

XLINKS MOROCCO-UK POWER PROJECT

Preliminary Environmental Information Report

Volume 2, Appendix 1.8: Breeding, Wintering and Migratory Bird Survey



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Glossary

Term	Meaning
Wintering Birds	Birds that spend the winter in a particular place.
Migratory Birds	Birds that travel to different places, usually when the season changes, to find the best conditions and habitats for feeding, breeding and raising their young.

Acronyms

Acronym	Meaning
PEIR	Preliminary Environmental Information Report
EIA	Environmental Impact Assessment
NERC	Natural Environments and Rural Communities
ECoW	Ecological Clerk of Works

Units

Units	Meaning
km	Kilometre
ha	Hectares
m	Metres

1 BREEDING, WINTERING AND MIGRATORY BIRD REPORT

1.1 Introduction

Purpose and Scope of this Report

- 1.1.1 This document forms Volume 2, Appendix 1.8 of the Preliminary Environmental Information Report (PEIR) prepared for the UK elements of the Xlinks Morocco-UK Power Project (referred to hereafter as ‘the Proposed Development’). The PEIR presents the preliminary findings of the Environmental Impact Assessment (EIA) process for the Proposed Development.
- 1.1.2 RPS was commissioned by Xlinks 1 Limited (‘the Applicant’) to undertake a series of surveys to provide an ecological baseline of habitats and species which could be affected by the proposed Onshore Cable Corridor and Converter Site from Cornborough Range at the coast to the existing substation at Alverdiscott in north Devon.
- 1.1.3 As a part of this process, an initial assessment of the scope of ecological receptors which could be affected by the proposals, a desk study, Phase 1 Habitat Survey, and a preliminary protected species assessment were carried out. Further, a series of species-specific surveys were undertaken to provide a detailed baseline of the potential ecological receptors which could be affected by the Proposed Development.
- 1.1.4 This report forms a part of the species-specific surveys and relates to the potential presence of breeding, wintering and migratory bird species of conservation concern. This assessment is intended to feed information into the Onshore Ecology and Nature Conservation chapter of the Environmental Statement which supports the Development Consent Order (DCO) application.
- 1.1.5 This report pertains to the breeding, wintering and migratory bird surveys and their results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RPS. The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Appraisal Notes are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

1.2 Study Area and Zone of Influence

- 1.2.1 The onshore elements of the Proposed Development are located in north Devon. The Onshore HVDC Cable Corridor is approximately 12 km in length and the converter station site is approximately 14 ha (Note this description is based on understanding of the Proposed Development at time of survey, and not the current 2024 footprint). The National Grid coordinates for either end of the proposed cable route are SS412278 and SS501251. The centre of the proposed converter station site is at SS493238.

- 1.2.2 The Onshore Cable Corridor passes through a mixture of pastoral and arable farm land, with fields bound by Devon hedgerows, and occasionally crossing small water-courses in wooded valleys. The route also crosses the tidal Torridge estuary.
- 1.2.3 The site location is shown on **Figure 1.1**. Aerial imaging available via Google Earth Pro was also reviewed to assess the site in relation to its context in the wider landscape.
- 1.2.4 The design of the Proposed Development has changed since these surveys were undertaken. As such, updated surveys will be carried out (where required) prior to application to ensure that all elements of the revised Proposed Development site have been considered. The updated survey results will be reported as part of the Environmental Statement.
- 1.2.5 However, although the design of the Proposed Development has been modified, the general findings of the survey remain relevant.
- 1.2.6 The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. The Zone of Influence is determined by the nature of the development and also in relation to designated sites, habitats or species which might be affected by the proposals.
- 1.2.7 For this scheme, in addition to the landscape-based appraisal discussed above, a corridor of 200 m to either side of the proposed route was surveyed in detail, the Zone of Influence is considered to be land within this corridor and linked to it through hedgerow networks or other linear features along with more distant sites which could be affected by disturbance or contamination issues during construction or operation.

1.3 Development Proposals

- 1.3.1 The proposals consist of a landfall of a power supply coming from north Africa, with underground cable route from landfall at Cornborough Range through to a connection to the National Grid at the existing Alverdiscott Substation. There will also be construction of a Converter Site, located close to the existing substation location.

1.4 Relevant Legislation

All birds, their nests and eggs are afforded protection under the Wildlife and Countryside Act 1981, as updated by the Countryside and Rights of Way Act 2000. It is an offence to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; and
- intentionally take or destroy the egg of any wild bird.

Schedule 1 birds cannot be intentionally or recklessly disturbed when nesting and there are increased penalties for doing so. Licences can be issued to visit the nests of such birds for conservation, scientific or photographic purposes 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.

1.5 Methods

Breeding Bird Survey

- 1.5.1 The survey methodology comprised an abridged five-visit standard territory (registration) mapping techniques as detailed in Bibby *et al.*, (2000) and Gilbert *et al.*, (1998). This method is based on the observation that many species are territorial during the breeding season. This is found particularly amongst passerines, where territories are often marked by conspicuous song, display and periodic disputes with neighbouring individuals.
- 1.5.2 All bird locations were mapped using standard British Trust for Ornithology (BTO) one and two letter species codes on appropriate field maps. Specific diagrammatic codes were also used for singing, calling, movements between areas, flying, carrying food, nest building, aggressive encounters and other behaviour. In addition, any occupied nests were plotted. The expected outcome of this technique is that mapped registrations fall into clusters, approximately coinciding with territories.
- 1.5.3 Surveying was confined to the length of the proposed cable route, which covered the HDD works, substation sites and proposed abnormal loads routes. Surveyors walked the route at a slow and methodical pace in suitably fine weather in order to locate and identify all individual birds by sound and/or sight; visits were undertaken early in the morning, generally between 05:00 and 11:00, commencing as close to sunrise as possible. Surveys were not conducted prior to sunrise, in order to avoid the dawn chorus (Bibby *et al.*, 2000).
- 1.5.4 Suitable optical equipment was used to observe bird behaviour. The start and finish points along the route were alternated on each visit to ensure that different parts of the site were visited at different times of day. This enabled a thorough representation of ornithological activity to be assessed.
- 1.5.5 Visits were undertaken as follows:
- Visit 1: 5, 7 and 8 April 2022;
 - Visit 2: 27 and 28 April 2022;
 - Visit 3: 18 and 19 May 2022;
 - Visit 4: 8 and 9 June 2022; and
 - Visit 5: 28 and 29 June 2022.
- 1.5.6 On each visit, registrations were recorded directly into ESRI Arcpad GIS software loaded onto handheld devices, with a 1:10,000 scale Ordnance Survey base map of the study area (and adjacent land). A fresh map was used for each survey. The data from the five visits were then used to create a territory master map, following procedures detailed in Gilbert *et al.*, (1998). From this master map, the number of territories for each species was assessed. The following definitions have been used to identify the breeding status of the species recorded:
- Confirmed Breeding: includes species for which territories were positively identified as a result of the number of registrations (i.e., three or more), the location of an active nest, the carrying of food or nesting material and the presence of recently fledged young or downy young;
 - Probable Breeding: includes a pair observed in suitable nesting habitat in breeding season, or agitated behaviour/anxiety calls from adults suggesting

probable presence of nest or young nearby. Behaviour was observed on insufficient occasions to confirm the presence of a territory;

- Possible Breeding: includes species observed or heard in suitable nesting habitat and exhibiting behaviour indicative of breeding, such as a singing male (or breeding calls heard); and
- Non-breeding: either fly-overs or no site interaction, species considered to be on migration or post-breeding flocks/family groups observed but considered to be non-breeding. In addition, species flying over the site but where habitat was not considered suitable for that species to breed were also excluded. For example swallows flying over fields but not breeding, or peregrine falcon hunting but no actual breeding potential occurred within the areas surveyed.

2.1.6 For late flying migrants (e.g., spotted flycatcher and hobby) for which fewer potential contacts are possible, one registration has been used to suggest a territory. This can also be applied to inconspicuous species.

1.6 Wintering and Migratory Bird Survey

1.6.1 The wintering and migratory bird surveys focussed on two key areas:

- The point at which the proposed cable route crosses beneath the Torridge Estuary; and
- The area of the coast near the cable landfall site at Cornborough Range.

1.6.2 The surveys were based on the Wetland Bird Survey (WeBS) methodology (Bibby *et al.*, 2000) and included vantage point inspections at suitable stages of tide along the crossing point. A walked transect was undertaken for the coastal route.

1.6.3 The aim of the tidal surveys was to undertake one survey at low tide and one survey at high tide each month. Each survey covered a four hour period (two hours either side of high/low tide). For the purposes of the analysis, the tidal cycle is divided into two periods. The term 'low tide' is used to indicate the period two hours either side of low tide, 'high tide' the period two hours either side of high tide.

1.6.4 Observations during the tidal surveys were made from a layby and publicly accessible platform adjacent to the river, off the A386 opposite Coach Drive. This location provided a suitable vantage point to observe all birds without causing undue disturbance. An experienced ornithologist, equipped with binoculars and telescope of appropriate magnification, observed the entire survey area on an hourly basis. As the site was a linear area with good visibility, birds could be observed from distance to avoid disturbance and minimise risk of double-counting

1.6.5 The coastal transect route was selected to include the coast near the landfall site and all accessible features within 200 m of the landfall site, where possible. The survey commenced at dawn and thus covered a range of different tidal states. Observations from the transect route were made from highways and public footpaths, including the South West Coast Path. As described above the footpaths in general provided suitable vantage points to observe all birds without causing undue disturbance.

1.6.6 The location and extent of flocks and individual waterbirds were recorded directly into ESRI Arcpad GIS Software on handheld PDA devices, with a 1:10,000 scale Ordnance Survey base map with a redline boundary included. The distance from the recorder to birds was assessed through the use of landmarks present in the

landscape and on the base map, which could be scaled as desired in the field. Birds were either plotted as individual counts at a location or as a flock, the extent of which could be plotted electronically directly onto the base map on the hand-held PDAs. The observers were proficient in the use of this method and equipment having undertaken such surveys on numerous occasions previously across the UK at coastal, estuarine and inland wetland sites. This is considered to be a robust and reliable method for recording birds and plotting their distribution.

- 1.6.7 The collected data were then downloaded into ESRI ArcGIS software and distribution maps produced.
- 1.6.8 In addition to the waterbirds recorded along the intertidal and coastal areas, any observations of songbirds (of conservation concern), high tide wader roosts or raptors on the surrounding terrestrial areas were also recorded.
- 1.6.9 A total of 15 survey visits were undertaken between October 2021 and February 2022 to cover the autumn passage and the winter period across the coastal landfall site and estuarine area. The survey dates and tide details are shown in **Table 1.1** below.

Table 1.1: Wintering and Migratory Bird Survey Dates and Tide Times.

Date	Survey Location	Time of low tide (hh:mm)	Tide height (m)	Time of high tide (hh:mm)	Tide height (m)
14/10/21	Coastal – landfall site	-	-	-	-
14/10/21	Torrige Estuary	-	-	13:11	3.90
15/10/21	Torrige Estuary	09:03	0.05	-	-
08/11/21	Torrige Estuary	14:31	0.10	-	-
09/11/21	Coastal – landfall site	-	-	-	-
10/11/21	Torrige Estuary	-	-	09:29	5.00
13/12/21	Torrige Estuary	-	-	13:37	4.36
14/12/21	Coastal – landfall site	-	-	-	-
15/12/21	Torrige Estuary	09:50	0.10	-	-
12/01/22	Torrige Estuary	-	-	13:43	3.93
13/01/22	Coastal – landfall site	-	-	-	-
14/01/22	Torrige Estuary	10:05	0.06	-	-
10/02/22	Torrige Estuary	-	-	12:38	3.38
11/02/22	Coastal – landfall site	-	-	-	-
12/02/22	Torrige Estuary	09:38	0.00	-	-

1.7 Assessment Criteria

- 1.7.1 The assessment of the breeding, wintering and migratory bird community included a focus on species that are afforded special statutory protection or those included on one, or more, of the lists of species of conservation interest. These include:

- Species listed on Annex 1 of the EC Birds Directive (Directive 2009/147/EC);
 - Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) (applicable to breeding season only);
 - Species included in the Birds of Conservation Concern 5 (BOCC 5) Red and Amber Lists (Stanbury et al., 2021);
 - Priority species within the UK Biodiversity Action Plan (UK BAP);
 - Local BAP species; and
 - Those occurring in nationally, regionally or locally important numbers.
- 1.7.2 The Natural Environment and Rural Communities (NERC) Act (2006) 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 40 of the Act; under section 40 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. In addition, with regard to those species on the list of Species of Principal Importance prepared under section 41, the Secretary of State must:
- 1.7.3 Take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitats included in any list published under this section; or
- a. Promote the taking by others of such steps.
 - b. Standard registration mapping techniques were also used to record non-breeding species.
- 1.7.4 Species listed on the BOCC 5 Red List 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 67 species on the Red List are of the most urgent conservation concern.
- 1.7.5 Species listed on the BOCC 5 Amber List, of which there are currently 96, 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.
- 1.7.6 The remaining species are placed on the Green List, indicating that they are of low conservation priority. These species still receive full protection through the provisions of the Wildlife and Countryside Act 1981 (as amended).
- 1.7.7 The UK BAP was launched in 1994 and established a framework and criteria for identifying species and habitat types of conservation concern. From this list, action plans for priority species of conservation concern were published and have subsequently been amended and updated.
- 1.7.8 A category of 'Local importance' was used for species that did not reach regional importance but were still of some ecological value. This included all species on the red list of BOCC 5.

- 1.7.9 The breeding bird assemblage of the site was also evaluated against the standard JNCC guidelines for the selection of biological Sites of Special Scientific Interest (SSSIs).
- 1.7.10 Finally, an additional evaluation method was used to establish species richness. Species richness is a simple and effective measure of diversity that can be used to describe conservation value separately for breeding, passage and wintering bird communities. Fuller (1980) provides the following criteria for breeding bird diversity criteria which are presented in **Table 1.2** below.

Table 1.2: Wintering and Migratory Bird Survey Dates and Tide Times.

Species	National Importance	Regional Importance	County Importance	Local Importance
Number of Species	85 +	70 - 84	50 - 69	25 - 49

- 1.7.11 The following geographical frames of reference and selection criteria (based on the Guidelines for Ecological Impact Assessment in the United Kingdom (CIEEM, 2022)) are used to describe the nature conservation value or potential value to the bird populations within the survey area:
- International importance – a species which is cited as part of the designated interest of a Special Protection Area (SPA) with connectivity to the site and occurs in internationally or nationally important numbers;
 - National importance – a species which is cited as part of the designated interest of a SSSI and occurs in nationally important numbers;
 - Regional importance – NERC Species or BOCC 5 Red List species that regularly occur in regionally important numbers;
 - County importance – NERC Species or BOCC 5 Red List species that regularly occur in numbers that are important on a county basis;
 - Local importance – BOCC 5 Red or Amber List species which occur regularly in locally sustainable populations; and
 - Site – all common and widespread species.

1.8 Limitations

Survey

- 1.8.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.
- 1.8.2 In some areas, potentially suitable habitats appear to occur where no landowner access was available to undertake surveys. In these areas, survey was limited to visual inspection from recognised Public Rights of Way (PRoWs).
- 1.8.3 The breeding bird survey was undertaken on a previous iteration of the proposed route alignment and converter station placement. There was insufficient time in the season to repeat the surveys and therefore an approach has been taken to assess the potential of areas not subject to detail survey to support species of conservation interest. In these cases habitats have been attributed based on visual inspection from nearby PRoWs and also by reviewing aerial photography,

such as that provided by Google Earth. The habitats and features present have been assessed for their likelihood to support species known to be present in the wider area. Where it has not been possible to exclude this presence, it is appropriate to assume that the presence of such species is likely and assess the scheme on this precautionary basis.

Accurate Lifespan of Ecological Data

- 1.8.4 The majority of ecological data remains valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for two years, assuming no significant considerable changes to the site conditions.
- 1.8.5 Site specific surveys used to inform Volume 2, Chapter 1: Onshore Ecology and Nature Conservation of the PEIR were undertaken between 2021 and 2024. CIEEMs Advice Note: On the lifespan of ecological reports and surveys (CIEEM, 2019) recommends that surveys exceeding three years in age are likely to require updating, whilst surveys undertaken between 18 months and three years prior to application may require site visits pre-construction to review the validity of survey findings. Therefore, in accordance with CIEEM guidance, site specific surveys undertaken over 18 months prior to the submission will be updated, where required (following a site review to confirm the validity of survey findings by a suitably qualified ecologist). Those surveys undertaken over three years will be supplemented by further surveys (if DCO is granted) to be completed pre-construction.

1.9 Results

Breeding Bird Survey

- 1.9.1 A total of 70 species were recorded within the site boundary, during the breeding bird surveys undertaken in 2022. Of these, 24 were confirmed to be breeding, three probably breeding and four possibly breeding. The remaining 39 species were of non-breeding status, either passing through the site or using the site for foraging.
- 1.9.2 Included within the species confirmed as breeding within the site were greenfinch, linnet, and skylark, which are Red-list species and dunnock, song thrush, and wren, which are Amber-list species.
- 1.9.3 Kingfisher, which is listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) was frequently recorded along the River Torridge during the winter surveys, however, was absent during the breeding surveys. There were no other Schedule 1 species recorded during the surveys undertaken in 2022.
- 1.9.4 A summary of the breeding and conservation status of the bird species recorded, with the numbers of territories identified is provided in **Table 1.3** below. The locations of territories of selected species confirmed as breeding on site and which are listed as protected or notable species are shown on **Figure 1.1** and **Figure 1.2**.

Table 1.3: Breeding and Conservation Status of Birds Recorded in 2022.

Species	Breeding Status	Number of Territories	Annex 1 EU Birds Directive	Schedule 1 WCA	NERC Species of Principle Importance	BOCC 5 Red and Amber Species
Blackbird	Confirmed	15	-	-	-	-
Blackcap	Confirmed	6	-	-	-	-
Black-headed gull	Non-breeding	N/A	-	-	-	Amber
Blue tit	Confirmed	15	-	-	-	-
Bullfinch	Probable	2	-	-	✓	Amber
Buzzard	Non-breeding	N/A	-	-	-	-
Canada Goose	Non-breeding	N/A	-	-	-	-
Carrion crow	Confirmed	1	-	-	-	-
Chaffinch	Confirmed	5	-	-	-	-
Chiffchaff	Confirmed	14	-	-	-	-
Coal tit	Confirmed	1	-	-	-	-
Collared dove	Possible	2	-	-	-	-
Cormorant	Non-breeding	N/A	-	-	-	-
Cuckoo	Non-breeding	N/A	-	-	✓	Red
Curlew	Non-breeding	N/A	-	✓	✓	Red
Dunnock	Confirmed	7	-	✓	✓	Amber
Garden warbler	Non-breeding	N/A	-	-	-	-
Goldcrest	Confirmed	3	-	-	-	-
Goldfinch	Confirmed	4	-	-	-	-
Great spotted woodpecker	Possible	2	-	-	-	-
Great tit	Confirmed	9	-	-	-	-
Green woodpecker	Possible	1	-	-	-	-
Greenfinch	Confirmed	2	-	-	-	Red
Grey heron	Non-breeding	0	-	-	-	-
Grey partridge	Non-breeding	N/A	-	✓	✓	Red
Herring gull	Non-breeding	N/A	-	-	-	Red
House martin	Non-breeding	N/A	-	-	-	Red
House sparrow	Confirmed	1	-	-	✓	Red
Jackdaw	Confirmed	2	-	-	-	-
Jay	Possible	1	-	-	-	-
Kestrel	Non-breeding	N/A	-	-	-	Amber

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Species	Breeding Status	Number of Territories	Annex 1 EU Birds Directive	Schedule 1 WCA	NERC Species of Principle Importance	BOCC 5 Red and Amber Species
Lesser black-backed gull	Non-breeding	N/A	-	-	-	Amber
Linnet	Confirmed	8	-	-	✓	Red
Long-tailed tit	Confirmed	4	-	-	-	-
Magpie	Confirmed	2	-	-	-	-
Mallard	Non-breeding	N/A	-	-	-	Amber
Marsh tit	Non-breeding	N/A	-	-	✓	Red
Meadow pipit	Non-breeding	N/A	-	-	-	Amber
Mistle thrush	Non-breeding	N/A	-	-	-	Red
Moorhen	Non-breeding	N/A	-	-	-	-
Nuthatch	Probable	3	-	-	-	-
Oystercatcher	Non-breeding	N/A	-	-	-	Amber
Pheasant	Non-breeding	N/A	-	-	-	-
Pied wagtail	Non-breeding	N/A	-	-	-	-
Raven	Non-breeding	N/A	-	-	-	-
Red-legged partridge	Non-breeding	N/A	-	-	-	-
Reed bunting	Non-breeding	N/A	-	✓	✓	Amber
Reed warbler	Non-breeding	N/A	-	-	-	-
Robin	Confirmed	29	-	-	-	-
Rock pipit	Non-breeding	N/A	-	-	-	-
Rook	Non-breeding	N/A	-	-	-	-
Sand martin	Non-breeding	N/A	-	-	-	-
Shelduck	Non-breeding	N/A	-	-	-	Amber
Skylark	Confirmed	7	-	-	✓	Red
Song thrush	Confirmed	9	-	-	✓	Amber
Sparrowhawk	Non-breeding	N/A	-	-	-	Amber
Spotted flycatcher	Non-breeding	N/A	-	-	✓	Red
Starling	Non-breeding	N/A	-	-	✓	Red
Stock dove	Non-breeding	N/A	-	-	-	Amber

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Species	Breeding Status	Number of Territories	Annex 1 EU Birds Directive	Schedule 1 WCA	NERC Species of Principle Importance	BOCC 5 Red and Amber Species
Stonechat	Non-breeding	N/A	-	-	-	-
Swallow	Non-breeding	N/A	-	-	-	-
Swift	Non-breeding	N/A	-	-	-	Red
Treecreeper	Probable	1	-	-	-	-
Turnstone	Non-breeding	N/A	-	-	-	Amber
Wheatear	Non-breeding	N/A	-	-	-	Amber
Whitethroat	Confirmed	3	-	-	-	-
Willow warbler	Non-breeding	N/A	-	-	-	Amber
Woodpigeon	Confirmed	4	-	-	-	Amber
Wren	Confirmed	47	-	-	-	Amber
Yellowhammer	Confirmed	1	-	-	✓	Red

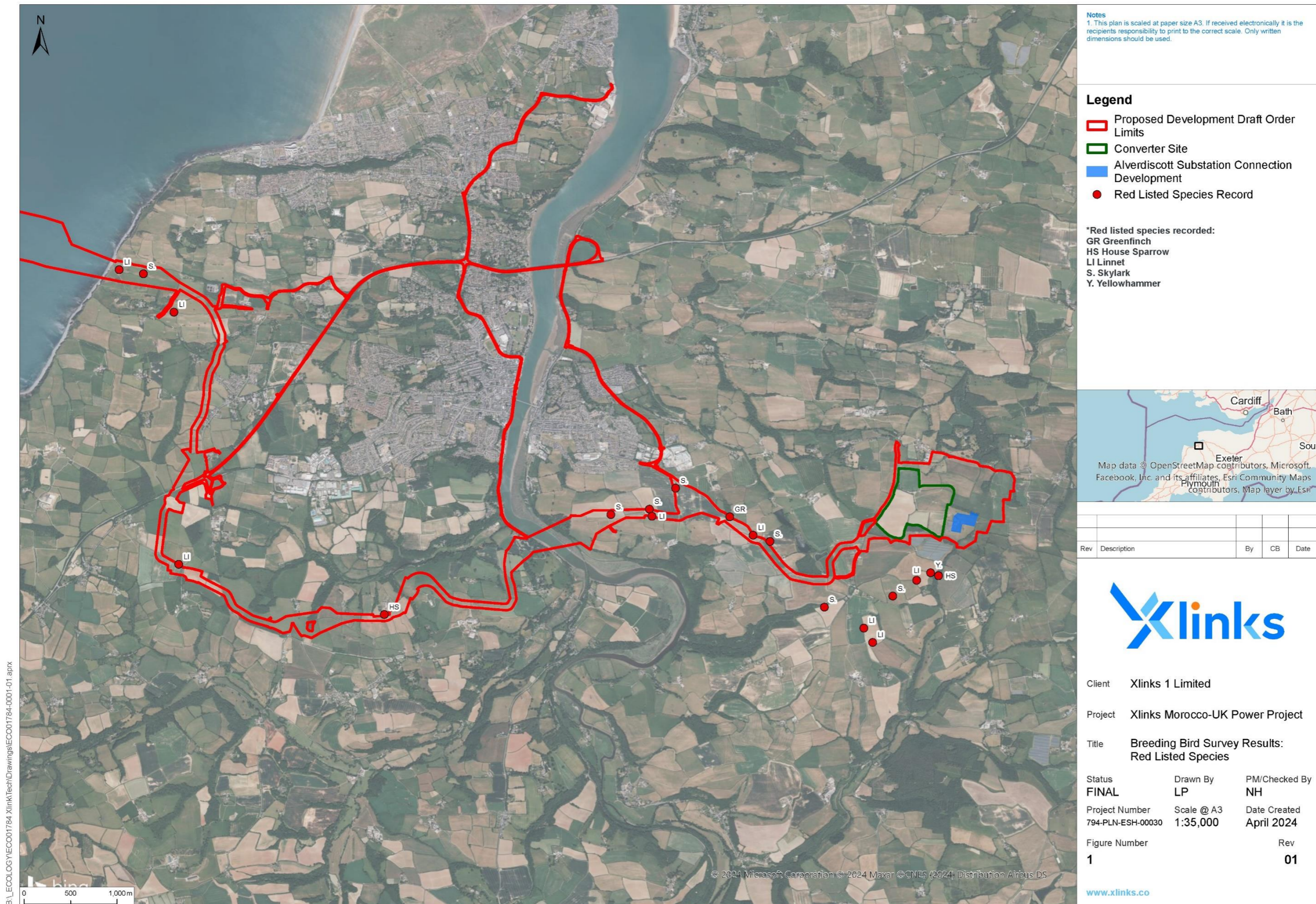


Figure 1.1: Breeding Bird Survey Results: Red Listed Species

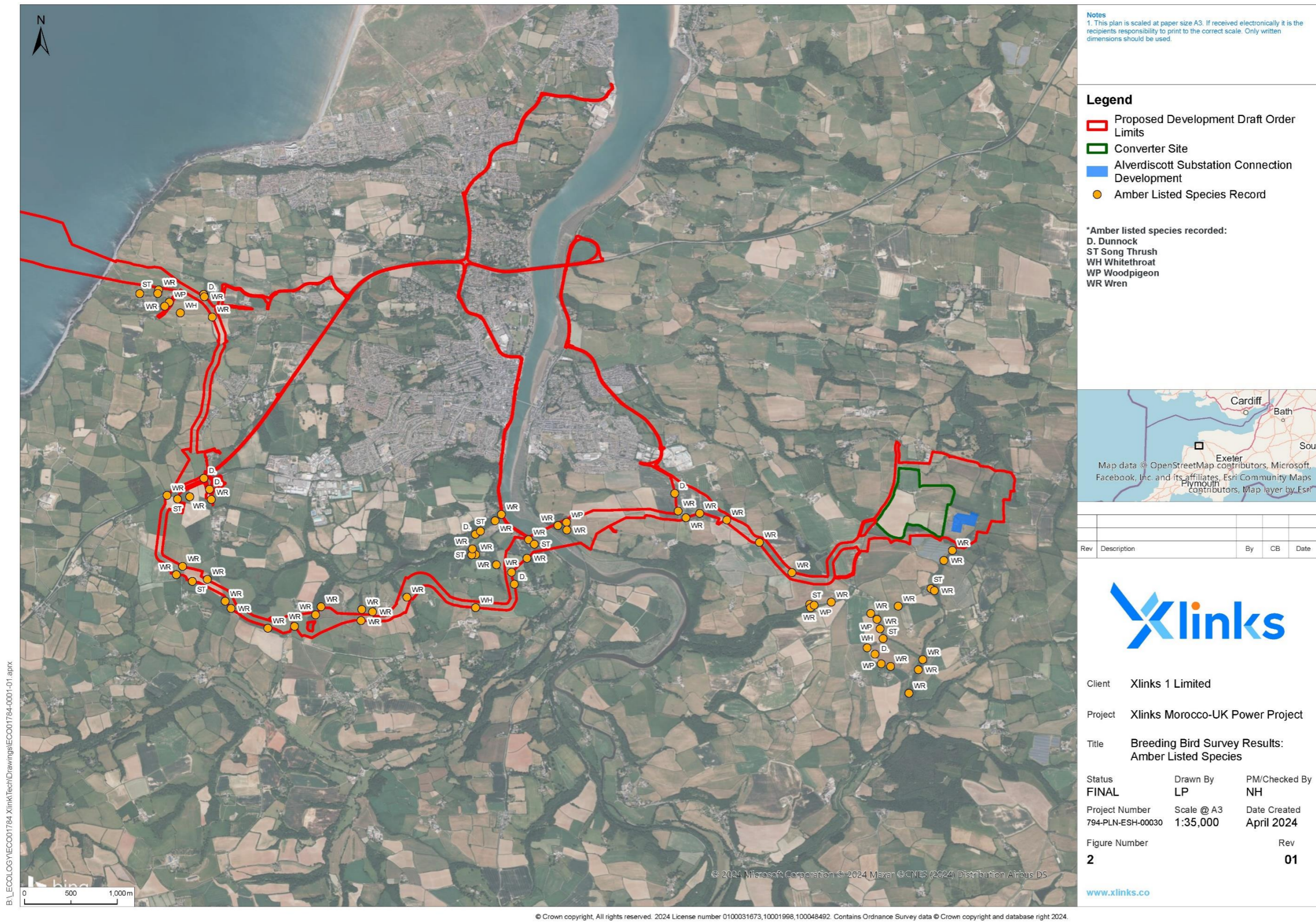


Figure 1.2: Breeding Bird Survey Results: Amber Listed Species

1.10 Wintering and Migratory Bird Survey

Coastal Site

- 1.10.1 The wintering and migratory bird surveys undertaken between October 2021 and February 2022 recorded 12 species of conservation interest at the landfall site at Cornborough Range. These included little egret, an Annex 1 species under the Birds Directive, and curlew and herring gull, which are Red-list species. Also recorded were black-headed gull, bullfinch, common gull, dunnock, lesser black-backed gull, meadow pipit, oystercatcher, rook and turnstone, which are Amber-list species. Curlew is also listed as a Devon BAP Priority Species. The birds were identified flying over the route and some were also found to be feeding in the area, in particular on areas exposed at high tide.
- 1.10.2 Summaries of the counts of each species recorded during the coastal surveys are provided in **Table 1.4** below. For the purposes of this report only those of conservation interest have been included in the results tables and assessment of impacts.
- 1.10.3 The locations of all birds recorded on each of the survey visits are shown on **Figure 1.3 to Figure 1.7**.

Table 1.4: Abundance of wintering birds of conservation interest recorded during coastal surveys in between October 2021 and February 2022.

Species	Date					Peak Count	Mean Count	Conservation Status
	14/10/21	09/11/21	14/12/21	27/01/2022	11/02/2022			
Black-headed gull	-	2	-	71	90	90	32.6	BOCC 5 Amber
Bullfinch	-	-	-	2	-	2	0.4	BOCC 5 Amber, NERC S41, UK BAP
Common gull	7	-	-	-	-	7	1.4	BOCC 5 Amber
Curlew	3	-	35	2	2	35	8.4	BOCC 5 Red, NERC S41, UK BAP, Devon BAP
Dunnock	1	-	-	-	-	1	0.2	BOCC 5 Amber, NERC S41, UK BAP
Herring gull	12	-	-	5	6	12	4.6	BOCC 5 Red, NERC S41, UK BAP
Lesser black-backed gull	4	-	-	-	1	4	1.0	BOCC 5 Amber
Little egret	-	1	-	-	-	1	0.2	BDIR
Meadow pipit	3	2	1	-	-	3	1.2	BOCC 5 Amber
Oystercatcher	20	-	7	6	8	20	8.2	BOCC 5 Amber
Rook	2	-	4	-	-	4	1.2	BOCC 5 Amber
Turnstone	-	-	-	2	7	7	1.8	BOCC 5 Amber

Abbreviations used in Table 3.2: BDIR: Annex 1 Birds Directive; BOCC 5 Amber: Birds of Conservation Concern: Amber; BOCC 5 Red: Birds of Conservation Concern: Red; NERC S41: Natural Environment and Rural Communities Act Species of Principal Importance; UK BAP: UK Biodiversity Action Plan species; Devon BAP: Devon Biodiversity Action Plan species.

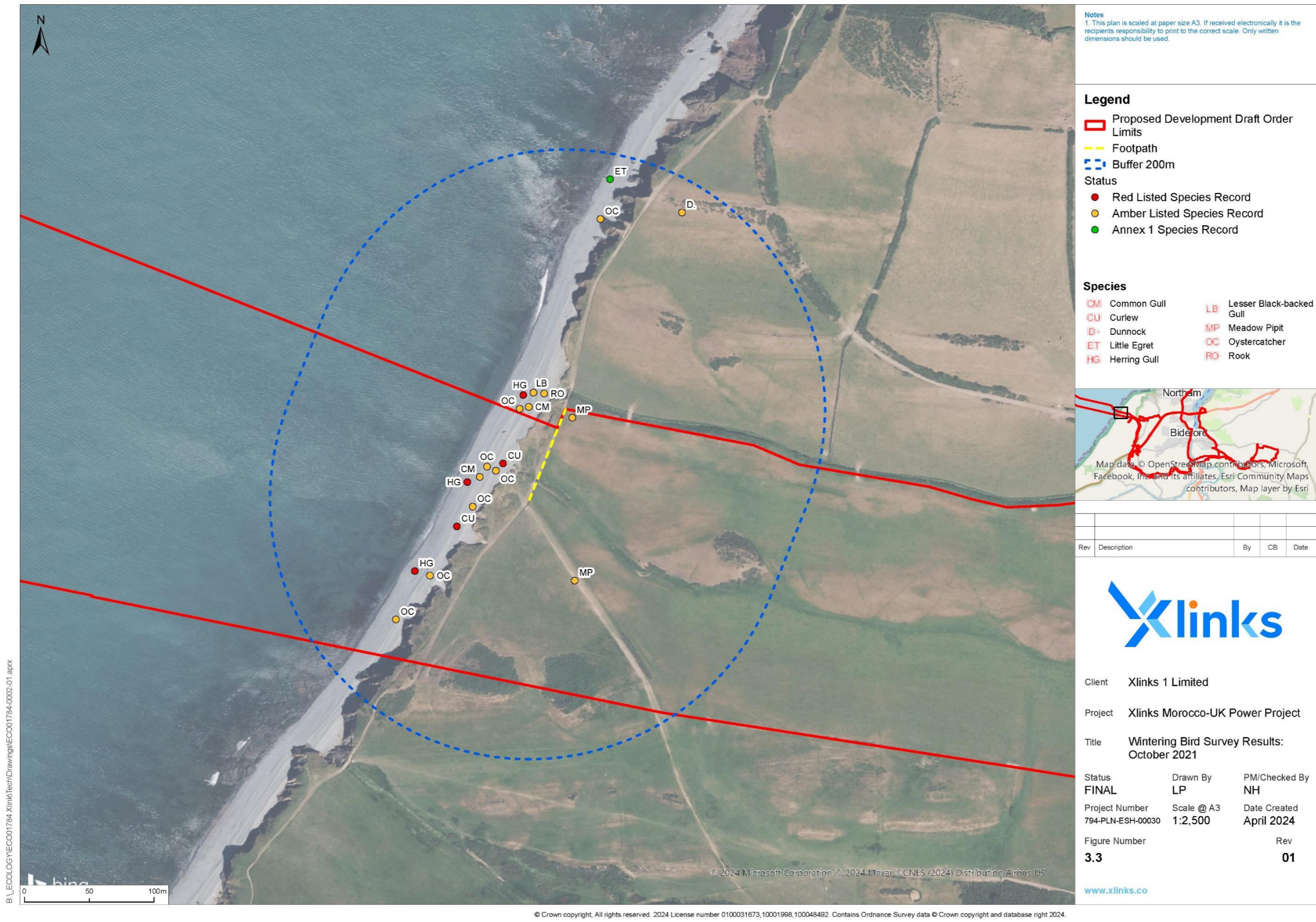


Figure 1.3: Wintering Bird Survey Results (Coastal) – October 2021

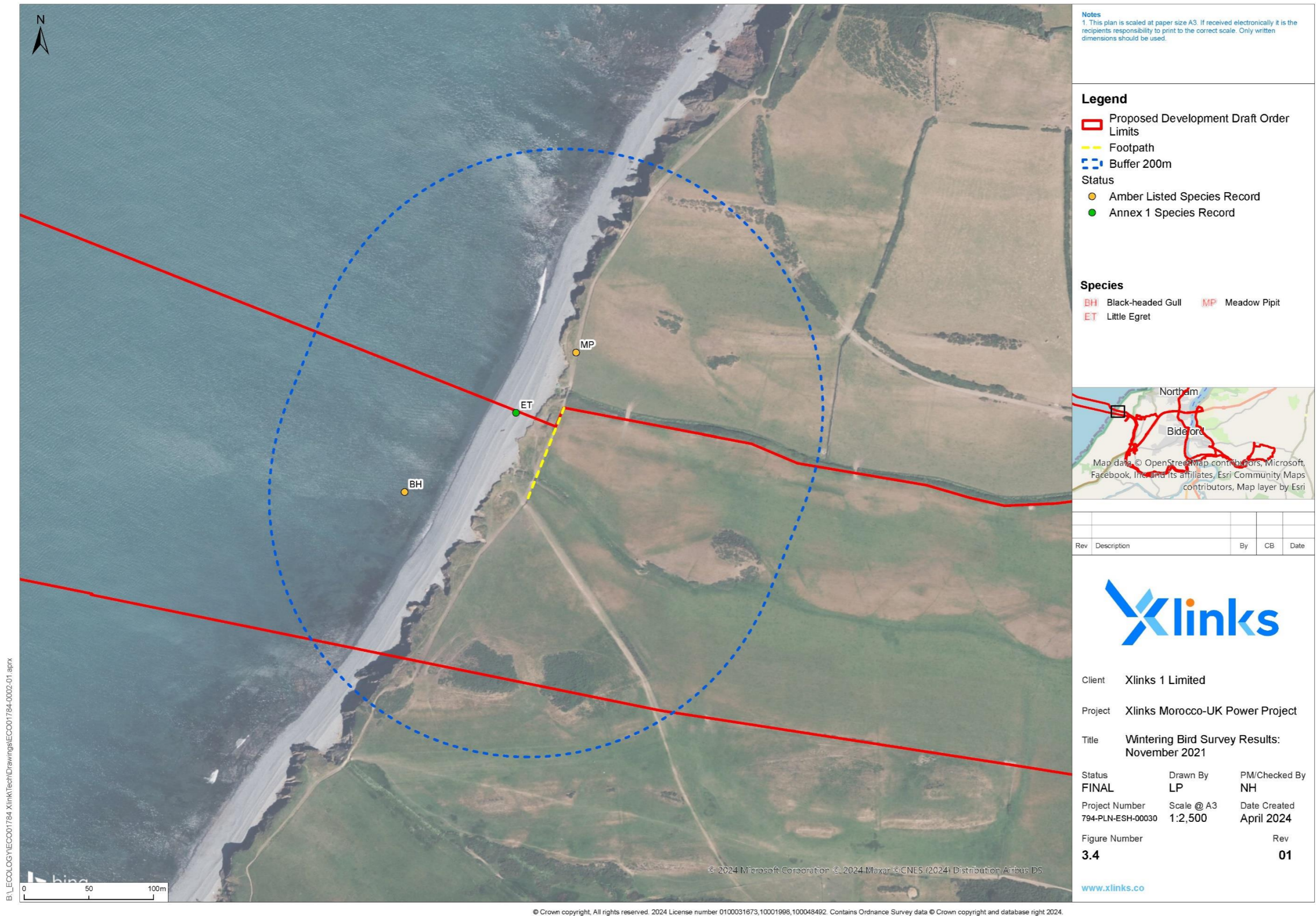


Figure 1.4: Wintering Bird Survey Results (Coastal) – November 2021

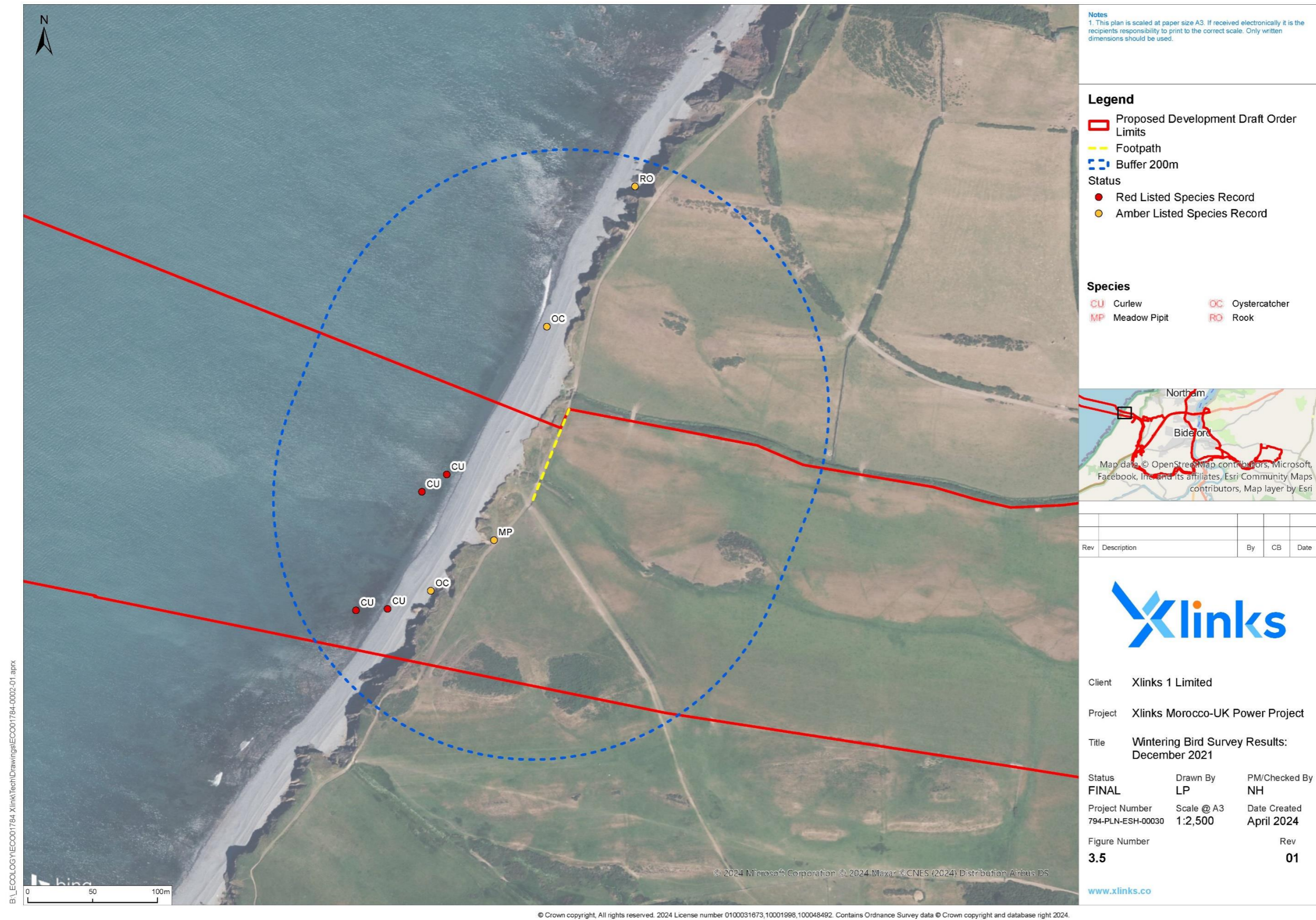


Figure 1.5: Wintering Bird Survey Results (Coastal) – December 2021

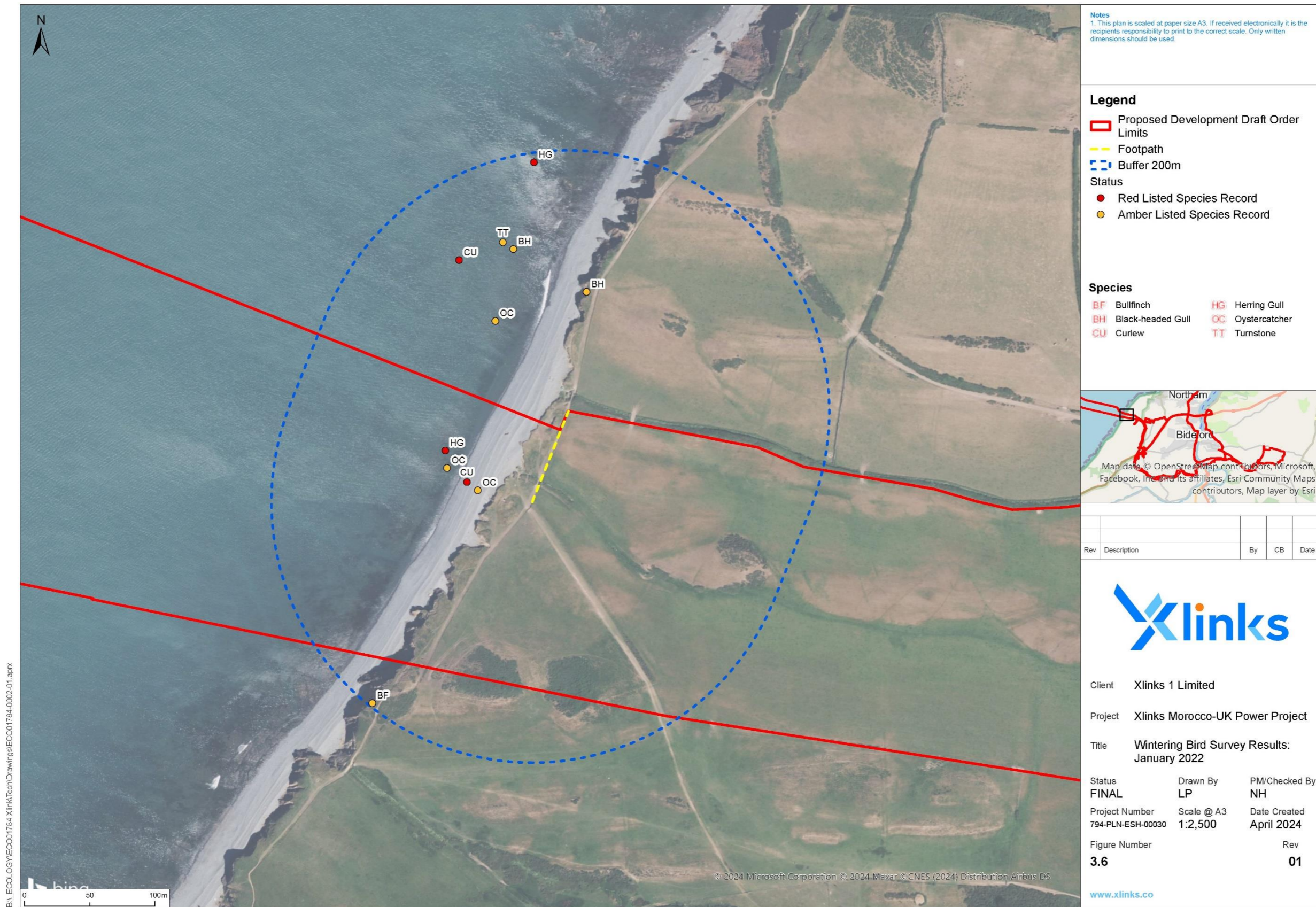


Figure 1.6: Wintering Bird Survey Results (Coastal) – January 2022

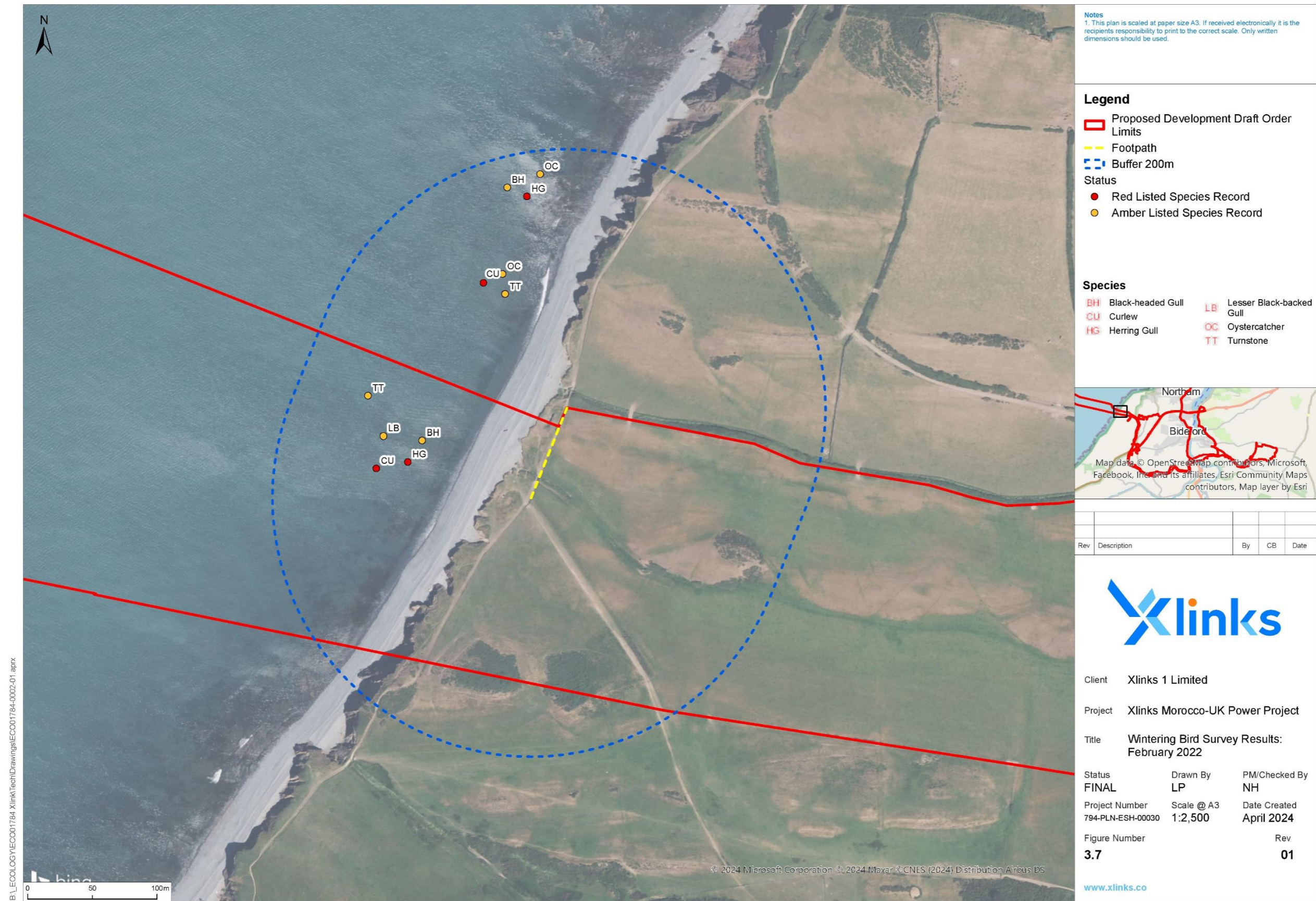


Figure 1.7: Wintering Bird Survey Results (Coastal) – February 2022

Estuary Site

- 1.10.4 At the Torridge Estuary survey location, 13 species of conservation interest were recorded between October 2021 and February 2022. These included little egret and kingfisher, both Annex 1 species under the Birds Directive and curlew, herring gull and lapwing, which are Red-list species. Eight amber-listed species, including black-headed gull, common gull, common sandpiper, lesser black-backed gull, mallard, oystercatcher, redshank and shelduck, were recorded flying over the survey area and using the estuary for foraging.
- 1.10.5 For the purposes of this report only those of conservation interest have been included in the results tables and assessment of impacts.
- 1.10.6 The survey did not identify any species which appeared to be particularly dependent specifically on this area of the estuary. The use of this area fell within a wider pattern of use of the estuarine environment, indicating that the specific value of the survey site was limited for the species present.
- 1.10.7 Peak counts across the tidal surveys for each species are provided in **Table 1.5**, along with the conservation status of each species (as defined in **section 1.7**).
- 1.10.8 The locations of all birds recorded on each of the survey visits are shown on **Figure 1.8** to **Figure 1.12**.

Table 1.5: Abundance of wintering birds of conservation interest recorded during coastal surveys in between October 2021 and February 2022.

Species	Date										Peak Count	Mean Count	Conservation Status
	14/10/21 (HT)	15/10/21 (LT)	08/11/21 (LT)	10/11/21 (HT)	13/12/21 (HT)	15/12/21 (LT)	12/01/22 (LT)	14/01/22 (HT)	10/02/22 (LT)	12/02/22 (HT)			
Black-headed gull	-	85	52	18	23	53	36	169	3	93	169	53.2	BOCC 5 Amber
Common gull	-	1	1	-	-	-	-	-	-	-	1	0.2	BOCC 5 Amber
Common sandpiper	-	4	3	-	2	-	-	-	2	-	4	1.1	BOCC 5 Amber
Curlew	-	3	6	-	14	2	-	3	1	2	14	3.1	BOCC 5 Red, NERC S41, UK BAP, Devon BAP
Herring gull	-	3	-	-	26	-	1	22	-	6	26	5.8	BOCC 5 Red, NERC S41, UK BAP
Kingfisher	-	-	-	-	-	-	-	-	1	-	1	0.1	BDIR
Lapwing	-	-	39	32	137	-	1	4	1	-	137	21.4	BOCC 5 Red
Lesser black-backed gull	-	2	2	-	-	-	-	-	-	4	4	0.8	BOCC 5 Amber
Little egret	1	8	2	-	1	2	2	1	-	1	8	1.8	BDIR
Mallard	-	21	-	2	-	1	6	4	2	2	21	3.8	BOCC 5 Amber
Oystercatcher	-	5	3	-	-	2	1	-	3	1	5	1.5	BOCC 5 Amber
Redshank	-	-	-	3	2	-	-	2	2	1	3	1.0	BOCC 5 Amber
Shelduck	-	-	-	-	-	-	1	-	2	-	2	0.3	BOCC 5 Amber

Abbreviations used in Table 3.3: BDIR: Annex 1 Birds Directive; BOCC 5 Amber: Birds of Conservation Concern: Amber; BOCC 5 Red: Birds of Conservation Concern: Red; NERC S41: Natural Environment and Rural Communities Act Species of Principal Importance; UK BAP: UK Biodiversity Action Plan species; Devon BAP: Devon Biodiversity Action Plan species.

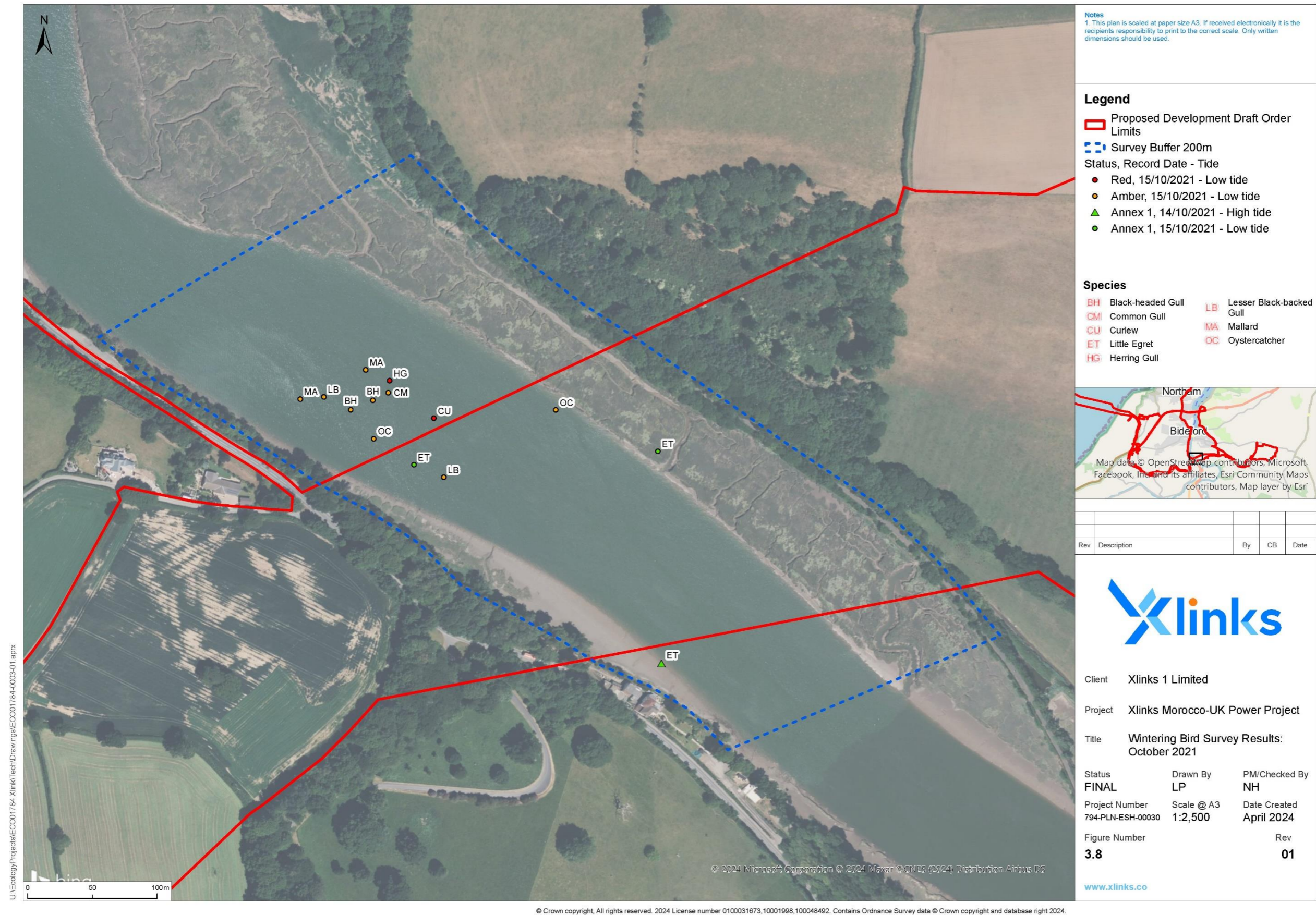


Figure 1.8: Wintering Bird Survey Results (Estuarine) – October 2021

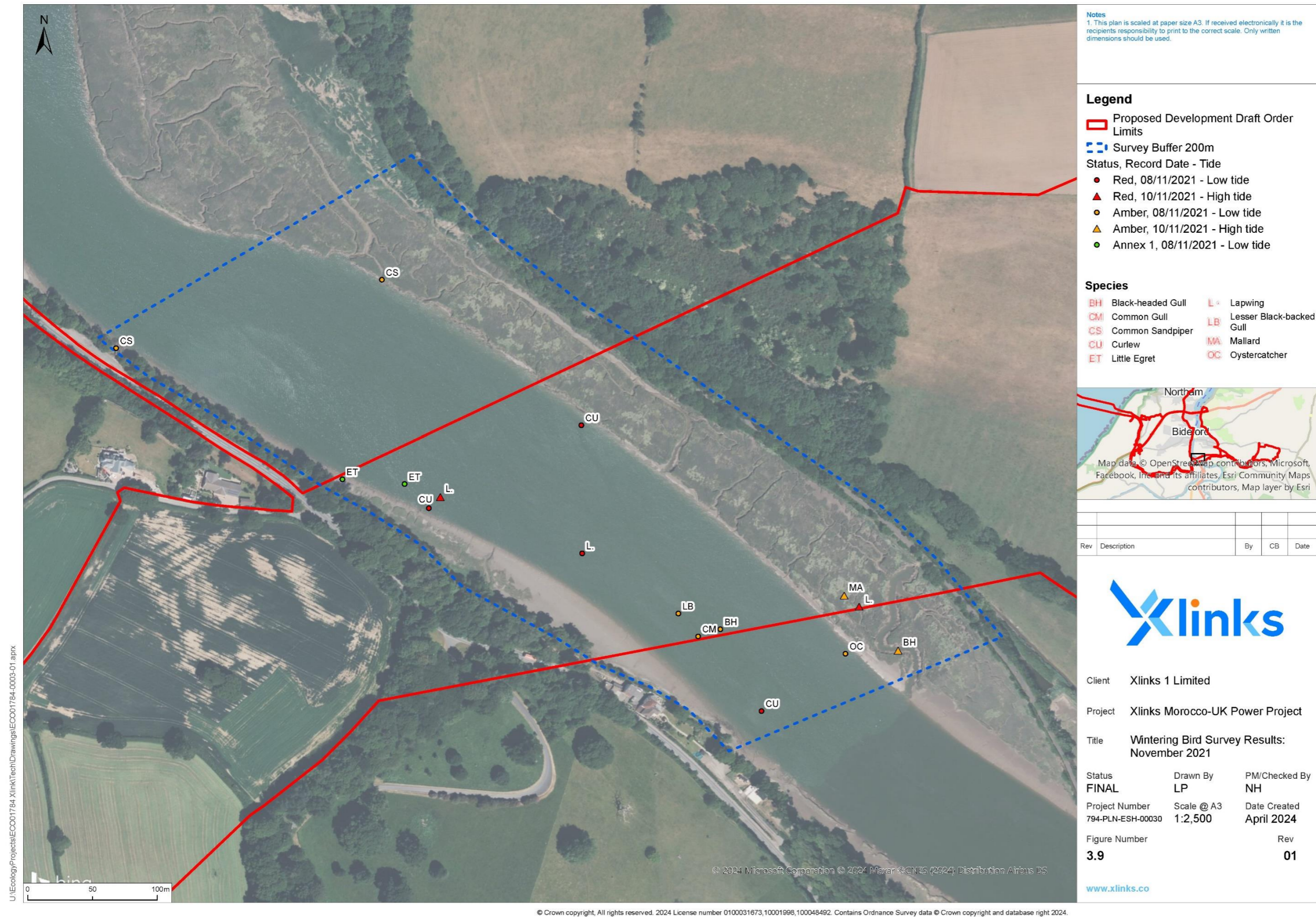


Figure 1.9: Wintering Bird Survey Results (Estuarine) – November 2021

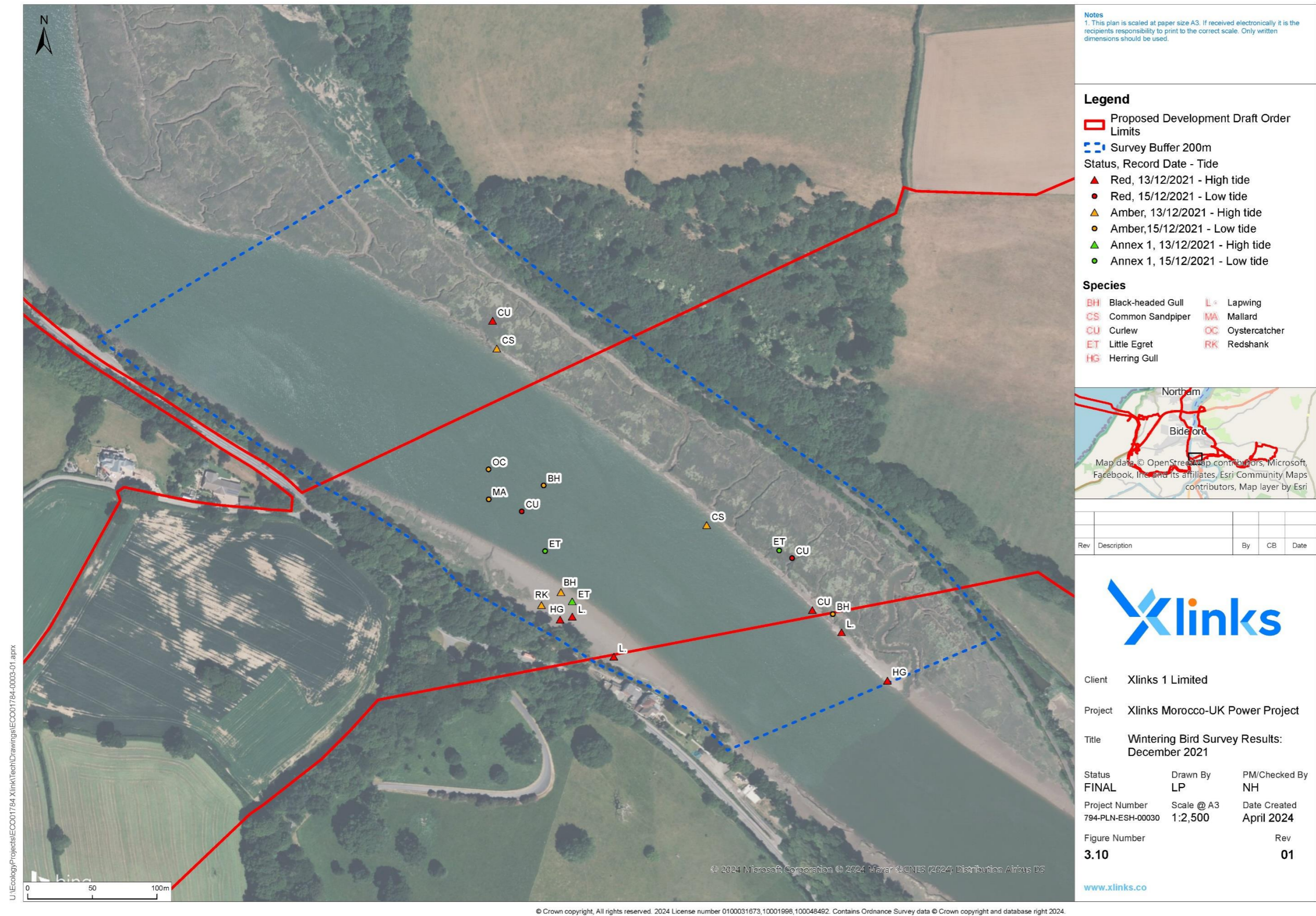


Figure 1.10: Wintering Bird Survey Results (Estuarine) – December 2021

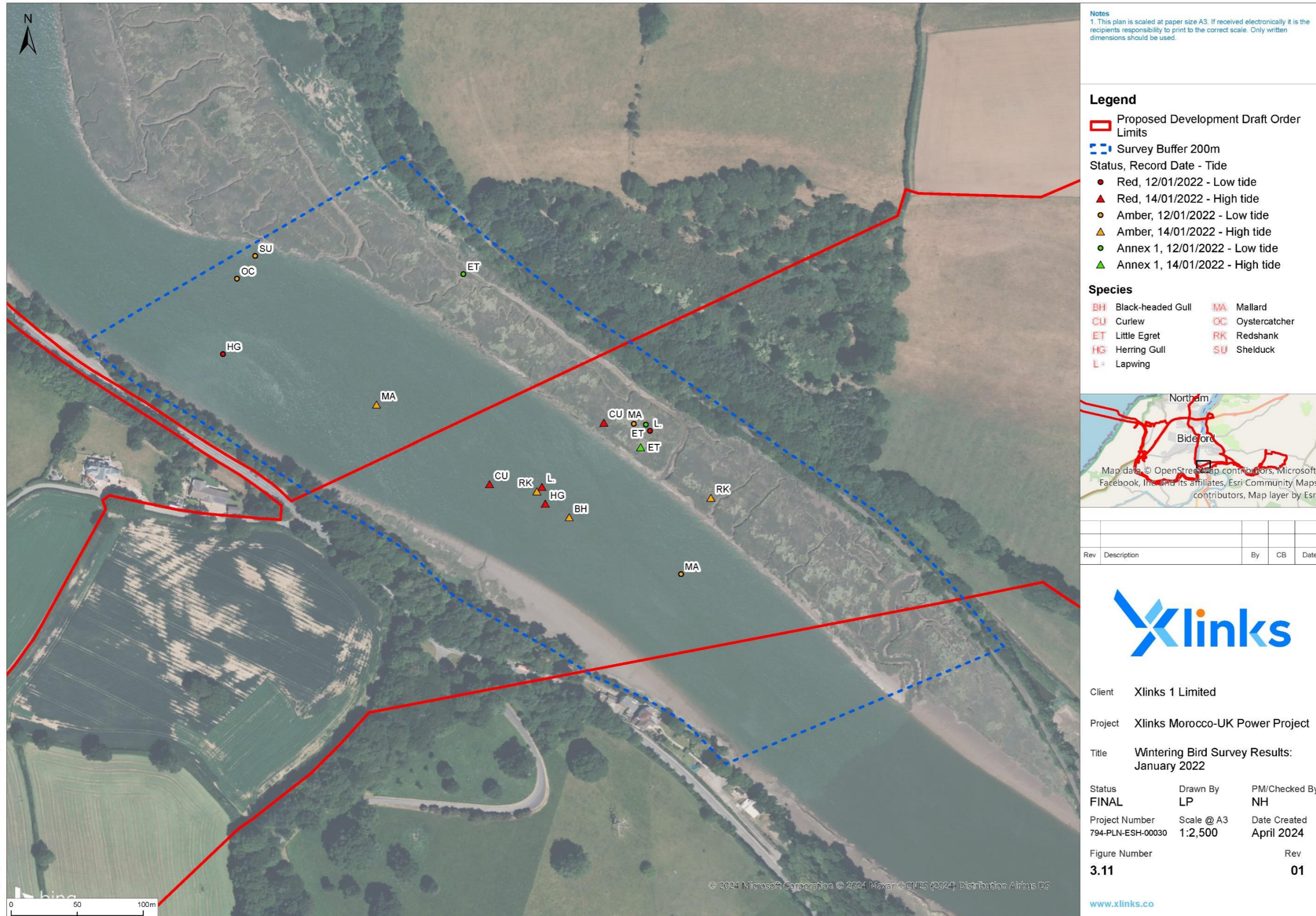


Figure 1.11: Wintering Bird Survey Results (Estuarine) – January 2022

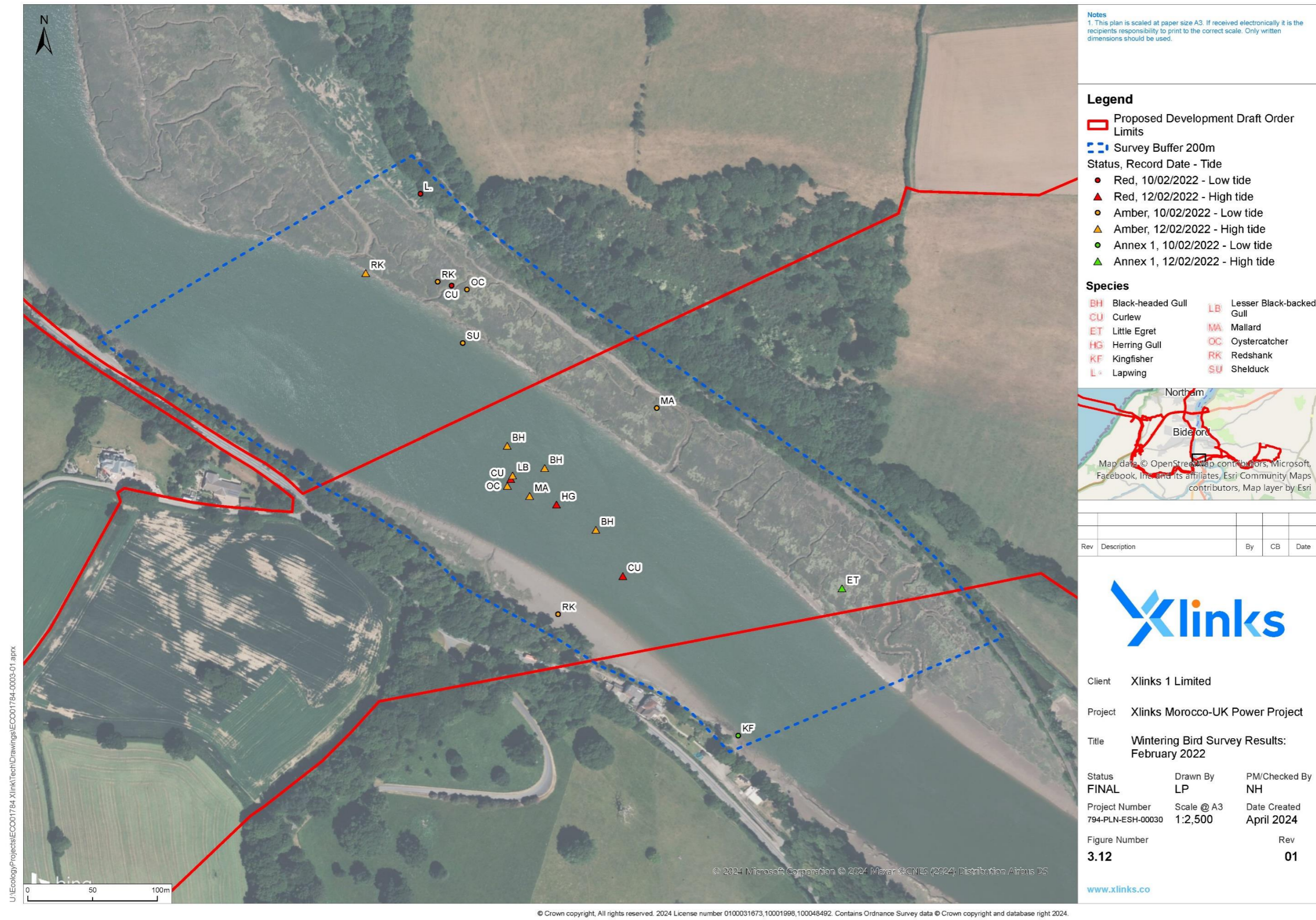


Figure 1.12: Wintering Bird Survey Results (Estuarine) – February 2022

1.11 Results

Breeding Bird Survey

- 1.11.1 A total of 70 species were recorded within the site boundary, during the breeding bird surveys undertaken in 2022. Of these, 24 were confirmed to be breeding, three probably breeding and four possibly breeding. The remaining 39 species were of non-breeding status, either passing through the site or using the site for foraging.
- 1.11.2 It is recommended that features with potential to support nesting birds are removed outside of the breeding bird season. It should be noted that whilst the main bird breeding season runs between March and September some birds can nest at any time of year.
- 1.11.3 If any clearance was required during the breeding season, the relevant areas should be inspected by a suitably qualified ecologist within 48 hours prior to clearance to check for the presence of nesting birds. If an active nest was present, the nest and vegetation within 5m of it would need to be retained until the young birds had fledged.
- 1.11.4 If a nest proved to be of a species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), advice from the inspecting ecologist regarding suitable distances to avoid disturbance of the nest and any birds using it would need to be sought and agreed with clearance contractors. Such buffers would need to remain in place until the young birds had fledged and left the nest.
- 1.11.5 There were no observations of peregrine falcon recorded during the surveys undertaken in 2022, although their presence is known in the local area. Any proposed works near Cornborough Range should consider the potential presence of nesting peregrine falcons. It is understood that the construction works site will be located at the top of the cliffs behind the coastal path. Given the low height of the cliff at Cornborough Range, it is considered unlikely that peregrine falcons would nest in this location. It is understood that the nearest known peregrine nesting site is located approximately 1.5 to 2km away.
- 1.11.6 Prior to commencing works, the cliffs should be surveyed for nesting peregrine falcon. If peregrines are found to be nesting within 200m of the construction site, a risk assessment would be undertaken to assess the likelihood of the birds being affected by the works. Intervisibility is unlikely given the work site location behind the coastal path and the proposed screening of the work site. Peregrine falcons typically raise one brood, occupying a nest between March to July inclusive, although, depending on the geographical area and the weather conditions, nesting can extend outside this period.
- 1.11.7 Kingfisher were regularly recorded at the estuary crossing during the 2021/2022 winter bird surveys. Therefore any proposed works near watercourses should consider the potential presence of nesting kingfisher. It is understood that all works will be located outside of the floodplain and therefore at a distance from the river and would be screened with solid fencing to reduce any disturbance. Prior to undertaking any proposed watercourse crossings, a nesting kingfisher survey should be undertaken. If kingfishers are found to be nesting within 200m of the construction site, a risk assessment would be undertaken to assess the likelihood of the birds being affected by the works.

- 1.11.8 Skylarks nest and feed within open expanses of grassland and arable fields. Where it is not possible to complete topsoil stripping outside of the nesting season, it is recommended that habitat management is considered, in order to make the area affected by the scheme unfavourable for nesting skylarks. This could include maintaining a short sward through mowing regimes. In addition, a survey should be undertaken to identify the locations of active nests. These areas should remain undisturbed until the young have fledged. Habitat in each area affected will be restored prior to the following nesting season.
- 1.11.9 Overall considering the habitats present and abundance / diversity of species recorded, the site is considered to be of no more than local value for breeding birds.

Wintering and Migratory Birds

- 1.11.10 For the coastal site, 12 species of conservation importance were recorded flying over and feeding within the survey area during the course of the site visits. This included a significant number of oystercatchers, curlews, black-headed gull, turnstone and herring gull feeding on exposed seaweed during low tide.
- 1.11.11 For the estuary site, 13 species of conservation importance were identified flying over and feeding within the survey area during the course of the site visits. These included lapwing and herring gull which are red list species. It is considered likely that the importance of this estuary site in isolation is limited, as it is utilised by foraging birds only as part of the wider estuarine environment; the majority of species were recorded foraging outside, or passing through, the survey area. In addition, the area is located outside of the SSSI.
- 1.11.12 No wetland and wildfowl species were observed roosting within the sites and therefore it can be considered unlikely that the coastal or estuarine survey areas form important roosting areas at high tide. Therefore, it is considered that the site is of no more than local value for wintering and migratory birds.

1.12 References

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