

## ENVIRONMENTAL STATEMENT (VOLUME III)

### Appendix 9.8 Bird Survey Report

#### HyNet Carbon Dioxide Pipeline DCO

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulations 5(2)(a)

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# 1. INTRODUCTION

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## 1.1. PROJECT BACKGROUND

- 1.1.1. This technical appendix includes the findings of the bird surveys, and supports the assessment contained in **Chapter 9 – Biodiversity (Volume II)**.
- 1.1.2. The Applicant intends to build and operate a new underground carbon dioxide (CO<sub>2</sub>) pipeline from Cheshire, England to Flintshire, Wales with necessary Above Ground Installations (AGIs) and Block Valve Stations (BVSs). It is classed as a Nationally Significant Infrastructure Project (NSIP) and will require a Development Consent Order (DCO) under the Planning Act 2008 ('PA2008') granted by the Secretary of State for Business, Energy and Industrial Strategy (BEIS).
- 1.1.3. The DCO Proposed Development will form part of HyNet North West ('the Project'), which is a hydrogen supply and Carbon Capture and Storage ('CCS') project. The goal of the Project is to reduce CO<sub>2</sub> emissions from industry, homes and transport and support economic growth in the North West of England and North Wales. The wider Project is based on the production of low carbon hydrogen from natural gas. It includes the development of a new hydrogen production plant, hydrogen distribution pipelines, hydrogen storage and the creation of CCS infrastructure. CCS prevents CO<sub>2</sub> entering the atmosphere by capturing it, compressing it and transporting it for safe, permanent storage.
- 1.1.4. The DCO Proposed Development is a critical component of HyNet North West which, by facilitating the transportation of carbon, enables the rest of the Project to be low carbon. The hydrogen production, distribution and CO<sub>2</sub> capture and storage elements of the Project do not form part of the DCO Proposed Development and will be delivered under separate consenting processes.
- 1.1.5. The DCO Application will seek consent for the construction, operation and maintenance of the following components which are part of the DCO Proposed Development, namely:
- **Ince Above Ground Installation (AGI) to Stanlow AGI Pipeline** – a section of new underground onshore pipeline (20" in diameter) to transport CO<sub>2</sub>;
  - **Stanlow AGI to Flint AGI Pipeline** – a section of new underground onshore pipeline (36" in diameter) to transport CO<sub>2</sub>;
  - **Flint AGI to Flint Connection Pipeline** – a section of new underground onshore pipeline (24" in diameter) to transport CO<sub>2</sub>;
  - **Flint Connection to Point of Ayr (PoA) Terminal Pipeline** – a section of existing Connah's Quay to Point of Ayr (PoA) underground onshore pipeline (24" in diameter) which currently transports natural gas but will be

repurposed and reused to transport CO<sub>2</sub>. The Flint Connection to PoA Terminal Pipeline is scoped out of the EIA, except for the areas adjacent to the three BVSs that are within the Newbuild Infrastructure Boundary;

- **Four AGIs** - Ince AGI, Stanlow AGI, Northop Hall AGI, and Flint AGI;
- **Six Block Valve Stations (BVSs)** - located along:
  - The new Stanlow AGI to Flint AGI Pipeline (three in total);
  - The existing Flint Connection to PoA Terminal Pipeline (three in total);
- Other above ground infrastructure, including Cathodic Protection (CP) transformer rectifier cabinets and pipeline marker posts;
- Utility Connection infrastructure, including power utilities and Fibre Optic Cable (FOC); and
- Temporary ancillary works integral to the construction of the Newbuild Carbon Dioxide Pipeline, including Construction Compounds and temporary access tracks.

1.1.6. Further details of each element of the DCO Proposed Development are set out in **Chapter 3 – Description of the DCO Proposed Development (Volume II)**.

## **1.2. BRIEF SCOPE AND OBJECTIVES**

1.2.1. The Applicant commissioned bird surveys within the Newbuild Infrastructure Boundary to support the DCO Proposed Development. The report is primarily informed by an ornithological desk study and the results of bird survey transects undertaken between October 2020 and March 2022, which were undertaken within and adjacent to the Newbuild Infrastructure Boundary.

1.2.2. The report includes an assessment of land within and beyond the Newbuild Infrastructure Boundary which supports protected and/or notable bird species or important bird assemblages.

1.2.3. The results of desk study and field surveys have been used to predict possible impacts on bird species and communities during the construction, operation and decommissioning stages of the DCO Proposed Development, in particular those populations and species associated with Special Protection Areas (SPA).

1.2.4. The results of these surveys and subsequent evaluation of the results are presented within this report. The impact assessment and recommendations for mitigation and compensation are presented within **Chapter 9: Biodiversity** of the **Environmental Statement (ES) (Volume II (Document Reference: D.6.2.9))** and information contained within this report is used to inform a **Habitat Regulations Assessment (HRA)** screening report (**Document reference: D.6.5.6**).

### 1.3. RELEVANT LEGISLATION AND POLICY

#### BIRDS OF CONSERVATION CONCERN RED AND AMBER LISTS

- 1.3.1. The UK's leading bird conservation organisations periodically review the most up to date information on the status of birds in the UK and elsewhere in their range to produce a review of the status of birds which occur regularly in the UK. The latest version of this review is presented as the Birds of Conservation Concern (BoCC) 5 (**Ref.1**).
- 1.3.2. BoCC comprises 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.
- 1.3.3. To qualify on the red list, species may be listed as globally threatened by International Union for Conservation of Nature (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).
- 1.3.4. 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.
- 1.3.5. 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.

#### WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED) SCHEDULE 1 (REF. 2)

- 1.3.6. All naturally occurring wild birds in Great Britain are protected from persecution. It is illegal to kill, injure or 'take' any wild bird, take or damage the nest of any wild bird whilst in use or being built. The eggs of all wild birds are also protected. If you have in your possession any live wild birds, egg(s) or any part of a wild bird you are committing an offence. The birds listed in Schedule 1 of the Wildlife and Countryside Act 1981 are further protected by Special Penalties all year round for those in Part 1 and during a specified closed season for those listed in Part 2.
- 1.3.7. All birds are protected in some form, but some species have additional protection during the breeding season as do their nests, eggs and dependent young. To disturb any of these species you must obtain a special licence in

advance. In England, permits for ringing and/or nest recording are issued by the BTO on behalf of Natural England (NE); licences for other activities are issued directly from NE. In Wales, all licences are issued directly by Natural Resources Wales (NRW) but ones for ringing and/or nest recording are applied for via the BTO.

### **NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006 (REF. 3) AND ENVIRONMENT (WALES) ACT 2016 (REF. 4)**

- 1.3.8. The NERC Act 2006 sets out to protect the rarest and most threatened species in England which must be protected from adverse effects of any development. Section 41 (S41) of the NERC Act lists these species, including birds, which are Species of Principal Importance (SPI) in England.
- 1.3.9. Section 7 (S7) of the Environment (Wales) Act 2016 also lists species in Wales, which are considered of key significance in sustaining and improving biodiversity in relation to Wales. The S7 list replaces that within Section 42 (S42) of the NERC Act 2006.
- 1.3.10. Birds listed within S41 of the NERC Act and S7 of the Environment (Wales) Act are the same and are based on the old UK Biodiversity Action Plan (BAP) list.

### **QUALIFYING SPECIES FOR THE DEE ESTUARY (WALES) SPECIAL PROTECTION AREA (SPA)**

- 1.3.11. The Dee Estuary (Wales) SPA and the Dee Estuary (Wales) Ramsar is designated for its bird interest, including significant numbers of individual species and important bird assemblages.
- 1.3.12. The area achieves Article 4.1 qualification (79/409/EEC) as during the breeding season it regularly supports:
- Little Tern *Sternula albifrons* (Eastern Atlantic - breeding) 2.9% of the GB breeding population 5-year peak mean 1995-1999.
  - Common Tern *Sterna hirundo* (Northern/Eastern Europe - breeding) 3.2% of the population in Great Britain 5-year peak mean 1995-1999.
- 1.3.13. Over winter the area regularly supports:
- Bar-tailed Godwit *Limosa lapponica* (Western Palearctic - wintering) 2.2% of the GB population 5-year peak mean 1994/95-1998/99.
- 1.3.14. On passage the area regularly supports:
- Sandwich Tern *Sterna sandvicensis* (Western Europe/Western Africa) 2.3% of the population in Great Britain 5-year peak mean 1995-1999.
- 1.3.15. The area achieves Article 4.2 qualification (79/409/EEC) as over winter the area regularly supports:

- Pintail *Anas acuta* (North-western Europe) 9.0% of the population 5-year peak mean 1994/95-1998/99.
- Teal *Anas crecca* (North-western Europe) 1.3% of the population 5-year peak mean 1994/95-1998/99.
- Dunlin *Calidris alpina* (Northern Siberia/Europe/Western Africa) 2% of the population 5-year peak mean 1994/95-1998/99.
- Knot *Calidris canutus* (North-eastern Canada/Greenland/Iceland/North-western Europe) 3.5% of the population 5-year peak mean 1994/95-1998/99.
- Oystercatcher *Haematopus ostralegus* (Europe & Northern/Western Africa) 2.5% of the population 5-year peak mean 1994/95-1998/99.
- Black-tailed Godwit *Limosa islandica* (Iceland - breeding) 2.5% of the population 5-year peak mean 1994/95-1998/99.
- Curlew *Numenius arquata* (Europe - breeding) 1.1% of the population 5-year peak mean 1994/95-1998/99.
- Grey Plover *Pluvialis squatarola* (Eastern Atlantic - wintering) 1.1% of the population 5-year peak mean 1994/95-1998/99.
- Shelduck *Tadorna* (North-western Europe) 2.6% of the population 5-year peak mean 1994/95-1998/99.
- Redshank *Tringa totanus* (Eastern Atlantic - wintering) 3.5% of the population 5-year peak mean 1994/95-1998/99.

1.3.16. On passage the area regularly supports:

- Redshank (Eastern Atlantic - wintering) 5.9% of the population 5-year peak mean 1994/95-1998/99.

1.3.17. The area also achieves Article 4.2 qualification (79/409/EEC) as an internationally important assemblage of birds due to over winter the area regularly supporting: 120,726 waterfowl (5-year peak mean 1991/92-1995/96) including: Shelduck, Pintail, Oystercatcher, Knot, Bar-tailed Godwit *Limosa lapponica* and Redshank.

#### **QUALIFYING SPECIES FOR THE MERSEY ESTUARY SPECIAL PROTECTION AREA (SPA)**

1.3.18. The Mersey Estuary SPA and the Mersey Estuary Ramsar is designated for its bird interest, including significant numbers of individual species and important bird assemblages.

1.3.19. The area achieves Article 4.1 qualification (79/409/EEC) as over winter the area regularly supports:

- Golden Plover *Pluvialis apricaria* (North-western Europe - breeding) 1.2% of the GB population 5-year peak mean, 1993/94-1997/98.

- 1.3.20. The area achieves Article 4.2 qualification (79/409/EEC) as over winter the area regularly supports:
- Pintail (North-western Europe) 1.9% of the population 5-year peak mean, 1993/94-1997/98.
  - Teal (North-western Europe) 2.9% of the population 5-year peak mean, 1993/94-1997/98.
  - Wigeon *Mareca penelope* (Western Siberia/North-western/North-eastern Europe) 4.2% of the population in Great Britain 5-year peak mean, 1993/94-1997/98.
  - Dunlin (Northern Siberia/Europe/Western Africa) 3.6% of the population 5-year peak mean, 1993/94-1997/98.
  - Black-tailed Godwit (Iceland - breeding) 1.6% of the population 5-year peak mean, 1993/94-1997/98.
  - Curlew (Europe - breeding) 1.1% of the population in Great Britain 5-year peak mean, 1993/94-1997/98.
  - Grey Plover (Eastern Atlantic - wintering) 2.3% of the population in Great Britain 5-year peak mean, 1993/94-1997/98
  - Great-crested Grebe *Podiceps cristatus* (North-western Europe - wintering) 1.4% of the population in Great Britain 5-year peak mean, 1993/94-1997/98
  - Shelduck (North-western Europe) 2.2% of the population 5-year peak mean, 1993/94-1997/98
  - Redshank (Eastern Atlantic - wintering) 2.8% of the population 5-year peak mean, 1993/94-1997/98
  - Lapwing *Vanellus* (Europe - breeding) 0.7% of the population in Great Britain 5-year peak mean, 1993/94-1997/98
- 1.3.21. On passage the area regularly supports:
- Ringed Plover *Charadrius hiaticula* (Europe/Northern Africa - wintering) 1.7% of the population in Great Britain 5-year peak mean, 1993-1997.
  - Redshank (Eastern Atlantic - wintering) 3.8% of the population 5-year peak mean, 1993-1997.
- 1.3.22. The surveys were planned to incorporate land close to the Dee and Mersey Estuary SPAs as this is where important bird assemblages are most likely to occur. Wetland birds within communities recorded during transect surveys were compared to those species which are qualifying species within the SPA bird assemblages and species recorded within the closest WeBS sectors.

## 2. METHODOLOGY

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### 2.1. DESK STUDY

2.1.1. A desk study was undertaken in July 2021 to review existing ecological baseline information available in the public domain and to obtain information held by relevant third parties. Ornithological records were collated within 2km of the Newbuild Infrastructure Boundary. To provide baseline data, bird records from the last ten years were requested from the following organisations:

- Cofnod (North Wales Environmental Information Service) provided records of birds within 2km of the Infrastructure Boundary within Wales (Flintshire); and
- rECOrd (The Biodiversity Information System for Cheshire, Halton, Warrington and Wirral) provided records of birds within 2km of the Newbuild Infrastructure Boundary within England (Cheshire West and Chester).

2.1.2. Wetland Bird Survey (WeBS) count data was supplied by the British Trust for Ornithology (BTO) for important wetland sites adjacent to the Newbuild Infrastructure Boundary. WeBS counts data is used to monitor the UK's internationally important non-breeding waterbird populations and wetland sites are counted once per month, providing data for population and trends in abundance and distribution. The network of sites legally protected for their importance to wintering waterbirds depends fundamentally on the WeBS counts. 'Waterbirds' includes wildfowl (ducks, geese and swans), waders, rails, divers, grebes, cormorants and herons. Gulls and terns are optionally included.

2.1.3. At coastal locations, counting is done at high tide. At large sites, several counters will be working as a team. Each counter surveys the whole of their defined count area, known as a WeBS sector, identifying all the waterbird species present and counting the number of individuals of each species. Data supplied by the BTO provides information on peak counts for wetland sites adjacent to the Newbuild Infrastructure Boundary. **Section 2.2** below describes the proximity of any WeBS sectors to the survey transect routes.

### 2.2. FIELD SURVEYS

2.2.1. Field surveys were undertaken along eight transect routes were distributed evenly along the length of the Newbuild Infrastructure Boundary (four within Cheshire West and Chester, England and four within Flintshire, Wales) and are presented in **Figures 9.8.1 to 9.8.8**. All transect routes were planned to be walked along Public Rights of Way (PRoW) and were designed to incorporate a variety of habitat types including, arable land, dry grassland, marshy grassland, swamp, urban fringe, woodland/scrub, hedgerows, ponds and riparian habitats. This mixture of habitat types allowed representative bird communities to be sampled across the length of the Newbuild Infrastructure Boundary.



- 2.2.2. At least one full year of data for each transect route was recorded, with a minimum of one visit per month throughout October to February and two visits per month during March to September. An exception to this was made for Transect 2, where waterbirds were recorded during winter 2020/21 around the location of the pipeline crossing of the River Dee. No WeBS data is available for this stretch of the River Dee, so it was decided to visit this transect twice per month for all future survey months, to provide adequate data to undertake an assessment of the waterbird assemblage present.
- 2.2.3. Transects were walked, mostly within one hour of sunrise, at a steady pace and paper field maps of each transect were annotated using standard two-letter BTO codes to show the locations and numbers of each bird species present. Transects 25 and 4, however, were walked slightly later as visits to these transects were combined with visits to Transects 26 and 5, which were commenced around sunrise, before Transects 25 and 4. Standard Common Bird Census (CBC) symbols were also used to indicate territorial behaviour and movements across the survey areas. As described above, transects included a wide range of different habitat types, which are briefly described below for each transect. Any WeBS sectors within 2km of survey transects are described below.

### **TRANSECT 1**

- 2.2.4. Transect 1 was located at the western end of the Newbuild Infrastructure Boundary, in Oakenholt, Flintshire and is within Section 6 (as defined within **Chapter 3 – Description of the DCO Proposed Development, Volume II**) of the Newbuild Infrastructure Boundary. The transect was 1.05km long and started and finished on Leadbrook Drive, which runs south from the A548 Chester Road. The transect route headed south-west along a tarmac footpath, before crossing improved grassland fields surrounding Little Leadbrook Farm and continuing towards Allt-Goch Lane. The footpath was then re-traced past Little Leadbrook Farm and a section of public footpath was walked across improved grassland towards the location of Leadbrook Hall Farm, where the transect terminated on Leadbrook Drive.
- 2.2.5. Habitats present along the route consisted predominantly of improved sheep-grazed grassland, surrounded by managed species-poor hedgerows. The western end of the transect crossed a small, un-named watercourse, with a narrow band of mature trees along its length.
- 2.2.6. Within the wider landscape the most significant habitat feature for bird assemblages is the Dee Estuary, which is located just to the north of the A548 and North Wales Coast Line, directly opposite Leadbrook Drive. WeBS data is available for the Dee Estuary (England and Wales) with three sectors being located within 1km of Leadbrook Drive:



- Oakenholt Marsh (Sector Location Code 69459), located 0.15km north of the northern end of Leadbrook Drive;
- Deeside Naturalists Reserve (Sector Location Code 69426), located 0.4km east of the northern end of Leadbrook Drive; and
- Flint Saltmarsh (Sector Location Code 69460), located 0.5km north-west of the northern end of Leadbrook Drive.

## **TRANSECT 2**

- 2.2.7. Transect 2 was located along the northern bank of the River Dee at Sealand, Flintshire, in Section 4 of the Newbuild Infrastructure Boundary. The transect was 4.1km long, starting along a public footpath across arable fields, from Deeside Lane before joining a tarmac footpath along the river. The transect then continued north-west until its end point at the A494 road bridge.
- 2.2.8. Habitat present to the north of the river consisted almost entirely of arable fields and associated farm buildings. The eastern half of the transect included hedgerows and mature trees along the northern edge of the footpath but the western half of the transect consisted only of post and wire fences as boundaries.
- 2.2.9. To the south of the river the land was also arable for the eastern third of the transect. The western two thirds, however, was heavily industrialised, with factories, car parks and commercial units occupying the land, with a sewage treatment works at the end of the transect near the A494 road bridge.
- 2.2.10. The River Dee is tidal at this point and the amount of exposed mud below the grassy banks varied between surveys, but all surveys showed some degree of exposed mud along the banks.
- 2.2.11. Within the wider landscape, land to the north of the river was mostly arable, whilst land further to the south consisted of arable fields towards the eastern end of Transect 2. At the western end of the transect there were extensive areas of housing around Mancot. There are no WeBS sectors adjacent to the transect or River Dee at this point, with the nearest survey sectors being located approximately 6km east at Queen's Park in Chester (Sector Location Code 45090) and 5.1km north-west at Deeside Industrial Estate Lagoons (Sector Location Code 69431).

## **TRANSECT 3**

- 2.2.12. Transect 3 was located within the village of Mollington, near Chester, in Section 3 of the Newbuild Infrastructure Boundary. The transect started on Grove Road, near the north of the village, before heading south-east, via Station Road, across cattle-grazed improved grassland, towards Townfield Lane. After following Townfield Road, in a north-westerly direction, the transect then headed north-east through more cattle and sheep-grazed improved grassland.

Eventually the 2.33km transect finished along Gypsy Lane, near St Oswalds CE Primary School.

2.2.13. Habitats along the transect consisted almost entirely of improved grassland with species-poor hedges and mature trees as field boundaries. There were six ponds located in fields between Grove Road and Townfield Lane.

2.2.14. The wider landscape included further improved grassland to the north and east of Transect 3, with housing to the south and arable land to the west. There are no WeBS sectors adjacent to Transect 3, with the nearest survey sector being located approximately 5.3km south-east at Queen's Park in Chester (Sector Location Code 45090).

#### **TRANSECT 4**

2.2.15. Transect 4 was located at Stoak, Cheshire, just to the south of the M56, near its junction with the M53, in Section 2 of the Newbuild Infrastructure Boundary. The transect started on Picton Lane and headed north-east along a hedgerow-bounded public footpath, through arable fields before crossing a drainage ditch and continuing south-east across improved grassland to a metal footbridge crossing the River Gowy. The transect route then continued north along the eastern bank of the river before heading east, along the southern side of the M56. The total length of the transect was 1.37km.

2.2.16. Habitats surrounding the transect included a large area of swamp and marshy grassland to the east of the River Gowy, with an active landfill site to the south. The marshy grassland was traversed by a network of drainage ditches. A small linear stand of plantation woodland was present parallel to and south of the M56, with this band of trees continuing south to form a field boundary separating the marshy grassland from arable land to the east. To the south and east of the transect was mostly arable land, which extended west of Picton Lane.

2.2.17. Land to the north of the M56 included another large area of swamp and marshy grassland immediately adjacent to the eastern bank of the river. None of these wetlands though are included as WeBS sectors, with the nearest such sectors located approximately 4km north and comprising the Mersey Estuary (Manchester Ship Canal-Eastham to Frodsham, Sector Location Code 46484; Ince Bank, Sector Location Code 45420 and Manisty Bay, Sector Location Code 45419).

#### **TRANSECT 5**

2.2.18. Transect 5 was located to the east of Ince and south of the Manchester Ship Canal and Mersey Estuary in Cheshire, in Section 1 of the Newbuild Infrastructure Boundary. The 0.98km long transect started south-east along Marsh Lane, before heading south along a footpath through Goldfinch Meadows (a Protos; Peel L&P nature area).

- 2.2.19. Habitat along Marsh Lane consisted of a drainage ditch running along the north of the lane, with a mixture of improved grassland and marshy grassland beyond, with approximately ten ponds located within the marshy areas. To the south of Marsh Lane there was a large field containing marshy grassland and scattered scrub. There were some large mature trees at the western end of the transect. Habitat at Goldfinch Meadows, the eastern half of the transect, consisted of more wet grassland and ponds, with large mature trees lining the southern edge of the path at the east of Transect 5.
- 2.2.20. Almost the entire length of Transect 5 is within a WeBS sector, with other, adjacent sectors as described below:
- Ince Marshes Fields (Sector Location Code 45316), containing the majority of Transect 5;
  - Manchester Ship Canal-Eastham to Frodsham (Sector Location Code 46484), located 0.4km north of Transect 5;
  - Ince Bank (Sector Location Code 45420), located 0.5km north of Transect 5;
  - Frodsham Sludge Lagoons (Sector Location Code 45351), located 1.5km north-east of Transect 5; and
  - Lordship Lane Fields (Sector Location Code 45317), located 1.6km south-east of Transect 5.

## **TRANSECT 7**

- 2.2.21. Transect 7 was located to the west of Elton village, in Cheshire, immediately south of the railway line and Ince & Elton Station, in Section 1 of the Newbuild Infrastructure Boundary. The 2.08km transect comprised a circuit walked along field boundaries through arable fields separating Stanlow Manufacturing Complex from Elton village.
- 2.2.22. The fields containing Transect 7 contained wheat stubble in winter 2020 but were planted up with potatoes in summer 2021 through to autumn 2021. The fields were bordered by bands/lines of mature trees along the western (Pool Lane), northern (railway) and eastern boundaries, with housing and a school to the west and south. The transect also followed small hedge and tree lines across the arable land. Part of Stanlow Manufacturing Complex (south of the railway line) comprised 230ha of developed land to the west of Pool Lane and Transect 7 land.
- 2.2.23. The nearest WeBS sectors to Transect 7 include:
- Ince Marshes Fields (Sector Location Code 45316), located 1km north of Transect 7;
  - Manchester Ship Canal-Eastham to Frodsham (Sector Location Code 46484), located 1.4km north of Transect 7;
  - Ince Bank (Sector Location Code 45420), located 1.5km north of Transect 7;

- Frodsham Sludge Lagoons (Sector Location Code 45351), located 2.4km north-east of Transect 7; and
- Lordship Lane Fields (Sector Location Code 45317), located 2.4km east of Transect 7.

## **TRANSECT 25**

- 2.2.24. Transect 25 was located near Mancot, Flintshire, between the A550 and the A494, in Section 5 of the Newbuild Infrastructure Boundary. The transect started at Overlea Drive, in the south, and continued north-east through improved grassland fields towards the junction of the A550 and the A494 at its northern end. The transect also included a small section of the housing estate to the south-west of Overlea Drive.
- 2.2.25. Habitat along the 2.27km long transect was mostly improved grassland, grazed by sheep but several small ponds were present within these fields. Field boundaries consisted of low species-poor hedgerows, with large mature trees also present along an un-named track running from Vickers Close to the A494 Aston Hill and along both sides of Clay Hill Lane.
- 2.2.26. Habitat within the wider landscape consisted of extensive residential areas to the west of the A494 and large industrial estates to the north-east, either side of the railway running beneath the A494 bridge. The industrial development continued to the southern bank of the River Dee, being the same area described within the Transect 2 description. Land to the east of the A550 was a mixture of improved grassland and residential areas.
- 2.2.27. There are no WeBS sectors near to Transect 25, with the nearest survey sectors being located approximately 2km south-west at Hawarden Castle Lakes (Sector Location Code 69032) and 2.4km north at Deeside Industrial Estate Lagoons (Sector Location Code 69431).

## **TRANSECT 26**

- 2.2.28. Transect 26 was located to the north of Ewloe, Flintshire, either side of the A494, in Section 5 of the Newbuild Infrastructure Boundary. The 1.43km long transect ran west to east from Shotton Lane to Lower Aston Lane. Between Shotton Lane and Old Aston Hill, the habitat along the transect consisted of arable land with a large pond to the east of Aston Hill Farm. Between Old Aston Hill and the A494 there was a mixture of residential properties and church grounds along the north of Church Lane and a grass covered underground reservoir to the south of Church Lane.
- 2.2.29. At the end of Church Lane and before the A494, there was a small area of broadleaved woodland with adjacent improved grassland. To the east of the A494 the transect ran along the south of a railway line, through poor semi-improved grassland, before going underneath the railway via a small subway

and heading north-east towards Old Aston Hill, with residential properties to the west and improved grassland to the east.

- 2.2.30. There are no WeBS sectors near to Transect 26, with the nearest survey sectors being located approximately 2.2km south-west at Hawarden Castle Lakes (Sector Location Code 69032), 2.9km south-west at Buckley Clay Pits (Sector Location Code 69201) and 3.6km north-east at Deeside Industrial Estate Lagoons (Sector Location Code 69431).

#### **SURVEY DATES AND WEATHER CONDITIONS**

- 2.2.31. Survey dates and weather conditions are provided in **Table 22**, in **Annex B**.

### 3. RESULTS

#### 3.1. DESK STUDY

##### LOCAL RECORDS CENTRE DATA

3.1.1. The results of the desk study, using data supplied by Cofnod and rECOrd, are presented below in **Table 1**.

**Table 1 – Birds of Conservation Concern within 2km of the Newbuild Infrastructure Boundary**

Latin Name	Common Name	No.	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Acanthis cabaret</i>	Lesser Redpoll	24	BoCC Red	S41/7	
<i>Accipiter gentilis</i>	Goshawk	1			Sch 1
<i>Accipiter nisus</i>	Sparrowhawk	30	BoCC Amber		
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler	26	BoCC Amber		
<i>Actitis hypoleucos</i>	Common Sandpiper	261	BoCC Amber		
<i>Alauda arvensis</i>	Skylark	144	BoCC Red	S41/7	
<i>Alcedo atthis</i>	Kingfisher	138	BoCC Amber		Sch 1
<i>Anas acuta</i>	Pintail	171	BoCC Amber		
<i>Anas crecca</i>	Teal	771	BoCC Amber		
<i>Anas platyrhynchos</i>	Mallard	831	BoCC Amber		
<i>Anser albifrons</i>	White-fronted Goose	6	BoCC Red	S41/7	
<i>Anser albifrons flavirostris</i>	Greenland White-fronted Goose	1	BoCC Red	S41/7	
<i>Anser anser</i>	Greylag Goose	38	BoCC Amber		
<i>Anser brachyrhynchus</i>	Pink-footed Goose	9	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	238	BoCC Amber		
<i>Anthus trivialis</i>	Tree Pipit	1	BoCC Red	S41/7	
<i>Apus apus</i>	Swift	222	BoCC Red		
<i>Ardea alba</i>	Great White Egret	11	BoCC Amber		
<i>Arenaria interpres</i>	Turnstone	45	BoCC Amber		
<i>Asio flammeus</i>	Short-eared Owl	3	BoCC Amber		

Latin Name	Common Name	No.	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Aythya ferina</i>	Pochard	7	BoCC Red		
<i>Aythya marila</i>	Scaup	7	BoCC Red	S41/7	Sch 1
<i>Branta bernicla</i>	Brent Goose	25	BoCC Amber	S41/7	
<b><i>Branta bernicla</i> subsp. <i>bernicla</i></b>	Brent Goose (dark-bellied)	5	BoCC Amber	S41/7	
<i>Branta bernicla</i> <b>subsp. <i>hrota</i></b>	Brent Goose (light-bellied)	1	BoCC Amber	S41/7	
<i>Branta leucopsis</i>	Barnacle Goose	180	BoCC Amber		
<i>Bucephala clangula</i>	Goldeneye	22	BoCC Red		
<i>Calcarius lapponicus</i>	Lapland Bunting	3	BoCC Amber		Sch 1
<i>Calidris alba</i>	Sanderling	19	BoCC Amber		
<i>Calidris alpina</i>	Dunlin	482	BoCC Red		
<i>Calidris canutus</i>	Knot	168	BoCC Amber		
<i>Calidris ferruginea</i>	Curlew Sandpiper	2	BoCC Amber		
<i>Calidris pugnax</i>	Ruff	19	BoCC Red		Sch 1
<i>Cettia cetti</i>	Cetti's Warbler	4			Sch 1
<i>Charadrius dubius</i>	Little Ringed Plover	150			Sch 1
<i>Charadrius hiaticula</i>	Ringed Plover	139	BoCC Red		
<i>Chlidonias niger</i>	Black Tern	4			Sch 1
<i>Chloris chloris</i>	Greenfinch	151	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	657	BoCC Amber		
<i>Cinclus cinclus</i>	Dipper	2	BoCC Amber		
<i>Circus aeruginosus</i>	Marsh Harrier	130	BoCC Amber		Sch 1
<i>Circus cyaneus</i>	Hen Harrier	61	BoCC Red	S41/7	Sch 1
<i>Coccothraustes coccothraustes</i>	Hawfinch	1	BoCC Red		
<i>Columba oenas</i>	Stock Dove	31	BoCC Amber		
<i>Columba palumbus</i>	Woodpigeon	223	BoCC Amber		

Latin Name	Common Name	No.	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Corvus frugilegus</i>	Rook	96	BoCC Amber		
<i>Coturnix coturnix</i>	Quail	1	BoCC Amber		Sch 1
<i>Cuculus canorus</i>	Cuckoo	8	BoCC Red	S41/7	
<i>Cygnus columbianus</i>	Bewick's Swan	16	BoCC Red		Sch 1
<i>Cygnus cygnus</i>	Whooper Swan	37	BoCC Amber		Sch 1
<i>Cygnus olor</i>	Mute Swan	446	BoCC Amber		
<i>Delichon urbicum</i>	House Martin	238	BoCC Red		
<i>Emberiza citrinella</i>	Yellowhammer	14	BoCC Red	S41/7	
<i>Emberiza schoeniclus</i>	Reed Bunting	295	BoCC Amber	S41/7	
<i>Falco columbarius</i>	Merlin	115	BoCC Red		Sch 1
<i>Falco peregrinus</i>	Peregrine	353			Sch 1
<i>Falco subbuteo</i>	Hobby	43			Sch 1
<i>Falco tinnunculus</i>	Kestrel	358	BoCC Amber		
<i>Ficedula hypoleuca</i>	Pied Flycatcher	3	BoCC Amber		
<i>Fringilla montifringilla</i>	Brambling	49			Sch 1
<i>Gallinago gallinago</i>	Snipe	141	BoCC Amber		
<i>Gallinula chloropus</i>	Moorhen	77	BoCC Amber		
<i>Gavia stellata</i>	Red-throated Diver	2			Sch 1
<i>Haematopus ostralegus</i>	Oystercatcher	633	BoCC Amber		
<i>Hydrocoloeus minutus</i>	Little Gull	7			Sch 1
<i>Ichthyaetus melanocephalus</i>	Mediterranean Gull	51	BoCC Amber		Sch 1
<i>Larus argentatus</i>	Herring Gull	395	BoCC Red	S41/7	
<i>Larus canus</i>	Common Gull	202	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	381	BoCC Amber		
<i>Larus glaucoides</i>	Iceland Gull	2	BoCC Amber		



Latin Name	Common Name	No.	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Larus marinus</i>	Great Black-backed Gull	318	BoCC Amber		
<i>Limosa lapponica</i>	Bar-tailed Godwit	54	BoCC Amber		
<i>Limosa limosa</i>	Black-tailed Godwit	650	BoCC Red	S41/7	Sch 1
<i>Linaria cannabina</i>	Linnet	429	BoCC Red	S41/7	
<i>Linaria flavirostris</i>	Twite	533	BoCC Red	S41/7	
<i>Locustella naevia</i>	Grasshopper Warbler	4	BoCC Red	S41/7	
<i>Mareca penelope</i>	Wigeon	537	BoCC Amber		
<i>Mareca strepera</i>	Gadwall	211	BoCC Amber		
<i>Melanitta nigra</i>	Common Scoter	17	BoCC Red	S41/7	Sch 1
<i>Mergellus albellus</i>	Smew	1	BoCC Red		
<i>Mergus serrator</i>	Red-breasted Merganser	11	BoCC Amber		
<i>Milvus milvus</i>	Red Kite	17			Sch 1
<i>Morus bassanus</i>	Gannet	8	BoCC Amber		
<i>Motacilla cinerea</i>	Grey Wagtail	31	BoCC Amber		
<i>Motacilla flava</i>	Yellow Wagtail	47	BoCC Red		
<i>Muscicapa striata</i>	Spotted Flycatcher	7	BoCC Red	S41/7	
<i>Numenius arquata</i>	Curlew	741	BoCC Red	S41/7	
<i>Numenius phaeopus</i>	Whimbrel	154	BoCC Red		Sch 1
<i>Oceanodroma leucorhoa</i>	Leach's Petrel	5	BoCC Red		Sch 1
<i>Oenanthe oenanthe</i>	Wheatear	284	BoCC Amber		
<i>Pandion haliaetus</i>	Osprey	6	BoCC Amber		Sch 1
<i>Passer domesticus</i>	House Sparrow	366	BoCC Red	S41/7	
<i>Passer montanus</i>	Tree Sparrow	64	BoCC Red	S41/7	
<i>Perdix perdix</i>	Grey Partridge	1	BoCC Red	S41/7	

Latin Name	Common Name	No.	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Phalaropus lobatus</i>	Red-necked Phalarope	1	BoCC Red		Sch 1
<i>Phoenicurus ochruros</i>	Black Redstart	7	BoCC Amber		Sch 1
<i>Phoenicurus phoenicurus</i>	Redstart	49	BoCC Amber		
<i>Phylloscopus trochilus</i>	Willow Warbler	97	BoCC Amber		
<i>Platalea leucorodia</i>	Spoonbill	15	BoCC Amber		Sch 1
<i>Plectrophenax nivalis</i>	Snow Bunting	1	BoCC Amber		Sch 1
<i>Pluvialis squatarola</i>	Grey Plover	80	BoCC Amber		
<i>Podiceps auritus</i>	Slavonian Grebe	3	BoCC Red		Sch 1
<i>Poecile montanus</i>	Willow Tit	1	BoCC Red	S41/7	
<i>Poecile palustris</i>	Marsh Tit	3	BoCC Red	S41/7	
<i>Prunella modularis</i>	Dunnock	598	BoCC Amber	S41/7	
<i>Puffinus puffinus</i>	Manx Shearwater	2	BoCC Amber		
<i>Pyrrhula pyrrhula</i>	Bullfinch	325	BoCC Amber	S41/7	
<i>Recurvirostra avosetta</i>	Avocet	56	BoCC Amber		Sch 1
<i>Regulus ignicapilla</i>	Firecrest	4			Sch 1
<i>Saxicola rubetra</i>	Whinchat	40	BoCC Red		
<i>Scolopax rusticola</i>	Woodcock	4	BoCC Red		
<i>Spatula clypeata</i>	Shoveler	333	BoCC Amber		
<i>Spatula querquedula</i>	Garganey	6	BoCC Amber		Sch 1
<i>Stercorarius parasiticus</i>	Arctic Skua	1	BoCC Red		
<i>Sterna hirundo</i>	Common Tern	213	BoCC Amber		
<i>Sterna paradisaea</i>	Arctic Tern	13	BoCC Amber		
<i>Sternula albifrons</i>	Little Tern	4	BoCC Amber		Sch 1
<i>Strix aluco</i>	Tawny Owl	1	BoCC Amber		
<i>Sturnus vulgaris</i>	Starling	451	BoCC Red	S41/7	

Latin Name	Common Name	No.	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Sylvia communis</i>	Whitethroat	140	BoCC Amber		
<i>Tadorna tadorna</i>	Shelduck	643	BoCC Amber		
<i>Thalasseus sandvicensis</i>	Sandwich Tern	34	BoCC Amber		
<i>Tringa erythropus</i>	Spotted Redshank	184	BoCC Amber		
<i>Tringa glareola</i>	Wood Sandpiper	2	BoCC Amber		Sch 1
<i>Tringa nebularia</i>	Greenshank	88	BoCC Amber		Sch 1
<i>Tringa ochropus</i>	Green Sandpiper	39	BoCC Amber		Sch 1
<i>Tringa totanus</i>	Redshank	536	BoCC Amber		
<i>Troglodytes troglodytes</i>	Wren	208	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	151	BoCC Amber		Sch 1
<i>Turdus philomelos</i>	Song Thrush	329	BoCC Amber		
<i>Turdus pilaris</i>	Fieldfare	133	BoCC Red		Sch 1
<i>Turdus torquatus</i>	Ring Ouzel	5	BoCC Red	S41/7	
<i>Turdus viscivorus</i>	Mistle Thrush	43	BoCC Red		
<i>Tyto alba</i>	Barn Owl	42			Sch 1
<i>Uria aalge</i>	Common Guillemot	15	BoCC Amber		
<i>Vanellus vanellus</i>	Lapwing	584	BoCC Red	S41/7	

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

3 Species within Schedule 1 of the Wildlife and Countryside Act 1981 are given additional protection by Special Penalties all year round for those in Part 1 of the Schedule.

## BTO WEBS DATA

3.1.8. BTO WeBS data for survey sectors within 2km of the Newbuild Infrastructure Boundary are presented below in **Table 2** and **Table 3** below.

**Table 2 – 5 Year (2014-2019) Mean Peak Counts of Waterbirds within WeBS Sectors with 2km of Transect 1**

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>
<i>Actitis hypoleucos</i>	Common Sandpiper	2	2	0
<i>Alcedo atthis</i>	Kingfisher	1	1	0

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>
<i>Anas acuta</i>	Pintail	387	11	1
<i>Anas crecca</i>	Teal	1380	614	92
<i>Anas platyrhynchos</i>	Mallard	298	190	24
<i>Anser anser</i>	Greylag Goose (British/Irish)	12	3	0
<i>Anser brachyrhynchus</i>	Pink-footed Goose	207	20	0
<i>Ardea alba</i>	Great White Egret	1	1	0
<i>Ardea cinerea</i>	Grey Heron	6	7	3
<i>Arenaria interpres</i>	Turnstone	1	2	5
<i>Aythya fuligula</i>	Tufted Duck	1	11	0
<i>Aythya marila</i>	Scaup	1	0	0
<i>Branta canadensis</i>	Canada Goose	638	380	129
<i>Branta leucopsis</i>	Barnacle Goose	2	2	0
<i>Bucephala clangula</i>	Goldeneye	1	0	0
<i>Calidris alpina</i>	Dunlin	3520	14	323
<i>Calidris canutus</i>	Knot	11	8	10
<i>Calidris ferruginea</i>	Curlew Sandpiper	1	0	0
<i>Calidris pugnax</i>	Ruff	0	3	0
<i>Charadrius dubius</i>	Little Ringed Plover	0	2	0
<i>Charadrius hiaticula</i>	Ringed Plover	18	0	0
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	1640	72	346
<i>Cygnus cygnus</i>	Whooper Swan	1	0	0
<i>Cygnus olor</i>	Mute Swan	3	6	0
<i>Egretta garzetta</i>	Little Egret	18	22	9
<i>Fulica atra</i>	Coot	35	39	0
<i>Gallinago gallinago</i>	Snipe	0	39	27

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>
<i>Gallinula chloropus</i>	Moorhen	9	12	0
<i>Haematopus ostralegus</i>	Oystercatcher	1900	126	219
<i>Larus argentatus</i>	Herring Gull	49	0	81
<i>Larus canus</i>	Common Gull	50	0	97
<i>Larus fuscus</i>	Lesser Black-backed Gull	352	27	41
<i>Larus marinus</i>	Great Black-backed Gull	27	0	11
<i>Limosa lapponica</i>	Bar-tailed Godwit	1	0	1
<i>Limosa limosa</i>	Black-tailed Godwit	1250	143	530
<i>Lymnocyptes minimus</i>	Jack Snipe	0	1	0
<i>Mareca penelope</i>	Wigeon	2340	408	4
<i>Mareca strepera</i>	Gadwall	0	5	0
<i>Mergus merganser</i>	Goosander	0	0	2
<i>Mergus serrator</i>	Red-breasted Merganser	1	0	0
<i>Numenius arquata</i>	Curlew	81	97	32
<i>Numenius phaeopus</i>	Whimbrel	5	0	6
<i>Phalacrocorax carbo</i>	Cormorant	38	10	20
<i>Pluvialis apricaria</i>	Golden Plover	28	0	11
<i>Pluvialis squatarola</i>	Grey Plover	2	0	0
<i>Podiceps cristatus</i>	Great Crested Grebe	7	2	2
<i>Recurvirostra avosetta</i>	Avocet	1	1	0
<i>Spatula clypeata</i>	Shoveler	0	20	0
<i>Sterna hirundo</i>	Common Tern	64	4	9
<i>Tachybaptus ruficollis</i>	Little Grebe	1	11	0
<i>Tadorna tadorna</i>	Shelduck	700	37	112
<i>Thalasseus sandvicensis</i>	Sandwich Tern	1	0	2

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>
<i>Tringa erythropus</i>	Spotted Redshank	4	13	0
<i>Tringa nebularia</i>	Greenshank	1	15	1
<i>Tringa totanus</i>	Redshank	1360	2176	689
<i>Vanellus vanellus</i>	Lapwing	1600	409	276

1 Oakenholt Marsh; 2 Deeside Naturalists Reserve; 3 Flint Saltmarsh

**Table 3 – 5 Year (2014-2019) Mean Peak Counts of Waterbirds within WeBS Sectors with 2km of Transects 5 and 7**

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>	4 <sup>3</sup>
<i>Actitis hypoleucos</i>	Common Sandpiper	0	8	0	1
<i>Alcedo atthis</i>	Kingfisher	0	1	0	1
<i>Anas acuta</i>	Pintail	0	11	0	27
<i>Anas crecca</i>	Teal	34	1006	(4)	596
<i>Anas platyrhynchos</i>	Mallard	18	354	5	78
<i>Anas platyrhynchos</i>	Domestic Mallard	0	1	0	0
<i>Anser anser</i>	Greylag Goose (Icelandic)	5	0	0	0
<i>Anser anser</i>	Greylag Goose (British/Irish)	7	35	0	18
<i>Anser anser</i>	Domestic Greylag Goose	0	5	0	8
<i>Anser brachyrhynchus</i>	Pink-footed Goose	100	663	0	120
<i>Ardea alba</i>	Great White Egret	0	4	0	0
<i>Ardea cinerea</i>	Grey Heron	1	26	1	5
<i>Aythya ferina</i>	Pochard	0	2	0	23
<i>Aythya fuligula</i>	Tufted Duck	6	68	0	144
<i>Branta bernicla</i>	Brent Goose (light bellied)	0	1	0	0
<i>Branta canadensis</i>	Canada Goose	0	6267	0	191
<i>Branta leucopsis</i>	Barnacle Goose	0	2	0	2
<i>Bubulcus ibis</i>	Cattle Egret	0	0	(1)	0

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>	4 <sup>3</sup>
<i>Bucephala clangula</i>	Goldeneye	0	1	0	1
<i>Calidris alpina</i>	Dunlin	0	42986	0	2924
<i>Calidris canutus</i>	Knot	0	32	0	3
<i>Calidris ferruginea</i>	Curlew Sandpiper	0	1	0	7
<i>Calidris minuta</i>	Little Stint	0	0	0	1
<i>Calidris pugnax</i>	Ruff	0	13	0	37
<i>Charadrius dubius</i>	Little Ringed Plover	1	1	0	1
<i>Charadrius hiaticula</i>	Ringed Plover	0	43	2	105
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	0	1809	400	471
<i>Cygnus columbianus</i>	Bewick's Swan	0	2	0	0
<i>Cygnus cygnus</i>	Whooper Swan	2	19	(26)	12
<i>Cygnus olor</i>	Mute Swan	19	26	0	17
<i>Egretta garzetta</i>	Little Egret	5	20	0	7
<i>Fulica atra</i>	Coot	8	95	0	38
<i>Gallinago gallinago</i>	Snipe	3	12	0	28
<i>Gallinula chloropus</i>	Moorhen	3	2	2	13
<i>Haematopus ostralegus</i>	Oystercatcher	2	409	2	2
<i>Ichthyaetus melanocephalus</i>	Mediterranean Gull	0	0	0	1
<i>Larus argentatus</i>	Herring Gull	0	515	0	12
<i>Larus canus</i>	Common Gull	0	20	0	73
<i>Larus fuscus</i>	Lesser Black-backed Gull	0	423	7	32
<i>Larus marinus</i>	Great Black-backed Gull	0	357	0	35
<i>Larus michahellis</i>	Yellow-legged Gull	0	0	0	1
<i>Limosa lapponica</i>	Bar-tailed Godwit	0	4	0	3
<i>Limosa limosa</i>	Black-tailed Godwit	0	1421	(23)	788

Latin Name	Common Name	1 <sup>1</sup>	2 <sup>2</sup>	3 <sup>3</sup>	4 <sup>3</sup>
<i>Lymnocyptes minimus</i>	Jack Snipe	0	1	0	
<i>Mareca penelope</i>	Wigeon	4	895	0	130
<i>Mareca strepera</i>	Gadwall	13	36	0	52
<i>Numenius arquata</i>	Curlew	101	1268	(21)	170
<i>Numenius phaeopus</i>	Whimbrel	0	5	0	3
<i>Phalacrocorax carbo</i>	Cormorant	1	121	0	15
<i>Pluvialis apricaria</i>	Golden Plover	547	1184	0	720
<i>Pluvialis squatarola</i>	Grey Plover	0	331	0	69
<i>Podiceps cristatus</i>	Great Crested Grebe	2	23	0	1
<i>Rallus aquaticus</i>	Water Rail	1	0	0	2
<i>Recurvirostra avosetta</i>	Avocet	0	16	0	9
<i>Spatula clypeata</i>	Shoveler	5	4	(2)	266
<i>Sterna hirundo</i>	Common Tern	0	0	0	1
<i>Tachybaptus ruficollis</i>	Little Grebe	5	6	0	11
<i>Tadorna ferruginea</i>	Ruddy Shelduck	0	1	0	0
<i>Tadorna tadorna</i>	Shelduck	7	6366	4	141
<i>Tringa nebularia</i>	Greenshank	0	1	0	3
<i>Tringa ochropus</i>	Green Sandpiper	0	3	0	1
<i>Tringa totanus</i>	Redshank	0	605	0	162
<i>Vanellus vanellus</i>	Lapwing	2333	6966	(8)	1482

1 Ince Marshes Fields; 2 Ince Bank; 3 Lordship Lane Fields (parentheses indicate incomplete counts); 4 Frodsham Sludge Lagoons



### 3.2. FIELD SURVEYS

3.2.1. A summary of the results of the field surveys is given below with tables listing species recorded at each transect over the twelve-month survey period. Detailed results showing a breakdown of numbers recorded during each individual survey are provided in **Annex B**.

#### TRANSECT 1

3.2.2. A total of 50 species were recorded at Transect 1, including 15 Amber list BoCC species and nine Red list BoCC species. The list also includes seven S41/7 and two Sch 1 species.

**Table 4 – Birds Species Recorded at Transect 1**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Accipiter nisus</i>	Sparrowhawk	BoCC Amber		
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Alectoris rufa</i>	Red-legged Partridge	BoCC Green		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Ardea cinerea</i>	Grey Heron	BoCC Green		
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba palumbus</i>	Wood Pigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		
<i>Erithacus rubecula</i>	Robin	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Garrulus glandarius</i>	Jay	BoCC Green		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Numenius arquata</i>	Curlew	BoCC Red	S41/7	
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Perdix perdix</i>	Grey Partridge	BoCC Red	S41/7	
<i>Phasianus colchicus</i>	Pheasant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Pyrrhula pyrrhula</i>	Bullfinch	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Saxicola rubicola</i>	Stonechat	BoCC Green		
<i>Streptopelia decaocto</i>	Collared Dove	BoCC Green		
<i>Sturnus vulgaris</i>	Starling	BoCC Red		
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Tadorna tadorna</i>	Shelduck	BoCC Amber		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus pilaris</i>	Fieldfare	BoCC Red		Sch 1
<i>Turdus viscivorus</i>	Mistle Thrush	BoCC Red		

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

3 Species within Schedule 1 of the Wildlife and Countryside Act 1981 are given additional protection by Special Penalties all year round for those in Part 1 of the Schedule.

## TRANSECT 2

3.2.8. A total of 82 species were recorded at Transect 2, including 35 Amber list BoCC species and 15 Red list BoCC species. The list also includes ten S41/7 and five Sch 1 species.

**Table 5 – Birds Species Recorded at Transect 2**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Accipiter nisus</i>	Sparrowhawk	BoCC Amber		
<i>Actitis hypoleucos</i>	Common Sandpiper	BoCC Amber		
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Alauda arvensis</i>	Skylark	BoCC Red	S41/7	
<i>Anas crecca</i>	Teal	BoCC Amber		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Anser anser</i>	Greylag Goose	BoCC Amber		
<i>Anser brachyrhynchus</i>	Pink-footed Goose	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Apus apus</i>	Swift	BoCC Red		
<i>Ardea alba</i>	Great White Egret	BoCC Amber		
<i>Ardea cinerea</i>	Grey Heron	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Charadrius hiaticula</i>	Ringed Plover	BoCC Red		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba oenas</i>	Stock Dove	BoCC Amber		
<i>Columba palumbus</i>	WoodPigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Cygnus cygnus</i>	Whooper Swan	BoCC Amber		Sch 1
<i>Cygnus olor</i>	Mute Swan	BoCC Amber		
<i>Delichon urbicum</i>	House Martin	BoCC Red		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		
<i>Egretta garzetta</i>	Little Egret	BoCC Green		
<i>Emberiza citrinella</i>	Yellowhammer	BoCC Red	S41/7	
<i>Emberiza schoeniclus</i>	Reed Bunting	BoCC Amber	S41/7	
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Falco peregrinus</i>	Peregrine	BoCC Green		Sch 1
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Gallinago gallinago</i>	Snipe	BoCC Amber		
<i>Gallinula chloropus</i>	Moorhen	BoCC Amber		
<i>Garrulus glandarius</i>	Jay	BoCC Green		
<i>Haematopus ostralegus</i>	Oystercatcher	BoCC Amber		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Ichthyaetus melanocephalus</i>	Mediterranean Gull	BoCC Amber		Sch 1
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus canus</i>	Common Gull	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Larus marinus</i>	Great Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Lymnocyptes minimus</i>	Jack Snipe	BoCC Green		
<i>Mareca penelope</i>	Wigeon	BoCC Amber		
<i>Mareca strepera</i>	Gadwall	BoCC Amber		
<i>Mergus merganser</i>	Goosander	BoCC Green		
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Motacilla cinerea</i>	Grey Wagtail	BoCC Amber		
<i>Motacilla flava</i>	Yellow Wagtail	BoCC Red		
<i>Numenius arquata</i>	Curlew	BoCC Red	S41/7	
<i>Oenanthe oenanthe</i>	Wheatear	BoCC Amber		
<i>Parus major</i>	Great Tit			
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Phalacrocorax carbo</i>	Cormorant	BoCC Green		
<i>Phasianus colchicus</i>	Pheasant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Riparia riparia</i>	Sand Martin	BoCC Green		
<i>Saxicola rubetra</i>	Whinchat	BoCC Red		
<i>Saxicola rubicola</i>	Stonechat	BoCC Green		
<i>Sterna hirundo</i>	Common Tern	BoCC Amber		
<i>Streptopelia decaocto</i>	Collared Dove	BoCC Green		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia borin</i>	Garden Warbler	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Tachybaptus ruficollis</i>	Little Grebe	BoCC Green		
<i>Tadorna tadorna</i>	Shelduck	BoCC Amber		
<i>Tringa totanus</i>	Redshank	BoCC Amber		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus pilaris</i>	Fieldfare	BoCC Red		Sch 1
<i>Vanellus vanellus</i>	Lapwing	BoCC Red	S41/7	

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

3 Species within Schedule 1 of the Wildlife and Countryside Act 1981 are given additional protection by Special Penalties all year round for those in Part 1 of the Schedule.

### TRANSECT 3

3.2.14. A total of 57 species were recorded at Transect 3, including 19 Amber list BoCC species and 11 Red list BoCC species. The list also includes nine S41/7 and three Sch 1 species.

**Table 6 – Birds Species Recorded at Transect 3**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Anas crecca</i>	Teal	BoCC Amber		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Anser anser</i>	Greylag Goose	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Ardea alba</i>	Great White Egret	BoCC Amber		
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Certhia familiaris</i>	Treecreeper	BoCC Green		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba oenas</i>	Stock Dove	BoCC Amber		
<i>Columba palumbus</i>	Wood Pigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		
<i>Emberiza citrinella</i>	Yellowhammer	BoCC Red	S41/7	

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Fulica atra</i>	Coot	BoCC Green		
<i>Garrulus glandarius</i>	Jay	BoCC Green		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus canus</i>	Common Gull	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Larus marinus</i>	Great Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Perdix perdix</i>	Grey Partridge	BoCC Red	S41/7	
<i>Periparus ater</i>	Coal Tit	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Poecile palustris</i>	Marsh Tit	BoCC Red	S41/7	
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Saxicola rubicola</i>	Stonechat	BoCC Green		
<i>Spatula clypeata</i>	Shoveler	BoCC Amber		
<i>Streptopelia decaocto</i>	Collared Dove	BoCC Green		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	



Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber;		
<i>Turdus pilaris</i>	Fieldfare	BoCC Red		Sch 1
<i>Turdus viscivorus</i>	Mistle Thrush	BoCC Red		
<i>Upupa epops</i>	Hoopoe	BoCC Green		Sch 1
<i>Vanellus vanellus</i>	Lapwing	BoCC Red	S41/7	

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

3 Species within Schedule 1 of the Wildlife and Countryside Act 1981 are given additional protection by Special Penalties all year round for those in Part 1 of the Schedule.

#### TRANSECT 4

3.2.20. A total of 63 species were recorded at Transect 4, including 27 Amber list BoCC species and nine Red list BoCC species. The list also includes nine S41/7 and three Sch 1 species.

**Table 7 – Birds Species Recorded at Transect 4**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler	BoCC Amber		
<i>Acrocephalus scirpaceus</i>	Reed Warbler	BoCC Green		
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Alauda arvensis</i>	Skylark	BoCC Red	S41/7	
<i>Alcedo atthis</i>	Kingfisher	BoCC Amber		Sch 1
<i>Anas crecca</i>	Teal	BoCC Amber		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Anser anser</i>	Greylag Goose	BoCC Amber		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Anser brachyrhynchus</i>	Pink-footed Goose	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Ardea alba</i>	Great White Egret	BoCC Amber		
<i>Ardea cinerea</i>	Grey Heron	BoCC Green		
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba oenas</i>	Stock Dove	BoCC Amber		
<i>Columba palumbus</i>	Wood Pigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Cygnus olor</i>	Mute Swan	BoCC Amber		
<i>Emberiza citrinella</i>	Yellowhammer	BoCC Red	S41/7	
<i>Emberiza schoeniclus</i>	Reed Bunting	BoCC Amber	S41/7	
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Gallinago gallinago</i>	Snipe	BoCC Amber		
<i>Gallinula chloropus</i>	Moorhen	BoCC Amber		
<i>Garrulus glandarius</i>	Jay	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus canus</i>	Common Gull	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Larus marinus</i>	Great Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Motacilla cinerea</i>	Grey Wagtail	BoCC Amber		
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Phalacrocorax carbo</i>	Cormorant	BoCC Green		
<i>Phasianus colchicus</i>	Pheasant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Phylloscopus trochilus</i>	Willow Warbler	BoCC Amber		
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Pyrrhula pyrrhula</i>	Bullfinch	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Saxicola rubicola</i>	Stonechat	BoCC Green		
<i>Scolopax rusticola</i>	Woodcock	BoCC Red		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Sylvia curruca</i>	Lesser Whitethroat	BoCC Green		
<i>Tachybaptus ruficollis</i>	Little Grebe	BoCC Green		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus pilaris</i>	Fieldfare	BoCC Red		Sch 1
<i>Vanellus vanellus</i>	Lapwing	BoCC Red	S41/7	

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

3 Species within Schedule 1 of the Wildlife and Countryside Act 1981 are given additional protection by Special Penalties all year round for those in Part 1 of the Schedule.

## TRANSECT 5

3.2.26. A total of 77 species were recorded at Transect 5, including 29 Amber list BoCC species and 14 Red list BoCC species. The list also includes 12 S41/7 and four Sch 1 species.

**Table 8 – Birds Species Recorded at Transect 5**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Accipiter nisus</i>	Sparrowhawk	BoCC Amber		
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler	BoCC Amber		
<i>Acrocephalus scirpaceus</i>	Reed Warbler	BoCC Green		
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Alauda arvensis</i>	Skylark	BoCC Red	S41/7	
<i>Anas crecca</i>	Teal	BoCC Amber		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Anser brachyrhynchus</i>	Pink-footed Goose	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Apus apus</i>	Swift	BoCC Red		
<i>Ardea alba</i>	Great White Egret	BoCC Amber		
<i>Ardea cinerea</i>	Grey Heron	BoCC Green		
<i>Aythya fuligula</i>	Tufted Duck	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Certhia familiaris</i>	Treecreeper	BoCC Green		
<i>Cettia cetti</i>	Cetti's Warbler	BoCC Green		Sch 1
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Circus aeruginosus</i>	Marsh Harrier	BoCC Amber		Sch 1
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba oenas</i>	Stock Dove	BoCC Amber		
<i>Columba palumbus</i>	Wood Pigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Cygnus olor</i>	Mute Swan	BoCC Amber		
<i>Delichon urbicum</i>	House Martin	BoCC Red		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		
<i>Egretta garzetta</i>	Little Egret	BoCC Green		
<i>Emberiza schoeniclus</i>	Reed Bunting	BoCC Amber	S41/7	
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Fulica atra</i>	Coot	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Gallinago gallinago</i>	Snipe	BoCC Amber		
<i>Gallinula chloropus</i>	Moorhen	BoCC Amber		
<i>Garrulus glandarius</i>	Jay	BoCC Green		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Larus marinus</i>	Great Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Linaria flavirostris</i>	Twite	BoCC Red	S41/7	
<i>Locustella naevia</i>	Grasshopper Warbler	BoCC Red	S41/7	
<i>Mareca strepera</i>	Gadwall	BoCC Amber		
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Numenius arquata</i>	Curlew	BoCC Red	S41/7	
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Periparus ater</i>	Coal Tit	BoCC Green		
<i>Phalacrocorax carbo</i>	Cormorant	BoCC Green		
<i>Phasianus colchicus</i>	Pheasant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Phylloscopus trochilus</i>	Willow Warbler	BoCC Amber		
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Pyrrhula pyrrhula</i>	Bullfinch	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Sitta europaea</i>	Nuthatch	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Spatula clypeata</i>	Shoveler	BoCC Amber		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia borin</i>	Garden Warbler	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Tachybaptus ruficollis</i>	Little Grebe	BoCC Green		
<i>Tadorna tadorna</i>	Shelduck	BoCC Amber		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus pilaris</i>	Fieldfare	BoCC Red		Sch 1
<i>Turdus viscivorus</i>	Mistle Thrush	BoCC Red		
<i>Vanellus vanellus</i>	Lapwing	BoCC Red	S41/7	

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

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3 Species within Schedule 1 of the Wildlife and Countryside Act 1981 are given additional protection by Special Penalties all year round for those in Part 1 of the Schedule.

## TRANSECT 7

3.2.32. A total of 54 species were recorded at Transect 7, including 19 Amber list BoCC species and 10 Red list BoCC species. The list also includes seven S41/7 and two Sch 1 species.

**Table 9 – Birds Species Recorded at Transect 7**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Accipiter nisus</i>	Sparrowhawk	BoCC Amber		
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Anser anser</i>	Greylag Goose	BoCC Amber		
<i>Anser brachyrhynchus</i>	Pink-footed Goose	BoCC Amber		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Apus apus</i>	Swift	BoCC Red		
<i>Ardea cinerea</i>	Grey Heron	BoCC Green		
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba oenas</i>	Stock Dove	BoCC Amber		
<i>Columba palumbus</i>	WoodPigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Delichon urbicum</i>	House Martin	BoCC Red		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		
<i>Emberiza schoeniclus</i>	Reed Bunting	BoCC Amber	S41/7	
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Garrulus glandarius</i>	Jay	BoCC Green		
<i>Haematopus ostralegus</i>	Oystercatcher	BoCC Amber		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	



Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Larus canus</i>	Common Gull	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Larus marinus</i>	Great Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Numenius arquata</i>	Curlew	BoCC Red	S41/7	
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Phalacrocorax carbo</i>	Cormorant	BoCC Green		
<i>Phasianus colchicus</i>	Pheasant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Sitta europaea</i>	Nuthatch	BoCC Green		
<i>Streptopelia decaocto</i>	Collared Dove	BoCC Green		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus pilaris</i>	Fieldfare	BoCC Red		Sch 1
<i>Turdus viscivorus</i>	Mistle Thrush	BoCC Red		

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

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## TRANSECT 25

3.2.38. A total of 52 species were recorded at Transect 25, including 19 Amber list BoCC species and seven Red list BoCC species. The list also includes six S41/7 and one Sch 1 species.

**Table 10 – Birds Species Recorded at Transect 25**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Anser anser</i>	Greylag Goose	BoCC Amber		
<i>Anthus pratensis</i>	Meadow Pipit	BoCC Amber		
<i>Apus apus</i>	Swift	BoCC Red		
<i>Ardea cinerea</i>	Grey Heron	BoCC Green		
<i>Branta canadensis</i>	Canada Goose	BoCC Green		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba oenas</i>	Stock Dove	BoCC Amber		
<i>Columba palumbus</i>	Wood Pigeon	BoCC Amber		
<i>Corvus corax</i>	Raven	BoCC Green		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Falco tinnunculus</i>	Kestrel	BoCC Amber		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Fulica atra</i>	Coot	BoCC Green		
<i>Gallinula chloropus</i>	Moorhen	BoCC Amber		
<i>Garrulus glandarius</i>	Jay	BoCC Green		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus canus</i>	Common Gull	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber;		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Periparus ater</i>	Coal Tit	BoCC Green		
<i>Phalacrocorax carbo</i>	Cormorant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Phylloscopus trochilus</i>	Willow Warbler	BoCC Amber		
<i>Pica pica</i>	Magpie	BoCC Green		
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Pyrrhula pyrrhula</i>	Bullfinch	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Sterna hirundo</i>	Common Tern	BoCC Amber		
<i>Streptopelia decaocto</i>	Collared Dove	BoCC Green		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus viscivorus</i>	Mistle Thrush	BoCC Red		

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

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## TRANSECT 26

3.2.44. A total of 50 species were recorded at Transect 25, including 18 Amber list BoCC species and seven Red list BoCC species. The list also includes eight S41/7 and one Sch 1 species.

**Table 11 – Birds Species Recorded at Transect 26**

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Accipiter nisus</i>	Sparrowhawk	BoCC Amber		
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler	BoCC Amber		
<i>Actitis hypoleucos</i>	Common Sandpiper	BoCC Amber		
<i>Aegithalos caudatus</i>	Long-tailed Tit	BoCC Green		
<i>Anas platyrhynchos</i>	Mallard	BoCC Amber		
<i>Buteo buteo</i>	Buzzard	BoCC Green		
<i>Carduelis carduelis</i>	Goldfinch	BoCC Green		
<i>Certhia familiaris</i>	Treecreeper	BoCC Green		
<i>Chloris chloris</i>	Greenfinch	BoCC Red		
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	BoCC Amber		
<i>Coloeus monedula</i>	Jackdaw	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Columba livia</i> (domest.)	Feral Pigeon	BoCC Green		
<i>Columba palumbus</i>	WoodPigeon	BoCC Amber		
<i>Corvus corone</i>	Carrion Crow	BoCC Green		
<i>Corvus frugilegus</i>	Rook	BoCC Amber		
<i>Cyanistes caeruleus</i>	Blue Tit	BoCC Green		
<i>Dendrocopos major</i>	Great Spotted Woodpecker	BoCC Green		
<i>Emberiza citrinella</i>	Yellowhammer	BoCC Red	S41/7	
<i>Emberiza schoeniclus</i>	Reed Bunting	BoCC Amber	S41/7	
<i>Erithacus rubecula</i>	Robin	BoCC Green		
<i>Fringilla coelebs</i>	Chaffinch	BoCC Green		
<i>Fulica atra</i>	Coot	BoCC Green		
<i>Gallinula chloropus</i>	Moorhen	BoCC Amber		
<i>Hirundo rustica</i>	Swallow	BoCC Green		
<i>Larus argentatus</i>	Herring Gull	BoCC Red	S41/7	
<i>Larus canus</i>	Common Gull	BoCC Amber		
<i>Larus fuscus</i>	Lesser Black-backed Gull	BoCC Amber		
<i>Linaria cannabina</i>	Linnet	BoCC Red	S41/7	
<i>Motacilla alba</i>	Pied Wagtail	BoCC Green		
<i>Parus major</i>	Great Tit	BoCC Green		
<i>Passer domesticus</i>	House Sparrow	BoCC Red	S41/7	
<i>Periparus ater</i>	Coal Tit	BoCC Green		
<i>Phasianus colchicus</i>	Pheasant	BoCC Green		
<i>Phylloscopus collybita</i>	Chiffchaff	BoCC Green		
<i>Phylloscopus trochilus</i>	Willow Warbler	BoCC Amber		
<i>Pica pica</i>	Magpie	BoCC Green		

Latin Name	Common Name	BoCC <sup>1</sup>	S41/7 <sup>2</sup>	Sch 1 <sup>3</sup>
<i>Prunella modularis</i>	Dunnock	BoCC Amber	S41/7	
<i>Pyrrhula pyrrhula</i>	Bullfinch	BoCC Amber	S41/7	
<i>Regulus regulus</i>	Goldcrest	BoCC Green		
<i>Streptopelia decaocto</i>	Collared Dove	BoCC Green		
<i>Sturnus vulgaris</i>	Starling	BoCC Red	S41/7	
<i>Sylvia atricapilla</i>	Blackcap	BoCC Green		
<i>Sylvia borin</i>	Garden Warbler	BoCC Green		
<i>Sylvia communis</i>	Whitethroat	BoCC Amber		
<i>Sylvia curruca</i>	Lesser Whitethroat	BoCC Green		
<i>Troglodytes troglodytes</i>	Wren	BoCC Amber		
<i>Turdus iliacus</i>	Redwing	BoCC Amber		Sch 1
<i>Turdus merula</i>	Blackbird	BoCC Green		
<i>Turdus philomelos</i>	Song Thrush	BoCC Amber		
<i>Turdus viscivorus</i>	Mistle Thrush	BoCC Red		

1 Birds of Conservation Concern Red, Amber or Green status. For definitions see **paragraphs 1.3.1 to 1.3.5** above.

2 Section 7 (S7) of the Environment (Wales) Act 2016 lists species in Wales, whilst Section 41 (S41) of the NERC Act 2006 lists species in England, which are considered of key significance in sustaining and improving biodiversity in relation to Wales and England.

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## **4. TRANSECT SUMMARIES**

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### **4.1. TRANSECT 1**

- 4.1.1. The bird assemblage at Transect 1 consisted mainly of common farmland birds including six species of corvid, Pheasant, and small numbers of Red-legged and Grey Partridge. Passerines recorded in fields, hedgerows and small patches of woodland included Starling, Chaffinch, Meadow Pipit, Goldfinch, Wren, Blue Tit, Linnet, Robin and Dunnock.
- 4.1.2. Fieldfare and Redwing were frequent in the winter and gulls were regularly recorded in small flocks, with the commonest species being Black-headed Gull. Despite the transect being located less than 0.5km from the Dee Estuary, Curlew (two birds in December 2020 and two in June 2021) and Shelduck (four birds overflying the transect in June 2021) were the only SPA qualifying species recorded at the site.
- 4.1.3. Survey data showed that despite the close proximity of the Dee Estuary, the fields surrounding Transect 1 are not regularly used by species for which the SPA is designated.

### **4.2. TRANSECT 2**

- 4.2.1. Extra survey effort was undertaken for Transect 2 due to early results showing large counts of Redshank along the exposed banks of the River Dee. The section of the river where the pipeline crosses is not within the Dee Estuary SPA but this canalised stretch of river is directly linked to the Dee Estuary, to the north-west, albeit 3.9km upstream at its nearest point.
- 4.2.2. The River Dee is tidal at the crossing point and the amount of exposed mud below the grassy banks varied between surveys depending on tidal state. These banks regularly supported large flocks of Redshank throughout the winter. From December 2020 to April 2021 numbers ranged from three in April 2021 to 165 in March 2021, with a mean count of 62 over the six visits. Only a single bird was recorded during each of the three visits from September 2021 to early October 2021 but from late October 2021 to late March 2022 a mean count of 61 was recorded over the 11 visits, with a minimum of zero in late November 2021 and a maximum of 146 in early March 2022.
- 4.2.3. The Redshank feeding along the banks of the river were mostly concentrated along the southern half of the transect route, including the area where the trenchless pipeline crossing is proposed.
- 4.2.4. Site designation data shows that in winter the Dee Estuary SPA regularly supports 3.5% of the Eastern Atlantic wintering population and 5.9% of the Eastern Atlantic passage population of Redshank.

- 4.2.5. A significant amount of Redshank would equate to 1% of the SPA passage or wintering population. The 5 year mean 1994/95-1998/99 for Redshank within the Dee Estuary SPA is 5,293 wintering individuals and 8,795 individuals on passage. In March 2021 the surveys along Transect 2 provided a peak count of 165 individuals, which equates to 3.1% of the wintering population and 1.9% of the passage population. Although the counts used from Transect 2 are peak counts and the figures given in the SPA designation are mean counts, this section of the River Dee can still be considered to be an important foraging area for Redshank, which constitute part of the SPA population.
- 4.2.6. Other SPA qualifying species were recorded along Transect 2 but in far smaller numbers than Redshank, including Shelduck, Curlew, Oystercatcher, Teal and Common Tern.
- 4.2.7. Large numbers of Lapwing were recorded but although small numbers were recorded on the muddy banks of the river, most were within, or overflying, arable fields to the north of the river. Mallard, Cormorant and Black-headed Gull were frequent on or flying along the length of the river throughout the year. Large numbers of Pink-Footed Goose were recorded overflying the transect in winter but only at very high altitude. Canada Goose numbers were also high but with birds generally not alighting on or directly adjacent to the river.
- 4.2.8. In May 2021 three Lapwing nests and one Oystercatcher nest were recorded within an arable field to the north of the river, approximately 250m south-west of the Newbuild Carbon Dioxide pipeline.

### **4.3. TRANSECT 3**

- 4.3.1. Transect 3 was located at the northern edge of the village of Mollington, consisting predominantly of improved grassland to the north, with species-poor hedgerows and mature trees as field boundaries and several small ponds along the route.
- 4.3.2. The bird assemblage was typical of farmland and urban fringe habitat, with the most frequent species including Goldfinch, Black-headed Gull, Jackdaw, Wood Pigeon, Carrion Crow, Blue Tit, Blackbird, House Sparrow and Starling present all year round. Flocks of Fieldfare and Redwing were recorded during the winter months.
- 4.3.3. Small numbers of wildfowl were present around ponds including Teal, Mallard, Greylag Goose, Canada Goose and Shoveler. The only notable species recorded was Hoopoe, in May 2021, at the northern edge of the village.

### **4.4. TRANSECT 4**

- 4.4.1. Land around Transect 4 included a large area of swamp and marshy grassland to the east of the River Gowy, with an active landfill site to the south. The marshy grassland and riverine habitat was found to support several typical



species including Sedge Warbler, Reed Warbler, Teal, Mallard, Grey Heron, Snipe, Moorhen, Grey Wagtail and Kingfisher.

- 4.4.2. The most significant bird assemblages within the area though consisted of large flocks of gulls feeding on and over the landfill site and directly adjacent to the transect in fields to the west of the River Gowy. Species present included Black-headed Gull, Common Gull, Lesser Black-backed Gull and Greater Black-backed Gull but the most frequent species was the BoCC red-listed Herring Gull, with a peak count of 800 in January 2021.

#### **4.5. TRANSECT 5**

- 4.5.1. Transect 5 is located only 0.5km south of the Mersey Estuary SPA/Ramsar. Only small numbers of Teal, Curlew and Lapwing were recorded in wet grassland fields either side of the transect, with Shelduck only recorded flying over the transect route. No other Mersey Estuary SPA qualifying species were recorded along Transect 5.
- 4.5.2. Species and numbers present do not indicate that land around Transect 5 is of importance for SPA qualifying species.

#### **4.6. TRANSECT 7**

- 4.6.1. Transect 7 is also located 1.5km south of the Mersey Estuary SPA/Ramsar site so was also assessed for its possible importance for SPA qualifying species.
- 4.6.2. The arable land within the transect was found to support a species assemblage typical of the habitat type. Large numbers of corvids, Black-headed Gull, Wood Pigeon, Goldfinch, Starling and winter thrushes foraged on the arable land, whilst small passerines including House Sparrow, Blackbird, Robin, Wren and Blue Tit were concentrated along field boundaries including the railway line to the north, woodland to the west and housing to the south and east. The only SPA qualifying species recorded was Curlew, which was largely restricted to birds overflying the site.
- 4.6.3. Species and numbers present do not indicate that land within Transect 7 is of importance for SPA qualifying species.

#### **4.7. TRANSECT 25**

- 4.7.1. Transect 25 is located along the line of the Newbuild Carbon Dioxide pipeline in Wales but is approximately 1.5km south of the Dee Estuary SPA and Ramsar. This transect is situated on farmland between large areas of residential development to the east and west, with industrial land to the north.
- 4.7.2. The bird assemblages present along this transect were typical of the type of urban fringe/agricultural location. Large numbers of Wood Pigeon, corvids and

Starling were recorded with small numbers of overflying Common Tern being the only Dee Estuary SPA qualifying species.

#### **4.8. TRANSECT 26**

4.8.1. Transect 26 is located near to Transect 25 and is also situated amongst urban fringe and farmland approximately 2.5km south of the of the Dee Estuary SPA and Ramsar.

4.8.2. The birds present along Transect 26 were also typical of the urban fringe/agricultural location, with no Dee Estuary SPA qualifying species recorded.

#### **4.9. NUMBER OF SPECIES RECORDED**

4.9.1. During the winter/passage period (September to February) a total of 75 species were recorded within or adjacent to the English section of the Newbuild Infrastructure Boundary (Transects 3, 4, 5 & 7); including 28 Amber BoCC, 15 Red BoCC, two Sch 1 (Fieldfare and Redwing) and 12 S41 species.

4.9.2. During the breeding period (March to August) a total of 82 species were recorded within or adjacent to the English section of the Newbuild Infrastructure Boundary (Transects 3, 4, 5 & 7); including 32 Amber BoCC, 14 Red BoCC, five Sch 1 (Kingfisher, Marsh Harrier, Hoopoe, Fieldfare and Redwing) and 12 S41 species.

4.9.3. During the winter/passage period (September to February) a total of 76 species were recorded within or adjacent to the Welsh section of the Newbuild Infrastructure Boundary (Transects 1, 2, 25 & 26); including 32 Amber BoCC, 12 Red BoCC, four Sch 1 (Whooper Swan, Peregrine, Fieldfare and Redwing) and ten S7 species.

4.9.4. During the breeding period (March to August) a total of 85 species were recorded within or adjacent to the Welsh section of the Newbuild Infrastructure Boundary (Transects 1, 2, 25 & 26); including 34 Amber BoCC, 17 Red BoCC, three Sch 1 (Mediterranean Gull, Fieldfare and Redwing) and 13 S7 species.

#### **4.10. POTENTIAL ORNITHOLOGICAL CONSTRAINTS**

##### **SPA QUALIFYING SPECIES**

4.10.1. During the bird surveys of land within the Newbuild Infrastructure Boundary, transects were sited evenly along the proposed Newbuild Carbon Dioxide pipeline route to sample a representative selection of habitat types to allow an assessment to be made of the value of the surrounding land for bird assemblages.

4.10.2. It was found that the only transect with significant numbers of SPA qualifying species was Transect 2, where large numbers of Redshank used the bare

banks of the River Dee, near Sealand, through the winter months. The other seven transects, including Transect 5 and Transect 7 which are near the River Mersey and Transect 1, near the River Dee did not regularly record SPA qualifying species.

- 4.10.3. Although the River Dee at the crossing point is not within the Dee Estuary SPA, it is directly linked to the SPA further north-west. The population of Redshank using the land along Transect 2 will be part of the population that occurs within the SPA and should be considered as being functionally linked.

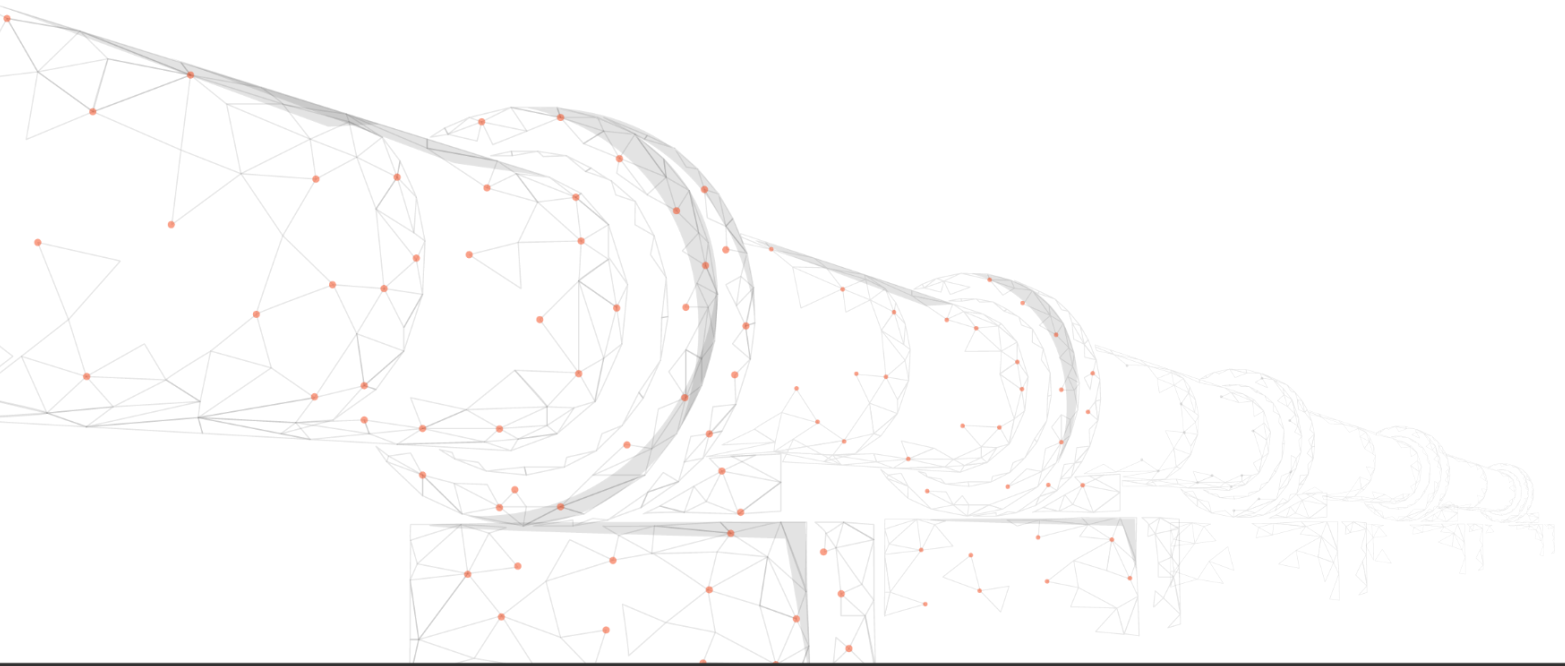
### **BREEDING BIRDS**

- 4.10.4. All breeding wild birds are afforded a degree of protection through the Wildlife and Countryside Act 1981 (as amended). This includes protection of active nests, eggs and young birds.
- 4.10.5. The DCO Proposed Development has the potential to directly impact upon nest sites of birds within a variety of habitats including:
- Passerines nesting within trees, scrub, hedgerows, swamp vegetation and wet ditches located along the proposed route of the Newbuild Carbon Dioxide Pipeline.
  - Water birds such as Moorhen, Coot, Mallard, Canada Goose, Mute Swan and Little Grebe are likely to nest around established ponds and surrounding vegetation along the proposed route of the Newbuild Carbon Dioxide Pipeline.
  - Arable and pasture fields along the proposed route of the Newbuild Carbon Dioxide Pipeline may support ground nesting species such as Skylark, Meadow Pipit, Lapwing and Oystercatcher.
  - The DCO Proposed Development may directly impact species within habitats described above if vegetation clearance during the breeding season is required to accommodate Construction Compounds or as part of trenchless and trenched operations during the construction stage of the DCO Proposed Development.

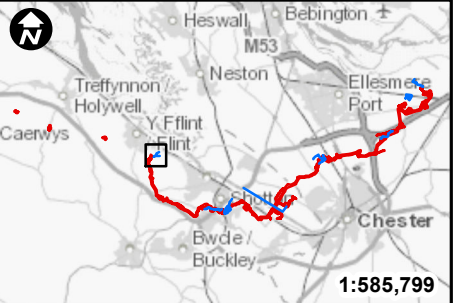
- **Ref. 1** – Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114: 723-747.
- **Ref. 2** - HMSO (1981). *Wildlife and Countryside Act (as amended by the Countryside and Rights of Way Act 2000)*. HMSO, London.
- **Ref. 3** - HMSO (2006). *Natural Environment and Rural Communities Act*. HMSO, London.
- **Ref. 4** - HMSO (2016). *Environment (Wales) Act 2016*. Welsh Government.

# Annex A

## FIGURES







**Key:**

Newbuild Infrastructure Boundary

— Transect 1

**Months**

XY	January
XY	February
XY	March
XY	April
XY	May
XY	June
XY	July
XY	August
XY	September
XY	October
XY	November
XY	December

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## HyNet North West

PROJECT TITLE  
**Hynet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE  
**Figure 9.8.1 - Mapping of BoCC red/amber and Schedule 1 birds by month Transect 1**

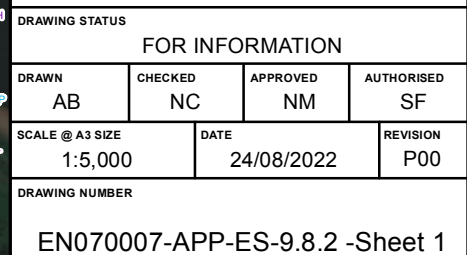
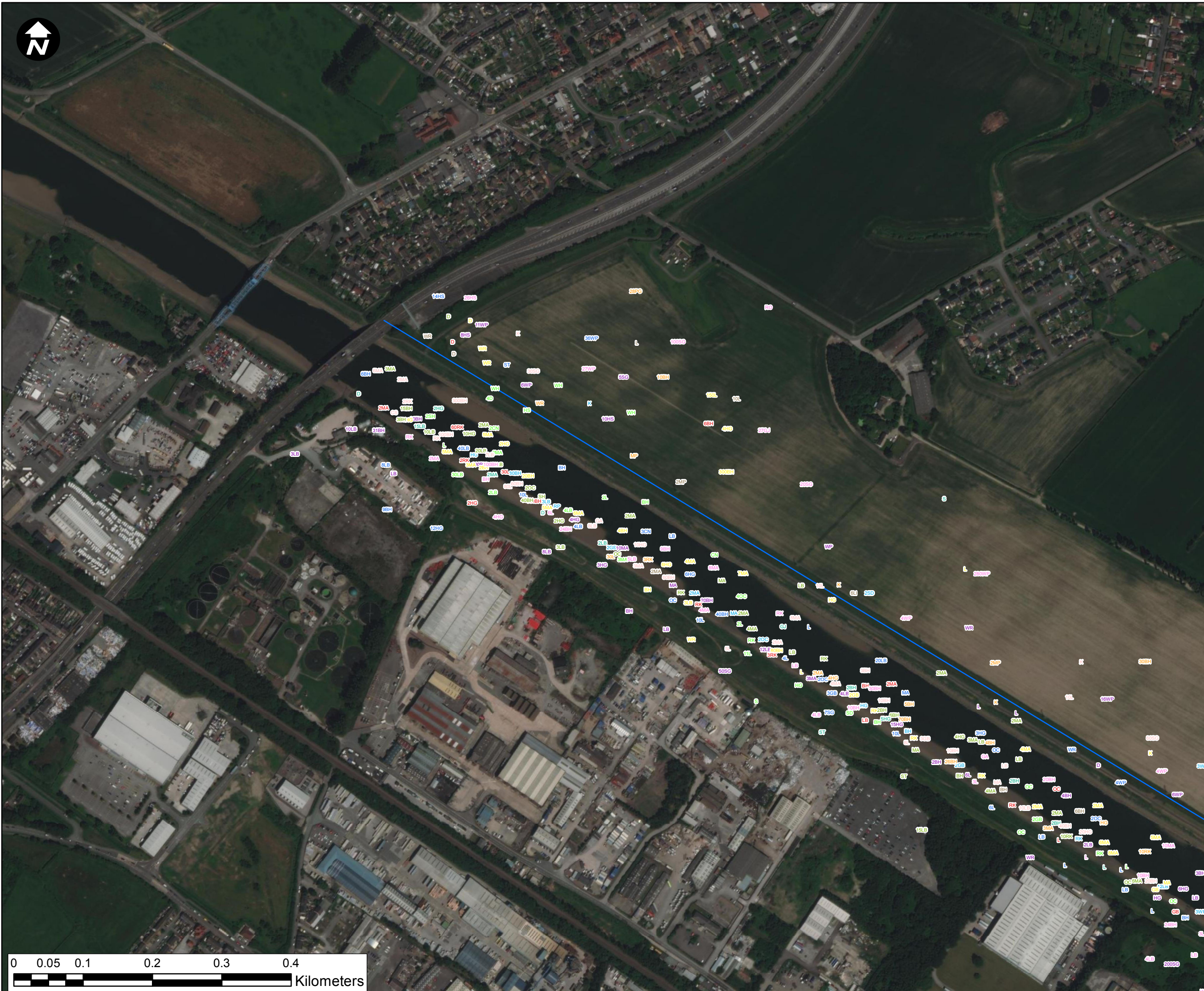
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**FOR INFORMATION**

DRAWN AB	CHECKED NC	APPROVED NM	AUTHORISED SF
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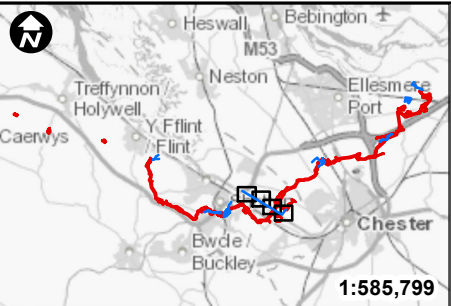
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DRAWING NUMBER  
**EN070007-APP-ES-9.8.1**









**Key:**

Newbuild Infrastructure Boundary

— Transect 2

**Months**

XY January

XY February

XY March

XY April

XY May

XY June

XY July

XY August

XY September

XY October

XY November

XY December

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## HyNet North West

PROJECT TITLE  
**Hynet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE  
**Figure 9.8.2 - Mapping of BoCC red/amber and Schedule 1 birds by month Transect 2**

DRAWING STATUS  
**FOR INFORMATION**

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AB	NC	NM	SF

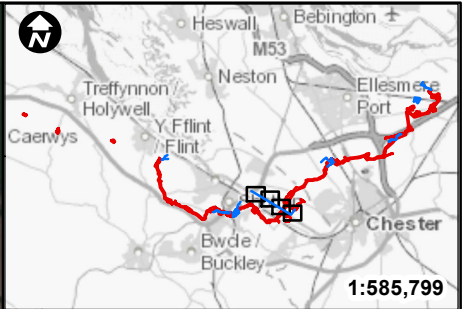
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DRAWING NUMBER  
**EN070007-APP-ES-9.8.2 -Sheet 2**









**Key:**

Newbuild Infrastructure Boundary

Transect 2

**Months**

XY January

XY February

XY March

XY April

XY May

XY June

XY July

XY August

XY September

XY October

XY November

XY December

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## HyNet North West

PROJECT TITLE

**Hynet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE

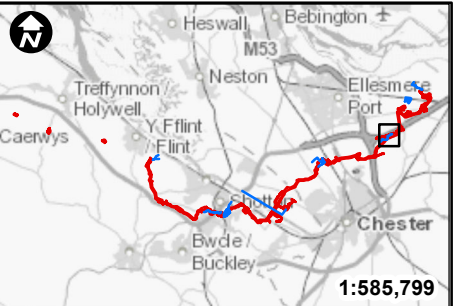
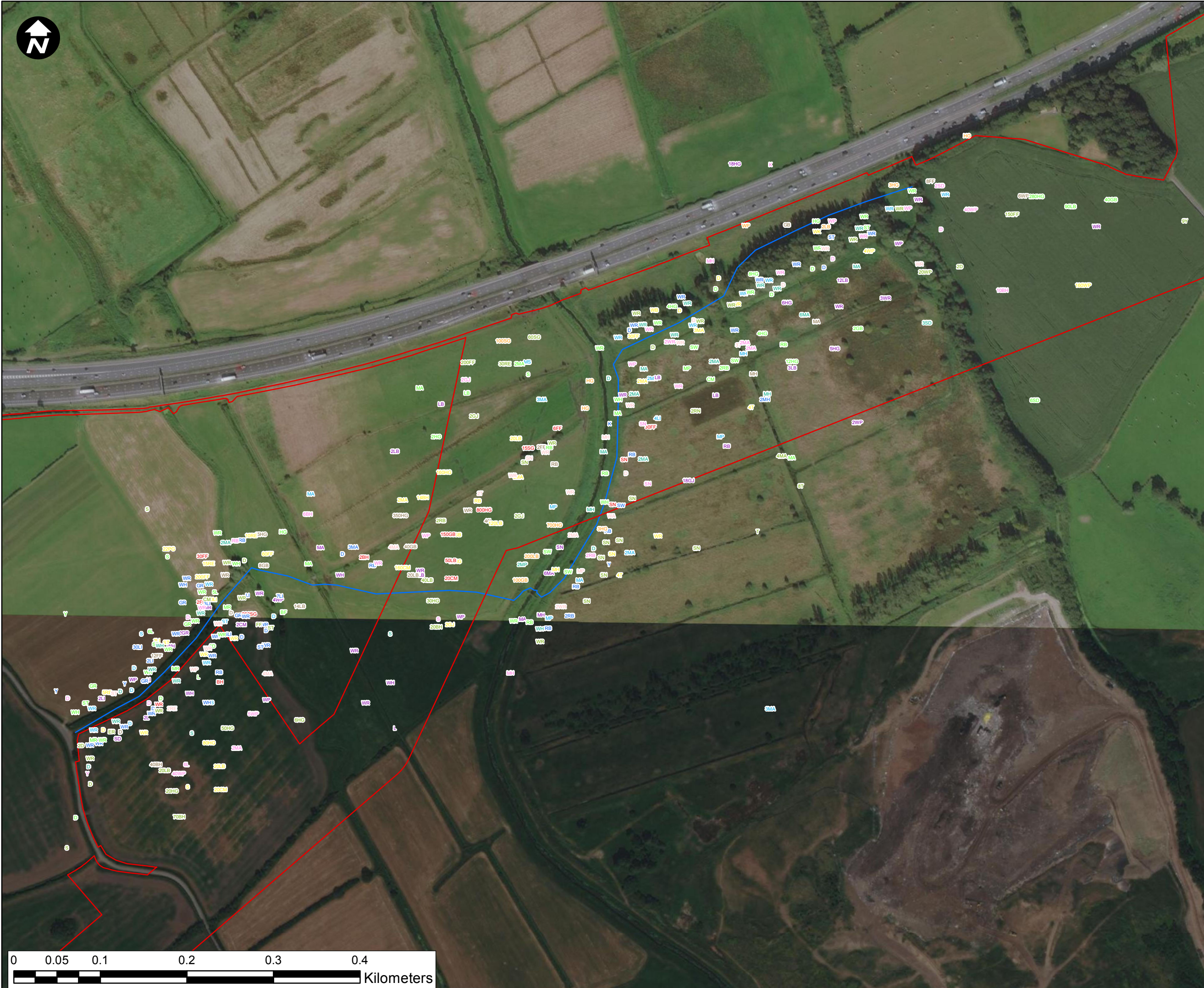
**Figure 9.8.2 - Mapping of BoCC red/amber and Schedule 1 birds by month Transect 2**

DRAWING STATUS			
FOR INFORMATION			
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SCALE @ A3 SIZE 1:5,000		DATE 24/08/2022	REVISION P00
DRAWING NUMBER  EN070007-APP-ES-9.8.2 -Sheet 4			









**Key:**

Newbuild Infrastructure Boundary

Transect 4

**Months**

XY January

XY February

XY March

XY April

XY May

XY June

XY July

XY August

XY September

XY October

XY November

XY December

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## HyNet North West

**PROJECT TITLE**

**Hynet North West Carbon Dioxide Pipeline DCO**

**DRAWING TITLE**

**Figure 9.8.4 - Mapping of BoCC red/amber and Schedule 1 birds by month Transect 4**

**DRAWING STATUS**

**FOR INFORMATION**

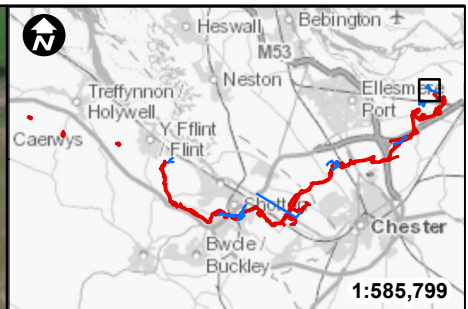
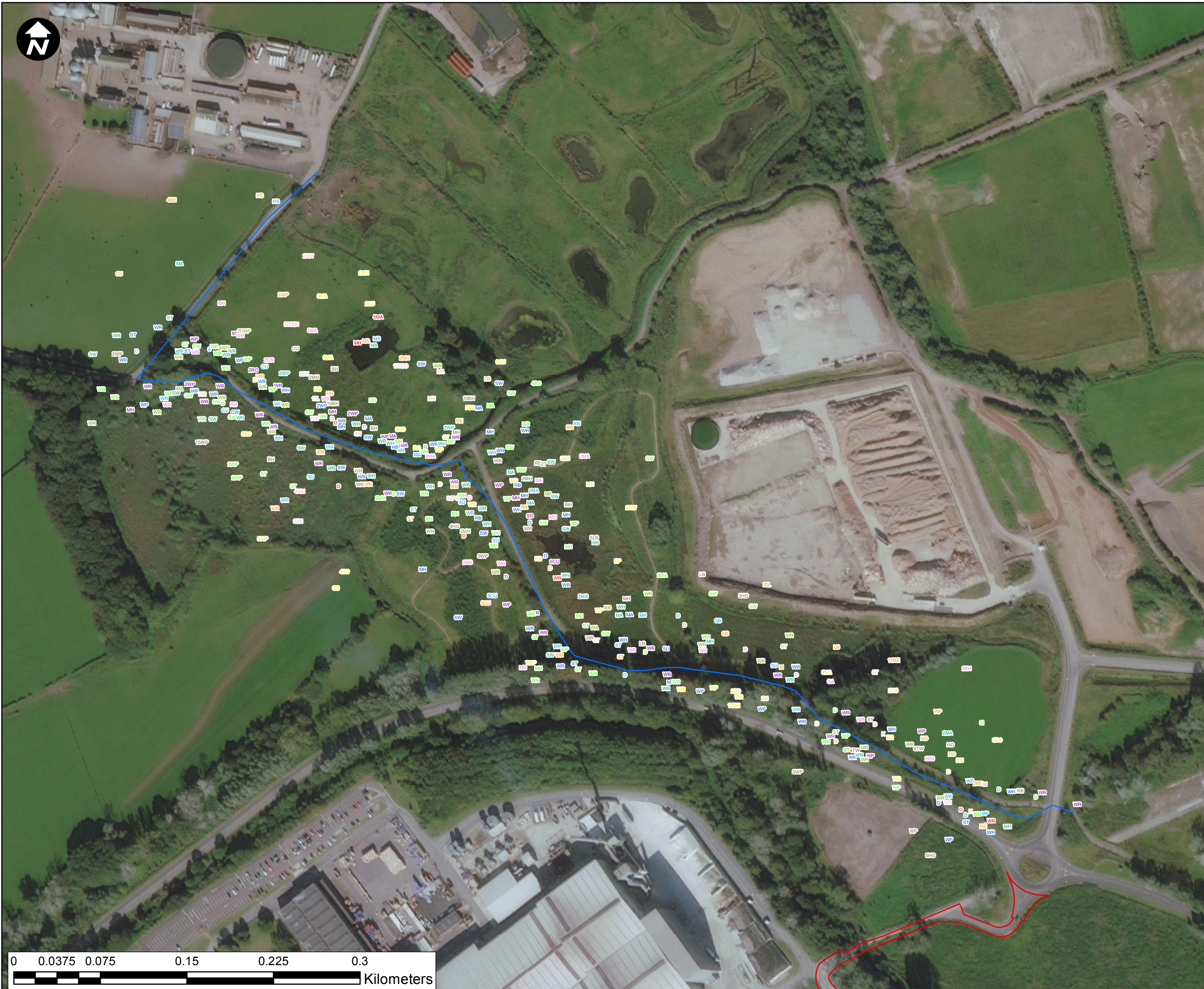
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AB	NC	NM	SF

SCALE @ A3 SIZE	DATE	REVISION
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**DRAWING NUMBER**

**EN070007-APP-ES-9.8.4**





**Key:**

Newbuild Infrastructure Boundary

Transect 5

**Months**

XY January

XY February

XY March

XY April

XY May

XY June

XY July

XY August

XY September

XY October

XY November

XY December

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## HyNet North West

**PROJECT TITLE**  
**Hynet North West Carbon Dioxide Pipeline DCO**

**DRAWING TITLE**  
**Figure 9.8.5 - Mapping of BoCC red/amber and Schedule 1 birds by month Transect 5**

**DRAWING STATUS**  
**FOR INFORMATION**

DRAWN	CHECKED	APPROVED	AUTHORISED
AB	NC	NM	SF

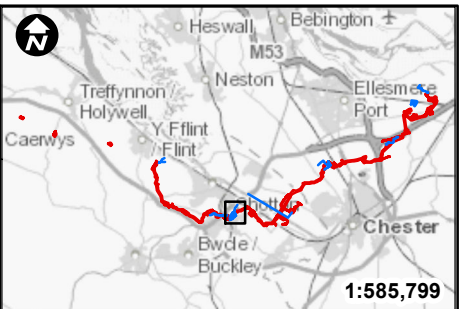
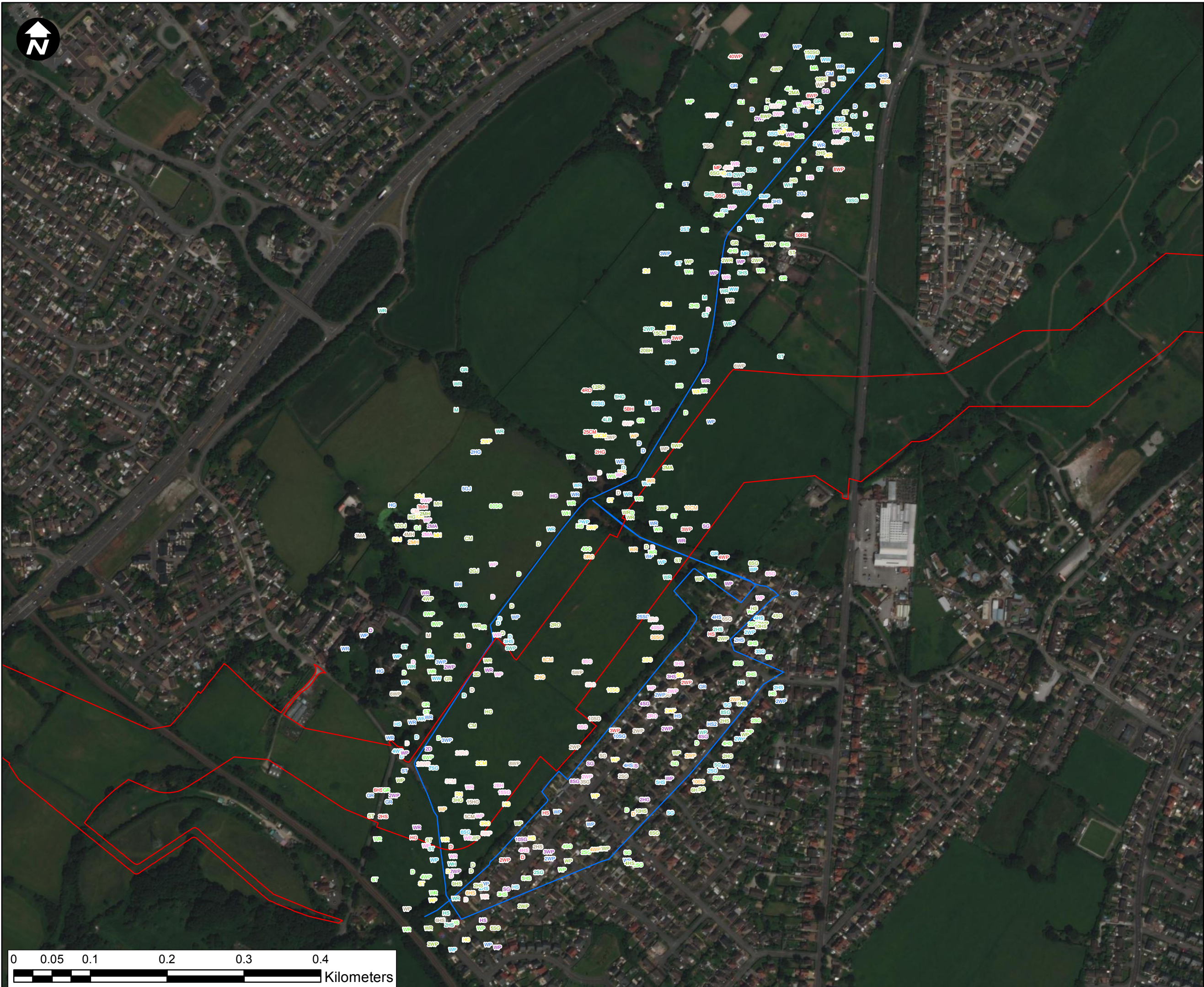
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**DRAWING NUMBER**  
**EN070007-APP-ES-9.8.5**









**Key:**

Newbuild Infrastructure Boundary

Transect 25

**Months**

XY January

XY February

XY March

XY April

XY May

XY June

XY July

XY August

XY September

XY October

XY November

XY December

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## HyNet North West

PROJECT TITLE

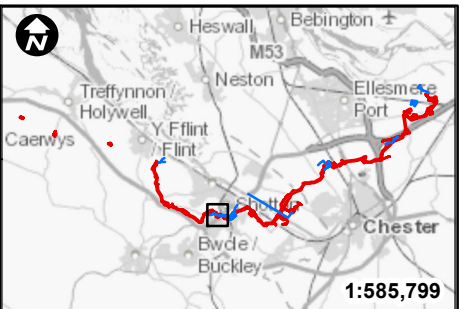
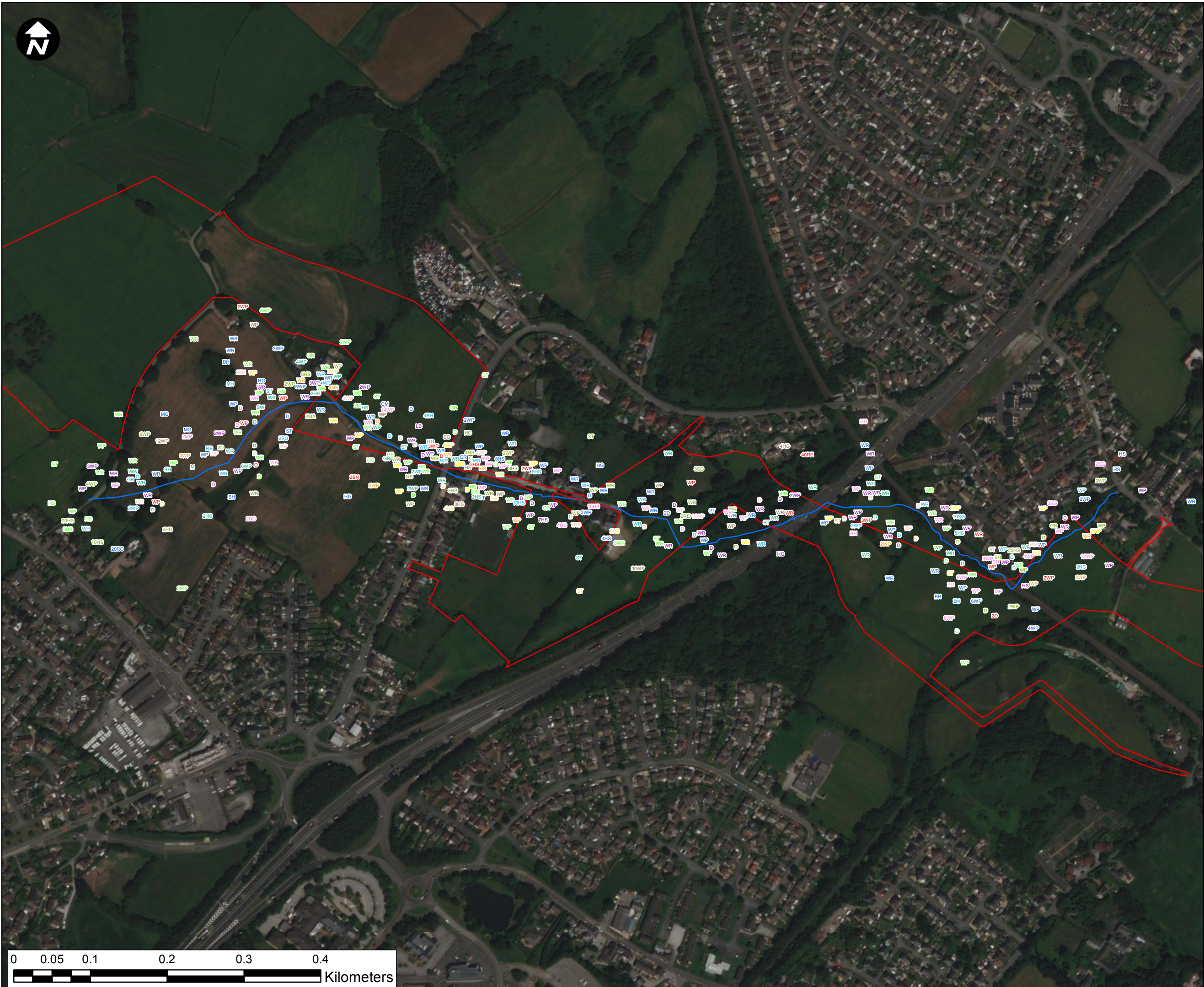
**Hynet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 9.8.7 - Mapping of BoCC red/amber and Schedule 1 birds by month Transect 25

DRAWING STATUS			
FOR INFORMATION			
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AB	NC	NM	SF
SCALE @ A3 SIZE		DATE	REVISION
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DRAWING NUMBER			
EN070007-APP-ES-9.8.7			





**Key:**

Newbuild Infrastructure Boundary

Transect 26

**Months**

XY January

XY February

XY March

XY April

XY May

XY June

XY July

XY August

XY September

XY October

XY November

XY December

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## HyNet North West

**PROJECT TITLE**

**Hynet North West Carbon Dioxide Pipeline DCO**

**DRAWING TITLE**

Figure 9.8.8 - Mapping of BoCC red/amber and Schedule 1 birds by month  
Transect 26

DRAWING STATUS			
FOR INFORMATION			
DRAWN AB	CHECKED NC	APPROVED NM	AUTHORISED SF
SCALE @ A3 SIZE 1:4,500	DATE 24/08/2022	REVISION P00	
DRAWING NUMBER EN070007-APP-ES-9.8.8			



# Annex B

## SPECIES TABLES

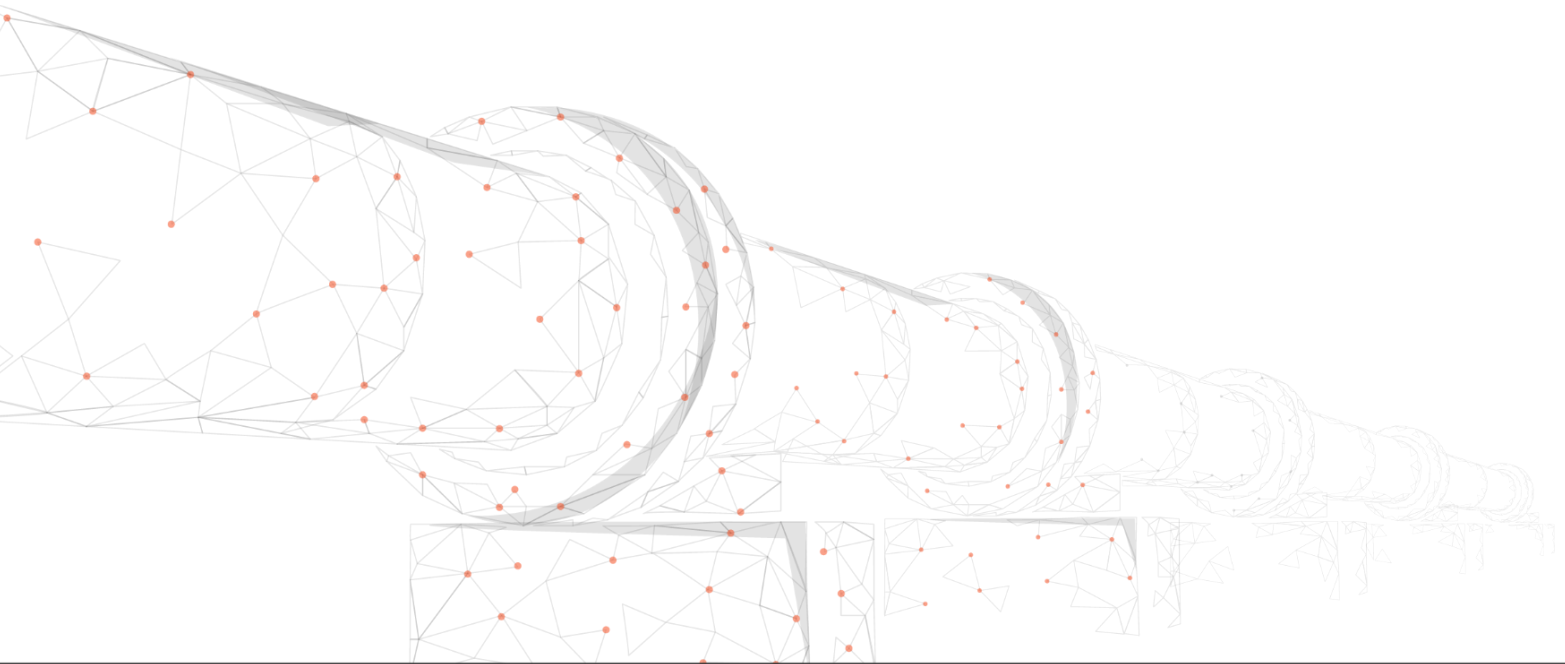


Table 12-Transect 1 Survey Results

Latin Name	Common Name	02/11/2020	07/12/2020	22/01/2021	18/02/2021	08/03/2021	24/03/2021	14/04/2021	22/04/2021	07/05/2021	20/05/2021	03/06/2021	30/06/2021	01/07/2021	19/07/2021	05/08/2021	25/08/2021	01/09/2021	13/09/2021	12/10/2021
<i>Accipiter nisus</i>	Sparrowhawk				1															
<i>Aegithalos caudatus</i>	Long-tailed Tit								1											
<i>Alectoris rufa</i>	Red-legged Partridge										2									
<i>Anas platyrhynchos</i>	Mallard						1							2						
<i>Anthus pratensis</i>	Meadow Pipit		50	30												2			5	
<i>Ardea cinerea</i>	Grey Heron																		1	
<i>Branta canadensis</i>	Canada Goose				1			1				2								11
<i>Buteo buteo</i>	Buzzard		1								1				1		1	1		
<i>Carduelis carduelis</i>	Goldfinch	6	21			4	4	22	2			1	4	13	3	6	1	3		
<i>Chloris chloris</i>	Greenfinch			2					1											
<i>Chroicocephalus ridibundus</i>	Black-headed Gull		200		12				15					2					61	14
<i>Coloeus monedula</i>	Jackdaw	55			20	2	34					3						4	2	10
<i>Columba livia</i> (domest.)	Feral Pigeon		5														18		15	
<i>Columba palumbus</i>	Wood Pigeon	4	3		2	3	2	3	1		1	7	1	2	3	4	4	12	16	20
<i>Corvus corax</i>	Raven		1	2			1	1							1		3	2	2	1
<i>Corvus corone</i>	Carrion Crow	2			27			1	3		5	4	4	6	1	4	5		1	2
<i>Corvus frugilegus</i>	Rook						4	2			5	1		1						12
<i>Cyanistes caeruleus</i>	Blue Tit	1	2	2	2	5	2	5	4	2	2	2	1		2	3	5	9	7	2
<i>Dendrocopos major</i>	Great Spotted Woodpecker		1								1			1	1					
<i>Erithacus rubecula</i>	Robin	3	6	1	2	3	1	1	3	4	6		1	3	4	4	6	5	5	3

Latin Name	Common Name	02/11/2020	07/12/2020	22/01/2021	18/02/2021	08/03/2021	24/03/2021	14/04/2021	22/04/2021	07/05/2021	20/05/2021	03/06/2021	30/06/2021	01/07/2021	19/07/2021	05/08/2021	25/08/2021	01/09/2021	13/09/2021	12/10/2021
<i>Falco tinnunculus</i>	Kestrel			1																
<i>Fringilla coelebs</i>	Chaffinch	9	4		1	1	3	9	5	1	3	2	3		1				2	6
<i>Garrulus glandarius</i>	Jay														1					
<i>Hirundo rustica</i>	Swallow							3	1			2	1	6	4	5			1	
<i>Larus argentatus</i>	Herring Gull		10				4							1			1		1	
<i>Larus fuscus</i>	Lesser Black-backed Gull	81																		
<i>Linaria cannabina</i>	Linnet										4	4	5							
<i>Motacilla alba</i>	Pied Wagtail		1		2		1						1	1	1				2	
<i>Numenius arquata</i>	Curlew		2										2							
<i>Parus major</i>	Great Tit	1	1		2	2	2	4	2			1	3			1	1	1	1	
<i>Passer domesticus</i>	House Sparrow					10						4	1	4	4		2	6		4
<i>Perdix perdix</i>	Grey Partridge													1				2		
<i>Phasianus colchicus</i>	Pheasant		2		2	2		1	5				1	2	1			1	2	2
<i>Phylloscopus collybita</i>	Chiffchaff						1	3	2	2	2	2	3	7			1			
<i>Pica pica</i>	Magpie	4	3	1	3	3	1	1			6	6	3	2	3		2			2
<i>Prunella modularis</i>	Dunnock		2		3	5	1	5	1	1	2	2	1	2	1			3		1
<i>Pyrrhula pyrrhula</i>	Bullfinch			1																
<i>Regulus regulus</i>	Goldcrest														1				1	
<i>Saxicola rubicola</i>	Stonechat																1			
<i>Streptopelia decaocto</i>	Collared Dove										1	1		1	2	1	1			
<i>Sturnus vulgaris</i>	Starling	10	10		8	60	8						21	7	30					
<i>Sylvia atricapilla</i>	Blackcap									1		1	1							

Latin Name	Common Name	02/11/2020	07/12/2020	22/01/2021	18/02/2021	08/03/2021	24/03/2021	14/04/2021	22/04/2021	07/05/2021	20/05/2021	03/06/2021	30/06/2021	01/07/2021	19/07/2021	05/08/2021	25/08/2021	01/09/2021	13/09/2021	12/10/2021
<i>Sylvia communis</i>	Whitethroat									1					1	1				
<i>Tadorna tadorna</i>	Shelduck											4								
<i>Troglodytes troglodytes</i>	Wren	2	3	1	1	3	3	3	5	3	5	7	7	13	6	3	8	1	5	1
<i>Turdus iliacus</i>	Redwing		60		20	3														10
<i>Turdus merula</i>	Blackbird	2	5	2	3	11	1	2	4	3	7	9	4	10		4	2	3		
<i>Turdus philomelos</i>	Song Thrush					2		1	2	1		2		4	1					
<i>Turdus pilaris</i>	Fieldfare		3		106	20														
<i>Turdus viscivorus</i>	Mistle Thrush	1	1					2						5				4		

Table 13-Transect 2 Survey Results (Part 1 Dec 20-Aug 21)

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	11/03/2021	22/03/2021	13/04/2021	27/04/2021	11/05/2021	25/05/2021	04/06/2021	22/06/2021	16/07/2021	27/07/2021	21/08/2021	25/08/2021
<i>Accipiter nisus</i>	Sparrowhawk					1										
<i>Actitis hypoleucos</i>	Common Sandpiper												2	2	2	
<i>Aegithalos caudatus</i>	Long-tailed Tit			5												
<i>Alauda arvensis</i>	Skylark					2	3	2	4		3		2			
<i>Anas crecca</i>	Teal			53	8											
<i>Anas platyrhynchos</i>	Mallard	107	25	94	64	28	15	25	30		10	17	16	15	6	19
<i>Anser anser</i>	Greylag Goose				3	41			1							
<i>Anser brachyrhynchus</i>	Pink-footed Goose															
<i>Anthus pratensis</i>	Meadow Pipit			6												
<i>Apus apus</i>	Swift												1			
<i>Ardea alba</i>	Great White Egret					1									1	
<i>Ardea cinerea</i>	Grey Heron			5	1	2	1	1	1		2	6	9	4	3	4
<i>Branta canadensis</i>	Canada Goose			8		21		2			9			3		146
<i>Buteo buteo</i>	Buzzard										1					
<i>Carduelis carduelis</i>	Goldfinch	2	1			4	5	9	9		6	8	9	8	3	11
<i>Charadrius hiaticula</i>	Ringed Plover						1									
<i>Chloris chloris</i>	Greenfinch					1	1	1				1				
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	2	32	632	82	26		82	20		6	3	5	60	43	449
<i>Coloeus monedula</i>	Jackdaw	8		4							4	13				2
<i>Columba livia</i> (domest.)	Feral Pigeon	20									13		35	30	30	

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	11/03/2021	22/03/2021	13/04/2021	27/04/2021	11/05/2021	25/05/2021	04/06/2021	22/06/2021	16/07/2021	27/07/2021	21/08/2021	25/08/2021
<i>Columba oenas</i>	Stock Dove			2			4	4			1					
<i>Columba palumbus</i>	Wood Pigeon	3		10	19	2	4	6	7		17	11	46	13	39	97
<i>Corvus corax</i>	Raven				2											
<i>Corvus corone</i>	Carrion Crow	2		15	18	7		3	2			2	16	5	29	8
<i>Corvus frugilegus</i>	Rook															
<i>Cyanistes caeruleus</i>	Blue Tit	1		1	2	2	2	3	1				2			4
<i>Cygnus cygnus</i>	Whooper Swan			4												
<i>Cygnus olor</i>	Mute Swan								1							
<i>Delichon urbicum</i>	House Martin												3	1		
<i>Dendrocopos major</i>	Great Spotted Woodpecker						1									
<i>Egretta garzetta</i>	Little Egret				1			1				8	6	3	1	4
<i>Emberiza citrinella</i>	Yellowhammer										4					
<i>Emberiza schoeniclus</i>	Reed Bunting														1	
<i>Erithacus rubecula</i>	Robin		1	2		4	1	3	2		1	3		2		5
<i>Falco peregrinus</i>	Peregrine															
<i>Falco tinnunculus</i>	Kestrel	1	1	1	1	1	1	1					1		1	
<i>Fringilla coelebs</i>	Chaffinch	3		30	41	10		7	11		1	3				1
<i>Gallinago gallinago</i>	Snipe															
<i>Gallinula chloropus</i>	Moorhen			2	1			2								
<i>Garrulus glandarius</i>	Jay															
<i>Haematopus ostralegus</i>	Oystercatcher				13	4	4	5	4		10	15	7	3		
<i>Hirundo rustica</i>	Swallow							3						7	1	

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	11/03/2021	22/03/2021	13/04/2021	27/04/2021	11/05/2021	25/05/2021	04/06/2021	22/06/2021	16/07/2021	27/07/2021	21/08/2021	25/08/2021
<i>Ichthyaetus melanocephalus</i>	Mediterranean Gull											1				
<i>Larus argentatus</i>	Herring Gull			11	20	14		1	7		8	2	16		9	20
<i>Larus canus</i>	Common Gull			4							1					
<i>Larus fuscus</i>	Lesser Black-backed Gull	5			3	12	12	30	17			30	12	61	14	26
<i>Larus marinus</i>	Great Black-backed Gull	1		3	1			2				5		9	1	
<i>Linaria cannabina</i>	Linnet															
<i>Lymnocyptes minimus</i>	Jack Snipe															
<i>Mareca penelope</i>	Wigeon			16												
<i>Mareca strepera</i>	Gadwall		7	4	6	3										
<i>Mergus merganser</i>	Goosander					2			4							
<i>Motacilla alba</i>	Pied Wagtail	1		7	3	1	1	1	5			1				
<i>Motacilla cinerea</i>	Grey Wagtail		1										2		7	
<i>Motacilla flava</i>	Yellow Wagtail								2		1		3			
<i>Numenius arquata</i>	Curlew						1									
<i>Oenanthe oenanthe</i>	Wheatear							1								
<i>Parus major</i>	Great Tit				1				3				3			
<i>Passer domesticus</i>	House Sparrow			3					10			1	14		14	8
<i>Phalacrocorax carbo</i>	Cormorant	11	2	17	17	25						2	2	2	14	
<i>Phasianus colchicus</i>	Pheasant	4					2	5			3	3				
<i>Phylloscopus collybita</i>	Chiffchaff										2	1	4			
<i>Pica pica</i>	Magpie	1		8	2	11		3	1		2		4		2	5
<i>Prunella modularis</i>	Dunnock			3	1	1	2		3		2	4				3

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	11/03/2021	22/03/2021	13/04/2021	27/04/2021	11/05/2021	25/05/2021	04/06/2021	22/06/2021	16/07/2021	27/07/2021	21/08/2021	25/08/2021
<i>Riparia riparia</i>	Sand Martin											2				
<i>Saxicola rubetra</i>	Whinchat							1								
<i>Saxicola rubicola</i>	Stonechat			1		1										
<i>Sterna hirundo</i>	Common Tern										1	2	8	3		
<i>Streptopelia decaocto</i>	Collared Dove			1											1	1
<i>Sturnus vulgaris</i>	Starling										8		37	2	63	250
<i>Sylvia atricapilla</i>	Blackcap							1	1			1	3	2		
<i>Sylvia borin</i>	Garden Warbler						1									
<i>Sylvia communis</i>	Whitethroat										4	3	3	1		
<i>Tachybaptus ruficollis</i>	Little Grebe	2		3												
<i>Tadorna tadorna</i>	Shelduck											2				
<i>Tringa totanus</i>	Redshank	98	50	31	165	50	3									
<i>Troglodytes troglodytes</i>	Wren	1			1	3	2	4	3		3	5	3	6	4	2
<i>Turdus iliacus</i>	Redwing	70		1												
<i>Turdus merula</i>	Blackbird	2		6	5	6	1	4	4		9	3	4	5	1	2
<i>Turdus philomelos</i>	Song Thrush				1		1		1		1	1	2	1	2	
<i>Turdus pilaris</i>	Fieldfare	10		4	1											
<i>Vanellus vanellus</i>	Lapwing		40	151	30	23	3	6	7		19	8	36	55	27	47



**Table 14 -Transect 2 Survey Results (Part 2 Sep 21-Mar 22)**

Latin Name	Common Name	02/09/2021	13/09/2021	11/10/2021	25/10/2021	08/11/2021	17/11/2021	01/12/2021	16/12/2021	05/01/2022	12/01/2022	01/02/2022	08/02/2022	01/03/2022	23/03/2022
<i>Accipiter nisus</i>	Sparrowhawk														
<i>Actitis hypoleucos</i>	Common Sandpiper	2		1									1		
<i>Aegithalos caudatus</i>	Long-tailed Tit				10	1	6		10						
<i>Alauda arvensis</i>	Skylark			12	3								2	2	3
<i>Anas crecca</i>	Teal				1							3			
<i>Anas platyrhynchos</i>	Mallard	56	203	63	138	35	36	25	22	46	46	69	44	30	22
<i>Anser anser</i>	Greylag Goose	27				10									1
<i>Anser brachyrhynchus</i>	Pink-footed Goose			120	6350		633	210							
<i>Anthus pratensis</i>	Meadow Pipit			1		2	2	3	2				3	2	
<i>Apus apus</i>	Swift														
<i>Ardea alba</i>	Great White Egret														
<i>Ardea cinerea</i>	Grey Heron	2	7	1	1	2	2		2		1	3	8	1	1
<i>Branta canadensis</i>	Canada Goose	187	725	38		42	94	65	50	3		2		3	6
<i>Buteo buteo</i>	Buzzard			2				1	1	1					1
<i>Carduelis carduelis</i>	Goldfinch	17	10	25		2						3		6	8
<i>Charadrius hiaticula</i>	Ringed Plover														
<i>Chloris chloris</i>	Greenfinch														
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	273	301	176	461	186	10	76		300	111	2	5	255	134
<i>Coloeus monedula</i>	Jackdaw	46	345	40		10		17	1			5	32		2
<i>Columba livia</i> (domest.)	Feral Pigeon		50	300	30	10	6	30	10	8	10	20	3	50	15
<i>Columba oenas</i>	Stock Dove						2								
<i>Columba palumbus</i>	Wood Pigeon	383	43	3	513	3	156	10	62	124	309	107	280	16	12

Latin Name	Common Name	02/09/2021	13/09/2021	11/10/2021	25/10/2021	08/11/2021	17/11/2021	01/12/2021	16/12/2021	05/01/2022	12/01/2022	01/02/2022	08/02/2022	01/03/2022	23/03/2022
<i>Corvus corax</i>	Raven		2										1		
<i>Corvus corone</i>	Carrion Crow	12	139	101	17	15	23	36	14	29	18	14	12	12	20
<i>Corvus frugilegus</i>	Rook	25						88							
<i>Cyanistes caeruleus</i>	Blue Tit	1	1			2	3	2	3		4		5	3	4
<i>Cygnus cygnus</i>	Whooper Swan														
<i>Cygnus olor</i>	Mute Swan														
<i>Delichon urbicum</i>	House Martin	12													
<i>Dendrocopos major</i>	Great Spotted Woodpecker														1
<i>Egretta garzetta</i>	Little Egret	3		2	4		1								4
<i>Emberiza citrinella</i>	Yellowhammer														
<i>Emberiza schoeniclus</i>	Reed Bunting														
<i>Erithacus rubecula</i>	Robin	1	5	2	5	4	4	2	3	2	4	1	1	3	3
<i>Falco peregrinus</i>	Peregrine				1										
<i>Falco tinnunculus</i>	Kestrel	1		2		1	2	1	1	1			1		1
<i>Fringilla coelebs</i>	Chaffinch		2	12	4	7	26	4	6	7	1	4	7	7	5
<i>Gallinago gallinago</i>	Snipe								8						
<i>Gallinula chloropus</i>	Moorhen														
<i>Garrulus glandarius</i>	Jay												1		
<i>Haematopus ostralegus</i>	Oystercatcher									1			2	7	17
<i>Hirundo rustica</i>	Swallow														
<i>Ichthyaetus melanocephalus</i>	Mediterranean Gull														
<i>Larus argentatus</i>	Herring Gull	7	1	10	20	4	2	7		4			10		2

Latin Name	Common Name	02/09/2021	13/09/2021	11/10/2021	25/10/2021	08/11/2021	17/11/2021	01/12/2021	16/12/2021	05/01/2022	12/01/2022	01/02/2022	08/02/2022	01/03/2022	23/03/2022
<i>Larus canus</i>	Common Gull	1												2	
<i>Larus fuscus</i>	Lesser Black-backed Gull	10	6	9	17	1				3	3		3	2	41
<i>Larus marinus</i>	Great Black-backed Gull			1	3		1			3			3	2	
<i>Linaria cannabina</i>	Linnet							6				15			
<i>Lymnocyptes minimus</i>	Jack Snipe			2											
<i>Mareca penelope</i>	Wigeon														
<i>Mareca strepera</i>	Gadwall								2	2		2			2
<i>Mergus merganser</i>	Goosander			1			1					2			
<i>Motacilla alba</i>	Pied Wagtail				1	11	2								
<i>Motacilla cinerea</i>	Grey Wagtail														
<i>Motacilla flava</i>	Yellow Wagtail														
<i>Numenius arquata</i>	Curlew														
<i>Oenanthe oenanthe</i>	Wheatear	1	1												1
<i>Parus major</i>	Great Tit											3	1	2	2
<i>Passer domesticus</i>	House Sparrow	26													
<i>Phalacrocorax carbo</i>	Cormorant	1	1	9	8	11	25	12	12	18	17	28	22	12	18
<i>Phasianus colchicus</i>	Pheasant		1				4					2	1		
<i>Phylloscopus collybita</i>	Chiffchaff	1													1
<i>Pica pica</i>	Magpie		1	1	5	6	2	2	4	1	1	3	2	2	1
<i>Prunella modularis</i>	Dunnock		2	1	3	3	1	1	2		1		1	1	4
<i>Riparia riparia</i>	Sand Martin														
<i>Saxicola rubetra</i>	Whinchat														

Latin Name	Common Name	02/09/2021	13/09/2021	11/10/2021	25/10/2021	08/11/2021	17/11/2021	01/12/2021	16/12/2021	05/01/2022	12/01/2022	01/02/2022	08/02/2022	01/03/2022	23/03/2022
<i>Saxicola rubicola</i>	Stonechat	4		1	4	5	5		2	3	3		2	1	
<i>Sterna hirundo</i>	Common Tern														
<i>Streptopelia decaocto</i>	Collared Dove	4			1						1		1		1
<i>Sturnus vulgaris</i>	Starling	84	470	50	60	4								200	4
<i>Sylvia atricapilla</i>	Blackcap														
<i>Sylvia borin</i>	Garden Warbler														
<i>Sylvia communis</i>	Whitethroat														
<i>Tachybaptus ruficollis</i>	Little Grebe							4		1	3	2			
<i>Tadorna tadorna</i>	Shelduck										1	1	2		
<i>Tringa totanus</i>	Redshank	1	1	1	20	11		100	98	122	13	64	83	146	15
<i>Troglodytes troglodytes</i>	Wren	1	2	4		1	2		2		2	1	2	1	5
<i>Turdus iliacus</i>	Redwing				8	1	4	15							
<i>Turdus merula</i>	Blackbird	1	1	3	3		3	2	9	4	7	4	2	2	5
<i>Turdus philomelos</i>	Song Thrush								1		2			1	4
<i>Turdus pilaris</i>	Fieldfare						80	41		16		2			
<i>Vanellus vanellus</i>	Lapwing	34	191	143	193	69	159	422	23	92	12		4	2	9

Table 15-Transect 3 Survey Results

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	10/03/2021	22/03/2021	12/04/2021	21/04/2021	26/04/2021	10/05/2021	24/05/2021	07/06/2021	28/06/2021	12/07/2021	26/07/2021	06/08/2021	16/08/2021	02/09/2021	14/09/2021	13/10/2021	16/11/2021
<i>Aegithalos caudatus</i>	Long-tailed Tit	8		5		5			3						3			3		22	5
<i>Anas crecca</i>	Teal			60																	5
<i>Anas platyrhynchos</i>	Mallard			30	2	7	2	3	1	1	3		1				3		2	6	
<i>Anser anser</i>	Greylag Goose					12		2	9		2										
<i>Anthus pratensis</i>	Meadow Pipit				4		4														
<i>Ardea alba</i>	Great White Egret												1								
<i>Branta canadensis</i>	Canada Goose				8	6	8			2		4								3	
<i>Buteo buteo</i>	Buzzard		2	1	1	1	1					2		1	2	1	2	2		3	
<i>Carduelis carduelis</i>	Goldfinch	5	1	9	4	2	4	2	3	14	8	2	12	16	6	7	4	12		36	6
<i>Certhia familiaris</i>	Treecreeper																				1
<i>Chloris chloris</i>	Greenfinch			5	1	3	1	1	3	3	2	1	6	1	4		2				
<i>Chroicocephalus ridibundus</i>	Black-headed Gull			33		10		2									27		6	92	200
<i>Coloeus monedula</i>	Jackdaw	108		72	55	31	55	2	10	8	1	10		25	2	20	3	141	10	46	165
<i>Columba livia</i> (domest.)	Feral Pigeon																	60	1	30	
<i>Columba oenas</i>	Stock Dove			16																	
<i>Columba palumbus</i>	Wood Pigeon	47	7	9	201	6	200	1	8			5	4	6		12	11	7	4	34	9
<i>Corvus corax</i>	Raven					1			2											2	
<i>Corvus corone</i>	Carrion Crow	9	5	24	54	6	54	5		4	2	3	4		4	2	12	18		25	13
<i>Corvus frugilegus</i>	Rook	20													3				1		
<i>Cyanistes caeruleus</i>	Blue Tit	17	7	16	6	14	9	7	4	8	1	9	12	4	9	6	10	9		7	10

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	10/03/2021	22/03/2021	12/04/2021	21/04/2021	26/04/2021	10/05/2021	24/05/2021	07/06/2021	28/06/2021	12/07/2021	26/07/2021	06/08/2021	16/08/2021	02/09/2021	14/09/2021	13/10/2021	16/11/2021
<i>Dendrocopos major</i>	Great Spotted Woodpecker										1	1		1			2		9		
<i>Emberiza citrinella</i>	Yellowhammer								1										1		
<i>Erithacus rubecula</i>	Robin	6	5	2	1	7		6	9	4	3	3	3	3	2	4	3	5		10	9
<i>Falco tinnunculus</i>	Kestrel	1																			
<i>Fringilla coelebs</i>	Chaffinch	4	21	9	2	7	2	1	7	5	1	2	9	3				2		9	10
<i>Fulica atra</i>	Coot							2													
<i>Garrulus glandarius</i>	Jay				2		2												2	2	
<i>Hirundo rustica</i>	Swallow									5	2	1	1		2	5	1				
<i>Larus argentatus</i>	Herring Gull	8		14											3		2			42	4
<i>Larus canus</i>	Common Gull					20											1			8	60
<i>Larus fuscus</i>	Lesser Black-backed Gull																1			3	
<i>Larus marinus</i>	Great Black-backed Gull																1				
<i>Linaria cannabina</i>	Linnet										1										
<i>Motacilla alba</i>	Pied Wagtail	5	2		1	2	1							1					6		12
<i>Parus major</i>	Great Tit	4	8	3	2	4	2	8	5	5	3	3	1	1	3	2		4		4	9
<i>Passer domesticus</i>	House Sparrow		6	15		16			10		1	12	15	9	6	3	1	10		6	21
<i>Perdix perdix</i>	Grey Partridge																		1		
<i>Periparus ater</i>	Coal Tit					3													1		
<i>Phylloscopus collybita</i>	Chiffchaff								1	4	3	4	1	3	2				9		
<i>Pica pica</i>	Magpie	2		11	2		2			3		1			2		2	1		2	10
<i>Poecile palustris</i>	Marsh Tit		1																		
<i>Prunella modularis</i>	Dunnock	2		5	2	5	2	4	1	4	1	4		3	3	1		5		9	7

Latin Name	Common Name	17/12/2020	21/01/2021	11/02/2021	10/03/2021	22/03/2021	12/04/2021	21/04/2021	26/04/2021	10/05/2021	24/05/2021	07/06/2021	28/06/2021	12/07/2021	26/07/2021	06/08/2021	16/08/2021	02/09/2021	14/09/2021	13/10/2021	16/11/2021
<i>Regulus regulus</i>	Goldcrest					1															
<i>Saxicola rubicola</i>	Stonechat																		1		
<i>Spatula clypeata</i>	Shoveler				8		8														
<i>Streptopelia decaocto</i>	Collared Dove			1		1			2				1				2		15		
<i>Sturnus vulgaris</i>	Starling	39	330	124	10	2	10	9	8	12	4	2	20	18	18	1		37		85	71
<i>Sylvia atricapilla</i>	Blackcap								2			2		1					3		
<i>Sylvia communis</i>	Whitethroat										1	3	1	1							
<i>Troglodytes troglodytes</i>	Wren	2		1	1	6	5		8	5	3	10	10	11	10	7	5	7		2	4
<i>Turdus iliacus</i>	Redwing	20	60	39				1											2		1
<i>Turdus merula</i>	Blackbird	14	6	12	9	4	6	5	10	11	12		7	3	4			3	9	10	22
<i>Turdus philomelos</i>	Song Thrush		1		2	1	2	2	2	4		1	2	1					3		
<i>Turdus pilaris</i>	Fieldfare		100	19																	1
<i>Turdus viscivorus</i>	Mistle Thrush			1																2	
<i>Upupa epops</i>	Hoopoe									1											
<i>Vanellus vanellus</i>	Lapwing			8	1	2	1	2	1										6		

Table 16-Transect 4 Survey Results

Latin Name	Common Name	04/11/2020	02/12/2020	27/01/2021	16/02/2021	25/02/2021	01/03/2021	09/03/2021	06/04/2021	20/04/2021	04/05/2021	18/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021	14/10/2021
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler												3			1					
<i>Acrocephalus scirpaceus</i>	Reed Warbler															1					
<i>Aegithalos caudatus</i>	Long-tailed Tit					6	1	6							4	7					
<i>Alauda arvensis</i>	Skylark							1			1	1		3							
<i>Alcedo atthis</i>	Kingfisher														1						
<i>Anas crecca</i>	Teal				4	4	8														5
<i>Anas platyrhynchos</i>	Mallard		1		3	4		4	3	9	6	10	3	2		3	6	2	4	2	8
<i>Anser anser</i>	Greylag Goose					2	2	2										18		2	
<i>Anser brachyrhynchus</i>	Pink-footed Goose				22																
<i>Anthus pratensis</i>	Meadow Pipit								2	1	2		1								1
<i>Ardea alba</i>	Great White Egret								1												
<i>Ardea cinerea</i>	Grey Heron		1				2		1				1				2			1	
<i>Branta canadensis</i>	Canada Goose										3		7				14				
<i>Buteo buteo</i>	Buzzard	4	4	3	3	2	3	1	1						1		2		2	2	
<i>Carduelis carduelis</i>	Goldfinch					3		4	6	8	1	5	7	12	42		20	2	8		1
<i>Chloris chloris</i>	Greenfinch													3	2	2		2			
<i>Chroicocephalus ridibundus</i>	Black-headed Gull		40	3	14		90													6	
<i>Coloeus monedula</i>	Jackdaw				53		50												34		
<i>Columba livia</i> (domest.)	Feral Pigeon		1				50														
<i>Columba oenas</i>	Stock Dove											3	6					1		2	



Latin Name	Common Name	04/11/2020	02/12/2020	27/01/2021	16/02/2021	25/02/2021	01/03/2021	09/03/2021	06/04/2021	20/04/2021	04/05/2021	18/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021	14/10/2021
<i>Columba palumbus</i>	Wood Pigeon	1	6		175	4	20										4	1	43	45	1
<i>Corvus corax</i>	Raven		1			1		2	1												
<i>Corvus corone</i>	Carrion Crow	9	80	26	62	60	100		4			4	12	4			1	37	50	20	5
<i>Cyanistes caeruleus</i>	Blue Tit			6	3	4	1	3	2	3	1	1	2	3		1	2	5		4	
<i>Cygnus olor</i>	Mute Swan									1											
<i>Emberiza citrinella</i>	Yellowhammer						9			1	2			1	2	2	1			1	
<i>Emberiza schoeniclus</i>	Reed Bunting		1		20	5	2		1				3	2	3	6				3	
<i>Erithacus rubecula</i>	Robin		2	3	4	4	3	2	1	3	1	2	4	2	2	3			3	2	7
<i>Falco tinnunculus</i>	Kestrel						1													1	1
<i>Fringilla coelebs</i>	Chaffinch			10	15	88	5	3	2	11		4	2	1	1	1			6	15	2
<i>Gallinago gallinago</i>	Snipe			2		1	2	5									1			2	1
<i>Gallinula chloropus</i>	Moorhen		1			1				1		1						1	1	1	1
<i>Garrulus glandarius</i>	Jay						1														
<i>Hirundo rustica</i>	Swallow												2				1				
<i>Larus argentatus</i>	Herring Gull	709	395	800	255	20	56	50						218				29			
<i>Larus canus</i>	Common Gull			20	20	160								3				2			
<i>Larus fuscus</i>	Lesser Black-backed Gull	202	34	50	40	120	60							91				18			
<i>Larus marinus</i>	Great Black-backed Gull	100	49	150		80	2							42							
<i>Linaria cannabina</i>	Linnet					12									30	21		5			
<i>Motacilla alba</i>	Pied Wagtail		8		1		2														1
<i>Motacilla cinerea</i>	Grey Wagtail																				1
<i>Parus major</i>	Great Tit			1		6				2				1	1		3		1		2

Latin Name	Common Name	04/11/2020	02/12/2020	27/01/2021	16/02/2021	25/02/2021	01/03/2021	09/03/2021	06/04/2021	20/04/2021	04/05/2021	18/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021	14/10/2021
<i>Phalacrocorax carbo</i>	Cormorant																	1			
<i>Phasianus colchicus</i>	Pheasant								1						1						
<i>Phylloscopus collybita</i>	Chiffchaff						1		3	3	2	3	3	3		1	1				
<i>Phylloscopus trochilus</i>	Willow Warbler									1											
<i>Pica pica</i>	Magpie		5			3		2					2						1		1
<i>Prunella modularis</i>	Dunnock		2			3	4	6	1	3		4	3	1	3	1			2	2	3
<i>Pyrrhula pyrrhula</i>	Bullfinch													1							
<i>Regulus regulus</i>	Goldcrest							1													
<i>Saxicola rubicola</i>	Stonechat		3		1	1	2												1	1	
<i>Scolopax rusticola</i>	Woodcock				1																
<i>Sturnus vulgaris</i>	Starling	100		215				60													
<i>Sylvia atricapilla</i>	Blackcap								1	2		4	4		1	3		2			
<i>Sylvia communis</i>	Whitethroat											2	2	1	3	1	1	2			
<i>Sylvia curruca</i>	Lesser Whitethroat													1							
<i>Tachybaptus ruficollis</i>	Little Grebe		3											1							
<i>Troglodytes troglodytes</i>	Wren		2	1	1	5	1	11	2	8	5	5	10	7	6	6	8	6	3	4	13
<i>Turdus iliacus</i>	Redwing					25		30													2
<i>Turdus merula</i>	Blackbird	2	2	3	1	3	5	2	2	2	5	2	11	3	2	1	1		3	4	3
<i>Turdus philomelos</i>	Song Thrush				1		1	1	2				1	1	2						1
<i>Turdus pilaris</i>	Fieldfare		22	68		290		35													
<i>Vanellus vanellus</i>	Lapwing		40										12				1				

Table 17-Transect 5 Survey Results (Part 1 Oct 20-Mar 21)

Latin Name	Common Name	07/10/2020	20/10/2020	03/11/2020	16/11/2020	02/12/2020	15/12/2020	21/01/2021	08/02/2021	22/02/2021	09/03/2021	26/03/2021
<i>Accipiter nisus</i>	Sparrowhawk	1		1								
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler											
<i>Acrocephalus scirpaceus</i>	Reed Warbler											
<i>Aegithalos caudatus</i>	Long-tailed Tit		11							2		
<i>Alauda arvensis</i>	Skylark											
<i>Anas crecca</i>	Teal										2	
<i>Anas platyrhynchos</i>	Mallard	40		1				5	8	3	1	3
<i>Anser brachyrhynchus</i>	Pink-footed Goose		30									
<i>Anthus pratensis</i>	Meadow Pipit											
<i>Apus apus</i>	Swift											
<i>Ardea alba</i>	Great White Egret	2							3			
<i>Ardea cinerea</i>	Grey Heron	2				1			4			
<i>Aythya fuligula</i>	Tufted Duck											
<i>Branta canadensis</i>	Canada Goose						12			7		
<i>Buteo buteo</i>	Buzzard		1			1	2	1	1	1	3	
<i>Carduelis carduelis</i>	Goldfinch			4	6	2	3		3	5	4	5
<i>Certhia familiaris</i>	Treecreeper									1		
<i>Cettia cetti</i>	Cetti's Warbler											
<i>Chloris chloris</i>	Greenfinch											
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	500		4		33	30		3			
<i>Circus aeruginosus</i>	Marsh Harrier										1	

Latin Name	Common Name	07/10/2020	20/10/2020	03/11/2020	16/11/2020	02/12/2020	15/12/2020	21/01/2021	08/02/2021	22/02/2021	09/03/2021	26/03/2021
<i>Coloeus monedula</i>	Jackdaw			4				10	6			
<i>Columba livia</i> (domest.)	Feral Pigeon			30		26			2	40		
<i>Columba oenas</i>	Stock Dove								2			
<i>Columba palumbus</i>	Wood Pigeon	1		3		4	20		1	13	14	20
<i>Corvus corax</i>	Raven				1				1			
<i>Corvus corone</i>	Carrion Crow	4		5		5	1		1	11	1	
<i>Corvus frugilegus</i>	Rook								6	3		
<i>Cyanistes caeruleus</i>	Blue Tit	14	8	6	2	2	1	5	7	11	1	5
<i>Cygnus olor</i>	Mute Swan	1			1							
<i>Delichon urbicum</i>	House Martin	4										
<i>Dendrocopos major</i>	Great Spotted Woodpecker										1	
<i>Egretta garzetta</i>	Little Egret	55		2		4	9		1	1		
<i>Emberiza schoeniclus</i>	Reed Bunting						2	1		5	1	1
<i>Erithacus rubecula</i>	Robin	3	2	3	1	2	2	2	6	9	2	5
<i>Falco tinnunculus</i>	Kestrel		2									
<i>Fringilla coelebs</i>	Chaffinch	3		2	5	1	3			7	2	1
<i>Fulica atra</i>	Coot	3		3			1	2	6		7	2
<i>Gallinago gallinago</i>	Snipe	1										
<i>Gallinula chloropus</i>	Moorhen	1		2			5	1		3		2
<i>Garrulus glandarius</i>	Jay											
<i>Hirundo rustica</i>	Swallow	3										
<i>Larus argentatus</i>	Herring Gull			3		14		4	2	3		

Latin Name	Common Name	07/10/2020	20/10/2020	03/11/2020	16/11/2020	02/12/2020	15/12/2020	21/01/2021	08/02/2021	22/02/2021	09/03/2021	26/03/2021
<i>Larus fuscus</i>	Lesser Black-backed Gull			2		1	6					
<i>Larus marinus</i>	Great Black-backed Gull				1					1		
<i>Linaria cannabina</i>	Linnet											
<i>Linaria flavirostris</i>	Twite						10					
<i>Locustella naevia</i>	Grasshopper Warbler											
<i>Mareca strepera</i>	Gadwall											
<i>Motacilla alba</i>	Pied Wagtail	10				1	10					
<i>Numenius arquata</i>	Curlew			1			41		10			
<i>Parus major</i>	Great Tit			1					1	4	1	3
<i>Passer domesticus</i>	House Sparrow				1							
<i>Periparus ater</i>	Coal Tit						1					
<i>Phalacrocorax carbo</i>	Cormorant										1	
<i>Phasianus colchicus</i>	Pheasant											
<i>Phylloscopus collybita</i>	Chiffchaff				1							3
<i>Phylloscopus trochilus</i>	Willow Warbler											
<i>Pica pica</i>	Magpie	1		7	1		17		4	3	4	
<i>Prunella modularis</i>	Dunnock		2	2	1		1	4		3	2	1
<i>Pyrrhula pyrrhula</i>	Bullfinch											
<i>Regulus regulus</i>	Goldcrest											
<i>Sitta europaea</i>	Nuthatch											
<i>Spatula clypeata</i>	Shoveler	2										
<i>Sturnus vulgaris</i>	Starling	150					100		4			

Latin Name	Common Name	07/10/2020	20/10/2020	03/11/2020	16/11/2020	02/12/2020	15/12/2020	21/01/2021	08/02/2021	22/02/2021	09/03/2021	26/03/2021
<i>Sylvia atricapilla</i>	Blackcap											
<i>Sylvia borin</i>	Garden Warbler											
<i>Sylvia communis</i>	Whitethroat											
<i>Tachybaptus ruficollis</i>	Little Grebe											
<i>Tadorna tadorna</i>	Shelduck											
<i>Troglodytes troglodytes</i>	Wren	1	3	2	3	4	1	2		6	9	10
<i>Turdus iliacus</i>	Redwing			19	1		60		10			
<i>Turdus merula</i>	Blackbird	1	12	7	17	9	6	3	10	4	4	4
<i>Turdus philomelos</i>	Song Thrush		2		2		1			1	1	1
<i>Turdus pilaris</i>	Fieldfare						20					
<i>Turdus viscivorus</i>	Mistle Thrush			1						2		
<i>Vanellus vanellus</i>	Lapwing	40		20								

Table 18-Transect 5 Survey Results (Part 2 Apr 21-Sep 21)

Latin Name	Common Name	14/04/2021	30/04/2021	12/05/2021	28/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021
<i>Accipiter nisus</i>	Sparrowhawk												
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler		5	2	6	3	6	4	3				
<i>Acrocephalus scirpaceus</i>	Reed Warbler						4		2				
<i>Aegithalos caudatus</i>	Long-tailed Tit				2	1				1	1		
<i>Alauda arvensis</i>	Skylark		1										
<i>Anas crecca</i>	Teal												
<i>Anas platyrhynchos</i>	Mallard		2	7	2		3	1	5	1	1		7
<i>Anser brachyrhynchus</i>	Pink-footed Goose												
<i>Anthus pratensis</i>	Meadow Pipit		1										
<i>Apus apus</i>	Swift						1						
<i>Ardea alba</i>	Great White Egret												
<i>Ardea cinerea</i>	Grey Heron							1	1	1	1	2	2
<i>Aythya fuligula</i>	Tufted Duck			3								2	
<i>Branta canadensis</i>	Canada Goose												
<i>Buteo buteo</i>	Buzzard											1	
<i>Carduelis carduelis</i>	Goldfinch	6	3	12	1	4	3		14	3	1		
<i>Certhia familiaris</i>	Treecreeper												
<i>Cettia cetti</i>	Cetti's Warbler				1			1					
<i>Chloris chloris</i>	Greenfinch									1		2	
<i>Chroicocephalus ridibundus</i>	Black-headed Gull												2
<i>Circus aeruginosus</i>	Marsh Harrier												



Latin Name	Common Name	14/04/2021	30/04/2021	12/05/2021	28/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021
<i>Coloeus monedula</i>	Jackdaw								10		6	1	
<i>Columba livia</i> (domest.)	Feral Pigeon												
<i>Columba oenas</i>	Stock Dove										1		
<i>Columba palumbus</i>	Wood Pigeon			4		4	7	1	6		6		
<i>Corvus corax</i>	Raven	1											
<i>Corvus corone</i>	Carrion Crow						3		2		2	1	5
<i>Corvus frugilegus</i>	Rook					2	4				12		
<i>Cyanistes caeruleus</i>	Blue Tit	1	1	5	2	1	3		9		7	5	6
<i>Cygnus olor</i>	Mute Swan	1											
<i>Delichon urbicum</i>	House Martin												
<i>Dendrocopos major</i>	Great Spotted Woodpecker								1				
<i>Egretta garzetta</i>	Little Egret												1
<i>Emberiza schoeniclus</i>	Reed Bunting				1			1	3				5
<i>Erithacus rubecula</i>	Robin	1						2				5	1
<i>Falco tinnunculus</i>	Kestrel												
<i>Fringilla coelebs</i>	Chaffinch	5	2	3	1	4	4	1	4		1		1
<i>Fulica atra</i>	Coot		1	4		3	1						1
<i>Gallinago gallinago</i>	Snipe						1						
<i>Gallinula chloropus</i>	Moorhen		1	3		2	4	1	3	1	2	3	1
<i>Garrulus glandarius</i>	Jay											2	1
<i>Hirundo rustica</i>	Swallow												
<i>Larus argentatus</i>	Herring Gull						1				2		

Latin Name	Common Name	14/04/2021	30/04/2021	12/05/2021	28/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021
<i>Larus fuscus</i>	Lesser Black-backed Gull										1		
<i>Larus marinus</i>	Great Black-backed Gull	1											
<i>Linaria cannabina</i>	Linnet								5				
<i>Linaria flavirostris</i>	Twite												
<i>Locustella naevia</i>	Grasshopper Warbler				1								
<i>Mareca strepera</i>	Gadwall				2							1	
<i>Motacilla alba</i>	Pied Wagtail				4								
<i>Numenius arquata</i>	Curlew		1						25	2			
<i>Parus major</i>	Great Tit		2	2		1		1	2				
<i>Passer domesticus</i>	House Sparrow	1											
<i>Periparus ater</i>	Coal Tit												1
<i>Phalacrocorax carbo</i>	Cormorant						6						
<i>Phasianus colchicus</i>	Pheasant						1				1	3	
<i>Phylloscopus collybita</i>	Chiffchaff	1	1	2	1	3	8	5	2		1	2	
<i>Phylloscopus trochilus</i>	Willow Warbler						1						
<i>Pica pica</i>	Magpie	1		2		2	6		1				
<i>Prunella modularis</i>	Dunnock	1	1	2		1	1	4				3	2
<i>Pyrrhula pyrrhula</i>	Bullfinch						1						
<i>Regulus regulus</i>	Goldcrest								1				
<i>Sitta europaea</i>	Nuthatch							1					
<i>Spatula clypeata</i>	Shoveler												
<i>Sturnus vulgaris</i>	Starling												

Latin Name	Common Name	14/04/2021	30/04/2021	12/05/2021	28/05/2021	01/06/2021	25/06/2021	01/07/2021	20/07/2021	09/08/2021	19/08/2021	15/09/2021	23/09/2021
<i>Sylvia atricapilla</i>	Blackcap		3	2	2	2	5	2	1	2			
<i>Sylvia borin</i>	Garden Warbler					1							
<i>Sylvia communis</i>	Whitethroat		2	2	8	2	2	3	2			1	
<i>Tachybaptus ruficollis</i>	Little Grebe			1									
<i>Tadorna tadorna</i>	Shelduck			3									
<i>Troglodytes troglodytes</i>	Wren	3	5	6	6	6	6	8	9	8	12	6	1
<i>Turdus iliacus</i>	Redwing												
<i>Turdus merula</i>	Blackbird	37	3	4	3	3	3	1		6	1		6
<i>Turdus philomelos</i>	Song Thrush	2		1		2	4	2	2				
<i>Turdus pilaris</i>	Fieldfare												
<i>Turdus viscivorus</i>	Mistle Thrush							1				1	
<i>Vanellus vanellus</i>	Lapwing												

Table 19-Transect 7 Survey Results

Latin Name	Common Name	04/11/2020	02/12/2020	27/01/2021	16/02/2021	01/03/2021	10/03/2021	07/04/2021	21/04/2021	05/05/2021	19/05/2021	02/06/2021	29/06/2021	14/07/2021	22/07/2021	21/08/2021	26/08/2021	06/09/2021	16/09/2021	18/10/2021
<i>Accipiter nisus</i>	Sparrowhawk			1								1				1				
<i>Aegithalos caudatus</i>	Long-tailed Tit		4	1	8	5						1			4			4		12
<i>Anser anser</i>	Greylag Goose																			2
<i>Anser brachyrhynchus</i>	Pink-footed Goose			64	13															40
<i>Anthus pratensis</i>	Meadow Pipit	1				12								1						
<i>Apus apus</i>	Swift													2	9					
<i>Ardea cinerea</i>	Grey Heron										2			1						
<i>Branta canadensis</i>	Canada Goose				2							12				37	9		32	8
<i>Buteo buteo</i>	Buzzard		2											1			1	2		1
<i>Carduelis carduelis</i>	Goldfinch	49	93	61	12	1	2	2	4		2	1	12	13	10	7	4			8
<i>Chloris chloris</i>	Greenfinch								1						1	1				
<i>Chroicocephalus ridibundus</i>	Black-headed Gull		28	4	35	170	20							9			17	27	60	1
<i>Coloeus monedula</i>	Jackdaw	3	21	13	4	13	5	6	31	6	4	10	4	4		1	11	13	34	2
<i>Columba oenas</i>	Stock Dove	1						3	8	2										
<i>Columba palumbus</i>	Wood Pigeon	5	28	8	174	11	6	22	66		11	7	9	15	10	21	11	48	76	13
<i>Corvus corax</i>	Raven			2	1	1		1				1	2				2		1	
<i>Corvus corone</i>	Carrion Crow	22	16	9	18	11	5	8	12	2	5	5	2	1	3	1	4	4	4	12
<i>Corvus frugilegus</i>	Rook			2	2	3	25		104	45	10									
<i>Cyanistes caeruleus</i>	Blue Tit	12	8	5	7	5	8	2	9	5	5	4	10		3	5	1	6	4	8
<i>Delichon urbicum</i>	House Martin											2								
<i>Dendrocopos major</i>	Great Spotted Woodpecker			1					1					1						
<i>Emberiza schoeniclus</i>	Reed Bunting	2																		1

Latin Name	Common Name	04/11/2020	02/12/2020	27/01/2021	16/02/2021	01/03/2021	10/03/2021	07/04/2021	21/04/2021	05/05/2021	19/05/2021	02/06/2021	29/06/2021	14/07/2021	22/07/2021	21/08/2021	26/08/2021	06/09/2021	16/09/2021	18/10/2021
<i>Erithacus rubecula</i>	Robin	8	8	3	2	2	6	2	3	2	5	2	1		1	3	11	6	8	7
<i>Falco tinnunculus</i>	Kestrel			1	2		1									2		1		
<i>Fringilla coelebs</i>	Chaffinch	16	12	25	3	18	2	1	1			3	1	1				3	1	3
<i>Garrulus glandarius</i>	Jay															4		3		
<i>Haematopus ostralegus</i>	Oystercatcher		6								1							1		
<i>Hirundo rustica</i>	Swallow													1		6				
<i>Larus argentatus</i>	Herring Gull	12	3	4	3	5		21	44	6				2			13	15	3	15
<i>Larus canus</i>	Common Gull				11	1	5							2				18		2
<i>Larus fuscus</i>	Lesser Black-backed Gull		23							1	25			1				6		
<i>Larus marinus</i>	Great Black-backed Gull													1						
<i>Linaria cannabina</i>	Linnet	15																		7
<i>Motacilla alba</i>	Pied Wagtail	1																		
<i>Numenius arquata</i>	Curlew		50													1		4		
<i>Parus major</i>	Great Tit	2	4	8	4	1	3	2	1	2	1	1	1	3	1	1	1	2	1	3
<i>Passer domesticus</i>	House Sparrow	66	61	59	80	80	50	10	39	8	55	19	10	12	42	3	11	10	14	20
<i>Phalacrocorax carbo</i>	Cormorant	1												1						
<i>Phasianus colchicus</i>	Pheasant									1										
<i>Phylloscopus collybita</i>	Chiffchaff					1		1	1	1	1	2		1				1		
<i>Pica pica</i>	Magpie	14	9	6	6	4	4		1	2	3	2	2	1	4		2		2	8
<i>Prunella modularis</i>	Dunnock	2	3	3	2	2	3		3		5	1	2	1			2	3	2	2
<i>Regulus regulus</i>	Goldcrest		1						1											
<i>Sitta europaea</i>	Nuthatch										1									

Latin Name	Common Name	04/11/2020	02/12/2020	27/01/2021	16/02/2021	01/03/2021	10/03/2021	07/04/2021	21/04/2021	05/05/2021	19/05/2021	02/06/2021	29/06/2021	14/07/2021	22/07/2021	21/08/2021	26/08/2021	06/09/2021	16/09/2021	18/10/2021
<i>Streptopelia decaocto</i>	Collared Dove		1	1	4	1	2		5		2	2	2	2	1					9
<i>Sturnus vulgaris</i>	Starling	70	53	74	68	32	383	6	5	5	71	69		6	10	6	26	58	155	138
<i>Sylvia atricapilla</i>	Blackcap								1	4	1	2	2		2					
<i>Sylvia communis</i>	Whitethroat									3	1		1	4	3		2			
<i>Troglodytes troglodytes</i>	Wren	6	6	9	4	4	7	5	7	4	6	6	10	9	4	9	3	2	3	
<i>Turdus iliacus</i>	Redwing		20	11	50	1														
<i>Turdus merula</i>	Blackbird	9	16	16	5	5	16	5	7	6	7	13	5	6	11	6		2	3	
<i>Turdus philomelos</i>	Song Thrush	1	1	1		2					3	1	3	3	2				1	
<i>Turdus pilaris</i>	Fieldfare	1		55	35	1	210													
<i>Turdus viscivorus</i>	Mistle Thrush					1	2			1										

Table 20-Transect 25 Survey Results

Latin Name	Common Name	02/03/2021	16/03/2021	16/04/2021	29/04/2021	13/05/2021	26/05/2021	10/06/2021	23/06/2021	12/07/2021	28/07/2021	21/08/2021	24/08/2021	07/09/2021	16/09/2021	19/10/2021	10/11/2021	15/12/2021	11/01/2022	03/02/2022
<i>Aegithalos caudatus</i>	Long-tailed Tit			2			6	3	13	10	8	2	10	4	3	4	6	3	3	
<i>Anas platyrhynchos</i>	Mallard	2	2			2			1				2	2				3		
<i>Anser anser</i>	Greylag Goose						1	1			8									13
<i>Anthus pratensis</i>	Meadow Pipit			2															1	
<i>Apus apus</i>	Swift									2										
<i>Ardea cinerea</i>	Grey Heron		1													1				
<i>Branta canadensis</i>	Canada Goose	8	2			2							2					1		
<i>Buteo buteo</i>	Buzzard									2	2	1	1	1		1			1	
<i>Carduelis carduelis</i>	Goldfinch	14	7	4	12	16	2	12	18	28	20	40	26	35	54	12	11	5	21	
<i>Chloris chloris</i>	Greenfinch	4	2	2	3	2	3	4	2	3	2						1			
<i>Chroicocephalus ridibundus</i>	Black-headed Gull		20							1					2				5	2
<i>Coloeus monedula</i>	Jackdaw	59	22		28	7	8	38	5	1		2	19	8	4	42	18	41	113	103
<i>Columba livia</i> (domest.)	Feral Pigeon														2					
<i>Columba oenas</i>	Stock Dove																	3		
<i>Columba palumbus</i>	Wood Pigeon	20	26	7	14	10	2		19	8	11	8	13	12	7	74	10	34	73	11
<i>Corvus corax</i>	Raven																			1
<i>Corvus corone</i>	Carrion Crow	3	6	5	1	3	1		4	3	2	3	6	6	4	9	7	3	9	8
<i>Corvus frugilegus</i>	Rook	14													2	25	3		4	3
<i>Cyanistes caeruleus</i>	Blue Tit	3	5		4	2	5	7	10	7	9	5	6	6	12	5	5	6	9	15
<i>Dendrocopos major</i>	Great Spotted Woodpecker	1					1			1		2			1			1		
<i>Erithacus rubecula</i>	Robin	8	4	8	6	7	2	3	2		2	3	8	5	7	7	8	6	10	5



Latin Name	Common Name	02/03/2021	16/03/2021	16/04/2021	29/04/2021	13/05/2021	26/05/2021	10/06/2021	23/06/2021	12/07/2021	28/07/2021	21/08/2021	24/08/2021	07/09/2021	16/09/2021	19/10/2021	10/11/2021	15/12/2021	11/01/2022	03/02/2022
<i>Falco tinnunculus</i>	Kestrel	1																		
<i>Fringilla coelebs</i>	Chaffinch	14	4	3	6	5	3	4	4		5	1	4			3	11	8	9	4
<i>Fulica atra</i>	Coot					1														1
<i>Gallinula chloropus</i>	Moorhen	1	2														2	4	3	1
<i>Garrulus glandarius</i>	Jay													1	2	2				
<i>Hirundo rustica</i>	Swallow				3		3	1	1		5	6	1							
<i>Larus argentatus</i>	Herring Gull	5	2	3		5				1	3	3			1		2	15	2	5
<i>Larus canus</i>	Common Gull	2	15													6	20		25	40
<i>Larus fuscus</i>	Lesser Black-backed Gull			1		4														
<i>Linaria cannabina</i>	Linnet					7	2	2												
<i>Motacilla alba</i>	Pied Wagtail		1															2	1	
<i>Parus major</i>	Great Tit	2	6	4	3	2	3	3	2		2	3	2	3	4	3	4	11	5	4
<i>Passer domesticus</i>	House Sparrow	40	23		28	13	2	28	10	9	12	1	4	13	44	4	12	8	10	3
<i>Periparus ater</i>	Coal Tit		1																	
<i>Phalacrocorax carbo</i>	Cormorant													14						
<i>Phylloscopus collybita</i>	Chiffchaff			3	5	2	6	4		8	3	2	3		1					
<i>Phylloscopus trochilus</i>	Willow Warbler			2	2			1												
<i>Pica pica</i>	Magpie	3	4		11	3	4	4	1	3	1	4	3	5	1	1	8	17	4	7
<i>Prunella modularis</i>	Dunnock	2	6	3	4	2	1	6	5	3	3		3	2	4	4	9	2	3	2
<i>Pyrrhula pyrrhula</i>	Bullfinch									1									1	2
<i>Regulus regulus</i>	Goldcrest								1											
<i>Sterna hirundo</i>	Common Tern																	5		

Latin Name	Common Name	02/03/2021	16/03/2021	16/04/2021	29/04/2021	13/05/2021	26/05/2021	10/06/2021	23/06/2021	12/07/2021	28/07/2021	21/08/2021	24/08/2021	07/09/2021	16/09/2021	19/10/2021	10/11/2021	15/12/2021	11/01/2022	03/02/2022
<i>Streptopelia decaocto</i>	Collared Dove							1		2		2			2			1		
<i>Sturnus vulgaris</i>	Starling	150	27	27	79	20	2	87		31	30	31	26	69	9	12	40	31	68	13
<i>Sylvia atricapilla</i>	Blackcap			2	2		5		2	3		1								
<i>Sylvia communis</i>	Whitethroat				1	2		2	1											
<i>Troglodytes troglodytes</i>	Wren	1	3	2	6	3	6	8	6	6	4	5		1	3	1	4	1		3
<i>Turdus iliacus</i>	Redwing	10	2														4		50	
<i>Turdus merula</i>	Blackbird	22	15	10	21	9	11	5	4	11	5	7	11	6		7	23	11	7	13
<i>Turdus philomelos</i>	Song Thrush	2	2	2	4	4	1	3	1	2										2
<i>Turdus viscivorus</i>	Mistle Thrush		2	1			1											1		2

Table 21-Transect 26 Survey Results

Latin Name	Common Name	02/03/2021	16/03/2021	16/04/2021	29/04/2021	13/05/2021	26/05/2021	10/06/2021	23/06/2021	12/07/2021	28/07/2021	21/08/2021	24/08/2021	07/09/2021	16/09/2021	19/10/2021	10/11/2021	15/12/2021	11/01/2022	03/02/2022
<i>Accipiter nisus</i>	Sparrowhawk		1				1													
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler						1													
<i>Actitis hypoleucos</i>	Common Sandpiper																	1		
<i>Aegithalos caudatus</i>	Long-tailed Tit	1	1		2											6	33	1	1	9
<i>Anas platyrhynchos</i>	Mallard	2																		
<i>Buteo buteo</i>	Buzzard		1		1	1				2		1		1			1	1	2	2
<i>Carduelis carduelis</i>	Goldfinch	4		10			3			3		5			1	20		3	1	12
<i>Certhia familiaris</i>	Treecreeper													1						
<i>Chloris chloris</i>	Greenfinch	1		1		1		2	1											
<i>Chroicocephalus ridibundus</i>	Black-headed Gull			4						1	1				2	2			2	
<i>Coloeus monedula</i>	Jackdaw	7	6		5	3		21		1				1	3	6	77	1	1	1
<i>Columba livia</i> (domest.)	Feral Pigeon													3						
<i>Columba palumbus</i>	WoodPigeon	6	17	13	5	7	6	14	6	18	20	16	6	14	46	22	11	47	17	17
<i>Corvus corone</i>	Carrion Crow	4	2	4		1		5	1	2	3	4	1		3	3	7	6	11	4
<i>Corvus frugilegus</i>	Rook										20									
<i>Cyanistes caeruleus</i>	Blue Tit	4	2	4		1		8	2	2	6	2	2	17	6	2	2	2	12	12
<i>Dendrocopos major</i>	Great Spotted Woodpecker		1					1									1			
<i>Emberiza citrinella</i>	Yellowhammer												1							
<i>Emberiza schoeniclus</i>	Reed Bunting				1															
<i>Erithacus rubecula</i>	Robin	4	2	4		8	5	5	1	2	2	3	6	9	9	4	6	5	14	13
<i>Fringilla coelebs</i>	Chaffinch	3	4	2	12	4		3			2		3	3		1	4	1		3

Latin Name	Common Name	02/03/2021	16/03/2021	16/04/2021	29/04/2021	13/05/2021	26/05/2021	10/06/2021	23/06/2021	12/07/2021	28/07/2021	21/08/2021	24/08/2021	07/09/2021	16/09/2021	19/10/2021	10/11/2021	15/12/2021	11/01/2022	03/02/2022
<i>Fulica atra</i>	Coot		2																	
<i>Gallinula chloropus</i>	Moorhen			1																
<i>Hirundo rustica</i>	Swallow											1								
<i>Larus argentatus</i>	Herring Gull	3		2					1	2					3			4		
<i>Larus canus</i>	Common Gull									1										
<i>Larus fuscus</i>	Lesser Black-backed Gull												1							
<i>Linaria cannabina</i>	Linnet							1												
<i>Motacilla alba</i>	Pied Wagtail	4					1							1				5		
<i>Parus major</i>	Great Tit		2	2	4	2	3	4	1	2	1	2	1	3	2	2		2	3	3
<i>Passer domesticus</i>	House Sparrow	65	6	6	10	5	5	5	4	2	12	17		4	16	7	5	5	3	9
<i>Periparus ater</i>	Coal Tit	1																		
<i>Phasianus colchicus</i>	Pheasant		1			2			1											1
<i>Phylloscopus collybita</i>	Chiffchaff			2	2	2	2	3	4	4		2								
<i>Phylloscopus trochilus</i>	Willow Warbler						1													
<i>Pica pica</i>	Magpie	5	5		2	1	3	3	4	5	2	6	7		6	8	2		5	4
<i>Prunella modularis</i>	Dunnock	3	5		4		2	3	2	3	3	2	4	2	2	3	2	1	25	7
<i>Pyrrhula pyrrhula</i>	Bullfinch						1			1										
<i>Regulus regulus</i>	Goldcrest		1		1				1		1									
<i>Streptopelia decaocto</i>	Collared Dove			1						1										
<i>Sturnus vulgaris</i>	Starling			10	2										5			1		
<i>Sylvia atricapilla</i>	Blackcap			1	1	1	1	2	2	1	1									
<i>Sylvia borin</i>	Garden Warbler								1											

Latin Name	Common Name	02/03/2021	16/03/2021	16/04/2021	29/04/2021	13/05/2021	26/05/2021	10/06/2021	23/06/2021	12/07/2021	28/07/2021	21/08/2021	24/08/2021	07/09/2021	16/09/2021	19/10/2021	10/11/2021	15/12/2021	11/01/2022	03/02/2022
<i>Sylvia communis</i>	Whitethroat				1	1	1	1												
<i>Sylvia curruca</i>	Lesser Whitethroat									1										
<i>Troglodytes troglodytes</i>	Wren	1	5	3	4	5	6	12	6	9	7	12	3	2	2	2	3	1	2	4
<i>Turdus iliacus</i>	Redwing		2																40	
<i>Turdus merula</i>	Blackbird	4	7	1	8	1	10	8	10	12	7	2	1	3		6	12	8	15	18
<i>Turdus philomelos</i>	Song Thrush		1	1	1	2	1	2	5	2							1			2
<i>Turdus viscivorus</i>	Mistle Thrush			2			1		2							2				

**Table 22 -Survey Dates and Weather Conditions**

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
<b>Transect 1</b>							
02/11/20	09:00	PHa & ST	10	0	3	SW	3
	10:00		11	0	3	SW	3
07/12/20	10:10	PHa & AE	4	0	1	W	7
	11:15		5	0	1	W	6
22/01/21	12:00	PHi	5	0	0	NA	3
	13:00		5	0	0	NA	3
18/02/21	09:00	PHa & MW	6	0	3	SW	6
	09:40		7	0	3	SW	4
08/03/21	06:45	PHa & GA	2	0	1	SW	7
	07:35		3	0	1	SW	5
24/03/21	10:50	PHa & SW	13	0	3	SW	4
	11:30		14	0	2	SW	3
14/04/21	09:20	PHa & SW	7	0	1	SE	4
	10:00		9	0	1	SE	5
22/04/21	06:00	PHa & MP	2	0	1	SE	2
	06:35		3	0	1	SE	2
07/05/21	05:30	PHi	8	0	0	NA	0
	07:00		8	0	0	NA	0
20/05/21	05:15	PHa & AC	7	0	1	SE	5
	05:50		8	0	1	SE	6

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
03/06/21	04:50	PHa & SW	15	0	1	SE	6
	05:30		16	0	1	SE	5
30/06/21	04:55	PHa & BP	13	0	1	NE	3
	05:40		14	0	1	NE	4
01/07/21	04:50	PHi	13	0	1	NE	3
	06:00		14	0	1	NE	4
19/07/21	05:15	PHa & BP	16	0	1	W	0
	05:50		17	0	1	W	0
04/08/21	05:30	RI & GA	12	0	2	W	3
	06:30		11	0	1	W	2
25/08/21	06:05	PHi & BP	14	0	0	NW	8
	06:40		15	0	1	NW	-
01/09/21	06:15	PHa & BP	10	0	1	NE	7
	07:00		11	0	1	NE	7
13/09/21	06:45	PHi & IMcQ	13	0	1	SE	8
	07:30		14	0	1	SE	8
12/10/21	07:30	PHa & BP	13	0	3	NW	2
	08:00		13	0	3	NW	4
Transect 2							
17/12/20	10:15	PHa & AE	6	0	1	S	3
	11:10		6	0	1	S	4
15/01/21	12:00	PHi & AC	1	0	2	NW	2



Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	14:00		1	0	2	NW	2
11/02/21	09:00	PHa & JL	-2	0	1	SE	1
	11:05		1	0	3	SE	2
11/03/21	06:45	PHa & GA	8	2	5	W	8
	08:30		8	0	4	W	3
22/03/21	06:10	PHa & SW	7	0	1	SW	8
	07:40		8	0	1	SW	7
13/04/21	06:45	PHi	9	0	0	NA	6
	-		10	0	0	NA	6
27/04/21	06:00	PHa & SW	9	0	2	NW	7
	07:35		10	0	2	NW	8
11/05/21	05:30	PHa & GA	6	0	1	SE	2
	07:05		6	0	1	SE	3
04/06/21	05:30	PHi	8	0	0	S	1
	07:00		9	0	1	S	1
22/06/21	04:45	PHa & GA	8	0	1	NW	3
	06:30		10	0	1	NW	0
16/07/21	05:25	PHi & GA	11	0	0	NW	0
	07:20		12	0	1	NW	1
27/07/21	05:25	PHa & SW	13	0	1	SW	4
	06:50		15	0	1	SW	5
05/08/21	05:35	RI & GA	13	0	1	SE	5

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	07:05		13	0	2	SE	4
25/08/21	06:20	PHa & BA	13	0	1	NE	6
	07:45		14	0	1	NE	5
02/09/21	06:35	PHi	14	0	1	SE	8
	08:25		15	0	1	SE	8
13/09/21	06:45	PHa & GA	13	2	1	SE	8
	08:50		13	2	1	SE	8
11/10/21	07:30	PHa & BP	11	0	1	W	3
	09:05		13	0	2	W	4
25/10/21	08:15	PHa & BP	10	0	1	SW	5
	10:05		12	0	1	SW	4
08/11/21	07:40	PHa & BP	8	0	2	SE	7
	09:10		9	0	3	SE	6
17/11/21	07:40	PHa & JL	8	2	1	W	6
	09:35		8	0	2	W	7
01/12/21	08:10	PHa & BP	7	2	4	NW	6
	09:45		7	2	6	NW	7
16/12/21	08:25	PHa & GA	7	0	1	SW	7
	10:10		8	0	1	SW	8
05/01/22	08:35	PHa & JL	5	3	3	NW	4
	10:20		5	0	4	NW	4
12/01/22	08:35	PHa & GA	2	0	1	SW	3

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	10:10		4	0	1	SW	2
01/02/22	08:10	PHa & GA	10	0	3	NW	3
	09:45		12	0	3	NW	3
08/02/22	08:00	PHa & GA	11	0	2	SW	4
	10:00		12	0	3	SW	5
01/03/22	07:15	PHa & AJ	3	0	1	N	3
	09:05		7	0	1	N	1
24/03/22	06:15	PHa & AJ	4	0	1	SE	1
	08:05		8	0	1	SE	0
Transect 3							
17/12/20	12:00	PHa & AE	7	0	1	S	4
	14:00		7	0	1	S	5
21/01/21	09:00	PHi & ?	0	1	2	NW	-
	10:45		0	0	2	NW	-
11/02/21	12:20	PHa & JL	1	0	3	SE	4
	13:35		1	0	3	SE	3
10/03/21	-	PHi	6	2	3	SW	8
	-		7	0	3	SW	8
22/03/21	09:00	PHa & SW	9	0	1	W	7
	10:20		9	0	1	W	7
12/04/21	06:00	PHi	6	2	3	SW	8
	08:00		7	2	3	SW	8

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
21/04/21	07:45	PHi & GA	1	0	0	-	0
	09:45		2	0	0	SW	0
26/04/21	06:05	PHa & SW	3	0	1	SE	1
	07:20		3	0	1	SE	1
10/05/21	05:30	PHa & GA	9	0	1	SE	6
	07:00		9	0	1	SE	5
24/05/21	05:40	PHi	5	0	2	N	1
	06:15		6	0	2	N	1
07/06/21	04:45	PHa & MW	13	0	1	NW	4
	06:00		14	0	1	NW	3
28/06/21	04:40	PHa & ST	14	0	1	NE	2
	06:00		16	0	1	NE	1
12/07/21	05:00	PHa & BP	14	0	1	SE	7
	06:15		16	0	1	SE	8
26/07/21	05:15	PHa & GA	15	0	1	SW	7
	06:35		16	0	1	SW	7
06/08/21	05:35	RI & GA	15	0	2	SE	7
	06:50		15	4	2	SE	8
16/08/21	05:50	PHi	15	0	3	NW	8
	07:00		16	0	3	NW	8
02/09/21	06:15	PHa & BP	13	0	1	NE	7
	07:35		15	0	1	NE	7

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
14/09/21	06:45	PHa & IM	14	0	1	E	8
	08:05		15	2	1	E	8
13/10/21	07:30	PHa & BP	13	0	1	W	7
	09:00		14	0	1	W	8
16/11/21	07:30	PHa & JL	9	0	1	S	5
	09:00		10	0	1	S	6
Transect 4							
04/11/20	11:10	PHa & ST	10	4	2	NW	7
	12:20		11	2	2	NW	6
02/12/20	11:30	PHa & JL	10	0	2	SW	4
	12:30		10	0	2	SW	4
27/01/21	11:15	PHa & AE	9	0	1	W	-
	12:00		9	0	1	W	-
16/02/21	10:35	PHa & AE	11	0	2	SW	7
	11:30		12	0	2	SW	6
25/02/21	09:00	PHa & MW	8	0	1	SW	4
	10:25		9	0	1	SW	3
01/03/21	11:20	PHa & AE	7	0	2	SE	3
	12:20		8	0	2	SE	3
09/03/21	06:40	PHa & GA	4	0	2	SE	7
	07:55		5	0	2	SE	6
07/04/21	07:00	PHi	1	0	3	W	1

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	08:20		2	0	3	W	1
20/04/21	06:05	PHa & GA	4	0	1	W	4
	07:00		4	0	1	W	2
04/05/21	06:30	PHi	5	0	3	N	8
	07:30		6	0	2	N	8
18/05/21	05:15	PHa & GA	9	0	1	SW	5
	06:10		10	0	1	SW	4
01/06/21	04:50	PHa & SW	12	0	1	SE	3
	05:50		13	0	1	SE	2
25/06/21	06:15	PHi & ?	13	0	2	N	8
	07:25		14	0	1	NW	8
01/07/21	05:35	PHa & BP	14	0	1	NW	7
	06:30		15	0	1	NW	7
20/07/21	06:30	PHa & BP	20	0	1	NW	2
	07:15		22	0	1	NW	0
09/08/21	06:35	RI & SW	14	0	2	S	7
	07:30		14	0	1	S	7
19/08/21	06:55	PHi	15	0	1	SW	5
	07:45		16	0	1	SW	5
15/09/21	07:35	PHa & BH	12	0	1	NW	6
	08:15		14	0	1	NW	4
23/09/21	09:20	DCa	10	0	3	SE	4

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	10:00		11	0	2	S	4
14/10/21	07:30	PHa & BP	11	0	1	SW	7
	08:30		12	0	1	SW	6
Transect 5							
07/10/20	09:00	PHi	12	0	2	NW	4
	10:30		12	0	2	NW	4
20/10/20	11:15	PHi	16	0	0	N	6
	12:30		17	1	0	N	6
03/11/20	08:30	PHa & JL	8	0	2	SW	4
	09:05		8	0	2	SW	3
16/11/20	13:30	PHi & AC	11	0	2	SW	8
	14:15		12	0	2	SW	8
02/12/20	10:30	PHa & JL	9	3	3	SW	8
	11:10		9	2	2	SW	6
15/12/20	10:10	PHa & AE	7	0	2	SE	4
	11:30		7	0	2	SE	2
21/01/21	10:50	PHi & AC	6	0	3	SW	3
	12:15		6	0	2	SW	4
08/02/21	09:05	PHa & JL	1	0	2	NE	6
	09:40		1	0	2	NE	4
22/02/21	09:00	PHa & JL	8	0	1	SW	6
	09:40		8	0	1	SW	6



Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
09/03/21	07:00	PHi & ?	2	0	1	S	6
	08:00		2	0	1	S	8
26/03/21	06:00	PHi	5	0	2	S	3
	-		6	0	2	S	4
14/04/21	13:30	PHi	11	0	2	SW	8
	-		12	0	2	SW	7
30/04/21	05:45	PHi	3	1	3	SW	1
	-		4	0	1	SW	2
12/05/21	05:30	PHa & GA	8	0	1	S	2
	06:10		9	0	1	S	3
28/05/21	05:45	PHi	11	0	0	NA	8
	07:00		12	0	0	NA	8
01/06/21	06:30	PHa & SW	14	0	1	SE	1
	07:05		15	0	1	SE	1
25/06/21	04:50	PHi	13	0	2	NW	8
	05:35		13	0	2	NW	8
01/07/21	04:40	PHa & BP	15	0	1	NW	6
	05:05		15	0	1	NW	6
20/07/21	05:15	PHa & BP	19	0	1	NW	2
	05:55		20	0	1	NW	2
09/08/21	05:40	RI & SW	14	2	2	S	7
	06:10		14	3	2	S	7

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
19/08/21	05:50	PHi	15	0	1	SW	7
	06:20		15	0	1	SW	7
15/09/21	06:45	PHa & BH	10	0	1	NW	7
	07:15		12	0	1	NW	6
23/09/21	08:35	DCa	11	0	2	N	5
	09:00		12	0	3	N	4
Transect 7							
04/11/20	09:20	PHa & ST	7	4	1	NW	5
	10:50		8	2	2	NW	4
02/12/20	08:50	PHa & JL	8	0	1	SW	8
	10:10		9	1	1	SW	8
27/01/21	09:15	PHa & AC	7	0	1	W	7
	10:45		8	0	1	W	6
16/02/21	09:00	PHa & AC	9	0	1	S	8
	10:10		10	0	2	S	7
01/03/21	09:15	PHa & AE	3	0	1	SE	0
	11:00		6	0	2	SE	2
10/03/21	06:45	PHa & GA	7	2	3	S	3
	08:15		8	3	4	S	4
07/04/21	07:00	PHi	3	0	0	NA	3
	08:20		4	0	0	NA	4
21/04/21	06:05	PHa & GA	7	0	2	NE	5

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	07:10		7	0	3	NE	6
05/05/21	06:00	PHi	6	1	3	N	3
	08:00		7	1	2	N	4
19/05/21	05:15	PHa & GA	6	0	1	W	6
	06:15		7	0	1	W	5
02/06/21	05:00	PHa & LR	12	0	1	NE	3
	05:55		13	0	1	NE	2
29/06/21	04:40	PHa & ST	14	0	2	W	7
	05:45		15	0	3	W	6
14/07/21	04:50	PHi	15	0	1	NW	1
	06:30		16	0	2-	NW	2
22/07/21	05:15	PHa & BP	16	0	1	SE	0
	06:35		19	0	1	SE	0
12/08/21	05:45	RI & IM	12	0	3	SE	3
	07:00		11	0	2	SE	1
26/08/21	06:00	PHa & DC	16	0	1	NW	7
	07:30		18	0	1	NW	4
06/09/21	06:30	PHa & GA	15	0	0	NE	4
	07:45		16	0	0	NE	4
16/09/21	06:45	PHa & SW	14	0	1	SW	3
	07:55		16	0	1	SW	2
18/10/21	08:15	PHa & GA	12	0	1	SE	3

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	09:30		13	0	2	SE	5
<b>Transect 25</b>							
02/03/21	07:00	PHa & AE	4	0	2	SE	8
	08:30		4	0	3	SE	8
16/03/21	08:00	PHa & GA	11	1	2	NW	8
	09:30		12	0	2	NW	7
16/04/21	06:45	PHi	0	0	0	SE	0
	08:00		1	0	0	SE	0
29/04/21	07:00	PHa & SW	5	0	1	N	2
	08:20		5	0	1	N	1
13/05/21	06:30	PHa & GA	10	0	1	NW	7
	07:40		11	1	1	NW	8
26/05/21	05:30	PHi	7	0	0	NA	2
	06:55		8	0	0	NA	2
10/06/21	06:05	PHa & GA	18	0	1	SW	5
	07:55		20	0	1	SW	3
23/06/21	05:45	PHa & GA	9	0	1	SW	2
	07:15		10	0	1	SW	2
12/07/21	06:15	PHi	14	0	1	SE	8
	07:45		15	0	2	SE	8
28/07/21	06:50	PHa & GA	16	0	2	W	6
	07:50		17	0	2	W	4

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
13/08/21	07:30	RI & IM	14	0	2	SW	4
	08:40		14	0	1	S	4
24/08/21	07:30	PHa & BP	14	0	1	SE	8
	08:40		15	0	1	SE	8
07/09/21	08:15	PHa & IM	16	0	1	SE	0
	09:50		19	0	1	SE	0
16/09/21	08:15	PHi	16	0	1	NW	2
	09:15		17	0	1	NW	2
19/10/21	09:40	PHa & GA	16	1	2	S	8
	10:45		17	0	2	S	8
10/11/21	09:00	PHa & MW	10	0	1	SW	7
	10:10		12	0	1	SW	5
15/12/21	09:35	PHa & GA	9	0	3	S	1
	10:45		9	0	3	S	0
11/01/22	10:15	PHa & GA	8	0	1	NW	5
	11:20		9	0	1	NW	4
03/02/22	09:35	PHa & GA	9	0	1	SW	5
	10:40		10	0	1	SW	5
Transect 26							
02/03/21	08:50	PHa & AE	4	0	2	SE	8
	09:50		5	0	2	SE	7
16/03/21	06:30	PHa & GA	9	1	2	W	8

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	07:30		10	1	3	W	8
16/04/21	06:30	PHi	11	0	2	NW	6
	07:25		12	0	2	NW	4
29/04/21	05:45	PHa & SW	4	0	2	NW	3
	06:35		5	0	2	NW	2
13/05/21	05:10	PHa & GA	7	0	1	NW	5
	06:05		8	0	1	NW	6
26/05/21	05:00	PHi	9	0	3	NE	4
	06:25		10	0	1	NE	2
10/06/21	04:45	PHa & GA	15	0	1	SW	6
	05:35		16	0	1	SW	6
23/06/21	04:45	PHa & GA	7	0	1	W	3
	05:30		8	0	1	W	2
12/07/21	04:50	PHi	14	0	0	SE	8
	05:45		15	0	1	SE	7
28/07/21	05:15	PHa & GA	14	0	2	SW	8
	06:20		15	0	2	SW	7
13/08/21	05:50	RI & IM	14	0	3	SW	6
	07:00		13	0	2	SW	6
24/08/21	06:00	PHa & BP	13	0	1	SE	7
	07:00		14	0	1	SE	7
07/09/21	06:30	PHa & IM	12	0	1	SE	3

Date	Start Finish Times	Surveyors	Temp (°C)	Rain <sup>1</sup>	Wind <sup>2</sup>	Wind Direction	Cloud <sup>3</sup>
	07:45		16	0	1	SE	0
16/09/21	06:45	PHi	15	0	1	W	7
	07:55		16	0	2	W	6
19/10/21	08:15	PHa & GA	14	1	2	SE	8
	09:10		15	1	2	SE	8
10/11/21	07:35	PHa & MW	10	1	1	SW	6
	08:25		11	0	1	SW	5
15/12/21	08:20	PHa & GA	9	0	2	SW	1
	09:05		9	0	2	SW	1
11/01/22	08:30	PHa & GA	7	0	1	NW	7
	09:35		8	0	1	NW	6
03/02/22	08:00	PHa & GA	7	0	1	SW	7
	09:05		8	0	1	SW	6

1 Rain: 0=none, 1=drizzle, 2=light, 3=moderate (or heavy showers), 4=heavy.

2 Wind (Beaufort Scale): 0=calm, 1=light air (smoke drifts in wind), 2=light breeze (leaves rustle, wind felt on face), 3=gentle breeze (light flags extended, small twigs in constant motion); 4=moderate wind (dust, leaves and loose paper raised, small branches move), 5=fresh wind (small trees sway), 6=strong wind (large branches move, whistling in phone lines, difficult to use umbrellas), 7-12=inappropriate conditions (7=moderate gale, 8=fresh gale, 9=strong gale, 10=whole gale, 11=storm, 12=hurricane).

3 Cloud (Oktas): 0-8 Oktas; proportion of sky covered by cloud.