sunnica West Site B		Cambridgeshire
Crid Connection Doute A	Cable Route A1	Suffolk
Grid Connection Route A	Cable Route A2	Cambridgeshire
Grid Connection Route B	Cable Route B1	Cambridgeshire



Scheme area	Survey compartment reference (See Figure 2)	County
Cable Route B2		
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 breeding bird survey and reflected the extent of access at the time. However, the survey covered the Order limits and provides a robust baseline of the breeding bird community present within the Order limits and allows determination of the presence of any protected or sensitive ornithological receptors.

Territory mapping survey - general breeding bird assemblage

- 3.2.4 The survey was undertaken based on a standard territory mapping methodology for surveying breeding birds as detailed in Bibby et al. (2000) (Ref 12) and Gilbert et al. (1998) (Ref 13). This method is based on the principle that many species during the breeding season are territorial. This is found particularly amongst passerines, where territories are often marked by conspicuous song, display and periodic disputes with neighbouring individuals.
- 3.2.5 Survey routes followed the length of all hedgerows, fence-lines and field margins (including paths, tracks and roads). Deviations into areas of set-aside, stubble fields, scrub, woodland and other uncultivated habitats were made, where possible. The routes did not include ploughed or cultivated fields, due to the possibility of trampling and damaging crops. Fields containing livestock were avoided for safety reasons.
- 3.2.6 Regular stopping points were included along the survey route to record any species that may be passing through the survey area. 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 early in the morning, commencing just after sunrise and finishing before midday.
- 3.2.7 In areas of limited access along Grid Connection Routes A2 and B2 (see Figure 2), strategic viewing points were used to survey for breeding birds and these strategic points were chosen on the basis of:
 - a. the extent of view;
 - b. access permission; and
 - c. safety considerations.
- 3.2.8 Four viewing points were used to survey breeding birds within the Grid Connection Routes A2 and B2 and 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. On commencement of the survey, a 360° arc was scanned by the surveyor, recording all species seen from the viewing point.



- 3.2.9 The surveys for breeding birds were undertaken between April and June 2019 (six survey visits) and, following updates to the Order limits, areas previously unsurveyed were surveyed between March and June 2020 (six survey visits).
- 3.2.10 Surveys across the Order limits were repeated between April and June 2021, with six survey visits being undertaken.
- 3.2.11 Surveys were undertaken early in the morning, commencing just after sunrise and finishing before midday. During these times, breeding birds are more active and can be detected in song more frequently. Each survey was undertaken during appropriate weather conditions for survey when the weather was dry, warm and with little to no wind. The survey dates can be found in Annex B, Table 8B-1.
- 3.2.12 All bird species were recorded and mapped across the survey area. Registrations of birds were recorded using two letter species codes. Specific codes were used to record bird behaviour, including singing, calling, flights and movements between areas, carrying food, nest building, aggressive encounters and other bird behaviour.
- 3.2.13 The expected outcome from the surveys is that mapped registrations fall into clusters, approximately coinciding with territories. A cluster is generally a spatially distinct group of registrations that represent the activity of not more than one pair. Ideally, clusters include registrations of territorial behaviour across all visits and are clearly demarcated from adjacent clusters by simultaneous recording of neighbouring birds. Where a species has closely packed territories, the mapping of simultaneously singing birds becomes essential. Territory boundaries are assumed to be between such birds.
- 3.2.14 Territory mapping methods produce analysis maps of non-overlapping ellipses encircling clusters of records thought to relate to separate pairs of breeding birds. These ellipses may not show the entire extent of the pairs' actual breeding territory which may be significantly larger; however, they are likely to show those areas in which the pair is most active.
- 3.2.15 On completion of the surveys, analysis maps were produced for each species, consisting of all registrations recorded during surveys between 2019 and 2020 and in 2021. From these species maps, the number of territories was calculated by identifying the number of clusters present. Any duplicated territories between 2019 and 2020, where the survey areas overlapped between years, were discounted.
- 3.2.16 For late-arriving (to the UK) trans-Saharan migrants, e.g. Spotted Flycatcher, for which fewer potential contacts are possible, only one registration is required to form a territory cluster. A number of species are not territorial and are dealt with appropriately, e.g. Linnet, where data represent aggregations or loose colonies.
- 3.2.17 Standard registration mapping techniques were also used to record non-breeding species.
- 3.2.18 The following definitions were used to identify the breeding territory status of each species recorded:



- a. Confirmed: includes species for which territories were positively identified as a result of the number of registrations recorded; the location of an active nest; or the presence of recently fledged young / downy young;
- Probable: includes a species pair observed in suitable nesting habitat during surveys; or agitated behaviour / anxiety calls from adults (suggesting the presence of a nest or young nearby). Behaviour was observed on insufficient occasions to confirm the presence of a territory;
- Possible: includes species observed during surveys in suitable nesting habitat; or a singing male present (or breeding calls heard) in suitable breeding habitat; or
- d. Non-breeding: species-specific information was used to determine fly-over species, or species suspected to be summering non-breeder.

Species specific surveys - Stone-curlew

2019 surveys

- 3.2.19 To determine the presence, or absence, of breeding and post-breeding Stone-curlew within the Order limits, all suitable habitats within Sunnica East Sites A and B were surveyed every two weeks between 5 April and 23 September 2019. Where possible, surveys were combined with surveys for the general breeding bird assemblage, above.
- 3.2.20 The Stone-curlew survey method used within Sunnica East Sites A and B was based on the RSPB Stone-curlew monitoring protocol (Ref 14). In summary, this involved a walkover of Sunnica East Sites A and B, where access allowed, following pre-determined survey routes (**Figure 3**) and regular stopping points to locate Stone-curlew.
- 3.2.21 In areas outside of Sunnica East Sites A and B (within 500m of the Order limits (Figure 3)), where there was suitable habitat for Stone-curlew (such as beet fields or short grassland) and this was accessible or visible from public rights of way, surveys for breeding Stone-curlew were undertaken between 3 April and 6 June 2019. Surveys outside of Sunnica East Sites A and B were undertaken using stopping points (see Figure 3) to scan areas for Stone-curlew and listen for any Stone-curlew calls.
- 3.2.22 Additionally, nocturnal surveys (using taping methods, under a licence issued by Natural England), were also undertaken around the Order limits. The aim of these nocturnal surveys was to locate Stone-curlew by playing a tape recording of Stone-curlew calls and listening for birds calling back. Taping is best done at night because Stone-curlews are more active at night and there is a much greater likelihood of them responding than during the day.
- 3.2.23 In general, tape playing:
 - a. was avoided near houses:
 - b. was carried out entirely from public roads;
 - c. took place twice a month during April and May and once in June 2019;
 - d. took place any time from 30 minutes after sunset; and



- e. was undertaken on a still night, as even a slight breeze will reduce tape range and make responses difficult to hear.
- 3.2.24 All Stone-curlew surveys were undertaken by an appropriately licenced ornithologist. The survey dates for Stone-curlew surveys (including surveys where these were combined with general breeding bird surveys (section 3.2), undertaken between 5 April and 23 September 2019 are presented in **Table 3-2**. All surveys were undertaken during good weather conditions, on dry and calm days or nights.

Table 3-2: Stone-curlew survey dates

Visit number	Survey date	Survey type
1	5 April 2019	Diurnal
2	17 April 2019	Diurnal
3	24-26 April	Diurnal - as part of the survey for breeding birds
4	25 April 2019	Nocturnal
5	30 April to 3 May	Diurnal - as part of the survey for breeding birds
6	30 April	Nocturnal
7	14-17 May	Diurnal - as part of the survey for breeding birds
8	21 May	Nocturnal
9	28-31 May	Diurnal - as part of the survey for breeding birds
10	6 Jun	Nocturnal
11	11-14 June	Diurnal - as part of the survey for breeding birds
12	24-28 June	Diurnal - as part of the survey for breeding birds
13	5, 16 and 27 August; 9 and 23 September	Diurnal surveys to look for post-breeding flocks and 'late' breeding attempts

2020 surveys

- 3.2.25 To ensure adequate coverage of the Order limits for nesting Stone-curlew, in consideration of changes to the Order limits after the bird breeding season in 2019, walkover surveys for Stone-curlew were undertaken in 2020 of any 'new' Scheme areas and, for an accurate record on the number of Stone-curlew pairs within the Order limits, this was extended to include the entire Sunnica East Sites A and B, where access was permitted. No surveys were undertaken outside of the Order limits in 2020.
- 3.2.26 These walkover surveys, (see section 3.2.20) were undertaken fortnightly between 7 April and 19 June 2020, with six survey visits taking place in this time. All surveys were undertaken during good weather conditions, on dry and calm days.

2021 surveys

3.2.27 Walkover surveys for Stone-curlew were repeated in 2021 as part of the surveys for the general breeding bird assemblage, within the Order limits. No surveys were undertaken outside of the Order limits in 2021. All surveys were undertaken during good weather conditions, on dry and calm days.



Woodlark

3.2.28 Surveys to determine the presence or absence of breeding Woodlark were undertaken on Sunnica East Site B as part of the territory mapping surveys for the general breeding bird assemblage. However, given the species-specific methods for surveying Woodlark include a survey period commencing from mid-February (Ref 13), the wintering bird survey in March 2019 and March 2021 was also used to record the presence of any Woodlark.

Nightjar

- 3.2.29 Surveys to determine the presence or absence of breeding Nightjar were undertaken on Sunnica East Site B on 20 June 2019 and 8 July 2019, and followed the species-specific methodology detailed by Gilbert et., al., (Ref 13). Surveys were undertaken in Sunnica East Site B only, as this area had the most suitable habitat for breeding Nightjar, which included scrub and young conifer plantation.
- 3.2.30 Surveys for Nightjar involves undertaking surveys, at night, between dusk and one hour after dusk or between one hour before dawn and dawn to listen for Nightjar territorial display activity such as males 'churring'. For health and safety reasons, two surveyors were used and in accordance with the survey methodology (Ref 13), surveys were undertaken on dry nights with wind speeds of Beaufort force 3 or lighter.
- 3.2.31 On each visit, a specifically chosen survey route was walked at a slow pace with start and finish times noted. Any Nightjar 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, with specific codes used to denote churring, calling, movements between areas, flight, aggressive encounters and other Nightjar behaviour.

3.3 Assessment of ornithological importance

- 3.3.1 The assessment of the ornithological importance of the Order limits during the breeding 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 section 2 of this report. These include:
 - a. species listed on Annex 1 of the EU Birds Directive (Ref 4);
 - b. species listed on Schedule 1 of the WCA, 1981 (as amended) (Ref 2);
 - c. priority bird species in the UK (Ref 6);
 - d. species listed as priority species or additional species of interest on the Cambridgeshire and Peterborough BAP (Table 2-1);
 - e. species listed as a priority species on the Suffolk BAP (Table 2-1); and
 - f. species included in the Birds of Conservation Concern (BoCC) Red and Amber Lists (Ref 11).



Species abundance

- 3.3.2 In addition to evaluating a site based on its populations of breeding 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 breeding population for certain species. 'National estimates for breeding birds are published in a paper: 'Population estimates of birds in Great Britain and the United Kingdom' (Ref 15). The BTO Bird Atlas 2007-2011 (Balmer et. al., 2013) (Ref 16) was also reviewed for species information on a national level.
- 3.3.3 Information on populations of nationally rare species was sourced from the most recently published paper by the Rare Breeding Birds Panel (RBBP) (Ref 17).
- 3.3.4 Information on the population status of breeding bird species at a county level was sourced from the Cambridgeshire Bird Atlas 2007 2011 (Bacon et al., 2013) (Ref 18) and the Suffolk Bird Atlas 2007 2011 (Regnault, 2014) (Ref 19).
- 3.3.5 County-level estimates on the breeding 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

- 3.3.6 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.
- 3.3.7 **Table 3-3** presents the breeding species diversity criteria as outlined in Fuller (1980) (Ref 20), which provided a method for assessing the ornithological interest of sites for conservation during the bird breeding season, based on the number of species present.

Table 3-3: Breeding species diversity criteria (Fuller, 1980)

Local	County	Regional	National
25-49	50-69	70-84	85+

- 3.3.8 It should be noted that Fuller's analysis was developed in the 1970s and, since then, species diversity has declined significantly. As a result, Fuller's thresholds are, in most circumstances, too high for today's breeding bird populations. However, it is not considered that the differences would be sufficient to increase the geographical scale at which the assemblages are considered to have value.
- 3.3.9 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).
- 3.3.10 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 (Wildlife Trust, 2014) (Ref 21). These guidelines state that the criterion for selection of County Wildlife Sites applies to (where relevant to the Scheme):



- a site which supports a range of breeding birds with a value equal to or exceeding the following indices:
- b. Lowland Damp Grassland 11;
- c. Lowland Open Water and Margins 24;
- d. Scrub 10; or
- e. Woodland 26.
- f. breeding sites of a county rarity; and
- g. localities with 50 breeding bird species recorded in the last five years.
- 3.3.11 In Suffolk, CWS are selected for their habitats and subsequently has 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 Scheme boundary, e.g. farmland passerines.

Importance of the breeding bird population

- 3.3.12 To support a focussed assessment of the population of breeding birds within the Order limits, their biodiversity value has been 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' (CIEEM, 2018) (hereafter referred to as the CIEEM Guidelines) (Ref 22); and professional judgement.
- 3.3.13 The CIEEM guidelines use 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. This assessment criteria, set out in **Table 3-4**, has been used in conjunction with species rarity, abundance and diversity within the survey area to assess the biodiversity importance of the breeding bird populations recorded during the field surveys.

Table 3-4: Importance of ornithological features

Importance of ornithological features	Descriptors and examples of criteria	
International or European	Resident or regularly occurring populations of species which may be considered of value at an international or European level ¹ where:	
	 a. 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 	
	C. the species is at a critical phase ³ of its life cycle at this scale.	
UK or National	Areas of habitats with priority species identified in the UK Post-2010 Biodiversity Framework i.e. UK Biodiversity Action Plan (BAP), including those published in accordance with Section 41 of the NERC Act (2006) and those considered to be of principal importance for the conservation of biodiversity.	



Importance of ornithological features	Descriptors and examples of criteria	
	Resident or regularly occurring populations of species which may be considered of value at a UK or a national level4 where:	
	 a. 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 	
	c. the species is at a critical phase of its life cycle at this scale.	
Regional	Populations of species of value at a regional level (i.e. East Anglia). Resident or regularly occurring populations of species which may be considered of value at a regional level5 where:	
	 a. 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 	
	C. the species is at a critical phase of its life cycle at this scale.	
County or Unitary Authority or District	Populations of species of value at a County (i.e. Cambridgeshire and Suffolk) level or District (e.g. East Cambridgeshire). Resident or regularly occurring populations of species which may be considered of value at a County (or District)6 level where:	
	 a. 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, 	
	C. the species is at a critical phase of its life cycle at this scale.	
Local	Species populations of value in a local (i.e. within ~ 2 km of the site) context.	
	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.	
Site	Habitats and associated species that is of value in the context of the site only. Populations of common and widespread species.	
	opulations of continuor and widespread species.	

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).

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

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

⁴ Species 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



Importance of ornithological features

Descriptors and examples of criteria

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.

- ⁵ Such species include those listed in the appropriate Natural Character Area description.
- ⁶ Such 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 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 the 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 of species does not automatically mean that these still occur within the area of interest or are relevant in the context of the Scheme.

Field survey

- 3.4.2 During the course of the survey, there were a number of modifications to the Order limits, which in turn resulted in minor modifications to the survey area used during the course of the breeding 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 Order limits 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.
- 3.4.3 It is considered that sufficient information has been gathered during the assessment to provide a representative sample of the breeding bird population present within the Order limits.
- 3.4.4 The survey results outlined for Burwell National Grid Substation Extension in subsequent sections cover both Option 1 and 2 as described in paragraph 1.3.13.



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 Order limits and a list of the 108 protected and, or notable bird species recorded during the desk study is included in Annex B.

4.2 Field survey

April to June 2019; and March to June 2020

- 4.2.1 The following sections present the breeding bird data collected within the Order limits between April to June 2019; and March to June 2020. These data are broken down into the respective Scheme areas (**Table 3-1**). Species lists in the following tables are listed in taxonomic order, as defined by the British Ornithologists Union (BOU) British List (Ref 23).
- 4.2.2 A total of 90 species (including species listed on Schedule 1 of the WCA and Annex 1 of the EU Birds Directive) were recorded between April and June 2019; and March and June 2020.
- 4.2.3 Of the 90 species recorded within the survey area, territories of 62 species were confirmed and territories of a further four species were considered to be probable or possible within the survey area, resulting in a breeding bird assemblage of 66 species (including species listed on Schedule 1 of the WCA and Annex 1 of the EU Birds Directive). Records relating to the remaining 24 species were of non-breeding species.
- 4.2.4 A summary of the breeding and conservation status of the 90 species recorded during the survey, with the numbers of territories identified (or thought likely in the case of probable and possible records) is provided in **Table 4-1**. Owing to the recording of territories of breeding species which are listed on Schedule 1 of the WCA and the sensitivity of these species to potential disturbance, those species have been redacted from **Table 4-1** and are included within confidential **Annex D**.
- 4.2.5 For species which are widespread throughout the survey area (e.g. Blue Tit Cyanistes caeruleus), common within Cambridgeshire, Suffolk and the UK and not of conservation concern (i.e. not listed on one or more of the lists of conservation concern as detailed in this report), the number of breeding territories of these species (including probable or possible) have not been calculated and these are referred to in **Table 4-1** as being present (P).
- 4.2.6 Breeding territory information for records of 'possible' breeders was also not calculated, due to the low number of registrations of birds; however, an estimation of the possible number of territories is included in parentheses in **Table 4-1**.



Table 4-1: Breeding status, number of territories and conservation status of birds recorded within the Order limits (excluding species on Schedule 1 of the WCA and Annex 1 of the EU Birds Directive) in 2019 and 2020

Species (English name) and scientific name	Conservation status (where		Su	ınnica	East	Sunni	ca West	Gr		onnec	tion	Burwell National Grid	Total number of breeding
	applicable)		Sit	te A	Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A2								LAGISION	applicable)
Mute Swan Cygnus olor	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Egyptian Goose Alopochen aegyptiaca	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Shelduck Tadorna tadorna	BoCC Amber	Confirmed	0	1	2	0	0	0	0	0	0	0	3
Mallard Anas platyrhynchos	BoCC Amber	Confirmed	0	1	0	0	0	0	0	0	1	0	2
Tufted Duck Aythya fuligula	-	Confirmed	0	1	1	0	0	0	0	0	0	0	2
Red-legged Partridge Alectoris rufa	-	Confirmed	Р	Р	Р	Р	0	Р	Р	Р	Р	0	Р
Pheasant Phasianus colchicus	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	0	Р
Little Grebe Tachybaptus ruficollis	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Great Crested Grebe Podiceps cristatus	-	Confirmed	0	1	0	0	0	0	0	0	0	0	1
Grey Heron Ardea cinerea	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Little Egret Egretta garzetta	Annex 1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Cormorant Phalacracorax carbo	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Sparrowhawk Accipiter nisus	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Marsh Harrier Circus aeruginosus	Annex 1, WCA Sch. 1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Red Kite Milvus milvus	Annex 1, WCA Sch.1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Buzzard Buteo buteo	-	Confirmed	0	0	2	3	0	0	0	0	0	0	5
Coot Fulica atra	-	Confirmed	0	2	0	0	0	0	0	0	0	0	2
Oystercatcher Haematopus ostralegus	BoCC Amber	Confirmed	1	2	4	0	0	0	0	0	0	0	7



Species (English name) and scientific name	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onned loute	ction	Burwell National Grid	Total number of breeding
	applicable)		Sit	e A	Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A2								LAGISION	applicable)
Lapwing Vanellus vanellus	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	5	6	8	0	4	0	0	0	0	0	23
Curlew Numenius arquata	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	0	0	1	0	0	0	0	0	0	1
Common Sandpiper Actitis hypoleucos	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Black-headed Gull Chroicocephalus ridibundus	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Herring Gull Larus argentatus	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Lesser Black-backed Gull Larus fuscus	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Stock Dove Columba oenas	BoCC Amber	Confirmed	2	1	3	1	0	0	0	0	0	0	7
Woodpigeon Columba palumbus	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Turtle Dove Streptopelia turtur	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Possible	0	(1)	0	0	0	0	0	0	0	0	(1)
Collared Dove Streptopelia decaocto	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1



Species (English name) and scientific name	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onned oute	ction	Burwell National Grid	Total number of breeding
	applicable)		Sit	e A	Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A2								LAGISION	applicable)
Cuckoo Cuculus canorus	Priority Species, BoCC Red, Suffolk BAP	Confirmed	0	1	0	1	0	0	0	0	0	0	2
Tawny Owl Strix aluco	BoCC Amber	Probable	0	0	0	(1)	0	0	0	0	0	0	(1)
Swift Apus apus	BoCC Amber, Cambs BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Great Spotted Woodpecker Dendrocopus major	-	Confirmed	0	0	1	0	1	0	0	0	0	0	2
Green Woodpecker Picus viridus	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Kestrel Falco tinnunculus	BoCC Amber	Confirmed	0	0	0	1	0	0	0	0	0	0	1
Jay Garrulus glandarius	-	Confirmed	0	0	1	1	0	1	0	0	0	0	3
Magpie <i>Pica pica</i>	-	Possible	0	0	0	0	(1)	0	0	0	0	0	(1)
Jackdaw Corvus monedula	-	Confirmed	0	0	0	2	(1)	0	0	0	0	0	2-3
Rook Corvus frugilegus	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Carrion Crow Corvus corone	-	Confirmed	0	0	0	1	0	0	0	0	(1)	0	1-2
Coal Tit Periparus ater	-	Confirmed	0	0	9	4	0	0	0	0	0	0	13
Blue Tit Cyanistes caeruleus	-	Confirmed	0	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Great Tit Parus major	-	Confirmed	0	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Skylark <i>Alauda arvensis</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	15	9	27	28	4	2	2	1	5	0	93
Sand Martin Riparia riparia	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Swallow Hirundo rustica	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1



Species (English name) and scientific name	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onnec	ction	Burwell National Grid	Total number of breeding
	applicable)		Sit	e A	Site B	Site A	Site B	A 1	A2	B1	B2	Substation Extension	territories (where
			A1	A2									applicable)
House Martin Delichon urbicum	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Long-tailed Tit Aegithalos caudatus	-	Confirmed	0	0	6	9	1	1	0	1	1	0	19
Willow Warbler Phylloscopus trochilus	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Chiffchaff Phylloscopus collybita	-	Confirmed	0	1	6	11	4	0	0	0	0	3	25
Sedge Warbler Acrocephalus schoenobaenus	-	Confirmed	0	2	0	0	0	0	0	0	0	0	2
Reed Warbler Acrocephalus scirpaceus	-	Confirmed	0	5	0	0	2	0	0	0	1	2	10
Grasshopper Warbler Locustella naevia	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Blackcap Sylvia atricapilla	-	Confirmed	1	3	19	34	4	2	0	1	2	3	69
Garden Warbler Sylvia borin	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Lesser Whitethroat Sylvia curruca	-	Confirmed	0	0	3	4	2	0	0	0	0	0	9
Whitethroat Sylvia communis	-	Confirmed	0	6	7	3	7	2	0	1	6	2	34
Goldcrest Regulus regulus	-	Confirmed	0	0	8	1	0	0	0	0	0	0	9
Wren Troglodytes troglodytes	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Nuthatch Sitta europea	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Treecreeper Certhia familiaris	-	Confirmed	0	0	2	3	0	0	0	0	0	0	5
Starling Sturnus vulgaris	Priority Species, BoCC Red, Suffolk BAP	Confirmed	0	1	1	0	0	0	0	0	2	0	4



Species (English name) and scientific name	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onned oute	ction	Burwell National Grid	Total number of breeding
	applicable)		Sit	e A	Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A2									applicable)
Ring Ouzel Turdus torquatus	Priority Species, BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Blackbird Turdus merula	-	Confirmed	0	Р	Р	0	Р	Р	Р	Р	Р	Р	Р
Song Thrush Turdus philomelos	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	1	1	9	6	2	0	0	0	0	1	20
Mistle Thrush Turdus viscivorus	Priority Species, BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Spotted Flycatcher Muscicapa striata	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	0	4	0	0	0	0	0	0	0	4
Robin Erithacus rubecula	-	Confirmed	Р	Р	Р	Р	Р	Ρ	Р	Р	Р	Р	Р
Nightingale Luscinia megarhynchos	BoCC Red	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Wheatear Oenanthe oenanthe	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
House Sparrow Passer domesticus	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	0	0	0	0	0	0	0	1	0	1
Dunnock Prunella modularis	Priority Species, BoCC Amber, Suffolk BAP	Confirmed	3	7	31	10	2	1	0	0	4	1	59



Species (English name) and scientific name	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onnec	ction	Burwell National Grid	Total number of breeding
	applicable)		Sit	e A	Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A2								Extension	applicable)
Yellow Wagtail Motacilla flava	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	4	5	5	0	1	0	0	0	0	15
Grey Wagtail Motacilla cinerea	BoCC Red	Confirmed	0	0	0	0	0	0	0	0	1	0	1
Pied Wagtail Motacilla alba	-	Confirmed	1	2	1	0	0	1	0	0	0	0	5
Meadow Pipit Anthus pratensis	BoCC Amber	Confirmed	0	0	0	0	1	0	0	0	0	0	1
Tree Pipit Anthus trivialis	Priority Species, BoCC Red, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Chaffinch Fringilla coelebs	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Bullfinch Pyrrhula pyrrhula	Priority Species, BoCC Amber, Cambs BAP, Suffolk BAP	Possible	0	0	(1)	0	0	0	0	0	0	0	(1)
Greenfinch Chloris chloris	-	Confirmed	0	0	3	0	1	0	0	0	1	0	5
Linnet <i>Linaria cannabina</i>	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	2	5	6	0	3	1	0	0	1	1	19
Crossbill Loxia curvirostra	WCA Schedule 1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Goldfinch Carduelis carduelis	-	Confirmed	0	Р	0	Р	Р	Р	Р	Р	Р	Р	Р



Species (English name) and scientific name	Conservation status (where applicable)		Sunnica East			Sunnica West		Gı		onnec	tion	Burwell National Grid		
			Site A		Site B	Site A	Site B	A 1	A2	B1	B2	Substation Extension	territories (where	
			A1	A2	2							Extension	applicable)	
Corn Bunting Emberiza calandra	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	3	1	0	0	0	0	0	0	0	0	4	
Yellowhammer Emberiza citrinella	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	5	3	11	4	2	0	0	3	0	28	
Reed Bunting Emberiza schoeniclus	Priority Species, BoCC Amber, Cambs BAP, Suffolk BAP	Confirmed	1	1	0	0	1	0	0	0	0	1	4	
Total number of breeding species			17	35	42	31	27	20	11	14	24	16	61	



April to June 2021

- 4.2.7 The following sections present the breeding bird data collected within the Order limits between April and June 2021. These data are broken down into the respective Scheme areas (**Table 3-1**). Species lists in the following tables are listed in taxonomic order, as defined by the British Ornithologists Union (BOU) British List (Ref 23).
- 4.2.8 A total of 88 species (including species listed on Schedule 1 of the WCA and Annex 1 of the EU Birds Directive) were recorded during the surveys for breeding birds between April and June 2021.
- 4.2.9 Of the 88 species recorded within the Order limits, territories of 49 species were confirmed and territories of a further ten species were considered to be probable or possible within the survey area, resulting in a breeding bird assemblage of 59 species (including species listed on Schedule 1 of the WCA and Annex 1 of the EU Birds Directive). Records relating to the remaining 29 species were of non-breeding species.
- 4.2.10 A summary of the breeding and conservation status of the 88 species recorded during the survey, with the numbers of territories identified (or thought likely in the case of probable and possible records) is provided in Table 4-2. Owing to the recording of territories of breeding species which are listed on Schedule 1 of the WCA and the sensitivity of these species to potential disturbance, those species have been redacted from Table 4-2 and are included within confidential **Annex D**.
- 4.2.11 For species which are widespread throughout the survey area (e.g. Blue Tit), common within Cambridgeshire, Suffolk and the UK and not of conservation concern (i.e. not listed on one or more of the lists of conservation concern as detailed in this report), the number of breeding territories of these species (including probable or possible) have not been calculated and these are referred to in Table 4-2 as being present (P).
- 4.2.12 Breeding territory information for records of 'possible' breeders was also not calculated, due to the low number of registrations of birds; however, an estimation of the possible number of territories is included in parentheses in **Table 4-2**.



Table 4-2: Breeding status, number of territories and conservation status of birds recorded within the Order limits (excluding species on Schedule 1 of the WCA and Annex 1 of the EU Birds Directive) in 2021

Species (English name) and scientific name (where first	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onnec	tion	Burwell National Grid	Total number of breeding
mentioned in this report)	applicable)		Sit	e A	Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A2	1							LAGIISIOII	applicable)
Canada Goose Branta canadensis	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Mute Swan	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Egyptian Goose	-	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Shelduck	BoCC Amber	Confirmed	0	1	2	0	0	0	0	0	0	0	3
Gadwall Mareca strepera	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Mallard	BoCC Amber	Confirmed	0	2	0	0	0	0	0	0	0	0	2
Teal Anas crecca	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Pochard Aythya ferina	BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Tufted Duck	-	Probable	0	(1)	(1)	0	0	0	0	0	0	0	(2)
Red-legged Partridge	-	Confirmed	Р	Р	Р	Р	0	Р	Р	Р	Р	0	Р
Pheasant	-	Confirmed	Р	Р	Р	Р	0	Р	Р	Р	Р	0	Р
Little Grebe	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Great Crested Grebe	-	Confirmed	0	1	0	0	0	0	0	0	0	0	1
Great White Egret Ardea alba	Annex 1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Little Egret	Annex 1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Cormorant	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Sparrowhawk	-	Possible	0	0	0	0	(1)	0	0	0	0	0	(1)
Marsh Harrier	Annex 1, WCA Sch. 1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Red Kite	Annex 1, WCA Sch.1	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Buzzard	-	Confirmed	0	0	1	3	1	0	0	0	0	0	5



Species (English name) and scientific name (where first	Conservation status (where		Su	nnica	East	Sunni	ca West	Gr		onnec oute	tion	Burwell National Grid	Total number of breeding
mentioned in this report)	applicable)		Sit	e A	Site B	Site A	Site B	A 1	A2	B1	B2	Substation Extension	territories (where
			A1	A2								Exterioion	applicable)
Moorhen Gallinula chloropus	-	Possible	0	0	0	0	(1)	0	0	0	0	0	(1)
Coot	-	Confirmed	0	2	0	0	0	0	0	0	0	0	2
Oystercatcher	BoCC Amber	Confirmed	0	1	4	0	0	0	0	0	0	0	5
Lapwing	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	0	8	0	3	0	0	0	0	0	11
Ringed Plover Charadrius hiaticula	BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Whimbrel Numenius phaeopus	WCA Sch. 1, BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Curlew	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Snipe Gallinago gallinago	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Black-headed Gull	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Stock Dove	BoCC Amber	Confirmed	1	1	2	0	0	0	0	0	0	1	5
Woodpigeon	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Collared Dove	-	Confirmed	0	0	0	0	0	0	0	0	1	0	1
Cuckoo	Priority Species, BoCC Red, Suffolk BAP	Possible	0	(1)	(1)	0	0	0	0	0	0	0	2
Little Owl Athene noctua	-	Possible	0	0	(1)	0	0	0	0	0	0	0	(1)



Species (English name) and scientific name (where first	Conservation status (where		Sunnica East			Sunni	Gr		onnec	ction	Burwell National Grid	Total number of breeding	
mentioned in this report)	applicable)		Site A Si		Site B	Site A	Site B	A 1	A2	B1	B2	Substation Extension	territories (where
			A 1	A2									applicable)
Swift	BoCC Amber, Cambs BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Great Spotted Woodpecker	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Green Woodpecker	-	Possible	0	0	(1)	0	0	0	0	0	0	0	(1)
Kestrel	BoCC Amber	Possible	0	0	(1)	0	0	0	0	0	0	0	(1)
Jay	-	Confirmed	0	0	0	1	0	0	0	0	0	0	1
Magpie	-	Confirmed	0	0	0	4	1	0	0	0	0	1	6
Jackdaw	-	Confirmed	0	0	0	5	1	1	0	0	0	0	7
Rook	-	Confirmed	0	0	Р	0	0	0	0	0	0	0	Р
Carrion Crow	-	Confirmed	0	0	0	2	1	0	0	0	0	0	3
Coal Tit	-	Confirmed	0	0	12	1	0	0	0	0	0	0	13
Marsh Tit Poecile palustris	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Blue Tit	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Great Tit	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Skylark	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	11	12	18	48	7	0	1	2	2	0	111
Sand Martin	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Swallow	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Long-tailed Tit	-	Confirmed	0	0	2	6	1	0	0	0	0	0	9



Species (English name) and scientific name (where first	Conservation status (where		Sunnica East			Sunnica West		Grid Connection Route				Burwell National Grid	Total number of breeding
mentioned in this report)	applicable)			Site A		Site A	Site B	A 1	A2	B1	B2	Substation Extension	territories (where
			A1	A2									applicable)
Willow Warbler	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Chiffchaff	-	Confirmed	0	0	10	19	4	0	0	2	0	2	37
Sedge Warbler	-	Confirmed	0	0	0	0	1	0	0	0	0	0	1
Reed Warbler	-	Confirmed	0	2	0	0	3	0	0	0	0	0	5
Grasshopper Warbler	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Blackcap	-	Confirmed	2	2	18	22	5	0	0	1	1	3	54
Garden Warbler	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Lesser Whitethroat	-	Confirmed	0	0	1	1	0	0	0	0	0	0	2
Whitethroat	-	Confirmed	1	1	6	9	4	0	0	0	1	2	24
Goldcrest	-	Confirmed	0	0	3	2	0	0	0	0	0	0	5
Wren	-	Confirmed	Р	Р	Р	Р	Р	Р	А	Р	Р	Р	Р
Treecreeper	-	Possible	0	0	(1)	0	0	0	0	0	0	0	(1)
Starling	Priority Species, BoCC Red, Suffolk BAP	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Blackbird	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Fieldfare Turdus pilaris	WCA Sch. 1, BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Song Thrush	Priority Species, BoCC Red,	Confirmed	0	0	2	6	0	0	0	0	0	1	9



Species (English name) and scientific name (where first	Conservation status (where		Sunnica East			Sunni	Gr		onnec oute	ction	Burwell National Grid	Total number of breeding	
mentioned in this report)	applicable)		Sit	e A	Site B	Site A Site B		A1 A2		B1	B2	Substation Extension	territories (where
			A1	A2								Extension	applicable)
	Cambs BAP, Suffolk BAP												
Mistle Thrush	Priority Species, BoCC Red	Confirmed	0	0	1	0	0	0	0	0	0	0	1
Robin	-	Confirmed	Р	Р	Р	Р	Р	Ρ	Р	Р	Р	Р	Р
Redstart Phoenicurus phoenicurus	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Wheatear	-	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
House Sparrow	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	0	1	0	0	0	0	0	0	0	0	1
Dunnock	Priority Species, BoCC Amber, Suffolk BAP	Confirmed	1	4	17	9	2	0	0	1	1	1	36
Yellow Wagtail	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	1	2	6	2	1	0	0	0	0	0	12
Grey Wagtail	BoCC Red	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Pied Wagtail	-	Confirmed	1	1	1	1	0	0	0	0	0	0	4
Meadow Pipit	BoCC Amber	Non-breeding	0	0	0	0	0	0	0	0	0	0	0
Chaffinch	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Greenfinch	-	Confirmed	0	0	1	0	1	0	0	0	0	0	2



Species (English name) and scientific name (where first	Conservation status (where		Sunnica East			Sunnica West		Gr		onned oute	ction	Burwell National Grid	Total number of breeding
mentioned in this report)	applicable)		Site A		Site B	Site A	Site B	A1	A2	B1	B2	Substation Extension	territories (where
			A1	A1 A2									applicable)
Linnet	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	1	2	2	3	6	0	0	0	0	0	14
Goldfinch	-	Confirmed	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Corn Bunting	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	5	2	0	1	0	0	0	0	0	0	8
Yellowhammer	Priority Species, BoCC Red, Cambs BAP, Suffolk BAP	Confirmed	1	2	3	8	5	0	0	1	0	1	21
Reed Bunting	Priority Species, BoCC Amber, Cambs BAP, Suffolk BAP	Confirmed	0	2	0	2	3	0	0	0	0	1	8
Total number of breeding species			20	30	40	31	28	11	11	15	15	17	55



5 Evaluation

5.1 Desk study

- 5.1.1 Records of 108 protected or notable bird species were returned from the CPERC and SBIS desk study. Of these 108 species:
 - a. 32 are listed on Annex 1 of the EU Birds Directive;
 - b. 34 are listed as Priority Species;
 - c. 37 species are included on the BoCC Red List;
 - d. 56 species are included on the BoCC Amber List;
 - e. 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
 - f. 15 species are listed as Suffolk Biodiversity Action Plan species.

5.2 Field survey

- 5.2.1 Specific information regarding specially protected species is confidential and has therefore been redacted from the following sections of this report, but is included within **Annex D**. However, these species have been included where evaluating breeding assemblages, without making reference to specific locations or areas where they occur within the Order limits.
- 5.2.2 A breeding assemblage of 66 species was confirmed within the Order limits during surveys for breeding birds in 2019 and 2020, whilst a breeding assemblage of 59 species was recorded within the Order limits in 2021. In total, a breeding assemblage of 73 species was recorded during surveys of breeding birds for the Scheme. However, the maximum breeding assemblage in any given year is 66 species as there are fluctuations in the species assemblages within the survey area over the three-year survey period.
- 5.2.3 From the breeding assemblage recorded during field surveys:
 - a. two species are listed on Annex 1 of the EU Birds Directive;
 - b. six species are listed on Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended);
 - c. 19 species are listed as a Priority Species in the UK;
 - d. 16 species are included on the BoCC Red List;
 - e. 12 species are included on the BoCC Amber List;
 - f. 15 species are included as a priority species or additional species of interest in Cambridgeshire; and
 - g. 17 species are listed as Suffolk Biodiversity Action Plan species.
- 5.2.4 The number of confirmed (and probable or possible) territories of bird species of conservation interest (excluding species listed on Annex 1 of the EU Birds Directive and, or, Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended)) within each Scheme area are included in **Table 5-1**.



Table 5-1: Number of species of conservation interest recorded within each Scheme area

Conservation designation	Sunnica East Site A		Sunnica Sunnic East Site B West Site		Sunnica West Site B	C	Gr onne Rou	ectio	on	Burwell National Grid Substation
	A1	A2				A 1	A2	B1	В2	Extension
Priority Species	9	13	12	10	8	5	1	3	6	5
BoCC Red	7	11	11	8	6	4	1	2	6	3
BoCC Amber	4	6	7	6	3	1	0	1	2	3
Cambs Priority Species	9	n/a	n/a	9	8	n/a	1	3	6	5
Suffolk BAP	n/a	13	11	n/a	n/a	4	n/a	n/a	n/a	n/a
Note: n/a – not applicable as the Scheme area is not within this county										

Specially protected species

- 5.2.5 Information regarding breeding information of specially protected species is confidential and has therefore been redacted from the following sections of this report, but is included within **Annex D**.
- 5.2.6 Non-breeding species, included on Annex 1 of the EU Birds Directive or Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended), included: Great White Egret, Little Egret, Marsh Harrier and Red Kite. There is no habitat within the Order limits to support breeding Great White Egret or Little Egret (which rely on large waterbodies and their margins for breeding). Whilst the habitat within the Order limits is potentially suitable for Marsh Harrier (arable farmland) and Red Kite (woodland), both species were observed sporadically throughout the survey period and none of the records were of birds displaying any breeding behaviour.
- 5.2.7 Crossbill is also included on Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended) and was recorded on a single occasion in 2019 but was not breeding within the Order limits.

Species of conservation importance

Priority species

5.2.8 Seventeen species (Lapwing, Curlew, Turtle Dove, Cuckoo, Skylark, Starling, Song Thrush, Mistle Thrush, Spotted Flycatcher, House Sparrow, Dunnock, Yellow Wagtail, Bullfinch, Linnet, Corn Bunting, Yellowhammer and Reed Bunting) and one sensitive breeding species (see Annex D) with breeding territories confirmed or having probable, or possible breeding territories within the survey area (see Table 4-1 and Table 4-2) are listed as Species of Principal Importance prepared under Section 41 of the Natural Environment and Rural Communities Act 2006.



- 5.2.9 Of the 18 priority species recorded across the Order limits, the number of breeding territories confirmed (or thought probable or possible) for all priority species, within each Scheme area were:
 - a. 14 within Sunnica East Site A;
 - b. 13 within Sunnica East Site B;
 - c. ten within Sunnica West Site A;
 - d. eight within Sunnica West Site B;
 - e. seven within the Grid Connection Routes; and
 - f. five within the Burwell National Grid Substation Extension area.

Birds of conservation concern

- 5.2.10 Breeding territories were confirmed, or thought probable, or possible for sixteen species (Lapwing, Curlew, Turtle Dove, Cuckoo, Skylark, Starling, Song Thrush, Mistle Thrush, Spotted Flycatcher, Nightingale, House Sparrow, Yellow Wagtail, Grey Wagtail, Linnet, Corn Bunting and Yellowhammer) within the survey area that are included on the BoCC Red List.
- 5.2.11 Of the 16 BoCC Red listed species recorded within the Order limits (see Table 4-1 and Table 4-2), the number of breeding territories confirmed (or thought probable or possible) for all BoCC Red List species, within each Scheme area were:
 - a. eleven within Sunnica East Site A;
 - b. eleven within Sunnica East Site B:
 - c. eight within Sunnica West Site A;
 - d. six within Sunnica West Site B:
 - e. six within the Grid Connection Routes; and
 - f. three within the Burwell National Grid Substation Extension area.
- 5.2.12 Breeding territories were confirmed, or thought probable, or possible for ten species (Shelduck, Mallard, Oystercatcher, Stock Dove, Tawny Owl, Kestrel, Dunnock, Meadow Pipit, Bullfinch and Reed Bunting) and two sensitive breeding species (see Annex D) within the survey area that are included on the BoCC Amber List.
- 5.2.13 Of the twelve BoCC Amber listed species recorded across within the Order limits (see Table 4-1 and Table 4-2), the number of breeding territories confirmed (or thought probable or possible) for all BoCC Amber List species, within each Scheme area were:
 - a. eight within Sunnica East Site A;
 - b. eight within Sunnica East Site B;
 - c. six within Sunnica West Site A;
 - d. three within Sunnica West Site B:
 - e. one within the Grid Connection Routes; and



- f. three within the Burwell National Grid Substation Extension area.
- 5.2.14 Inclusion on the Birds of Conservation Concern Red or Amber list does not confer any statutory protection. However, the species concerned are all of conservation importance and considered to be under varying levels of threat in a UK context.
 - Cambridgeshire and Peterborough BAP
- 5.2.15 Breeding territories were confirmed, or thought probable, or possible for 15 species (Lapwing, Curlew, Turtle Dove, Skylark, Starling, Song Thrush, Spotted Flycatcher, House Sparrow, Dunnock, Yellow Wagtail, Bullfinch, Linnet, Corn Bunting, Yellowhammer and Reed Bunting) and two sensitive breeding species (see Annex D) that are included on the Cambridgeshire and Peterborough BAP.
- 5.2.16 Of the 17 Cambridgeshire and Peterborough BAP species (see Table 4-1 and Table 4-2) recorded within the Order limits, the number of breeding territories confirmed (or thought probable or possible), within each Scheme area (with consideration to the geographic location of each Scheme area), were:
 - a. nine within Sunnica East Site A1;
 - b. ten within Sunnica West Site A;
 - c. nine within Sunnica West Site B;
 - d. four within the Grid Connection Routes (A2, B1 and B2); and
 - e. five within the Burwell National Grid Substation Extension area.

Suffolk BAP

- 5.2.17 Breeding territories were confirmed, or thought probable, or possible for 15 species (Lapwing, Turtle Dove, Cuckoo, Skylark, Starling, Song Thrush, Spotted Flycatcher, House Sparrow, Dunnock, Yellow Wagtail, Bullfinch, Linnet, Corn Bunting, Yellowhammer and Reed Bunting) and one sensitive breeding species (see Annex D) that are included on the Suffolk BAP.
- 5.2.18 Of the 16 Suffolk BAP species recorded within the Order limits, the number of breeding territories confirmed (or thought probable or possible), within each Scheme area (with consideration to the geographic location of each Scheme area), were:
 - a. thirteen within Sunnica East Site A2;
 - b. twelve within Sunnica East Site B; and
 - c. four within the Grid Connection Route A1.

Species abundance

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



- 5.2.20 No species were present within the Order limits in numbers of national significance, i.e. 1% or more of the UK population, when compared to national population estimates as presented in Woodward et al. (Ref 15).
- 5.2.21 The population of Curlew (one territory in Sunnica West Site A in 2019) would represent the only record of a breeding territory of Curlew in Cambridgeshire when compared to population estimates of birds presented in the Cambridgeshire Bird Atlas 2007 2011 (Ref 18). Whilst this is of significance at a county level, the habitat on Sunnica West Site A does not include breeding habitat for this species (Curlew rely on open moorland, rank grassland or set-aside within farmland) and is predominantly arable farmland, such as Wheat, Barley and Maize. Whilst Curlew were confirmed as holding a territory within Sunnica West Site A, based on the number of registrations and calls heard by this species, breeding did not take place within Sunnica West Site A and the Site forms part of a Curlew territory which, if breeding, was located off-site. Although Curlew was recorded in 2021, this species was non-breeding in 2021, based on the observations and number of registrations.
- 5.2.22 No other species recorded within the Order limits are present in numbers of county significance when compared to population estimates presented in the Cambridgeshire Bird Atlas 2007 2011 (Ref 18) or the Suffolk Bird Atlas 2007 2011 (Ref 19).
- 5.2.23 Current county population estimates for some of the species afforded special statutory protection and, or, of conservation importance are not available. However, whilst the majority of species of conservation importance that were recorded within the Order limits are declining in the UK, most remain widespread and none of these species are likely to be present within the Order limits in numbers important at a county scale in Cambridgeshire or Suffolk.
- 5.2.24 The majority of species populations within the Order limits are considered to be of no more than local importance, however, the populations of the following species may be of district importance:
 - a. Lapwing in Suffolk (fourteen territories in Sunnica East Site A2 and Sunnica East Site B in 2019);
 - b. Skylark in Suffolk (38 territories in Scheme areas within the county in 2019/2020 and 30 territories in Scheme areas within the county in 2021); and
 - c. Skylark in Cambridgeshire (55 territories in Scheme areas within the county in 2019/2020 and 71 territories in Scheme areas within the county in 2021).

Species diversity

5.2.25 To measure species diversity, the breeding assemblage (66 and 59) recorded in the survey area was evaluated against the criteria developed by Fuller (**Table 3-3**) and taking into consideration that species diversity has declined significantly since the criteria were developed. The breeding assemblages would regard the value of the Order limits, as being of county importance for breeding birds. However, when evaluating the number of breeding 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) and in



- consideration of the Scheme being split over two counties, the number of species occurring within each Scheme area is much lower.
- 5.2.26 Using Fuller's method (section 3.3.6) to evaluate species diversity within the two counties that the Scheme crosses (Cambridgeshire and Suffolk), the importance of the species assemblages within each Scheme area are as follows:
 - a. Cambridgeshire:
 - i. Sunnica East Site A1 local importance;
 - ii. Sunnica West Sites A and B local importance;
 - iii. Grid Connection Routes A2, B1 and B2 local importance; and
 - iv. Burwell National Grid Substation Extension- local importance.
 - b. Suffolk:
 - i. Sunnica East Site A2 local importance;
 - ii. Sunnica East Site B local importance; and
 - iii. Grid Connection Route A1 local importance.
- 5.2.27 Evaluation of the breeding species assemblage and numbers recorded during surveys, with respect to criteria for selection of Local Wildlife Sites (of County value) in Cambridgeshire (Ref 21) indicates that the individual Scheme areas occurring within the county (Sunnica East Sites A and B; Grid Connection Routes A2, B1 and B2; and the Burwell National Grid Substation Extension):
 - a. do not support a range of breeding birds with a value equal to or exceeding the indices for scrub and woodland (of those habitats occurring on Site) within the county;
 - b. do support a breeding county rarity; and
 - c. do not support 50 breeding bird species recorded in the last five years.
- 5.2.28 This assessment further supports that the Scheme areas within Cambridgeshire are of no more than county importance for breeding birds. Whilst there is no CWS criteria to evaluate the Scheme areas within Suffolk, Sunnica East Sites A and B are likely to be of no more than county importance.

Species distribution

5.2.29 The location of species of conservation concern (see **Table 4-1** and **Table 4-2**) are presented in **Figure 4**. 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).

Evaluation of key habitat types for breeding birds

5.2.30 A summary of the broad habitat types present in the survey area and their key ornithological features, are presented in **Table 5-2**.



Table 5-2: Key ornithological features of habitat within the Order limits

Broad habitat type	Key ornithological features
Waterbodies (ponds and agricultural reservoirs)	Supports species associated with wetland features, such as Mallard and Great Crested Grebe. Also support species associated with wetland margins, including Lapwing.
Arable farmland	The predominant habitat type occurring across the Order limits. Supports a number of notable breeding species of conservation concern.
Scrub / hedgerows	Scrub and hedgerows across the Order limits. Supports breeding species of conservation concern, such as Yellowhammer and Linnet.
Mature trees / woodland	Parcels of woodland and individual trees scattered throughout the Order limits. Supports species such as Green Woodpecker, as well as species often found in scrub / hedgerows.



6 Conclusions

- 6.1.1 A total breeding bird assemblage of 73 species was recorded within the Order limits between 2019 and 2021. However, the maximum breeding assemblage in any given year is 66 species as there are fluctuations in the species assemblages within the survey area over the three-year survey period. From the breeding assemblages of 66 bird species (2019/2021) and 59 species (2021), 31 species (including specially protected species as presented in Annex D) meet at least one of a range of criteria relating to conservation importance (see Table 4-1and Table 4-2), as detailed in section 2 of this report.
- 6.1.2 Species diversity for the Scheme is of county importance. However, individually, the component sites of the Order limits are of local importance only.
- 6.1.3 The population of Curlew within the survey area is likely to be of county importance in Cambridgeshire. The population of Lapwing in Suffolk and Skylark in both Suffolk and Cambridgeshire are likely to be of district importance. No other species recorded in the survey area were recorded in a figure approaching 1% of the county breeding population estimates in Cambridgeshire or Suffolk. The numbers of individuals for most species recorded were all relatively low and did not represent significant proportions (i.e. 1 % or more) of the county populations in both counties.



7 References

- Ref 1 AECOM (2020). Sunnica Energy Farm Preliminary Ecological Appraisal.
- Ref 2 Anon. (1981). The Wildlife & Countryside Act. HMSO, London.
- Ref 3 HMSO (2000). Countryside and Rights of Way Act 2000. HMSO, London.
- Ref 4 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 5 HMSO (2018). Conservation of Habitats and Species Regulations 2017 (as amended). HMSO, London.
- Ref 6 Anon. (2006). The Natural Environment and Rural Communities Act. HMSO, London.
- Ref 7 Anon. (2008). UK Biodiversity Action Plan.
- Ref 8 JNCC, UK Post-2010 Biodiversity Framework, 2012. Available online
- Ref 9 Cambridgeshire and Peterborough Biodiversity Group (2008). Priority Species and Habitats. Available online.
- Ref 10 SBIS (2015). Priority species and habitats. Available from online.
- Ref 11 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 12 Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000). Bird Census Techniques: 2nd edition. Academic Press, London.
- Ref 13 Gilbert G., Gibbons D.W., and Evans J. (1998) Bird Monitoring Methods: A manual of techniques for key UK species. RSPB, Bedfordshire
- Ref 14 RSPB pers. comms
- Ref 15 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 16 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 17 Eaton M. and the Rare Breeding Birds Panel (2020) Rare breeding birds in the United Kingdom in 2018. British Birds 113, 727-804
- Ref 18 Bacon, L., Cooper, A. and Venables, H. (2013). Cambridgeshire Bird Atlas 2007 2011. Cambridgeshire Bird Club.
- Ref 19 Regnault, M., (2014). Suffolk Bird Atlas 2007 2011. Suffolk.
- Ref 20 Fuller, R.J. (1980). A Method for Assessing the Ornithological Interest of Sites for Conservation. Biological Conservation 17, 229-239
- Ref 21 Cambridgeshire and Peterborough County Wildlife Sites Panel., 2014.
 Cambridgeshire and Peterborough County Wildlife Sites Selection Guidelines.
 The Wildlife Trust.



- Ref 22 CIEEM (2018). Guidelines for Ecological Impact Assessment in the United Kingdom: Terrestrial, Freshwater, Coastal and Marine.
- Ref 23 THE BRITISH LIST. The official list of bird species recorded in Britain. Available online.
- Ref 24 Ruddock, M. and Whitfield, D.P. (2007) A Review of Disturbance Distances in Selected Bird Species. Report from Natural Research (Projects) Ltd to Scottish Natural Heritage



Annex 8A Figures



Figure 1 Order limits boundary and location

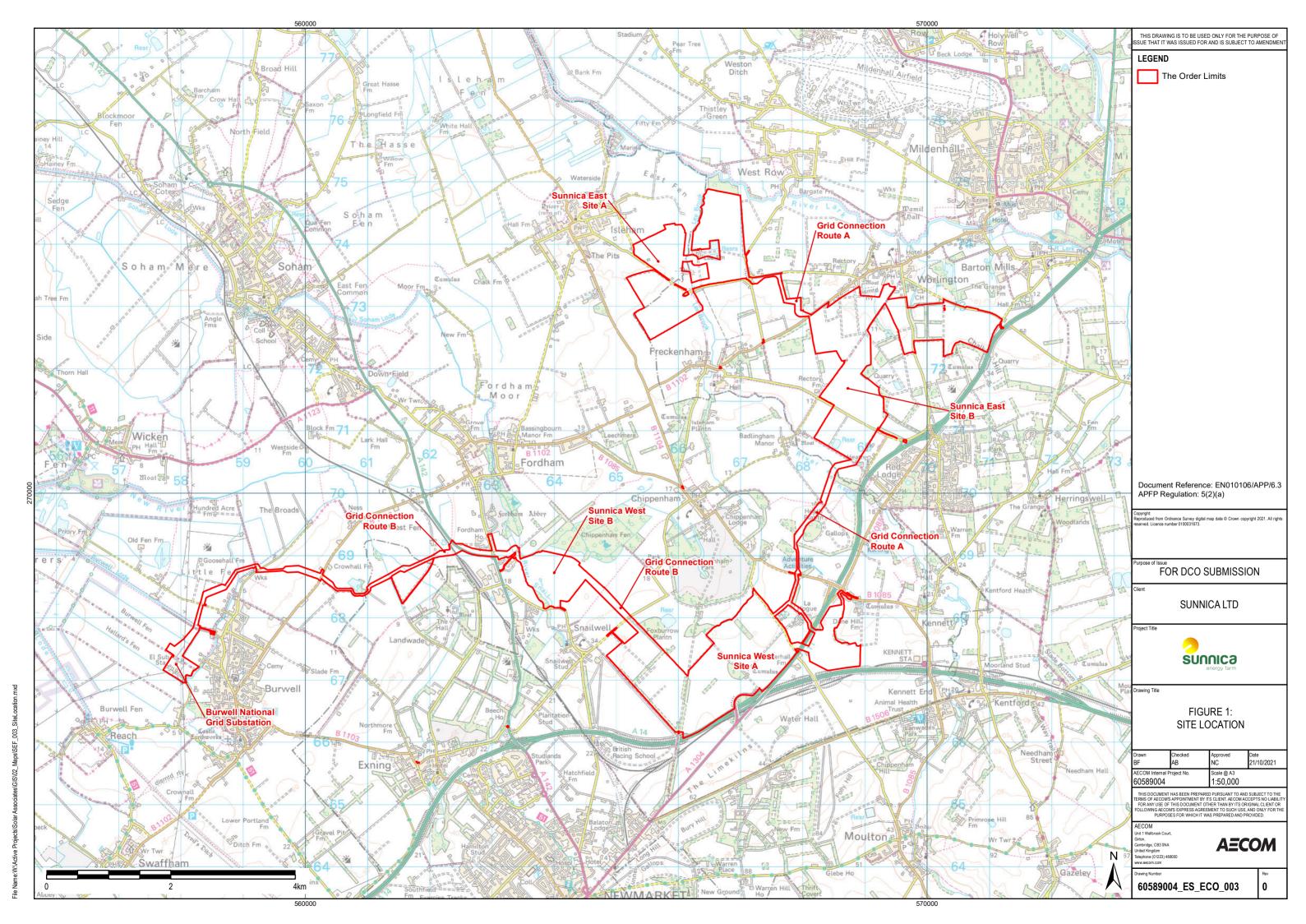




Figure 2 Survey area used for breeding birds

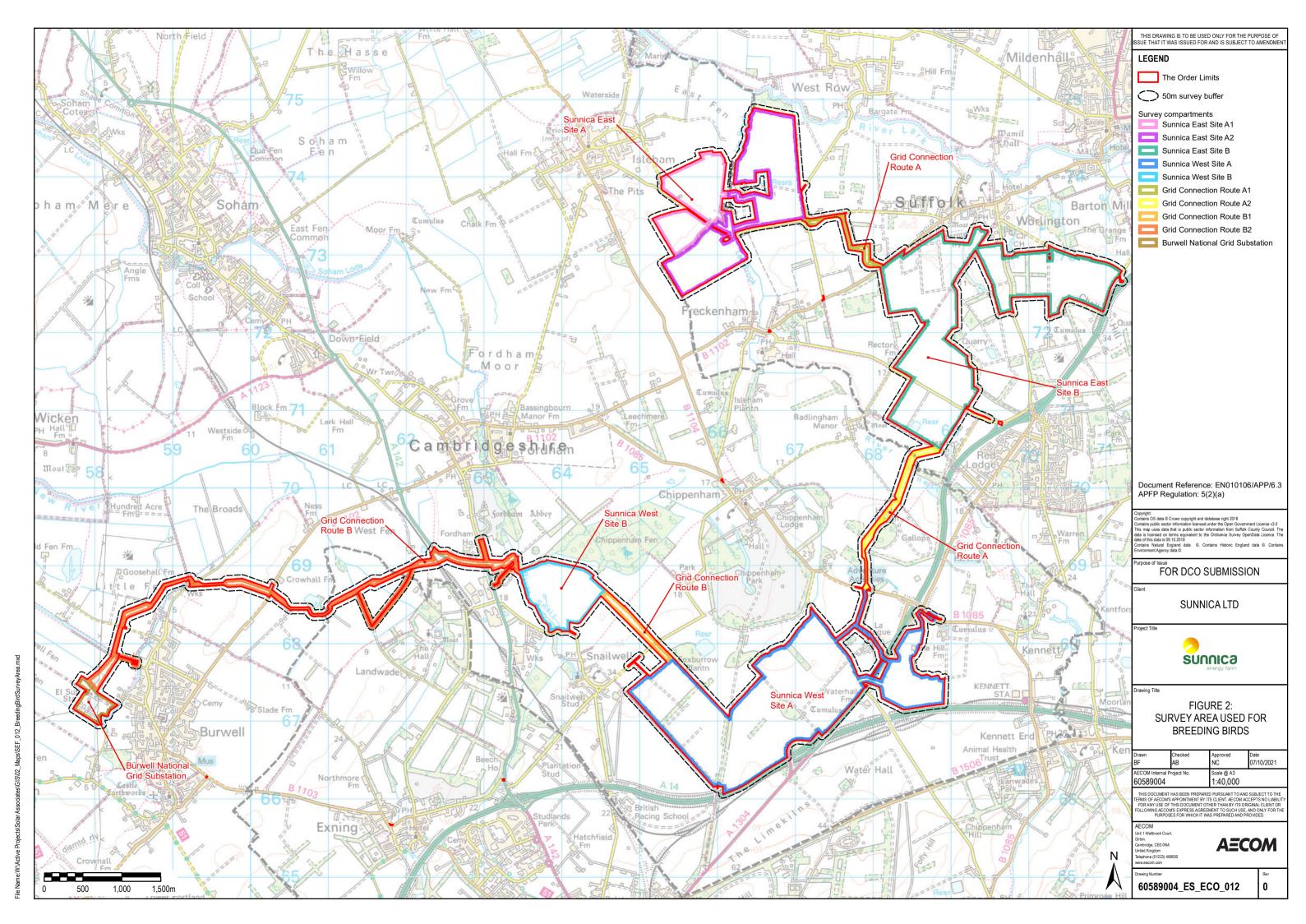




Figure 3 Stone-curlew survey areas

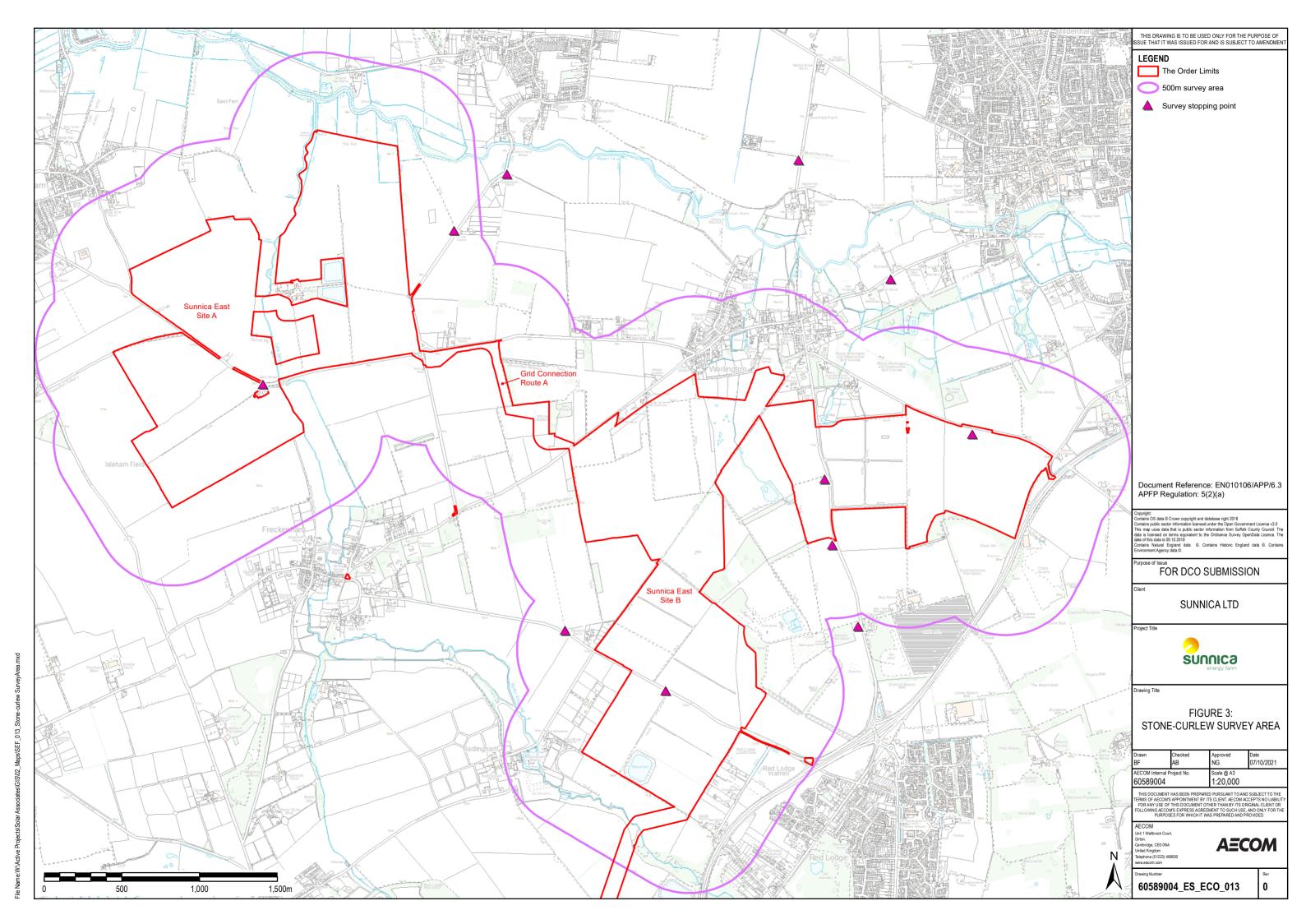
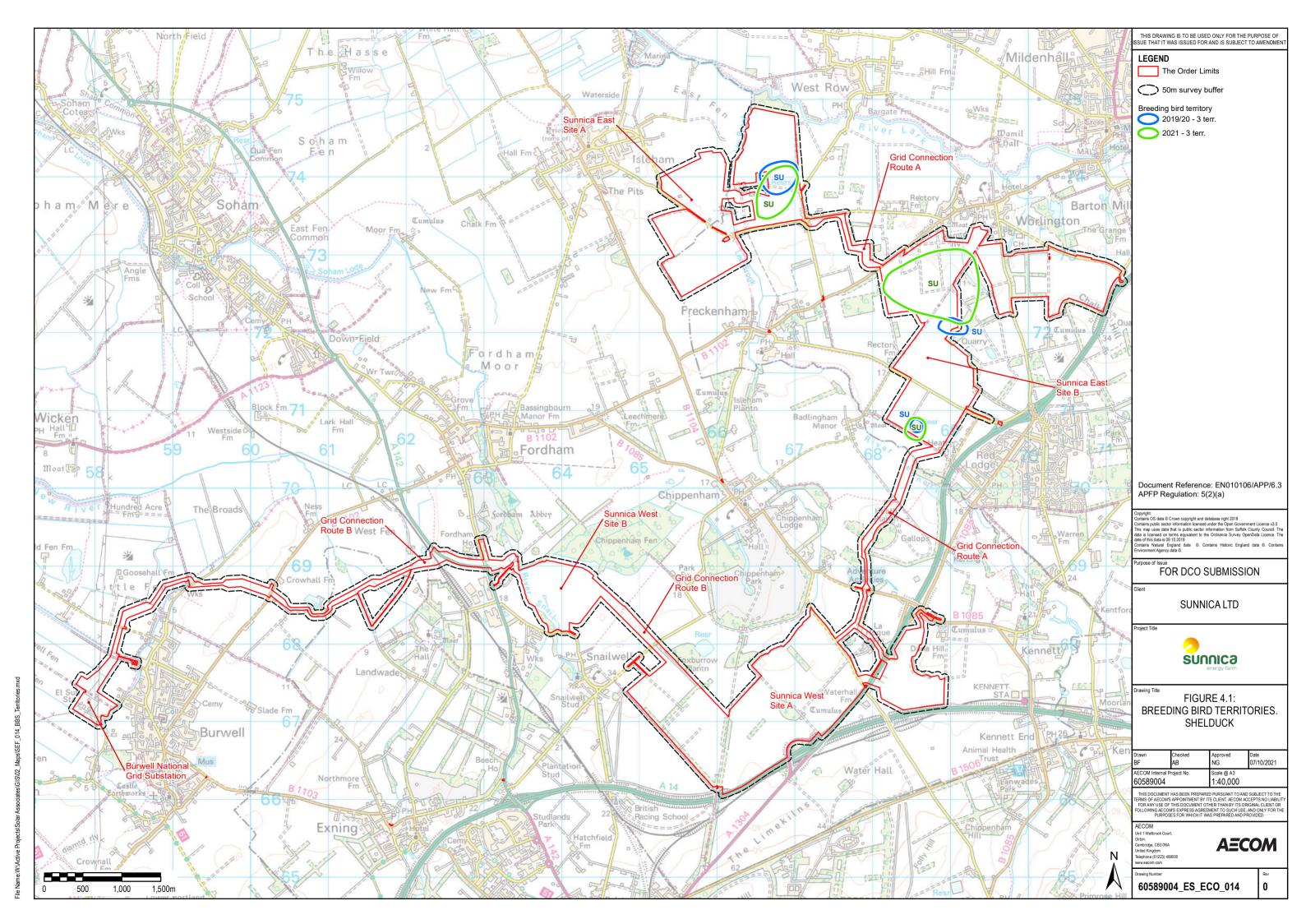
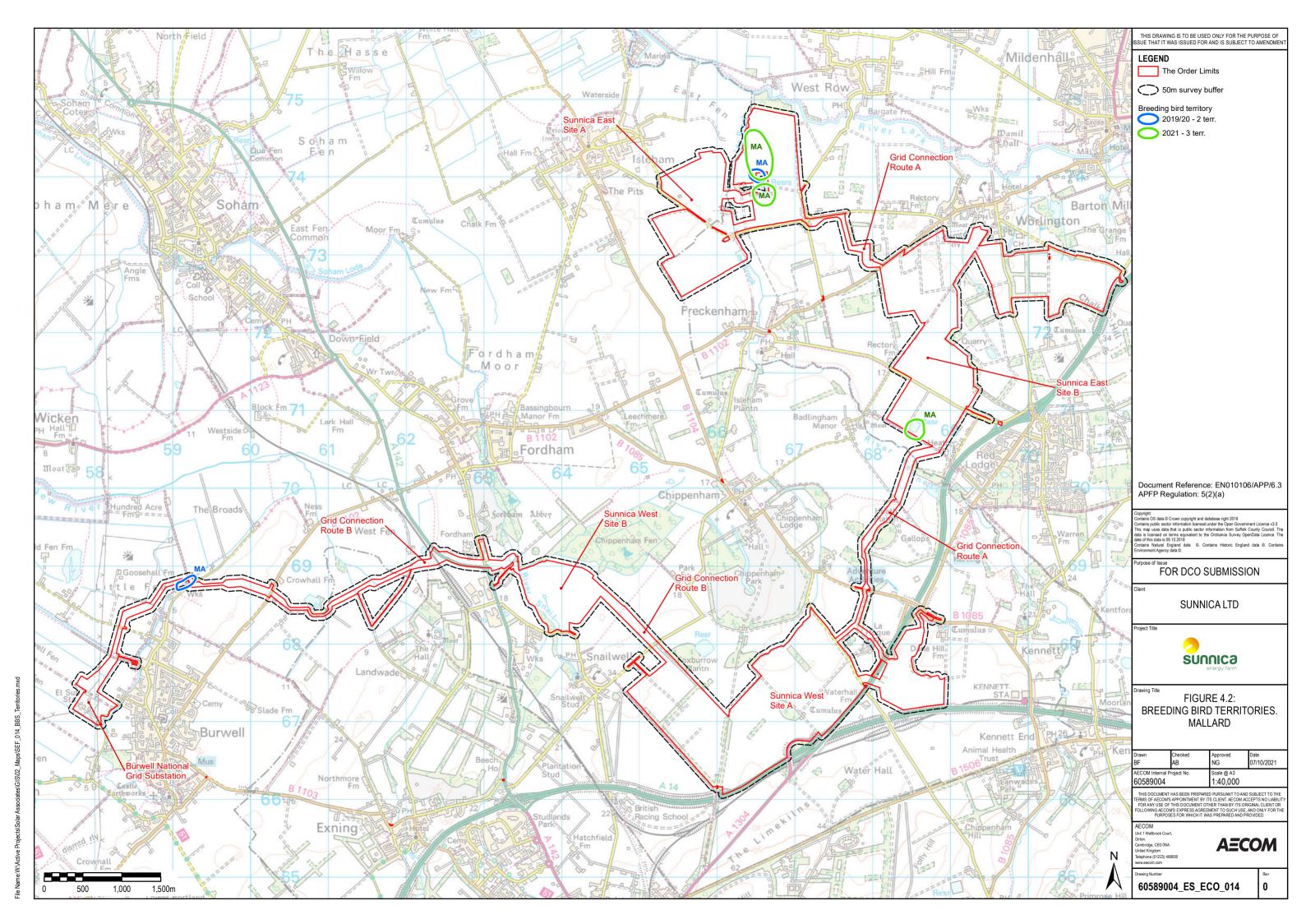
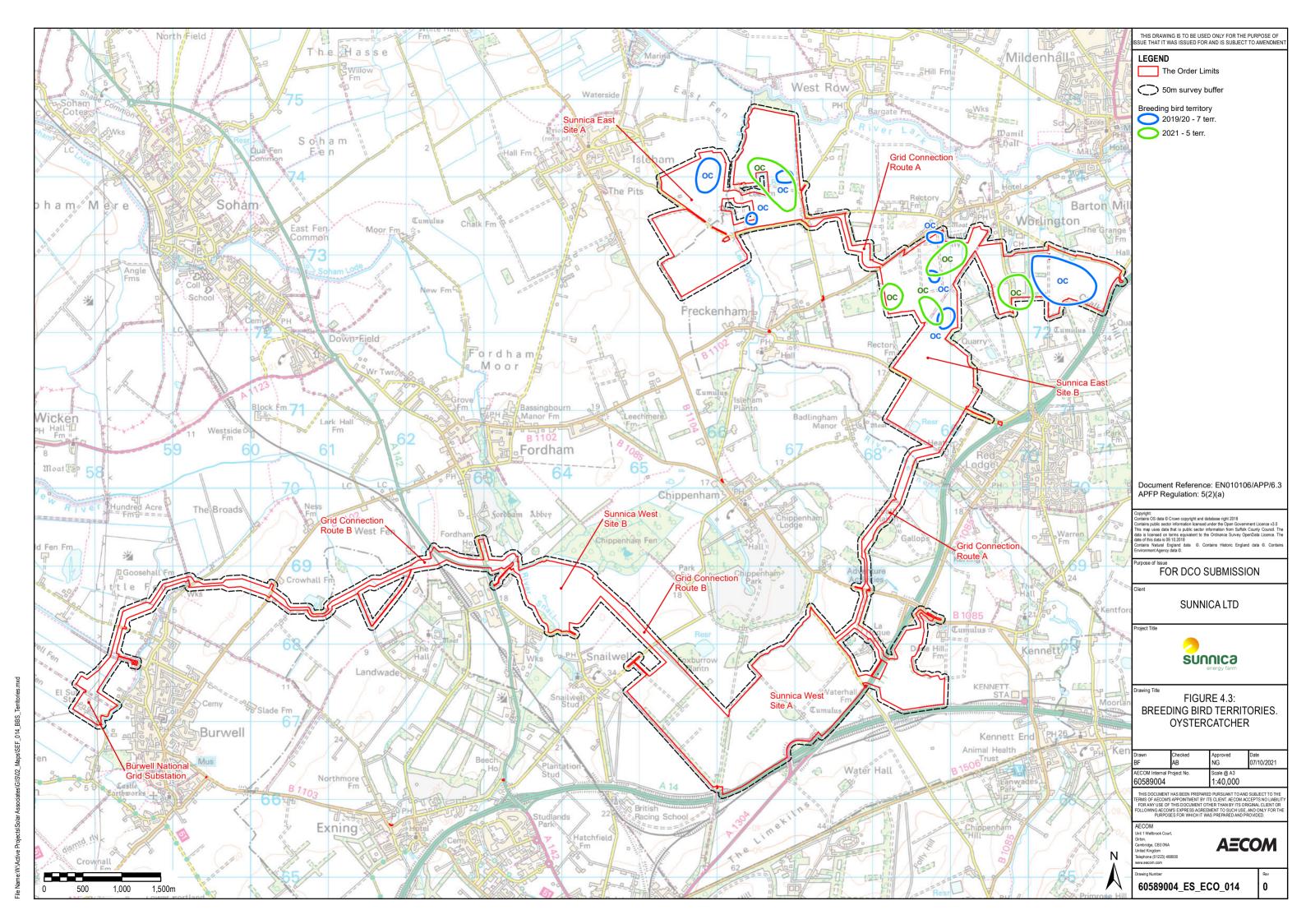


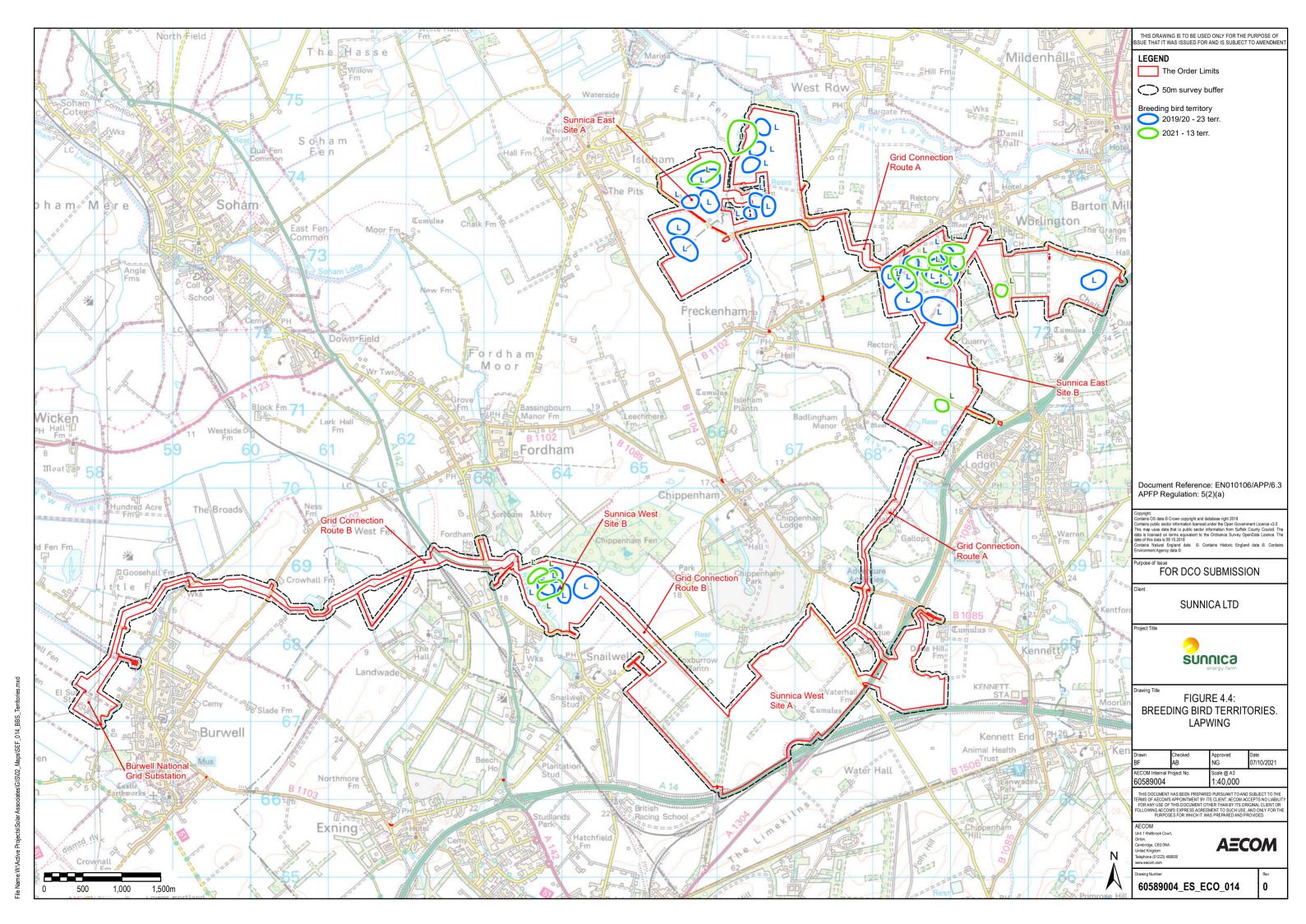


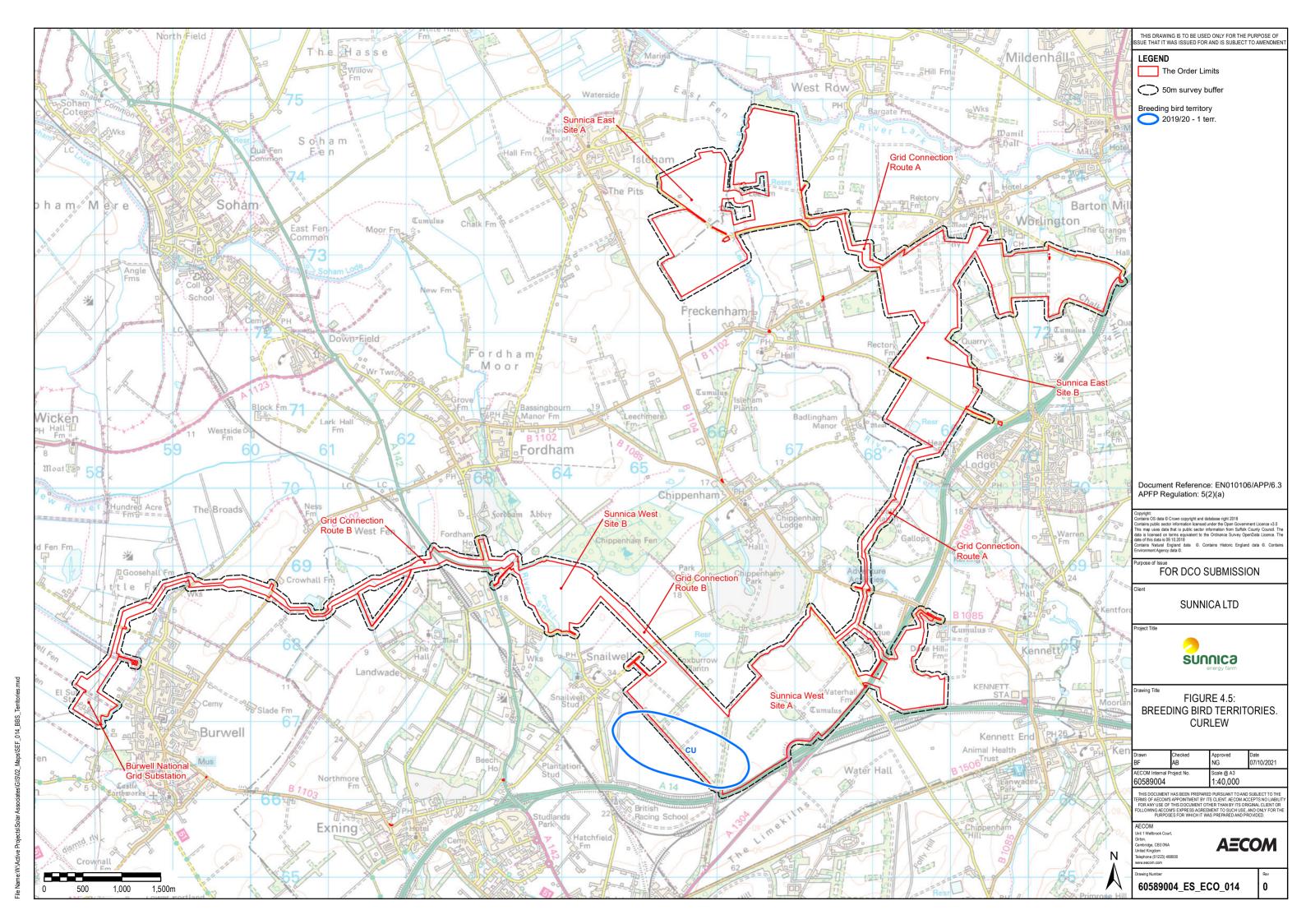
Figure 4 Breeding Bird Territories

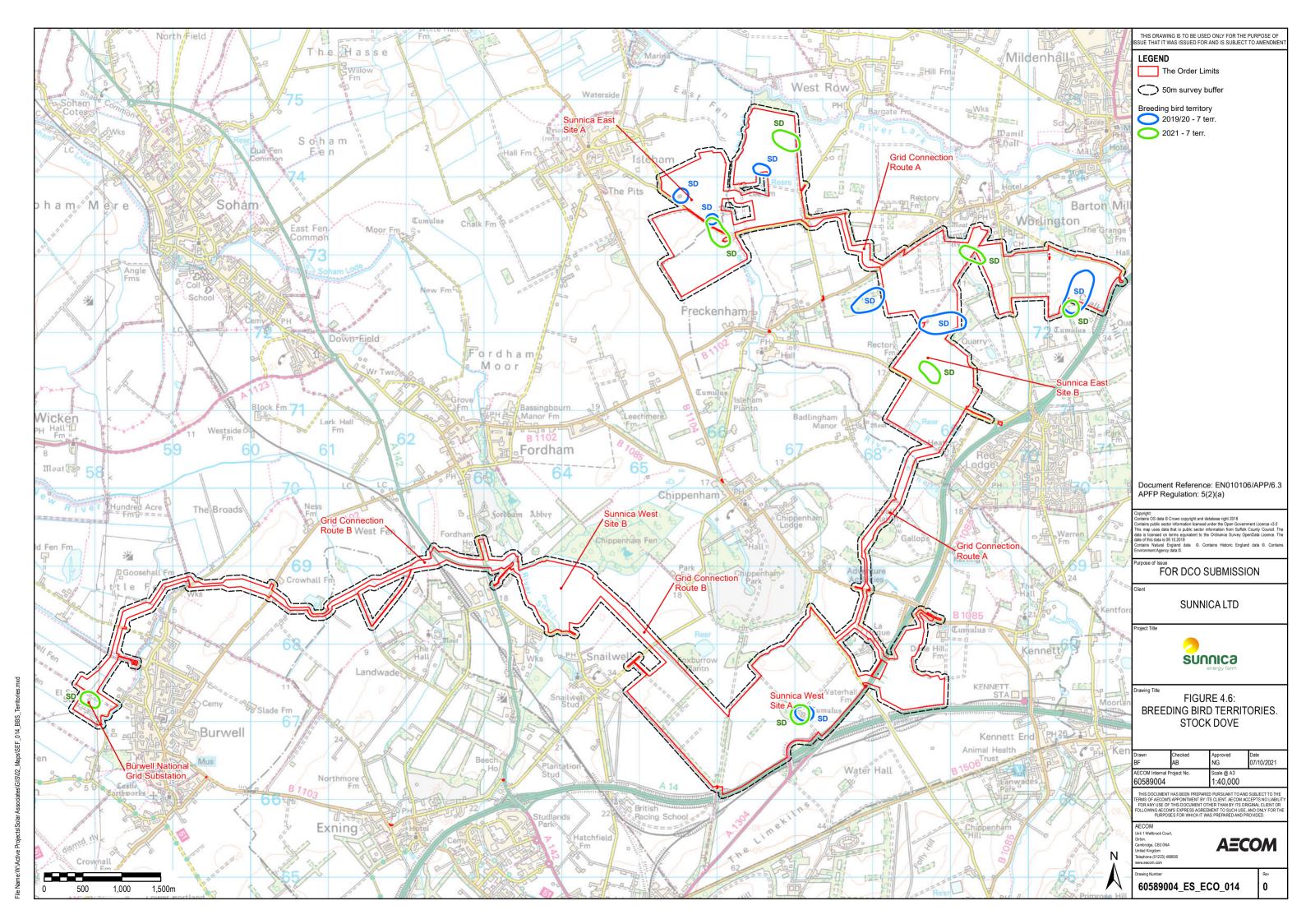


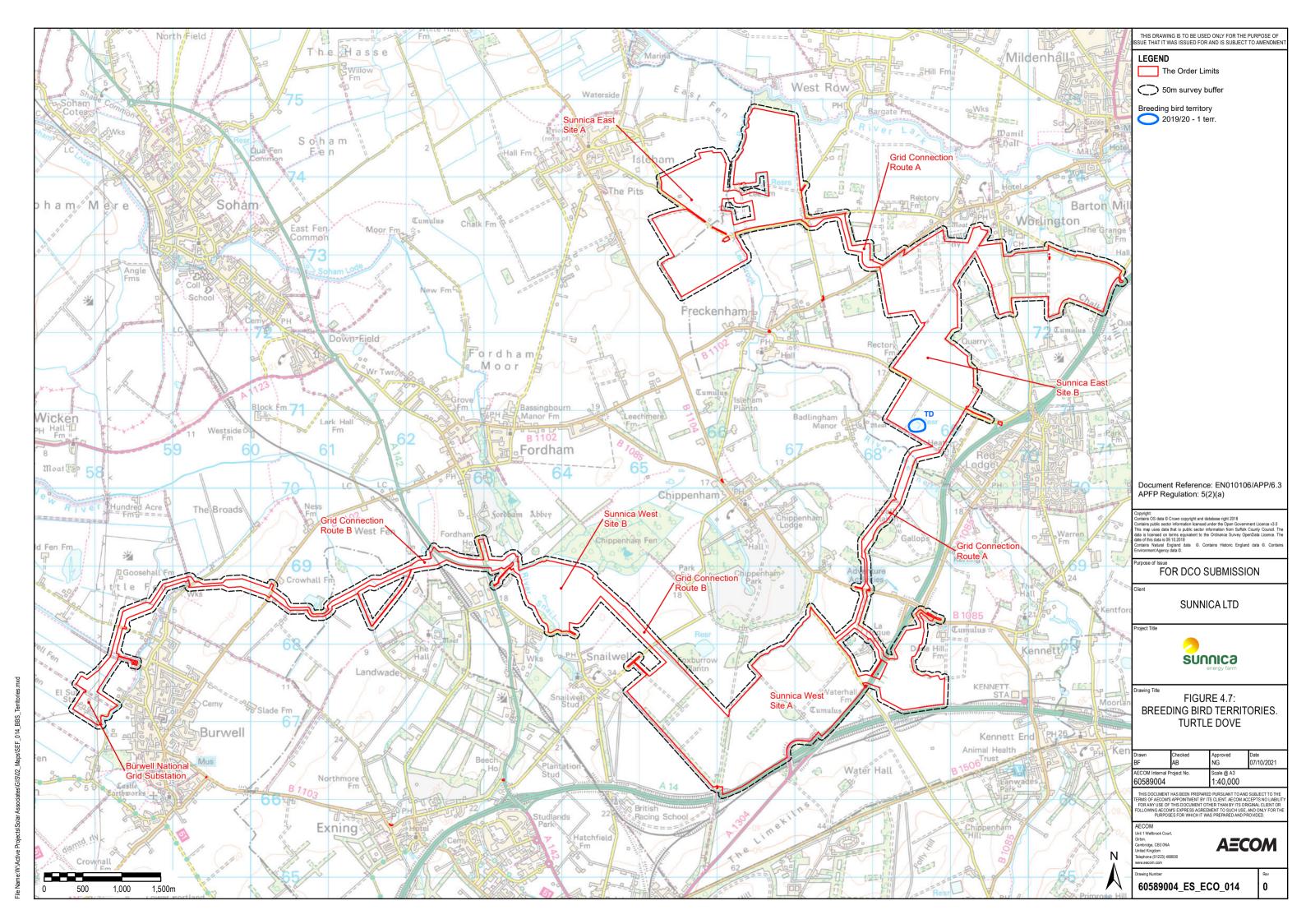


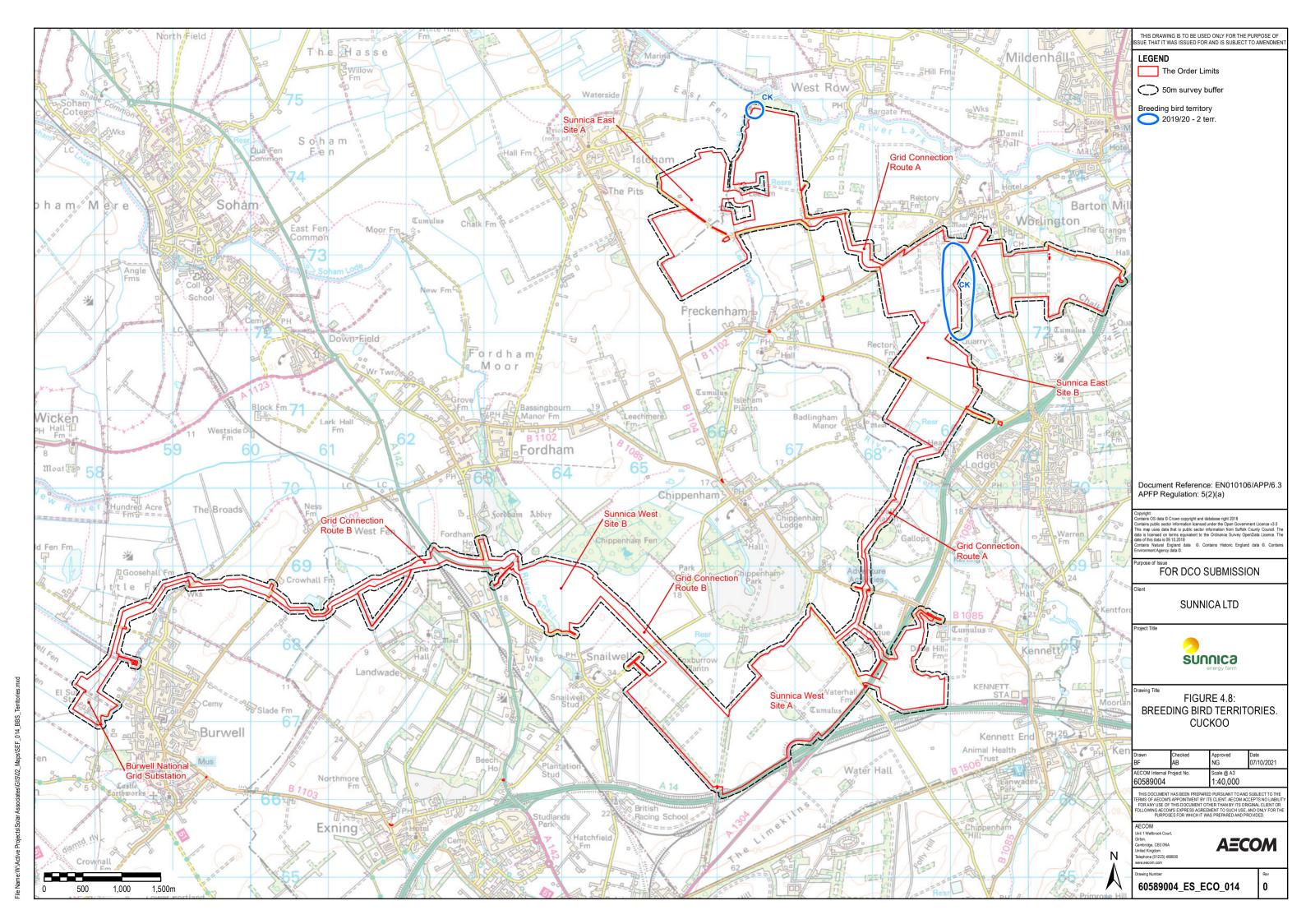


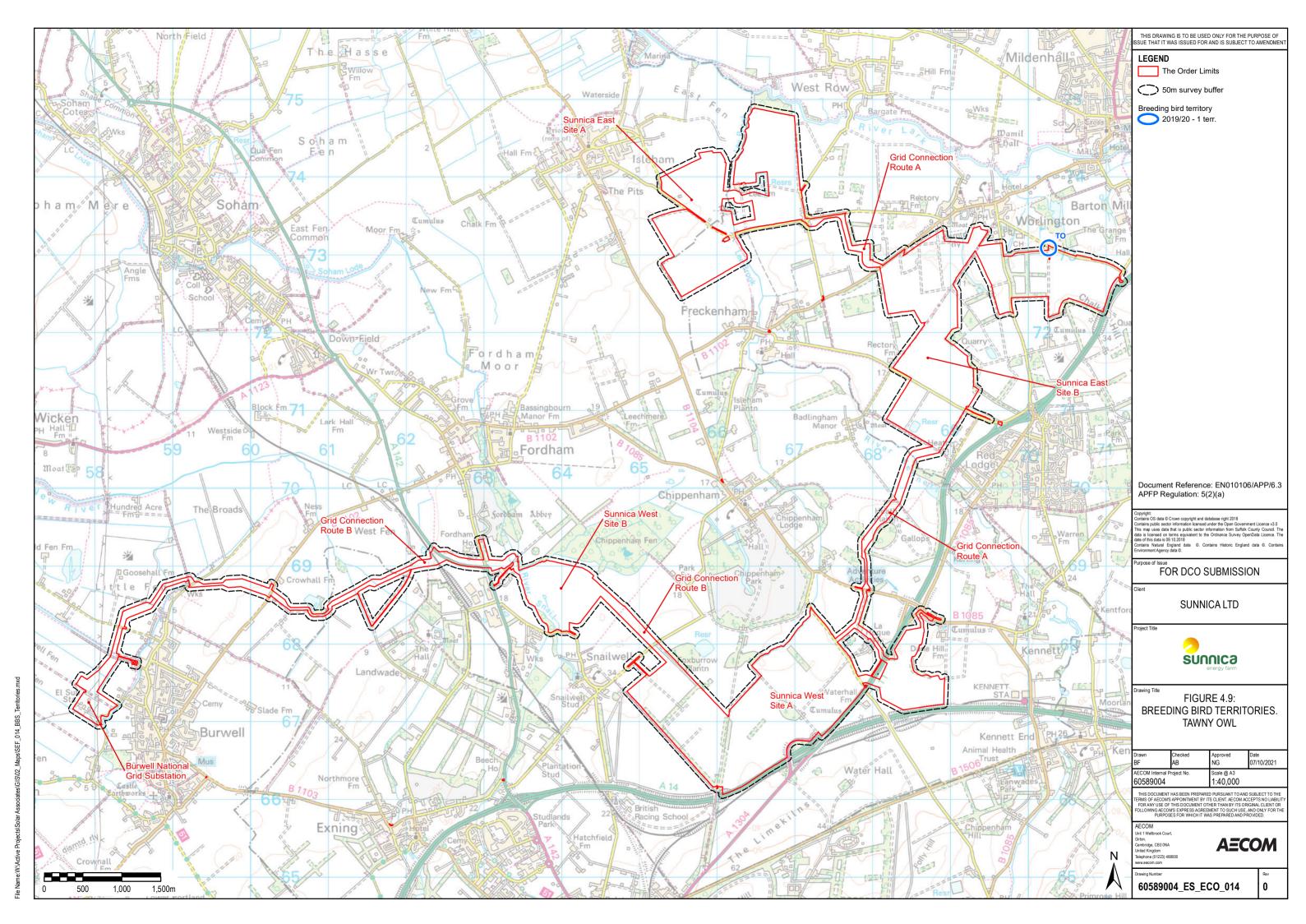


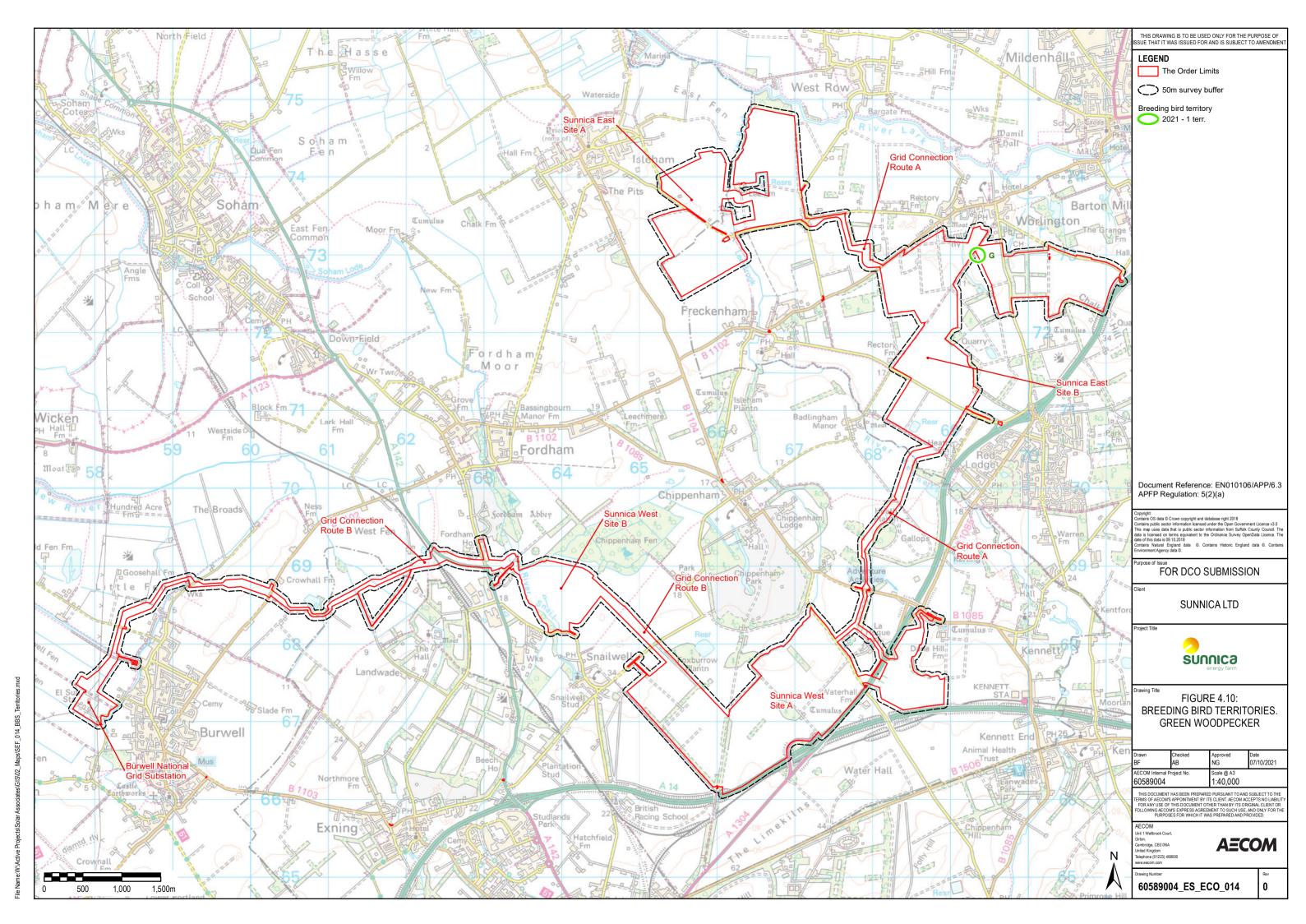


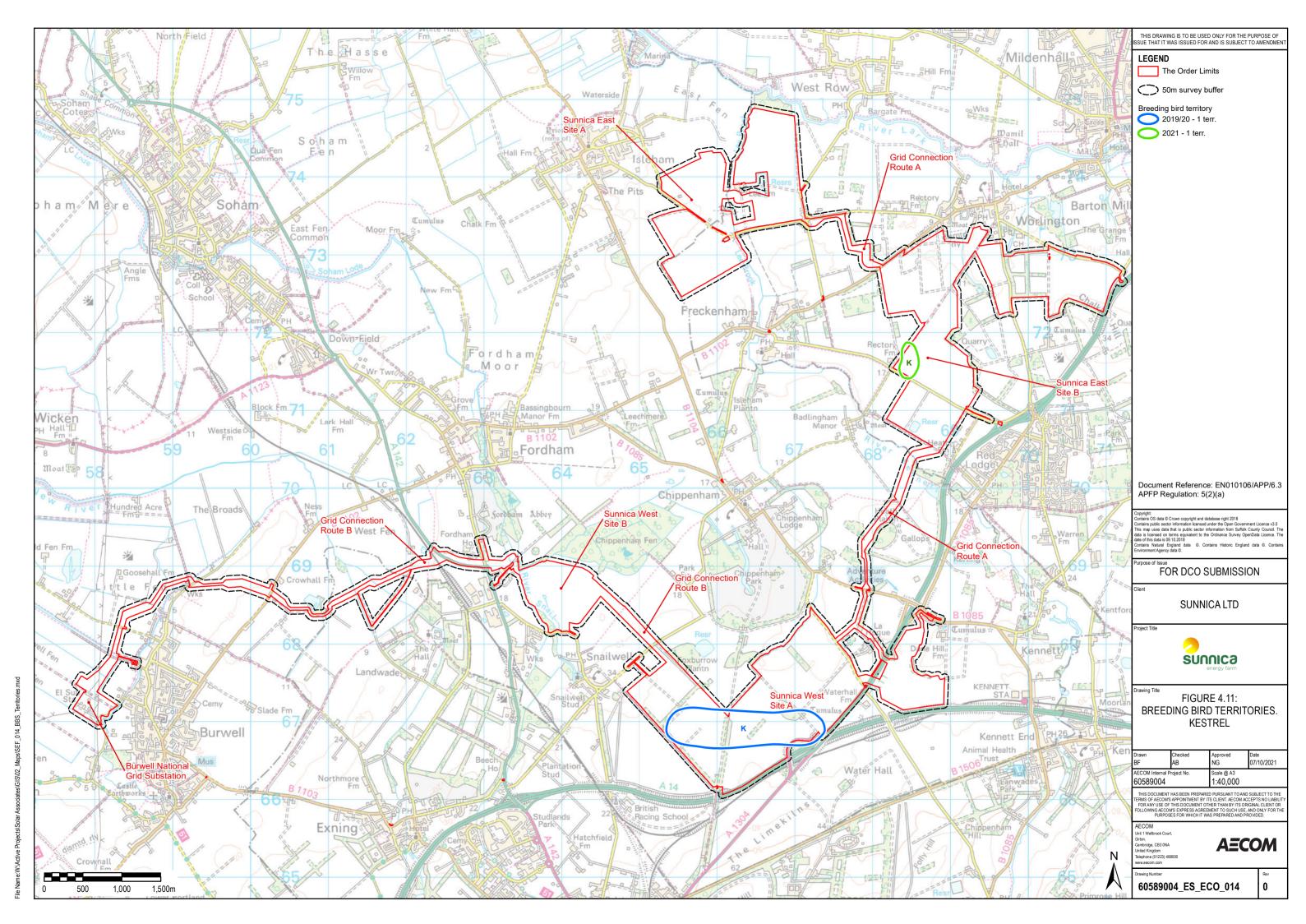


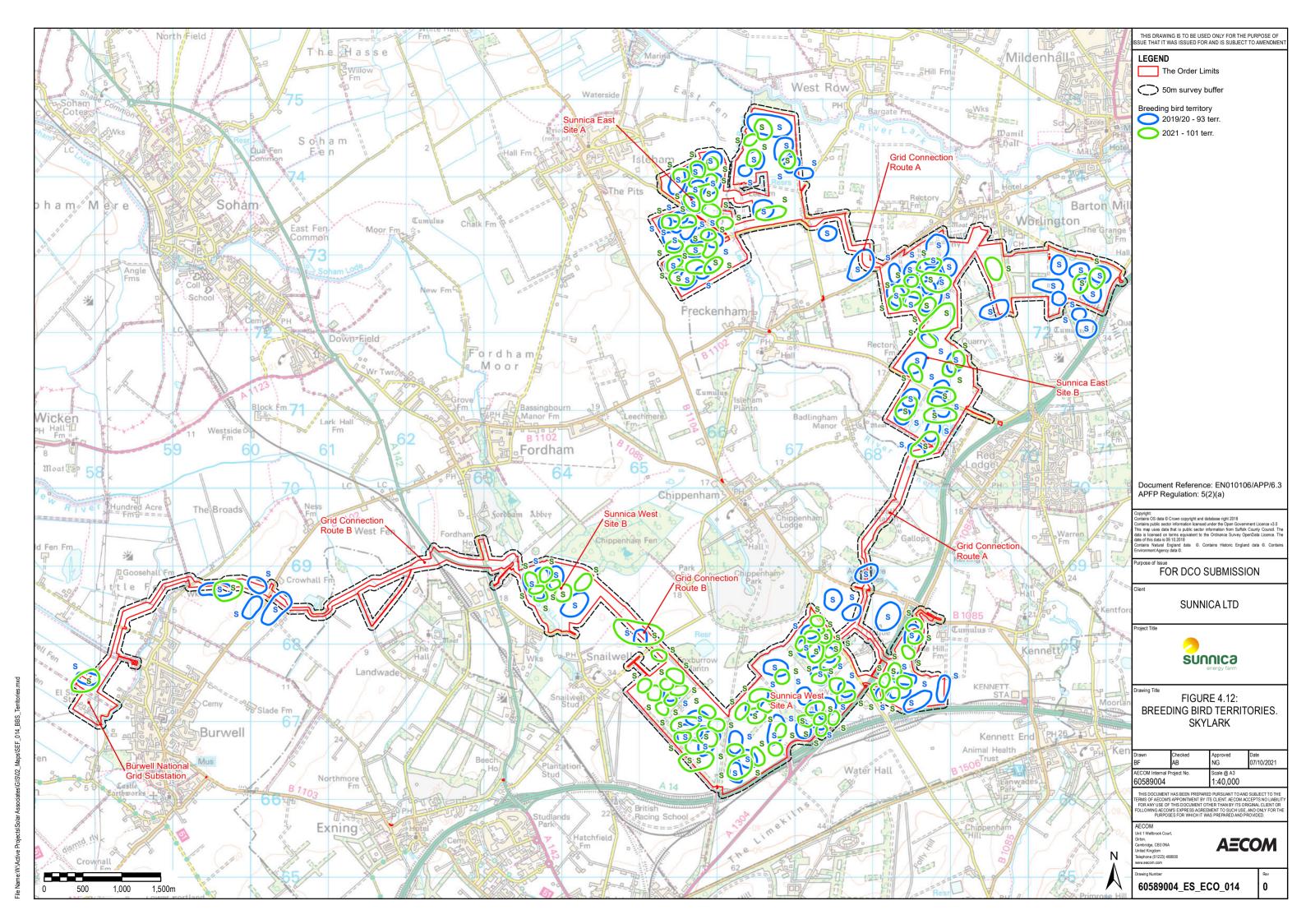


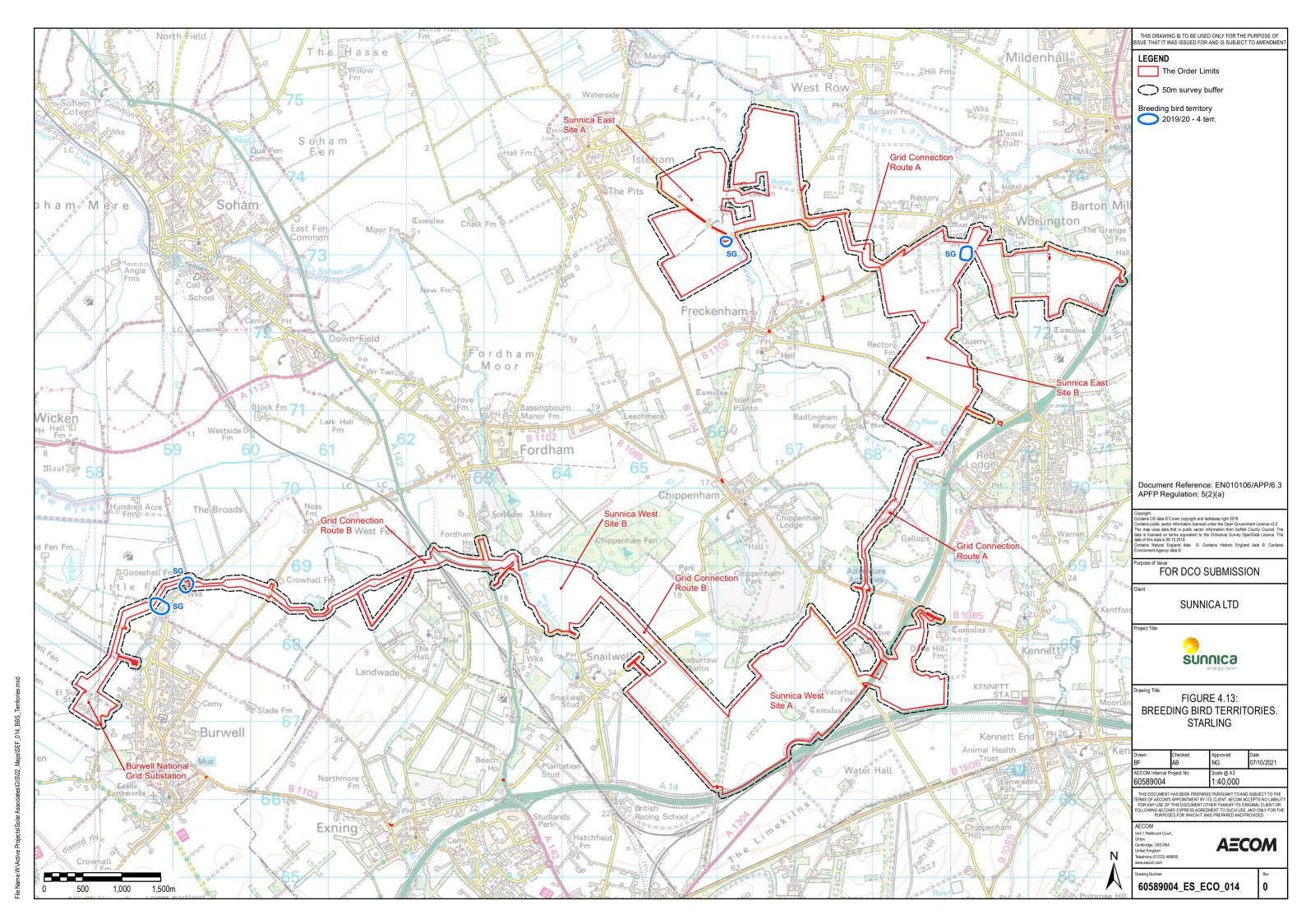


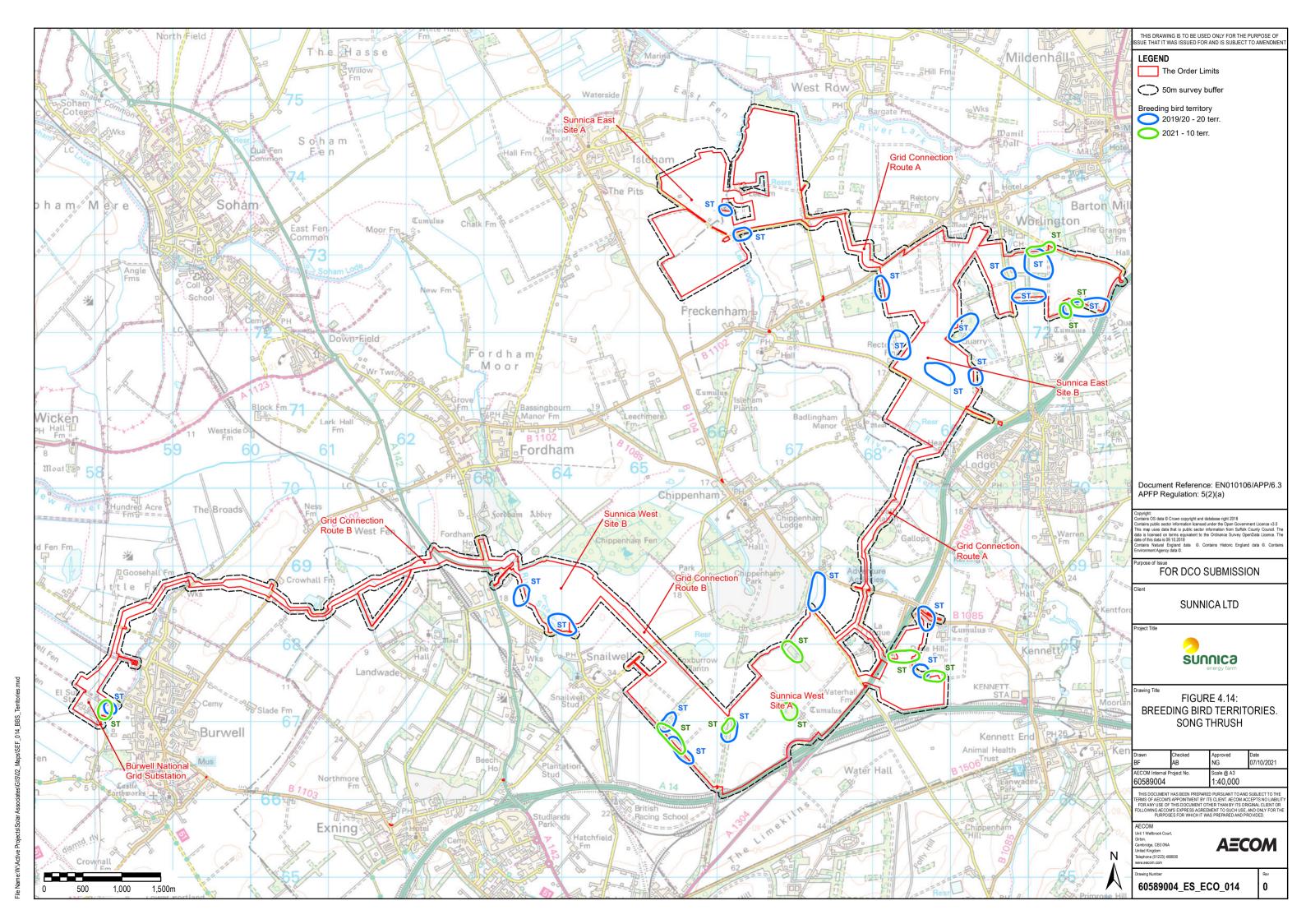


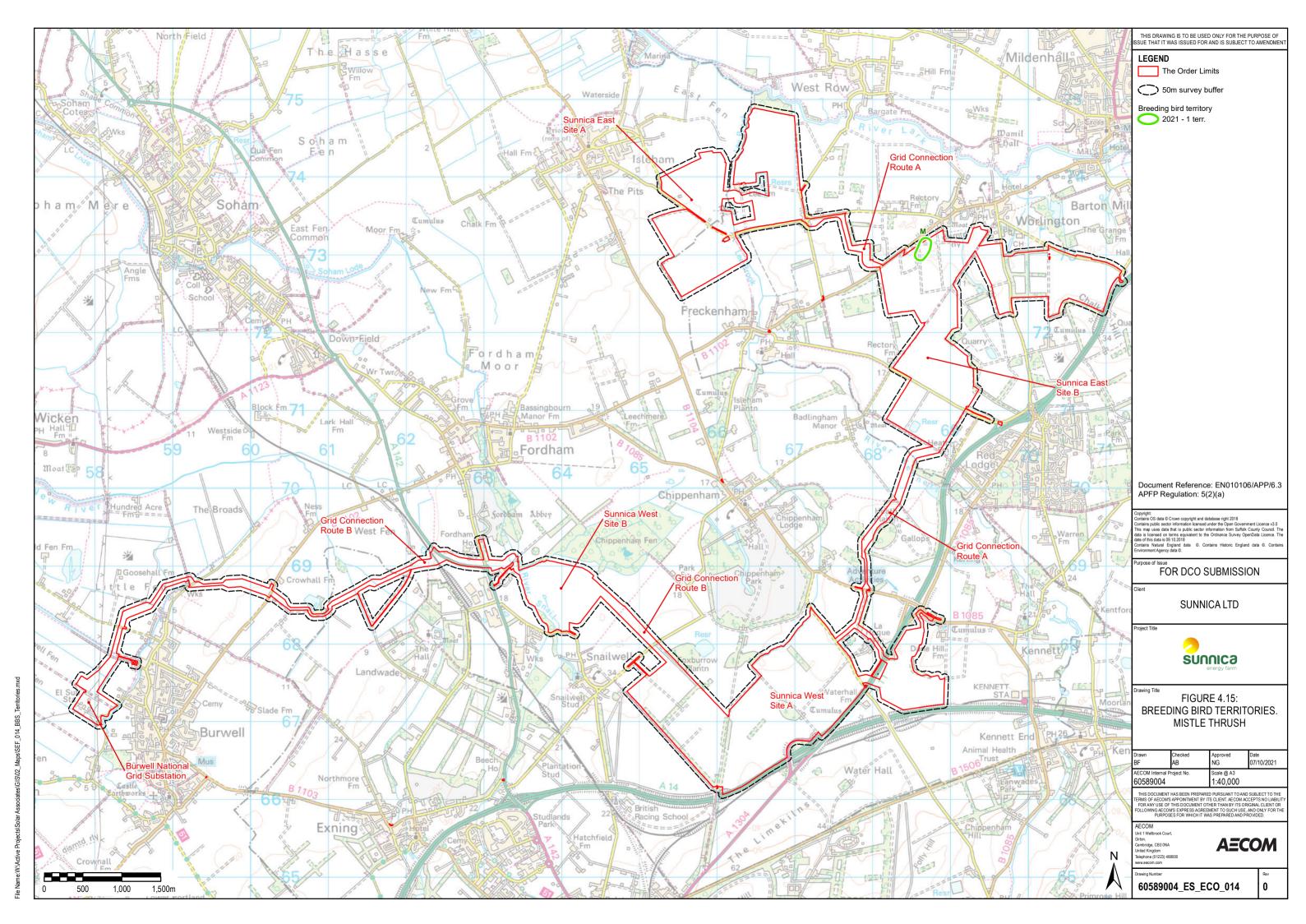


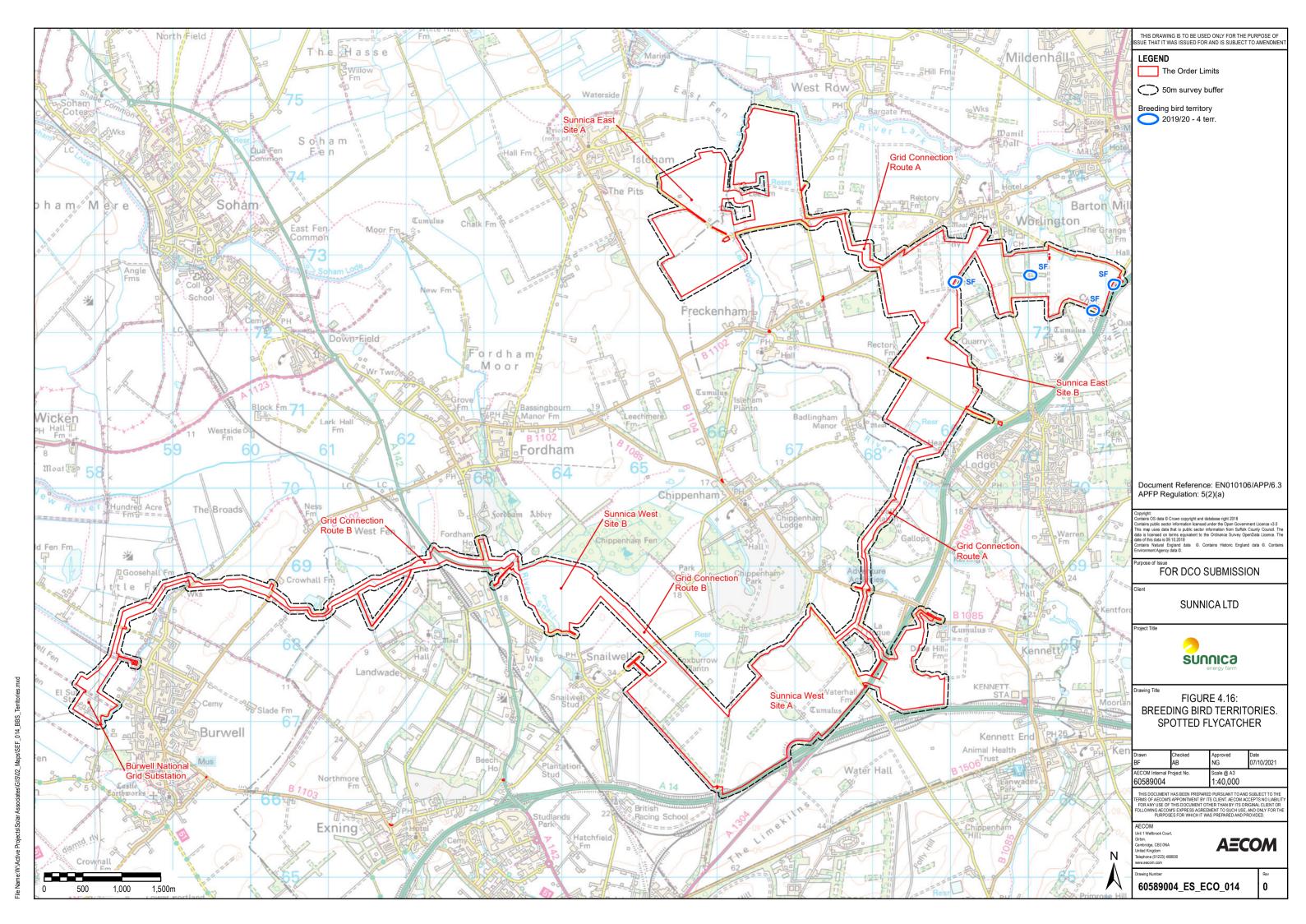


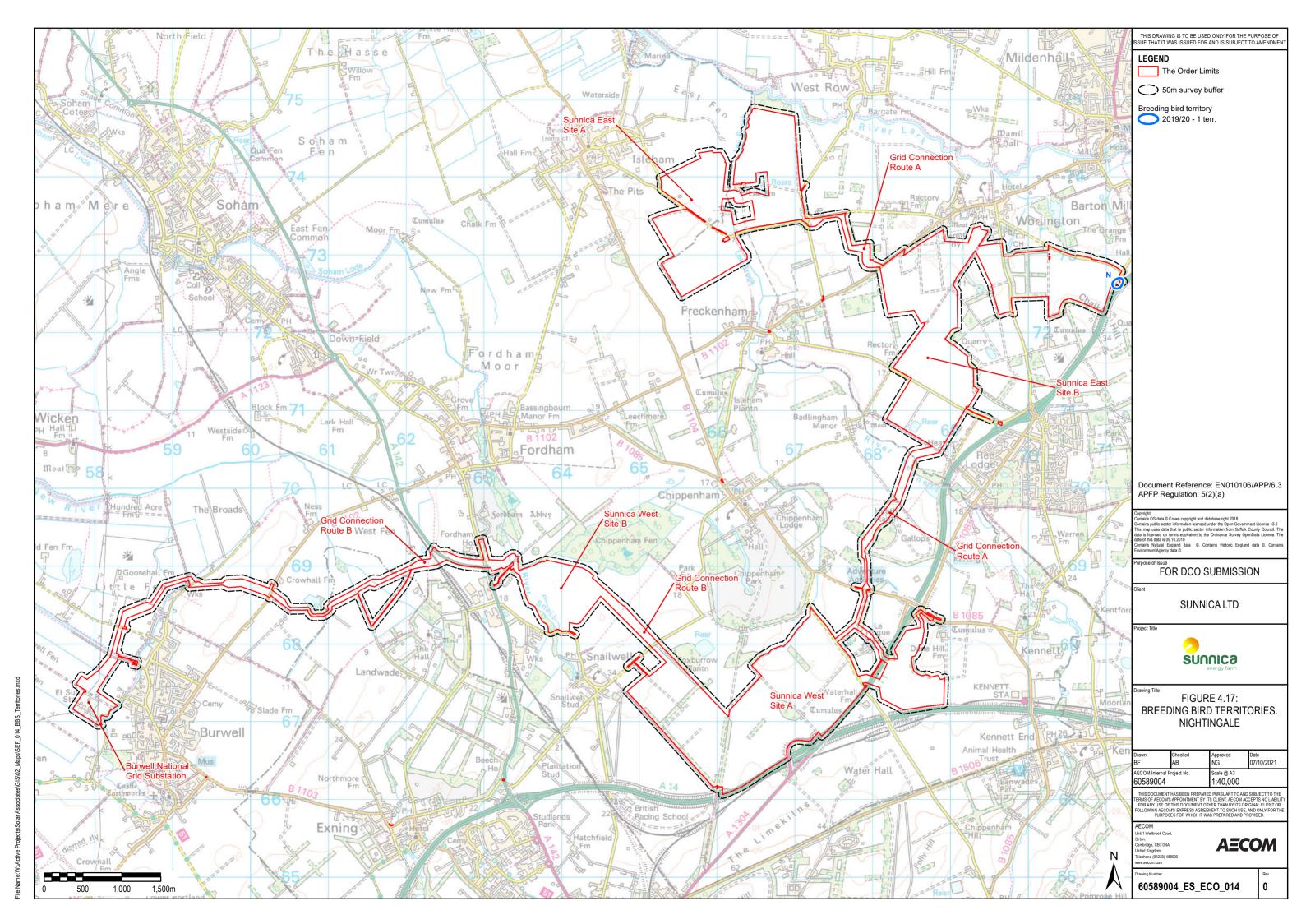


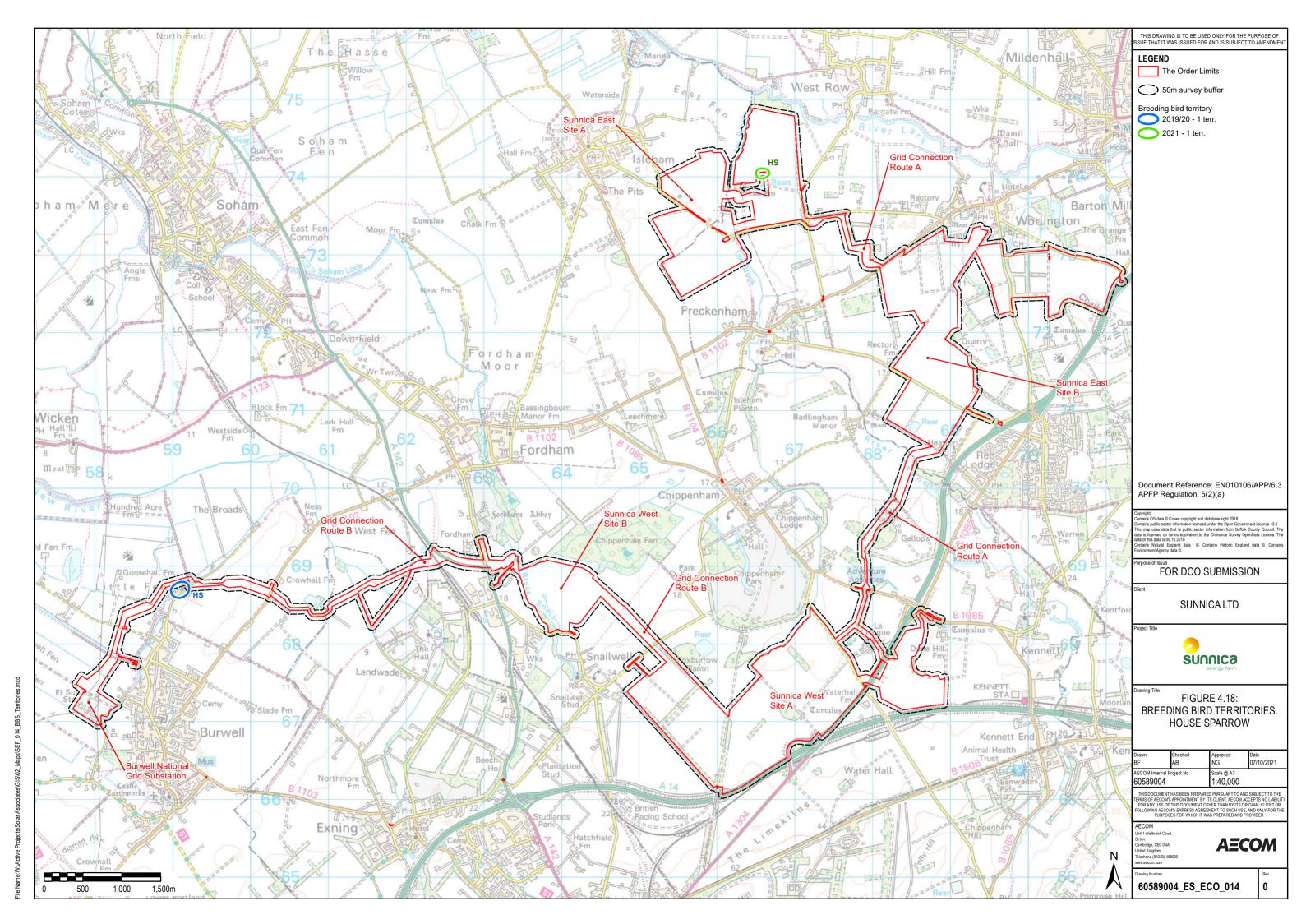


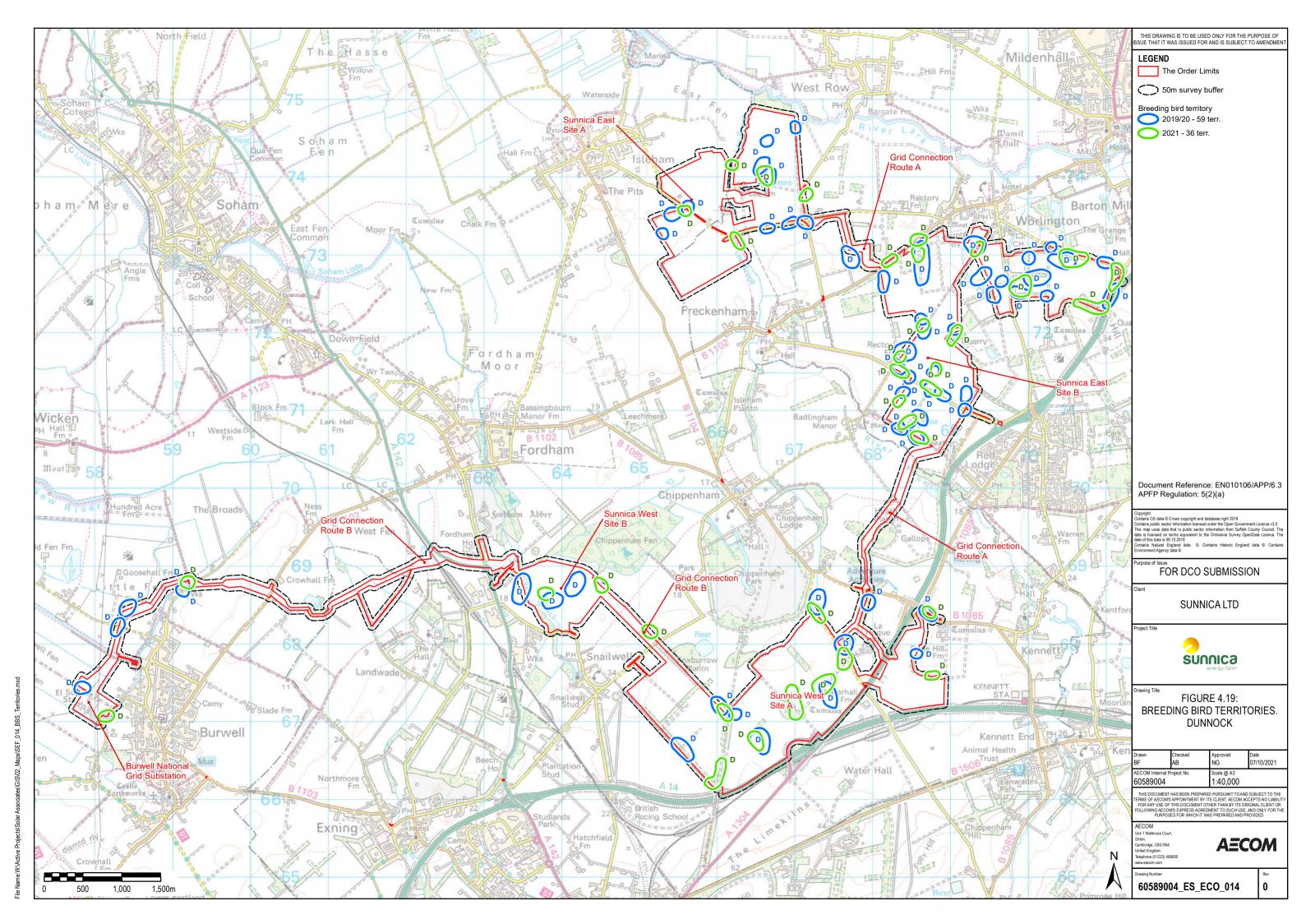


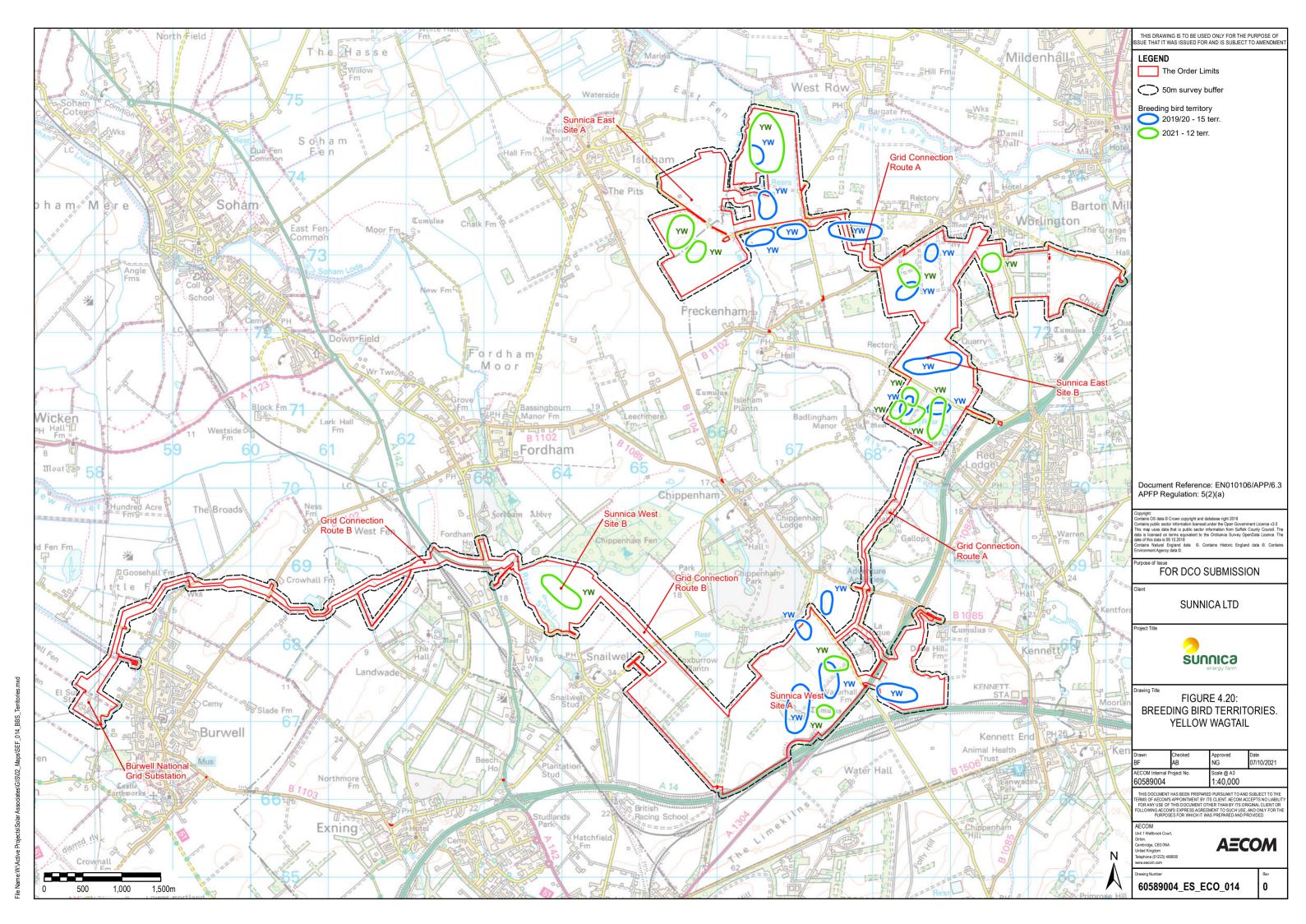


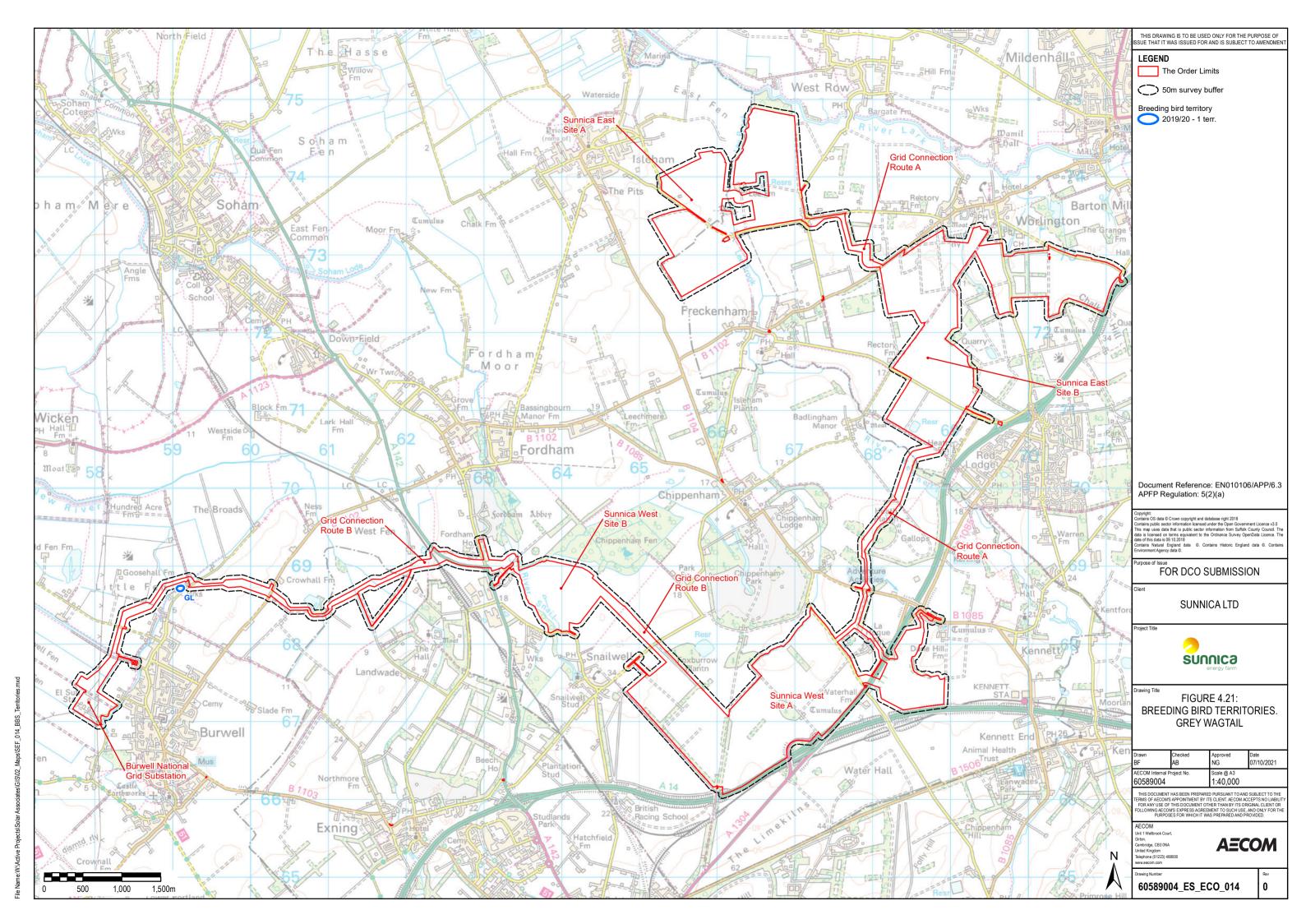


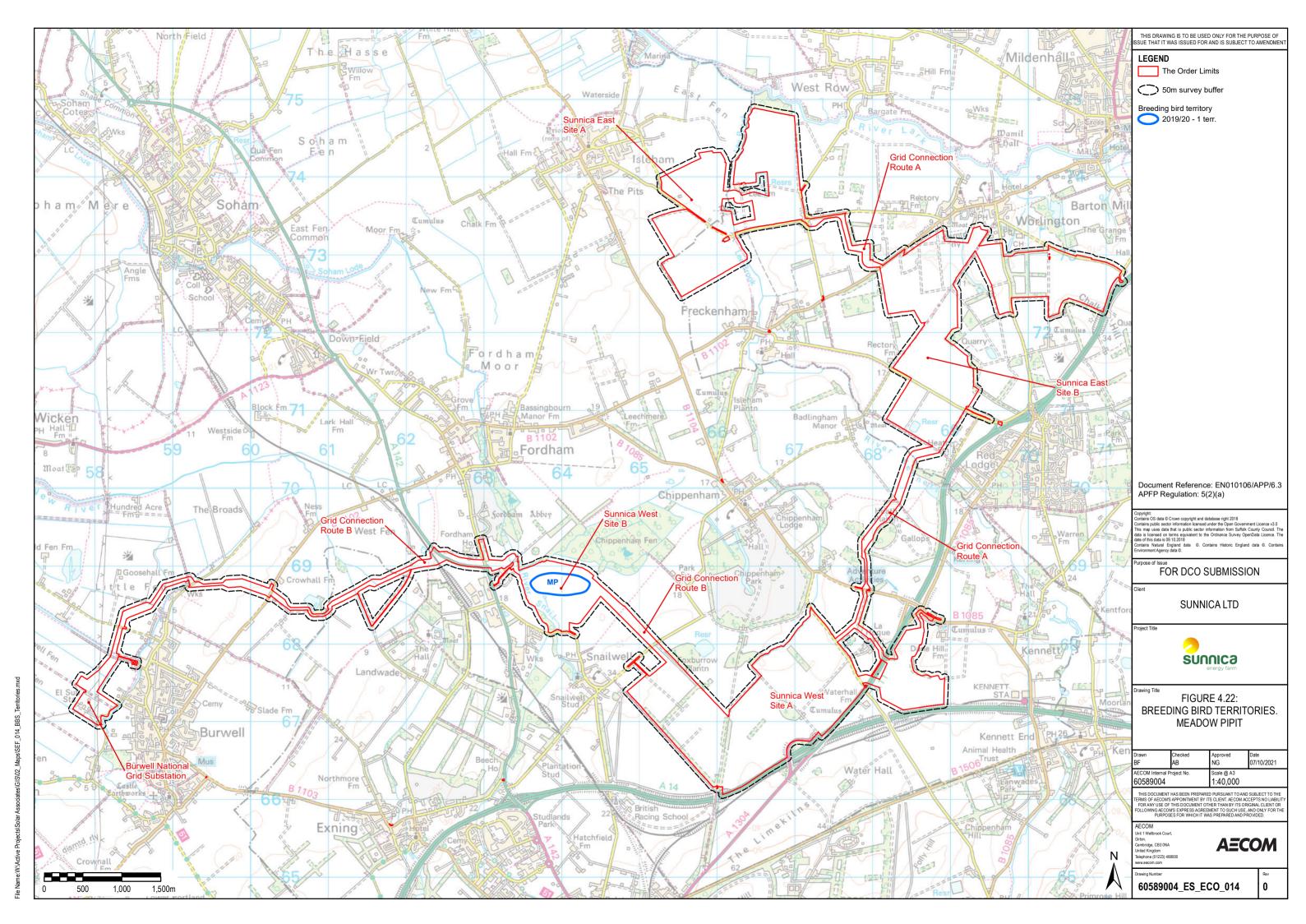


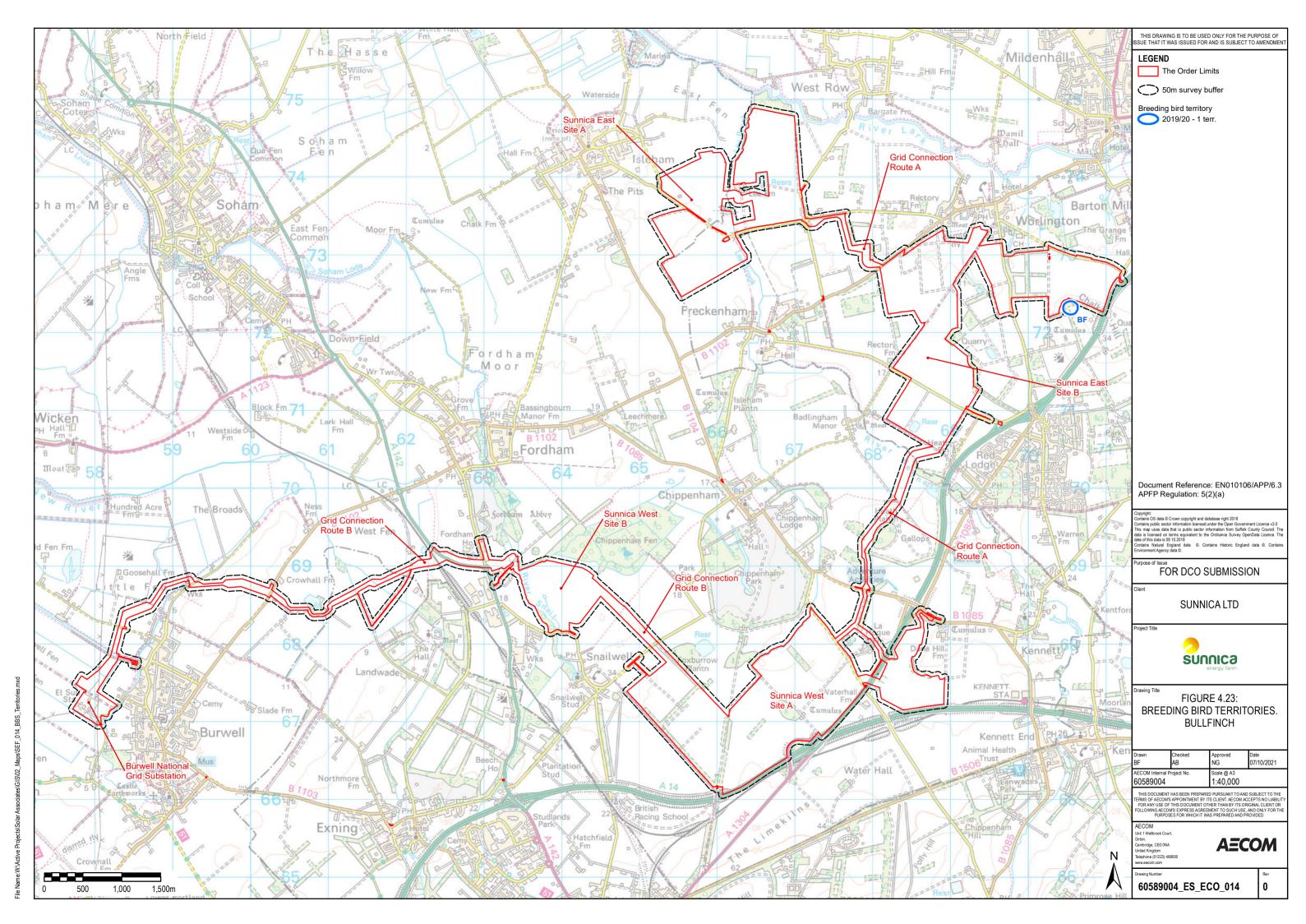


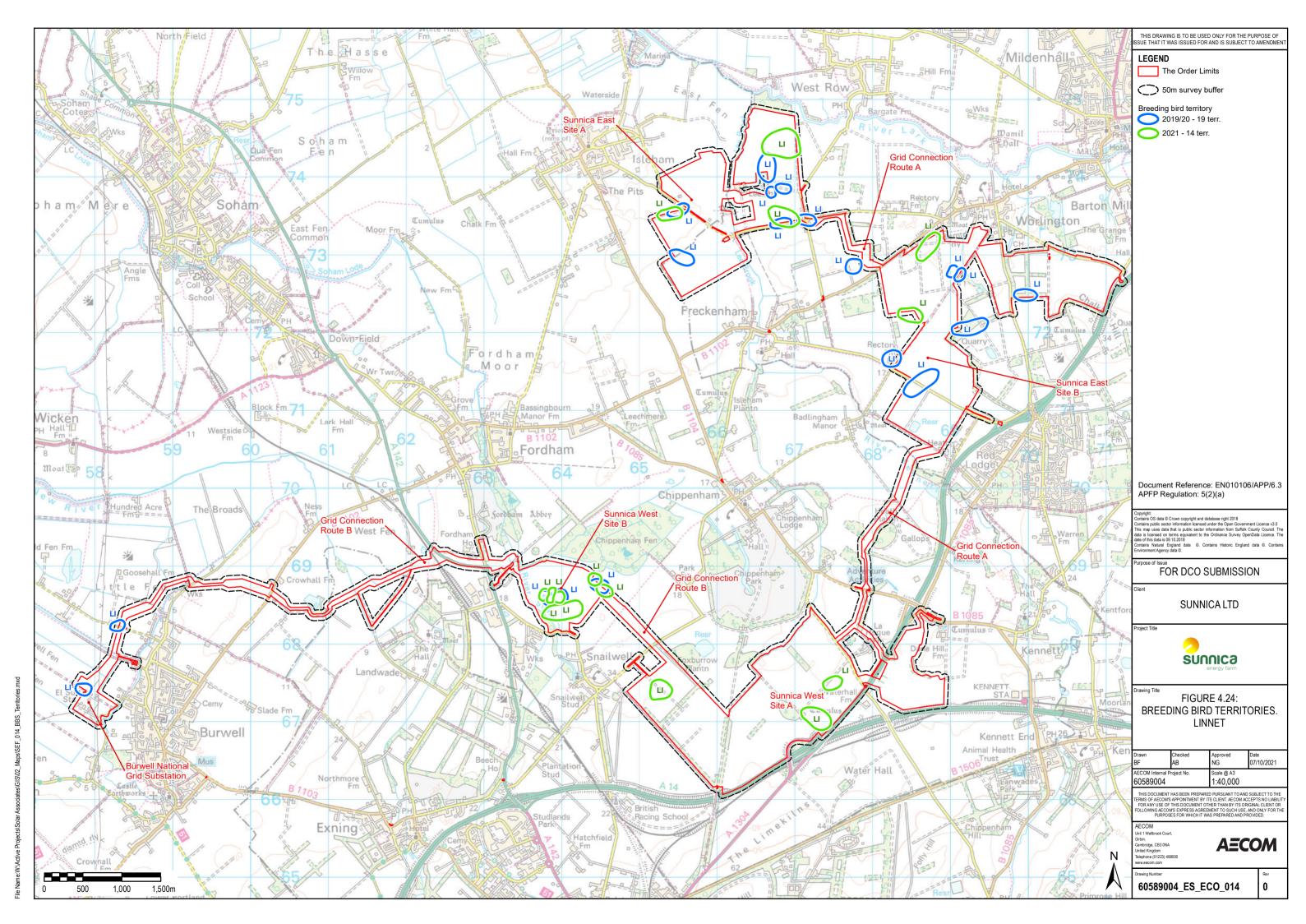


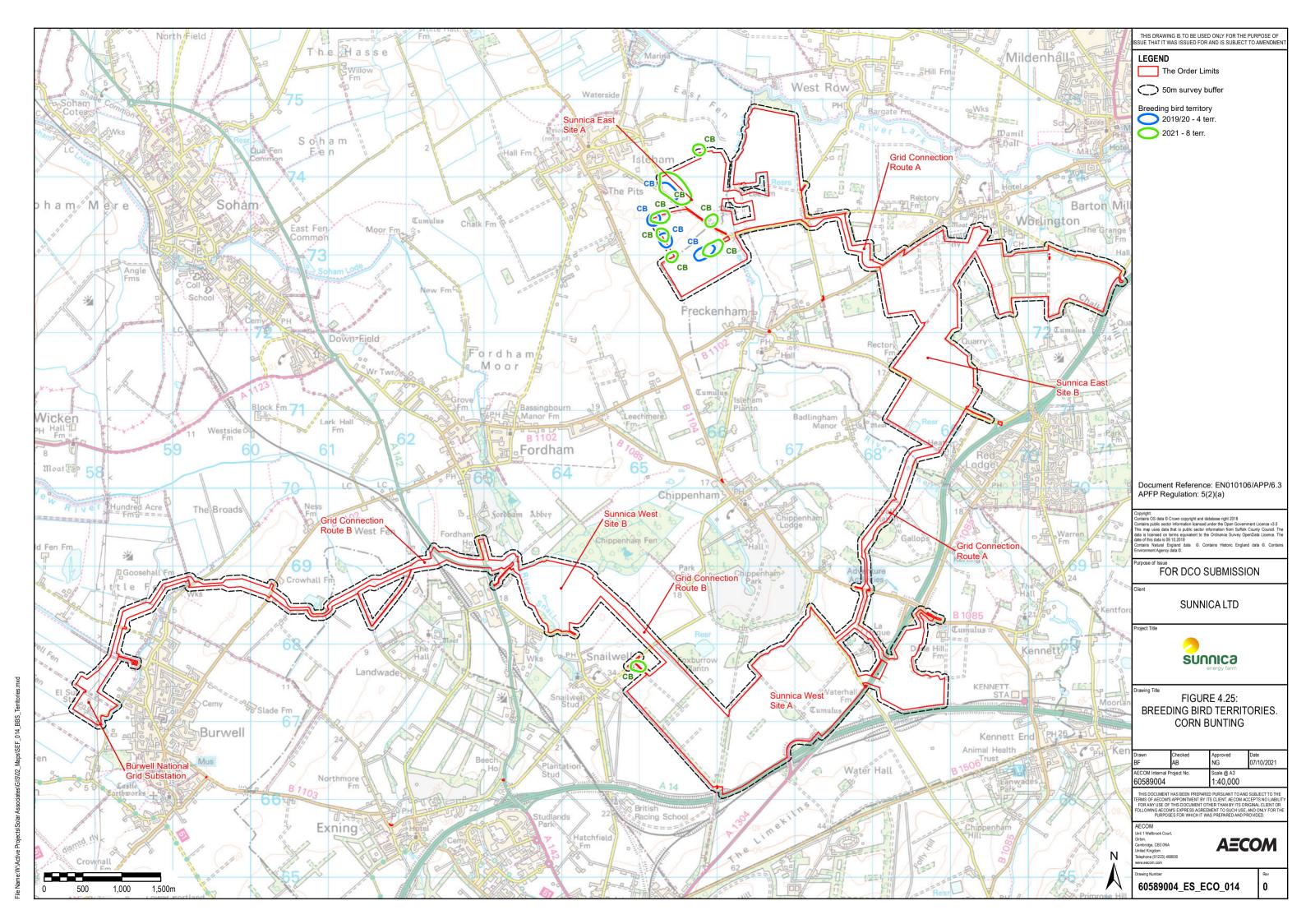


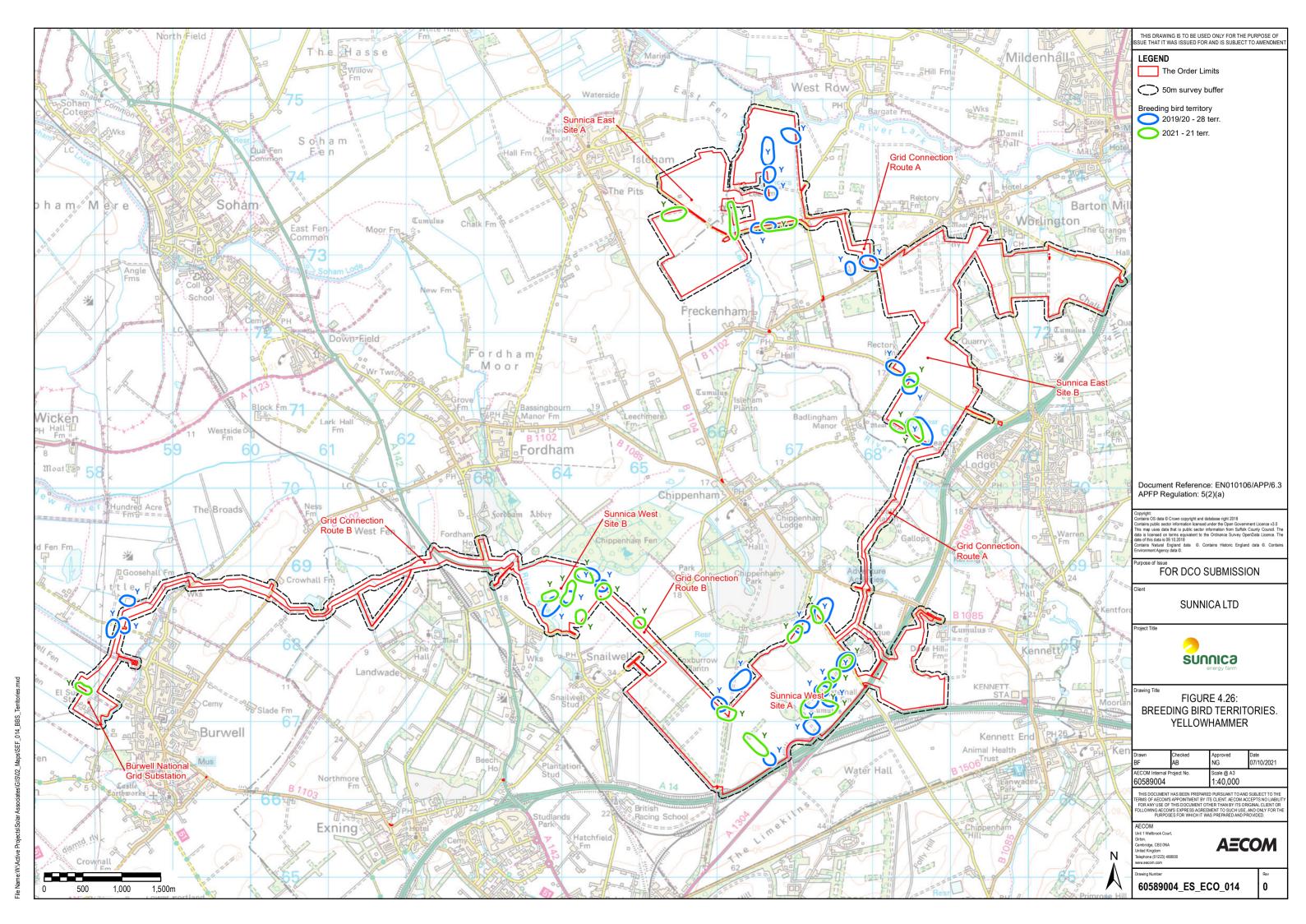


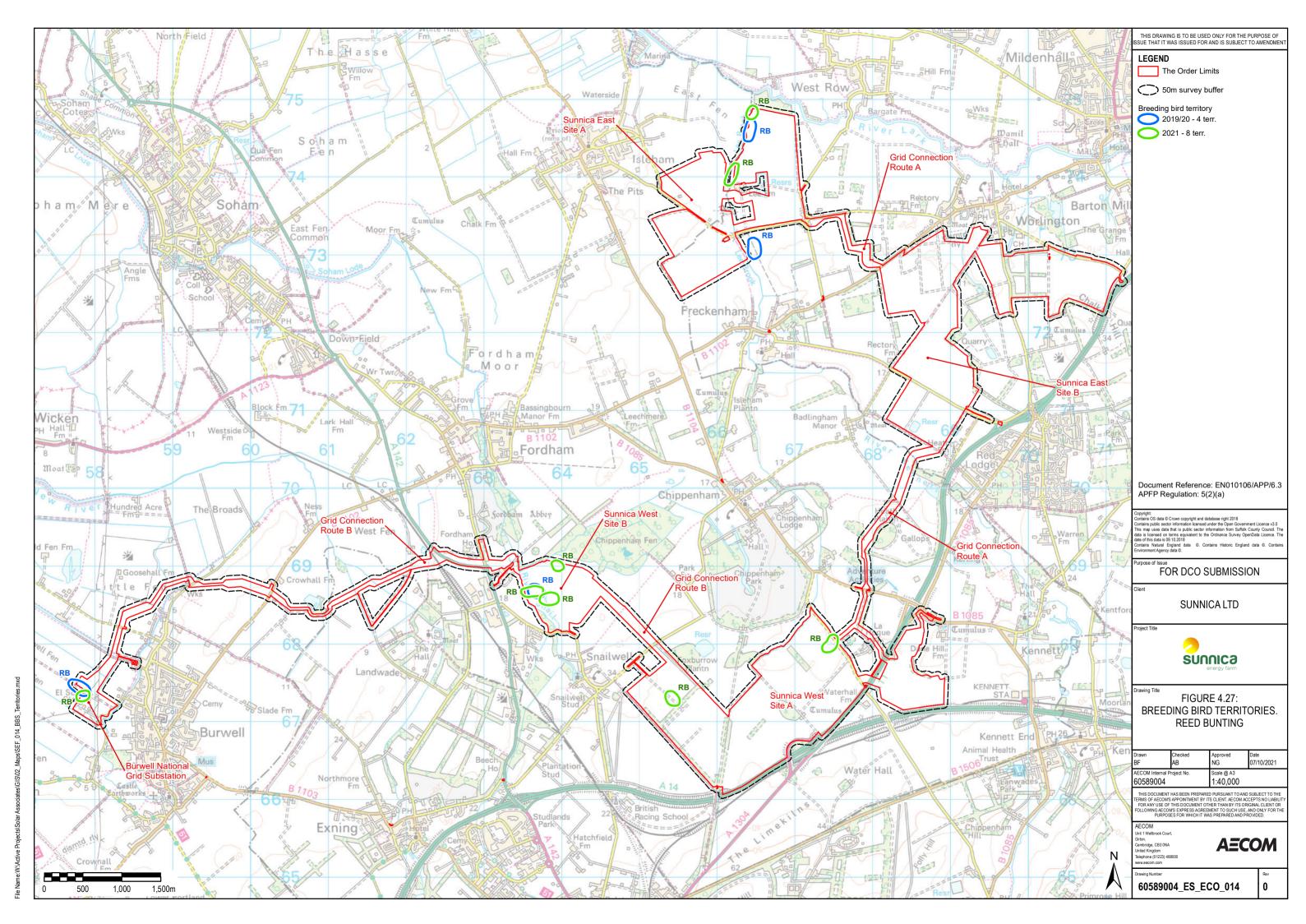














Annex 8B Survey Details

Table 8B-1: Survey dates for each survey of breeding birds

Visit	Survey period	Survey Date (s)
1	2019	24 th to 26 th and 29 th April 2019
	2020	6 th to 7 th April 2020
	2021	6 th to 9 th April 2021
2	2019	1st to 3rd and 6th to 9th May 2019
	2020	23 rd to 24 th April 2020
	2021	19 th to 22 nd April 2021
3	2019	13 th to 17 th May 2019
	2020	5 th to 7 th May 2020
	2021	4 th to 7 th May 2021
4	2019	27 th to 31 st May 2019
	2020	21st to 22nd May 2020
	2021	17 th to 20 th May 2021
5	2019	11 th to 15 th June 2019
	2020	3 rd to 5 th June 2020
	2021	1st, 3rd and 4th June 2021
6	2019	24 th to 28 th June 2019
	2020	19 th June 2020
	2021	14 th to 16 th June 2021



Annex 8C Records of Protected and Notable Species

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

Common name	Scientific name	Designation
Arctic Tern	Sterna paradisaea	BD1, BAmb
Avocet	Recurvirostra avosetta	BD1, WCA1i, BAmb
Barn Owl	Tyto alba	CPASI, SBAP, WCA1i
Barnacle Goose	Branta leucopsis	BD1, BAmb
Barred Warbler	Sylvia nisoria	BD1
Bewick's Swan	Cygnus columbianus	BD1, UKBAP, CPPS, WCA1i, BAmb
Bittern	Botaurus stellaris	BD1, Sect.41, UKBAP, SBAP, CPPS, WCA1i, BAmb
Black Redstart	Phoenicurus ochruros	Bern2, BRed, WCA1i
Black Stork	Ciconia nigra	BD1
Black-headed Gull	Chroicocephalus ridibundus	BAmb
Black-necked Grebe	Podiceps nigricollis	WCA1i, BAmb
Black-tailed Godwit	Limosa limosa	WCA1i, CPPS, BRed
Black-winged Stilt	Himantopus himantopus	BD1, WCA1i
Brent Goose	Branta bernicla	Sect.41, UKBAP, BAmb
Bullfinch	Pyrrhula pyrrhula	Sect.41, UKBAP, SBAP, CPPS, BAmb
Caspian Gull	Larus cachinnans	BAmb
Common Gull	Larus canus	BAmb
Common (Mealy) Redpoll	Acanthis flammea	BAmb
Common Sandpiper	Actitis hypoleucos	BAmb
Common Scoter	Melanitta nigra	Sect.41, UKBAP, WCA1i, Bred
Common Tern	Sterna hirundo	BD1, BAmb
Corn Bunting	Emberiza calandra	Sect.41, UKBAP, SBAP, CPPS, BRed
Crane	Grus grus	BD1, CPASI, BAmb
Cuckoo	Cuculus canorus	Sect.41, UKBAP, BRed
Curlew	Numenius arquata	Sect.41, UKBAP, CPPS, BRed
Dunnock	Prunella modularis	Sect.41, UKBAP, BAmb
Fieldfare	Turdus pilaris	WCA1i, Bred
Firecrest	Regulus ignicapilla	BD1
Gadwall	Anas strepera	BAmb
Garganey	Anas querquedula	WCA1i, BAmb
Golden Plover	Pluvialis apricaria	BD1
Grasshopper Warbler	Locustella naevia	Sect.41, UKBAP, CPPS, BRed
Great Black-backed Gull	Larus marinus	BAmb
Green Sandpiper	Tringa ochropus	WCA1i, BAmb



Common name	Scientific name	Designation
Greenshank	Tringa nebularia	WCA1i, BAmb
Grey Partridge	Perdix perdix	Sect.41, UKBAP, SBAP, CPPS
Grey Plover	Pluvialis squatarola	BAmb
Grey Wagtail	Motacilla cinerea	Bred
Greylag Goose	Anser anser	BAmb
Hen Harrier	Circus cyaneus	BD1, Sect.41, WCA1i
Herring Gull	Larus argentatus	CPPS, BRed
Honey-buzzard	Pernis apivorus	BD1, WCA1i, BAmb
House Martin	Delichon urbicum	BAmb
House Sparrow	Passer domesticus	Sect.41, UKBAP, CPPS, BRed
Kestrel	Falco tinnunculus	BAmb
Kingfisher	Alcedo atthis	BD1, WCA1i
Lapwing	Vanellus vanellus	Sect.41, UKBAP, CPPS, BRed
Lesser Black-backed Gull	Larus fuscus	BAmb
Lesser Redpoll	Acanthis cabaret	Sect.41, UKBAP, CPPS, BRed
Lesser Spotted Woodpecker	Dendrocopos minor	Sect.41, UKBAP, CPPS, BRed
Linnet	Linaria cannabina	Sect.41, UKBAP, SBAP, CPPS, BRed
Little Egret	Egretta garzetta	BD1
Mallard	Anas platyrhynchos	BAmb
Marsh Harrier	Circus aeruginosus	BD1, WCA1i, BAmb
Marsh Tit	Poecile palustris	Sect.41, UKBAP, CPPS, BRed
Meadow Pipit	Anthus pratensis	BAmb
Mediterranean Gull	Larus melanocephalus	BD1, WCA1i, BAmb
Merlin	Falco columbarius	BD1, WCA1i, Bred
Mistle Thrush	Turdus viscivorus	Bred
Mute Swan	Cygnus olor	BAmb
Nightingale	Luscinia megarhynchos	Bred
Nightjar	Caprimulgus europaeus	BD1, Sect.41, UKBAP, SBAP, BAmb
Osprey	Pandion haliaetus	BD1, WCA1i
Oystercatcher	Haematopus ostralegus	BAmb
Parrot Crossbill	Loxia pytyopsittacus	WCA1i, BAmb
Peregrine	Falco peregrinus	BD1, WCA1i
Pintail	Anas acuta	BAmb
Quail	Coturnix coturnix	WCA1i, BAmb, BRCC
Red Kite	Milvus milvus	BD1, WCA1i
Redshank	Tringa totanus	BAmb
Redwing	Turdus iliacus	WCA1i, Bred
Reed Bunting	Emberiza schoeniclus	Sect.41, UKBAP, SBAP, CPPS, BAmb
Ring Ouzel	Turdus torquatus	Sect.41, UKBAP, Bred
Ringed Plover	Charadrius hiaticula	Bred
Ruff	Calidris pugnax	BD1, WCA1i, Bred



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



Annex 8D CONFIDENTIAL

Confidential information regarding the locations of any sensitive breeding species recorded, which are included on Schedule 1 of the Wildlife and Countryside Act (1981, as amended) are included separately as confidential Annex D and will be provided to key stakeholders separately.