

BREEDING AND WINTERING BIRDS REPORT

Project Dragon, Port Talbot Docks



ECO02340
1

September 2023

Document status

Version	Revision	Authored by	Reviewed by	Approved by	Review date
1		Alex Harper	Tim Oliver	Tim Oliver	August 2023
2		Alex Harper	Paul Turner	Tim Oliver	October 2023

Approval for issue

Tim Oliver

11 October 2023

File Name

230623 ECO02340 Project Dragon - BBS WBS Assessment Report

The report has been prepared for the exclusive use and benefit of our client and solely for the purpose for which it is provided. Unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS') no part of this report should be reproduced, distributed or communicated to any third party. RPS does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

The report has been prepared using the information provided to RPS by its client, or others on behalf of its client. To the fullest extent permitted by law, RPS shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by RPS, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to RPS without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:

RPS

Tim Oliver
Technical Director
RPS | Consulting UK & Ireland
2 Callaghan Square
Cardiff
CF10 5AZ
United Kingdom

T +44 1454 853 000
E tim.oliver@rpsgroup.com

Prepared for:

LanzaTech UK Ltd

Contents

1	INTRODUCTION	1
1.1	Purpose and scope of this report	1
1.2	Study Area Location and Context	1
	Development Areas.....	1
	Open Water Dock.....	2
2	METHODS.....	3
2.1	Desk Study	3
2.2	Overwintering Survey – Open Water Dock	3
2.3	Overwintering Survey – Production Development Zone	4
2.4	Breeding Bird Assessment.....	5
	Breeding Bird Survey - Wider Harbourside Site.....	5
2.5	Assessment Criteria	6
2.6	Legislation	7
2.7	Survey Limitations.....	7
	Open Water Dock Vantage Points	7
	Production Development Zone (Wintering Birds).....	8
	Production Development Zone (Breeding Birds)	8
3	RESULTS.....	9
3.1	Overwintering birds	9
	WeBS Data (Open Water Dock)	9
	Open Water Dock.....	9
	Production Development Zone	10
3.2	Breeding Birds.....	12
	Breeding Bird Assemblage.....	Error! Bookmark not defined.
4	DISCUSSION	14
4.1	Wintering Birds.....	14
	Open Water Dock (Wintering Bird Assemblage).....	Error! Bookmark not defined.
	Open Water Dock.....	Error! Bookmark not defined.
4.2	Breeding Bird Assemblage.....	19
	Production Development Zone (Precautionary Assessment)	19
	Open Water Dock.....	21
	Wider Harbourside Site	Error! Bookmark not defined.
4.3	Geographical Importance.....	22
	Wintering Assemblage	Error! Bookmark not defined.
	Breeding Assemblage.....	22
5	CONCLUSION	23
5.1	Overwintering Birds.....	23
5.2	Breeding Birds.....	23
	REFERENCES	24

Figures

- Figure 1.** Development Areas Plan
Figure 2 Harbourside Areas Plan
Figure 3 Open Water Docks Areas Plan
Figure 4 Wintering Bird Activity October 2022
Figure 5 Wintering Bird Activity November 2022

-
- Figure 4** Wintering Bird Activity December 2022
Figure 5 Wintering Bird Activity January 2023
Figure 6 Wintering Bird Activity February 2023
Figure 7 Wintering Bird Activity March 2023

Appendices

- Appendix A** Open Water Docks - Species Counts
Appendix B PDZ Species Counts - Winter 2021/2022
Appendix C Harbourside Site Breeding Bird Survey 2021

1 INTRODUCTION

1.1 Purpose and Scope of this Report

- 1.1.1 RPS was commissioned by LanzaTech UK Ltd to prepare an assessment of the overwintering and breeding bird activity on land within and adjoining the Project Dragon development.
- 1.1.2 This report covers wintering and breeding bird activity within the main development area (Production Development Zone) adjoining temporary construction areas (TCA West and TCA East) and the open water dock.
- 1.1.3 The objective of the assessment is to define the species assemblages associated with the different parts of the survey area, bring together surveys completed between 2021 and 2023 and past records of species provided by the British Trust for Ornithology (BTO).
- 1.1.4 Specific consideration has been given to species protected under Schedule 1 of the Wildlife and Countryside Act 1981, species of principal importance in Wales listed by Section 7 of the Environment (Wales) Act 2016, and Birds of Conservation Concern (BoCC) in Wales jointly published by the Royal Society for the Protection of Birds (RSPB) and the British Trust for Ornithology (BTO).
- 1.1.5 The information presented in this report defines the baseline conditions which inform the assessment of effects within the Ecological Impact Assessment (EclA) and the biodiversity chapter of the Environmental Statement (ES).

1.2 Study Area Location and Context

Development Areas

- 1.2.1 The proposed development site is located within Port Talbot Docks and comprises two permanent development areas: the Production Development Zone (PDZ), and the Marine Unloading/Loading Facility to the north of the PDZ located on the southern side of the open water dock at Crown Wharf.
- 1.2.2 The Crown Wharf is separated from the PDZ by a section of the internal port road known as Phoenix Way.
- 1.2.3 Prior to February 2023, the PDZ supported self-sown willow and extensive stands of Japanese knotweed with more localised areas of grassland, reedbed, gorse scrub, bramble, and bracken. Associated British Ports (ABP) initiated works to control the Japanese knotweed in February 2023. Much of the willow was cut to ground level prior to the start of the nesting season in 2023 to define the full extent of Japanese knotweed, and inform the control strategy for 2023 and into 2024. The development areas are shown in Figure 1.

Temporary Construction Areas

- 1.2.4 The proposed development also includes several Temporary Construction Areas (TCAs).
- 1.2.5 TCA West is located immediately west of the PDZ and comprises two land parcels, one of hardstanding and a second larger parcel of scrub, bracken, bramble and regenerating and re-sown grassland.
- 1.2.6 TCA East adjoins the eastern boundary of the PDZ and comprises area of buildings, hardstanding and bare ground with smaller areas of regeneration grassland, scrub bracken, bramble and Japanese knotweed.

-
- 1.2.7 TCA 1 is located within part of Margam Wharf at the eastern end of the open water dock to the east of TCA East and the PDZ. TCA 1 is an open mosaic of ephemeral vegetation, bare ground and regenerating grassland with sparsely scattered scrub. The locations of the Temporary Construction Areas are defined on Figure 1.

Harbourside Site Areas

- 1.2.8 Breeding and overwintering bird surveys completed for the Harbourside Site (west of the PDZ) in 2021 surveys form part of this assessment. The extent of the Harbourside Site is defined in Figure 2 which shows the four survey compartments referred to in the results (Areas A, B, C West and C East). These areas are shown on Figure 3.
- 1.2.9 TCA West is part of Area C East but the majority of the Harbourside Site lies outside of the current proposed development areas.

Open Water Dock

- 1.2.10 The open water dock is an irregularly shaped area of open water, approximately 45ha in extent. For the purposes of the survey the dock has been sub-divided into 3 main sections (Eastern, Northern, and Western).
- An eastern section comprises the open water dock between Crown Wharf and Margam Wharf and bounded by Phoenix Way to the south.
 - A western section comprises the south-western part of the open water dock, to the south side of Talbot Wharf
 - A northern section comprises two areas of open water; one between Talbot Wharf and the North Bank Fishing Club wharf and a second between this wharf and an industrial estate to the north-east.
- 1.2.11 A tidal gate / shipping lock defines the western end of the open water dock separating it from the intertidal section of the River Afan where areas of rocky shore, sand, and mud are exposed at low tide.
- 1.2.12 This section of river is designated as the Lower River Afan Estuary Site of Importance for Nature Conservation (SINC). The river flows into Swansea Bay to the north of the harbour wall and breakwaters. Residential areas of Port Talbot are located close to the river to the north and east.

2 METHODS

2.1 Desk Study

- 2.1.1 The Wetland Bird Survey Data (WeBS) for wintering birds in the docks area was obtained for the period August 2012 to December 2016 (the most recent WeBS data available for the open water dock). Monthly counts of species were completed for each year within this period.

2.2 Overwintering Survey – Open Water Dock

- 2.2.1 A wintering bird survey of the open water dock was undertaken between October 2022 to March 2023 inclusive. The core survey area was the eastern section comprising the open water and reedbed adjacent to Crown Wharf and Margam Wharf. Sightings of wetland birds outside the core survey were also noted and mapped.
- 2.2.2 Each survey work was undertaken by a suitably experienced bird surveyor, over six visits (one per month) between October 2022 to March 2023 inclusive. Each survey was undertaken over a 2-hour period in the morning. The dates, times and weather conditions for each survey visit are shown in Table 2.1. The survey dates were selected to be within a few days of the standard BTO monthly WeBS counts.
- 2.2.3 Suitable optical equipment was used and all observed species within the survey area were recorded and mapped.

Table 2.1: Survey Dates and Conditions

Date	Times	Weather conditions			
		Wind (Beaufort)	Cloud (Oktas)	Precipitation	Temperature (°C)
10/10/2022	10:00-12:00	2	0	None	13
14/11/2022	10:00-12:00	2-3	0	None	13
12/12/2022	10:00-12:00	2-3	1	None	2
23/01/2023	09:00-11:00	0	7	None	2
09/02/2023	10:00-12:00	1	2	None	11
20/03/2023	10:00-12:00	1	4	Drizzle	10

- 2.2.4 The surveys were conducted from several vantage points with no safe access on foot close to the edge of the dock.
- 2.2.5 The core survey area in the eastern section of the open water was covered from two vantage points.
- 2.2.6 The vantage point in Margam Wharf covered the open water, edge of the reedbed, and the remains of old berths on the south-eastern edge of the dock including distant views of the old berths alongside Crown Wharf.
- 2.2.7 The vantage point at Crown Wharf covered the open water and reedbed on the northern bank, as well as more distant view back to Margam Wharf. The old berths were viewed from the access road running parallel to the edge of the dock.

- 2.2.8 The vantage point located alongside Phoenix Way further to the west, covered the western section of the open water dock between Crown Wharf and the shipping lock as well as the southern bank of Talbot Wharf.
- 2.2.9 The northern sections of the open water dock were outside of the core survey area, but distant views were gained from the Crown Wharf and Margam Wharf vantage points.
- 2.2.10 The monthly survey results are presented on plans showing all the species recorded on each visit and the location of the observation. The results were analysed to assess the use of the open water dock by different species and assess importance of the wintering bird community with reference to thresholds of national, regional, county, local and site importance.

2.3 Wintering Survey – Production Development Zone and TCA West

- 2.3.1 The wintering bird survey was based on a standard ‘walkover’ methodology as outlined in Gilbert et al. (1998) and Bibby et al. (2000).
- 2.3.2 The survey area included the PDZ and TCA West and an extensive area of naturally regenerating land further to the west. The results for the PDZ, TCA West and the immediately adjoining habitats are referenced in this report.
- 2.3.3 The accessible parts of the survey area were walked at a slow pace to locate and identify all individual birds. Incidental records were made of birds observed on the open water dock. All areas of the site were approached to within 100m, where possible. All species encountered within the survey area were recorded and mapped. Suitable optical equipment was used.
- 2.3.4 The surveys were undertaken twice monthly between November 2021 and March 2022 with the dates and conditions listed in Table 2.2.

Table 2.2: Survey Dates and Conditions

Date	Surveyor	Times	Weather Conditions			
			Wind (Beaufort)	Cloud (Oktas)	Precipitation	Temperature (°C)
09/11/2021	DS*	08:55-11:20	SW 2	8	Nil	13
19/11/2021	DS	08:45-11:10	W 1-2	7-6	Nil	11-14
02/12/2021	DS	08:25-11:15	NW 1	3-2	Nil	4-7
22/12/2021	DS	09:25-11:55	SE 3-4	7	Nil	6-7
13/01/2022	DS	09:45-12:10	NE 1-0	0	Nil	2-8
26/01/2022	DS	12:35-15:00	SW 2	7	Nil	8-9
04/02/2022	DS	09:20-11:55	W 4-5	1-2	Nil	6-7
22/02/2022	DS	09:45-12:15	W 7-5	8-6	Light rain-nil	9-11
08/03/2022	DS	09:40-11:50	SE 5-4	3-8	Nil	6-10
22/03/2022	DS	12:05-14:25	ESE-SE 3	1-0	Nil	14-15

- 2.3.5 The data captured for the PDZ and TCA West across the survey visits was analysed to provide an estimate of the abundance and distribution of notable species present. The importance of these habitats for wintering bird species was assessed and defined in a geographical context.

2.4 Breeding Bird Assessment

Harbourside Site (including TCA West)

- 2.4.1 In 2021 a breeding bird survey of the Harbourside site was completed for a 23ha survey area of the Harbourside site, which was subdivided into four separate areas based on their location, topographical features, and habitats.
- 2.4.2 The extent of each of the areas that comprise the Harbourside site are illustrated on Figure 2 .Area C East, centred at the OS grid reference SS 760 886, adjoins the boundary of the PDZ, and incorporates TCA West.
- 2.4.3 The survey method was based on a standard 'walkover' methodology as outlined in Gilbert et al. (1998) and Bibby et al. (2000). The site was subject to three survey visits each completed over a single morning starting within 3 hours of sunrise. On all visits, the survey areas in the Harbourside site were fully covered along with the land immediately adjoining the survey boundary. The surveyor was Tim Oliver, a suitably experienced ornithologist. The weather conditions during each of the survey visits is presented in Table 2.3.
- 2.4.4 In 2023, a single breeding bird survey visit was completed for Area C East including the TCA West area on 6th June by Tim Oliver. The survey commenced at 8:40am, due to Tata access permit constraints, and followed the same transect methodology.

Table 2.3 Survey dates and weather conditions

Date	Surveyor	Times	Weather Conditions			
			Visibility	Cloud (Oktas)	Precipitation	Temperature (°C)
28/05/21	TO	05:45-11:00	Moderate (overcast)	7	Occasional light drizzle	10
07/06/21	TO	06:00-11:10	Good (sunny, only high cloud)	2	Nil	14
02/07/21	TO	06:30-11:15	Good (sunny clear)	3	Nil	12
06/06/23 (Area C East Only)	TO	08:00 – 10:00	Moderate	5	Nil	12

- 2.4.5 Suitable optical equipment was used throughout the survey visit to scan the open habitats, scrub, hedgerows and edge habitats. All species encountered (heard or observed) within the survey area were recorded and mapped. Species overflying the site were also noted.
- 2.4.6 Additional ad hoc observations of breeding activity were also noted during walkover surveys in summer and during works supervised by the Ecological Clerk of Works (ECoW) in March 2022. Evidence of breeding / probable breeding include singing males, alarm calling and juveniles/family groups.
- 2.4.7 The data captured during the three survey visits were analysed to provide an estimate of the abundance and distribution of notable species present.

Predicted Breeding Bird Assemblage - Production Development Zone

- 2.4.8 It has not been possible to undertake a breeding bird survey of the PDZ in 2023 because the area was being managed to control Japanese knotweed.
- 2.4.9 Consequently the 2021 survey findings for the adjoining parts of the Harbourside Site have been used to make a precautionary assessment of the potential assemblage of species using the PDZ and with specific consideration given to the activity in the adjoining scrub habitats.
- 2.4.10 The Harbourside site breeding bird survey has provided information on the assemblage of species in different habitat types in the docks. In particular, the willow scrub in Area C East is largely equivalent to the features found in the PDZ, but with much more extensive stands of Japanese knotweed in the PDZ.
- 2.4.11 The smaller areas of mixed scrub, bramble and naturally regenerating grassland in the PDZ and Area C East are very similar in scale, structure and composition.
- 2.4.12 The breeding bird assemblage in the wider harbourside site (Areas C West, Area B and Area A) has also been considered where relevant to other habitat types within the PDZ. With close similarities in habitat type and structure between the survey areas and the PDZ, the precautionary extrapolation of breeding bird data in this report is considered to reflect the potential breeding bird assemblage in the PDZ.

TCA East (Breeding Birds)

- 2.4.13 A walkover assessment of buildings in TCA East was carried out in July 2023. Searches were made for evidence of nesting activity in and around the buildings including the presence of nest material, droppings or juvenile birds.

TCA1 (Breeding Birds)

- 2.4.14 Ad hoc sightings of breeding birds were noted during walkover surveys in summer 2021, 2022 and 2023 during site visits including checks for any ground nesting birds.

2.5 Assessment Criteria

- 2.5.1 The importance of the species wintering and breeding within the site was assessed and defined in a geographical context with reference to thresholds of national, regional, county, local and site importance with reference to their county and national conservation status of the bird species, including:
- Species listed under Section 7 of the Environment (Wales) Act 2016;
 - Species included in the Birds of Conservation Concern (BoCC) Red and Amber Lists in Wales;
 - Species occurring in nationally, regionally or locally important numbers
- 2.5.2 The Environment (Wales) Act 2016 list of Species of Principal Importance is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 7 of the Act; every public authority (e.g. a local authority or local planning authority) must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 2.5.3 The BoCC red and amber lists are published by the RSPB. Red List species are those that have declined in numbers by 50% over the last 25 years, those that have shown an historical population

decline between 1800 and 1995 and species that are of global conservation concern. The 60 species on the Red List are of the most urgent conservation concern.

- 2.5.4 Species listed on the BoCC Amber List, of which there are currently 91, include those that have shown a moderate decline in numbers (25%-49%) over the last 25 years and those with total populations of less than 300 breeding pairs. Also included are those species which represent a significant proportion (greater than 20%) of the European breeding or wintering population, those for which at least 50% of the British population is limited to 10 sites or less, and those of unfavourable conservation status in Europe.
- 2.5.5 The remaining species are placed on the Green List, indicating that they are of low conservation priority.
- 2.5.6 Thresholds for national significance in terms of population size for individual species are classified as sites that regularly support >1% of the national breeding population of a species consistent with the criteria for SSSI designation.
- 2.5.7 A population of a species is classified as County importance if it exceeds 1% of the estimated county population. Smaller numbers of birds are classified as having importance in a local or site context. This assessment is informed by data available from the local bird group reports.
- 2.5.8 In assessing the importance of wintering bird populations, the survey results were compared against population estimates of wintering birds from Woodward *et al.* (2020) and Hughes *et al.* (2020). The survey results for individual species results were compared against the most recent country Bird Report (Gower Ornithological Society, 2021).

2.6 Legislation

- 2.6.1 All species of wild birds receive full protection through the provisions of the Wildlife and Countryside Act 1981 (as amended). A few species are also afforded special protection under Schedule 1 of the Wildlife and Countryside Act (1981) and cannot be intentionally or recklessly disturbed when nesting. Licences can be issued to visit the nests but not to allow disturbance during a development, even in circumstances where that development is fully authorised by consents such as a valid planning permission.

2.7 Survey Limitations

Open Water Dock Vantage Points

- 2.7.1 The edge of the open water dock cannot be safely accessed and there is limited access on foot close to its perimeter. Therefore the survey was conducted from vantage points including Margam Wharf, Crown Wharf and the southern edge of the dock further to the west. Each vantage point location was set back from the edge of the dock by at least 5m.
- 2.7.2 The vantage points provided good visibility of the different sections within and adjoining the development area.
- 2.7.3 The open water between Talbot Wharf, the Fishing Club Wharf and the north-eastern industrial estate were not comprehensively surveyed. Although these northern parts of the dock were more distant, much of the activity associated with open water areas was also visible from the vantage points.
- 2.7.4 Industrial operations adjoining Margam Wharf are periodically associated with high levels of noise, with the potential for this to affect bird behaviour at the eastern end of the open water dock

Production Development Zone and TCA West (Wintering Birds)

- 2.7.5 It was not possible to undertake a breeding bird survey of the PDZ in 2023 because the area was being managed to control Japanese knotweed.
- 2.7.6 The dense vegetation present across the PDZ in winter 2021/2022 made access difficult to remote areas and the coverage of areas will have been affected by the stands of dense Japanese knotweed and willow scrub. The area was primarily surveyed from the central hardstanding area, the margins, and the areas of open grassland.

Production Development Zone and TCA West (Breeding Birds)

- 2.7.7 It has not been possible to undertake a breeding bird survey of the PDZ in 2023. The scrub habitats overlap extensive stands of Japanese knotweed.
- 2.7.8 An estimate of the species present in the PDZ, and their likely numbers has been made based on the survey information on the adjoining areas (see 2.4.9 to 2.4.11).
- 2.7.9 The scrub, bramble, Japanese knotweed and grassland habitats in the PDZ are also present in smaller extents in TCA West and is largely a continuation of the same habitats.
- 2.7.10 The regenerating willow scrub is very similar in age and structure and the scrub habitats (bramble, gorse, butterfly bush) forms the same type of mosaic. Areas of bracken tend to be small and predominantly monocultures in both areas.
- 2.7.11 The habitats/features within the PDZ that do not occur in the adjoining habitats (seasonally flooded ground with stands of reed, hardstanding, were compared against similar features in the wider Harbourside site.
- 2.7.12 With close similarities in habitat types and habitat structure between the PDZ and the adjoining sections of the Harbourside site covered in the 2021 survey, the precautionary extrapolation of breeding bird data from the wider harborside to the PDZ is considered to reflect the likely breeding bird assemblage in the PDZ.

3 RESULTS

3.1 Overwintering Birds

WeBS Data (Open Water Dock)

- 3.1.1 The WeBS data collected during monthly surveys over a 5 year period comprised records of 23 species within the docks area. The species, frequency of presence and peak counts are detailed in Table 3.1.

Table 3.1 WeBS Data Summary - July 2012 to December 2016

Common Name	Scientific Name	Number of Months Recorded (out of 60)	Peak Counts	Month of Peak Count
Black headed gull	<i>Chroicocephalus ridibundus</i>	39	128	December
Canada goose	<i>Branta canadensis</i>	17	50	December
Common gull	<i>Larus canus</i>	18	63	December
Common sandpiper	<i>Actitis hypoleucos</i>	1	1	May
Coot	<i>Fulica atra</i>	36	29	December
Cormorant	<i>Phalacrocorax carbo</i>	44	12	November
Gadwall	<i>Anas strepera</i>	1	1	February
Goosander	<i>Mergus merganser</i>	1	1	February
Great black-backed gull	<i>Larus marinus</i>	33	5	October
Great crested grebe	<i>Podiceps cristatus</i>	12	6	March
Grey heron	<i>Ardea cinerea</i>	22	4	November
Herring gull	<i>Larus argentatus</i>	52	261	November
Kingfisher	<i>Alcedo atthis</i>	6	2	July
Lapwing	<i>Vanellus vanellus</i>	4	21	January
Lesser black-backed gull	<i>Larus fuscus</i>	46	201	July
Little grebe	<i>Tachybaptus ruficollis</i>	16	9	December
Mallard	<i>Anas platyrhynchos</i>	45	46	August
Moorhen	<i>Gallinula chloropus</i>	32	4	February
Mute swan	<i>Cygnus olor</i>	45	11	November
Oystercatcher	<i>Haematopus ostralegus</i>	6	2	July
Snipe	<i>Gallinago gallinago</i>	31	52	December
Tufted duck	<i>Aythya fuligula</i>	3	3	February
Wigeon	<i>Anas penelope</i>	3	4	September

- 3.1.2 The species present in the dock during over 65% of the survey visits were herring gull, lesser black-backed gull, black headed gull, cormorant, mallard and mute swan. The three gull species had the highest peak counts. The numbers of species recorded during each WeBS survey visit was relatively low and over the five years, multiple wetland species have only been recorded on a few occasions in low numbers.

Open Water Dock

- 3.1.3 During the winter bird survey visits undertaken between October 2022 and March 2023 a total of 23 species were recorded in habitats in the open water dock. A summary of the species recorded, together with peak and mean counts is provided in Table 3.2. The survey results are shown on Figures 4-9. The survey data is presented in full in Appendix A.
- 3.1.4 There is a vertical edge to the Crown Wharf berth with sections of old structures extending into the dock. Mallard and cormorant were the only species recorded in these locations during the surveys.

Table 3.2 Wintering Bird Assemblage Open Water Dock – October 2022 to March 2023

Species	Scientific Name	Conservation Status	Peak count (Open Water Dock)	Note
Black headed gull	<i>Chroicocephalus ridibundus</i>	BoCCW Red, Section 7	45	Variable numbers
Canada goose	<i>Branta canadensis</i>		4	Recorded on 3 visits
Coot	<i>Fulica atra</i>	BoCCW Amber	8	Resident
Cormorant	<i>Phalacrocorax carbo</i>		6	Present throughout winter
Great black-backed gull	<i>Ichthyaeetus ichthyaeetus</i>	BoCCW Amber	1	Recorded on 2 visits
Great crested grebe	<i>Podiceps cristatus</i>		5	Species recorded on 2 visits
Herring gull	<i>Larus argentatus</i>	BoCCW Red, Section 7	80	Present throughout winter
Kingfisher	<i>Alcedo atthis</i>	Schedule 1	1	Occasional winter visitor
Lapwing	<i>Vanellus vanellus</i>	BoCCW Red, Section 7	3	Occasional winter visitor
Lesser black-backed gull	<i>Larus fuscus</i>	BoCCW Red	9	Regularly present in winter
Mallard	<i>Anas platyrhynchos</i>		19	Variable numbers recorded
Moorhen	<i>Gallinula chloropus</i>		1	Likely resident species
Mute swan	<i>Cygnus olor</i>		2	Present throughout winter
Oystercatcher	<i>Haematopus ostralegus</i>	BoCCW Amber	2	Occasional winter visitor
Snipe	<i>Gallinago gallinago</i>	BoCCW Amber	7	Present throughout winter (total under recorded)
Tufted duck	<i>Aythya fuligula</i>		2	Rare winter visitor

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

Section 7: Environment (Wales) Act 2016 Species of Principal Importance for Conservation in Wales.

BoCCW Red and Amber: Birds of Conservation Concern in Wales High and Moderate concern

Production Development Zone and TCA West

- 3.1.5 A total of 28 species were recorded within the combined areas of the PDZ and TCA West during winter bird survey visits undertaken between November 2021 and March 2022. A summary of the species recorded, together with their peak and mean counts is provided in Table 3.3. The full survey data is presented in Appendix B.
- 3.1.6 Out of the 28 species, a total of 12 species were recorded which meet at least one of the criteria relating to nature conservation as described in Section 2.5.

Table 3.3 Wintering Bird Activity Peak Counts, Winter 2021-2022

Common Name	Scientific Name	Conservation Status	PPZ	TCA West	Area C East	Note
Blackbird	<i>Turdus merula</i>		8	1	1	Present throughout winter
Blue tit	<i>Cyanistes caeruleus</i>		6	2	2	Present throughout winter
Bullfinch	<i>Pyrrhula pyrrhula</i>	BoCC Red	2	0	2	Occasionally recorded
Buzzard	<i>Buteo buteo</i>		1	0	0	Overflying
Carrion crow	<i>Corvus corone</i>		3	0	2	Regularly recorded
Cetti's warbler	<i>Cettia cetti</i>	Schedule 1	1	0	0	Recorded once
Chaffinch	<i>Fringilla coelebs</i>		3	2	2	Regularly recorded
Chiffchaff	<i>Phylloscopus collybita</i>		4	2	2	Regularly recorded
Dunnock	<i>Prunella modularis</i>		3	1	3	Regularly recorded
Goldcrest	<i>Regulus regulus</i>	BoCC Amber	2	0	0	Regularly recorded
Goldfinch	<i>Carduelis carduelis</i>		22	1	9	Flocks regularly recorded
Great tit	<i>Parus major</i>		3	0	2	Regularly recorded
Grey wagtail	<i>Motacilla cinerea</i>	BoCC Amber	1	1	1	Recorded once
Linnet	<i>Linaria cannabina</i>	BoCC Red	2	2	5	Recorded twice
Long-tailed tit	<i>Aegithalos caudatus</i>		13	0	0	Flocks regularly recorded
Magpie	<i>Pica pica</i>	BoCC Amber	3	2	11	Regularly recorded
Mistle thrush	<i>Turdus viscivorus</i>	BoCC Amber	1	0	1	Occasionally recorded
Pied wagtail	<i>Motacilla alba yarelli</i>		0	1	1	Recorded once
Redwing	<i>Turdus iliacus</i>		7	0	2	Regularly present in winter
Robin	<i>Erithacus rubecula</i>	Schedule 1	10	2	3	Present throughout winter
Snipe	<i>Gallinago gallinago</i>		4	0	0	Regularly present in winter
Song thrush	<i>Turdus philomelos</i>	BoCC Amber	3	1	2	Present throughout winter
Sparrowhawk	<i>Accipiter Nisus</i>	Section.7	2	0	2	Occasionally recorded
Stonechat	<i>Saxicola rubicola</i>		0	0	2	Off-site scrub
Water rail	<i>Rallus aquaticus</i>		1	0	0	Recorded once
Wood pigeon	<i>Columba palumbus</i>		2	0	2	Occasionally recorded
Woodcock	<i>Scolopax rusticola</i>	BoCC Red	2	0	0	Recorded twice
Wren	<i>Troglodytes troglodytes</i>		7	1	2	Present throughout winter

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

Section 7: Environment (Wales) Act 2016 Species of Principal Importance for Conservation in Wales.

BoCCW Red and Amber: Birds of Conservation Concern in Wales High and Moderate concern

TCA 1

- 3.1.7 In early winter 2022, small numbers of birds were recorded in the scattered scrub on the edge of the open water dock on the boundary of TCA1. Wall cotoneaster (invasive non-native plant) is abundant along part of the dock edge and produces large numbers of berries. Individual meadow pipit and mistle thrush were recorded in November 2022 along with robin, blackbird, dunnock and magpie.

3.2 Breeding Bird Assemblage

Area C East, TCA West and Extrapolation to the PDZ

- 3.2.1 Eleven species were confirmed or assumed to be nesting in Area C East. Three species were classified as confirmed or probably breeding in TCA West, whitethroat (3 pairs), dunnock (1-2 pairs) and wren (1-2 pairs), with all nesting activity associated with the mixed species scrub and bramble.
- 3.2.2 In comparison a total of 24 species were classified as breeding across the whole of the Harbourside with six further species recorded as foraging and likely to be nesting in nearby. The breeding bird assemblage for the different sections of the Harbourside site are presented in Appendix C. The assemblage of species associated with Area C East had differences to the other areas of the Harbourside site due to the extent of regenerating willow scrub and areas of mixed shrubs species comprising gorse, bramble, hawthorn and butterfly bush.
- 3.2.3 In 2021, the scrub woodland and areas of dense mixed scrub in Area C East supported several common and widespread bird species with up to four pairs of wren along with observations of great tit, blue tit, blackbird, and robin, all species associated with gardens and urban areas as well as the wider environment. Additional species associated with scrub woodland habitats were song thrush, blackcap, chiffchaff and goldfinch.
- 3.2.4 The bird activity in Area C East comprised common and widespread bird species associated with urban areas (wren, dunnock, chaffinch, robin, blackbird, great tit and blue tit) alongside species associated with scrub woodland habitats (chaffinch, song thrush, blackcap and chiffchaff).
- 3.2.5 Whitethroat was the only BoCCW red list species recorded Area C East with all territorial behaviour within the boundary of TCA West. Dunnock BoCCW Amber was also recorded in this habitat.
- 3.2.6 A follow up early morning walkover survey of TCA West in June 2023 confirmed the presence of the same assemblage of species with two pairs of whitethroat and a family of dunnock. Cetti's warbler was heard briefly singing from bramble scrub in TCA West but was only heard once for a very short duration and was considered to be an individual moving through the area.
- 3.2.7 Across Area C East the level of breeding bird activity and number of nesting pairs was low for the size of the area reflecting the limited value of the regenerating willow scrub for nesting birds.

Table 3-1: Recorded bird activity in Area C East in 2021 and recorded/predicted activity in the PDZ and TCA West combined.

Species	Breeding Pairs Area C East 2021	Breeding Status in Wider Harbourside Site	Precautionary Estimate of Nesting Pairs in PDZ and TCA West	Breeding Status PDZ and TCA West
Blackbird	1	Confirmed	3-6	Confirmed
Blackcap	2	Confirmed	1-3	Confirmed
Blue tit	1	Confirmed	0-2	Limited nesting habitat
Bullfinch	0	Possible	0-2	Possible breeding species
Carrion crow	0	Non-breeding	-	Limited nesting habitat
Cetti's warbler	0	Confirmed	0-1	Possible breeding species
Chaffinch	2	Confirmed	1-3	Confirmed
Chiffchaff	2	Confirmed	1-3	Confirmed
Dunnock	1	Confirmed	3-7	Confirmed

Species	Breeding Pairs Area C East 2021	Breeding Status in Wider Harbourside Site	Precautionary Estimate of Nesting Pairs in PDZ and TCA West	Breeding Status PDZ and TCA West
Goldcrest	0	<i>Not recorded</i>	1	Probable breeding
Goldfinch	0-1	<i>Confirmed</i>	1-3	Confirmed
Great spotted woodpecker	-	<i>Non-breeding</i>	-	No suitable nesting habitat
Great Tit	1	<i>Confirmed</i>	1-3	Limited nesting habitat
Linnet	0	<i>Confirmed</i>	0-2	Possible breeding species
Long-tailed tit	0	<i>Confirmed</i>	1-2	Confirmed
Magpie	0	<i>Confirmed</i>	0-1	Possible
Mistle thrush	0	<i>Non-breeding</i>	-	Limited nesting habitat
Peregrine	0	<i>Overflies the site</i>	-	Overflies the site
Reed warbler	Not recorded	<i>Confirmed</i>	0-2	Sub-optimal habitat
Robin	2	<i>Confirmed</i>	4-8	Confirmed
Sedge warbler	Not recorded	<i>Confirmed</i>	0-1	Possible but sub-optimal habitat
Snipe	Not recorded	<i>Non-breeding</i>	-	Non-breeding winter visitor
Song thrush	2	<i>Confirmed</i>	2-4	Confirmed
Sparrowhawk	Not recorded	<i>Non-breeding</i>	-	No suitable nesting habitat
Whitethroat	6	<i>Confirmed</i>	5-8	Confirmed
Woodpigeon	0	<i>Probable</i>	1-2	Possible
Wren	4	<i>Confirmed</i>	6-12	Confirmed

TCA East

- 3.2.8 At least one pair of herring gull is considered to have nested on Building 1 in TCA East. No evidence of gull activity associated with the roofs of other buildings in this temporary construction area. To the north of the open water dock, outside the site, a pair of herring gull with juvenile birds were noted on a large industrial building on the northern side of the open water dock in 2021.
- 3.2.9 No nesting activity was observed in or around any of the other buildings during the 2023 walkover survey inspections.
- 3.2.10 It is assumed that small numbers of breeding pairs are expected to nest in the small blocks of scrub on the boundary of this area.

TCA1

- 3.2.11 No ground nesting birds were observed in TCA1 during summer walkover surveys in 2021, 2022 and 2023. The regenerating scrub/grassland western side of Margam Wharf adjoining TCA1 / overlapping boundary.
- 3.2.12 During survey visits in June ad hoc sightings were made of foraging blue tit, wren, dunnock, robin, blackbird. The young age of the trees limits the areas of cover in which nests could be present. With very limited potential nesting habitat TCA1 only has the potential to support small number of breeding pairs.

4 DISCUSSION - WINTERING BIRDS

- 4.1.1 A total of 16 species of conservation interest were recorded across the surveys of the open water dock during monthly counts between October 2022 and March 2023 and the surveys of the PDZ between October 2021 and March 2022. All these species meet at least one of the criteria described in Section 2.5 for defining species of conservation concern. These species are listed in Table 4.1. With individual species accounts below.
- 4.1.2 These species of conservation interest meet at least one of a range of criteria relating to nature conservation; namely Species of Principal Importance (Section 7, Environment Wales 2016), Birds of Conservation Concern in Wales (BoCCW) Red or Amber lists, or species protected under Schedule 1 of the Wildlife and Countryside Act 1981.
- 4.1.1 The species composition recorded in 2022/ 2023 closely matched the monthly counts completed over five years at the time when WeBS surveys were being undertaken in the dock.
- 4.1.2 Several wildfowl species that were not recorded in the recent survey have been recorded as very rare autumn/winter visitors in the past: tufted duck, wigeon, goosander, gadwall and Mediterranean gull. Mallard was the only wildfowl species that is consistently recorded in the open water dock.
- 4.1.3 Four wader species have been recorded in the past: oystercatcher, lapwing, snipe and common sandpiper. These species were recorded rarely and in small numbers with the exception of wintering snipe with counts higher than 30 species in mid-winter, with a peak high count of 52.

Table 4.1 Wintering birds recorded in the open water docks (Schedule 1, Section 7 and BoCC Red and Amber List Species)

Common name	Scientific name	Conservation Status		
		Schedule 1 species	Section 7 species Environment Wales Act (2016)	BoCCW4 Red and Amber Species
Open Water Dock				
Herring gull	<i>Larus argentatus</i>			

Common name	Scientific name	Conservation Status		
		Schedule 1 species	Section 7 species Environment Wales Act (2016)	BoCCW4 Red and Amber Species
Mistle Thrush	<i>Turdus viscivorus</i>			Amber
Dunnock	<i>Prunella modularis</i>			

Lapwing

- 4.1.8 Lapwing is a common winter visitor to the area with a UK wintering population of 620,000. Three individuals were observed on one occasion on an old wooden berth at the western end of the open water dock. Lapwing were recorded on four occasions in winter during the WeBS counts and once during winter 2022/2023 and is considered to be an occasional visitor. The dock has site level importance for this species.

Lesser Black-backed Gull

- 4.1.9 Lesser black-backed gull is a common migrant and winter visitor with a wintering UK population of 120,000 individuals. This species was recorded in low numbers during the winter with at least an individual bird observed on the open water dock during half of the surveys. The peak count was 9 in December 2022. The dock has importance for the wintering population in the context of the site.

Woodcock

- 4.1.10 Woodcock is uncommon in the region with coastal habitat being primarily used in winter. The species has a wintering UK population of 1,400,000 individuals. It is a scarce breeding species with fewer than 50 10k squares in Wales (28), but more widespread in winter but typically occurring at low abundance. Woodcock was recorded on two occasions (February and March 2022) representing individuals feeding around seasonally flooded areas before dispersing to breeding grounds. The presence of two individuals in late winter confers importance in the context of the site.

Meadow Pipit

- 4.1.11 Meadow pipit is a common winter visitor and passage migrant. An individual bird was observed feeding on the berries of wall cotoneaster in TCA1 during the November 2022 survey visit. No birds were recorded during subsequent surveys and the dock is considered to have importance for this species at the level of the site.

BoCCW4 Amber List Species

Snipe

- 4.1.1 Snipe is a common winter visitor and passage migrant with high counts regionally in the winter months. The peak count of 8 individuals in vegetation around an area of off-site seasonal pooling in previously disturbed land adjacent to the dockside at Crown Wharf suggests at least site importance. The past WeBS peak count of 52 for the dock as a whole indicates that the dock area has the potential to have district importance as a wintering habitat for this species. Snipe were consistently recorded in the PDZ with counts of between 1 and 4. Snipe is a common winter visitor and the species using the PDZ are a proportion of the local population and the flooded hardstanding has site level importance.

Coot

- 4.1.2 Coot is a locally common winter visitor with regionally high abundances over the winter. Coot is resident in the open water dock, frequently recorded in the reedbed on the opposite bank to Crown Wharf. The peak count of 10 individuals in the open water dock indicates it has local value for this species.

Great Black-backed Gull

- 4.1.3 Great black backed gull is a common resident with small numbers seen further south of the site. Single birds were recorded on two occasions and the dock has low importance for the species.

Oystercatcher

- 4.1.4 Oystercatcher is a common resident becoming regionally numerous in the winter. Some of the sparsely vegetated ground around the margins of the docks has the potential to be used by a nesting pair. The small numbers of birds recorded indicates that the site has low importance for the species.

Grey Heron

- 4.1.5 Grey heron is a common resident species with individuals commonly occurring in locations throughout the county. This is regularly recorded during the WeBS counts 2012 to 2017 cover the whole of the open water. An individual was recorded on the dock margin in February 2023. The open water dock is considered to have negligible importance for this species.

Water Rail

- 4.1.6 Water rail is a locally common winter resident in the region and was recorded on the margin of the flooded hardstanding in the PDZ on one occasion during the winter 2021/2022 surveys and is considered to be a rare visitor.

Grey Wagtail

- 4.1.7 Grey wagtail has limited regional abundance with low counts across the region common. The population is estimated to be 5,950 pairs. One individual was recorded on one occasion during winter indicates the PDZ has very low importance for the species.

Mistle Thrush

- 4.1.8 Mistle thrush is a common resident breeder with regional counts of double-digits common. A single individual was recorded in the PDZ on two occasions in January and early February 2022 and was not recorded in March. A mistle thrush was recorded feeding on berries in TCA1 in November 2022 but was not recorded during any other visits. The PDZ and TCAs are a resource of low important resource for the species.

Dunnock

- 4.1.9 Dunnock is a common winter resident in the region with solitary individuals very widespread. Dunnock activity was recorded in TCA West, TCA1 and the PDZ with peak count of seven. The PDZ and TCAs are classified as having site importance for the dunnock in winter.

Magpie

- 4.1.10 Magpie is a common resident species in the county and was observed in PDZ, TCA West and TCA1 during the winter months. In the PDZ the mean count in winter was four individuals and is considered to have site importance for the magpie.

Bullfinch

- 4.1.11 Bullfinch is a common resident were occasionally observed during the winter months. The Site is of low importance to the species in winter.

Chaffinch

- 4.1.12 Chaffinch is a common resident species with high winter counts regionally. The peak count in the PDZ and TCA West combined in winter was four. The Site has importance for the species in the context of the site in winter.

Schedule 1 Species

Cetti's Warbler

- 4.1.13 Cetti's warbler is regional status locally common resident primarily associated with reedbed in coastal locations. In the docks October 2022 it was head briefly singing from scrub on the edge of the reedbed adjacent to Margam Wharf. It was recorded on one occasion during the overwintering surveys to west of the PDZ, but in habitat with low suitability for nesting.

Kingfisher

- 4.1.14 Kingfisher is a locally common resident with an estimated population in Wales of between 445 and 970. Kingfisher was recorded on one occasion during the overwintering surveys when an individual flew over the open water and into the reedbed.
- 4.1.15 Kingfisher was recorded on six occasions during the 60 WeBS counts indicating that this species is periodically using the dock as a foraging area. Kingfisher is on the BoCCW4 green list and is of least conservation concern. The dock is considered to have importance for this species at the level of the site.

4.2 Geographical Importance

Wintering Assemblage

- 4.2.1 Data were sourced from Woodward *et al.* (2020) and Hughes *et al.* (2020) for the population estimates of wintering birds in the UK. Where available, data on populations of wintering birds in Wales were used. The survey results for individual species results were compared against the most recent country Bird Report (Gower Ornithological Society, 2021).
- 4.2.2 The assemblage of wetland birds regularly using the dock is small, comprising species that are common and widespread in coastal/wetland habitats during winter months. All the species occur in small numbers with the exception of the gull species. The peak counts recorded during the WeBS counts in 2012-2016 were notably higher than the peak counts in winter 2022/2023.
- 4.2.3 A wider range of wetland species are recorded occasionally around the dock and in this context, the assemblage of wintering species is considered to be of local importance.

5 DISCUSSION - BREEDING BIRDS

5.1 Species Assemblage

Production Development Zone and TCAs

- 5.1.1 A precautionary assessment of the breeding bird assemblage for the PDZ and TCA West is presented in Table 4.2. The assessment is based on the similarity of the habitats in the PDZ with habitats in the wider docks (particularly Area C East), and the associated bird activity in these areas.
- 5.1.2 The precautionary assessment assumes a higher diversity than was observed on the ground during other survey work.
- 5.1.3 With closest habitat similarities, the predicted breeding assemblage will be closest to Area C East but considers the extent of each of the different habitat types and the breeding bird survey results from across the Harbourside site.
- 5.1.4 Overall, it is estimated that between 12 and 20 species have bred in the PDZ. This includes all the species that were confirmed as breeding in Area C East in 2021 and additional species based on the survey findings in similar habitat in the wider harborside site.
- 5.1.5 Eleven of these species meet at least one of criteria described in Section 2.5 to define species of conservation importance and/or concern. These species and their conservation status are listed in Table 4.3.
- 5.1.6 The highest value nesting habitat is associated with the denser structured vegetation, principally bramble, gorse and woody hawthorn scrub which have a scattered distribution across the PDZ and TCA West. Dense bracken and reed also provides potential cover for ground nesting birds.
- 5.1.7 The areas of open structured grassland form a patchwork between the scrub and the Japanese knotweed, as a consequence are relatively enclosed and have negligible value for species of ground nesting birds such as skylark and meadow pipit, which both favour larger areas of low vegetation cover.
- 5.1.8 It is presumed that herring gull nests on the roof of an industrial building in TCA East (Building 1). Although no nest site could be seen from the ground the presence of juveniles indicates the very likely presence of a nest on the flat roof.
- 5.1.9 No cavity nesting species were recorded in any of the buildings in TCA East but use by species such as house sparrow, starling, or pied wagtail cannot be ruled out.
- 5.1.10 Observations during walkover surveys in the PDZ in summer months in 2021 and 2022 found a surprisingly low level of bird activity in the regenerating willow scrub. The open growth structure and narrow diameter branches provide limited cover for nest sites. The ground flora cover below the regenerating willow is also poorly developed. Together these factors provides sub-optimal conditions for nesting. Much of the Japanese knotweed also have low value for nesting birds. Given the extent of willow scrub and Japanese knotweed across the PDZ the precautionary baseline being used is very unlikely to be under estimate the breeding bird assemblage.

Table 4.2 Probable Breeding Bird Species – Schedule 1 Section 7, BoCCW Red and Amber Species

Common name	Scientific name	Conservation Status		
		Schedule 1 species	Section 7 species Environment Wales Act (2016)	BoCCW4 Red and Amber Species
Production Development Zone and TCA West				
Bullfinch	<i>Pyrrhula pyrrhula</i>			

Herring Gull

- 5.1.14 Herring gull is a common resident breeding species in the county and is noted as nesting on roofs in coastal locations as well as natural coastal sites. At least one pair of herring gull is considered to have nested on Building 1 in TCA East. No evidence of gull activity associated with the roofs of other buildings in this temporary construction area.

BoCC Wales Amber List

Bullfinch

- 5.1.15 Bullfinch is a common resident breeder in the region but with low counts regionally over the winter months. The population estimate for Wales of 29,500. The dense scrub on the eastern side of the site has the potential to have been used as a nest site with a pair of bullfinch observed in late winter 2022. The site is classified as have negligible to site level importance for this species.

Chaffinch

- 5.1.16 Chaffinch is a common resident breeder in the region with high winter counts regionally. The population estimate for Wales is 470,000. Chaffinch were confirmed to be nesting in adjacent scrub habitats and is classified as a breeding species in the PDZ which has importance for the species in the context of the site.

Dunnock

- 5.1.17 Dunnock is a common breeder and winter resident in the region with solitary individuals often being recorded, double figure counts are of regional significant. Two pairs of dunnock bred in adjacent mixed scrub habitats and it is used that several pairs will have nested in equivalent habitat in the PDZ and other TCAs. Overall the habitats are considered to have local importance for the dunnock.

Magpie

- 5.1.18 Magpie is a common resident breeder in the region and multiple records in the region of 10+ are common. Magpie has been regularly observed within the PDZ and is a possible breeding species, but the open structure of the willow shrubs significantly reduces the potential nest sites. The PDZ has negligible importance for the species.

Schedule 1 Species

Cetti's Warbler

- 5.1.19 Cetti's warbler is regional status locally common resident breeding species and is becoming increasing well established.
- 5.1.20 It was recorded briefly singing from scrub adjoining reedbed within the PDZ in spring 2022 and from bramble in June 2023. There are no Welsh population estimates given due to it being recorded in less than 50 10km squares in Wales 2007-2011. It had been recorded as breeding in 47 and this will have increased in the intervening period as the population continues to increase. It is included on the BoCCW4 green list and is of least conservation concern.

Open Water Dock

- 5.1.21 A number of birds will be nesting on the margins of the docks with additional species nesting in the adjoining scrub. Coot, a BoCCW4 amber list species, is also resident in the dock and will be nesting in dense marginal cover. The passerines reed warbler, sedge warbler (both green list), reed bunting (red list) and Cetti's warbler (Schedule 1 but green list) are all expected to nest in or adjoining the reedbeds on the sides of the dock. Other species nesting in the dock area include mute swan, Canada goose, mallard, and moorhen (all BoCC green list species).

5.2 Geographical Importance

- 5.2.1 Data were sourced from Woodward *et al.* (2020) and Hughes *et al.* (2020) for the population estimates of wintering birds in the UK. Where available, data on populations of wintering birds in Wales were used. The county bird report from Glamorgan bird club was used for reference to specific species (Eastern Glamorgan Bird Report no.6, 2021).

Breeding Assemblage

- 5.2.2 The precautionary assessment of the breeding bird assemblage in the PDZ and TCA West of would have comprised between 12 and 20 breeding species. Cetti's warbler has been briefly in heard singing in several locations but with no evidence of birds holding territories or nesting within the Site.
- 5.2.3 TCA1 is considered to have negligible value for breeding birds but does provide a foraging resource for common species of birds that will be nesting in the locality. The habitats within TCA1 currently only have the potential to support a very small number of nesting pairs of common species.
- 5.2.4 The potential nesting bird habitat in TCA East relates to the small areas of dense scrub with herring gull presumed to be nesting on the flat roof of the largest building.
- 5.2.5 Across the all the buildings there were a very limited number of features leading into cavities and the potential value for cavity nesting species is very low.
- 5.2.6 The habitats and features in TCA East is considered to have limited value for nesting birds. Overall the site is considered to support a breeding bird assemblage of local importance.

6 CONCLUSION

6.1 Overwintering Birds

- 6.1.1 The targeted wintering bird surveys conducted during 2022-2023 indicated the use of the site by widespread and common bird species associated with the dock. No species were recorded in high numbers reaching the threshold for national or county importance. The survey findings were consistent within WeBS data covering the period from 2012 to 2017. Species rarely recorded during WeBS surveys were not observed during the monthly counts completed in winter 2022-2023.
- 6.1.2 Within the PDZ, both dunnoek and snipe were recorded at relatively high numbers, 7 and 8 respectively. Both species are considered to occur in locally important numbers.
- 6.1.3 A total of 16 species that are classified as Red or Amber species on the BoCCW4 were recorded in the open water dock, PDZ or the TCAs during the winter months.
- 6.1.4 The overall assemblage of wintering species is considered to be of local importance.

6.2 Breeding Birds

- 6.2.1 The PDZ and TCA West are the areas within the site of highest potential value for nesting birds in relation to the extent of habitat and the assemblage of breeding species associated with the habitats.
- 6.2.2 The precautionary assessment of the breeding bird assemblage using the PDZ and TCA West is estimated to be between 12 and 20 species. Of the species with BoCCW Red or Amber list status whitethroat, dunnoek and goldcrest are classified as confirmed or probable breeding species. Areas dense gorse, bramble, hawthorn have value for the BoCC whitethroat and dunnoek and the structure of these habitats has the potential to support other BoCCW bullfinch and linnet. A single breeding pair of goldcrest were also recorded in the PDZ.
- 6.2.3 Chaffinch and magpie are potential nesting species in the PDZ which were added to the BoCCW amber list in 2023.
- 6.2.4 Herring gull is presumed to be nest on the large flat roofed building in TCA East.
- 6.2.5 Cetti's warbler occurs in Port Talbot Docks with potential nesting habitat in the PDZ and in habitats adjoining TCA East, although no evidence of nesting has been recorded.
- 6.2.6 In comparison, the young regenerating habitats of TCA1 has very low value for breeding birds.
- 6.2.7 Overall the breeding bird assemblage in the Site is classified as having importance in a local context with the populations of individual species important at either a site or local level.

REFERENCES

Anon. (1981). *The Wildlife & Countryside Act*.

Anon. (2016). *The Environment (Wales) Act*.

Burns et al (2020) *The state of the UK's birds 2020*. The RSPB, BTO, WWT, DAERA, JNCC, NatureScot, NE and NRW, Sandy, Bedfordshire.

Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000). *Bird Census Techniques, second edition*. Academic Press, London.

Johnstone et al (2022) *Birds of Conservation Concern Wales 4: the population status of birds in Wales* Milvus 2:1 (Online First)

the population status of birds in Wales Fuller, R.J. (1980). *A Method for Assessing the Ornithological Interest of Sites for Conservation*. *Biological Conservation* **17**, 229-239.

Gilbert, G., Gibbons, D.W. and Evans, J. (1998). *Bird Monitoring Methods: A manual of techniques for key species*. RSPB/BTO/JNCC/WWT/ITE/The Seabird Group. RSPB/BTO, Sandy, Beds.

Holling, M. and the Rare Breeding Birds Panel (2018). Rare breeding birds in the United Kingdom in 2016. *British Birds* **111**, 644-694.

Musgrove, A., Aebischer, N., Eaton, M., Hearn, R., Newson, S., Noble, D., Parsons, M., Risely, K, and Stroud, D. (2013). *Population estimates of birds in Great Britain and the United Kingdom*. *British Birds* **106**, 64-100.

Stanbury et al (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

Glamorgan Bird Club (2021) *Eastern Glamorgan Bird Report no.60* . Copypring Newport Printing Co. ISBN 978-0-9927301-9-2

FIGURES



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Legend

Application Boundary

Rev	Description	By	CB	Date



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rps@rpsgroup.com

Client	LanzaTech UK Limited			
Project	Project Dragon SAF Production Facility			
Title	Development Areas			

Status	Drawn By	PM/Checked By
ISSUE	OW	TO
Project Number	Scale @ A3	Date Created
ECO02340	1:4,000	AUG 2023
Figure Number	Rev	
1	-	

rpsgroup.com

C:\Users\Hayley.Mardle\OneDrive - RPS Group PLC\Desktop\ECO01825 - Harbourside Site, Port Talbot\Tech\Drawings\1825-0002-General\Map.mxd



© 2022 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Legend

Site Boundaries

Rev	Description	By	CB	Date

rps MAKING COMPLEX EASY

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rps@rpsgroup.com

Client **LanzaTech**

Project **Project Dragon**

Title **Harbourside Areas Plan**

Status	Drawn By	PM/Checked By
Final	HM	TO
Project Number	Scale @ A3	Date Created
ECO02340	1:4,500	MAY 2023
Figure Number		Rev
2		-

rpsgroup.com



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Rev	Description	By	CB	Date



MAKING
COMPLEX
EASY

A TETRA TECH COMPANY

5th Floor, One Temple Quay, Temple Back East, Bristol, BS1 6DZ
T: +44(0)1454 853 000 E: rpsbl@rpsgroup.com

Client

Lanzatech

Project

Project Dragon

Title

Survey Areas

Status

Draft

Drawn By

LP

PM/Checked By

AH

Project Number

ECO02340

Scale @ A3

1:6,500

Date Created

25/05/23

Figure Number

3

Rev

01

rpsgroup.com

Document: \\bris-aw-fs-01\Env\PlanningProjects\Bristol Ecology Projects\A ECO02340 Project Dragon\Tech\Drawings\ECO02340 Open Water Dock Areas.aprx

C:\Users\Oliver.Wayne\OneDrive - RPS Group PLC\Documents\projects\ECO02340-Open Water Dock Areas\ECO02340-All Drawings\ECO02340-All Drawings.aprx



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

- Legend
- BH Black-headed Gull
 - CG Canada Goose
 - CW Cetti's Warbler
 - CO Coot
 - CA Cormorant
 - GB Great Black-backed Gull
 - HG Herring Gull
 - KF Kingfisher
 - LB Lesser Black-backed Gull
 - MA Mallard
 - MH Moorhen
 - MS Mute Swan

Rev	Description	By	CB	Date



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rps@rpsgroup.com

Client LanzaTech

Project Project Dragon

Title Winter Bird Survey 10/10/2022

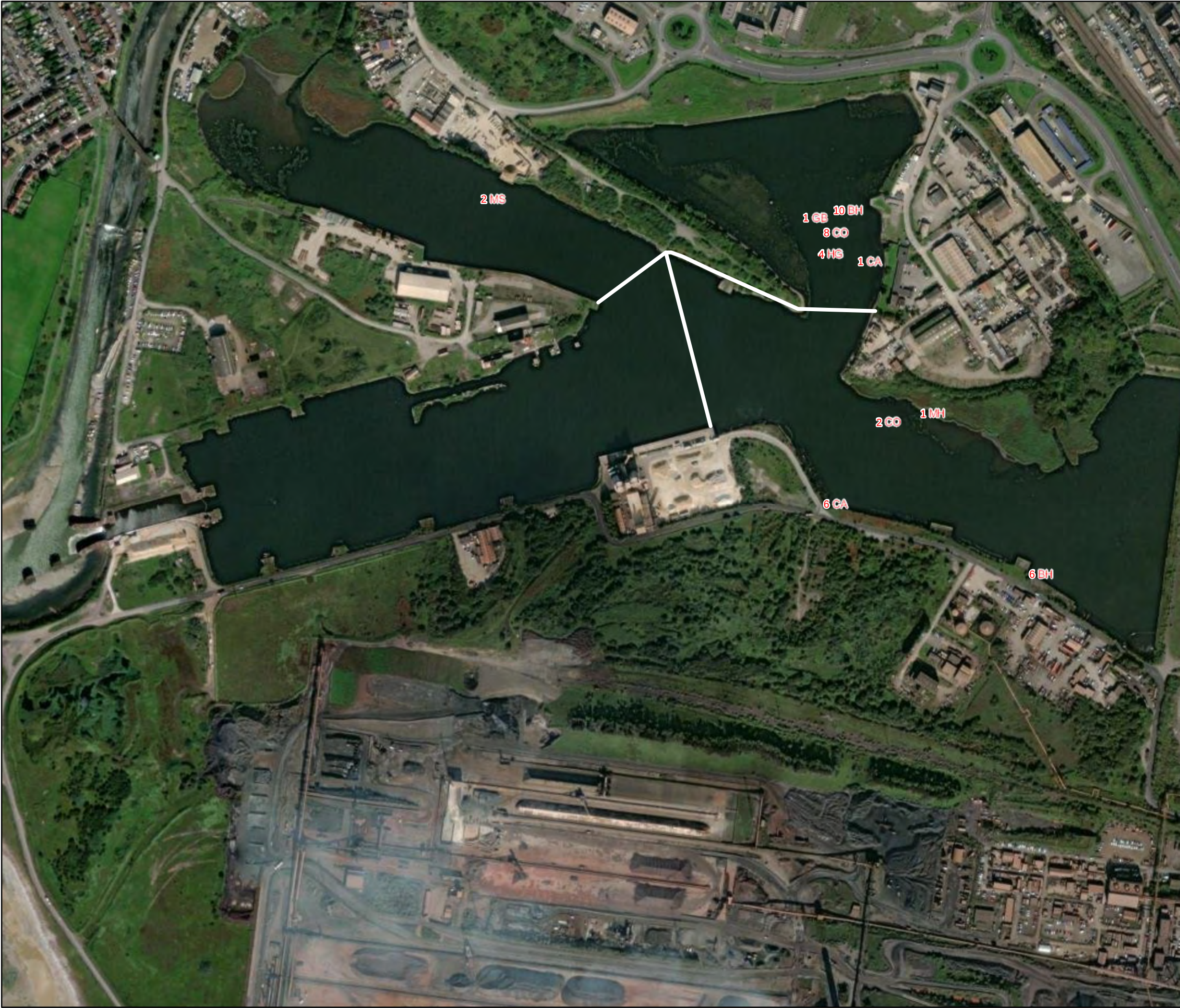
Status	Drawn By	PM/Checked By
FINAL	HM	TO

Project Number	Scale @ A3	Date Created
ECO02340	1:8,000	JUN 2023

Figure Number	Rev
4	1

rpsgroup.com

C:\Users\Oliver.Wayne\OneDrive - RPS Group PLC\Documents\projects\ECO02340 Open Water Dock Areas\ECO02340-All Drawings\ECO02340-All Drawings.aprx



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

- Legend
- BH Black-headed Gull
 - CO Coot
 - CA Cormorant
 - GB Great Black-backed Gull
 - HG Herring Gull
 - MH Moorhen
 - MS Mute Swan

Rev	Description	By	CB	Date



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client LanzaTech

Project Project Dragon

Title Winter Bird Survey 14/11/2022

Status	Drawn By	PM/Checked By
DRAFT	HM	TO
Project Number	Scale @ A3	Date Created
ECO02340	1:8,000	JUN 2023
Figure Number		Rev
5		1

rpsgroup.com

C:\Users\Oliver.Wayne\OneDrive - RPS Group PLC\Documents\projects\ECO02340 Open Water Dock Areas\ECO02340-All Drawings\ECO02340-All Drawings.aprx



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

- Legend
- CO Coot
 - CA Cormorant
 - HG Herring Gull
 - LB Lesser Black-backed Gull
 - MS Mute Swan

Rev	Description	By	CB	Date



MAKING
COMPLEX
EASY

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rpsox@rpsgroup.com

Client Lanzatech

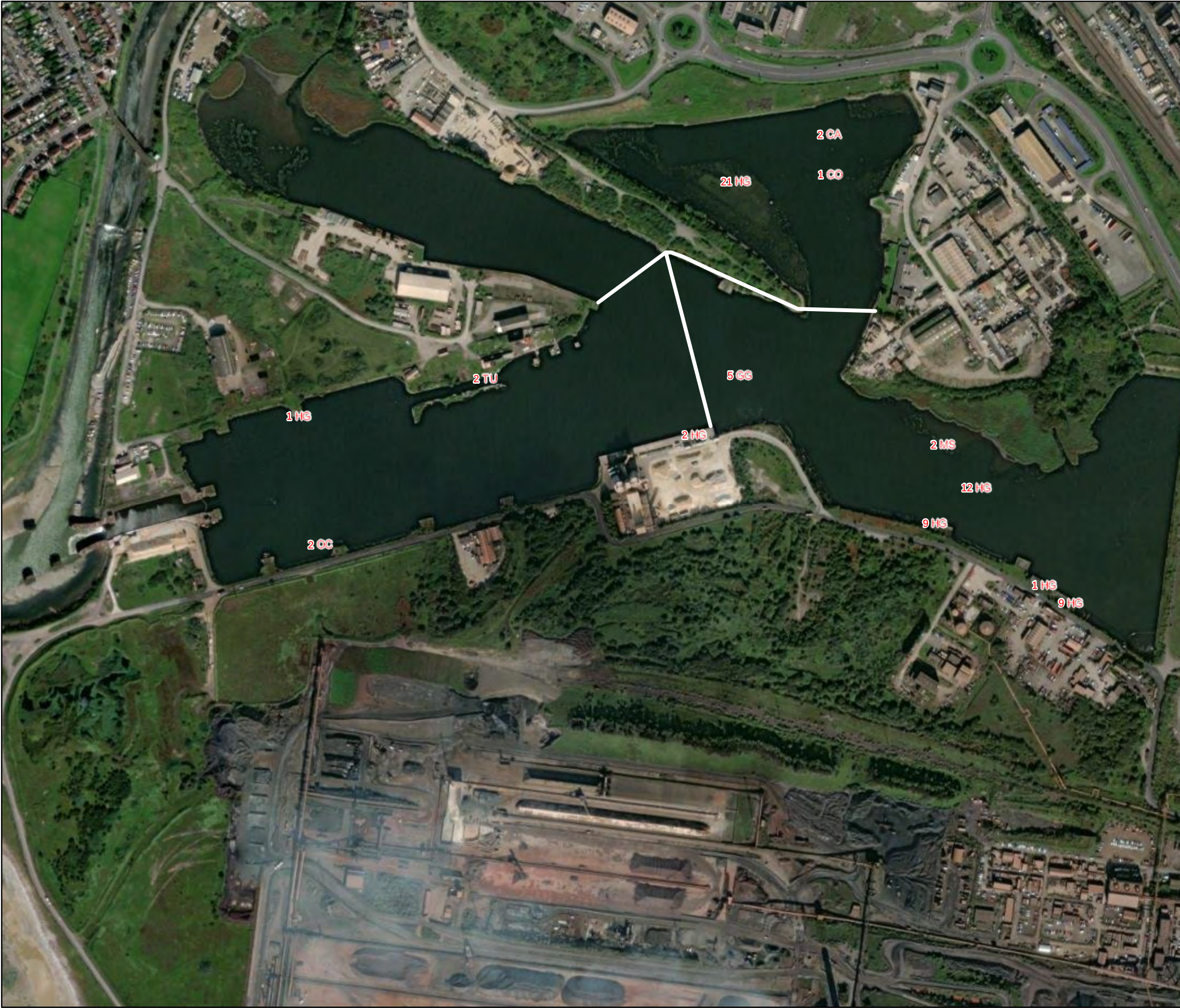
Project Project Dragon

Title Winter Bird Survey 12/12/2022

Status	Drawn By	PM/Checked By
DRAFT	HM	TO
Project Number	Scale @ A3	Date Created
ECO02340	1:8,000	JUN 2023
Figure Number		Rev
6		1

rpsgroup.com

C:\Users\Oliver.Wayne\OneDrive - RPS Group PLC\Documents\projects\ECO02340 Open Water Dock Areas\ECO02340-All Drawings\ECO02340-All Drawings.aprx



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

Legend

- CO Coot
- CA Cormorant
- GG Great Crested Grebe
- HG Herring Gull
- MS Mute Swan
- OC Oystercatcher
- TU Tufted Duck

Rev	Description	By	CB	Date



20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rps@rpsgroup.com

Client LanzaTech

Project Project Dragon

Title Winter Bird Survey 23/01/2023

Status	Drawn By	PM/Checked By
DRAFT	HM	TO
Project Number	Scale @ A3	Date Created
ECO02340	1:8,000	JUN 2023
Figure Number		Rev
7		1

rpsgroup.com

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

BH	Black-headed Gull
CG	Canada Goose
CO	Coot
CA	Cormorant
GB	Great Black-backed Gull
GG	Great Crested Grebe
HG	Herring Gull
L	Lapwing
LB	Lesser Black-backed Gull
MA	Mallard
MH	Moorhen
MS	Mute Swan

Rev	Description	By	CB	Date

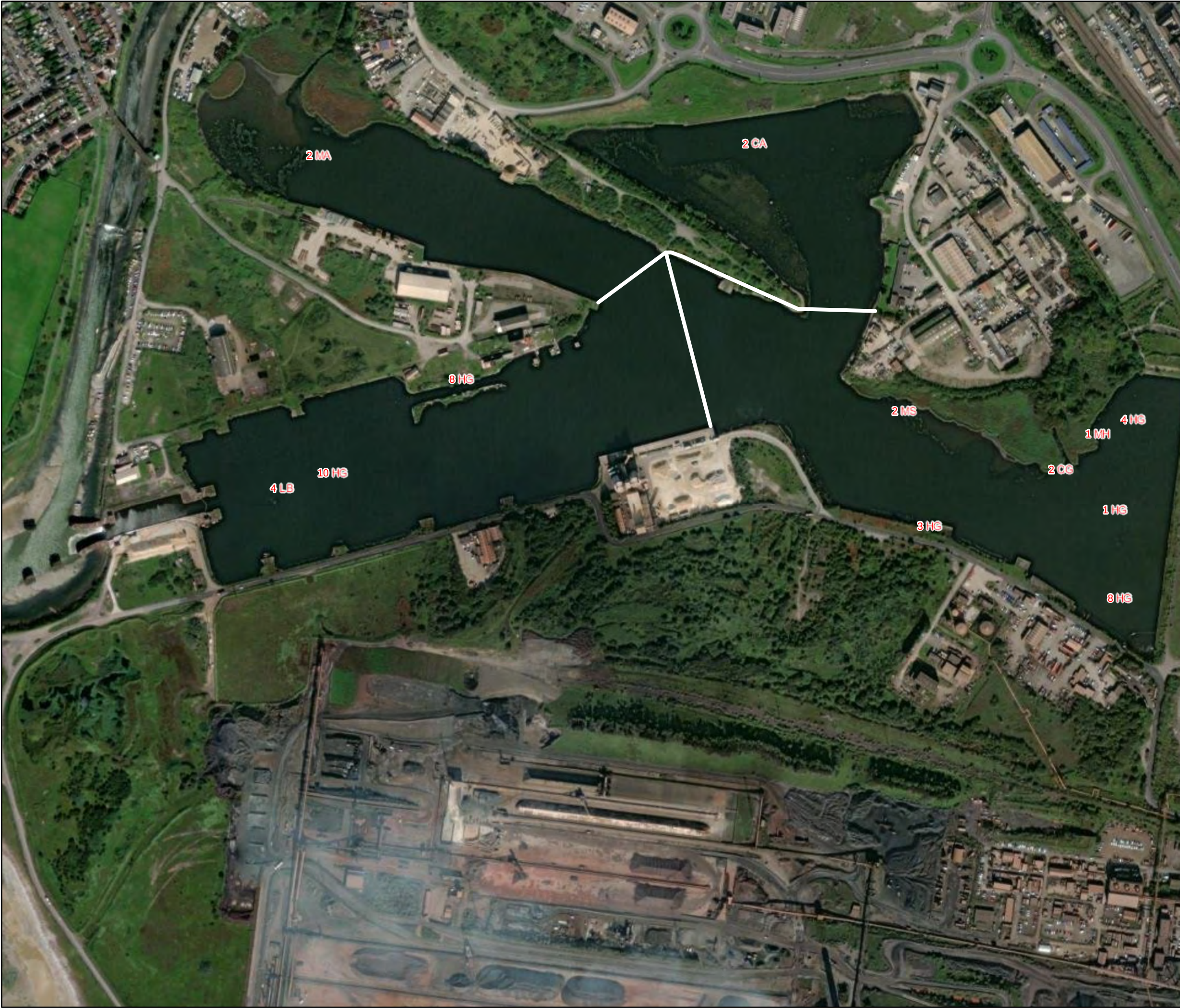


Title	Winter Bird Survey 09/02/2023
-------	-------------------------------

Figure Number	Rev
8	1

rpsgroup.com

C:\Users\Oliver.Wayne\OneDrive - RPS Group PLC\Documents\projects\ECO02340 Open Water Dock Areas\ECO02340-All Drawings\ECO02340-All Drawings.aprx



© 2023 RPS Group

Notes

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.

2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.

- Legend**
- CG** Canada Goose
 - CA** Cormorant
 - HG** Herring Gull
 - LB** Lesser Black-backed Gull
 - MA** Mallard
 - MH** Moorhen
 - MS** Mute Swan

Rev	Description	By	CB	Date



MAKING
COMPLEX
EASY

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH
T: +44(0)1235 821 888 E: rps@rpsgroup.com

Client **Lanzatech**

Project **Project Dragon**

Title **Winter Bird Survey 20/03/2023**

Status	Drawn By	PM/Checked By
DRAFT	HM	TO
Project Number	Scale @ A3	Date Created
ECO02340	1:8,000	JUN 2023
Figure Number		Rev
9		1

rpsgroup.com



APPENDICES

Appendix A

Open Water Dock Counts 2022/2023

Open Water Dock – Species Counts

Common name	10/10/2022		14/11/2022		12/12/2022		23/01/2023		09/02/2023		20/03/2023	
	Eastern Section	Wider Dock	Eastern Section	Wider Dock	Eastern Section	Wider Dock	Eastern Section	Wider Dock	Eastern Section	Wider Dock	Eastern Section	Wider Dock
Herring gull	80	51		89	23	36	33	32	8	44	18	18
Lesser black-backed gull	1	1				9			1			4
Black headed gull	35	23	6	10						24		
Great black-backed gull		1							1			
Canada goose		4								4	2	
Coot	2		2	8	2				1			
Cormorant	1	2	6		2		2		5	2		2
Great crested grebe				1			5					
Grey heron									2			
Kingfisher	1											
Lapwing										3		
Snipe			7									
Mallard	19								3			2
Moorhen			3						1		1	
Mute swan	2			2	2		2			2		2
Oystercatcher								2				
Tufted duck							2					

Appendix B

PDZ Survey Results – Winter 2021/2022

PDZ Species Counts – Winter 2021 /2022

Common Name	Scientific Name	09/11/21			19/11/21			02/12/21			22/12/21			13/01/21		
		PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West
Blackbird	<i>Turdus merula</i>	3	1		6	1		6			6	1	1	3	1	
Blue tit	<i>Cyanistes caeruleus</i>	6			2	1	2	4			2			2		2
Bullfinch	<i>Pyrrhula pyrrhula</i>				2						1	.				1
Buzzard	<i>Buteo buteo</i>															
Carrion crow	<i>Corvus corone</i>						1						1			1
Cetti's Warbler	<i>Cettia cetti</i>															
Chaffinch	<i>Fringilla coelebs</i>	2			2	2	2		2	1						
Chiffchaff	<i>Phylloscopus collybita</i>				1			4		1						
Dunnock	<i>Prunella modularis</i>		1	3	1		1	2		1	1	1	1	3	1	3
Goldcrest	<i>Regulus regulus</i>							1			1					
Grey wagtail	<i>Motacilla cinerea</i>				1				1							
Goldfinch	<i>Carduelis carduelis</i>	22		9	6			1								
Great tit	<i>Parus major</i>	3					1	2								
Linnet	<i>Linaria cannabina</i>			1		2								2		
Long-tailed tit	<i>Aegithalos caudatus</i>	7						10			2					
Mistle thrush	<i>Turdus viscivorus</i>															
Magpie	<i>Pica pica</i>	3		1			4	1	2		1					1
Pied wagtail	<i>Motacilla alba yarelli</i>			1					1							
Raven	<i>Corvus corax</i>															2
Robin	<i>Erithacus rubecula</i>	10	2	1	2			8			3		2	6	2	2
Redwing	<i>Turdus iliacus</i>							7						4		
Stonechat	<i>Saxicola rubicola</i>															
Snipe	<i>Gallinago gallinago</i>				2			1						1		
Song thrush	<i>Turdus philomelos</i>	3			3		2					1	2	2	1	1
Sparrowhawk	<i>Accipiter nisus</i>								1				1			1
Water rail	<i>Rallus aquaticus</i>				1											
Wood pigeon	<i>Columba palumbus</i>			1	2		2				1					
Woodcock	<i>Scolopax rusticola</i>															
Wren	<i>Troglodytes troglodytes</i>	7		2	2		1	2		1	3	1	2			

PDZ Species Counts – Winter 2021 /2022 Contd

Common Name	Scientific Name	26/01/22			04/02/22			22/02/22			08/03/22			22/03/22		
		PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West	PDZ	TCA West	Area C East excl. TCA West
Blackbird	<i>Turdus merula</i>	2			6	1	11	8	1		5		1	7		1
Blue tit	<i>Cyanistes caeruleus</i>	2			1	2	2	6			2			5		
Bullfinch	<i>Pyrrhula pyrrhula</i>									2				1		
Buzzard	<i>Buteo buteo</i>	1						1								
Carrion crow	<i>Corvus corone</i>	2			3			2					2			
Cetti's Warbler	<i>Cettia cetti</i>															
Chaffinch	<i>Fringilla coelebs</i>	3			2	1	1				1					
Chiffchaff	<i>Phylloscopus collybita</i>	2			1	2	2							1		
Duncock	<i>Prunella modularis</i>			1			3	3		3				2		1
Goldcrest	<i>Regulus regulus</i>	1			1	1		2								
Grey wagtail	<i>Motacilla cinerea</i>															1
Goldfinch	<i>Carduelis carduelis</i>	19			3	1	8	16								
Great tit	<i>Parus major</i>				1		2				1		1	2		
Linnet	<i>Linaria cannabina</i>	1					5									
Long-tailed tit	<i>Aegithalos caudatus</i>	8			13			6								
Mistle thrush	<i>Turdus viscivorus</i>	1					1	1								
Magpie	<i>Pica pica</i>			1			11	1		2			7			
Pied wagtail	<i>Motacilla alba yarelli</i>															
Raven	<i>Corvus corax</i>															
Robin	<i>Erithacus rubecula</i>	4		1	10		1	4			5			6	1	
Redwing	<i>Turdus iliacus</i>	2			1			3			2	2				
Stonechat	<i>Saxicola rubicola</i>															2
Snipe	<i>Gallinago gallinago</i>							3			2			4		
Song thrush	<i>Turdus philomelos</i>	1		1	2	1		1	1			1		3		
Sparrowhawk	<i>Accipiter nisus</i>	1			2											
Water rail	<i>Rallus aquaticus</i>															
Wood pigeon	<i>Columba palumbus</i>															
Woodcock	<i>Scolopax rusticola</i>				1						2					
Wren	<i>Troglodytes troglodytes</i>					1		3		1	1		1		1	

Appendix C

Harbourside Site Breeding Bird Assemblage

Port Talbot Docks – Harbourside Site Breeding Bird Survey 2021

Species	Scientific Name	BoCC Wales	Total Breeding Pairs (Est.)	Site Areas			
				Area A	Area B	Area C (West)	Area C (East)
Blackbird	<i>Turdus merula</i>	Low	8	2	2	3	1
Blackcap	<i>Sylvia atricapilla</i>	Low	2				2
Blue Tit	<i>Cyanistes caeruleus</i>	Low	1				1
Chiffchaff	<i>Phylloscopus collybita</i>	Low	3			1	2
Coot	<i>Fulica atra</i>	Moderate	1		1		
Dunnock	<i>Prunella modularis</i>	Moderate	5	2	1	1	1
Goldfinch	<i>Carduelis carduelis</i>	Low	0-2		0-1		0-1
Great Tit	<i>Parus major</i>	Low	1				1
Grey Heron	<i>Ardea cinerea</i>	Moderate	0				
House Sparrow	<i>Passer domesticus</i>	Moderate	0				
Kestrel	<i>Falco tinnunculus</i>	High	0				
Little Grebe	<i>Tachybaptus ruficollis</i>	Low	1		1		
Linnet	<i>Linaria cannabina</i>	High	2		?		
Maggpie	<i>Pica pica</i>	Moderate	1		1		
Mallard	<i>Anas platyrhynchos</i>	Low	1		1		
Meadow Pipit	<i>Anthus pratensis</i>	High	7	2	3	2	
Moorhen	<i>Gallinula chloropus</i>	Low	0				
Oystercatcher	<i>Haematopus ostralegus</i>	Moderate	0				
Pied wagtail	<i>Motacilla alba</i>	Low	0				
Reed Bunting	<i>Emberiza schoeniclus</i>	Low	1		1		
Reed Warbler	<i>Acrocephalus scirpaceus</i>	Low	6		6		
Robin	<i>Erithacus rubecula</i>	Low	4			2	2
Sand Martin	<i>Riparia riparia</i>	Low	10-20			10-20	
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	Low	5		5		
Skylark	<i>Alauda arvensis</i>	Moderate	6	3	3		
Song Thrush	<i>Turdus philomelos</i>	Low	2				2
Starling	<i>Sturnus vulgaris</i>	High	0				
Stonechat	<i>Saxicola rubicola</i>	Low	4	2	1	1	
Tufted Duck	<i>Aythya fuligula</i>	Low	1		1		
Whitethroat	<i>Sylvia communis</i>	High	6			3	3
Wren	<i>Troglodytes troglodytes</i>	Low	8		2	2	4
Additional species overflying the site							
Canada Goose	<i>Branta canadensis</i>	N/A					
Carrion Crow	<i>Corvus corone</i>	Low					
Cormorant	<i>Phalacrocorax carbo</i>	Low					
Herring Gull	<i>Larus argentatus</i>	High					
Mute Swan	<i>Cygnus olor</i>	Low					
Peregrine	<i>Falco peregrinus</i>	Low					
Woodpigeon	<i>Columba palumbus</i>	Low					