



Greater Cambridge Partnership

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# **CAMBOURNE TO CAMBRIDGE**

Environmental Statement

Technical Report 5: Ecology, Appendix 5.8:  
Breeding Bird Survey (Draft)



Greater Cambridge Partnership

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## **Cambourne to Cambridge**

Breeding Bird Survey (Draft)

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# 1 Introduction

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## 1.1 Project Background

- 1.1.1. The Cambourne to Cambridge project (C2C) is a proposed new 13.6km public transport route linking Cambourne and Cambridge. It will include a dedicated busway serving communities in Cambourne and the proposed Bourn Airfield development, as well as in Hardwick, Coton and the West Cambridge campus. A service road, to be used as a path for active travel, particularly by cyclists and pedestrians, will run alongside the busway. A new travel hub will be provided at Scotland Farm.
- 1.1.2. Scheme details are provided in the main report to the Environmental Statement (ES).

## 1.2 Ecological Background

- 1.2.1. The recommendation for a breeding bird survey to inform the Scheme was made as part of a desk study and Protected Species Scoping Survey undertaken in 2017 (Cambridge Ecology, 2017). Records of 64 bird species were returned, and the following habitats were identified:
- Arable land;
  - Improved grassland;
  - Flood plain grazing land;
  - Un-improved grassland;
  - Hedgerows;
  - Waterbodies;
  - Dense and scattered scrub;
  - Ancient woodland;
  - Traditional orchard;
  - Broad-leaved woodland plantation;
  - Tall ruderal;
  - Wet and dry ditches; and
  - Ponds and other waterbodies.
- 1.2.2. Areas of terrestrial and aquatic habitat suitable for breeding birds were identified. Hedgerow, scrub, woodland, orchard, grassland and wetland areas were considered suitable breeding areas for farmland bird specialists such as Yellowhammer *Emberiza citrinella*.
- 1.2.3. Breeding bird surveys to inform the Scheme were subsequently undertaken during 2018 and 2021 (Cambridge Ecology, 2018 and Cambridge Ecology, 2021).
- 1.2.4. The Scheme also overlaps with a development at Bourn Airfield. Breeding bird surveys have been undertaken to inform the Bourn Airfield development during 2015 and 2018 (Thomson Environmental Consultants, 2015 and Thomson Environmental Consultants, 2018).

## 1.3 Brief and Objectives

- 1.3.1. WSP UK Ltd was commissioned by Greater Cambridge Partnership (GCP) to complete a breeding bird survey for the Scheme. This was to ensure sufficient baseline data regarding the breeding bird community was available to inform the design of the Scheme. The aims of the breeding bird survey were to:
- Resolve access constraints encountered during previous breeding bird surveys;
  - Provide an updated list of bird species that make up the breeding bird community associated with the Scheme; and
  - Provide an evaluation (in combination with data from previous surveys) of the value of the Survey Area for breeding birds.
- 1.3.2. The breeding bird survey comprises a desk study and field surveys during the breeding bird season. The results of the survey are contained within this report.
- 1.3.3. These results will be used to inform the impact assessment and proposed mitigation for breeding birds present across the Scheme. Details of the impact assessment and mitigation will be included within the Biodiversity Chapter of the Environmental Statement for the Scheme.

## 1.4 Study and Survey Areas

### Survey Area

- 1.4.1. The area covered by the breeding bird survey (the 'Survey Area') comprised suitable habitat within the Scheme boundary and a 250m buffer from the Scheme boundary. A 250m buffer was applied to allow consideration for any temporary impacts outside the footprint of the road, and to maintain consistency with previous breeding bird surveys undertaken to inform the Scheme (Cambridge Ecology, 2018 and Cambridge Ecology, 2021).
- 1.4.2. The Survey Area is shown in **Annex 5.8.1**.

### Study Area

- 1.4.3. Data from a wider 'Study Area' surrounding the Survey Area was also sought to provide contextual information about how birds use the landscape within which the Scheme is located. This is hereafter referred to as the 'Study Area'. These data were used to inform the survey methodology and provide further baseline information, and comprised:
- Internationally designated sites for birds were considered within 10km of the Scheme.
  - Nationally designated sites for birds were considered within 5km of the Scheme; and
  - Individual records of all bird species and non-statutory designated sites were requested within 2km of the Scheme.

## 2 Relevant Legislation and Policy

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### 2.1 Conservation of Habitats and Species Regulations 2017 (Habitat Regulations)

- 2.1.1. The Habitat Regulations Part 1 Regulation 10 (2) & (3) state that local authorities '*must take such steps in the exercise of their functions as they consider appropriate to contribute to...the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the UK including by means of the upkeep, management and creation of such habitat...*'. The legislation continues to state that economic and recreation requirements must be taken into consideration in considering which measures are appropriate.

### 2.2 Wildlife and Countryside Act 1981 (as amended)

- 2.2.1. Under the Wildlife and Countryside Act 1981 (as amended) all wild birds are protected from killing and injury, and their nests and eggs protected from taking, damage and destruction whilst in use.
- 2.2.2. Additional protection is extended to species listed under Schedule 1 of the Act, meaning it is also an offence to disturb these species at or near the nest, or whilst they have dependent young during breeding the season.

### 2.3 Natural Environment and Rural Communities Act 2006

- 2.3.1. The NERC Act 2006 reinforces the duty upon all public authorities, including planning authorities, to have regard for the conservation of biodiversity when discharging their duties. The Act refines the definition of biodiversity conservation, stating that it includes restoring or enhancing a population or habitat. Section 41 of the NERC Act requires the Secretary of State to list Habitats and Species of Principal Importance (HPIs and SPIs) for the conservation of biodiversity in England. The habitats and species listed in accordance with Section 41 largely replicate those listed on the UK Biodiversity Action Plan (BAP) which occur in England (however there are exceptions).

### 2.4 Other Considerations

#### Birds of Conservation Concern Red and Amber Lists

- 2.4.1. The UK's leading bird conservation organisations reviewed the most up to date information on the status of birds in the UK and elsewhere in their range to produce the third review of the status of birds which occur regularly in the UK. This is presented as 'The status of our bird populations: the fifth Birds of Conservation Concern (BoCC) in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain' (Stanbury et al., 2021). The review comprised a 'red list' of species of high

conservation concern, an ‘amber’ list of species of moderate conservation concern, with other species that do not qualify under red or amber list criteria on the green list.

- 2.4.2. To qualify on the red list species may be listed as globally threatened by IUCN, have suffered a historical decline without substantial recent recovery, or a decline of more than 50% in breeding or non-breeding populations, or a 50% contraction in breeding range over 25 years (or the longer term). Amber list species can be those listed as Species of European Conservation Concern, those which have suffered a historical decline but shown significant recent recovery, have shown a decline of between 25 and 50% in breeding or non-breeding populations, or a contraction in breeding range of between 25 and 50% over 25 years (or the longer term) or be rare or localised breeders in the UK, or be species for which 20% of the breeding or non-breeding population is found in the UK.
- 2.4.3. Red or amber listing does not confer additional protection under legislation or planning policy, however it provides a basis for informing evaluation of a site and for targeting conservation effort and is a widely used resource for interpreting bird populations.

### **Biodiversity Action Plans**

- 2.4.4. The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, is a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contains a list of priority habitats and species of conservation concern in the UK, and outlines biodiversity initiatives designed to enhance their conservation status. The priority species generally correlate with those listed in accordance with Section 41 of the NERC Act (with some exceptions).
- 2.4.5. BAPs in the UK have no statutory status but provide a framework for implementing conservation requirements. Furthermore, species listed as Priority species in the UK BAP which are also listed as Species of Principal Importance (SPI) are afforded a degree of protection under the NERC Act (2006), which states that local authorities have a duty to conserve biodiversity (see above). These comprise the SPI species listed under Section 4.1.5 (NERC Act) above.
- 2.4.6. The national BAP is supplemented by local BAPs which identify habitats and species of particular value or concern at the local level.
- 2.4.7. The Survey Area is covered by the Cambridgeshire and Peterborough Local Biodiversity Action Plan (LBAP). The LBAP includes Local Priority Species (formerly Local Species Action Plans) to help determine where practical conservation efforts should be targeted as part of planning applications. The LBAP also includes species in need of conservation listed as part of the Cambridgeshire and Peterborough Additional Species of Interest (CPASI).



## 3 Methodology

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### 3.1 Desk Study

#### Online data

- 3.1.1. An ecological desk study was completed in 2022 to include data relevant to the Scheme. Records of bird species were requested from Cambridgeshire & Peterborough Environmental Records Centre (CPERC). These records included all species from within a 2km buffer of the Scheme Boundary within the last 10 years. Freely downloadable datasets (available from Multi Agency Geographic Information for the Countryside (MAGIC), Department for Environment, Food and Rural Affairs) were consulted for information regarding designated sites.

#### Previous reports

- 3.1.2. The following breeding bird survey reports have been undertaken to inform the Scheme:
- Cambourne to Cambridge Better Public Transport: Breeding Bird Survey 2018 (Cambridge Ecology, 2018) P0608-R-010a; and
  - Cambourne to Cambridge Better Public Transport: Breeding Bird Survey 2021 (Cambridge Ecology, 2021) P0879-R-005a.
- 3.1.3. The Scheme overlaps with a development at Bourn Airfield. The following breeding bird survey reports have previously been undertaken to inform the Bourn Airfield development:
- Bourn Airfield, Cambridge, Cambridgeshire. Interim Breeding Bird Survey (Thomson Environmental Consultants, 2015) BCOU109 / 008 / 001; and
  - Bourn Airfield. ES Volume 3: Ecology Survey Technical Reports (Thomson Environmental Consultants, 2018) BCOU110/001 10.1.

### 3.2 Breeding Bird Survey

- 3.2.1. To inform an evaluation of the breeding bird community within the Survey Area, six breeding bird survey visits were completed between April and July 2022. The methodology and effort applied for the Scheme is consistent with the Bird Survey Guidelines (Bird Survey & Assessment Steering Group, 2021).
- 3.2.2. Given the potential impacts of the Scheme which involves a permanent loss of habitat, territory (registration) mapping techniques were undertaken (Bibby, et al., 2000). This technique forms the basis of the British Trust for Ornithology (BTO) Common Bird Census (CBC), the outcome of which provides a sufficient level of confidence when describing the breeding bird community present.
- 3.2.3. Transects routes were designed to capture the full range of habitats suitable to support breeding birds within the Survey Area. These habitats included woodland, hedgerows,

arable, scrub and grassland (see **Annex 5.8.2**). The Survey Area was subsequently divided into 9 sectors for reporting purposes (see **Annex 5.8.1**).

- 3.2.4. All survey visits were completed in the early morning, commencing near dawn and during periods of good visibility and suitable weather conditions, i.e. avoiding periods of persistent rain or fog, extreme temperatures or high winds. Each of the survey visits lasted between five to eight hours in duration and was completed over two or three days, walking a different transect each day.
- 3.2.5. During each survey visit the transects within the Survey Area were walked once at a slow pace, with surveyors approaching all suitable habitat within 50m where possible whilst scanning and listening for birds. In accordance with good practice guidance (Bibby, et al., 2000), the start point and direction of the routes walked was varied where possible on each survey visit to minimise bias, as birds may be active at different times of day in different areas.
- 3.2.6. The locations of birds seen and heard were mapped digitally using ArcGIS Field Maps. The species, number of individuals, sex if possible, behaviour and location of each observation was recorded. Behaviours recorded included: calling, alarm calling, singing, carrying food, carrying nest material, disputing, begging and flying over.
- 3.2.7. The breeding activity of each species was assessed in accordance with the following categories:
  - Non-breeder (NB) – Birds observed flying over, considered to still be on migration or a summering non-breeder;
  - Possible breeding (PoB) – Birds observed singing or present in suitable habitat in breeding season;
  - Probable breeding (PrB) – A pair observed in suitable habitat, territorial behaviour observed in the same place on at least two separate occasions, or by many individuals simultaneously on one day, or birds observed visiting a probable nest site, showing courtship or display behaviour in suitable breeding habitat or nest building; and
  - Confirmed breeding (CB) – Nest containing eggs or young seen or heard, adults observed carrying faecal sac or food, feigning injury as a distraction display or entering or leaving a nest site in circumstances indicating an occupied nest, a used nest or eggshells found or recently fledged or downy young recorded (showing evidence of dependency on adults).

### 3.3 Dates of Survey and Personnel

- 3.3.1. The breeding bird survey visits were completed by competent surveyors with at least four years' experience of ecological survey, including wintering and breeding bird surveys.
- 3.3.2. Breeding bird survey visits were completed on the following dates:
  - Visit 1: 28 April and 5 May 2022;
  - Visit 2: 11-12 May 2022;

- Visit 3: 24-25 and 27 May 2022;
- Visit 4: 7-9 June 2022;
- Visit 5: 21-23 June 2022: and
- Visit 6: 5-7 July 2022.

3.3.3. Times and weather conditions are provided in **Annex 5.8.3**.

## 3.4 Territory Mapping

- 3.4.1. Using the results of the breeding bird survey, the territories of bird species of conservation concern were mapped.
- 3.4.2. Conservation status has been assessed using the following criteria:
- Listed on Schedule 1 of the Wildlife and Countryside Act (1981 as amended);
  - Listed on Section 41 (Priority Species) of the Natural Environment and Rural Communities (NERC) Act, 2006;
  - UK Biodiversity Action Plan (UK BAP) (JNCC 2007);
  - Cambridgeshire and Peterborough Local Biodiversity Action Plan (LBAP) priority species (CPBP 2021); and
  - Included in Birds of Conservation Concern (BoCC) Red List.
- 3.4.3. The territory mapping method is based on the observation 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.
- 3.4.4. The expected outcome of the breeding bird survey is that mapped registrations for a species fall into clusters, approximately coinciding with territories. Where a species has closely packed territories (e.g. Reed Warbler), the mapping of simultaneously singing birds becomes essential. Territory boundaries are taken to be between such birds.
- 3.4.5. Behavioural observations made during the surveys that were indicative of breeding comprised:
- Territorial/alarm;
  - Song;
  - Aggressive encounter;
  - Occupied nest / nest box / sitting on nest;
  - Carrying nest material; and
  - Carrying food.
- 3.4.6. The data analyses followed procedures detailed in Bibby et al. (2000). From species master maps, the number of territories for each species was calculated. As six survey visits were undertaken when any given breeding species was expected to be present, two registrations of a bird, in the same area, was required as the minimum number necessary to assume a breeding territory.

- 3.4.7. For late flying migrants, e.g. Spotted Flycatcher *Muscicapa striata*, for which fewer potential contacts are possible, only one registration was required, this approach was also applied to inconspicuous species, e.g. Grey Partridge *Perdix perdix*.
- 3.4.8. A number of species are not territorial, e.g. Linnet *Carduelis cannabina*, where data represent aggregations or loose colonies. Therefore, a territory represents a colony of a certain number of pairs of breeding birds. Species that do not form territories or nest colonially e.g. certain wildfowl, the term territory is replaced by breeding pair and/or brood.

## 3.5 Evaluation Methods

- 3.5.1. The evaluation of the importance of the breeding bird community has been based on CIEEM (2018) guidance. This guidance recommends that valuation of the ecological receptor importance is made with reference to a geographical framework given the different communities of birds observed within the Survey Area, based on the data collected during survey.
- 3.5.2. Values were categorised in the following geographical context, in accordance with the guidelines:
  - International – internationally important populations of breeding birds, such as those associated with the designation and protection of SPAs, SACs and Ramsars or >1% of international population.
  - National – bird populations that are important for conservation within the United Kingdom as a whole, such as those associated with the designation and protection of SSSI or >1% of UK population.
  - County – bird populations that are important within a single county i.e. >1% of county population, assessed by consulting the Cambridgeshire Bird Atlas (Cambridgeshire Bird Club, 2013). Alternatively, if the bird population qualifies as a County Wildlife Site (CWS) according to the CWS selection criteria (Cambridgeshire and Peterborough CWS Panel, 2020).
  - Local – common and widespread bird populations that are important within a local area. Such areas may stand out within a 10km grid square as being of importance to bird populations, but that are of less importance and more typical/ or replaceable than those in the above categories. Species of conservation interest regularly occurring in locally sustainable populations.

## 3.6 Notes and Limitations

- 3.6.1. The surveys started in late April, while the guidelines recommend starting surveying in late March. However, this is not considered a significant limitation as the Survey Area lacked habitat for early nesting species, such as Lesser Spotted Woodpecker *Dendrocopos minor*, Raven *Corvus corax* and Common Crossbill *Loxia curvirostra*, and therefore the surveys are considered to have detected all appropriate species.

- 3.6.2. Whilst every effort has been made to detect all species present some bird species are more difficult to detect due to their ecology (crepuscular species) or behaviour (secretive nature) and therefore may have gone undetected by this survey. As a constraint applicable to all bird surveys this is not considered to place significant constraints upon interpretation of the results for this Survey Area.
- 3.6.3. Coton Orchard, which includes traditional orchard, grassland and scrub habitats, could not be accessed during the surveys. However, the majority of the habitats in the orchard will be retained in the Scheme (Reference Biodiversity chapter of ES).
- 3.6.4. Several other areas could not be accessed during the surveys. This is not expected to place a significant limitation on the interpretation of survey results as this represented only a small proportion of the total Survey Area. Attempts were also made to survey areas of inaccessible land from public rights of way.

## 4 Results

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### 4.1 Desk Study

#### Online data

#### Cambridgeshire and Peterborough Local Biodiversity Action Plan (LBAP)

4.1.1. The LBAP listed the following 26 bird species as local priority species:

- Bewick's Swan *Cygnus columbianus*;
- Bittern *Botaurus stellaris*;
- Black-tailed Godwit *Limosa limosa*;
- Bullfinch *Pyrrhula pyrrhula*;
- Corn Bunting *Emberiza calandra*;
- Corncrake *Crex crex*;
- Curlew *Numenius arquata*;
- Grasshopper Warbler *Locustella naevia*;
- Grey Partridge *Perdix perdix*;
- Hawfinch *Coccothraustes coccothraustes*;
- Herring Gull *Larus argentatus*;
- House Sparrow *Passer domesticus*;
- Lapwing *Vanellus vanellus*;
- Lesser Redpoll *Acanthis cabaret*;
- Lesser Spotted Woodpecker *Dendrocopos minor*;
- Linnet *Carduelis cannabina*;
- Marsh Tit *Poecile palustris*;
- Reed Bunting *Emberiza schoeniclus*;
- Skylark *Alauda arvensis*;
- Song Thrush *Turdus philomelos*;
- Spotted Flycatcher *Muscicapa striata*;
- Stone-curlew *Burhinus oediconemus*;
- Tree Sparrow *Passer montanus*;
- Turtle Dove *Streptopelia turtur*;
- Yellow Wagtail *Motacilla flava*; and
- Yellowhammer *Emberiza citronella*.

4.1.2. The LBAP also listed Barn Owl *Tyto alba*, Swift *Apus apus* and Crane *Grus grus* as additional species of interest.

4.1.3. The LBAP contained Species Action Plans for House Sparrow and Turtle Dove.

#### Cambridgeshire & Peterborough Environmental Records Centre (CPERC)

4.1.4. No internationally designated sites for birds were identified within 10km of the Scheme, and no nationally designated sites for birds were identified within 5km of the Scheme.



- 4.1.5. CPERC returned 540 records for birds within the 2km Study Area. Records of 53 bird species were returned, including the following:
- 18 species listed on Annex 1 of the EU Birds Directive (Directive 79/409/EEC);
  - 21 species listed on Schedule 1 of the Wildlife and Countryside Act (1981 as amended);
  - 24 species listed on Section 41 (Priority Species) of the Natural Environment and Rural Communities (NERC) Act, 2006;
  - 23 UK Biodiversity Action Plan (UK BAP) (JNCC 2007) and Local Biodiversity Action Plan (LBAP) priority species;
  - 30 species included in the Birds of Conservation Concern (BoCC) Red List; and
  - 37 species included in the Birds of Conservation Concern (BoCC) Amber List.
- 4.1.6. Full details of the Desk Study Results are presented in **Annex 5.8.4**.

### Previous reports

#### **Cambourne to Cambridge Better Public Transport: Breeding Bird Survey 2018 (Cambridge Ecology, 2018) P0608-R-010a**

- 4.1.7. The survey comprised the sections between Bourn Airfield and Grange Road, Cambridge.
- 4.1.8. 68 bird species were recorded including 50 that were considered to be confirmed or probable breeding species.
- 4.1.9. Of these breeding species, 13 were considered to be of particular conservation importance due to being UK BAP Priority Species and Species of Principal Importance (NERC Act 2006) and/or on the red list of birds of conservation concern. These species comprised Grey Partridge, Marsh Tit, Skylark, Starling *Sturnus vulgaris*, Song Thrush, Mistle Thrush *Turdus viscivorus*, Spotted Flycatcher, House Sparrow, Dunnock *Prunella modularis*, Bullfinch, Linnet, Yellowhammer and Reed Bunting.
- 4.1.10. A further four breeding species were recorded that are on the amber list of birds of conservation concern: Stock Dove *Columba oenas*, Tawny Owl *Strix aluco*, Kestrel *Falco tinnunculus* and House Martin *Delichon urbicum*.

#### **Cambourne to Cambridge Better Public Transport: Breeding Bird Survey 2021 (Cambridge Ecology, 2021) P0879-R-005a.**

- 4.1.11. The survey comprised the sections between Bourn Airfield and Grange Road, Cambridge.
- 4.1.12. 51 bird species were recorded including 42 that were considered to be confirmed or probable breeding species.
- 4.1.13. Of these breeding species, ten were considered to be of particular conservation importance due to being UK BAP Priority Species and Species of Principal Importance (NERC Act 2006) and/or on the red list of birds of conservation concern. These species comprised Skylark, Starling, Song Thrush, Mistle Thrush, House Sparrow, Dunnock, Bullfinch, Linnet, Yellowhammer and Reed Bunting.

- 4.1.14. A further four breeding species were recorded that are on the amber list of birds of conservation concern: Mallard *Anas platyrhynchos*, Stock Dove, Kestrel and Willow Warbler *Phylloscopus trochilus*.

**Bourn Airfield, Cambridge, Cambridgeshire. Interim Breeding Bird Survey (Thomson Environmental Consultants, 2015) BCOU109 / 008 / 001**

- 4.1.15. 36 bird species were recorded during a single visit survey of the Bourn Airfield development site, including 13 that were considered to be confirmed or probable breeding species.
- 4.1.16. Of these breeding species, three were considered to be of particular conservation importance due to being UK BAP Priority Species and Species of Principal Importance (NERC Act 2006) and/or on the red list of birds of conservation concern. These species comprised Linnet, Song Thrush and Yellowhammer.

**Bourn Airfield. ES Volume 3: Ecology Survey Technical Reports (Thomson Environmental Consultants, 2018) BCOU110/001 10.1.**

- 4.1.17. 59 bird species were recorded during the survey of the Bourn Airfield development site, including 38 that were considered to be confirmed or probable breeding species.
- 4.1.18. Of these breeding species, ten were considered to be of particular conservation importance due to being UK BAP Priority Species and Species of Principal Importance (NERC Act 2006) and/or on the red list of birds of conservation concern. These species comprised Corn Bunting, Cuckoo *Cuculus canorus*, Dunnock, Linnet, Mistle Thrush, Reed Bunting, Skylark, Starling, Song Thrush, and Yellowhammer.
- 4.1.19. A further five breeding species were recorded that are on the amber list of birds of conservation concern: Coal Tit *Periparus ater*, Green Woodpecker *Picus viridis*, Mallard, Stock Dove and Whitethroat *Sylvia communis*.

## 4.2 Breeding Bird Survey

- 4.2.1. A total of 62 species of bird were recorded within the Survey Area during the breeding bird survey. This included 20 species which are legally protected or species of conservation concern (as defined in Section 3.4.2 of this report). In addition, there were a further 11 species on the BoCC Amber List.
- 4.2.2. 21 species were confirmed as breeding within the Survey Area, including four species of conservation concern: House Martin, House Sparrow, Song Thrush and Starling. A further three species were listed on the BoCC Amber List: Kestrel, Moorhen *Gallinula chloropus*, and Wren *Troglodytes troglodytes*.
- 4.2.3. 19 species were considered probable breeders within the Survey Area, including five species of conservation concern: Dunnock, Greenfinch *Chloris chloris*, Mistle Thrush, Skylark and Yellowhammer. A further four species were listed on the BoCC Amber List: Mallard, Stock Dove, Willow Warbler, Woodpigeon *Columba palumbus*.

- 4.2.4. Ten species were considered possible breeders within the Survey Area, including six species of conservation concern: Bullfinch, Cuckoo, Grasshopper Warbler, Linnet, Marsh Tit and Reed Bunting. One further species was listed on the BoCC Amber List: Rook *Corvus frugilegus*.
- 4.2.5. The remaining 12 species were considered non-breeders within the Survey Area.
- 4.2.6. Specific Barn Owl surveys were undertaken in relation to the Scheme and results including suitable habitats, nesting and roosting locations are presented within a Barn Owl Technical Report 5.3. As a result, barn owl breeding status is not referenced in this report.
- 4.2.7. The breeding status of all bird species identified within the Survey Area have been assessed and are recorded in **Annex 5.8.6**.

## Territory Mapping

- 4.2.8. Notable species of conservation concern were subject to territory (registration) mapping (Bibby, et al., 2000). A summary of these species is included in **Table 4-1** below and territory maps are presented in **Annex 5.8.5**.

**Table 4-1 - Territories of Notable Species of Conservation Concern by Sector<sup>1</sup>  
(Followed by number of colonies in brackets for colonial species).**

Species	Conservation Status	S1	S2	S3	S4	S5	S6	S7	S8	S9	Total
Dunnock	NERC SPI	5	4	2.5	0	6.5	3.5	0	6	1.5	<b>29</b>
Greenfinch	BoCC Red	0	0	2	0	5.5	1.5	0	3	0	<b>12</b>
House Martin	BoCC Red	0	0	0	0	5 (1)	0	0	0	0	<b>5 (1)</b>
House Sparrow	NERC SPI BoCC Red LBAP	17 (3)	6 (1)	0	3 (0.5)	6 (1.5)	0	0	0	0	<b>32 (6)</b>
Mistle Thrush	BoCC Red	0	0	0	0	1	0	0	0	2	<b>3</b>
Skylark	NERC SPI BoCC Red LBAP	0	13	1.5	1.5	1	0	0	7	0	<b>24</b>
Song Thrush	NERC SPI LBAP	3	0	3	0.5	8	2.5	0	3	1	<b>21</b>
Starling	NERC SPI BoCC Red	12 (1)	10 (1)	0	10 (0.5)	15 (1)	5 (0.5)	0	0	0	<b>52 (4)</b>
Yellowhammer	NERC SPI BoCC Red	0	0	0.5	1	1.5	0	0	1	0	<b>4</b>

<sup>1</sup> Some sectors have 0.5 of a territory when a particular territory spans two neighbouring sectors

Species	Conservation Status	S1	S2	S3	S4	S5	S6	S7	S8	S9	Total
	LBAP										

4.2.9. The conservation status included within **Table 4-1** above are expanded on below:

- BoCC Red – Birds of Conservation Concern Red
- NERC SPI – Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England Section 41; and
- LBAP – Cambridgeshire and Peterborough Local Biodiversity Action Plan priority species

### Summary of Territory Mapping

#### Dunnock

In total, 110 records of Dunnock were identified during the breeding bird survey. Using these records, 29 territories were mapped (**Annex 5.8.5.1**) within Sectors 1-3, 5-6 and 8-9. Of these territories, 13 are located either wholly or partially within the boundaries of the Scheme. These territories comprised of hedgerow, scrub, woodland and suburban habitats.

#### Greenfinch

In total, 104 records of Greenfinch were identified during the breeding bird survey. Using these records, 12 territories were mapped (**Annex 5.8.5.2**) within Sectors 3, 5-6 and 8. Of these territories, six are located either wholly or partially within the boundaries of the Scheme. These territories comprised of hedgerow, woodland and suburban habitats.

#### House Martin

In total, 32 records of House Martin were identified during the breeding bird survey. Using these records, one colony was mapped (**Annex 5.8.5.3**) within Sector 5 consisting of an estimated five breeding pairs. The foraging area of the colony is partially located within the boundaries of the Scheme. The colony was located within the village of Coton and the territory of the colony comprised of suburban habitats and adjacent fields.

#### House Sparrow

In total, 177 records of House Sparrow were identified during the breeding bird survey. Using these records, six colonies were mapped (**Annex 5.8.5.4**) within Sectors 1-2 and 4-5, consisting of an estimated total of 32 breeding pairs. Of these colonies, two are partially located within the boundaries of the Scheme. These territories consist of suburban habitats and adjacent scrub.

#### Mistle Thrush

In total, 22 records of Mistle Thrush were identified during the breeding bird survey. Using these records, three territories were mapped (**Annex 5.8.5.5**) within Sectors 5 and 9. Of these territories, two are partially located within the boundaries of the Scheme. These territories comprised of hedgerow and suburban habitats.

### Skylark

In total, 102 records of Skylark were identified during the breeding bird survey. Using these records, 24 territories were mapped (**Annex 5.8.5.6**) within Sectors 2-5 and 8. Of these territories, seven are located either wholly or partially within the boundaries of the Scheme. These territories comprised of arable fields.

### Song Thrush

In total, 81 records of Song Thrush were identified during the breeding bird survey. Using these records, 21 territories were mapped (**Annex 5.8.5.7**) within Sectors 1, 3-6 and 8-9. Of these territories, 11 are located either wholly or partially within the boundaries of the Scheme. These territories comprised of hedgerow, scrub, woodland and suburban habitats.

### Starling

In total, 311 records of Starling were identified during the breeding bird survey. Using these records, four colonies were mapped (**Annex 5.8.5.8**) within Sectors 1-2 and 4-6, consisting of an estimated total of 52 breeding pairs. The territories of all four colonies are partially located within the boundaries of the Scheme. The colony territories comprised of suburban and arable habitats.

### Yellowhammer

In total, 21 records of Yellowhammer were identified during the breeding bird survey. Using these records, four territories were mapped (**Annex 5.8.5.9**) within Sectors 3-5 and 8. Of these territories, one is located partially within the boundaries of the Scheme. The territory was located north of Coton village and consisted of hedgerows, field margins and arable fields.

## **Results by Sector**

### **Sector 1**

- 4.2.10. A total of 36 species of bird were recorded within Sector 1 during the breeding bird survey. This included nine species which are legally protected or species of conservation concern.
- 4.2.11. Seven species were confirmed as breeding within Sector 1, including two species of conservation concern: House Sparrow and Starling.
- 4.2.12. 12 species were considered probable breeders within Sector 1, including two species of conservation concern: Dunnock and Song Thrush. A further three species were listed on the BoCC Amber List: Willow Warbler, Woodpigeon and Wren.
- 4.2.13. Nine species were considered possible breeders within Sector 1, including three species of conservation concern: Greenfinch, Marsh Tit and Skylark.
- 4.2.14. The remaining eight species were considered non-breeders within Sector 1.

## **Sector 2**

- 4.2.15. A total of 42 species of bird were recorded within Sector 2 during the breeding bird survey. This included 11 species which are legally protected or species of conservation concern.
- 4.2.16. Nine species were confirmed as breeding within Sector 2, including one species of conservation concern: Starling. One further species was listed on the BoCC Amber List: Kestrel.
- 4.2.17. 12 species were considered probable breeders within Sector 2, including four species of conservation concern: Dunnock, House Sparrow, Skylark and Yellowhammer. A further two species were listed on the BoCC Amber List: Woodpigeon and Wren.
- 4.2.18. 15 species were considered possible breeders within Sector 2, including six species of conservation concern: Bullfinch, Greenfinch, Linnet, Reed Bunting and Song Thrush. One further species was listed on the BoCC Amber List: Stock Dove.
- 4.2.19. The remaining six species were considered non-breeders within Sector 2.

## **Sector 3**

- 4.2.20. A total of 36 species of bird were recorded within Sector 3 during the breeding bird survey. This included ten species which are legally protected or species of conservation concern.
- 4.2.21. One species was confirmed as breeding within Sector 3, Blue Tit, which is not a species of conservation concern.
- 4.2.22. 16 species were considered probable breeders within Sector 3, including four species of conservation concern: Dunnock, Greenfinch, Skylark and Song Thrush. A further two species were listed on the BoCC Amber List: Woodpigeon and Wren.
- 4.2.23. 15 species were considered possible breeders within Sector 3, including three species of conservation concern: Bullfinch, Starling, and Yellowhammer. A further two species were listed on the BoCC Amber List: Rook and Stock Dove
- 4.2.24. The remaining four species were considered non-breeders within Sector 3.

## **Sector 4**

- 4.2.25. A total of 24 species of bird were recorded within Sector 4 during the breeding bird survey. This included ten species which are legally protected or species of conservation concern.
- 4.2.26. Four species were confirmed as breeding within Sector 4, including two species of conservation concern: House Sparrow and Starling.
- 4.2.27. Seven species were considered probable breeders within Sector 4, including two species of conservation concern: Skylark and Yellowhammer. One further species was listed on the BoCC Amber List: Woodpigeon.
- 4.2.28. 11 species were considered possible breeders within Sector 4, including four species of conservation concern: Dunnock, Greenfinch, Linnet and Song Thrush. One further species was listed on the BoCC Amber List: Wren.



4.2.29. The remaining two species were considered non-breeders within Sector 4.

### **Sector 5**

4.2.30. A total of 47 species of bird were recorded within Sector 5 during the breeding bird survey. This included 13 species which are legally protected or species of conservation concern.

4.2.31. 13 species were confirmed as breeding within Sector 5, including four species of conservation concern: House Martin, House Sparrow, Song Thrush and Starling.

4.2.32. 15 species were considered probable breeders within Sector 5, including five species of conservation concern: Dunnock, Greenfinch, Mistle Thrush, Skylark and Yellowhammer. A further two species were listed on the BoCC Amber List: Woodpigeon and Wren.

4.2.33. 14 species were considered possible breeders within Sector 5, including three species of conservation concern: Bullfinch, Linnet and Marsh Tit. A further three species were listed on the BoCC Amber List: Kestrel, Rook and Stock Dove.

4.2.34. The remaining five species were considered non-breeders within Sector 5.

### **Sector 6**

4.2.35. A total of 37 species of bird were recorded within Sector 6 during the breeding bird survey. This included 11 species which are legally protected or species of conservation concern.

4.2.36. Seven species were confirmed as breeding within Sector 6. None of these were species of conservation concern but one was listed on the BoCC Amber List: Wren.

4.2.37. 11 species were considered probable breeders within Sector 6, including three species of conservation concern: Dunnock, Greenfinch and Song Thrush. A further two species were listed on the BoCC Amber List: Stock Dove and Woodpigeon.

4.2.38. 15 species were considered possible breeders within Sector 6, including seven species of conservation concern: Bullfinch, Cuckoo, Grasshopper Warbler, House Sparrow, Linnet, Skylark and Starling.

4.2.39. The remaining four species were considered non-breeders within Sector 6.

### **Sector 7**

4.2.40. A total of six species of bird were recorded within Sector 7 during the breeding bird survey. None of these were legally protected or species of conservation concern.

4.2.41. Two species were confirmed as breeding within Sector 7.

4.2.42. One species was considered a probable breeder within Sector 7, Wren, which is listed on the BoCC Amber List

4.2.43. Two species were considered possible breeders within Sector 7, neither of which were species of conservation concern.

4.2.44. The remaining one species, Stock Dove, was considered a non-breeder within Sector 7.

## **Sector 8**

- 4.2.45. A total of 50 species of bird were recorded within Sector 8 during the breeding bird survey. This included 14 species which are legally protected or species of conservation concern.
- 4.2.46. Ten species were confirmed as breeding within Sector 8, including one species listed on the BoCC Amber List: Moorhen.
- 4.2.47. 20 species were considered probable breeders within Sector 8, including five species of conservation concern: Dunnock, Greenfinch, Skylark, Song Thrush and Yellowhammer. A further five species were listed on the BoCC Amber List: Mallard, Stock Dove, Willow Warbler, Woodpigeon and Wren.
- 4.2.48. Nine species were considered possible breeders within Sector 8, including five species of conservation concern: Bullfinch, Linnet, Marsh Tit, Mistle Thrush and Starling. One further species was listed on the BoCC Amber List: Rook.
- 4.2.49. The remaining 11 species were considered non-breeders within Sector 8.

## **Sector 9**

- 4.2.50. A total of 33 species of bird were recorded within Sector 9 during the breeding bird survey. This included 10 species which are legally protected or species of conservation concern.
- 4.2.51. Four species were confirmed as breeding within Sector 9, including one species listed on the BoCC Amber List: Wren.
- 4.2.52. 12 species were considered probable breeders within Sector 9, including three species of conservation concern: Dunnock, Mistle Thrush and Song Thrush. A further two species were listed on the BoCC Amber List: Stock Dove and Woodpigeon.
- 4.2.53. Ten species were considered possible breeders within Sector 9, including two species of conservation concern: Bullfinch and Greenfinch.
- 4.2.54. The remaining seven species were considered non-breeders within Sector 9.

## 5 Evaluation

- 5.1.1. No bird species recorded reached over 1% of the estimated total number of breeding pairs for that species in Cambridgeshire (Cambridgeshire Bird Club, 2013).
- 5.1.2. According to the data from the breeding bird survey, the Survey Area does not qualify as a County Wildlife Site (CWS) according to the CWS criteria for the selection of avian sites (Cambridgeshire and Peterborough CWS Panel, 2020).
- 5.1.3. Therefore, it is considered that the bird community of the Survey Area is not of County importance or above.

### Assemblage Value

- 5.1.4. The hedgerow, woodland and scrub habitats within the Sectors 1-6 and 8-9 supported a wide range of species typical of this habitat (30 breeding species). This included breeding territories of species of conservation value such as Dunnock, Greenfinch, Mistle Thrush, Song Thrush and Yellowhammer. Therefore, Sectors 1-6 and 8-9 were considered to be of Local level importance for their hedgerow / woodland / scrub bird assemblages.
- 5.1.5. The arable habitats within Sectors 2-5 and 8 supported eight breeding species including species of conservation value such as Skylark and Yellowhammer. Due to the low number of breeding species, the arable bird assemblage within the Survey Area was not considered to be of Local level importance or above.

### Individual Species

- 5.1.6. **Table 5-1** presents the 13 bird species within the Survey Area that are evaluated to have breeding populations of Local level importance. This evaluation is based on the species of conservation concern regularly occurring in locally sustainable populations (see Section 3.5.2 of this report).

**Table 5-1 - Evaluation of Nature Conservation Importance of Bird Species by Sector**

Species	S1	S2	S3	S4	S5	S6	S7	S8	S9
Dunnock	Local	Local	Local	-	Local	Local	-	Local	-
Greenfinch	-	-	-	-	Local	Local	-	Local	-
House Martin	-	-	-	-	Local	-	-	-	-
House Sparrow	Local	Local	-	-	Local	-	-	-	-
Mistle Thrush	-	-	-	-	Local	-	-	-	-
Skylark	-	Local	-	-	Local	-	-	Local	-
Song Thrush	Local	-	Local	-	Local	Local	-	Local	-
Starling	Local	Local	-	-	Local	-	-	-	-

- 5.1.7. The other 27 species identified as confirmed or probable breeders within the Survey Area were evaluated to be not of Local level importance or above. This was due to these species either being considered nationally common or unthreatened and/or occurring within the Survey Area infrequently or in low numbers.

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## 6 Conclusion

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- 6.1.1. The breeding bird survey undertaken by WSP in 2022 identified that the following bird species of Conservation Concern were confirmed or probable breeders within the Survey Area: Dunnock, Greenfinch, House Martin, House Sparrow, Mistle Thrush, Skylark, Song Thrush, Starling and Yellowhammer.
- 6.1.2. Sectors 1-6 and 8-9 supported territories of at least three bird species of conservation concern, while Sector 7 did not support any territories of species of conservation concern.
- 6.1.3. Sectors 1-6 and 8-9 of the Survey Area were evaluated as having hedgerow / woodland / scrub bird assemblages of Local level importance.
- 6.1.4. The following species were evaluated as having populations of Local level importance within the Survey Area: Dunnock, Greenfinch, House Martin, House Sparrow, Mistle Thrush, Skylark, Song Thrush and Starling. Sectors 1-3, 5-6 and 8 supported at least one species population of Local level importance.
- 6.1.5. A desk study of previous breeding bird surveys completed within the boundary of the Scheme between 2015 and 2021, identified the following additional species of Conservation Concern as confirmed or probable breeders: Bullfinch, Corn Bunting, Cuckoo, Grey Partridge, Linnet, Marsh Tit, Reed Bunting, Spotted Flycatcher and Tawny Owl.
- 6.1.6. None of these additional species were evaluated as having more than Local level importance, as assessed by consulting the Cambridgeshire Bird Atlas and CWS selection criteria.

## 7 References

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### 7.1 Project References

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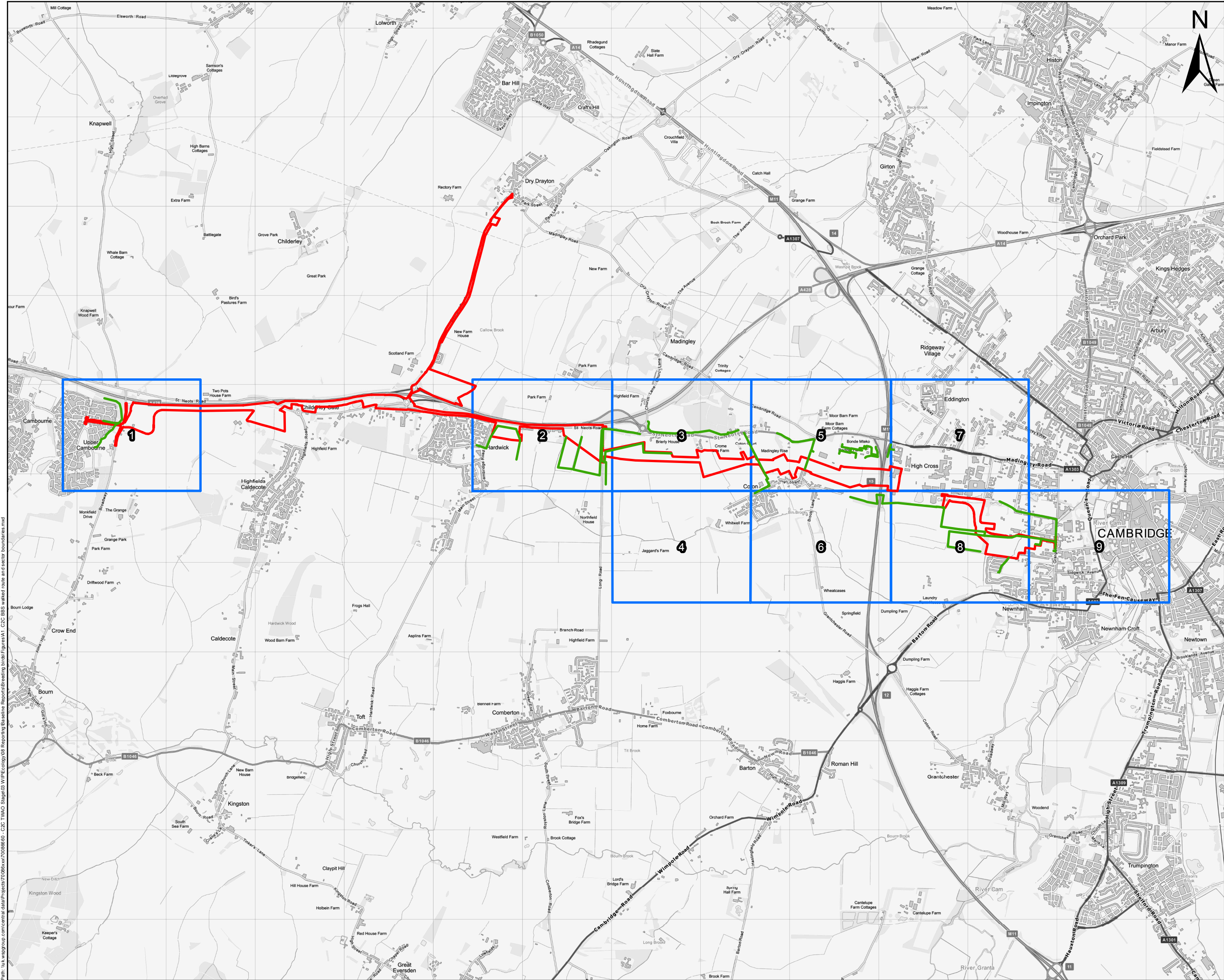
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# **Annex 5.8.1**

## **Map of Walked Route and Sectors**

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WSP



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- Legend**
- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries

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Drawing Title	Annex 5.8.1: Walked Route and Sector Boundaries		
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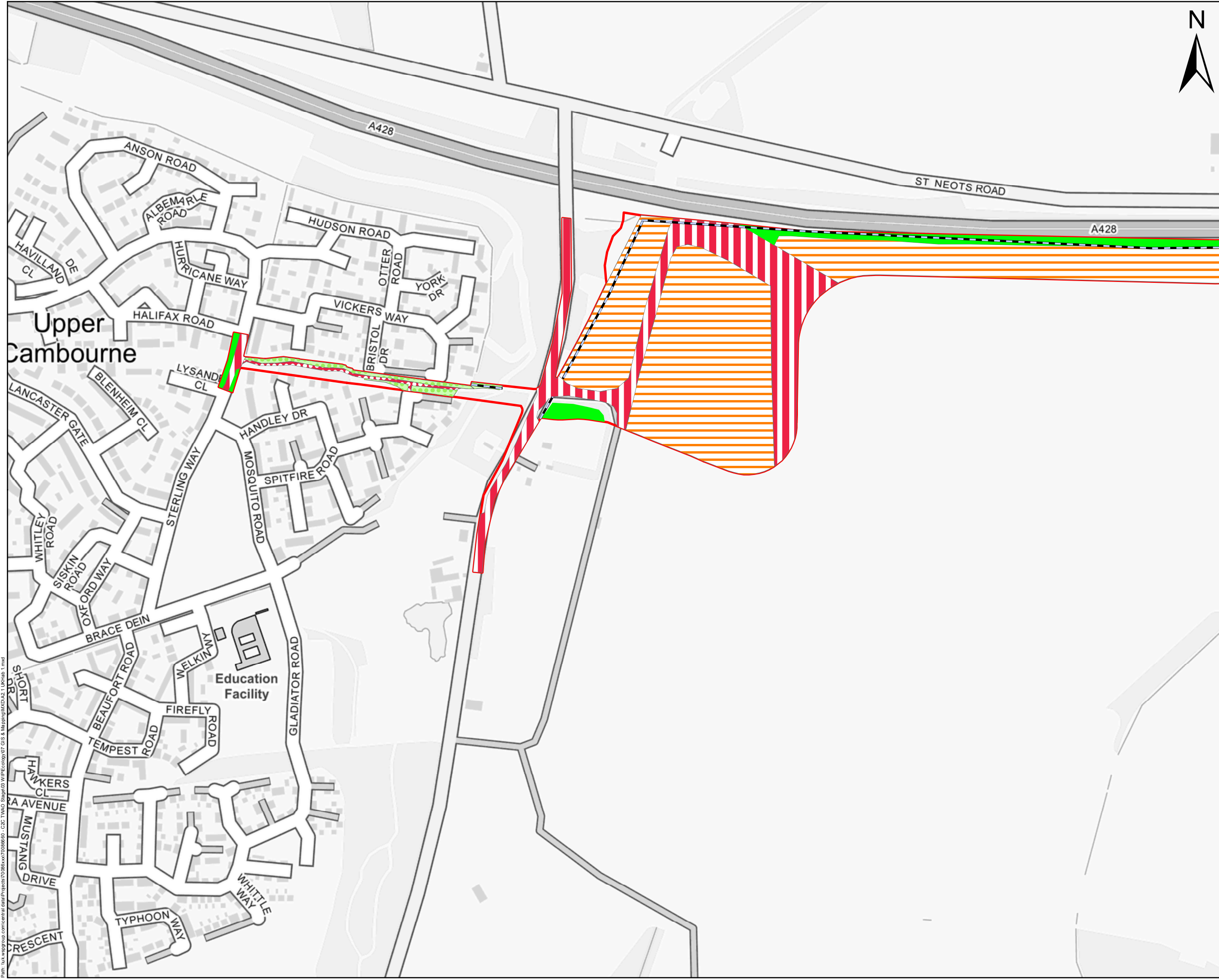
# Annex 5.8.2

**UKHab Habitat Maps**

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WSP





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### Legend

Proposed Scheme Boundary

UKHab habitats:

c1c - cereal crops

g3c5 - Arrhenatherum neutral grassland

g4 - modified grassland

u1b - developed land, sealed surface

u1c - artificial unvegetated unsealed surface

h2 - hedgerows

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CAMBRIDGE TO CAMBOURNE**

Drawing Title  
**Annex 5.8.2: UKHab Habitat Map  
Map 1**

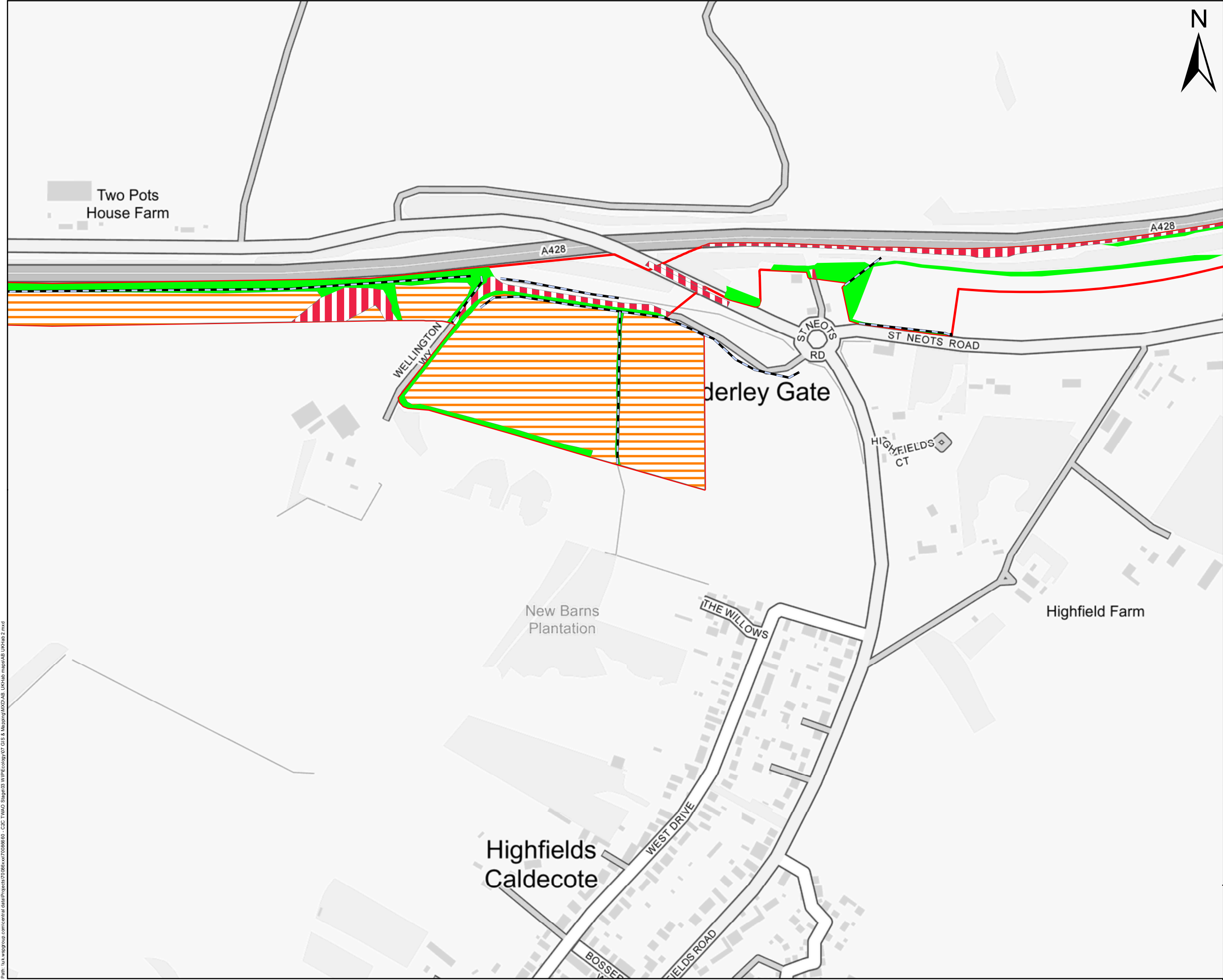
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### Legend

Proposed Scheme Boundary

UKHab habitats:

c1c - cereal crops

g4 - modified grassland

u1b - developed land, sealed surface

h2 - hedgerows

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GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.2: UKHab Habitat Map  
Map 2

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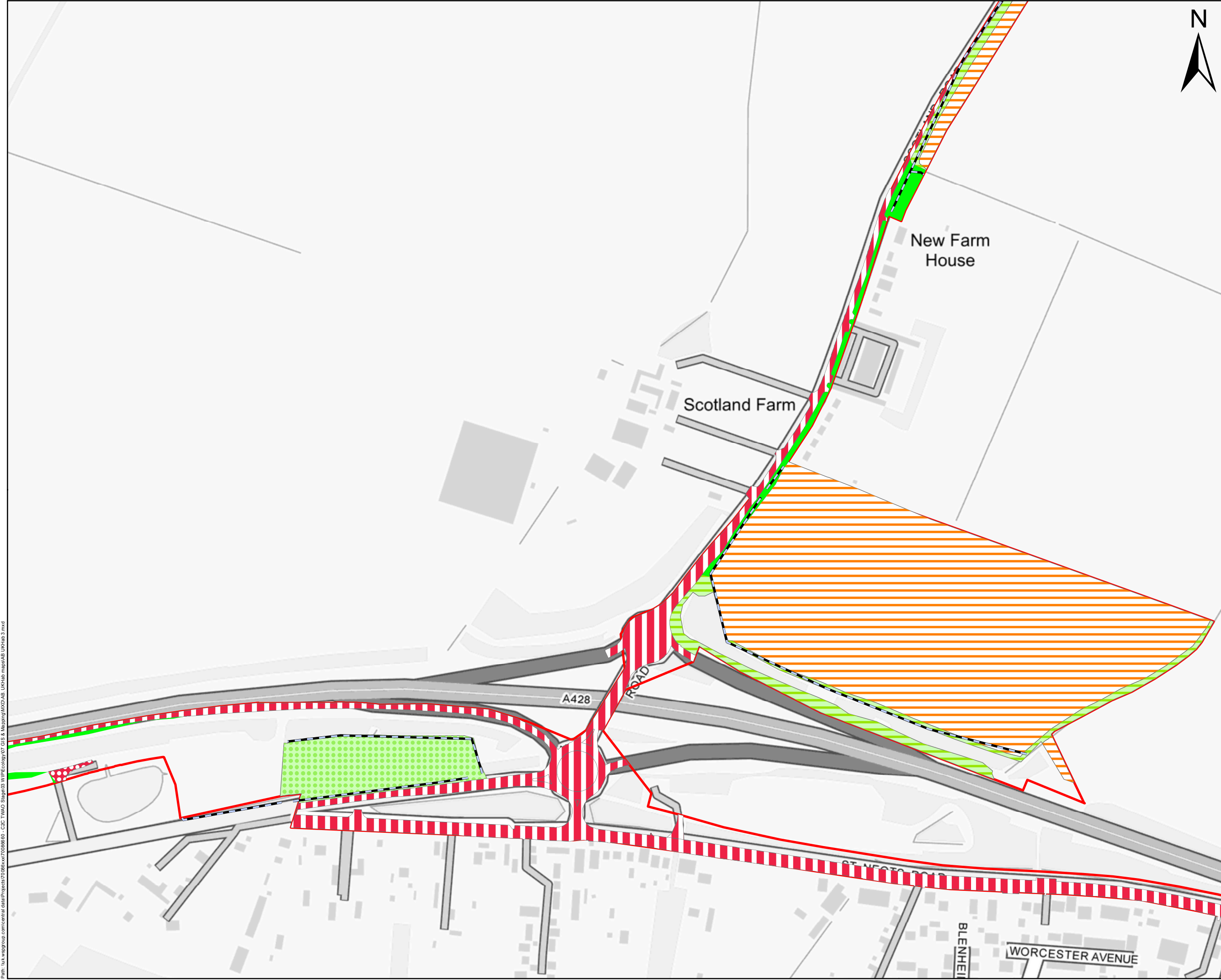
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70086660-xx-061





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**Legend**

Proposed Scheme Boundary

**UKHab habitats:**

c1c - cereal crops

g3c - other neutral grassland

g3c5 - Arrhenatherum neutral grassland

g4 - modified grassland

u1b - developed land, sealed surface

u1c - artificial unvegetated unsealed surface

h2 - hedgerows

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Drawing Title

Annex 5.8.2: UKHab Habitat Map  
Map 3

Scale at A3

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Stage 2 check

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JF

Date

03/11/2022

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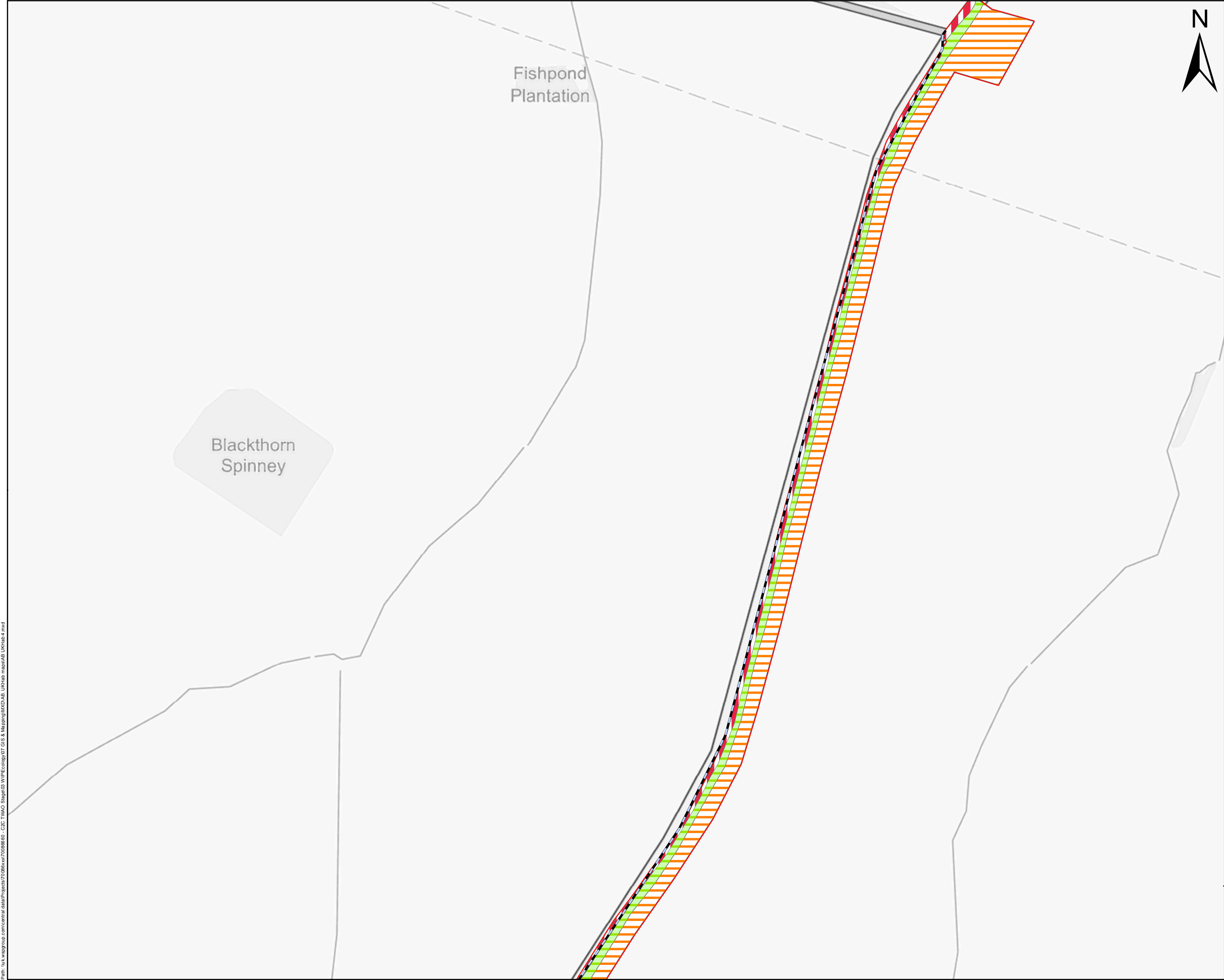
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Legend

Proposed Scheme Boundary

UKHab habitats:

c1c - cereal crops

g3c - other neutral grassland

u1b - developed land, sealed surface

h2 - hedgerows

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CAMBRIDGE TO CAMBOURNE

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Annex 5.8.2: UKHab Habitat Map  
Map 4

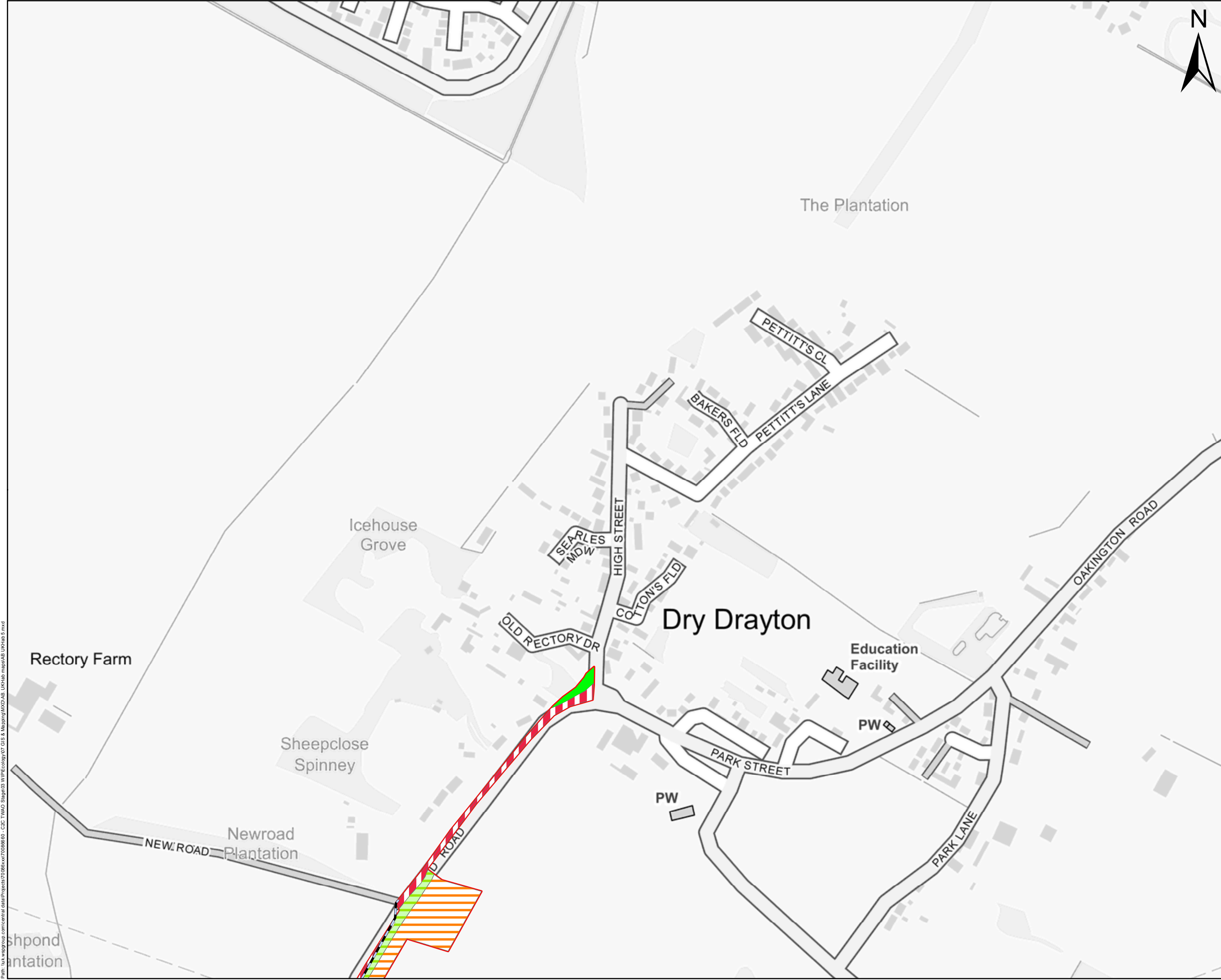
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UKHab habitats:

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g3c - other neutral grassland

g4 - modified grassland

u1b - developed land, sealed surface

h2 - hedgerows

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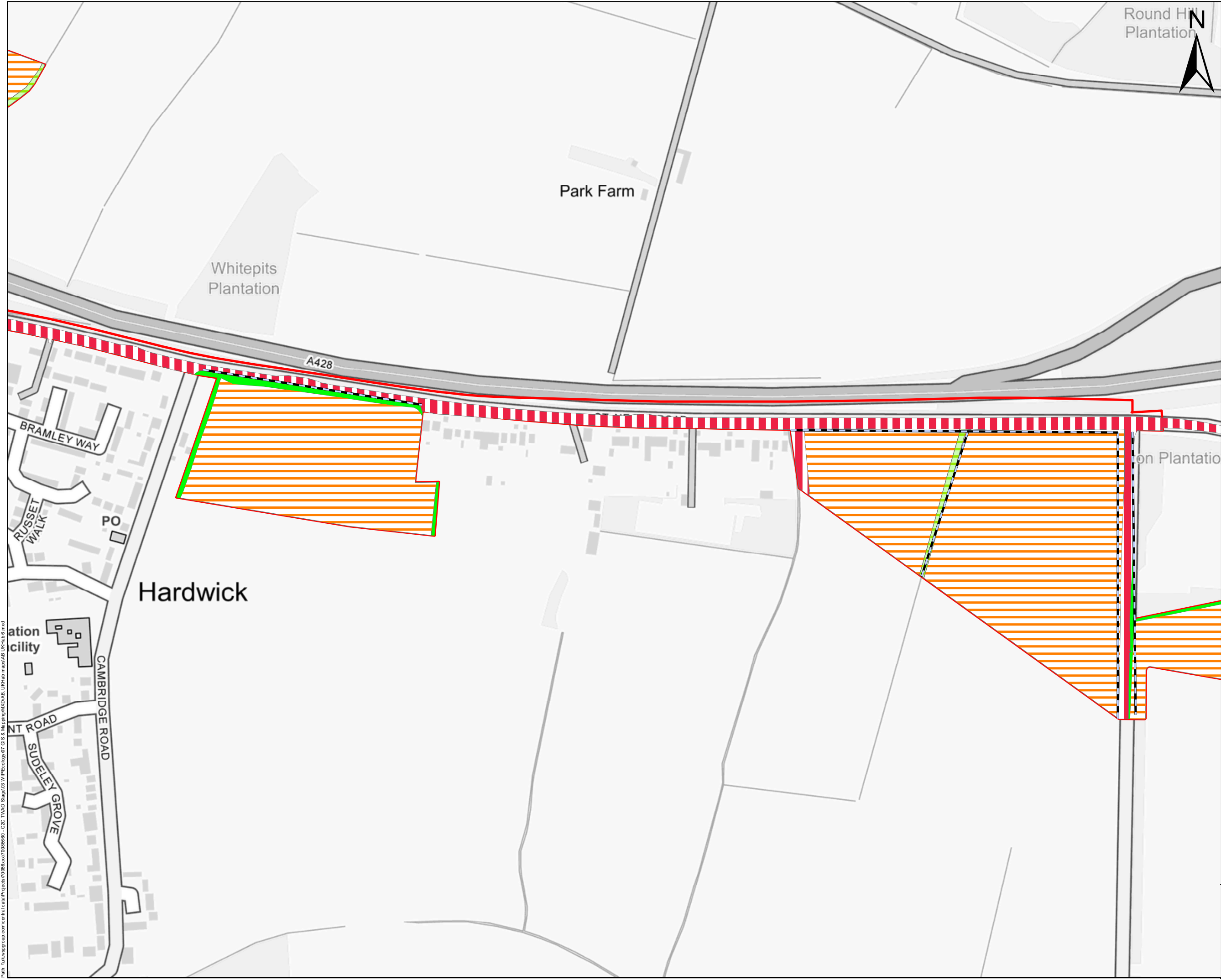
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**Legend**

Proposed Scheme Boundary

UKHab habitats:

- c1c - cereal crops
- g3c - other neutral grassland
- g4 - modified grassland
- u1b - developed land, sealed surface
- h2 - hedgerows

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CAMBRIDGE TO CAMBOURNE

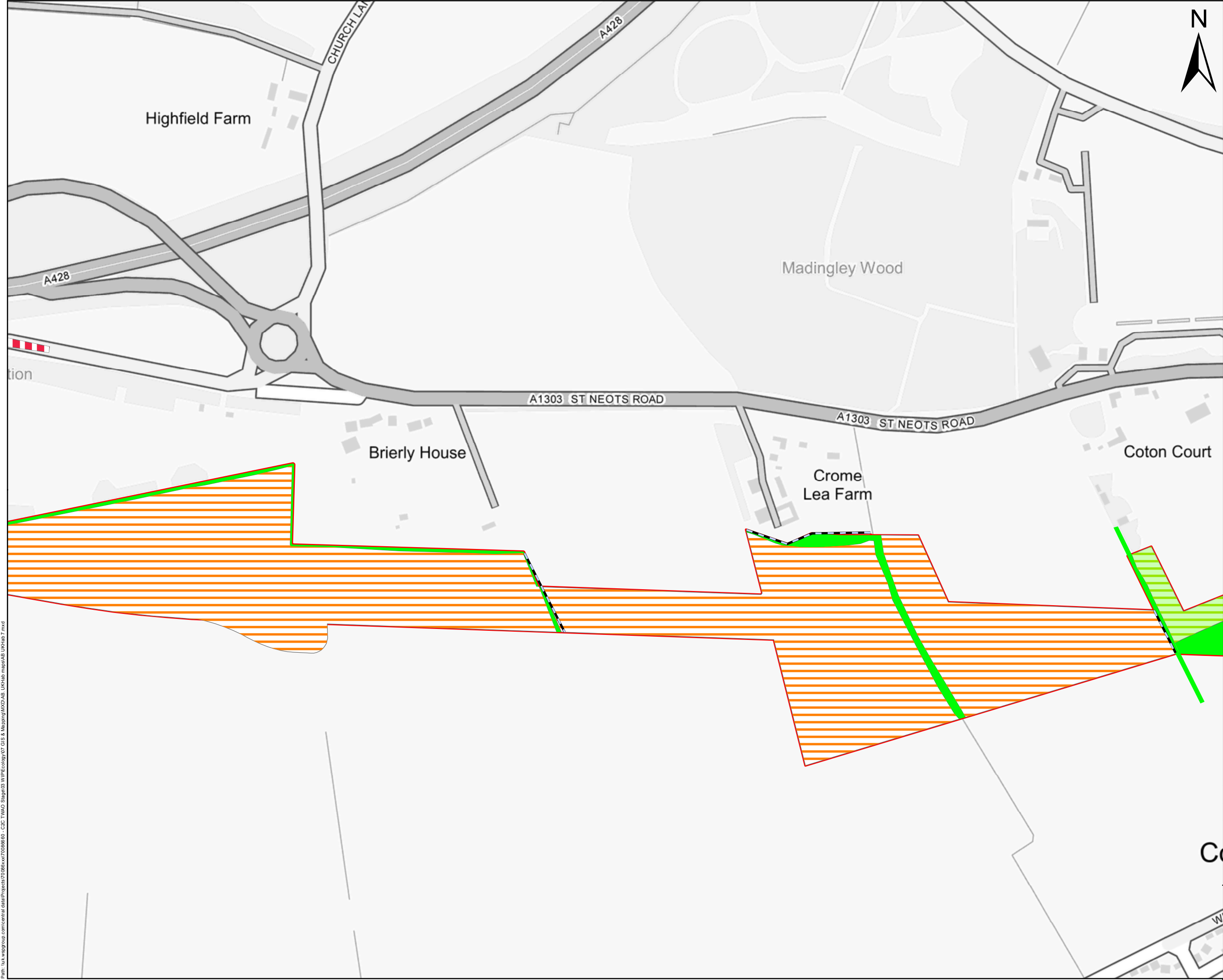
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Map 6

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### Legend

- Proposed Scheme Boundary
- UKHab habitats:
  - c1c - cereal crops
  - g3c - other neutral grassland
  - g4 - modified grassland
  - u1b - developed land, sealed surface
  - h2 - hedgerows

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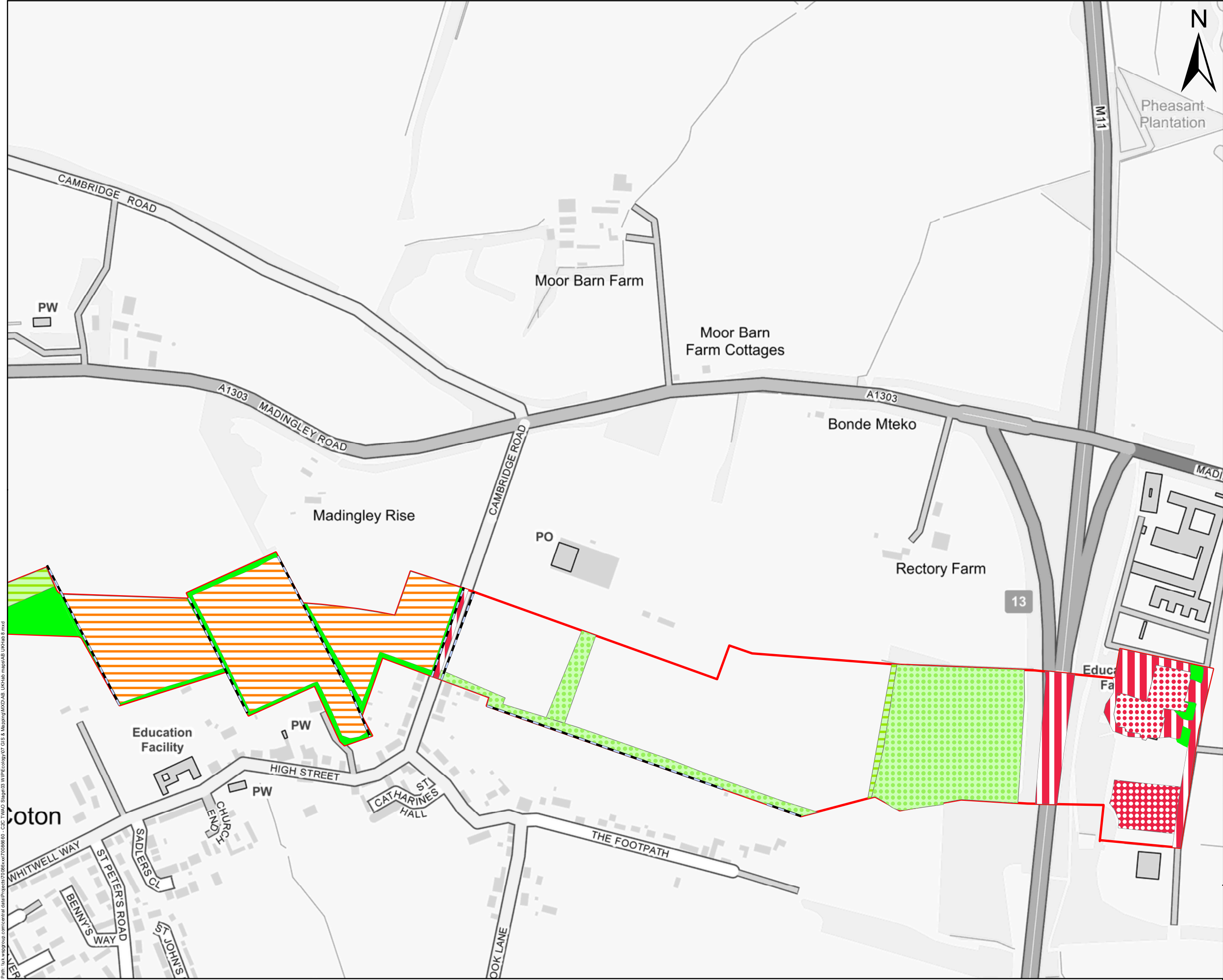
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Stage 1 check	Stage 2 check	Originated	Date
AM	TV	JF	03/11/2022

0 50 100 150 m

**wsp**

Drawing Number: 70086660-xx-066



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Legend

Proposed Scheme Boundary

UKHab habitats:

c1c - cereal crops

g3c - other neutral grassland

g3c5 - Arrhenatherum neutral grassland

g4 - modified grassland

u1b - developed land, sealed surface

u1b5 - buildings

u1c - artificial unvegetated unsealed surface

h2 - hedgerows

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Revision Details	By	Check	Date	Suffix

Drawing Status  
DRAFT

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.2: UKHab Habitat Map  
Map 8

Scale at A3  
1:4,869

Drawn	UKJPF001	Stage 1 check	Stage 2 check	Originated	Date
		AM	TV	JF	03/11/2022

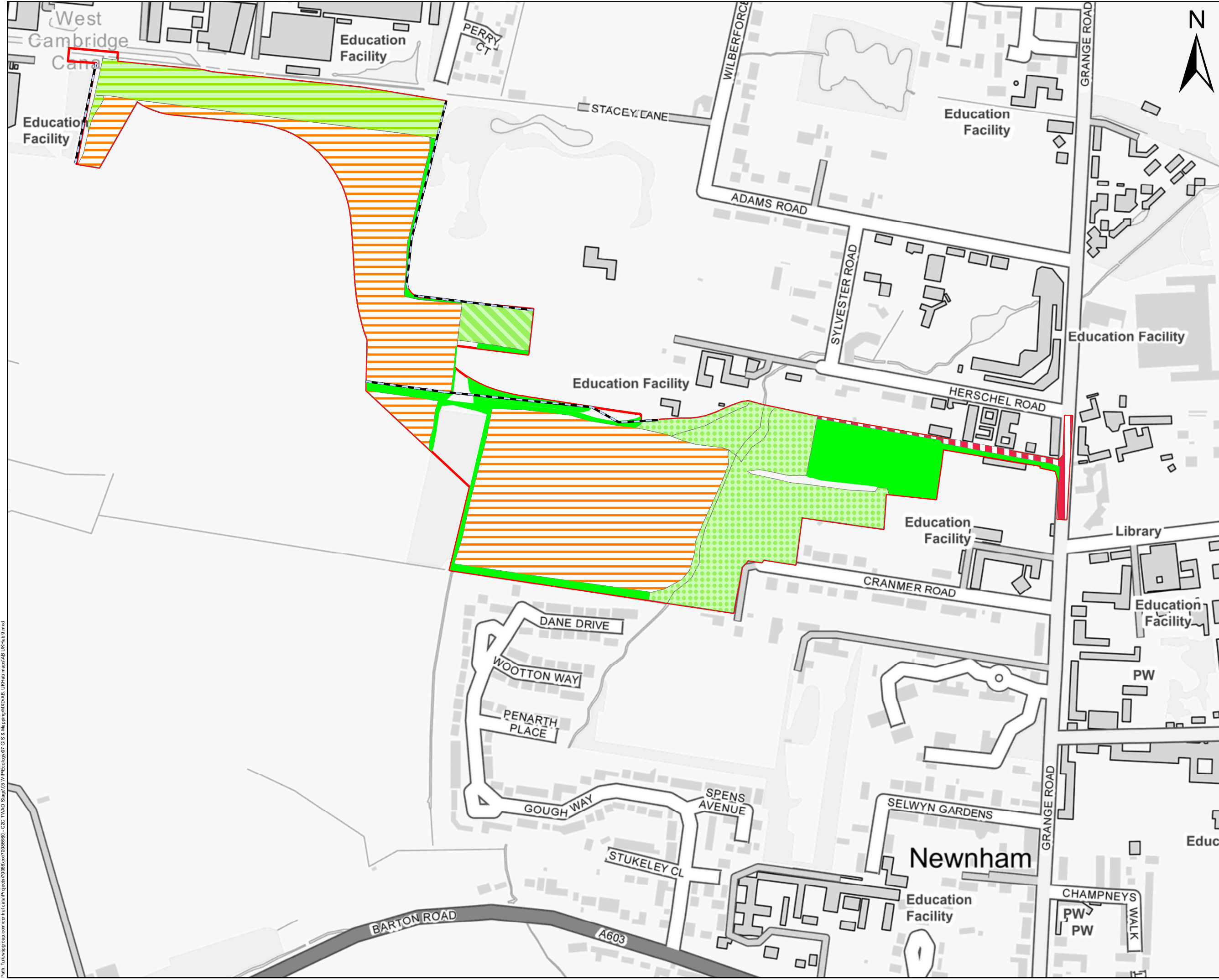
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Drawing Number  
70086660-xx-067

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**Legend**

- Proposed Scheme Boundary
- UKHab habitats:
  - c1c - cereal crops
  - g3a - lowland meadows
  - g3c - other neutral grassland
  - g3c5 - Arrhenatherum neutral grassland
  - g4 - modified grassland
  - u1b - developed land, sealed surface
  - h2 - hedgerows

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Drawing Status		Check		
DRAFT				
Job Title				
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.2: UKHab Habitat Map Map 9				
Scale at A3		1:4,421		
Drawn		UKJPF001		
Stage 1 check	Stage 2 check	Originated	Date	
AM	TV	JF	03/11/2022	
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Drawing Number				
70086660-xx-068				

# **Annex 5.8.3**

## **Weather Conditions**

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WSP

**Table 5.8.3-1 – Breeding Bird Survey Dates and Conditions**

Survey number	1				2				3					
Visit number	1		2		1		2		1		2		3	
Date	28/04/2022		05/05/2022		11/05/2022		12/05/2022		24/05/2022		25/05/2022		27/05/2022	
Sunrise	05:35		05:22		05:11		05:10		04:53		04:51		04:49	
Start time	05:44		05:30		05:23		05:33		04:55		05:02		04:57	
End Time	11:52		12:29		12:51		12:27		10:56		10:39		11:09	
Conditions	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
Visibility	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Wind speed (Beaufort scale)	2	2	1	0	0	1	2	2	0	0	0	3	0	1
Rain	Dry	Dry	Dry	Dry	Dry	Occasional drizzle	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
Air temperature (°C)	7	11	8	15	12	13	8	15	9	15	8	15	11	17
Cloud cover (Oktas)	8	8	8	2	8	8	0	0	8	7	8	8	1	1

Survey number	4				5						6					
Visit number	1		2		1		2		3		1		2		3	
Date	07/06/2022		09/06/2022		21/06/2022		22/06/2022		23/06/2022		05/07/2022		06/07/2022		07/07/2022	
Sunrise	04:40		04:39		04:38		04:38		04:39		04:46		04:47		04:48	
Start time	04:44		04:50		04:38		04:38		04:38		04:59		04:51		04:54	
End Time	11:43		15:05		09:48		10:31		09:20		12:01		10:47		07:30	
Conditions	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End
Visibility	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Wind speed (Beaufort scale)	0	1	1	0	0	0	1	1	0	0	1	2	1	3	0	2
Rain	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
Air temperature (°C)	12	18	10	12	12	22	13	22	10	22	12	19	12	21	16	16
Cloud cover (Oktas)	6	6	0	0	0	0	0	0	0	0	3	7	8	7	8	8

# **Annex 5.8.4**

## **Desk Study Results**

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WSP

**Table 5.8.4-1 – Records since 2012 of Bird Species of Conservation Concern within 2km of the Scheme**

Common Name	Scientific Name	Designations	Number of Records
Lesser Redpoll	<i>Acanthis cabaret</i>	Sect.41, UKBAP, BoCC Red	22
Common Sandpiper	<i>Actitis hypoleucos</i>	BoCC Amber	1
Skylark	<i>Alauda arvensis</i>	Sect.41, UKBAP, BoCC Red	10
Kingfisher	<i>Alcedo atthis</i>	BD1, WCA Sch1, BoCC Amber	19
Shoveler	<i>Anas clypeata</i>	BoCC Amber	2
Teal	<i>Anas crecca</i>	BoCC Amber	4
Wigeon	<i>Anas penelope</i>	BoCC Amber	2
Mallard	<i>Anas platyrhynchos</i>	BoCC Amber	41
Gadwall	<i>Anas strepera</i>	BoCC Amber	3
Greylag Goose	<i>Anser anser</i>	BoCC Amber	11
Meadow Pipit	<i>Anthus pratensis</i>	BoCC Amber	2
Swift	<i>Apus apus</i>	CPASI, BoCC Amber	25
Short-eared Owl	<i>Asio flammeus</i>	BoCC Amber	17
Bittern	<i>Botaurus stellaris</i>	BD1, Sect.41, UKBAP, WCA Sch1, BoCC Amber	1
Brent Goose	<i>Branta bernicla</i>	Sect.41, UKBAP, BoCC Amber	1
Barnacle Goose	<i>Branta leucopsis</i>	BoCC Amber	12
Nightjar	<i>Caprimulgus europaeus</i>	BD1, Sect.41, UKBAP, BoCC Amber	1
Little Ringed Plover	<i>Charadrius dubius</i>	WCA Sch1	1
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	BoCC Amber	20
Hen Harrier	<i>Circus cyaneus</i>	BD1, Sect.41, WCA Sch1, BoCC Red	1
Stock Dove	<i>Columba oenas</i>	BoCC Amber	11
Cuckoo	<i>Cuculus canorus</i>	Sect.41, UKBAP, BoCC Red	3
Mute Swan	<i>Cygnus olor</i>	BoCC Amber	13
House Martin	<i>Delichon urbicum</i>	BoCC Amber	13
Yellowhammer	<i>Emberiza citrinella</i>	Sect.41, UKBAP, BoCC Red	13
Reed Bunting	<i>Emberiza schoeniclus</i>	Sect.41, UKBAP, BoCC Amber	6
Merlin	<i>Falco columbarius</i>	BD1, WCA Sch1, BoCC Red	2
Peregrine	<i>Falco peregrinus</i>	BD1, WCA Sch1	32
Hobby	<i>Falco subbuteo</i>	WCA Sch1	25
Kestrel	<i>Falco tinnunculus</i>	BoCC Amber	24

Common Name	Scientific Name	Designations	Number of Records
Brambling	<i>Fringilla montifringilla</i>	WCA Sch1	6
Snipe	<i>Gallinago gallinago</i>	BoCC Amber	7
Herring Gull	<i>Larus argentatus</i>	BoCC Red	7
Common Gull	<i>Larus canus</i>	BoCC Amber	8
Lesser Black-backed Gull	<i>Larus fuscus</i>	BoCC Amber	3
Great Black-backed Gull	<i>Larus marinus</i>	BoCC Amber	1
Mediterranean Gull	<i>Larus melanocephalus</i>	BD1, WCA Sch1, BoCC Amber	1
Linnet	<i>Linaria cannabina</i>	Sect.41, UKBAP, BoCC Red	17
Grasshopper Warbler	<i>Locustella naevia</i>	Sect.41, UKBAP, BoCC Red	2
Common Crossbill	<i>Loxia curvirostra</i>	WCA Sch1	5
Nightingale	<i>Luscinia megarhynchos</i>	BoCC Red	1
Red Kite	<i>Milvus milvus</i>	BD1, WCA Sch1	19
Grey Wagtail	<i>Motacilla cinerea</i>	BoCC Red	17
Yellow Wagtail	<i>Motacilla flava</i>	Sect.41, UKBAP, BoCC Red	4
Spotted Flycatcher	<i>Muscicapa striata</i>	Sect.41, UKBAP, BoCC Red	9
Curlew	<i>Numenius arquata</i>	Sect.41, UKBAP, BoCC Red	2
Whimbrel	<i>Numenius phaeopus</i>	WCA Sch1, BoCC Red	1
Golden Oriole	<i>Oriolus oriolus</i>	WCA Sch1, BoCC Red	1
Osprey	<i>Pandion haliaetus</i>	BD1, WCA Sch1, BoCC Amber	3
House Sparrow	<i>Passer domesticus</i>	Sect.41, UKBAP, BoCC Red	21
Tree Sparrow	<i>Passer montanus</i>	Sect.41, UKBAP, BoCC Red	1
Grey Partridge	<i>Perdix perdix</i>	Sect.41, UKBAP, BoCC Red	6
Honey-buzzard	<i>Pernis apivorus</i>	BD1, WCA Sch1, BoCC Amber	1
Black Redstart	<i>Phoenicurus ochruros</i>	WCA Sch1, BoCC Red	3
Redstart	<i>Phoenicurus phoenicurus</i>	BoCC Amber	1
Willow Warbler	<i>Phylloscopus trochilus</i>	BoCC Amber	5
Marsh Tit	<i>Poecile palustris</i>	Sect.41, UKBAP, BoCC Red	9
Dunnock	<i>Prunella modularis</i>	Sect.41, UKBAP, BoCC Amber	37
Bullfinch	<i>Pyrrhula pyrrhula</i>	Sect.41, UKBAP, BoCC Amber	16
Firecrest	<i>Regulus ignicapilla</i>	WCA Sch1	15
Whinchat	<i>Saxicola rubetra</i>	BoCC Red	1
Woodcock	<i>Scolopax rusticola</i>	BoCC Red	17



Common Name	Scientific Name	Designations	Number of Records
Common Tern	<i>Sterna hirundo</i>	BoCC Amber	7
Arctic Tern	<i>Sterna paradisaea</i>	BoCC Amber	1
Sandwich Tern	<i>Sterna sandvicensis</i>	BoCC Amber	1
Turtle Dove	<i>Streptopelia turtur</i>	Sect.41, UKBAP, BoCC Red	1
Tawny Owl	<i>Strix aluco</i>	BoCC Amber	20
Starling	<i>Sturnus vulgaris</i>	Sect.41, UKBAP, BoCC Red	38
Green Sandpiper	<i>Tringa ochropus</i>	WCA Sch1, BoCC Amber	3
Redwing	<i>Turdus iliacus</i>	WCA Sch1, BoCC Red	21
Song Thrush	<i>Turdus philomelos</i>	Sect.41, UKBAP, BoCC Red	14
Fieldfare	<i>Turdus pilaris</i>	WCA Sch1, BoCC Red	21
Mistle Thrush	<i>Turdus viscivorus</i>	BoCC Red	9
Barn Owl	<i>Tyto alba</i>	CPASI, WCA Sch1	17
Lapwing	<i>Vanellus vanellus</i>	Sect.41, UKBAP, BoCC Red	4



# Annex 5.8.5

## Territory Maps

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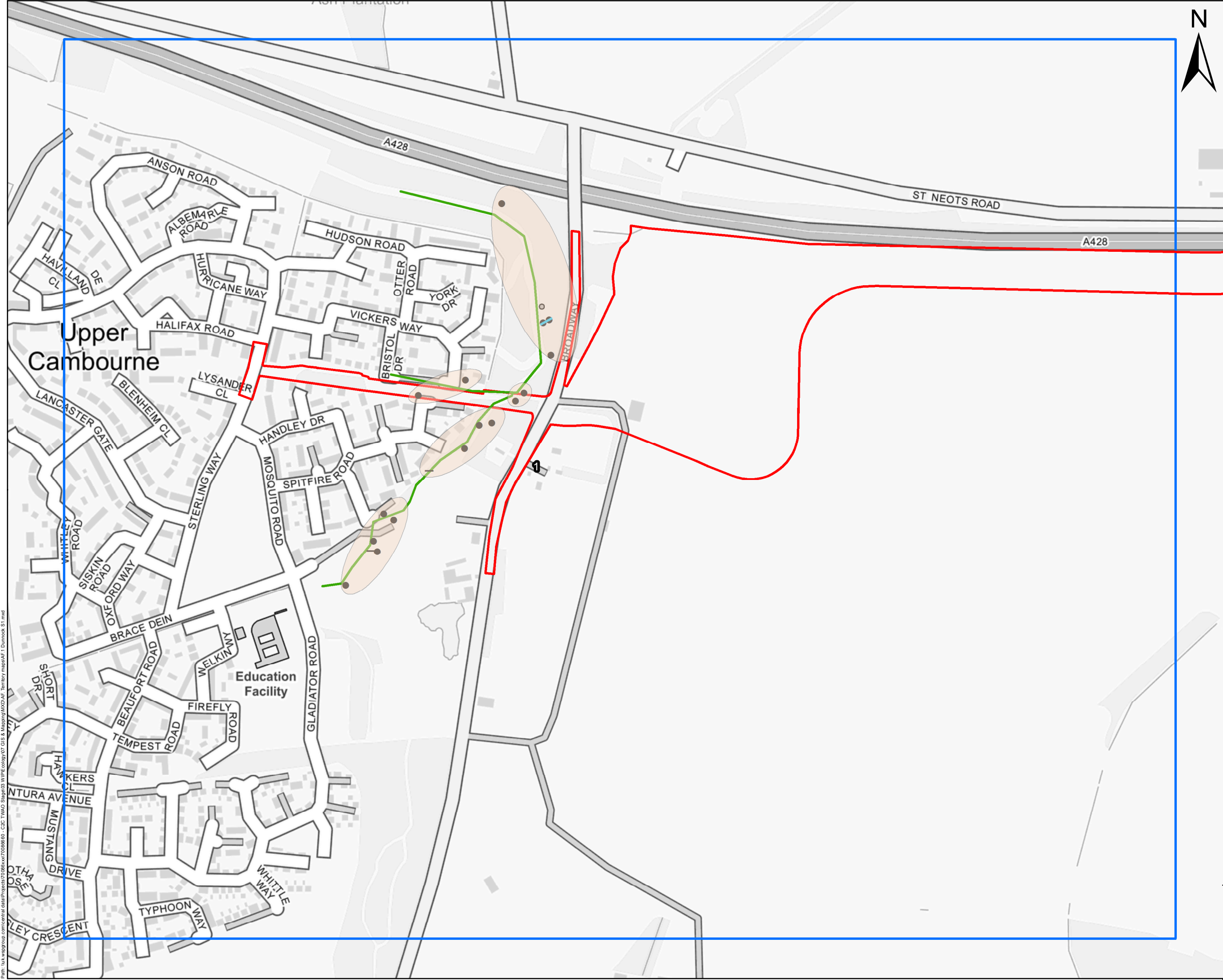
WSP

# **Annex 5.8.5.1**

**Dunnock territories**

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**wsp**



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Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Dunnock territories
- Notation:
- Other
  - Singing
  - Calling
  - Same bird moving

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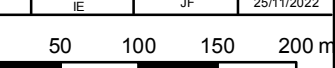
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CAMBRIDGE TO CAMBOURNE

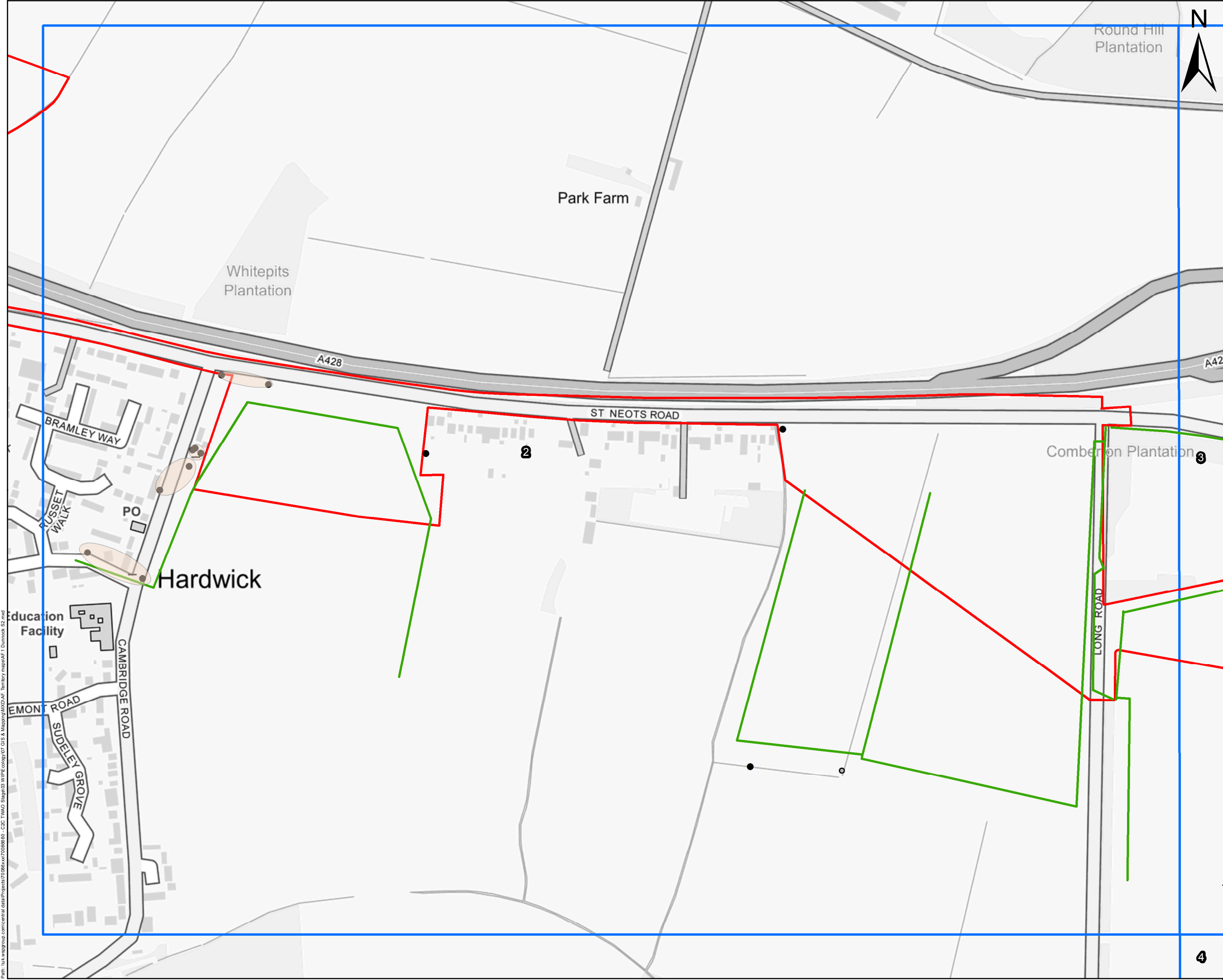
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Sector 1

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Drawing Number  
70086660-xx-002



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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Dunnock territories

### Notation:

- Other
- Singing
- Calling
- Same bird moving

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Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.1: Dunnock Territories  
Sector 2

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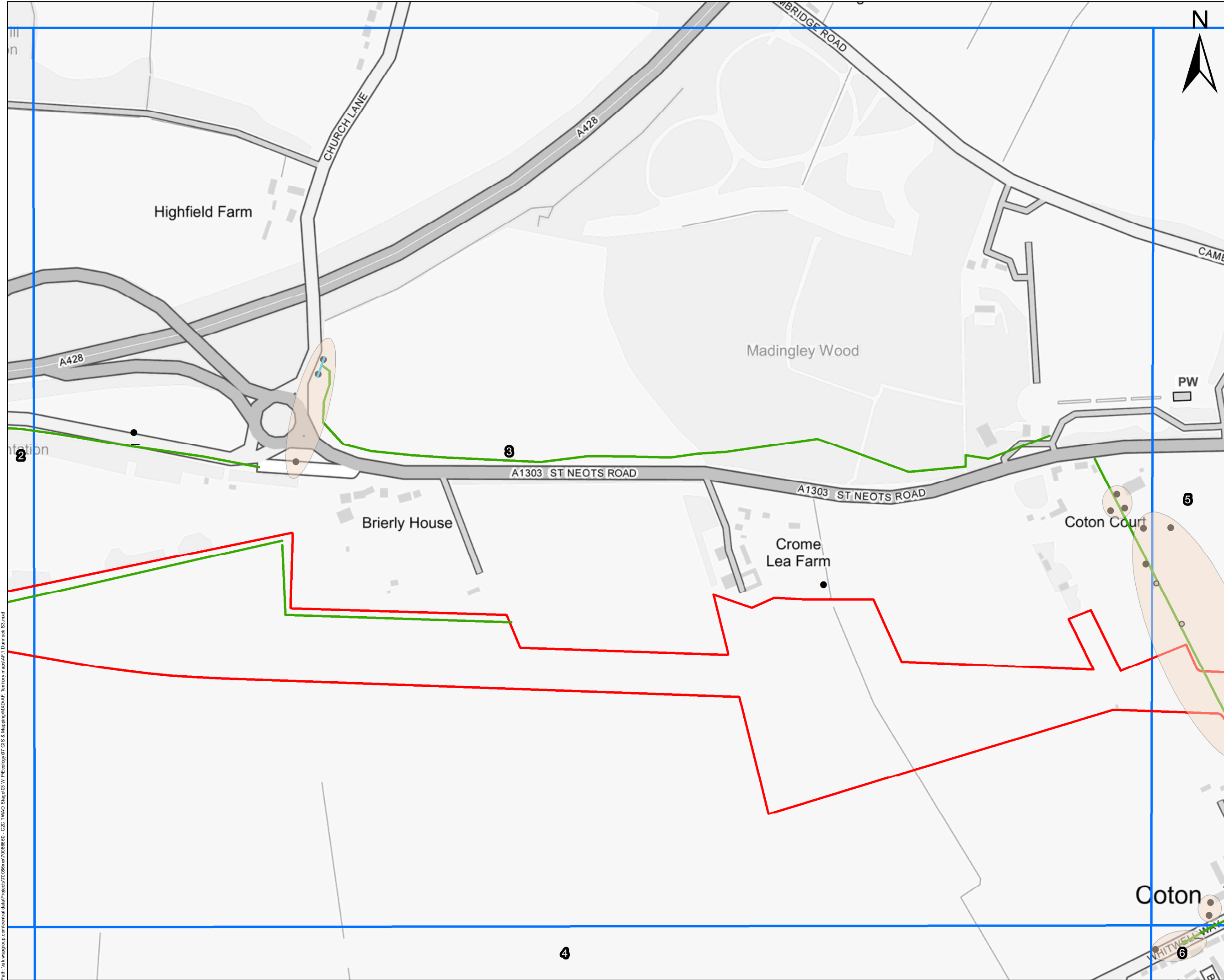
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Stage 1 check	AM	Stage 2 check	IE		

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Drawing Number  
70086660-xx-003





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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Dunnock territories
- Notation:
  - Other
  - Singing
  - Calling
  - Same bird moving

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Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.1: Dunnock Territories  
Sector 3

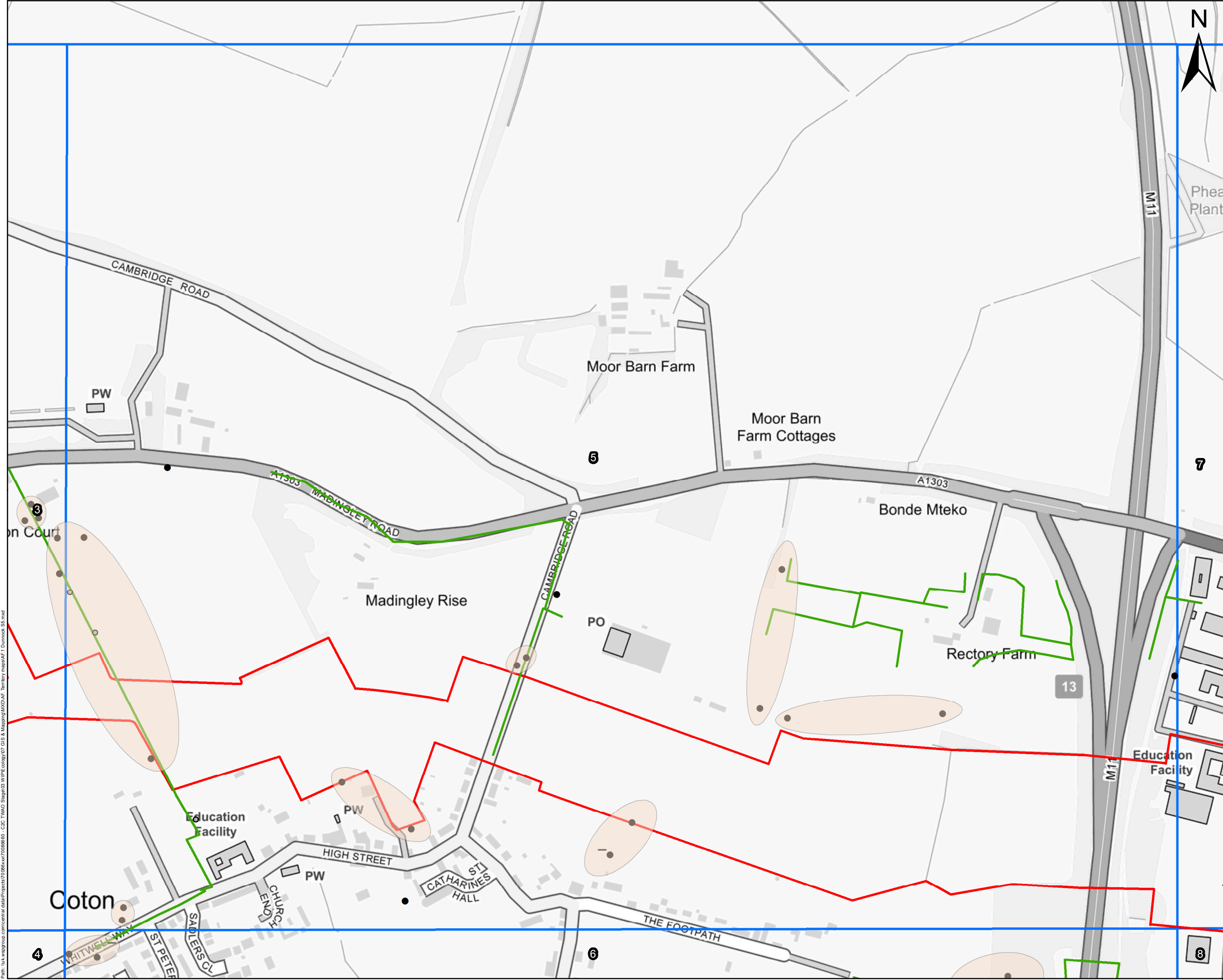
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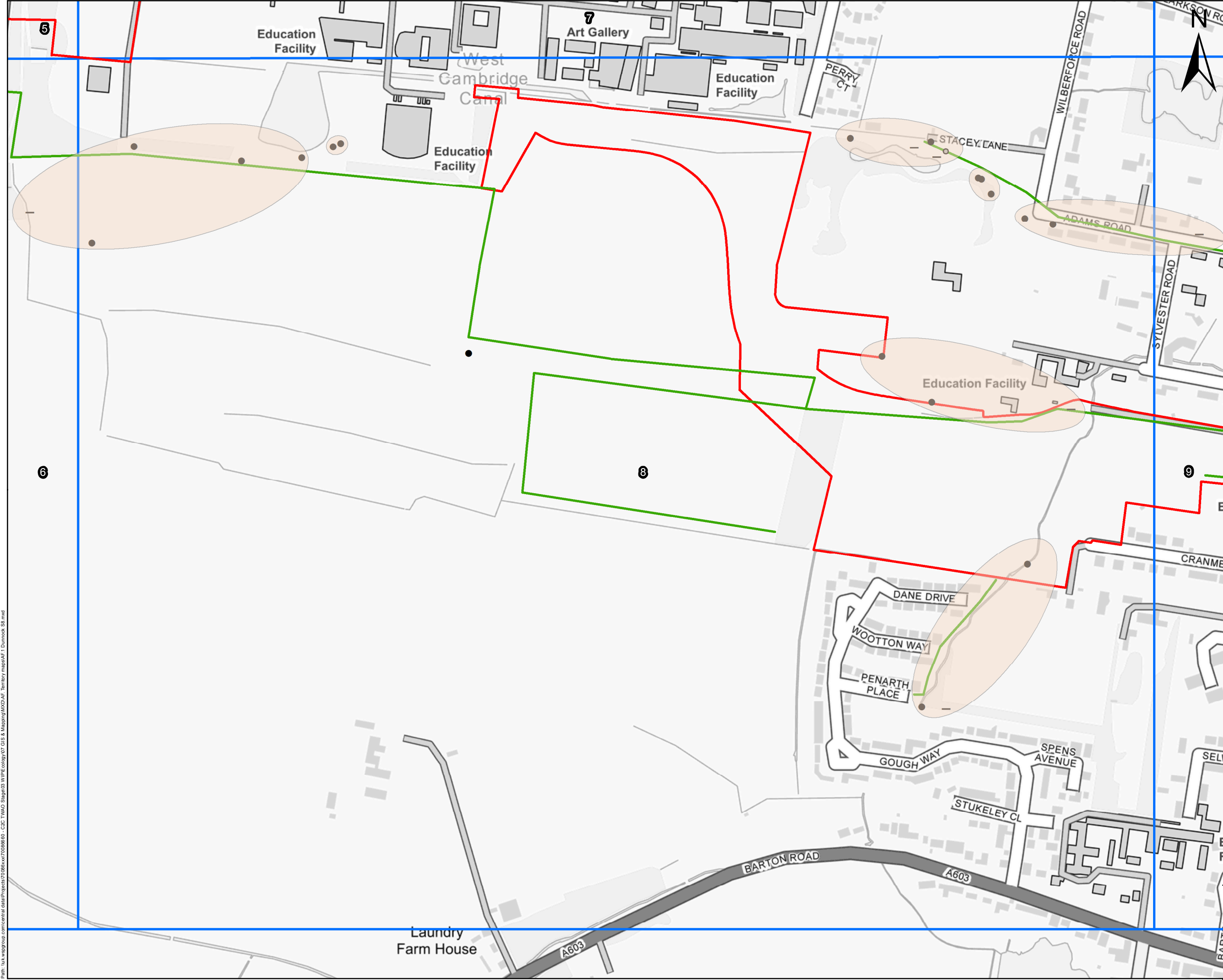
- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Dunnock territories
- Notation:
- Other
  - Singing
  - Calling
  - Same bird moving

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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Dunnock territories

Notation:

- Other
- Singing
- Calling
- Same bird moving

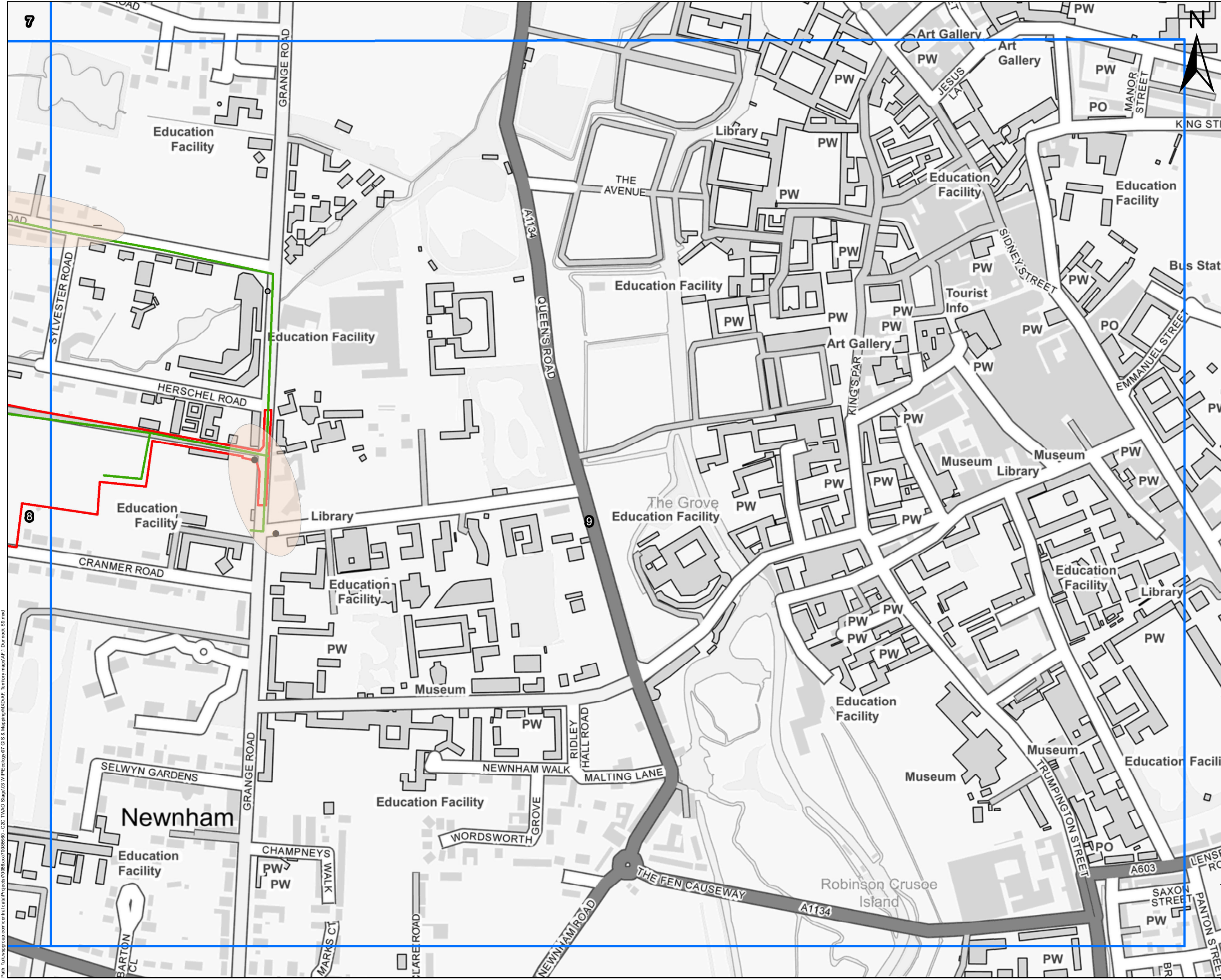
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Annex 5.8.5.1: Dunnock Territories Sector 8				
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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Dunstock territories
- Notation:
- Other
  - Singing
  - Calling
  - Same bird moving

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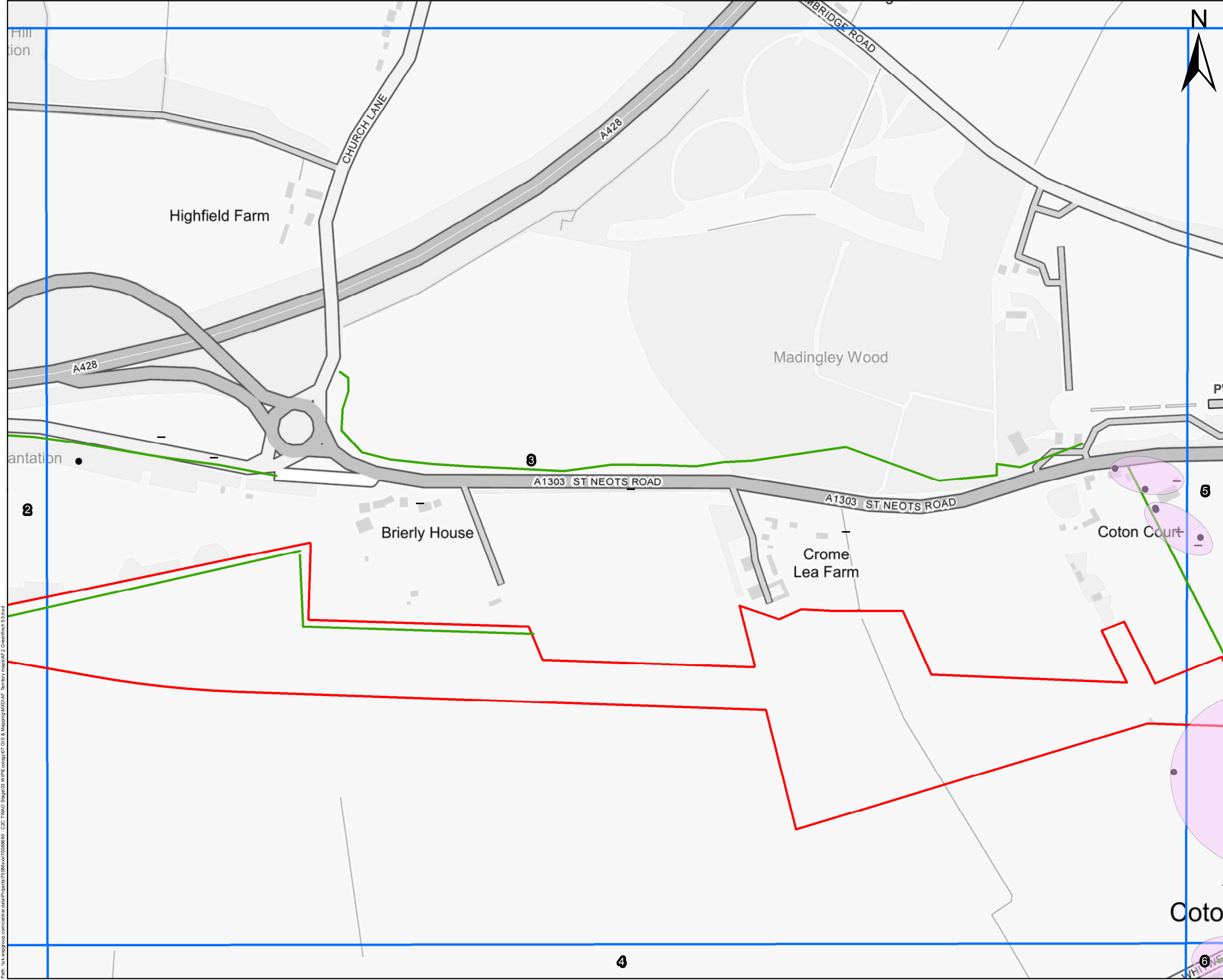
# **Annex 5.8.5.2**

## **Greenfinch territories**

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**wsp**





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Greenfinch territories

Notation:

- Singing
- Calling
- Flight Lines

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GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE

Drawing Title
Annex 5.8.5.2: Greenfinch Territories Sector 3

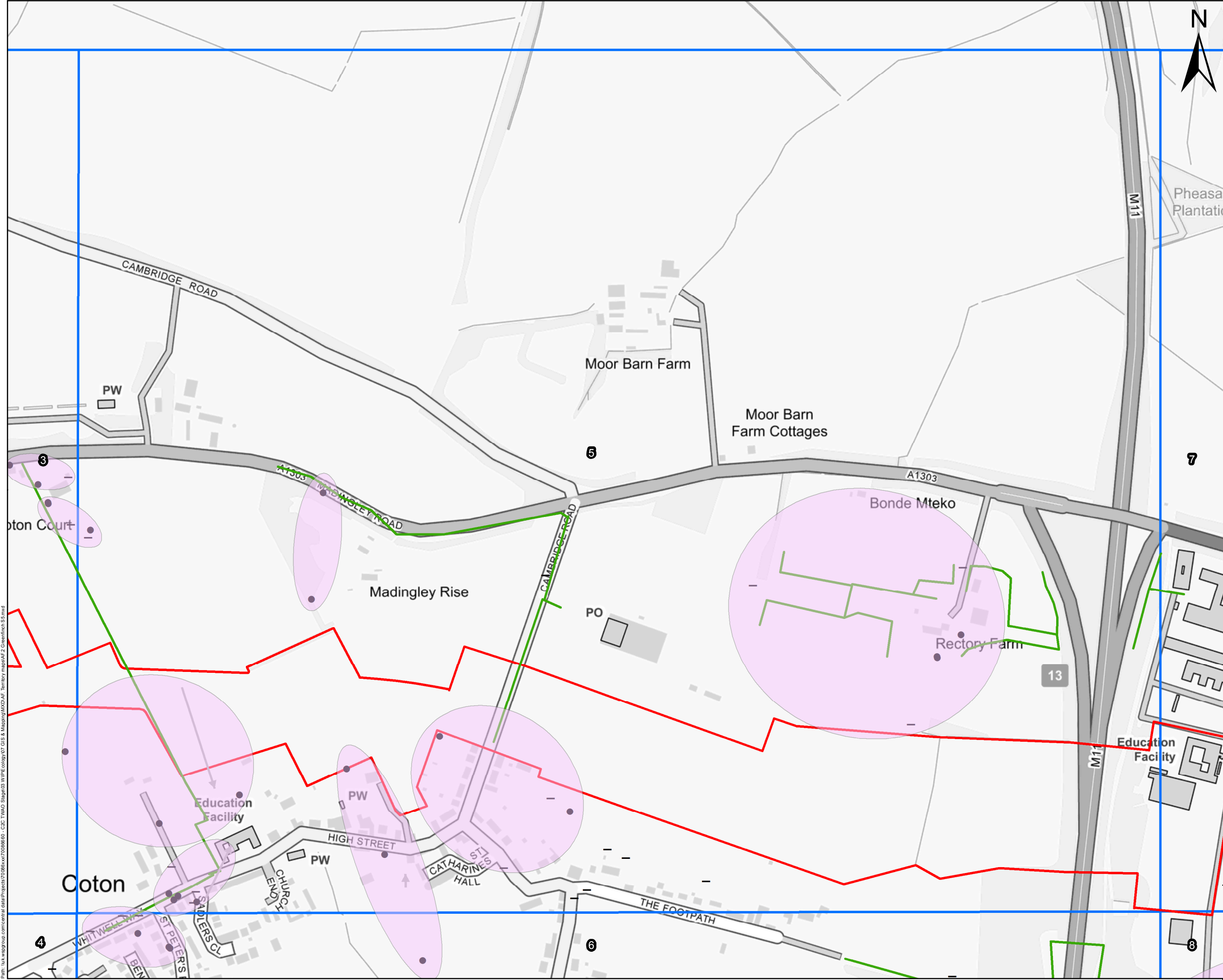
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Drawing Number  
70086660-xx-009

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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Greenfinch territories

Notation:

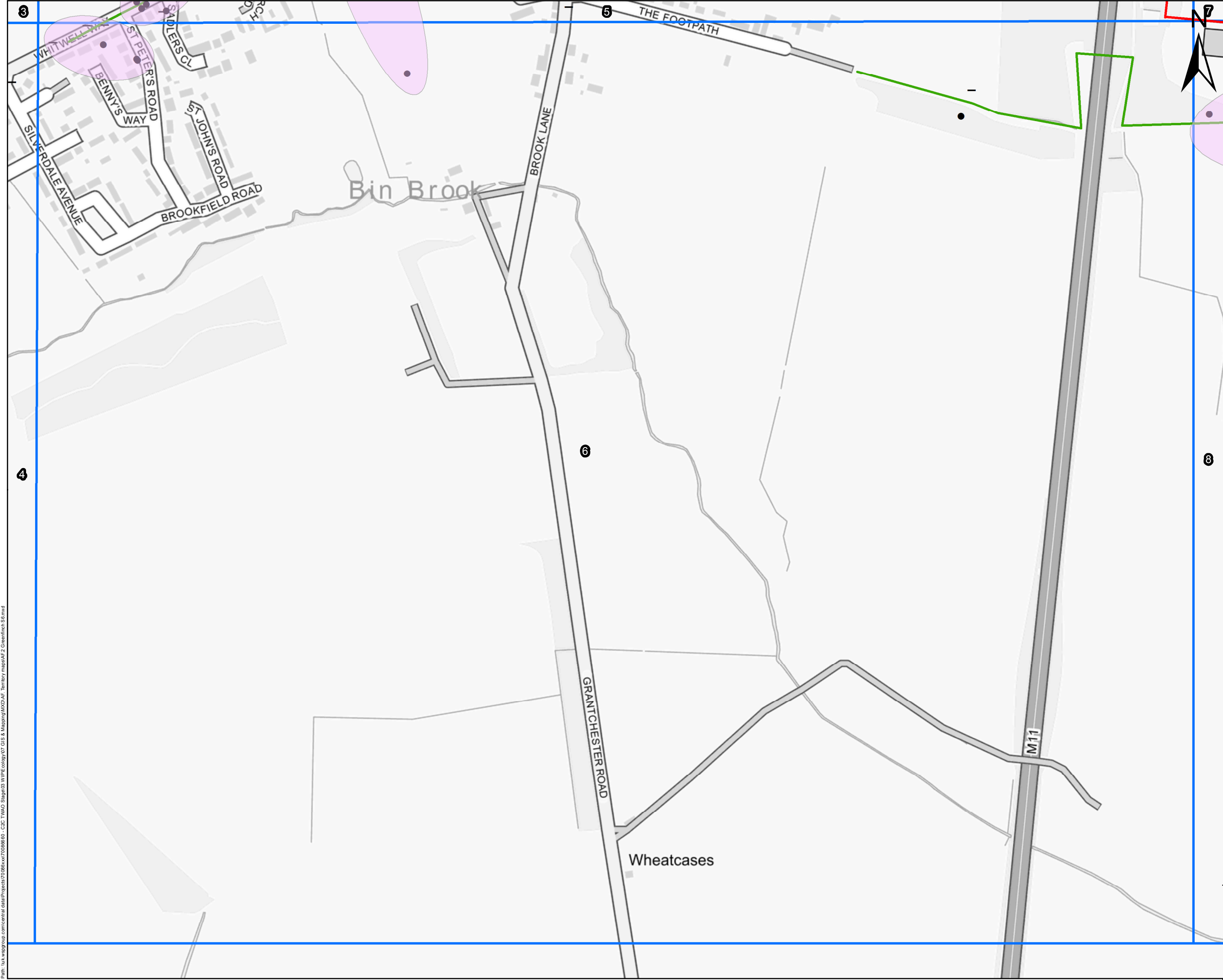
- Singing
- Calling
- Flight Lines

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Drawing Title				
Annex 5.8.5.2: Greenfinch Territories Sector 5				
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Drawing Number  
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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Greenfinch territories

Notation:

- Singing
- Calling
- Flight Lines

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Drawing Status	Version 1
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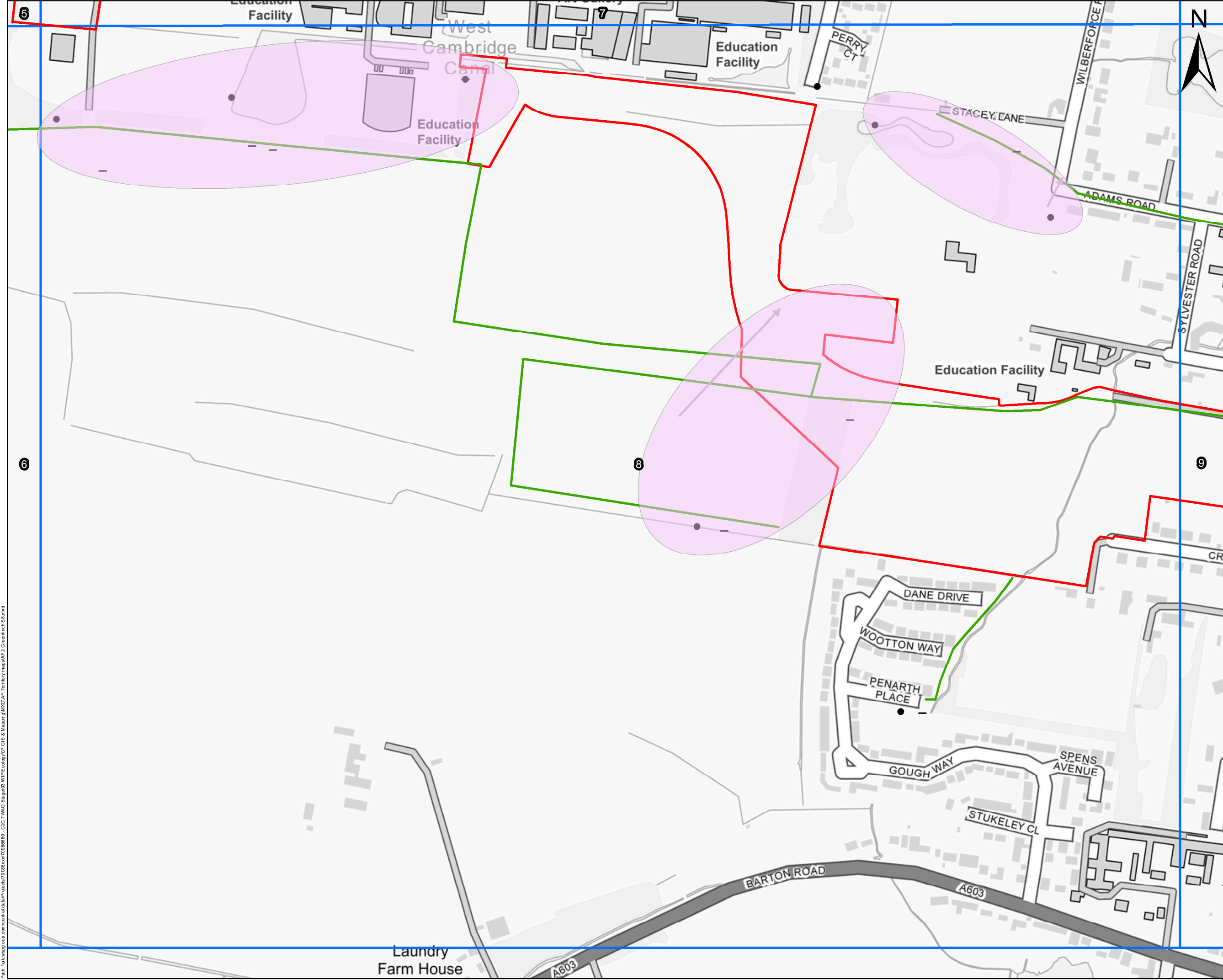
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Drawn	UKJPF001	Originated	JF	Date	25/11/2022
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Stage 1 check	AM	Stage 2 check	IE	0	50	100	150 m
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Drawing Number	70086660-xx-009
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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Greenfinch territories
- Notation:
- Singing
  - Calling
  - Flight Lines

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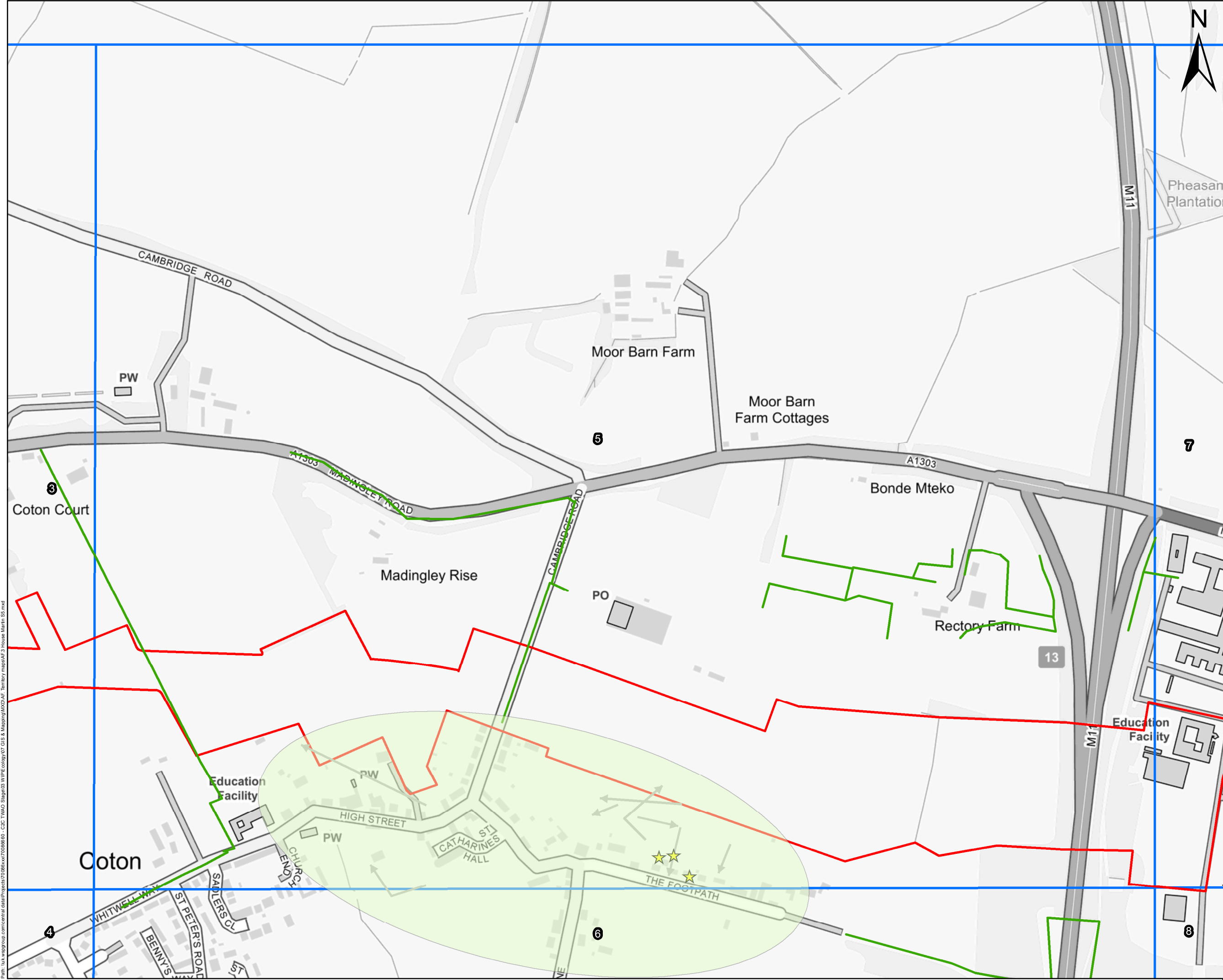
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	Check		
Drawing Status			
Version 1			
Job Title			
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE			
Drawing Title			
Annex 5.8.5.2: Greenfinch Territories Sector 8			
Scale at A3			
1:4,705			
Drawn		UKJPF001	
Stage 1 check	Stage 2 check	Originated	Date
AM	IE	JF	25/11/2022
0 50 100 150 m			
Drawing Number			
70086660-xx-009			

# **Annex 5.8.5.3**

**House Martin territories**

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**wsp**



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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- House Martin colonies
- Notation:
  - Nest
  - Flight Lines

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Revision Details	By	Check	Date	Suffix
Drawing Status	Version 1			
Job Title	GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE			
Drawing Title	Annex 5.8.5.3: House Martin Territories Sector 5			
Scale at A3	1:5,121			
Drawn	UKJPF001			
Stage 1 check	AM	Stage 2 check	IE	Originated JF
				Date 25/11/2022
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wsp				
Drawing Number	70086660-xx-014			



# **Annex 5.8.5.4**

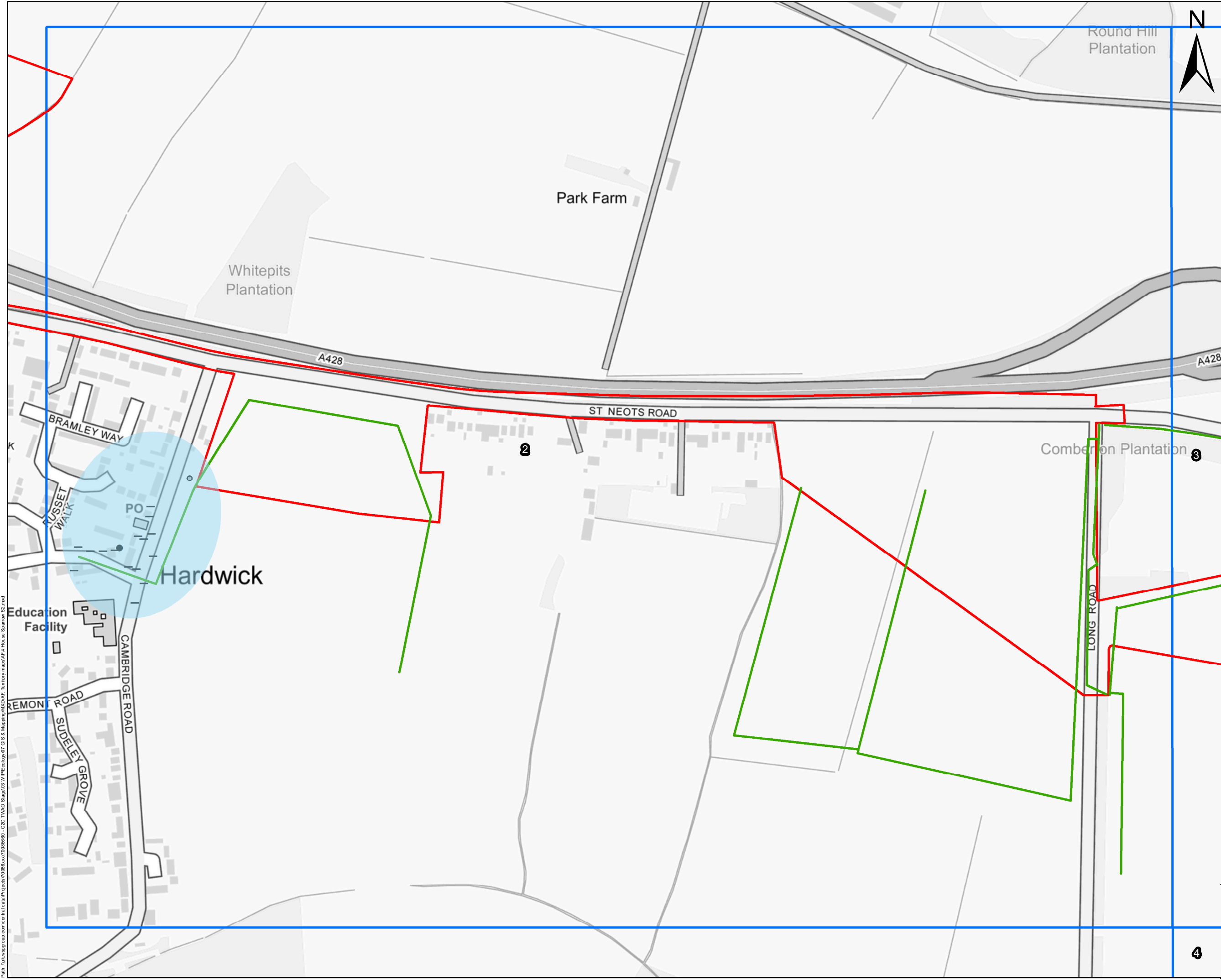
## **House Sparrow territories**

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**wsp**







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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- House Sparrow colonies

### Notation:

- Other
- Singing
- Calling
- Carrying food
- Flight Lines

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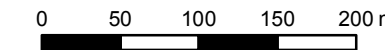
Drawing Status	Version 1
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Job Title	GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE
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Drawing Title	Annex 5.8.5.4: House Sparrow Territories Sector 2
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Scale at A3	1:4,807
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Drawn	UKJPF001	Originated	JF	Date	25/11/2022
Stage 1 check	AM	Stage 2 check	IE		



Drawing Number	70086660-xx-016
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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- House Sparrow colonies

Notation:

- Other
- Singing
- Calling
- Carrying food
- Flight Lines

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	Check		

Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.4: House Sparrow  
Territories Sector 4

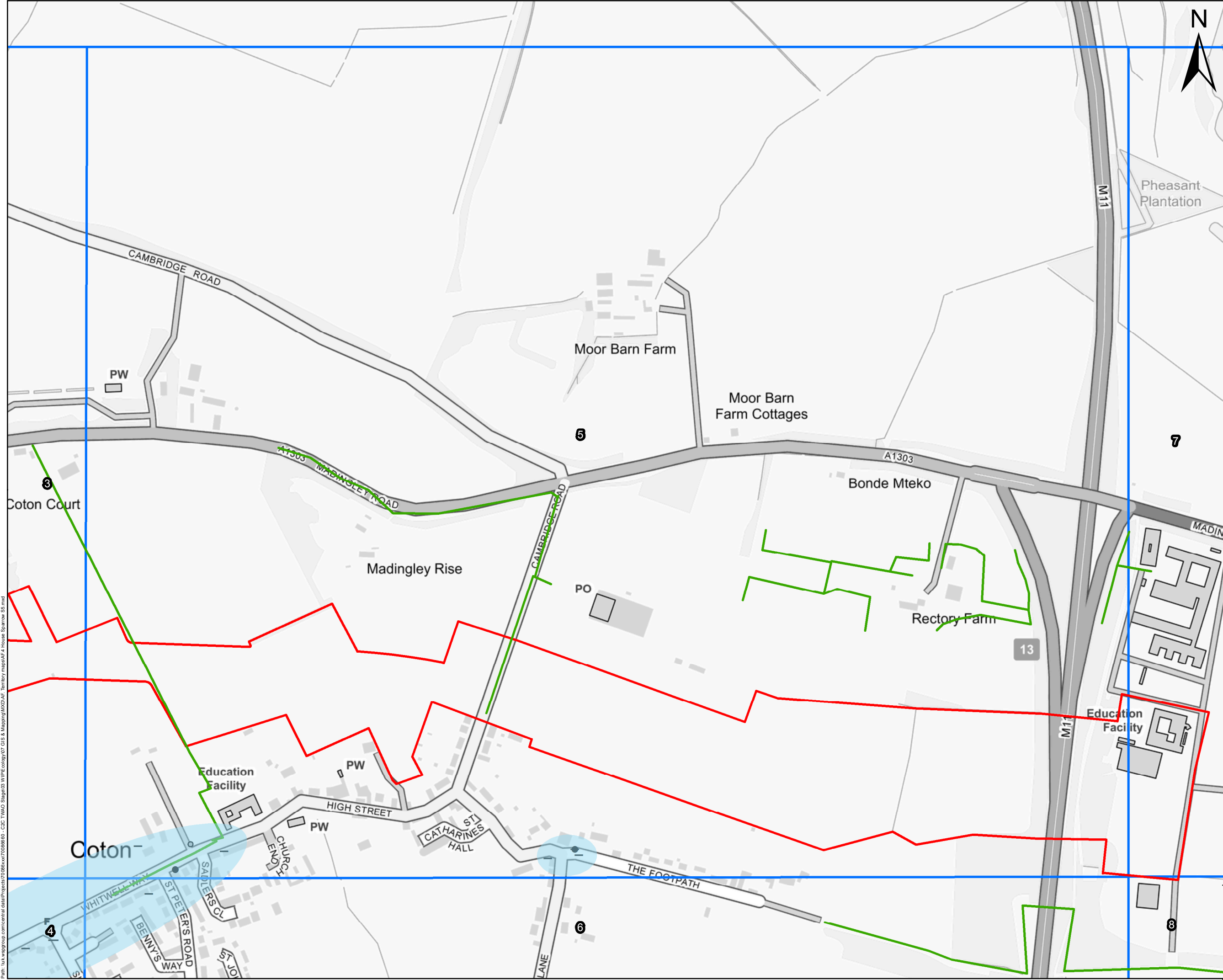
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Stage 1 check	Stage 2 check	Originated	Date
AM	IE	JF	25/11/2022

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Drawing Number  
70086660-xx-017




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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - House Sparrow colonies
- Notation:
- Other
  - Singing
  - Calling
  - Carrying food
  - Flight Lines

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Revision Details		By	Date	Suffix
Drawing Status		Check		
Version 1				
Title				
EATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.5.4: House Sparrow Territories Sector 5				
Scale at A3		1:5,207		
Drawn UKJPF001				
Stage 1 check AM	Stage 2 check IE	Originated JF	Date 25/11/2022	
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wsp				
Drawing Number				
70086660-xx-018				

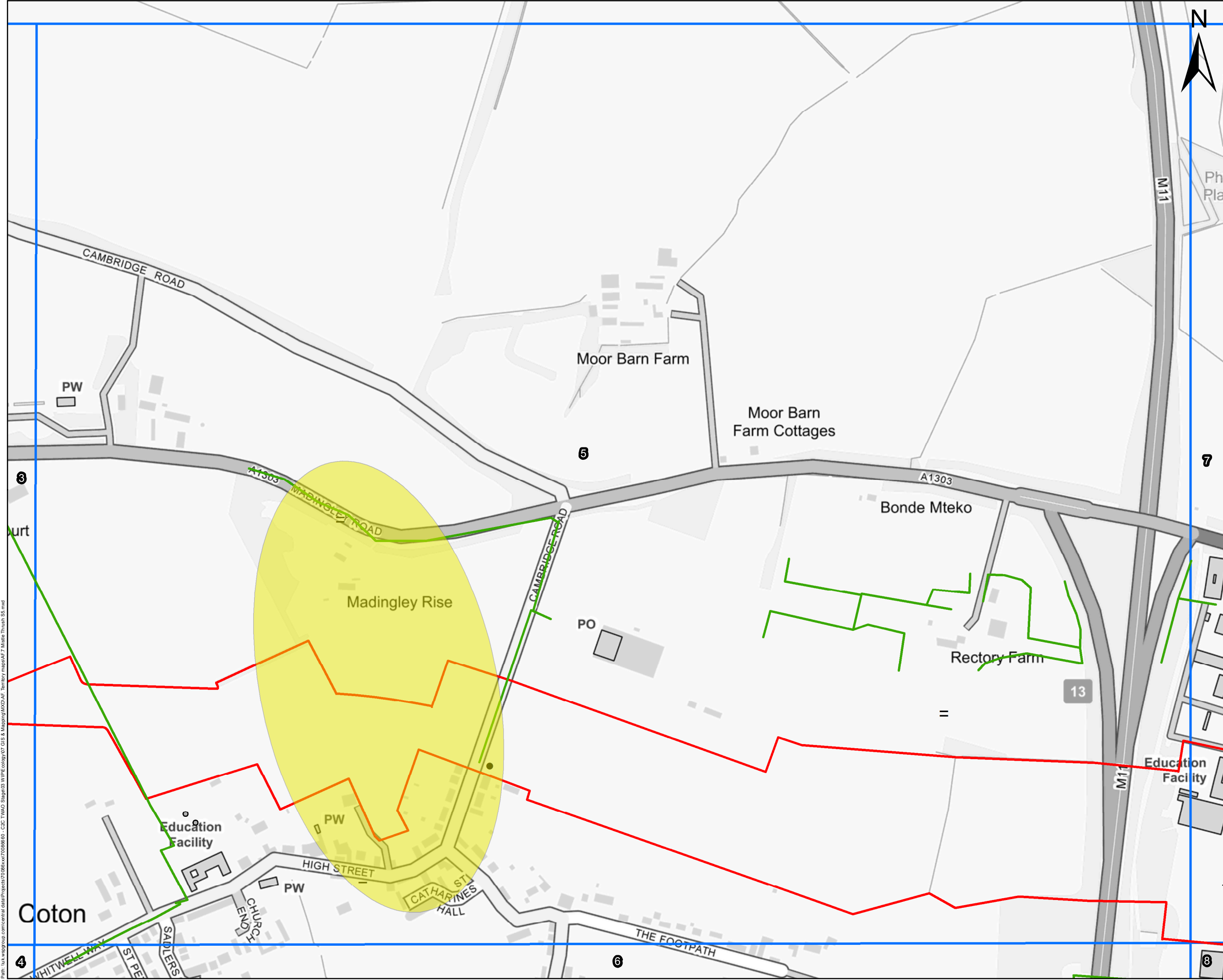
# **Annex 5.8.5.5**

## **Mistle Thrush territories**

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wsp





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Mistle Thrush territories

### Notation:

- Other
- Singing
- Alarm
- Calling
- Same bird moving
- Flight Lines

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Revision Details		By	Date	Suffix
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Drawing Status				
Version 1				
Job Title				
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.5.5: Mistle Thrush Territories Sector 5				
Scale at A3				
1:4,699				
Drawn		UKJPF001		
Stage 1 check	Stage 2 check	Originated	Date	
AM	IE	JF	25/11/2022	
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Drawing Number				
70086660-xx-021				





# **Annex 5.8.5.6**

**Skylark territories**

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**wsp**





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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Skylark territories

Notation:

- Other
- Singing
- Alarm
- Calling
- Same bird moving

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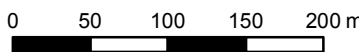
Drawing Status	Version 1
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Job Title	GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE
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Drawing Title	Annex 5.8.5.6: Skylark Territories Sector 2
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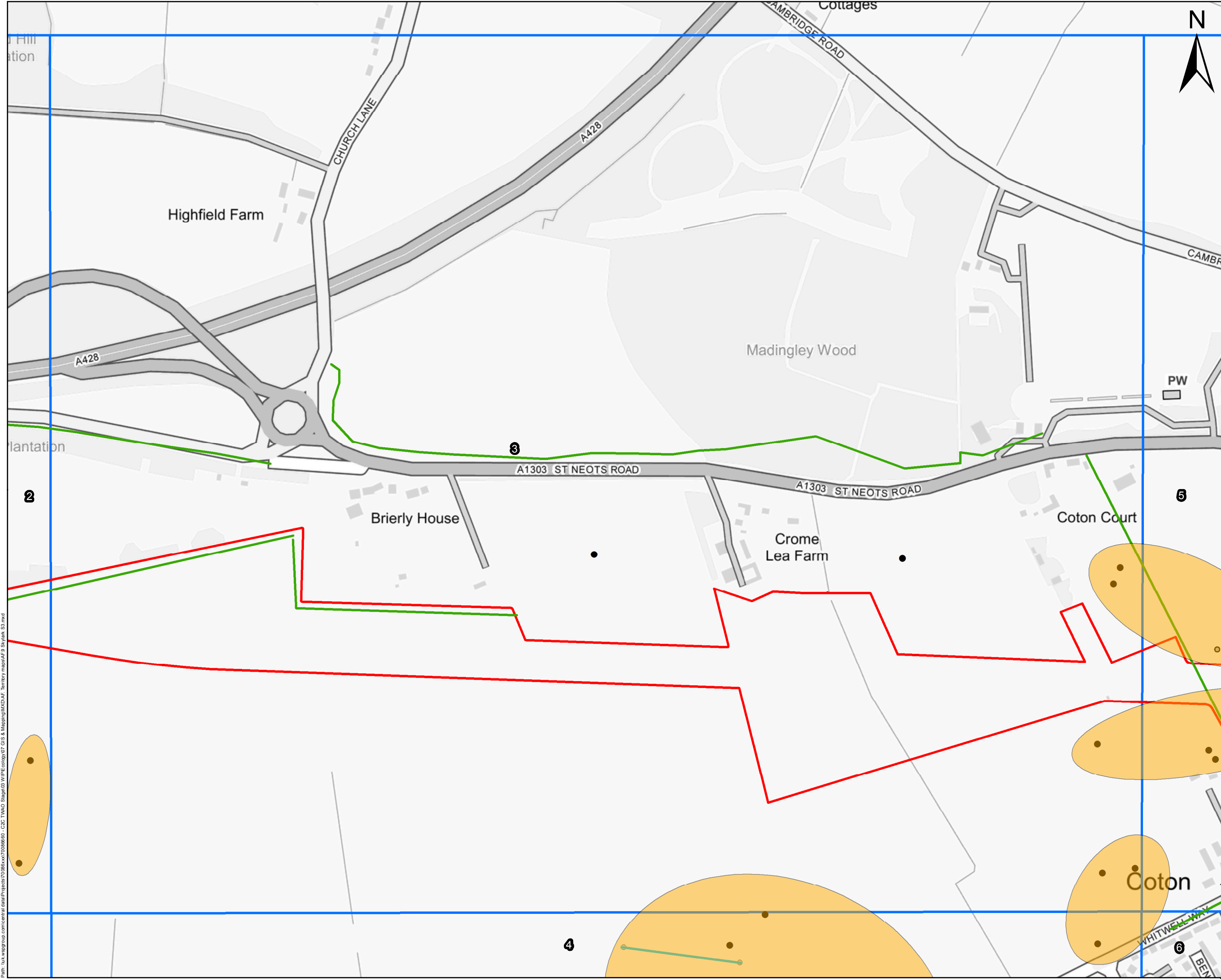
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Drawn	UKJPF001	Originated	JF	Date	25/11/2022
Stage 1 check	AM	Stage 2 check	IE		



Drawing Number	70086660-xx-024
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**Legend**

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Skylark territories

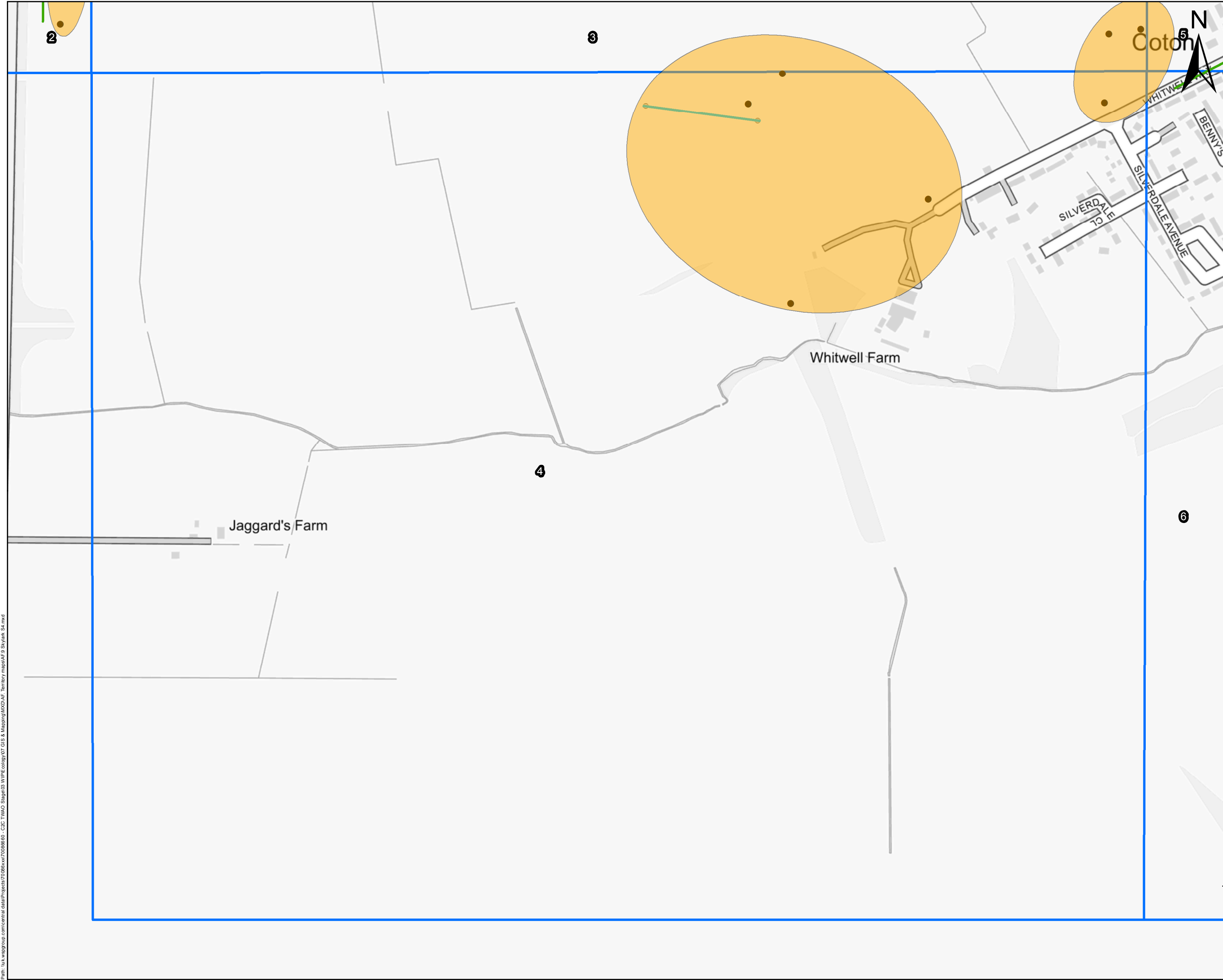
**Notation:**

- Other
- Singing
- Alarm
- Calling
- Same bird moving

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Revision Details		By	Date	Suffix
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Drawing Status				
Version 1				
Job Title				
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.5.6: Skylark Territories Sector 3				
Scale at A3				
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Stage 1 check	Stage 2 check	Originated	Date	
AM	IE	JF	25/11/2022	
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Drawing Number				
70086660-xx-024				

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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Skylark territories

Notation:

- Other
- Singing
- Alarm
- Calling
- Same bird moving

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Revision Details	By	Date	Suffix
	Check		

Drawing Status

Version 1

Job Title

GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title

Annex 5.8.5.6: Skylark  
Territories Sector 4

Scale at A3

1:5,105

Drawn	UKJPF001		
Stage 1 check	Stage 2 check	Originated	Date
AM	IE	JF	25/11/2022

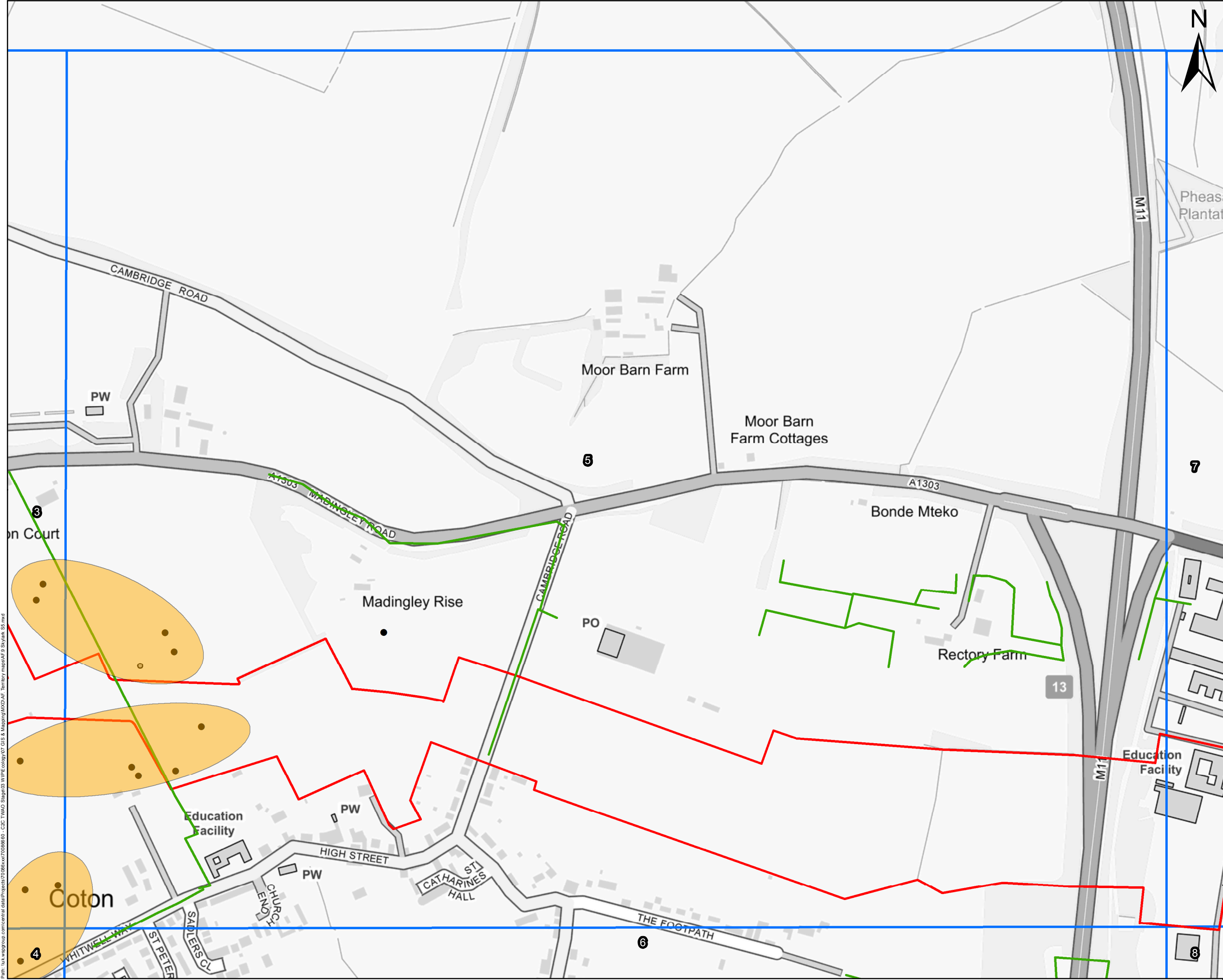
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Drawing Number

7008660-xx-024





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Skylark territories

### Notation:

- Other
- Singing
- Alarm
- Calling
- Same bird moving

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Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.6: Skylark  
Territories Sector 5

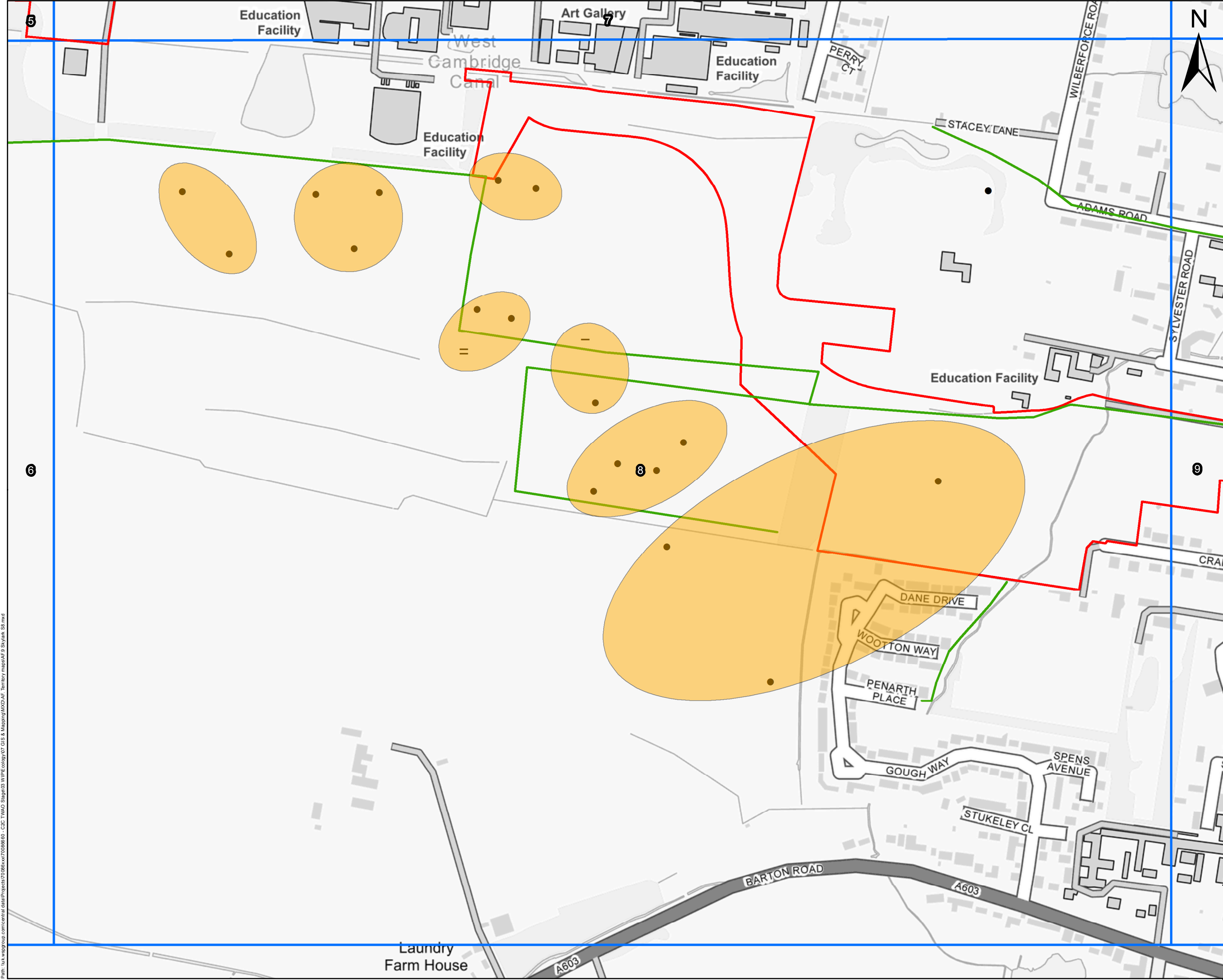
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Stage 1 check AM Stage 2 check IE Originated JF Date 25/11/2022

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Drawing Number  
70086660-xx-024



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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Skylark territories
- Notation:**
- Other
  - Singing
  - Alarm
  - Calling
  - Same bird moving

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Revision Details	By	Date	Scale
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Drawing Status			
Version 1			
Job Title			
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE			
Drawing Title			
Annex 5.8.5.6: Skylark Territories Sector 8			
Scale at A3			
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Drawn		Date	
UKJPF001		25/11/2022	
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wsp			
Drawing Number			
7008660-xx-024			

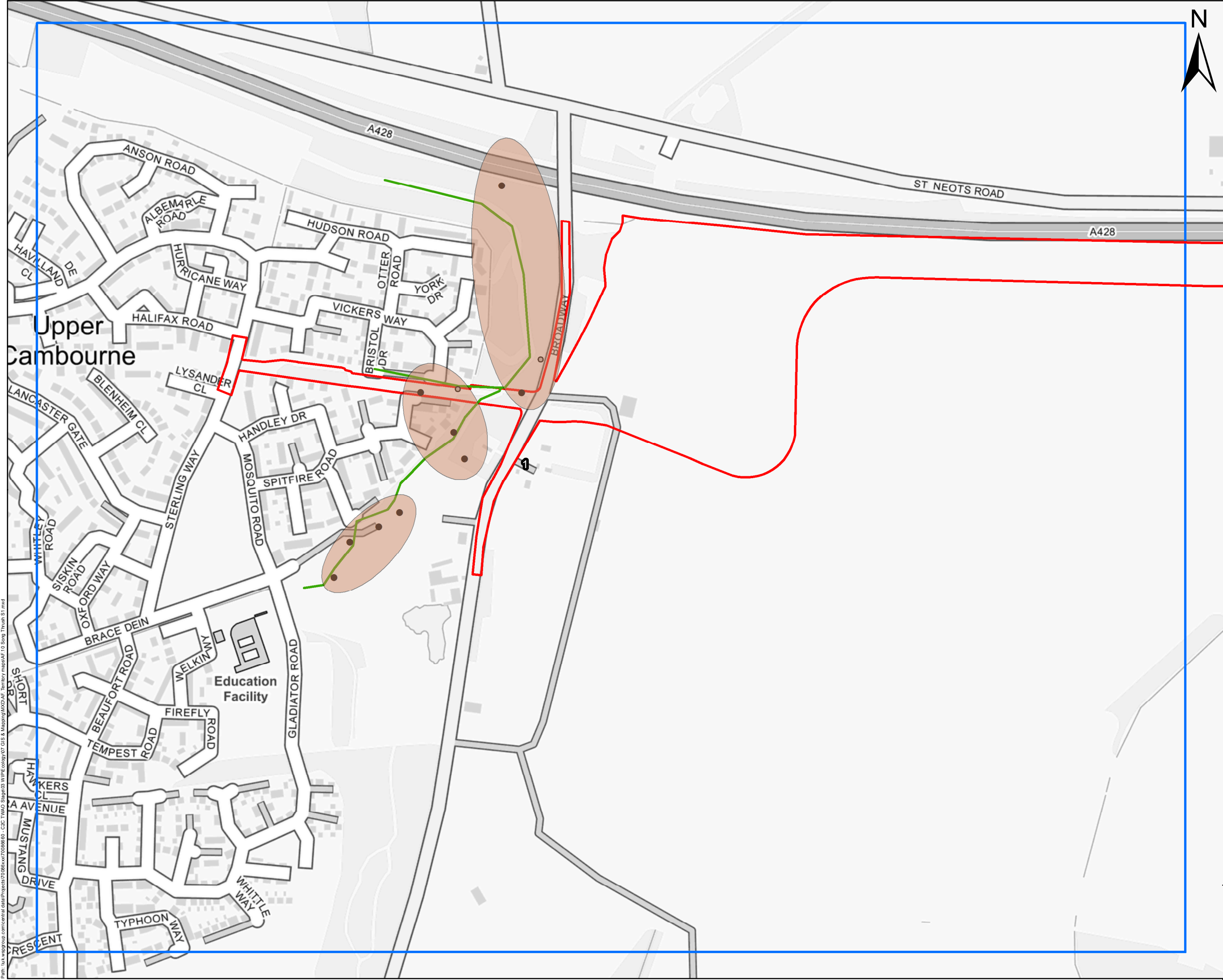
# **Annex 5.8.5.7**

## **Song Thrush territories**

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**wsp**





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

### Notation:

- Other
- Singing
- Calling
- Same bird moving

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Revision Details	By	Date	Check
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Drawing Status

Version 1

Job Title

GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title

Annex 5.8.5.7: Song Thrush  
Territories Sector 1

Scale at A3

1:4,653

Drawn	UKJPF001	Originated	JF	Date	25/11/2022
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Stage 1 check	AM	Stage 2 check	IE
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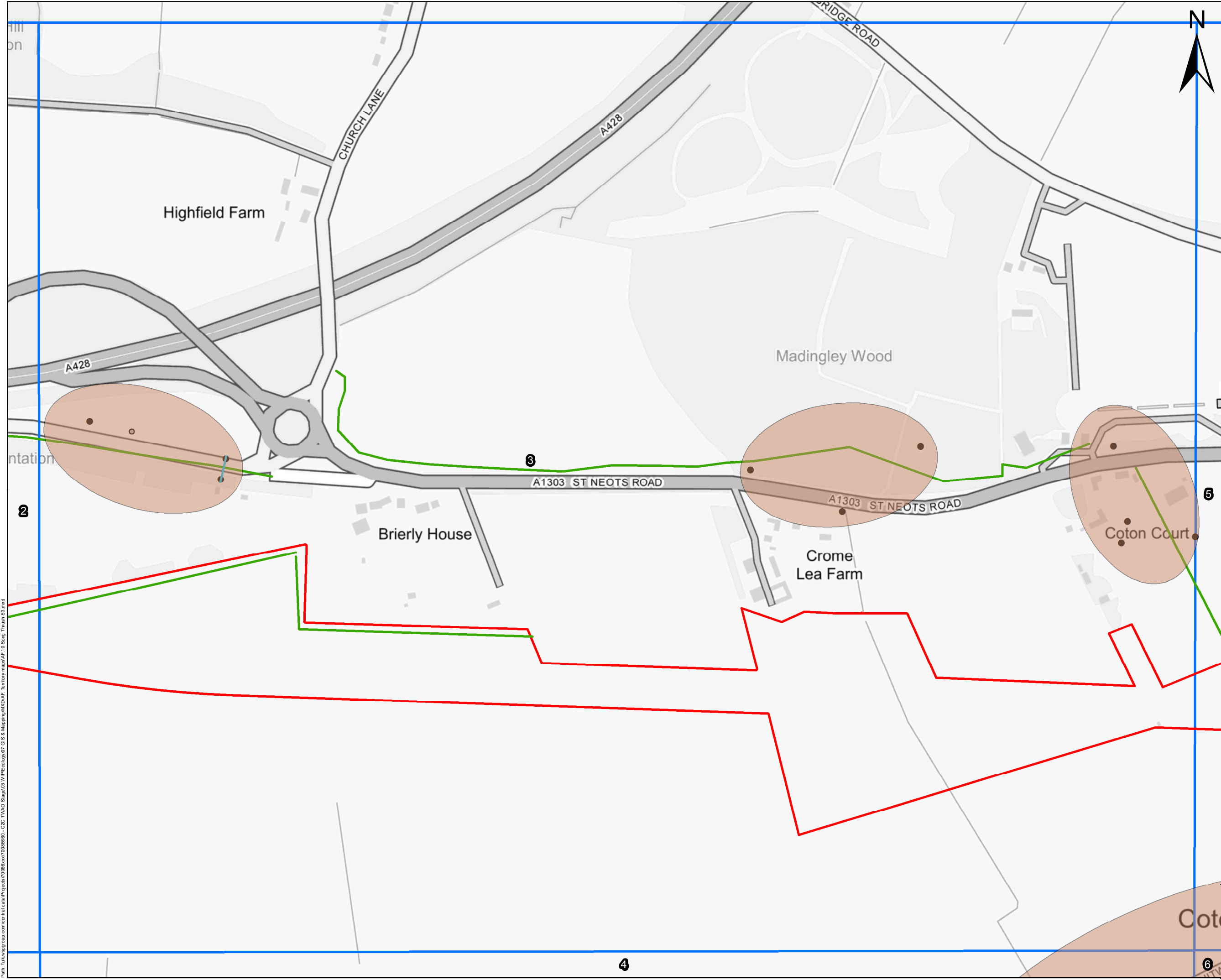
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Drawing Number

70086660-xx-029





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

### Notation:

- Other
- Singing
- Calling
- Same bird moving

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Revision Details	By	Date	Suffix
	Check		

Drawing Status	Version 1
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Job Title	GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE
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Drawing Title	Annex 5.8.5.7: Song Thrush Territories Sector 3
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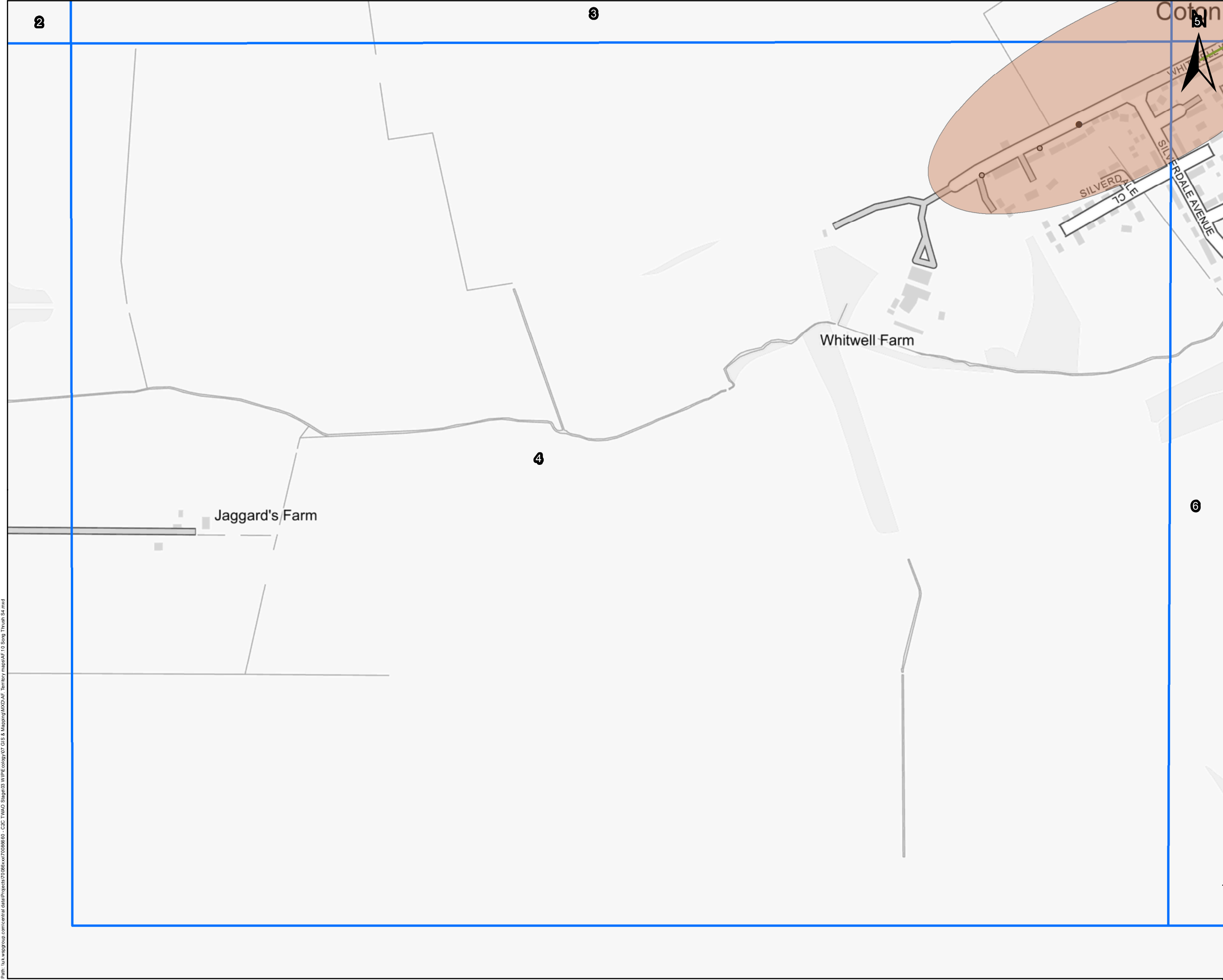
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Drawn	UKJPF001	Originated	JF	Date	25/11/2022
Stage 1 check	AM	Stage 2 check	IE		

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Drawing Number	70086660-xx-029
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**Legend**

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

**Notation:**

- Other
- Singing
- Calling
- Same bird moving

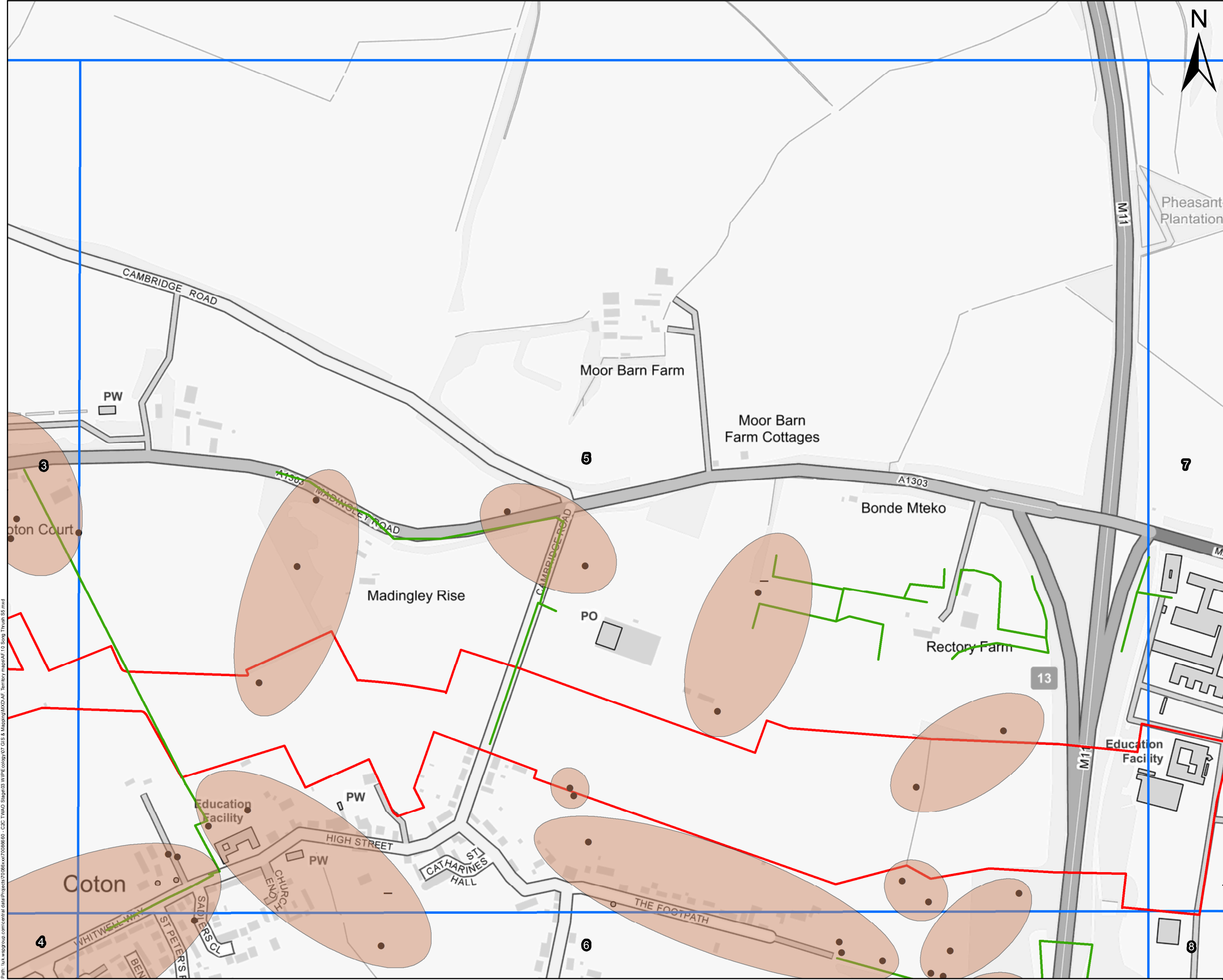
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Revision Details	By Check	Date	Suffix
Drawing Status			
Version 1			
Job Title			
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE			
Drawing Title			
Annex 5.8.5.7: Song Thrush Territories Sector 4			
Scale at A3			
1:4,896			
Drawn UKJPF001			
Stage 1 check AM	Stage 2 check IE	Originated JF	Date 25/11/2022
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Drawing Number  
70086660-xx-029



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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

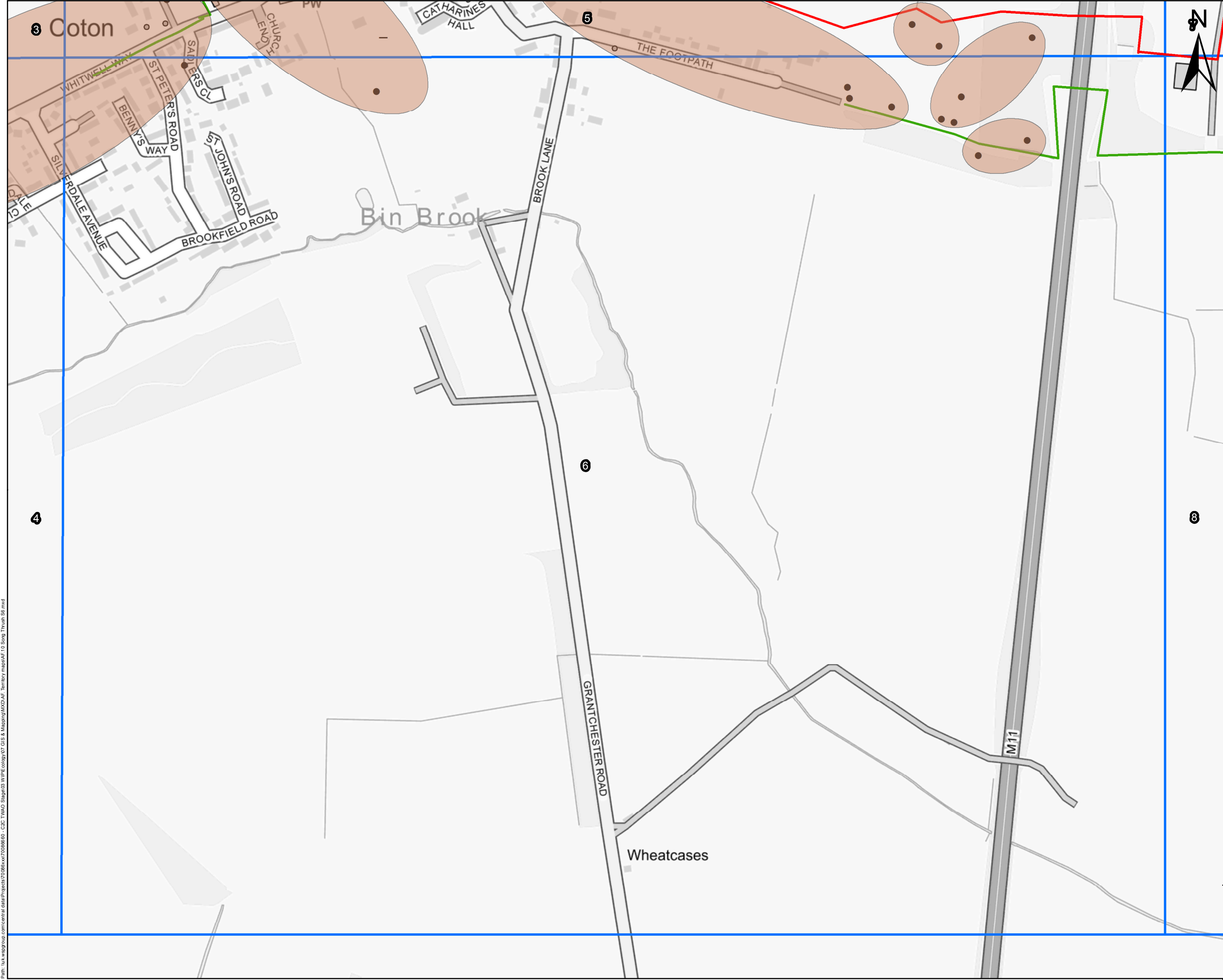
Notation:

- Other
- Singing
- Calling
- Same bird moving

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Drawing Status		Check		
Version 1				
Job Title				
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.5.7: Song Thrush Territories Sector 5				
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Stage 1 check	Stage 2 check	Originated	Date	
AM	IE	JF	25/11/2022	
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Drawing Number				
70086660-xx-029				





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

### Notation:

- Other
- Singing
- Calling
- Same bird moving

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Revision Details		By Check	Date Suffr

Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.7: Song Thrush  
Territories Sector 6

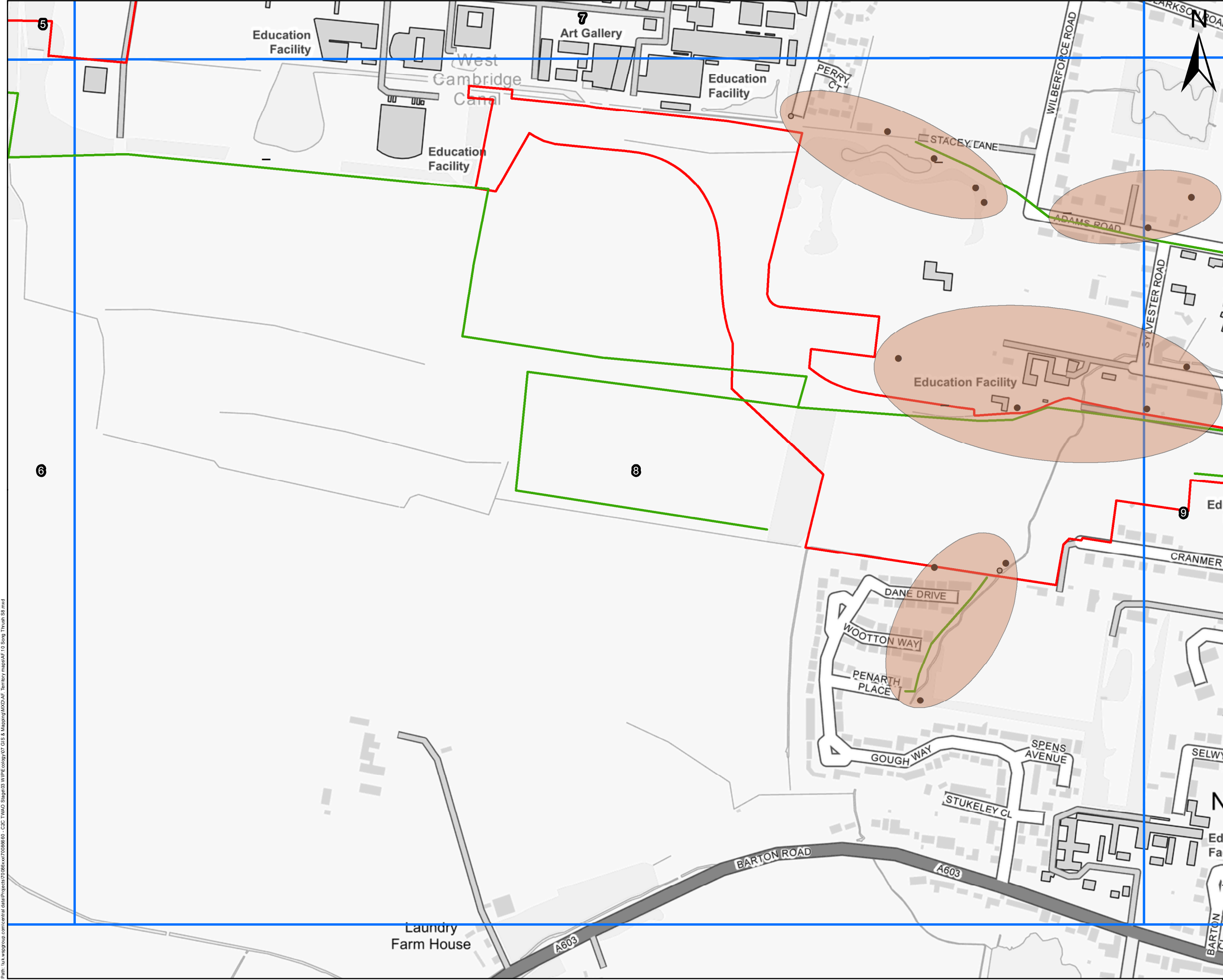
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Drawn UKJPF001			
Stage 1 check AM	Stage 2 check IE	Originated JF	Date 25/11/2022



Drawing Number  
70086660-xx-029





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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

### Notation:

- Other
- Singing
- Calling
- Same bird moving

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Drawing Status	Version 1
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Job Title	GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE
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Drawing Title	Annex 5.8.5.7: Song Thrush Territories Sector 8
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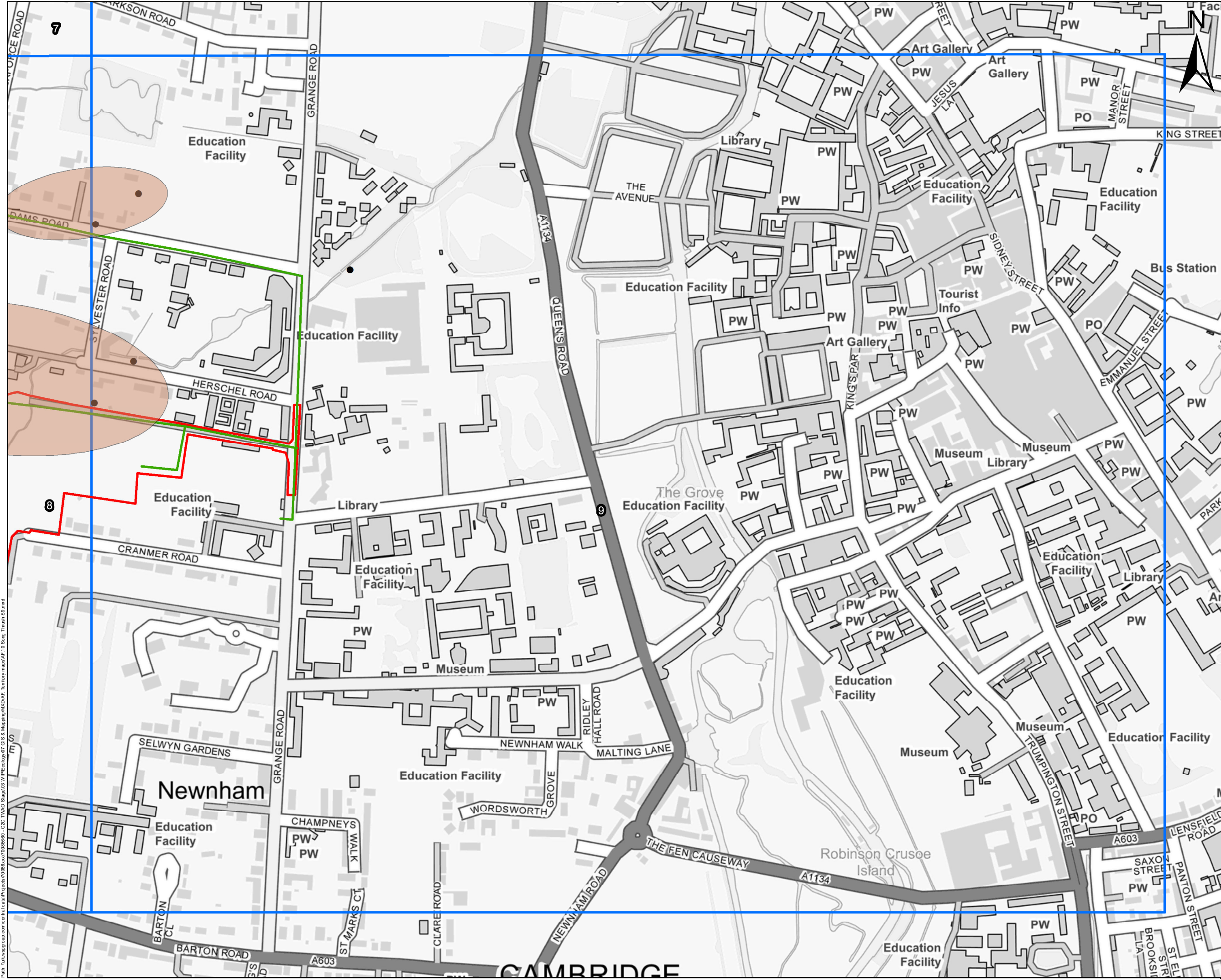
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Drawn	UKJPF001	Originated	JF	Date	25/11/2022
Stage 1 check	AM	Stage 2 check	IE		



Drawing Number	70086660-xx-029
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**Legend**

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Song Thrush territories

**Notation:**

- Other
- Singing
- Calling
- Same bird moving

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Revision Details	By	Check	Date	Notes
Version 1				

Drawing Status

Job Title

GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title

Annex 5.8.5.7: Song Thrush Territories Sector 9

Scale at A3

1:5,068

Drawn	UKJPF001	Originated	Date
Stage 1 check	AM	IE	JF

25/11/2022

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**wsp**

Drawing Number

70086660-xx-029

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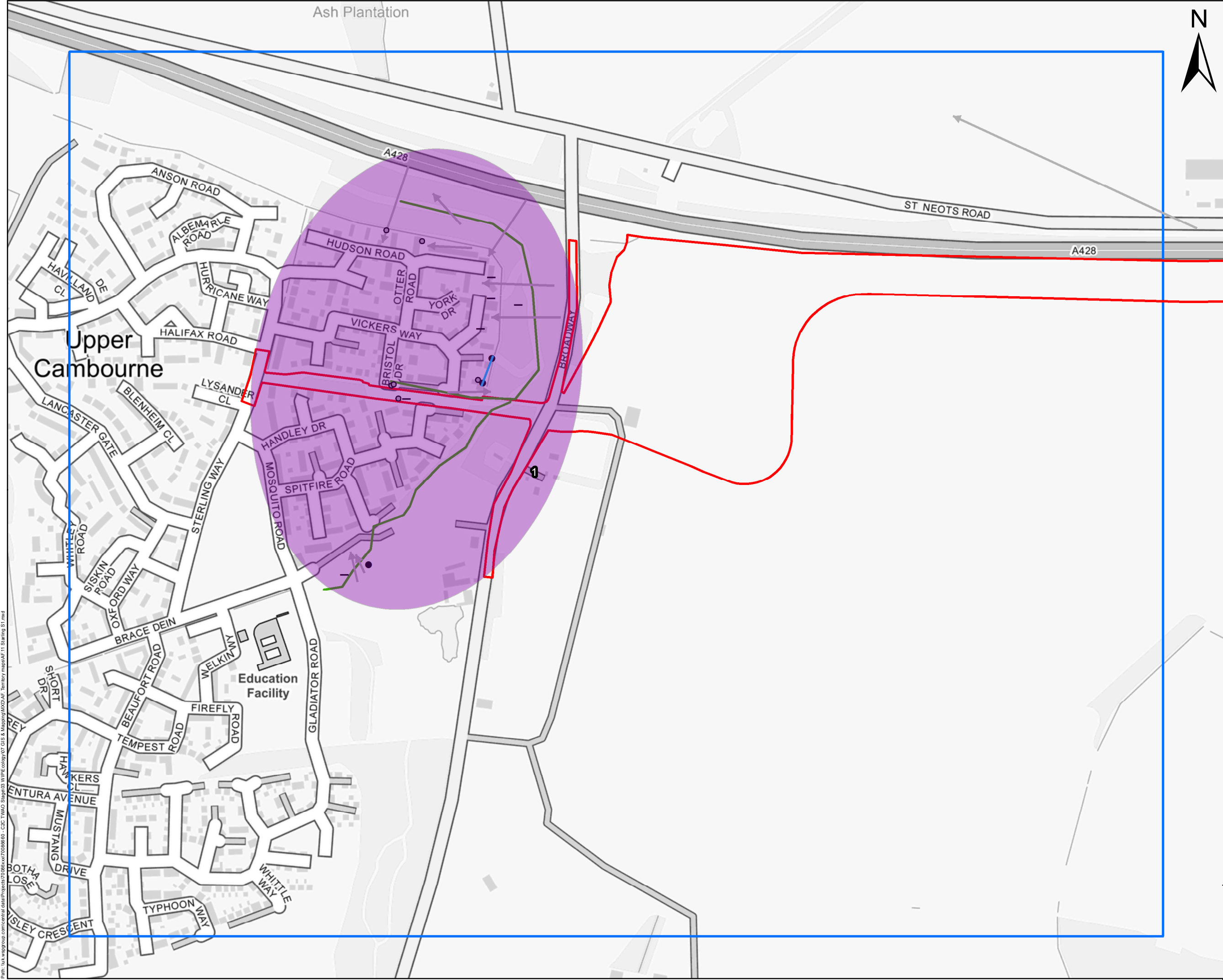
# **Annex 5.8.5.8**

**Starling territories**

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**wsp**





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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Starling colonies
- Notation:
- Other
  - Singing
  - Calling
  - Flight Lines
  - Same bird moving

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Drawing Status  
**Version 1**

Job Title  
**GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE**

Drawing Title  
**Annex 5.8.5.8: Starling  
Territories Sector 1**

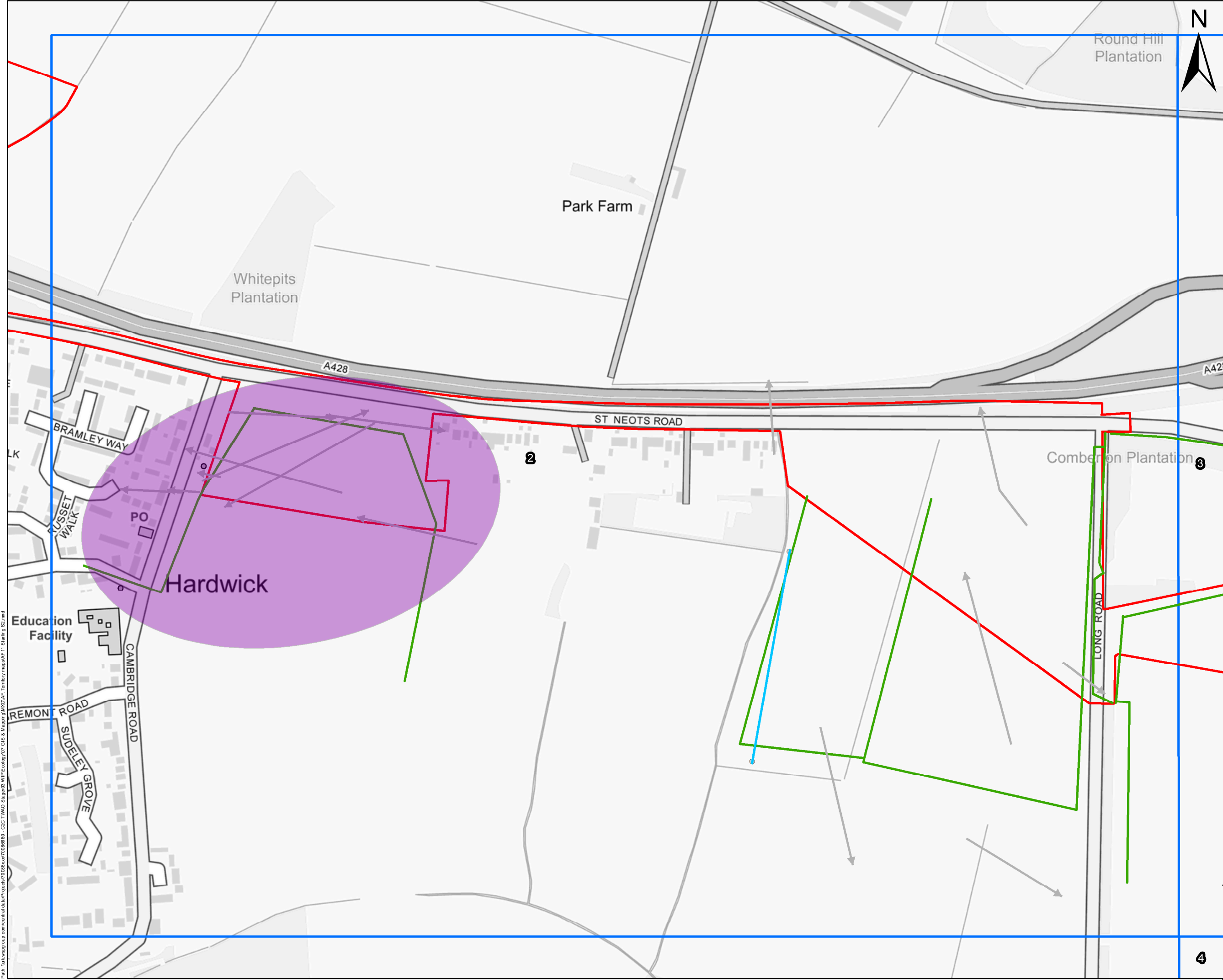
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Stage 1 check	Stage 2 check	JF	25/11/2022
AM	IE		



Drawing Number  
70086660-xx-036





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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Starling colonies
- Notation:
- Other
  - Singing
  - Calling
  - Flight Lines
  - Same bird moving

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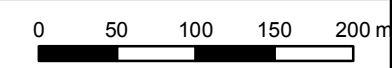
Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

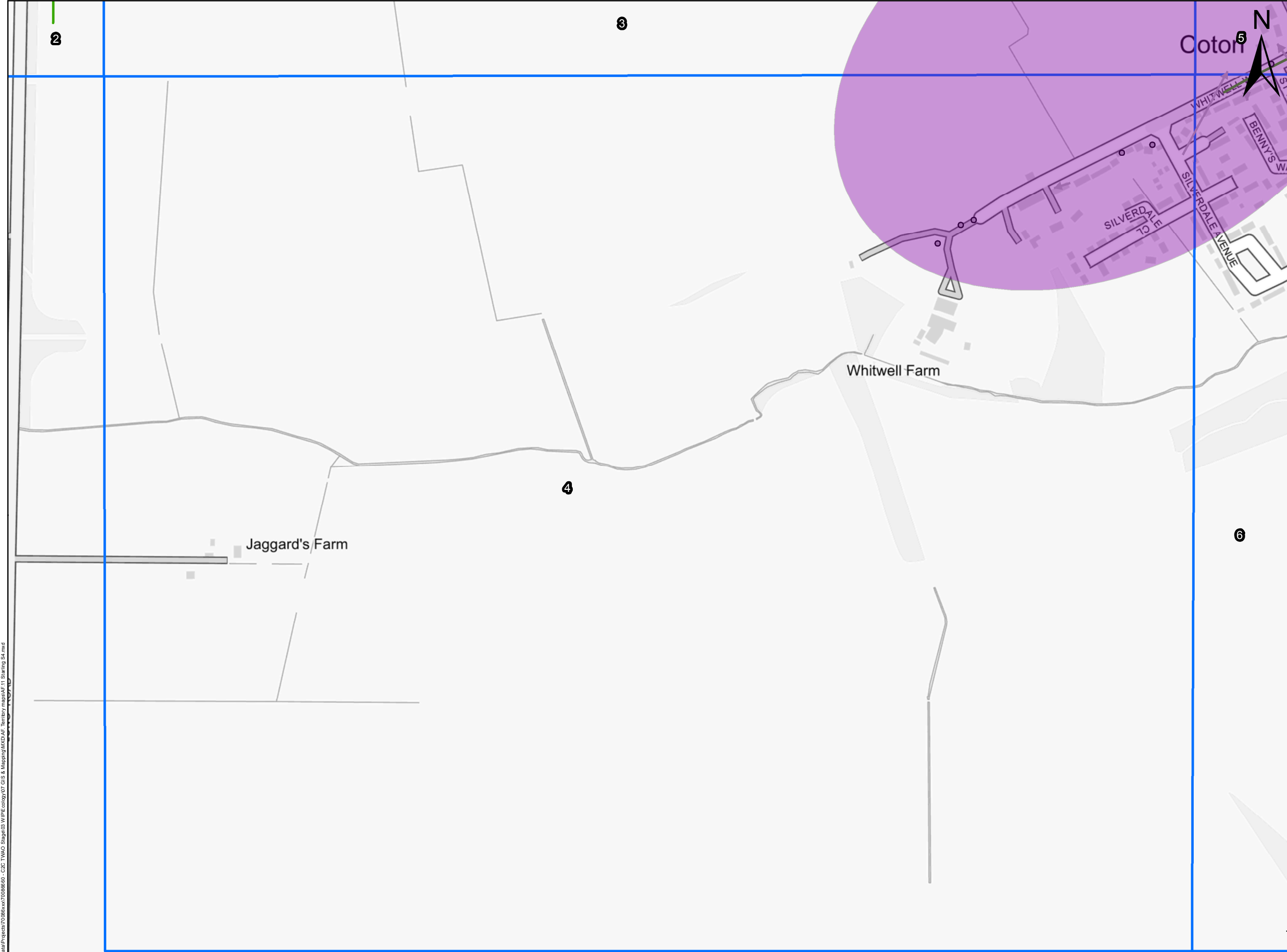
Drawing Title  
Annex 5.8.5.8: Starling  
Territories Sector 2

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Drawn	UKJPF001	Originated	Date
Stage 1 check	AM	Stage 2 check	IE
AM	IE	JF	25/11/2022



Drawing Number  
70086660-xx-036



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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Starling colonies

Notation:

- Other
- Singing
- Calling
- Flight Lines
- Same bird moving

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By	Check	Date	Suffix

Drawing Status

Version 1

Job Title

GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title

Annex 5.8.5.8: Starling  
Territories Sector 4

Scale at A3

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Drawn		Date	
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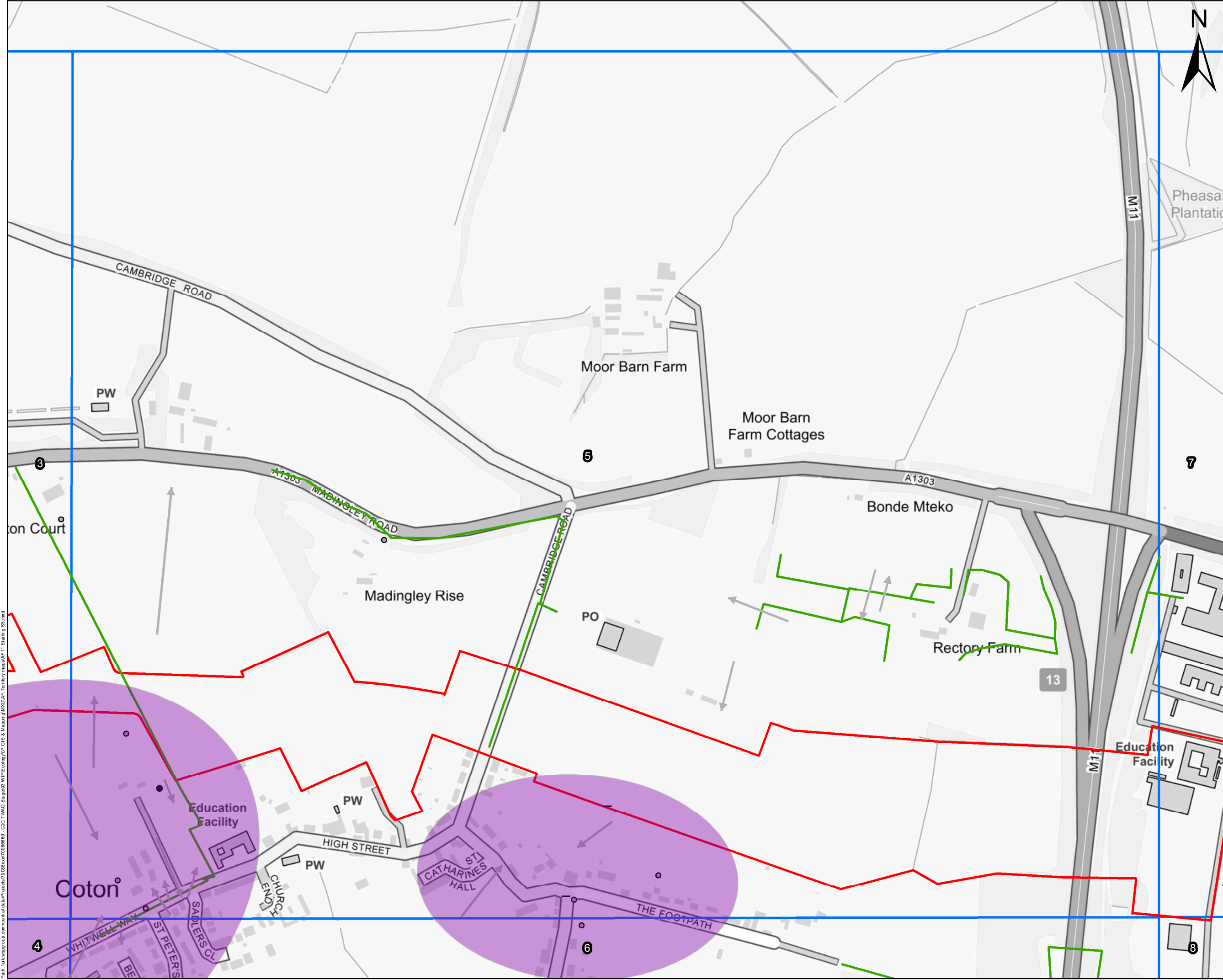
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AM	IE	JF	25/11/2022

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WSP

Drawing Number

70086660-xx-036



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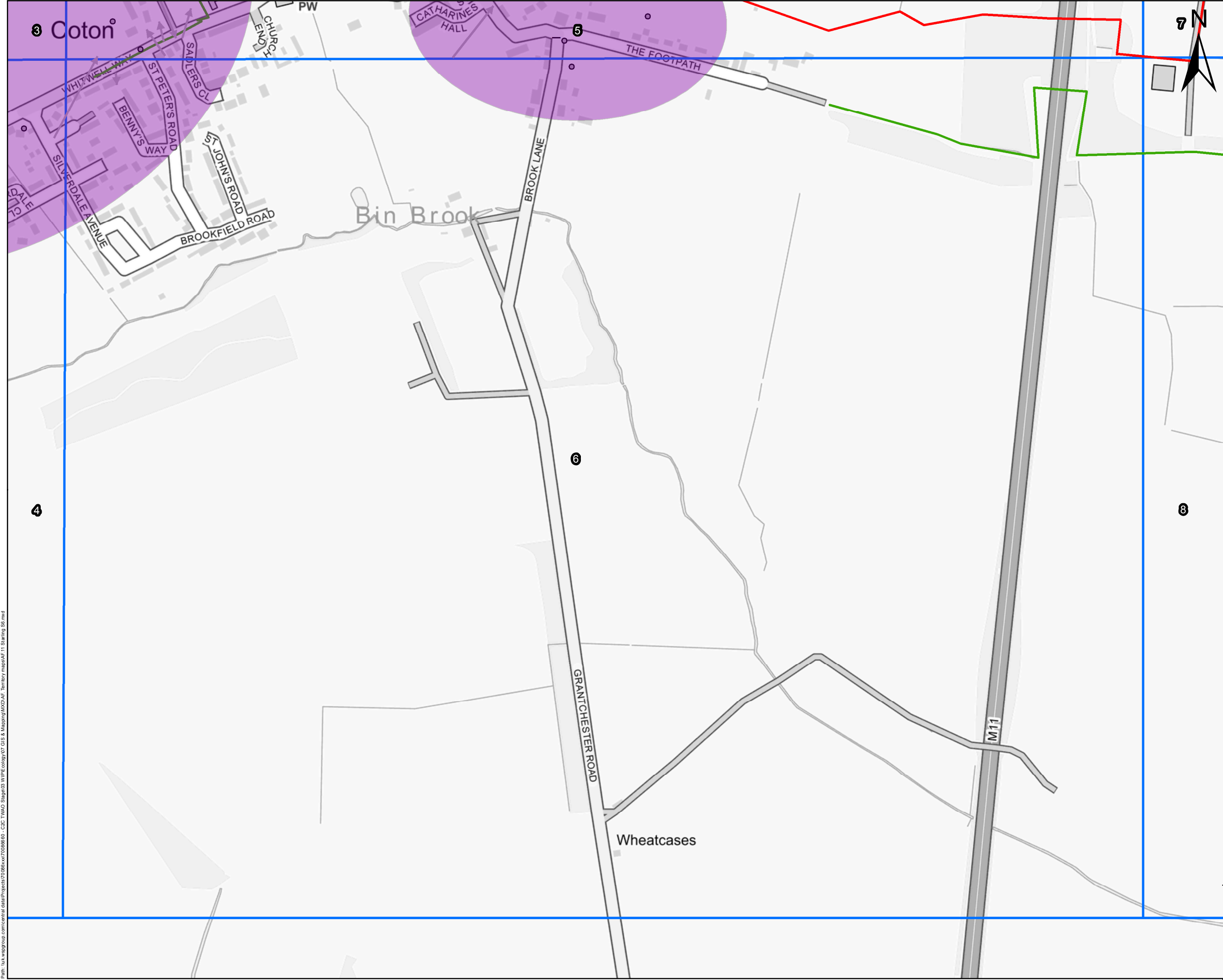
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- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Starling colonies
- Notation:
- Other
  - Singing
  - Calling
  - Flight Lines
  - Same bird moving

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Drawing Status		Check		
Version 1				
Title				
EATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.5.8: Starling Territories Sector 5				
Scale at A3				
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1 check AM	Stage 2 check IE	Originated JF	Date 25/11/2022	
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Drawing Number				
70086660-xx-036				





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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Starling colonies

Notation:

- Other
- Singing
- Calling
- Flight Lines
- Same bird moving

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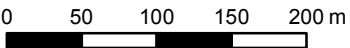
Drawing Status	Version 1
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Job Title	GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE
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Drawing Title	Annex 5.8.5.8: Starling Territories Sector 6
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Drawn	UKJPF001	Originated	JF	Date	25/11/2022
Stage 1 check	AM	Stage 2 check	IE		



Drawing Number	70086660-xx-036
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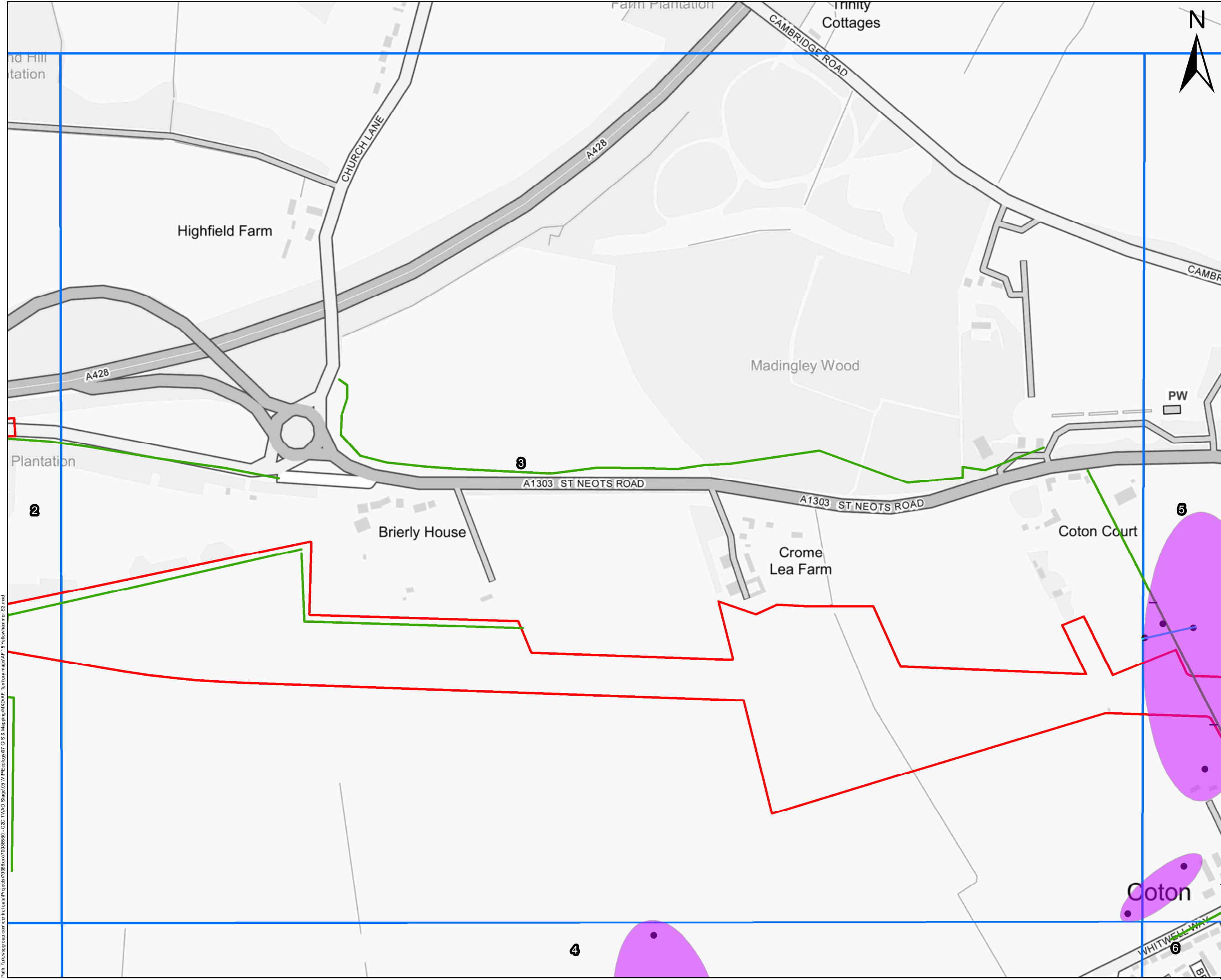


# **Annex 5.8.5.9**

**Yellowhammer territories**

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**wsp**



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### Legend

- Proposed Scheme Boundary
  - Breeding Bird Walked route
  - Sector Boundaries
  - Yellowhammer territories
- Notation:
- Other
  - Singing
  - Calling
  - Same Bird Moving

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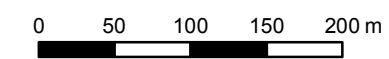
Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.9: Yellowhammer  
Territories Sector 3

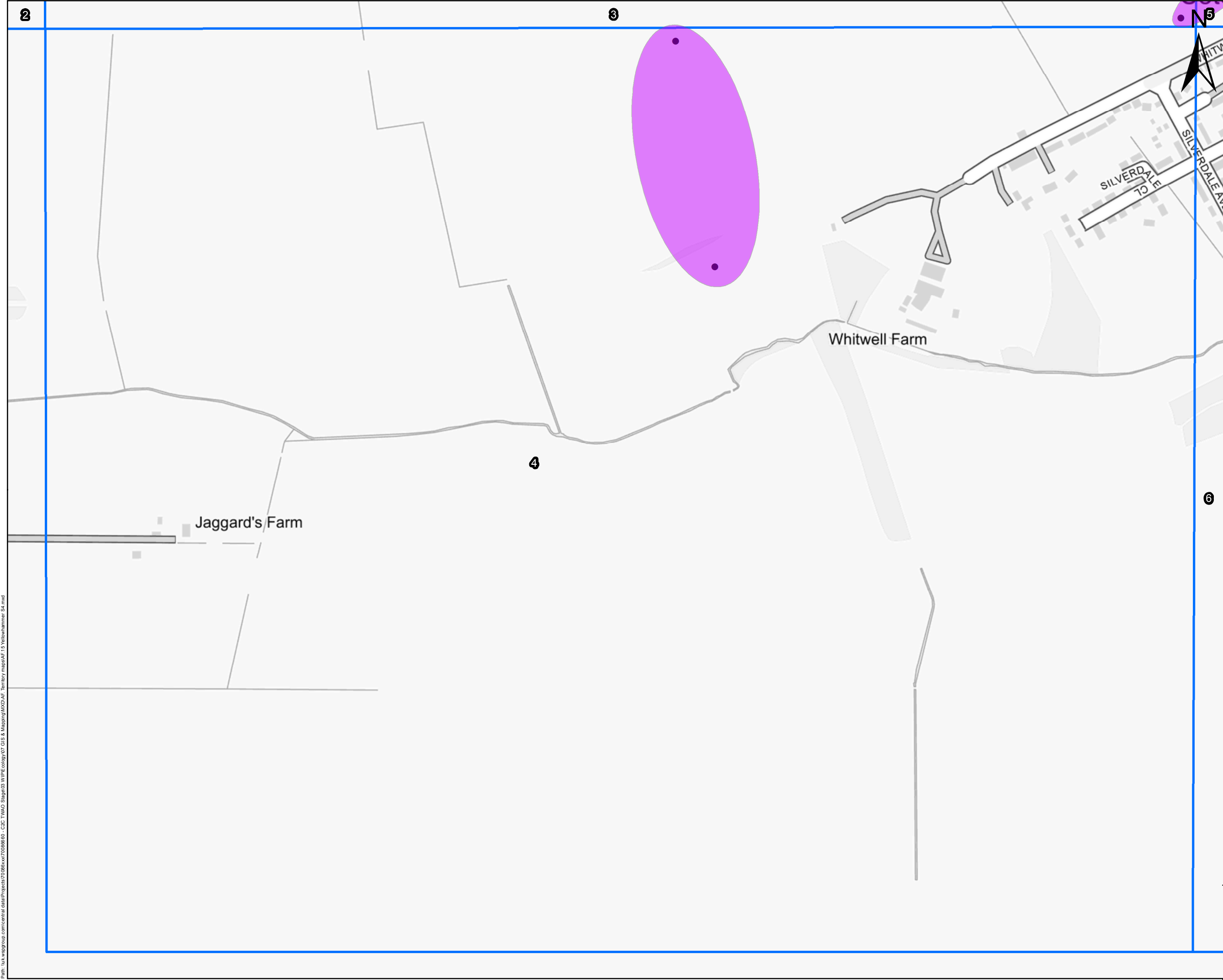
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Stage 1 check	Stage 2 check	JF	25/11/2022
AM	IE		



Drawing Number  
70086660-xx-055

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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Yellowhammer territories

Notation:

- Other
- Singing
- Calling
- Same Bird Moving

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	Check		

Drawing Status  
Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.9: Yellowhammer  
Territories Sector 4

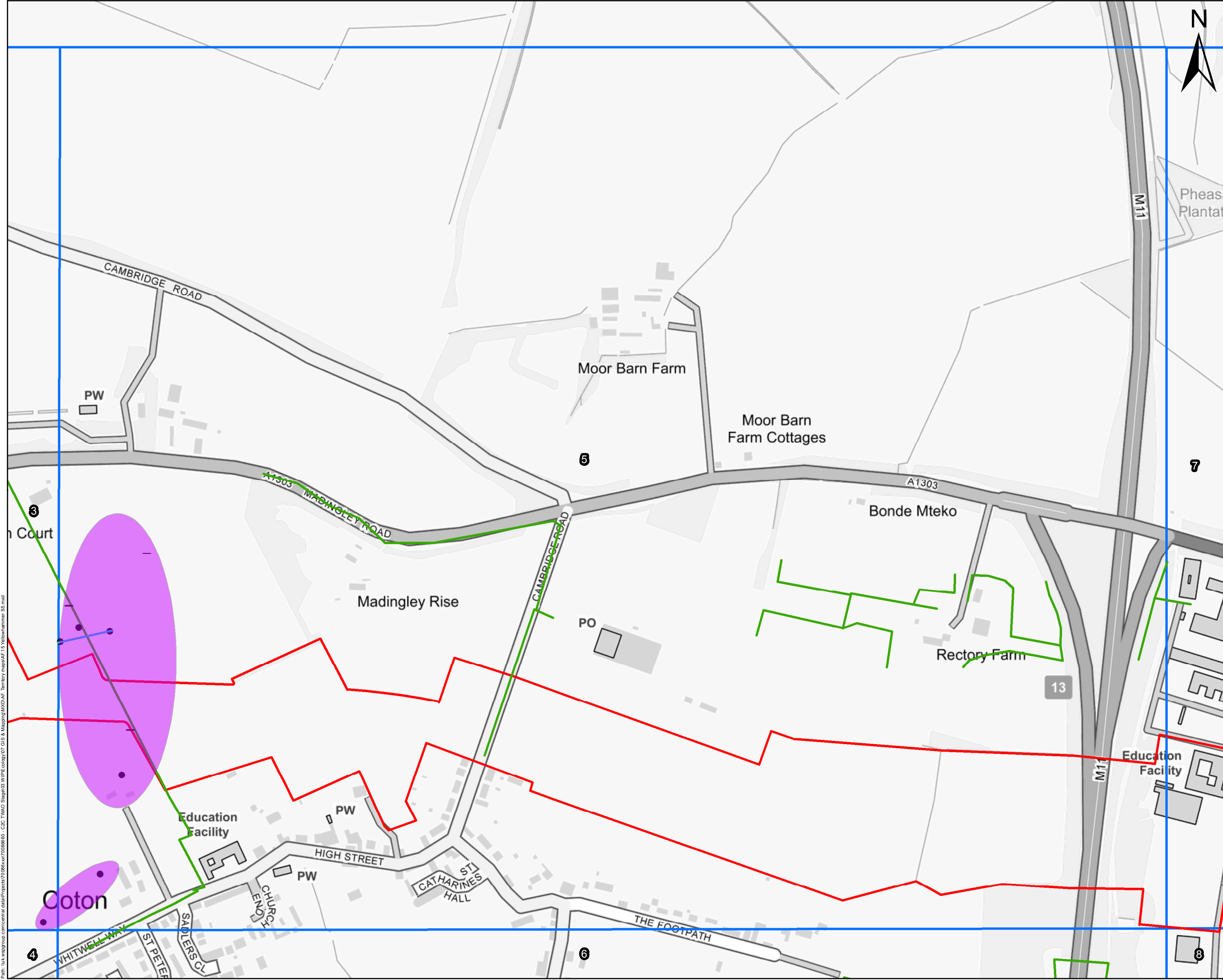
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Stage 1 check AM	Stage 2 check IE	Originated JF	Date 25/11/2022

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Drawing Number  
70086660-xx-055



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### Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Yellowhammer territories

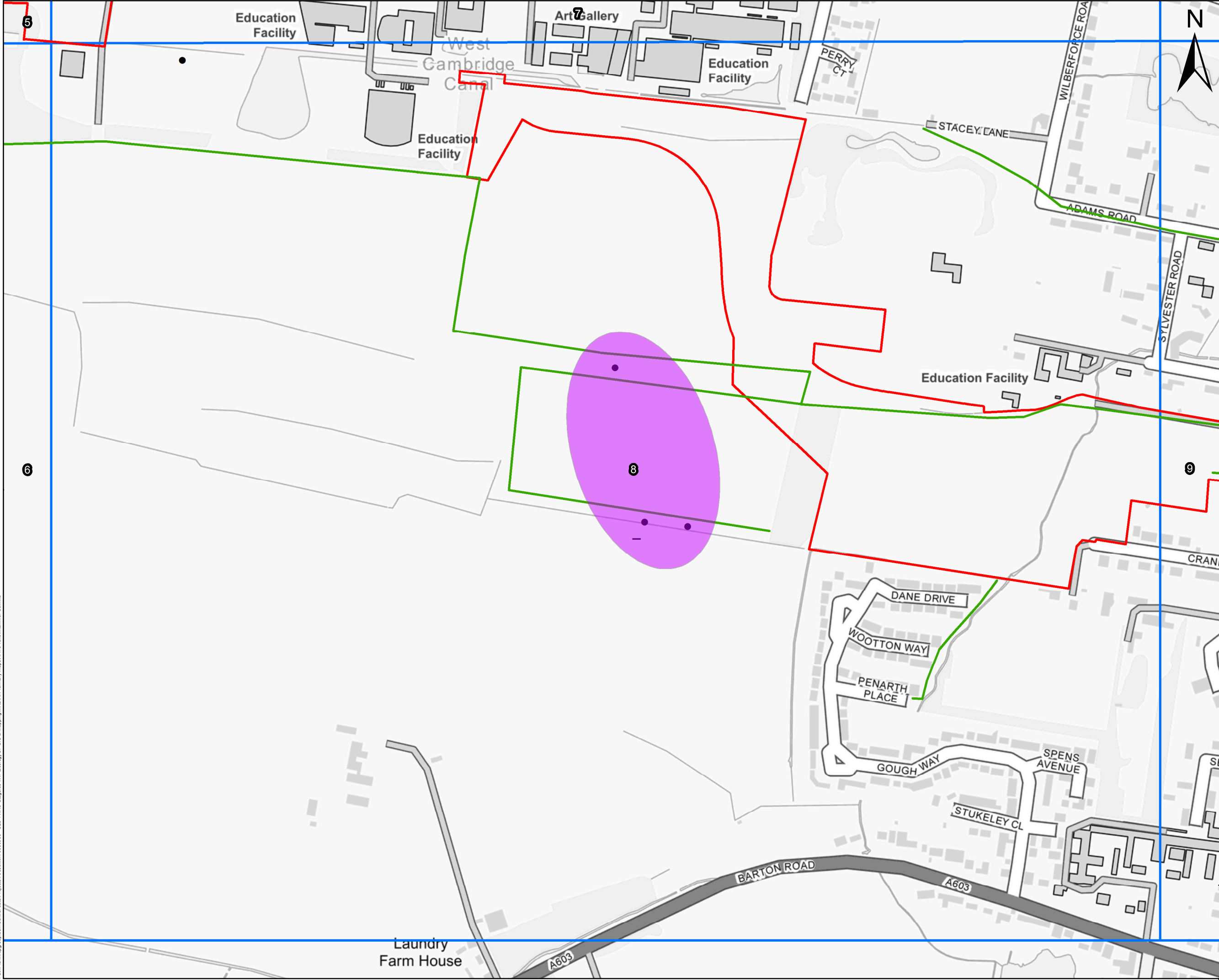
### Notation:

- Other
- Singing
- Calling
- Same Bird Moving

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Drawing Status				
Version 1				
Job Title				
GREATER CAMBRIDGE PARTNERSHIP CAMBRIDGE TO CAMBOURNE				
Drawing Title				
Annex 5.8.5.9: Yellowhammer Territories Sector 5				
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AM	IE	JF	25/11/2022	
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Drawing Number				
70086660-xx-055				





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Legend

- Proposed Scheme Boundary
- Breeding Bird Walked route
- Sector Boundaries
- Yellowhammer territories
- Notation:
  - Other
  - Singing
  - Calling
  - Same Bird Moving

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Version 1

Job Title  
GREATER CAMBRIDGE PARTNERSHIP  
CAMBRIDGE TO CAMBOURNE

Drawing Title  
Annex 5.8.5.9: Yellowhammer  
Territories Sector 8

Scale at A3  
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Drawn UKJPF001		Originated JF	
Stage 1 check AM	Stage 2 check IE	Originated JF	Date 25/11/2022



Drawing Number  
70086660-xx-055

# **Annex 5.8.6**

## **Bird Breeding Status**

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**Table 5.8.6-1** shows the breeding status of all bird species recorded throughout the breeding bird surveys. Notation within is in line with the descriptions listed in Section 3.2.7 of the report. Where no breeding description is provided in a given cell, the species was not recorded in the particular transect during the surveys.

**Table 5.8.6-1 – Breeding status of all species recorded by Sector**

Species	S1	S2	S3	S4	S5	S6	S7	S8	S9
Blackbird	PrB	CB	PrB	CB	CB	CB	PoB	CB	CB
Blackcap	CB	PrB	PrB	PrB	PrB	PrB	-	PrB	PrB
Black-headed gull	-	NB	-	-	NB	-	-	NB	NB
Bluetit	CB	CB	CB	CB	CB	CB	CB	CB	PrB
Bullfinch	-	PoB	PoB	-	PoB	PoB	-	PoB	PoB
Buzzard	-	PoB	PoB	-	PrB	NB	-	PoB	-
Canada goose	-	-	-	-	-	-	-	NB	-
Carrion crow	PoB	PoB	PoB	PoB	CB	CB	-	PrB	PoB
Chaffinch	PoB	PrB	PrB	PoB	PrB	PrB	-	PrB	-
Chiffchaff	PrB	PrB	PrB	PoB	PrB	PrB	-	PrB	PrB
Coal tit	-	PoB	PoB	-	PoB	-	-	PoB	PrB
Collared dove	PrB	PoB	-	PoB	PrB	PoB	-	-	PoB
Cormorant	-	-	-	-	NB	-	-	NB	-
Cuckoo	-	-	-	-	-	PoB	-	NB	-
Dunnock	PrB	PrB	PrB	PoB	PrB	PrB	-	PrB	PrB
Feral Pigeon	NB	-	-	PrB	PoB	PrB	-	-	PoB
Garden warbler	-	-	-	-	PoB	-	-	-	-
Goldcrest	PrB	PrB	PrB	-	PrB	CB	-	PrB	PrB
Goldfinch	PrB	CB	PrB	PrB	PrB	PrB	PoB	PrB	PoB
Grasshopper warbler	-	-	-	-	-	PoB	-	-	-
Great spotted woodpecker	PoB	PoB	PoB	PoB	PoB	PoB	-	PrB	PoB

Species	S1	S2	S3	S4	S5	S6	S7	S8	S9
Great tit	CB	CB	PrB	-	CB	CB	-	CB	PrB
Green woodpecker	-	-	PoB	-	PoB	PoB	-	PrB	PoB
Greenfinch	PoB	PoB	PrB	PoB	PrB	PrB	-	PrB	PoB
Grey heron	-	NB	-	-	NB	NB	-	NB	-
Herring gull	-	-	NB	-	-	-	-	NB	NB
House martin	-	-	-	-	CB	-	-	NB	NB
House sparrow	CB	PrB	-	CB	CB	PoB	-	-	-
Jackdaw	PoB	PoB	PoB	PoB	CB	PoB	-	CB	CB
Jay	-	PoB	PoB	-	PoB	PoB	-	CB	CB
Kestrel	-	CB	-	-	PoB	NB	-	PrB	-
Lapwing	-	-	-	NB	-	-	-	-	-
Lesser black-backed gull	-	NB	-	-	-	-	-	NB	NB
Lesser whitethroat	PoB	-	-	-	-	-	-	-	-
Linnet	NB	PoB	NB	PoB	PoB	PoB	-	PoB	-
Long-tailed tit	CB	PoB	PoB	-	PoB	CB	-	CB	PoB
Magpie	CB	CB	PrB	-	CB	PoB	-	CB	PoB
Mallard	-	-	-	-	-	-	-	PrB	-
Marsh tit	PoB	-	-	-	PoB	-	-	PoB	-
Mistle thrush	-	-	-	-	PrB	-	-	PoB	PrB
Moorhen	-	-	-	-	-	-	-	CB	-
Peregrine	-	-	-	-	-	-	-	-	NB
Pheasant	-	PrB	PoB	-	CB	-	-	PoB	-
Pied wagtail	NB	CB	PoB	-	CB	PoB	-	CB	-
Red kite	-	-	NB	-	-	-	-	-	-
Red-legged partridge	-	PoB	-	-	PoB	-	-	-	-



Species	S1	S2	S3	S4	S5	S6	S7	S8	S9
Reed bunting	-	PoB	-	-	-	-	-	-	-
Reed warbler	PoB	-	-	-	-	-	-	PrB	-
Robin	PrB	CB	PrB	PrB	CB	PrB	CB	CB	PrB
Rook	NB	NB	PoB	-	PoB	-	-	PoB	-
Skylark	PoB	PrB	PrB	PrB	PrB	PoB	-	PrB	-
Song thrush	PrB	PoB	PrB	PoB	CB	PrB	-	PrB	PrB
Sparrowhawk	NB	-	-	-	-	-	-	-	-
Starling	CB	CB	PoB	CB	CB	PoB	-	PoB	NB
Stock dove	NB	PoB	PoB	-	PoB	PrB	NB	PrB	PrB
Swallow	NB	NB	NB	-	NB	-	-	NB	-
Swift	NB	NB	-	NB	NB	NB	-	NB	NB
Whitethroat	PrB	PrB	PrB	-	PrB	PoB	-	PrB	-
Willow warbler	PrB	-	-	-	-	-	-	PrB	-
Woodpigeon	PrB	PrB	PrB	PrB	PrB	PrB	-	PrB	PrB
Wren	PrB	PrB	PrB	PoB	PrB	CB	PrB	PrB	CB
Yellowhammer	-	PrB	PoB	PrB	PrB	-	-	PrB	-



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