

Appendix 7J

Wintering Bird Survey Report

Welsh Government

**Global Centre for Rail Excellence
(GCRE)**

Wintering Bird Survey Report
2018/19

Rev A | 9 July 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 264904

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1 Introduction

1.1 Background

Ove Arup & Partners Ltd (Arup) was commissioned by the Welsh Government (WG) to undertake a range of consultancy services in relation to the Global Centre for Rail Excellence (GCRE), hereafter referred to as ‘the Project’.

As part of that commission, a range of ecological surveys have been undertaken to identify the baseline ecological conditions of the Project area, to inform the assessment of impacts as part of the Environmental Impact Assessment (EIA) process.

This document describes the wintering bird surveys undertaken for the Project.

1.2 Objective

The objective of the surveys covered by this report was to provide data on the assemblage, numbers and distribution of wintering birds within the study area.

Nomenclature within this report follows the British (English) vernacular name within the British Ornithologists’ Union (BOU) British list¹.

¹ BOU (2015). *The British List; The official list of bird species recorded in Britain* [online] available at: <https://www.bou.org.uk/british-list/category-a-b-c-species/>.

2 Project Description and Context

The WG are proposing to develop a rail testing, maintenance, research, development and storage facility (also referred to as the Global Rail Centre for Excellence) at the site of the Onllwyn washery and Nant Helen open cast mine site. The site for development is approximately 475 ha.

The proposed site is currently being mined by Celtic Energy, who will cease extraction operations in 2021, at which point Celtic Energy will be required to restore the land in accordance with regulatory requirements and agreements with Powys County Council (PCC) and Neath Port Talbot County Borough Council (NPTCBC). This includes Section 106 planning obligations and planning conditions that need to be discharged.

Celtic Energy has submitted two recent planning applications for the site, including: the revised restoration strategy for approval (Planning reference number: 19/1899/REM) which would change the existing approved restoration scheme (for planning application ref 18/1070/REM). And, the Nant Helen complementary earthworks application for approval (Planning reference number: 20/0738/FUL) The purpose of these applications is to allow for a 'flexible and adaptable landform for a variety of future uses on restoration, including the use of the site as a rail testing and storage facility, proposed by the WG.

3 Site Description

The Project site is within the Dulais Valley located within Powys and Neath Port Talbot, with the Brecon Beacons National Park Authority boundary immediately to the north. Nearby settlements include Onllwyn, Seven Sisters, Ystradgynlais, Caehopkin, Abercrave or Coelbren.

The site is predominantly brownfield land that has been heavily worked by open cast mining. Much of the site has been revegetated.

4 Study Area

The study area encompasses the majority of land within the Nant Helen open cast operational site, which at the time of commencing the ecological surveys was considered to be the likely boundary of the project site.

5 Methodology

Prior to the completion of the first survey, a transect route was identified (Figure 2). This transect route was determined with the intention of providing coverage of key areas within the study area which may support important species/numbers of wintering birds based on habitat type/extent. Four transects were then completed between 13 December 2018 and 4 March 2019 (Table 1).

The survey route included a walked transect through farmland and a driven transect, with two viewpoints from which 15-minute duration point counts were completed. The route of the walked and driven transect and the viewpoints are shown on Figure 2.

During each survey the surveyor recorded all observations on field maps using standard British Trust for Ornithology (BTO) coding. Observations of birds outside the study area were also logged.

The direction of surveys was alternated between visits to ensure all parts of the survey area received adequate coverage during different periods of the day.

5.1 Surveyors

Surveys were completed by Martyn Owen MCIEEM.

Martyn is an experienced consultant ornithologist and was Shropshire County Bird Recorder from 2012-2017, former editor of the Shropshire Ornithological Society's Annual Bird Report and remains on the Shropshire Ornithological Society Rarity Committee.

Martyn has completed bird survey work at many sites in Wales (and elsewhere) employing the full range of ornithological survey techniques and data analysis in relation to many projects over the previous 15 years. Martyn holds numerous Natural Resources Wales (NRW) Schedule 1 survey licences.

5.2 Survey Details

Detail in relation to survey dates and weather are provided within Table 1.

Table 1: Survey details.

Survey Visit	Date	Time	Weather				
			Wind Speed (Beaufort)	Wind Direction	Cloud Cover (Oktas)	Temp (°C)	Precip.
1	13/12/2018	08:30-14:30	3-4	SE	6-8	5-7	Nil
2	07/01/2019	08:10-12:55	2-3	SW	8	8-10	Nil
3	13/02/2019	08:00-13:55	1-2	SW	7-8	7-8	Nil
4	04/03/2019	08:00-12:55	3-4	SW	8	0-2	Occasional rain

5.3 Limitations

The wintering bird survey covered a four-month period between December 2018 and March 2019. Whilst the late autumn period (October/November) was not included timing of Arup's commission, this is not considered a significant limitation; the results achieved in the survey are considered adequate to describe the wintering bird assemblage that typically uses the study area.

The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of flora and fauna, factors such as the time of year and natural behaviour of the animals. Nevertheless, these surveys were conducted at the optimal survey periods and using methodologies which are in accordance with published guidelines.

6 Results

Table 2 provides a summary of all species observed across the survey period. Within this table the peak count for each species is emboldened. The locations of all observations are provided within Figures 3.1-3.4.

Across the survey period, 34 species were recorded. Of these species, three are included on the Birds of Conservation Concern Wales (BoCCW)³² Red list, 12 are included on the BoCCW3 Amber list with seven being included in response to Section 7 (S7) of the Environment (Wales) Act 2016, being of principal importance for the purpose of maintaining and enhancing biodiversity in Wales.

² Johnstone I., Bladwell S. (2016). *Birds of Conservation Concern in Wales 3: the population status of birds in Wales*. Birds in Wales, vol.14 No.1

Table 2: Results summary

Species	BTO Code	Conservation Status	Total Count within Study Area (Figure 3.1-3.4)				Comments
			Survey 1	Survey 2	Survey 3	Survey 4	
Greylag Goose <i>Anser anser</i>	GJ	-	0	8	0	0	The sole record related to a flock in flight in the northeast of the Study Area.
Greater Canada Goose <i>Branta canadensis</i>	CG	-	0	0	0	6	During the final survey, three groups of two birds (presumed pairs) were present within the Study Area.
Mallard <i>Anas platyrhynchos</i>	MA	BoCCW3 Amber	6	5	1	8	Recorded on ponds within the Study Area.
Grey Heron <i>Ardea cinerea</i>	H.	BoCCW3 Amber	1	0	1	1	All records related to a bird fishing on a pond in the northeast of the Study Area.
Red Kite <i>Milvus milvus</i>	KT	BoCCW3 Amber	2	0	1	1	Foraging birds over farmland within the Study Area.
Buzzard <i>Buteo buteo</i>	BZ	-	2	0	1	2	Foraging within the Study Area.
Snipe <i>Gallinago gallinago</i>	SN	BoCCW3 Amber	1	0	0	0	A single record of a bird flushed from a wet area in the west of the Study Area.
Woodpigeon <i>Columba palumbus</i>	WP	-	0	0	4	0	
Kestrel <i>Falco tinnunculus</i>	K.	BoCCW3 Red S7	1	0	0	0	A single record of a female foraging in the centre of the Study Area.
Magpie <i>Pica pica</i>	MG	-	1	8	2	2	
Jackdaw <i>Corvus monedula</i>	JD	-	8	37	54	19	Flocks of birds present within farmland and associated with buildings in the east of the Study Area.
Rook <i>Corvus frugilegus</i>	RO	-	14	0	32	0	
Carrion Crow <i>Corvus corone</i>	C.	-	19	15	29	5	
Raven <i>Corvus corax</i>	RN	-	1	1	4	1	A nest present on a pylon in the centre of the Study Area, with birds predominantly noted in this area.
Blue Tit <i>Cyanistes caeruleus</i>	BT	-	0	3	5	1	
Great Tit <i>Parus major</i>	GT	-	0	1	0	1	

Species	BTO Code	Conservation Status	Total Count within Study Area (Figure 3.1-3.4)				Comments
			Survey 1	Survey 2	Survey 3	Survey 4	
Skylark <i>Alauda arvensis</i>	S.	BoCCW3 Amber S7	0	0	12	22	Breeding birds returned to the Study Area from Survey 2, predominantly in the west.
Wren <i>Troglodytes troglodytes</i>	WR	-	2	2	3	4	
Starling <i>Sturnus vulgaris</i>	SG	BoCCW3 Red S7	42	4	7	21	Foraging flocks noted in farmland in the east of the site.
Blackbird <i>Turdus merula</i>	B.	-	1	6	4	2	
Fieldfare <i>Turdus pilaris</i>	FF	BoCCW3 Amber	0	3	0	16	Maximum flock (12) noted foraging in farmland/scrub in the centre of the Study Area, with scattered records elsewhere.
Song Thrush <i>Turdus philomelos</i>	ST	BoCCW3 Amber S7	0	0	7	4	Scattered records predominantly in the east of the Study Area from survey 3.
Redwing <i>Turdus iliacus</i>	RE	BoCCW3 Amber	0	4	0	0	Solely records in flight during survey 2.
Mistle Thrush <i>Turdus viscivorus</i>	M.	BoCCW3 Amber	1	1	0	0	Singletons noted in the centre of the Study Area (survey 1) and southeast (survey 2).
Robin <i>Erithacus rubecula</i>	R.	-	0	1	0	0	
Stonechat <i>Saxicola rubicola</i>	SC	-	0	2	1	2	Associated with marshy grassland in the centre of the site.
Dunnock <i>Prunella modularis</i>	D.	S7	0	0	2	1	Records in the centre of the Study Area during surveys 3 and 4.
House Sparrow <i>Passer domesticus</i>	HS	BoCCW3 Amber S7	0	15	0	11	Birds present around residential areas to the southeast of the Study Area.
Pied Wagtail <i>Motacilla alba</i>	PW	-	1	0	2	2	
Meadow Pipit <i>Anthus pratensis</i>	MP	BoCCW3 Amber	9	7	1	5	Scattered records, predominantly in the west of the Study Area associated with pastoral farmland.
Chaffinch <i>Fringilla coelebs</i>	CH	-	0	0	2	2	
Linnet <i>Linaria cannabina</i>	Li	BoCCW3 Red S7	4	0	2	0	A flock of four in the centre of the Study Area (survey 1) and two in the same area during survey 3.

Species	BTO Code	Conservation Status	Total Count within Study Area (Figure 3.1-3.4)				Comments
			Survey 1	Survey 2	Survey 3	Survey 4	
Goldfinch <i>Carduelis carduelis</i>	GO	-	0	2	0	0	
Reed Bunting <i>Emberiza schoeniclus</i>	RB	BoCCW3 Amber S7	5	4	1	5	Records during each survey, with records associated with wet pasture in the centre of the Study Area.

7 Conclusions

A wintering bird survey to inform the proposed complementary restoration works at Nant Helen was completed during winter 2018/19. This survey included a walked transect through farmland and a driven transect, with two viewpoints (Figure 2) from which 15-minute point counts were completed. During each survey all species observed or heard were recorded.

Overall, the assemblage of birds recorded is typical of habitats in upland areas of this part of Wales. No particularly rare species or large aggregations of species of conservation concern were recorded. Of the total of 34 species was recorded, three are included on the Birds BoCCW3 Red list, 12 are included on the BoCCW3 Amber list with seven being included on S7 of the Environment (Wales) Act 2016.

A full ecological impact assessment will be included within the Environmental Statement for the project and this will include an assessment of the significance of impacts from the project on protected and/or notable wintering bird species. This will also detail any mitigation or compensation measures required to ensure there is no significant effect on wintering bird species within the site.

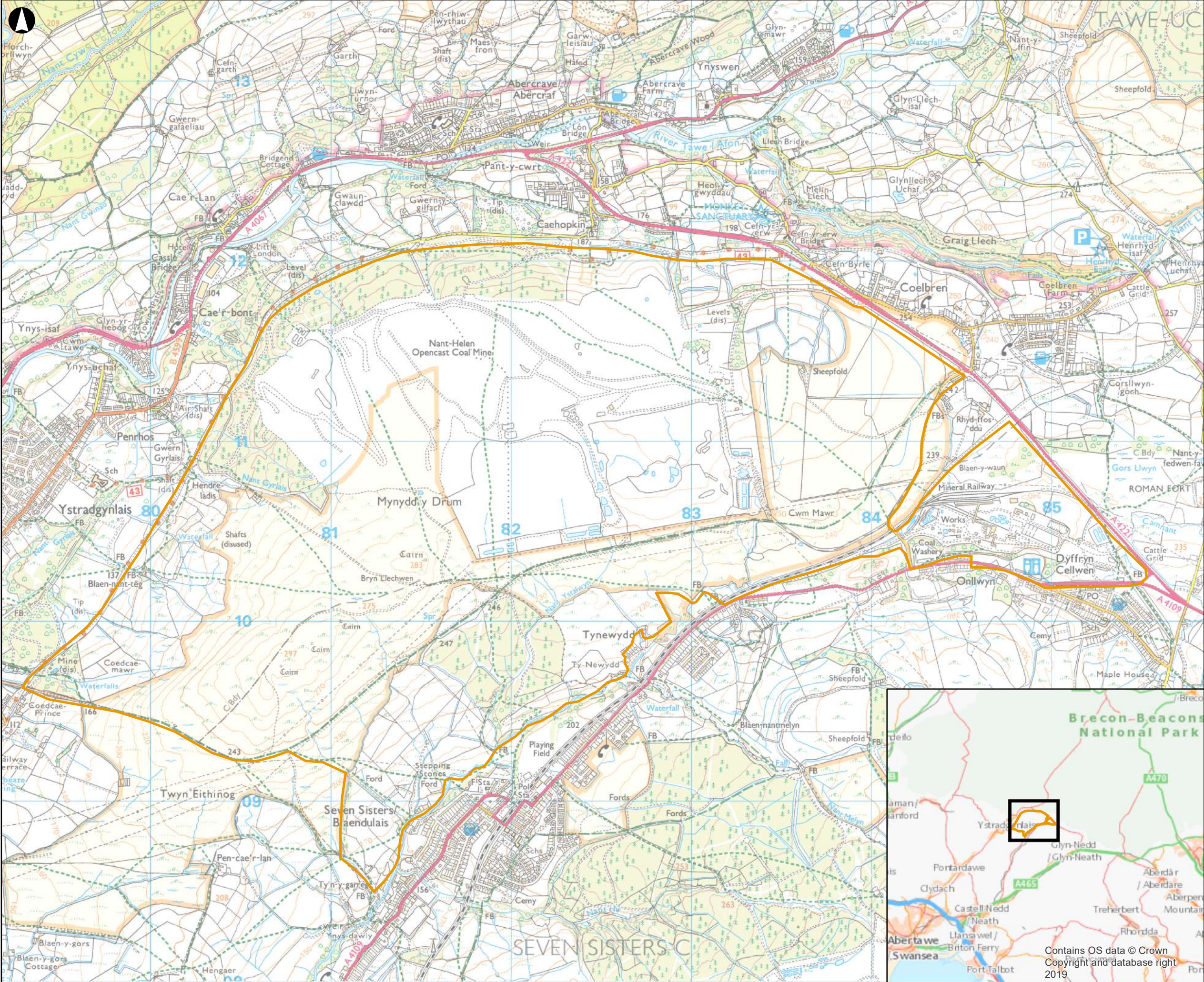
This report is the result of the survey work undertaken between April and September 2019. This report refers, within the limitations stated, to the condition or proposed works of the site at the time of the surveys. Changes in legislation, guidance, best practice, etc. may necessitate a re-assessment/survey. No warranty is given as to the possibility of future changes in the condition of the site.

The results of these surveys are considered valid for a minimum of 18 months to a maximum of 3 years. If more than 18 months elapses before any planning application is submitted, the requirement for repeat surveys should be reviewed³.

³ Chartered Institute of Ecology and Environmental Management (2019). *Advice Note on the Lifespan of Ecological Reports and Surveys*.

Figures

Figure 1	Study Area
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Figure 3.1	Survey Results – 13 December 2018
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Figure 3.3	Survey Results – 13 February 2019
Figure 3.4	Survey Results – 4 March 2019

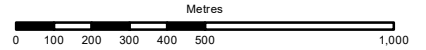


Legend

 Survey Area

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Ordnance Survey 0100031673

F1	06/01/20	JG	AC	PC
Issue	Date	By	Chkd	Appd



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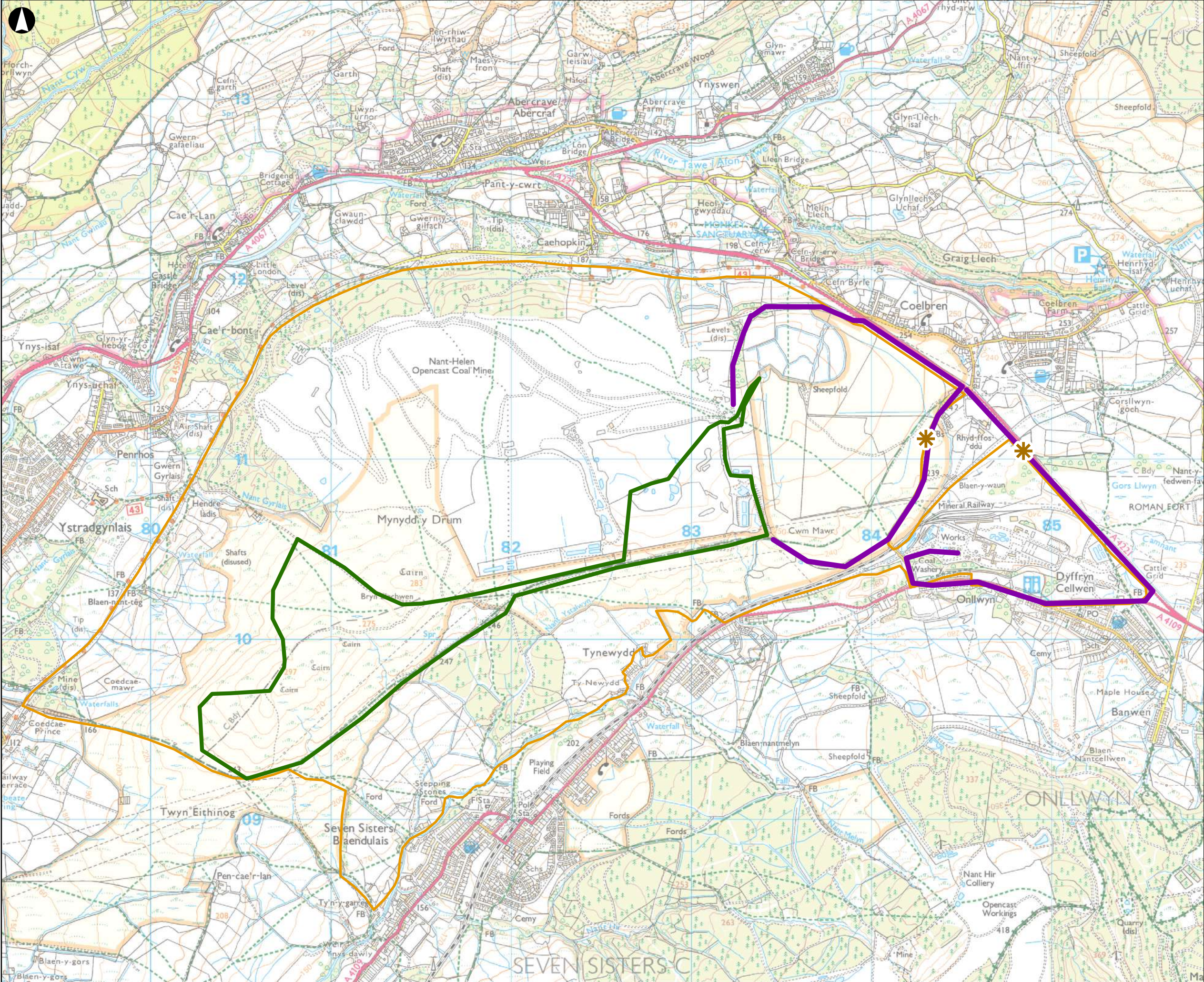
**Figure 1
Site Location**

Scale at A3
1:20,000

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Drawing No 001	Issue F1
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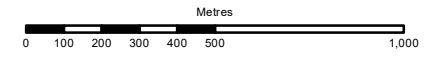
Legend

Survey Route

- Driven Transect
- Walked Transect
- ✱ Viewpoints
- Survey Area

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Figure 2
Survey Details

Scale at A3

1:20,000

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Drawing No 002	Issue F1



Wintering Bird Observations

- Red List
- Amber List
- Green List
- Environment (Wales) Act 2016; Section 7 Species

 Survey Area

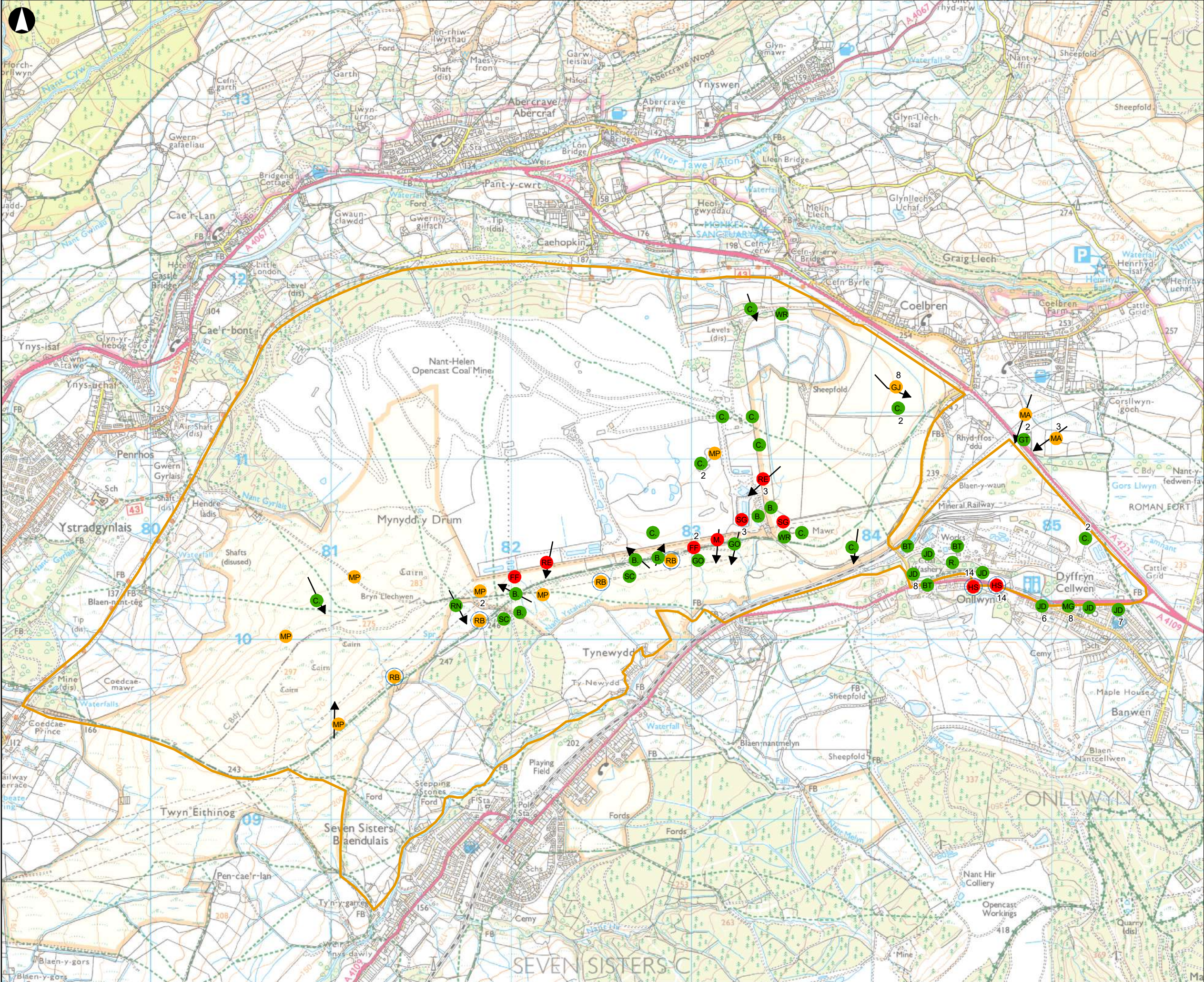
F1	06/01/20	JG	AC	PC
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Client

Wintering Bird Survey Report

Scale at A3

Job No 264904	Drawing Status For Issue
Drawing No 003.1	Issue F1



Legend

Wintering Bird Observations

Welsh Conservation Status

Red List

Amber List

Green List

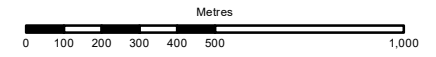
Environment (Wales) Act 2016; Section 7 Species

Flight Lines

Survey Area

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Ordnance Survey 0100031673

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Wintering Bird Survey Report

Figure 3.2
Survey Results - 07/01/2019

Scale at A3

1:20,000

Job No

264904

Drawing Status

For Issue

Drawing No

003.2

Issue

F1





Wintering Bird Observations

- Red List
- Amber List
- Green List
- Environment (Wales) Act 2016; Section 7 Species

 Survey Area

F1	06/01/20	JG	AC	PC
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Wintering Bird Survey Report

Scale at A3

Job No 264904	Drawing Status For Issue
Drawing No 003.4	Issue F1