

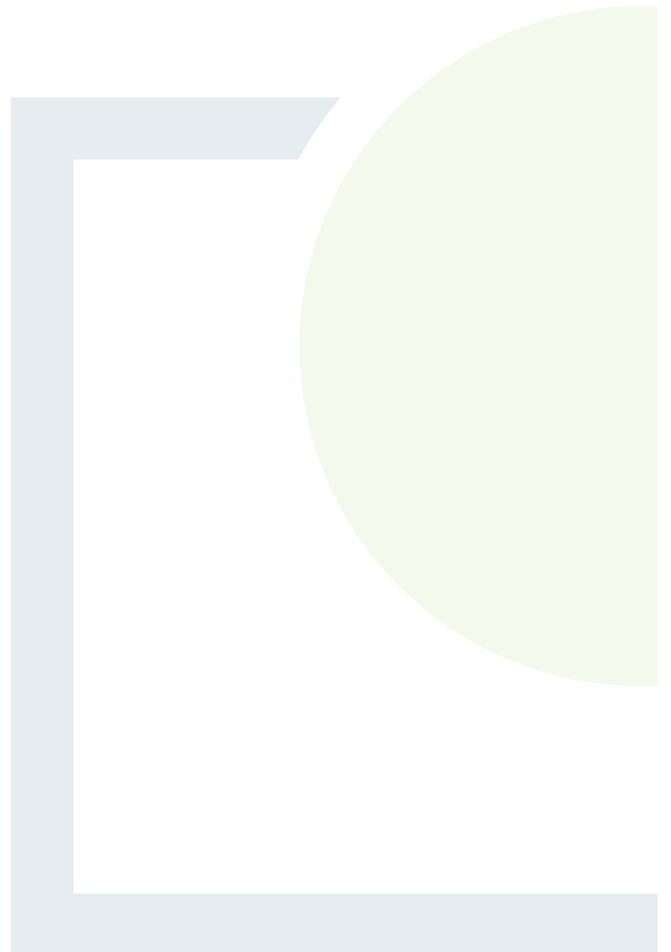


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TIMONEY**

**CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING**

APPENDIX 5.3

Ornithology Report





CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE &
PLANNING

BARNADIVANE WIND FARM & SUBSTATION, CO CORK ORNITHOLOGICAL SURVEY

APPENDIX 5.3 BASELINE ORNITHOLOGICAL
SURVEYS - BARNADIVANE WIND FARM &
SUBSTATION:
WINTER 2020/2021, SUMMER 2021,
WINTER 2021/22, SUMMER 2022

Prepared for:

Barna Wind Energy (B.W.E.) Ltd & Arran Windfarm Ltd

Date: February 2023

Core House, Pouladuff Road, Cork, T12 D773, Ireland

T: +353 21 496 4133 | E: info@ftco.ie

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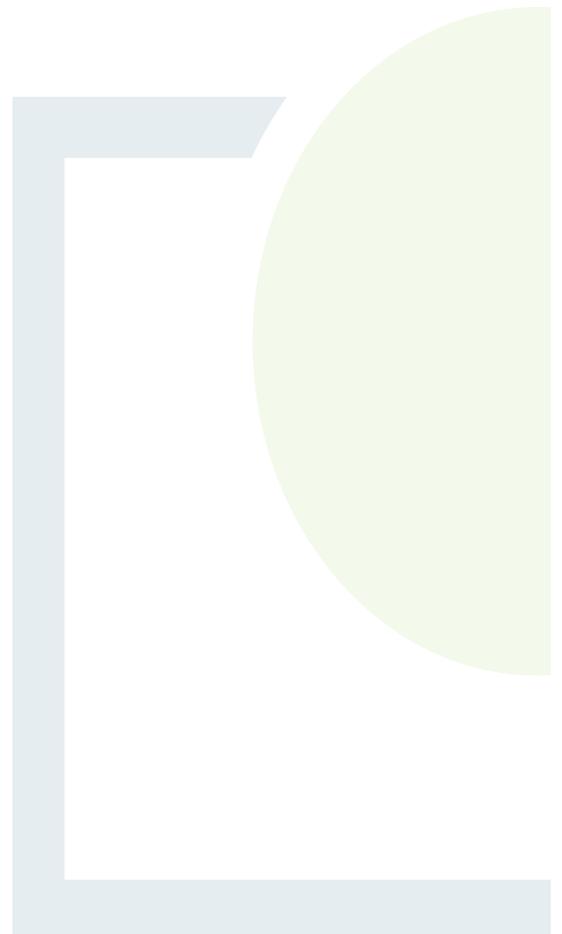


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EXECUTIVE SUMMARY

Ornithological surveys for the Proposed Development searched for and recorded all bird species, focusing primarily on the Proposed Development site but also taking in the surrounding region. Surveys covered the 2020-21 and 2021-22 non-breeding seasons, and the 2021 and 2022 breeding seasons.

The methodology for the ornithological surveys at the Proposed Development adhered to Scottish Natural Heritage guidance (SNH, 2017) for assessing the impact of proposed Wind Farm developments on the breeding and wintering populations of bird species in the study area. Two timed watches of three hours duration were carried out from each vantage point (VP) every month from April to September inclusive in 2021 and 2022 for breeding season surveys, totalling 36 hours of observation time per survey season at each VP. In July 2021 at VP2, half an hour of survey time less was conducted, totalling 35.5 hours of survey time at VP2 for the summer 2021 season.

Breeding bird transect surveys were carried out in April and June each summer season and breeding wader surveys were undertaken between April and July inclusive each summer season. VP surveys were carried out using the same methodology over the winter season, with two three-hour watches per month from October to March inclusive during the winter 2020/2021 and 2021/2022 seasons totalling 36 hours of observation time at each VP for each survey season. Winter transect surveys were carried out three times each winter season. Hinterland surveys were carried out each month throughout the two-year survey period.

Summer Surveys

During summer VP surveys, a total of 52 species of bird were recorded from April to September in 2021 and 2022 combined. Of these species six are Red-listed (Gilbert et al., 2021): Golden Plover, Kestrel, Meadow Pipit, Snipe, Stock Dove and Swift. A total of 12 species are Amber-listed: Goldcrest, Greenfinch, Herring Gull, House Martin, Lesser Black-backed Gull, Linnet, Mallard, Skylark, Starling, Swallow, Wheatear and Willow Warbler. The remaining 34 species are Green-listed. Two species are protected under Annex 1 of the EU Birds Directive: Golden Plover and Peregrine.

During hinterland surveys surrounding the Proposed Development site, seven Annex 1 species were noted: Golden Plover, Hen Harrier, Kingfisher, Little Egret, Peregrine, Ruff and Whooper Swan. A total of ten Red-listed species were recorded: Curlew, Golden Plover, Grey Wagtail, Kestrel, Lapwing, Meadow Pipit, Snipe, Stock Dove, Swift and Yellowhammer. Additionally, 30 Amber-listed species were noted, with the remaining 42 species recorded during Hinterland surveys over both summer seasons being Green-listed.

Snipe was the only species detected during breeding wader surveys. Breeding bird surveys recorded 34 species; within these, three species are red-listed: Meadow Pipit, Grey Wagtail and Kestrel. A total of six species are Amber-listed: Goldcrest, Lesser Black-backed Gull, Linnet, Starling, Swallow and Willow Warbler. The remaining 25 species noted during breeding birds surveys are Green-listed. There were no Annex 1 listed species recorded during breeding bird transects.

Winter Surveys

During winter VP surveys throughout the winter seasons 2020/21 and 2021/22, a total of 50 species were recorded. Seven Red-listed species were recorded: Golden Plover, Grey Wagtail, Kestrel, Meadow Pipit, Redwing, Snipe and Yellowhammer. A total of nine are Amber-listed: Goldcrest, Greenfinch, Hen Harrier, Lesser Black-backed Gull, Linnet, Mallard, Ringed Plover, Skylark and Starling. The remaining 34 are Green-listed. Three of the species recorded over the winter period are protected under the Annex 1 of the EU Birds Directive: Golden Plover, Hen Harrier and Peregrine.



During winter hinterland surveys 13 Red-listed species were recorded: Black-tailed Godwit, Curlew, Dunlin, Golden Plover, Goldeneye, Grey Wagtail, Kestrel, Lapwing, Meadow Pipit, Redwing, Shoveler, Snipe and Woodcock along with 24 Amber-listed species and 41 Green-listed species. Of these 78 species, eight are Annex 1 listed: Barnacle Goose, Golden Plover, Kingfisher, Little Egret, Peregrine, Ruff, Greenland White-fronted Goose and Whooper Swan.

A total of 30 species were recorded during winter transect surveys. Of these, three are Red-listed: Grey Wagtail, Meadow Pipit and Redwing. Four are Amber-listed: Goldcrest, Greenfinch, House Sparrow, and Starling. The remaining 23 are green listed. There were no Annex 1 listed species recorded during winter transect surveys.



1. INTRODUCTION

Fehily Timoney & Company (FT) was appointed by Barna Wind Energy (B.W.E.) Ltd & Arran Windfarm Ltd. (the Applicant) to undertake ornithological surveys at the Proposed Development site during 2020-2022. This report presents the results of two years of ornithological surveys and summarises the flight activity of target bird species as well as presence and distribution of all bird species on site and surrounding areas during the breeding and non-breeding survey periods in 2020, 2021 and 2022. The study area of the Proposed Development site is near Teerelton, south of Macroom, Co. Cork.

This avian assessment for surveys completed over two years in winter 2020/21, summer 2021, winter 2021/22 and summer 2022 includes the assessment of target bird species potentially occurring within the Proposed Development site boundary, and within the lands surrounding the Proposed Development site. Surveys adhered to Scottish Natural Heritage guidance (SNH, 2017). The following surveys were carried out:

- Vantage Point survey (breeding and non-breeding season);
- Hinterland survey;
- Breeding & winter bird transect survey;
- Breeding Wader Survey.

This report outlines the results of the above surveys to inform about avian usage of the Proposed Development site and surrounding areas.

1.1 Study Area

The Proposed Development site is located in the townlands of Lackareagh, Garranereagh and Barnadivane (Kneeves), near Teerelton, Co. Cork, approximately 8 km south of Macroom.

The Proposed Development is located on a ridgeline draining primarily to the Bride River valley. The site ranges in elevation from 180m on the southern boundary to 270m to the north of the site. The land to the south slopes downwards towards the River Bride and low-lying rolling farmland. To the north, the land slopes to the Cumber 19 River, which is a tributary of the River Lee.

According to Corine Land Cover (2018), the dominant land use within the Proposed Development site boundary is 231 - Agricultural Areas - Pastures with small areas of 312 - Coniferous forests and 324 - Transitional woodland scrub present in the surrounding area.

There are two SPAs within 15 km of the Proposed Development site boundary:

- The Gearagh SPA (004109)
- Mullaghanish to Musheramore Mountains SPA (004162)

The Gearagh, which is located ca. 6km north of the Proposed Development site is an important wetland site for birds and is designated for Wigeon, Teal, Mallard, Coot and Wetland and Waterbirds. All species listed as SCI species are Amber-listed.



Mullaghanish to Musheramore Mountains SPA is located ca. 14 km to the north of the Proposed Development site is designated for Hen Harrier, which is Amber-listed and an Annex 1 species.

There are two SACs within 15 km of the Proposed Development site boundary:

- The Gearagh SAC (000108)
- Bandon River SAC (002171)

The following protected national sites are within 15km of the proposed development:

- Killaneer House Glen pNHA (001062)
- Boylegrove Wood pNHA (001854)
- The Gearagh pNHA (000108)
- Bandon Valley South of Dunmanway pNHA (001035)
- Bandon Valley West of Bandon pNHA (001034)
- Lough Allua pNHA (001065)
- Lough Gal pNHA (001067)
- Prohus Wood pNHA (001248)
- Glashgarriff River pNHA (001055)

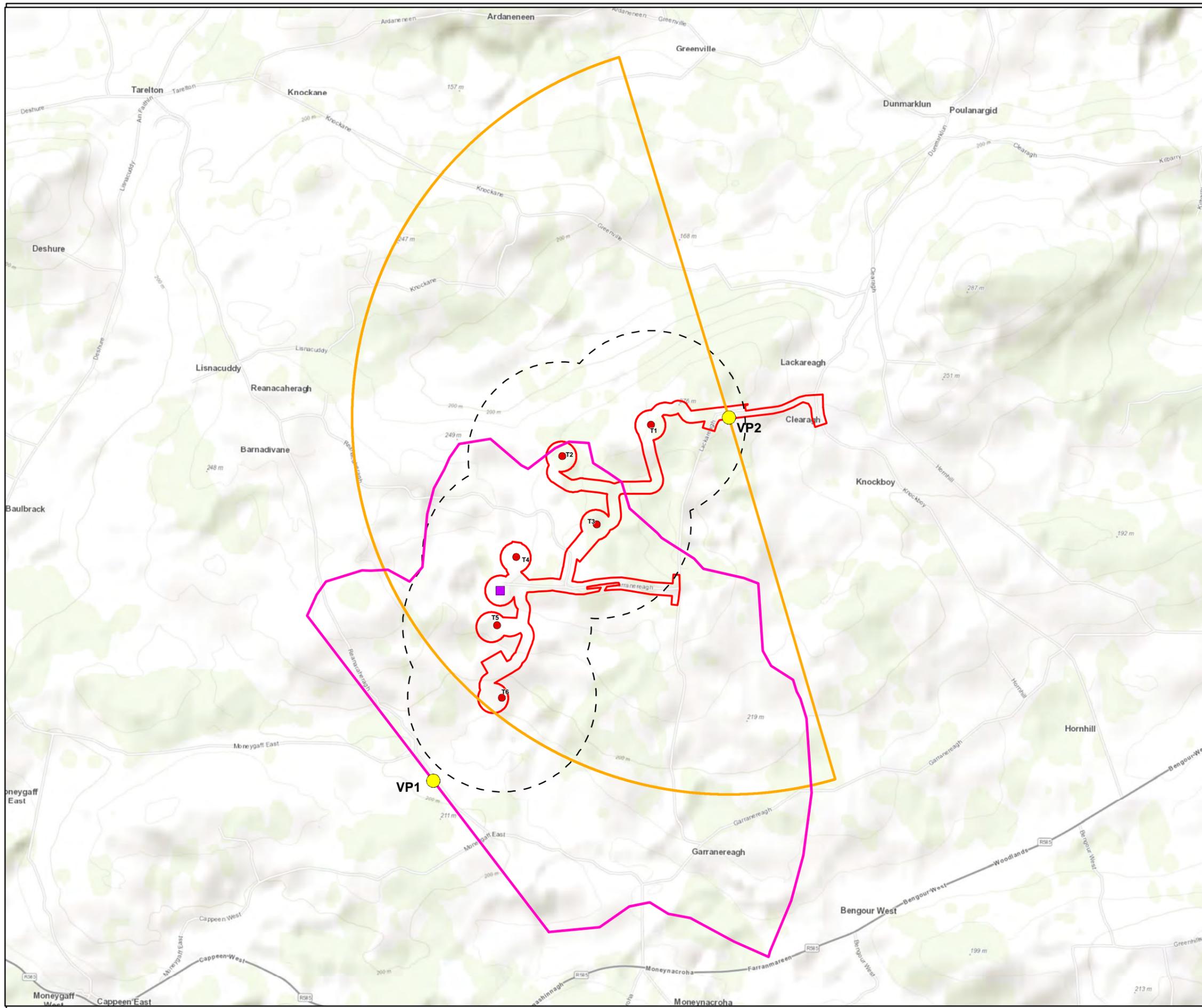
Four of the pNHAs listed above are noted to be important for bird species:

Killaneer House Glen pNHA is a relatively natural wood in an agricultural area. It is considered to support a rich avian community of about 20 regularly occurring bird species.

The Gearagh pNHA is a wetland which is important for a variety of bird species, particularly wetland species. The area is also designated as an SPA and SAC.

Bandon Valley West of Bandon pNHA has provides suitable habitat for a variety of bird species, such as Red-listed Lapwing and Curlew, Amber-listed Mallard, Teal and Cormorant and Green-listed Grey Heron.

Lough Gal pNHA is noted to be a good site for wildfowl, ducks, geese and swans.



Legend

- Development Planning Boundary
- Turbines 500m Buffer
- Proposed Met Mast
- Proposed Turbine Layout
- Viewpoints

Viewsheds

Name

- VP1 Viewshed
- VP2 Viewshed

TITLE:	
Turbine and VP Locations	
PROJECT:	
Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO: 1.1	
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:20000	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3

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2. SURVEY METHODOLOGY

The following ornithological surveys were carried out:

- Vantage Point Surveys (breeding and non-breeding season);
- Hinterland survey;
- Breeding Wader survey;
- Breeding bird & winter transect survey.

The avian surveys carried out at the Proposed Development adhered to Scottish Natural Heritage guidance (SNH, 2017).

2.1 Target Species

The following criteria has been utilised to select target species for the current study. SNH guidance (SNH, 2017) on the assessment of the effects of Wind Farms on ornithological interests suggests that there are four important species lists from which target species be drawn, as follows:

- Species listed on Annex 1 of the Birds Directive;
- Red-listed birds of Conservation Concern (Gilbert *et al.* 2021);
- Schedule 1 of the Wildlife and Countryside Act 1981 (not applicable in Ireland); and
- Regularly occurring migratory species.

In addition to the above, consideration was given to species identified as being of conservation concern locally/regionally or those particularly susceptible to impact from Wind Farm development. Note that not all species on the above lists are categorised as target species, e.g., most passerine species and general lowland farmland birds are not considered to be particularly susceptible to impacts from Wind Farms (SNH, 2017).

In the Irish context, it has been suggested that target species should be taken from species of conservation concern in Ireland (Gilbert *et al.*, 2021), those likely to occur in the vicinity of the proposed Wind Farm, and those most at risk from particular impacts such as disturbance and displacement (Nairn and Partridge, 2013).

'Birds of Conservation Concern in Ireland' (BoCCI) are classified into three separate lists: red, amber and green. Red-listed species are of high conservation concern, Amber-listed species are of medium conservation concern and Green-listed species are considered not to be of conservation concern (Gilbert *et al.*, 2021). Note that during part of the surveys BoCCI list No.3 (Colhoun and Cummins, 2013) was in use, but for this report, the current version (Gilbert *et al.*, 2021) is utilised.

Additionally, a review of the bird species listed on Annex 1 on the EU Birds Directive (2009/147/EC) was undertaken in assessing the conservation status of birds. Annex 1 species are often afforded additional protection through the designation of Special Protection Areas (SPAs) throughout EU countries in addition to existing National legislation.

The target species/groups for these surveys were: all raptors and owls, all wild goose, swan and duck species, all waders, all gull species., herons, Great Spotted Woodpecker and Swift.



2.2 Vantage Point Surveys

Vantage Point (VP) surveys were carried out at the Proposed Development site from October 2020 to September 2022 (inclusive) during the breeding (summer) and non-breeding (winter) seasons, in accordance with Scottish Natural Heritage (SNH) methodology for onshore Wind Farms (SNH, 2017). These surveys were divided into summer (April - September) and winter (October - March) seasons.

Two fixed VP locations overlooking the Proposed Development study area were used during VP surveys (see Figure 1-1). These were chosen to cover a specific viewshed of the proposed development site encompassing the view of all proposed turbine locations and the SNH buffer zone around the maximum possible turbine layout of the Wind Farm. SNH (2017) guidance states that viewsheds should cover a 500 m circular buffer drawn around each proposed turbine location.

The main purposes of VP survey watches are to collect data on target species that will enable estimates to be made of:

- a) The time spent flying over the defined survey area;
- b) The relative use of different parts of the defined survey area; and
- c) The proportion of flying time spent within the upper and lower height limits as determined by the rotor diameter and rotor hub height.

Table 2-1: Vantage point viewshed and turbines encompassed

Site	Vantage Point	Turbine number(s) covered in viewshed
Proposed Development site	VP1	T2, T3, T4, T5, T6
	VP2	T1, T2, T3, T4, T5, T6

VP locations were based on observations from walkover/reconnaissance surveys, viewshed analysis (using GIS) and collated information on known feeding and roosting sites from both desktop review and consultation. The number and location of vantage points was selected in order to achieve visibility of the entire study area and important features for birds in close proximity to the Proposed Development site (e.g., lakes, wetlands, woodlands).

In line with recommended best practice (SNH, 2017 and Band *et al.* 2007), viewshed analysis was undertaken using ARCMAP 10.8.1, to calculate a theoretical zone of visibility from each vantage point. Visibility is calculated from each vantage point along an invisible layer suspended at the predicted lowermost height passed through by the rotor blade tips, using an observer height of 1.5 m.



We note the following from SNH guidance in respect of priority areas for viewshed analysis (emphasis added):

*“Where the key purpose is to estimate the risk of collision with turbines, **it is the visibility of the airspace to be occupied by the turbine rotors (the collision risk volume) that is of prime importance.** Therefore, it is recommended that visibility be calculated using the least visible part of this airspace, i.e. an imaginary layer suspended at the lowermost height passed through by the rotor blade tips (typically about 20-30m above ground level). Predicting visibility at this level is a simple task using GIS, however it should be noted that the baseline should take account of any forestry or other features that will potentially obstruct the view. For example, forestry may be 10-30m high and if viewshed height is taken as 20-30m ground level the visible area could be overestimated if there is forestry within the viewshed. Being able to view all or most of the site to ground level can be helpful in gauging overall bird activity and usage of the site but is not as important as being able to view the collision risk volume”*

Following SNH guidance (2017), watches were conducted to sample diurnal and crepuscular activity of target species and aligning with the required effort from SNH.

Data recorded included flight activity of target species (flight height, duration, directionality) in addition to metrics such as flock size (per recorded transit) and time of observation relative. Detailed notes of each observation of a target bird species were recorded including behaviour, gender (where possible), numbers, flight height, associated habitat and the period of time spent within the study area. Successful foraging events were also noted if they arose. Other bird species seen or heard during the VP surveys were also recorded on a casual basis and were considered separately in the analysis as additional species. Flight activity was annotated onto field maps. Details of flight-path observations are provided in Section 3. Binoculars and telescopes are used to scan for target species. Dictaphones are utilised to dictate bird heights whilst tracking flight events.

Flight heights are estimated visually as allowed for in SNH (2017) guidance. Flight height estimation using a clinometer or rangefinder is accepted as an alternative means of determining flight height however this is often not practicable (equipment may be clumsy and birds may be lost from view whilst trying to focus additional equipment on a target species rapidly moving out of sight); it should be noted that in practice many flocks of swans do not fly close enough to a surveyor for a rangefinder to be used, resulting in most flight heights being estimated in any case. As is often the case an experienced observer will be able to record accurate observations at a higher frequency, resulting in a more robust dataset for analysis.

As previously mentioned, VP surveys were carried out at the Proposed Development site from October 2020 to September 2022 inclusive and involved carrying out 2 x 3-hour VPs at each VP every month. As per SNH guidance (2017), 36 hours of vantage point effort was carried out at each vantage point during each breeding survey period, and 36 hours during each winter survey period. In July 2021, only 5.5 hours of observations were carried out at VP2, resulting in a total survey time of 35.5 hours for VP2 during the summer 2021 season. This change in survey effort is negligible and does not materially affect the robustness of the assessment. The proportion of survey time that activity was recorded inside and outside the Proposed Development site boundary was used as part of the overall analysis and assessment of target species usage of the study area. Vantage point locations can be found in Table 2-2 below. All surveys were conducted during suitable weather conditions.



Table 2-2: Grid References for VP locations at the Proposed Development site

Site	Vantage Point	Easting, Northing (ITM)
Proposed Development site	VP 1	533330, 561973
	VP 2	534900, 563900

2.3 Hinterland Surveys

The methodology used for wetland sites during the winter hinterland surveys followed I-WeBS (Irish Wetland Bird Survey) methodology (Lewis et al, 2019), whereby each location was surveyed for the duration necessary to identify and obtain a count for all target species present. The same approach was adapted for non-wetland sites. A hinterland survey for raptors was conducted in accordance with Raptors: a field guide to survey and monitoring (Hardey et al. 2013) to assess Hen Harrier and other raptor activity over the winter and breeding periods in the greater surroundings. Surveys for Hen Harrier breeding and roosting sites and breeding raptors were also carried out within 2km of the Proposed Development, fulfilling and exceeding the requirement set out in SNH Guidance (2017). The surveys were carried out in suitable habitats for birds (woodland, wetland, etc) in the area surrounding the Proposed Development site. Hinterland surveys included potential breeding wader habitat during summer 2021 and 2022 seasons.

Hinterland surveys comprised of a total of 11 hinterland vantage points (HVPs) within 10 km of the Proposed Development site over the survey period. These sites were chosen as they had suitable habitat for target species such as raptors, geese, swans, waterbirds and waders. Surveys were carried out each month throughout the survey period starting in October 2020 and ending in September 2022. Wading birds, waterfowl and raptors were monitored using short VP watches (of between 1hr and 2hr duration). Sightings of birds were also recorded for birds seen in the Barnadivane area within the following distance bands: 2km, 5km and 10km radius of the Proposed Development site.

Table 2-3 indicates the distance of each hinterland site location within the 15 km area around the Proposed Development, as shown in Figure 2-1. The hinterland survey results are discussed in Section 1. 3.6 and full results are detailed in Appendix 3.

Table 2-3: Hinterland site location and survey schedule

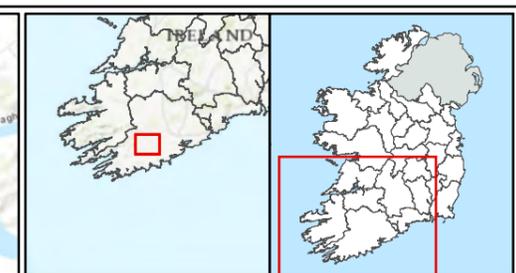
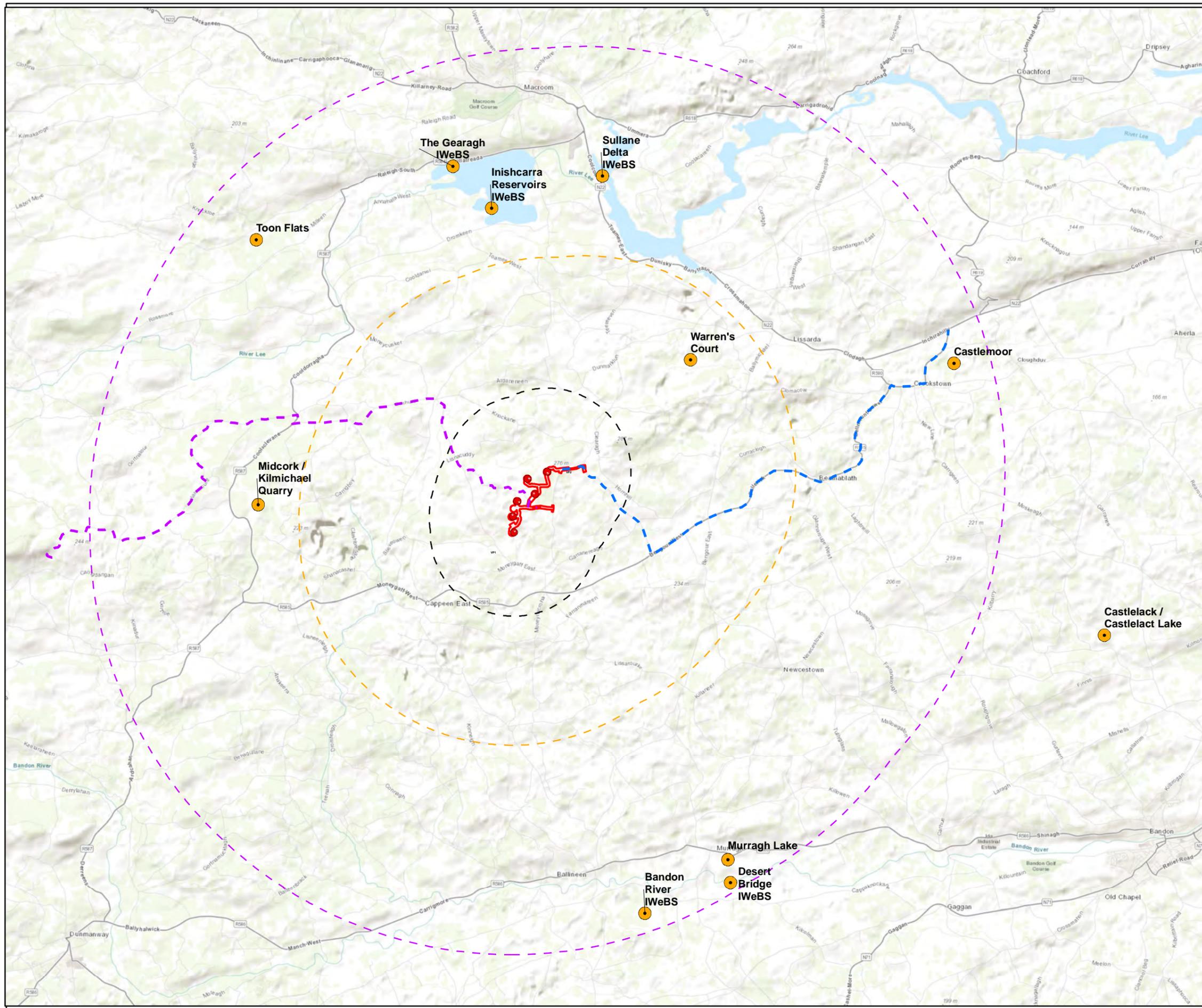
HVPs	Location	Distance from site	Dates visited		
1	Castlelack Lake	~ 13.8 km	26/01/2022		
2	Castlemoor	~ 9 km	23/11/2020 01/12/2020 14/12/2020	20/01/2021 03/02/2021 20/09/2021 16/10/2021	15/11/2021 31/12/2021 26/01/2022
3	Desert Bridge	~ 9.7 km	28/11/2020 01/12/2020 14/12/2020 20/01/2021 04/02/2021 03/03/2021	14/07/2021 03/08/2021 20/09/2021 15/11/2021 31/12/2021 26/01/2022	04/03/2022 01/04/2022 11/05/2022 01/06/2022 16/07/2022 04/08/2022



HVPs	Location	Distance from site	Dates visited		
			12/05/2021 10/06/2021	12/02/2022	12/09/2022
4	Inishcarra Reservoir	~ 6.3 km	23/11/2020 01/12/2020	20/01/2021 04/02/2021	03/03/2021
5	Kilmicheal/ Mid Cork Quarries	~ 5 km	12/05/2021 10/06/2021 14/07/2021	03/08/2021 16/10/2021 20/09/2021	11/05/2022 28/07/2022 31/08/2022
6	Murragh Lake	~ 9.3 km	28/11/2020 01/12/2020 14/12/2020 20/01/2021 04/02/2021 03/03/2021 12/05/2021 10/06/2021	14/07/2021 03/08/2021 20/09/2021 16/10/2021 15/11/2021 31/12/2021 12/02/2022 26/01/2022	04/03/2022 01/04/2022 11/05/2022 01/06/2022 16/07/2022 04/08/2022 12/09/2022
7	River Bandon SAC	~ 9.5 km	16/10/2021 15/11/2021 31/12/2021 26/01/2022	12/02/2022 04/03/2022 01/04/2022 11/05/2022	01/06/2022 16/07/2022 04/08/2022 12/09/2022
8	Sullane Delta	~ 7 km	23/11/2020 01/12/2020 14/12/2020 20/01/2021 03/02/2021 03/03/2021	15/11/2021 31/12/2021 26/01/2021 12/02/2022 04/03/2022 01/04/2022	11/05/2022 01/06/2022 16/07/2022 04/08/2022 12/09/2022
9	The Gearagh	~7.5 km	23/11/2020 01/12/2020 14/12/2020 20/01/2021 03/02/2021 03/03/2021 12/05/2021 10/06/2021	14/07/2021 03/08/2021 20/09/2021 16/10/2021 15/11/2021 31/12/2021 26/01/2021 12/02/2022	04/03/2022 01/04/2022 11/05/2022 01/06/2022 16/07/2022 04/08/2022 12/09/2022
10	Toon Flats	~ 8 km	23/11/2020 01/12/2020	14/12/2020 20/01/2021	03/02/2021 03/03/2021
11	Warren's Court	~ 3.5 km	23/11/2020 01/12/2020 16/04/2021 17/04/2021 12/05/2021	03/08/2021 20/09/2021 16/10/2021 15/11/2021 31/12/2021	04/03/2022 01/04/2022 11/05/2022 01/06/2022 16/07/2022



HVPs	Location	Distance from site	Dates visited		
			23/05/2021 10/06/2021 14/07/2021	26/01/2021 12/02/2022	04/08/2022 12/09/2022
12	Barnadivane 2km radius		12/05/2021 10/06/2021 14/07/2021 08/08/2021 20/09/2021	16/10/2021 15/11/2021 31/12/2021 12/02/2022	26/01/2022 04/03/2022 01/04/2022 11/05/2022
13	Barnadivane 5km radius		01/04/2022 11/05/2022	01/06/2022 16/07/2022	04/08/2022 12/09/2022
14	Barnadivane 10km radius		14/07/2021	03/08/2021	



Legend

- Development Planning Boundary
- Turbines 2km Buffer
- Development Planning Boundary - 5km Buffer
- Development Planning Boundary - 10km Buffer
- Turbine Delivery Route
- Alternative Grid Connection Route
- Proposed Turbine Layout
- Hinterland Sites

TITLE:	
Survey Area for Hinterland Sites	
PROJECT:	
Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO:	2.1
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:90000	REVISION: 0
DATE: 24/02/2023	PAGE SIZE: A3

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2.4 Breeding Wader Surveys

Surveys to assess the presence of the breeding wader species were conducted in between April and July in 2021 and 2022 with surveys conducted every month during this period, totalling four rounds of surveys each year. A number of methods were combined from published literature including Bibby *et al*, (2000), Gilbert *et al*, (1998), O’Brien & Wilson (2011) and SNH 2017 to estimate numbers of target species breeding within this envelope. This survey utilised transects walked through suitable habitat within 3 hours of dusk. A total of two no. ca. 1km transects were selected in the survey area. Table 2-4 indicates target wader species and associated suitable breeding habitat. Count units (see Table 2-5) were predefined for each target species and included in the method statement provided to surveyors.

Table 2-4: Target Species and Associated Suitable Breeding Habitat

Target Species	Suitable Breeding Habitat
Snipe	Wet pastures, marsh, bogs (intact and cutover) and fens
Redshank	Bog
Curlew	Bog
Common Sandpiper	Streams/rivers in bog
Woodcock	Woodland, bog woodland
Ringed Plover	Cutover bog, milled peat with exposed gravel

Table 2-5: Count Units for each Wading Species

Species	Count Unit
Lapwing	Incubating Bird
Common Snipe	Drumming or Chipping Bird
Redshank	Alarming Bird
Woodcock	Displaying Male
Ringed Plover	Presence or Absence/ Fledged Young late in season
Common Sandpiper	Presence or Absence/ Fledged young late in season
Curlew	Territorial Activity

All species encountered (seen or heard) were recorded and their abundance, behaviour, sex/age and breeding status noted. Any species occurring more than 100 m from the observer, or flying over the Proposed Development site and not using it, were recorded as ‘additional’ species to further inform the baseline survey. Table 2-6 below, details the survey dates and weather conditions.



If they occurred, observations of breeding behaviour from each visit were annotated onto maps (locations of territories or breeding attempts) in order to produce a final summary map at the end of the survey season using ARCMAP 10.8.2. Breeding wader summary sheets were also compiled at the end of the breeding season, indicating in each case the minimum number of breeding pairs/occupied territories known to occur.

Table 2-6: Breeding Waders Survey Details

Date	Transects	Cloud (Okta)	Precipitation	Visibility	Wind
11/04/21	1&2	4/8	Dry	1km	F2
15/05/21	1&2	8/8	Dry	1km	F2
10/06/21	1&2	8/8	Dry	>5km	F3
27/07/21	1&2	7/8	Dry	3-5km	F2
26/04/22	1&2	1/8	Dry	>5km	F3
09/05/22	1&2	6/8	Dry	>5km	F2
14/06/22	1&2	5/8	Dry	>5km	F1
22/07/22	1&2	6/8	Dry	>5km	F2

2.5 Breeding Bird Transect Surveys

For general breeding birds the method utilised was based on the existing British Trust for Ornithology (BTO) Breeding Bird Survey (BBS or CBS; Bibby et al, 2000). The study area for this survey comprised a total of two no. c. 1 km transects which were selected and centred on different habitats present within the subject site (see Figure 2-2). Birds were counted over two rounds in each summer season (2021 and 2022) timed to coincide with the early breeding season (April to mid-May) and the later part of the breeding season (mid-May to June).

Surveyors recorded all birds seen or heard as they walked methodically along the transect routes. Birds were noted in three distance categories, measured at right angles to the transect line (within 25 m, between 25 m-100 m and over 100 m from the transect line) and those seen in flight only. Recording birds in distance bands gives a measure of bird detectability and allows relative population densities to be estimated if required (BTO, 2023).

The breeding bird transect schedule is available in Table 2-7. Detailed results of the breeding bird transect surveys can be viewed in Table 3-2 below.

Table 2-7: Breeding Bird Transect Survey Details

Date	Transect	Time	Weather Conditions
11/04/2021	1	19:50 – 20:23	Cloud: 4/8 oktas; rain: none; wind: W F2; visibility: 1km
	2	20:42 - 21:18	Cloud: 4/8 oktas; rain: none; wind: W F2; visibility: >5km
10/06/2021	1	08:31 - 09:01	Cloud: 8/8 oktas; rain: none; wind: SW F3; visibility: 3-5km



Date	Transect	Time	Weather Conditions
	2	07:50 – 08:16	Cloud: 8/8 oktas; rain: none; wind: SW F3; visibility: 3-5km
24/04/2022	1	14:16 - 14:44	Cloud: 8/8 oktas; rain: none; wind: NE F3; visibility: >5km
	2	15:55 - 15:46	Cloud: 8/8 oktas; rain: none; wind: NE F3; visibility: >5km
11/06/2022	1	08:00 - 08:29	Cloud: 8/8 oktas; rain: none; wind: SW F4; visibility: >5km
	2	07:18 - 07:44	Cloud: 8/8 oktas; rain: none; wind: SW F4; visibility: >5km

2.6 Winter Bird Transect Surveys

Over the winter seasons 2020/2021 and 2021/2022, general bird transect surveys were carried out at the same two transects as the breeding bird surveys in three rounds per season (one visit to each transect per round).

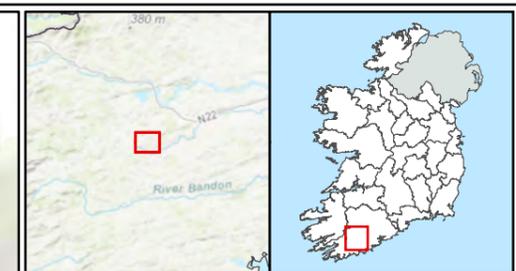
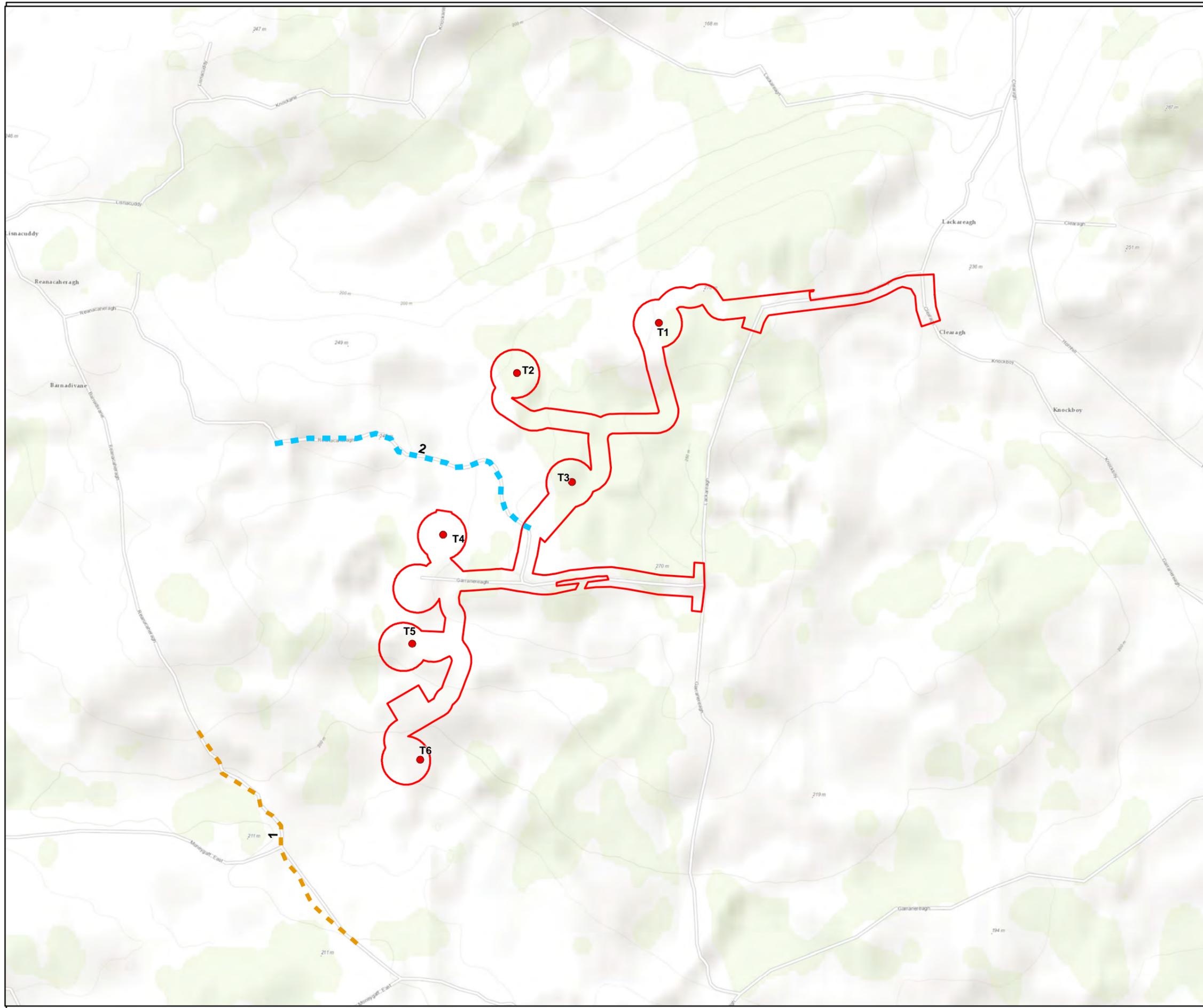
Surveyors recorded all birds seen or heard as they walked methodically along the transect routes. Birds were noted in three distance categories, measured at right angles to the transect line (within 25 m, between 25 m-100 m and over 100 m from the transect line) and those seen in flight only. Recording birds in distance bands gives a measure of bird detectability and allows relative population densities to be estimated if required (BTO, 2023). The winter transect survey details are available in Table 2-8 below. The results are presented in Table 3-3 and Table 3-4.

Table 2-8: Bird transect survey details - Winter Season

Date	Transect	Time	Weather Conditions
01/12/2020	1	11:15 - 12:20	Cloud: 4/8 oktas; rain: none; wind: N F2 visibility: 3-5km
	2	12:55 - 14:07	Cloud: 4/8 oktas; rain: none; wind: N F2; visibility: 3-5km
11/12/20	1	09:07 - 09:45	Cloud: 6/8 oktas; rain: none; wind: NW F1; visibility: 3-5km
21/12/20	2	10:18 - 11:00	Cloud: 8/8 oktas; rain: mist; wind: SW F3; visibility: 2km
04/02/2021	1	12:55 - 14:05	Cloud: 7/8 oktas; rain: none; wind: F2; visibility: 3-5km
	2	11:20 - 12:35	Cloud: 8/8 oktas; rain: none; wind: F3; visibility: 2km
10/11/2021	1	08:38 - 09:10	Cloud: 6/8 oktas; rain: none; wind: NE F2; visibility: >5km
02/11/2021	2	15:30 - 16:05	Cloud: 6/8 oktas; rain: none; wind: NW F4; visibility: >5km



Date	Transect	Time	Weather Conditions
19/01/2022	1	11:54 - 12:17	Cloud: 7/8 oktas; rain: none; wind: NW F4; visibility: >5km
12/01/2022	2	15:55 - 16:42	Cloud: 1/8 oktas; rain: none; wind: NW F1; visibility: >5km
02/03/2022	1	17:58 - 18:32	Cloud: 8/8 oktas; rain: none; wind: S F2-3; visibility: >3-5km
21/03/2022	2	17:24 - 18:08	Cloud: 8/8 oktas; rain: none; wind: SE F1-2; visibility: 3-5km



- Legend**
- Development Planning Boundary
 - Proposed Turbine Layout
- Bird Survey Transects**
- 1
 - 2

TITLE:	Transects - Breeding Birds - Breeding Waders - Winter	
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO:	2-2	
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE:	1:12500	REVISION: 0
DATE:	23/02/2023	PAGE SIZE: A3





3. RESULTS

3.1 Avian usage of the Study Area- Vantage Point

Two timed watches of three hours duration (six hours in total per month) were carried out at both VPs every month from October 2020 to September 2022 inclusive. In July 2021 at VP2, half an hour of survey time less was conducted. This survey effort totals 144 hours of observation time at VP1 and 143.5 hours of observation time at VP2 over the survey period (see Appendix 1 for results and survey conditions). Bird activity was recorded from the VPs every month. In total there were 247 flights and two records of perched birds involving 13 target species recorded during the survey period.

A total of 60 bird species were recorded during VP surveys (see Table 3-1: Status of Species Observed during VP surveys Table 3-1). Of these species, three are protected under Annex 1 of the EU Birds Directive: Golden Plover, Hen Harrier and Peregrine. A total of nine are Red-listed under BoCCI No.4 (Gilbert et al., 2021); Golden Plover, Grey Wagtail, Kestrel, Meadow Pipit, Redwing, Snipe, Stock Dove, Swift and Yellowhammer. There were totals of 14 Amber-listed and 37 green listed species.

3.1.1 Winter (October 2020 to March 2021)

During this winter season, there were 43 individual flight lines of seven target species recorded. The number of observed flight lines per species was: Buzzard - 29; Golden Plover - 3; Kestrel - 1; Mallard - 1; Peregrine - 5; Snipe - 1; Sparrowhawk - 3. Buzzard was the most commonly observed target species during the winter season 2020/21 at the Proposed Development site. Golden Plover and Peregrine were the only bird species recorded during this period which are protected under the Annex 1 of the EU Birds Directive. A total of seven Red-listed species were noted during this winter season: Golden Plover, Grey Wagtail, Kestrel, Meadow Pipit, Redwing, Snipe and Yellowhammer. A further five Amber-listed species were recorded: Goldcrest, Greenfinch, Linnets, Mallard and Starling. The remaining 32 species noted throughout the winter 2020/21 season were Green-listed.

3.1.2 Summer (April to September 2021)

During this summer season, there were 68 individual flight lines of eight target species recorded. The number of observed flight lines per species was: Buzzard - 20; Golden Plover - 1; Grey Heron - 1; Herring Gull - 1; Kestrel - 18; Lesser Black-backed Gull - 21; Peregrine - 1; Sparrowhawk - 5. Lesser Black-backed Gull was the most frequently observed species, followed by Buzzard. Golden Plover and Peregrine were again the only Annex 1 species recorded. A total of five Red-listed species were noted during this summer season: Golden Plover, Kestrel, Meadow Pipit, Stock Dove and Swift. A further nine Amber-listed species were recorded: Goldcrest, Greenfinch, Herring Gull, House Martin, Lesser Black-backed Gull, Linnets, Starling, Swallow and Willow Warbler. The remaining 29 species noted throughout the summer 2021 season were Green-listed.

3.1.3 Winter (October 2021 to March 2022)

During this winter season, there were 41 individual flight lines of ten target species recorded. The number of observed flight lines per species was: Buzzard - 16; Golden Plover - 1; Grey Heron - 1; Hen Harrier - 2; Kestrel - 4; Lesser Black-backed Gull - 2; Mallard - 1; Peregrine - 2; Snipe - 6; Sparrowhawk - 6. Buzzard was again the most commonly observed target species during the winter season 2021/22 at the Proposed Development site. Bird species protected under the Annex 1 of the EU Birds Directive recorded during this period were Golden Plover, Hen Harrier and Peregrine. A total of six Red-listed species were noted during this winter season: Golden Plover, Grey Wagtail, Kestrel, Meadow Pipit, Redwing and Snipe. A further nine Amber-listed species were recorded: Goldcrest, Hen Harrier, Lesser Black-backed Gull, Linnets, Mallard, Ringed Plover, Skylark, Starling and Swallow. The remaining 30 species noted throughout the winter 2021/22 season were Green-listed.



3.1.4 Summer (April to September 2022)

During this summer season, there were 99 individual flight lines of eight target species recorded as well as one flightline each for Great Spotted Woodpecker and for Swift. The number of observed flight lines per species was: Buzzard - 28; Great Spotted Woodpecker - 1; Herring Gull - 4; Kestrel - 15; Lesser Black-backed Gull - 42; Mallard - 2; Peregrine - 1; Snipe - 1; Sparrowhawk - 4 and Swift - 1. Lesser Black-backed Gull was again the most frequently observed species during the summer season followed by Buzzard and Kestrel. During this season Peregrine was the only species observed which is protected under the Annex 1 of the EU Birds Directive. A total of four Red-listed species were noted during this summer season: Kestrel, Meadow Pipit, Snipe and Swift. A further 11 Amber-listed species were recorded: Goldcrest, Herring Gull, House Martin, Lesser Black-backed Gull, Linnets, Mallard, Skylark, Starling, Swallow, Wheatear and Willow Warbler. The remaining 30 species noted throughout the summer 2022 season were Green-listed.

3.2 Target Species Observations

3.2.1 Buzzard

3.2.1.1 *Winter 2020/2021*

There were 29 observations (of which 27 were birds in flight) of this Green-listed raptor species throughout the winter VP surveys in 2020/21. The presence of this species was recorded at both VPs, across the months of November 2020, January and March 2021. These were predominantly observations of individuals (14 observations) and of two birds flying together (11 observations), while three observations were of three birds flying together. On the 15th of March 2021, five Buzzards were observed flying together and calling for 152 seconds at heights between 100-150m. The longest observed flights were both recorded on the 7th of March 2021. One was of two birds flying together 779 seconds at heights above 20m, reaching heights of over 150m. The other observation was of two Buzzards flying in the same height range for 899 seconds. Most flight lines (21 flight lines) included time spent at heights greater than 20m. A total of eight flight lines were entirely below heights of 20m. A total of 20 flight lines were within or intersecting the SNH buffer. Two observations were of perched birds.

3.2.1.2 *Winter 2021/2022*

There were 16 observations of Buzzards throughout the winter VP surveys 2021/22. The presence of this species was recorded from both VPs and most records were of individuals (13 observations). Two Buzzards were mobbed by crows within the 30-100m height bands; this was observed for 230 seconds. A further event of mobbing by corvids was observed on the 15th of March 2022. A pair was observed in display and territorial flights for 1,680 seconds at heights between 20-185m. Three Buzzards were seen flying together at heights between 30-100m for 75 seconds on the 12th of March 2022. Hunting behaviour was noted once; this occurred on the 2nd of November 2021. All but one flight line included heights above 30m. One flight line was exclusively at heights up to 10m. A total of 12 flight lines were within or intersecting the SNH buffer.

3.2.1.3 *Summer 2021*

This Green-listed species was noted 20 times during the summer season of 2021. It was observed every month, from both VPs, with the exception of September. Most observations were of individuals (18 observations). Two birds were seen flying together for 360 seconds within the 50-100m height band on the 9th of April 2021. On the 11th of May 2021, two Buzzards were observed flying together for 180 seconds at heights between 30-50m. Of the observed flights, 18 flight lines included heights above 30m. Only two flight lines were exclusively low at heights up to 10m. A total of 19 flight lines were within or intersecting the SNH buffer.



3.2.1.4 *Summer 2022*

Buzzard was noted 27 times during the summer 2022 season. Observations were made from both VPs and across all summer months. Most observations (26 observations) were of individual birds. One observation of two birds flying over together at heights between 50-100m was recorded on the 26th of May 2022. Hunting behaviour was noted on ten occasions. Additionally, a Buzzard was seen carrying prey on the 7th of June 2022. An instance of a Buzzard being mobbed by Corvids was noted on the 22nd of April 2022; the birds involved were flying at heights between 30-50m and were observed for 45 seconds. Of the flight lines observed, 25 included flight time at heights above 30m, and three included flight time at heights between 20-30m. A total of 22 flight lines were within or intersecting the SNH buffer.

3.2.2 Golden Plover

3.2.2.1 *Winter 2020/2021*

During this winter season, Golden Plover was noted three times, with all observations being from VP2. One observation was of a flock of 60 Plovers flying at heights between 0-50m on the 2nd of February 2021. The other two observations were from the 15th of March 2021. One observation was of just one Golden Plover. The second observation on this date was of 100 Golden Plovers flying at heights between 100 -150m. Only one observed flight line was within/intersecting the SNH buffer. A flock of 80 Golden Plovers was additionally recorded landing in a field, descending from heights of 120m; this observation was made on the way to VP2 before the VP watch on the 15th of March 2021.

3.2.2.2 *Winter 2021/2022*

In this season, one observation of Golden Plover was made from VP2 on December 21st, 2021. A total of six Plovers were observed flying at heights between 30-100m. This flight line was within/intersecting the SNH buffer.

3.2.2.3 *Summer 2021*

During the summer of 2021, one observation of Golden Plover was made from VP2. On the 9th of April 2021, a total of 60 Plovers were seen flying at heights between 100-185m for 300 seconds. This flight line was within/intersecting the SNH buffer.

3.2.2.4 *Summer 2022*

There were no observations of this Red-listed Annex 1 species during the summer season of 2022.

3.2.3 Great Spotted Woodpecker

3.2.3.1 *Winter 2020/2021*

There were no observations of this Green-listed Woodpecker species during the winter season of 2020/2021.

3.2.3.2 *Winter 2021/2022*

There were no observations of this Green-listed Woodpecker species during the winter season of 2021/2022.



3.2.3.3 *Summer 2021*

There were no observations of this Red-listed Annex 1 species during the summer season of 2021.

3.2.3.4 *Summer 2022*

During the summer of 2021, one observation of Great Spotted Woodpecker was made. This occurred on the 12th of August 2022, as an individual was seen flying at heights between 20-50m from VP2. This flight line was within/intersecting the SNH buffer.

3.2.4 Grey Heron

3.2.4.1 *Winter 2020/2021*

There was one observation of Green-listed Grey Heron during the winter of 2020/2021. This bird seen from VP1 on the 11th of December 2020 was not observed in flight.

3.2.4.2 *Winter 2021/2022*

On the 15th of December 2021, a single Grey Heron was observed from VP1. The Heron was seen flying at heights below 10m. This flight line was within/intersecting the SNH buffer.

3.2.4.3 *Summer 2021*

There was one observation of Grey Heron on the 2nd of August 2021 from VP1. On this occasion a Heron was seen flying at heights between 10-20m. This flight line was within/intersecting the SNH buffer.

3.2.4.4 *Summer 2022*

There were no observations of Grey Heron during the summer season of 2022.

3.2.5 Hen Harrier

3.2.5.1 *Winter 2020/2021*

There were no Hen Harrier observations recorded during the winter season 2020/21.

3.2.5.2 *Winter 2021/2022*

There were two Hen Harrier observations recorded during the winter season 2021/22, both from VP2. The first observation was on the 2nd of November 2021, when a male Hen Harrier was seen commuting at heights between 20-100m for 360 seconds. The second observation was from the 21st of December 2021, when a ringtail was seen flying at heights between 20-50m for 86 seconds. These flight lines were within/intersecting the SNH buffer.

3.2.5.3 *Summer 2021*

There were no Hen Harrier observations recorded during the summer season 2021.



3.2.5.4 *Summer 2022*

There were no Hen Harrier observations recorded during the summer season 2022.

3.2.6 Herring Gull

3.2.6.1 *Winter 2020/2021*

There were no Herring Gull observations recorded during the winter season 2020/21.

3.2.6.2 *Winter 2021/2022*

There were no Herring Gull observations recorded during the winter season 2021/22.

3.2.6.3 *Summer 2021*

There was one observation of Herring Gull during the summer 2021 season from VP1. On this occasion one Herring Gull was seen flying at heights between 20-30m for 20 seconds. This flight line did not intersect the SNH buffer.

3.2.6.4 *Summer 2022*

There were three observations of Herring Gull over the summer 2022 season. One observation was made on the 27th of April 2022 when one Gull was seen flying at heights between 0-50m. The other two observations were made in June 2022. Both of these observations were of two Gulls flying together; one flight line was between 30-100m, and one was at heights between 20-50m. Only one observed flight line (27th April described above) was within/intersecting the SNH buffer.

3.2.7 Kestrel

3.2.7.1 *Winter 2020/2021*

There was just one observation of Kestrel during the winter season of 2020/21 (2nd of November 2020). This observation was from VP1 and was of an individual flying from a perch at heights up to 10m. This flight line was within/intersecting the SNH buffer.

3.2.7.2 *Winter 2021/2022*

This Red-listed raptor species was observed four times throughout the winter season of 2020/21 and all observations were of individual Kestrels. The first observation was on the 2nd of November 2021 from VP2, when a Kestrel was seen hunting at heights between 20-50m. On the 10th of November 2021 a male Kestrel was seen from VP1, hunting within the 20-50m height bands. Another Kestrel was observed from VP1 on 15th November 2021, flying low over grassland at heights not exceeding 10m. The final observation of the season was on the 12th of March 2022 of a male Kestrel hunting at heights between 20-30m. Only one observed flight was within/intersecting the SNH buffer.



3.2.7.3 *Summer 2021*

Kestrel was observed 18 times throughout the summer 2021 season, with observations made from both VPs. Most observations were of individual Kestrels, with just two observations of two Kestrels flying together. On the 2nd of July 2021 a Kestrel was observed hunting for 120 seconds at heights up to 50m, and was observed catching prey and eating it. Males were identified on three occasions. Hunting behaviour was noted on 13 occasions. The majority of flight lines (17 flight lines) included flight time at heights greater than 30m. Just one flight was restricted to heights below 30m. A total of 16 flight lines were within or intersecting the SNH buffer.

3.2.7.4 *Summer 2022*

This raptor species was observed 15 times throughout the summer of 2022. Observations were made from both VPs. All observations were of individual Kestrels. Males were identified on two occasions and a female was identified on one occasion. Hunting behaviour was observed ten times. On the 8th of June 2022, a Kestrel was seen carrying prey. On the 13th of July 2022, a Kestrel was seen landing on a pole but was not seen leaving. Eight flight lines included time at heights above 30m and just one flight line was entirely below 20m. The longest duration a Kestrel was observed during this season was on the 5th of April 2022 when a Kestrel was observed hunting for 240 seconds. A total of 12 flight lines were within or intersecting the SNH buffer.

3.2.8 Lesser Black-backed Gull

3.2.8.1 *Winter 2020/2021*

There were no Lesser Black-backed Gull observations recorded during the winter season 2020/21.

3.2.8.2 *Winter 2021/2022*

There were two observations of this Amber-listed Gull species in October 2021. On the 8th of October, four Gulls were seen from VP1, flying at heights between 20-50m. On the 17th of October 2021 a flock of 70 Gulls was seen flying at heights between 20-50m. Both flight lines were within or intersecting the SNH buffer.

3.2.8.3 *Summer 2021*

There were 21 observations of Lesser Black-backed Gull throughout all months of the summer 2021 season and from both VPs. On the 9th of April 2021, ten Gulls were seen from VP1 flying at heights between 0-100m. They landed in a field with 63 other Gulls. On the same day a further four Gulls landed in the field, descending from heights of 50m. On the 9th of May 2021 a flock of 27 Gulls were seen from VP1, flying at heights between 30-100m. On the 11th of May 2021, 31 Gulls were seen from VP2 flying at heights between 30-100m. On the 16th of June a flock of 60 Gulls was seen flying at heights of 100-185m for 240 seconds; this observation was made from VP1. All other observations were of individuals and groups up to five Gulls. A total of 17 flight lines were within or intersecting the SNH buffer.



3.2.8.4 *Summer 2022*

This Amber-listed Gull species was recorded 43 times throughout all months of summer of 2022 except for July. A total of 42 flight lines were recorded. For one observation (24th of May 2022), no flight was observed. The largest flock (61 Gulls) was observed for 60 seconds on the 26th of May 2022 from VP1, flying at heights between 50-100m. On the same day a flock of 29 Gulls was seen flying over at heights between 50-100m. The second largest flock of 47 Gulls was observed from VP1 for 40 seconds, flying over the Proposed Development site at heights between 30-50m. Other observations were of individuals, small groups and flocks up to 26 individuals. The majority of flight lines (34 flight lines) included time within the 30-185m height bands. A further six flight lines included observation time within the 20-30m height band. A total of 33 flight lines were within or intersecting the SNH buffer.

3.2.9 Mallard

3.2.9.1 *Winter 2020/2021*

There was one observation of Mallard in this winter season on the 7th of March 2021 from VP1. On this occasion two birds, a male and a female, were seen at heights below 20m. This flight line was within the SNH buffer.

3.2.9.2 *Winter 2021/2022*

There was one sighting of Mallard during this winter season on the 12th of March 2022 from VP1. On this occasion a pair was seen flying at heights between 30-50m. This flight line did not intersect the SNH buffer.

3.2.9.3 *Summer 2021*

There were no observations of Mallard during the summer season 2021.

3.2.9.4 *Summer 2022*

There were two observations of Mallard during this summer season, both recorded from VP1. The first was on the 6th of April 2022, when two Mallards were seen flying below 10m. On the 17th of May 2022, three Mallards were seen flying at heights between 30-100m. One of these flight lines intersected the SNH buffer. The other was outside the buffer.

3.2.10 Peregrine

3.2.10.1 *Winter 2020/2021*

Throughout this winter season, this Green-listed raptor species was observed on five occasions. These flights all were viewed from VP2 and involved individual Peregrines. Four observations were from the 14th of January 2021. Two of these were Peregrines flying below 20m, and two were Peregrines flying at heights between 20-50m. The fifth observation was made on the 15th of March 2021 and was of a Peregrine flying at heights between 20-50m. All these flight lines were within/intersecting the SNH buffer.



3.2.10.2 *Winter 2021/2022*

Throughout this winter season, this raptor species was observed on two occasions. These flights were all viewed from VP2 and involved individual Peregrines. The first observation was from the 19th of January 2022, involving a Peregrine flying at heights between 50-185m. The second observation was from the 16th of February 2022, when a male Peregrine was recorded flying at heights between 20-100m. Both flight lines were within/intersecting the SNH buffer.

3.2.10.3 *Summer 2021*

During the summer season of 2021, there was one observation of Green-listed Peregrine made from VP2 on the 1st of August 2021. A juvenile was seen flying at heights between 20-30m. This flight line was within/intersecting the SNH buffer.

3.2.10.4 *Summer 2022*

During the summer season of 2022, one observation of Peregrine was recorded. This observation was made from VP2 on the 8th of June 2022 and involved a female flying at heights between 10-20m. This flight line was within/intersecting the SNH buffer.

3.2.11 Snipe

3.2.11.1 *Winter 2020/2021*

This Red-listed wader species was observed once from VP1 on the 9th of November 2020. On this occasion eight Snipe were seen flying below 10m. This flight line did not intersect the SNH buffer.

3.2.11.2 *Winter 2021/2022*

Throughout this winter season, Snipe was observed on six occasions. On the 8th of October 2021 a flock of 23 Snipe were seen from VP1, flying at heights between 30-100m. On the 12th of March 2022 three Snipe were observed from VP1, flying at heights between 0-100m. The remaining four observations were of individual Snipe: one flying below 10m, one flying at heights between 20-30m, one flying at heights between 0-100m, and one flying at heights between 0-185m. A total of four flight lines were within/intersecting the SNH buffer.

3.2.11.3 *Summer 2021*

There were no observations of Snipe during the summer season 2021.

3.2.11.4 *Summer 2022*

During the summer season 2022, there was one observation of Snipe recorded from VP2 on the 25th of September 2022. One Snipe was seen flying over at heights between 30-100m. This flight line did not intersect the SNH buffer.



3.2.12 Sparrowhawk

3.2.12.1 *Winter 2020/2021*

Sparrowhawk was observed three times during the winter season 2020/21, with all observations being from VP2 and of individual birds. On the 21st of December 2020 a Sparrowhawk was seen flying below 10m, mobbing a female Peregrine. On the 14th of January 2021, Sparrowhawk was observed twice, flying below 10m on both occasions. A total of two flight lines were within/intersecting the SNH buffer.

3.2.12.2 *Winter 2021/2022*

Sparrowhawk was observed on six occasions throughout the winter season 2020/21 from both VPs. All observations were of individual birds. Of these observations, four were of birds flying below 10m. One flight was at heights between 20-30m. On the 19th of January, a Sparrowhawk was observed in flight for 300 seconds at heights between 50-185m. Three of the observations were of Sparrowhawks hunting. A total of five flight lines were within/intersecting the SNH buffer.

3.2.12.3 *Summer 2021*

This Green-listed species was observed five times throughout the summer of 2021 from both VPs. These observations were all of individual birds. On the 16th of June 2021, a female was seen flying with prey at heights between 10-20m. On the 2nd of July 2021, a Sparrowhawk was seen flying with prey at heights between 30-50m. On the 1st of August, a Sparrowhawk was seen interacting with a Peregrine at heights between 20-30m. Two flights were recorded in April 2021 and on both occasions flight paths included heights between 50-100m. All these flight lines were within/intersecting the SNH buffer.

3.2.12.4 *Summer 2022*

This Green-listed species was observed four times throughout the summer of 2022, from VP1 only. On the 17th of May 2022, two Sparrowhawks were seen flying over together at heights up to 50m. On the 13th of July 2022 a male was seen hunting at heights between 0-10m. On the 18th of August 2022, a female was observed being mobbed by Swallows at heights between 30-185m. On the 28th of September 2022, a Sparrowhawk was flying over at heights between 50-185m. A total of three flight lines were within/intersecting the SNH buffer.

3.2.13 Swift

3.2.13.1 *Winter 2020/2021*

There were no observations of Swift during the winter season 2020/21.

3.2.13.2 *Winter 2021/2022*

There were no observations of Swift during the winter season 2021/22.

3.2.13.3 *Summer 2021*

This species was noted as being present on the 17th of June 2021. No flight data was recorded on this occasion.



3.2.13.4 Summer 2022

During this summer season, there was one observation of this Red-listed species from VP2. On the 23rd of May 2022, four Swifts were seen flying at heights between 20-100m for 110 seconds. This flight line was within/intersecting the SNH buffer.

Table 3-1: Status of Species Observed during VP surveys

Common Name	Scientific Name	*BoCCI Status	**Annex 1 Status
Blackbird	<i>Turdus merula</i>	Green	No
Blackcap	<i>Sylvia atricapilla</i>	Green	No
Blue Tit	<i>Cyanistes caeruleus</i>	Green	No
Bullfinch	<i>Pyrrhula pyrrhula</i>	Green	No
Buzzard	<i>Buteo buteo</i>	Green	No
Chaffinch	<i>Fringilla coelebs</i>	Green	No
Chiffchaff	<i>Phylloscopus collybita</i>	Green	No
Crossbill	<i>Loxia curvirostra</i>	Green	No
Coal Tit	<i>Periparus ater</i>	Green	No
Dunnock	<i>Prunella modularis</i>	Green	No
Feral Pigeon	<i>Columba livia</i>	Green	No
Fieldfare	<i>Turdus pilaris</i>	Green	No
Goldcrest	<i>Regulus regulus</i>	Amber	No
Golden Plover	<i>Pluvialis apricaria</i>	Red	Yes
Goldfinch	<i>Carduelis carduelis</i>	Green	No
Great Spotted Woodpecker	<i>Dendrocopos major</i>	Green	No
Great Tit	<i>Parus major</i>	Green	No
Greenfinch	<i>Chloris chloris</i>	Amber	No
Grey Heron	<i>Columba livia</i>	Green	No
Grey Wagtail	<i>Motacilla cinerea</i>	Red	No
Hen Harrier	<i>Circus cyaneus</i>	Amber	Yes
Herring Gull	<i>Larus argentatus</i>	Amber	No
Hooded Crow	<i>Corvus cornix</i>	Green	No



Common Name	Scientific Name	*BoCCI Status	**Annex 1 Status
House Martin	<i>Delichon urbicum</i>	Amber	No
Jackdaw	<i>Coloeus monedula</i>	Green	No
Jay	<i>Garrulus glandarius</i>	Green	No
Kestrel	<i>Falco tinnunculus</i>	Red	No
Lesser Black-backed Gull	<i>Larus fuscus</i>	Amber	No
Lesser Redpoll	<i>Carduelis cabaret</i>	Green	No
Linnet	<i>Linaria cannabina</i>	Amber	No
Long-tailed Tit	<i>Aegithalus caudatus</i>	Green	No
Magpie	<i>Pica pica</i>	Green	No
Mallard	<i>Anas platyrhynchos</i>	Amber	No
Meadow Pipit	<i>Anthus pratensis</i>	Red	No
Mistle Thrush	<i>Turdus viscivorus</i>	Green	No
Peregrine	<i>Falco peregrinus</i>	Green	Yes
Pheasant	<i>Phasianus colchicus</i>	Green	No
Pied Wagtail	<i>Motacilla alba</i>	Green	No
Raven	<i>Corvus corax</i>	Green	No
Redwing	<i>Turdus iliacus</i>	Red	No
Reed Bunting	<i>Emberiza schoeniclus</i>	Green	No
Ringed Plover	<i>Charadrius hiaticula</i>	Amber	No
Robin	<i>Erithacus rubecula</i>	Green	No
Rook	<i>Corvus frugilegus</i>	Green	No
Siskin	<i>Carduelis spinus</i>	Green	No
Skylark	<i>Alauda arvensis</i>	Amber	No
Snipe	<i>Gallinago gallinago</i>	Red	No
Song thrush	<i>Turdus philomelos</i>	Green	No
Sparrowhawk	<i>Accipiter nisus</i>	Green	No
Starling	<i>Sturnus vulgaris</i>	Amber	No



Common Name	Scientific Name	*BoCCI Status	**Annex 1 Status
Stock Dove	<i>Columba oenas</i>	Red	No
Stonechat	<i>Saxicola torquatus</i>	Green	No
Swallow	<i>Hirundo rustica</i>	Amber	No
Swift	<i>Apus apus</i>	Red	No
Treecreeper	<i>Certhia familiaris</i>	Green	No
Wheatear	<i>Oenanthe oenanthe</i>	Amber	No
Willow Warbler	<i>Phylloscopus trochilus</i>	Amber	No
Woodpigeon	<i>Columba palumbus</i>	Green	No
Wren	<i>Troglodytes troglodytes</i>	Green	No
Yellowhammer	<i>Emberiza citrinella</i>	Red	No

* refers to the conservation status of the species according to Birds of Conservation Concern in Ireland

**refers to species listed on Annex 1 of the EU Birds Directive

3.3 Breeding Wader Surveys

A total of two wader records resulted from the eight wader surveys carried out at the Proposed Development site across the breeding seasons of 2021 and 2022. These records were both from the 11th of April 2021. At 20:20 from TR1 one Snipe was heard calling while flying over farmland; it was not seen. At 20:50 from TR2 another Snipe was heard calling while flying over heath bog; it was not seen. These records are not indicative of breeding Snipe (observations of chipping or drumming birds are required to confirm breeding). As such, no confirmed breeding wader activity or occupied territories were recorded at the Proposed Development site.

3.4 Breeding Bird Transects

A total of 34 species were recorded along both transects across the breeding seasons of 2021 and 2022. Among these were three Red-listed species: Meadow Pipit, Grey Wagtail and Kestrel. A single Grey Wagtail was noted in April 2022 within 25m of TR1. Meadow Pipit was noted across the early and late breeding seasons in both 2021 and 2022 and across both transects.

There were six Amber-listed species recorded during the breeding bird transect surveys: Goldcrest, Lesser Black-backed Gull, Linnets, Starling, Swallow and Willow Warbler. The remaining 25 species recorded during the summer seasons were Green-listed.

Target species recorded during breeding bird surveys were Kestrel, Buzzard and Lesser Black-backed Gull. There was one record of a Kestrel flyover from the 11th of April 2021. Buzzard also had a recorded flyover on the 24th of April 2022. Lesser Black-backed Gull flyovers were noted on two separate dates, the 24th of April and the 11th of June 2022, on both dates they were seen from both transects. On the 24th of April a large flock of 150 Lesser Black-backed Gulls was seen flying over from Transect 1.

For detailed results of the breeding bird transect surveys, see Table 3-2 below.



Table 3-2: Breeding Bird Transect Results

Common Name	Scientific Name	T1			T2			T1			T2										
		April 2021			June 2021			April 2021			June 2021										
		0-25m	25-100m	100+/FO	0-25m	25-100m	100+/FO	0-25m	25-100m	100+/FO	0-25m	25-100m	100+/FO								
Blackbird	<i>Turdus merula</i>	0	4	0	1	2	0	1	1	2	0	2	0	2	0	0	0	1	1	0	1
Blackcap	<i>Sylvia atricapilla</i>	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blue Tit	<i>Cyanistes caeruleus</i>	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Buzzard	<i>Buteo buteo</i>	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Chaffinch	<i>Fringilla coelebs</i>	2	0	0	2	1	0	0	0	2	0	1	1	0	1	0	0	0	0	1	0
Coal Tit	<i>Parus ater</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dunnock	<i>Prunella modularis</i>	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
Goldcrest	<i>Regulus regulus</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goldfinch	<i>Carduelis carduelis</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0
Great Tit	<i>Parus major</i>	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
Grey Wagtail	<i>Motacilla cinerea</i>	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Hooded Crow	<i>Corvus cornix</i>	1	0	0	0	0	2	0	1	2	0	0	0	0	0	6	0	0	1	0	2
Jackdaw	<i>Corvus monedula</i>	0	0	3	0	0	2	0	4	0	6	12	0	0	0	0	0	0	0	3	0
Kestrel	<i>Falco tinnunculus</i>	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lesser Black-backed Gull	<i>Larus fuscus</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	150	0	0	0	1	4	0
Lesser Redpoll	<i>Carduelis cabaret</i>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Linnet	<i>Linaria cannabina</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0



3.5 Winter Bird Transect Survey

A total of 30 species were recorded along the two transects across the winter seasons of 2020/21 and 2021/22. The Red-listed species, Meadow Pipit was noted in each round throughout both winter seasons. Red-listed Redwing was noted throughout both winter seasons. It was recorded each round during the winter of 2020/21, while it was only noted three times across the first two rounds of the winter season of 2021/22. Red-listed Grey Wagtail was only noted once, on the 12th of January 2022.

A total of four Amber-listed species were observed: Goldcrest, Greenfinch, House Sparrow and Starling. The remaining 23 species were Green-listed.

The only record of a target species across both winter seasons was a Buzzard flyover on the 2nd of November 2021.

Detailed results of the winter bird surveys are shown in Table 3-3 and Table 3-4.



Common Name	Scientific Name	T1						T2													
		December 1		December 2		February		December 1		December 2		February									
		0-25m	25-100m	100+FO	0-25m	25-100m	100+FO	0-25m	25-100m	100+FO	0-25m	25-100m	100+FO								
Wren	<i>Troglodytes troglodytes</i>	0	0	0	1	0	0	4	4	0	0	3	0	0	0	3	1	0	5	3	1

Table 3-4: Winter Bird Transect Results 2021/2022

Common Name	Scientific Name	T1						T2														
		November		January		March		November		January		March										
		0-25m	25-100m	100+FO	0-25m	25-100m	100+FO	0-25m	25-100m	100+FO	0-25m	25-100m	100+FO									
Blackbird	<i>Turdus merula</i>	1	2	1	1	3	0	0	0	0	0	2	1	5	0	0	0	0	0	0	0	0
Bullfinch	<i>Pyrrhula pyrrhula</i>	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blue Tit	<i>Cyanistes caeruleus</i>	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buzzard	<i>Buteo buteo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Chaffinch	<i>Fringilla coelebs</i>	9	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Coal Tit	<i>Periparus ater</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Duncock	<i>Prunella modularis</i>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fieldfare	<i>Turdus pilaris</i>	0	0	0	60	0	1	0	0	0	0	40	0	0	0	2	0	0	0	0	0	0
Goldcrest	<i>Regulus regulus</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grey Wagtail	<i>Motacilla cinerea</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Great Tit	<i>Parus major</i>	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hooded Crow	<i>Corvus cornix</i>	1	0	1	3	0	1	0	5	1	3	1	0	0	1	1	0	1	1	1	1	1
Jackdaw	<i>Corvus monedula</i>	0	0	0	1	0	3	0	2	0	3	0	0	0	2	21	0	2	0	0	0	2
Magpie	<i>Pica pica</i>	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Meadow Pipit	<i>Anthus pratensis</i>	0	0	0	23	0	0	2	0	0	1	0	0	0	0	1	0	0	1	0	0	0



Common Name	Scientific Name	T1						T2					
		November		January		March		November		January		March	
		0-25m	25-100m	100+/FO	0-25m	25-100m	100+/FO	0-25m	25-100m	100+/FO	0-25m	25-100m	100+/FO
Mistle Thrush	<i>Turdus viscivorus</i>	2	0	0	1	0	0	2	0	0	0	0	0
Pied Wagtail	<i>Motacilla alba</i>	0	0	0	1	0	0	0	0	0	0	0	0
Robin	<i>Erithacus rubecula</i>	1	2	0	1	0	1	4	0	0	0	1	0
Redwing	<i>Turdus iliacus</i>	3	1	0	33	0	0	0	0	0	0	0	0
Raven	<i>Corvus corax</i>	0	0	0	0	0	0	0	0	1	0	0	0
Rook	<i>Corvus frugilegus</i>	0	2	0	0	2	0	1	1	1	1	0	6
Stonechat	<i>Saxicola rubicola</i>	2	0	0	1	0	0	0	0	0	1	0	0
Starling	<i>Sturnus vulgaris</i>	0	0	0	30	0	10	0	40	0	0	0	14
Siskin	<i>Carduelis spinus</i>	0	0	0	0	1	0	0	0	0	0	0	0
Song Thrush	<i>Turdus philomelos</i>	0	0	0	0	0	1	1	0	0	0	0	0
Woodpigeon	<i>Columba palumbus</i>	0	0	8	0	0	1	0	2	0	19	0	0
Wren	<i>Troglodytes troglodytes</i>	1	0	0	1	0	0	1	0	0	0	3	1



3.6 Hinterland Survey

Hinterland surveys to establish breeding and wintering occupancy within a 10km radius of the Proposed Development site were carried out each month over the four surveyed seasons across 11 HVPs. See Table 2-3 for exact survey dates of each Hinterland site. A total of 101 species were identified during hinterland surveys. Throughout Hinterland surveys, there were nine species recorded which are protected under Annex 1 of the EU Birds Directive. These are: Barnacle Goose, Golden Plover, Hen Harrier, Kingfisher, Little Egret, Peregrine, Ruff, White-fronted Goose (Greenland) and Whooper Swan. A total of 16 species are Red-listed: Black-tailed Godwit, Curlew, Dunlin, Golden Plover, Goldeneye, Grey Wagtail, Kestrel, Lapwing, Meadow Pipit, Redwing, Shoveler, Snipe, Stock Dove, Swift, Woodcock and Yellowhammer. A further 35 species are Amber-listed, and the remaining 50 species are Green-listed. For a full list and conservation status of each species, see Table 3-5.

During the winter 2020/2021 season a total of 38 species were identified. Of these, six were Annex 1 species: Barnacle Goose, Golden Plover, Kingfisher, Little Egret, White-fronted Goose (Greenland) and Whooper Swan. A total of ten Red-listed species were noted: Black-tailed Godwit, Curlew, Dunlin, Golden Plover, Goldeneye, Grey Wagtail, Lapwing, Shoveler, Snipe, Woodcock. Additionally, 17 Amber-listed species were noted as well as 11 Green-listed species.

Throughout the winter 2021/2022 season a total of 70 species were noted. Of these seven were Annex 1 species: Barnacle Goose, Golden Plover, Kingfisher, Little Egret, Peregrine, Ruff, Whooper Swan. Ten Red-listed species were recorded: Black-tailed Godwit, Curlew, Dunlin, Golden Plover, Grey Wagtail, Kestrel, Lapwing, Meadow Pipit, Redwing and Snipe. Additionally, 22 Amber-listed and 38 Green-listed species were identified.

During the 2021 summer season, 69 species were noted. Of these, five were Annex 1 species: Golden Plover, Hen Harrier, Peregrine, Ruff and Whooper Swan. A total of nine Red-listed species were identified: Curlew, Golden Plover, Grey Wagtail, Kestrel, Lapwing, Meadow Pipit, Snipe, Stock Dove and Swift. Additionally, 24 Amber-listed and 36 Green-listed species were noted.

During Hinterland surveys in the summer 2022 season, a total of 74 species were identified. Of these, three were Annex 1 species: Kingfisher, Little Egret and Whooper Swan. A total of eight Red-listed species: Curlew, Grey Wagtail, Kestrel, Lapwing, Meadow Pipit, Snipe, Stock Dove and Yellowhammer. Additionally, 26 Amber-listed and 40 Green-listed species were noted.

Species of conservation concern that were recorded are discussed in more detail in this section. Species have been selected for detailed discussion on the basis of conservation status, vulnerability to wind farm developments and species being recorded on or near the Proposed Development site, which will indicate potential links between species recorded at the Proposed Development site and the surrounding environment. Distances of Hinterland sites from the Proposed Development site can be viewed in Table 2-3.

3.6.1 Buzzard

There were two records of this Green-listed raptor species during the winter 2020/21 hinterland surveys; both observations were from Toon flats. Three observations of Buzzard were made during the winter 2021/22 season. One of these observations was from The Gearagh, while another two were made within 2km of the Proposed Development site boundary.

This species was recorded on six occasions during the summer 2021 season. Two of these observations were from Desert Bridge, one was from Warren's Court, one was from The Gearagh, one was within a 2km radius of the Proposed Development site boundary, and the last was within a 10km radius of the site. During the summer season of 2022, Buzzard was seen on four occasions: twice at the River Bandon SAC, once within the 2km site boundary radius and once within the 5km site boundary radius. On most occasions one Buzzard was noted. On two occasions, two individuals were seen together.



3.6.2 Golden Plover

This Red-listed and Annex 1 wader species was recorded on five occasions throughout the winter 2020/21 season during hinterland surveys. Of these, two sightings were at The Gearagh, where 40 Plovers were seen on the 23d of November 2020 and just two were seen on January 20th, 2021. Two further observations were at Inishcarra Reservoir, where one Golden Plover was seen on the 20th of 2021 and 30 birds were noted on the 3rd of March 2021. The largest flock of this season, 58 birds, was seen at Sullane Delta on the 20th of January 2021.

Golden Plover was recorded twice during the winter 2021/22 season. The first occasion was on the 15th of November at The Gearagh, where 1300 birds were observed. On the 4th of March 2022 a smaller flock of 300 Plovers was noted at the same hinterland site.

During the Summer 2021 season, there was one observation of Golden Plover at Warren's Court on the 16th of April 2021, where 311 birds were seen. In the summer 2022 season, there were no sightings of Golden Plover.

3.6.3 Grey Heron

This Green-listed species was commonly observed at most hinterland sites and throughout all survey seasons. It was most commonly seen at The Gearagh, where it was noted on 19 occasions throughout all survey seasons, this is also the site where the highest numbers of this species were most consistently seen, where on six occasions numbers between four to nine Herons were counted. Inishcarra Reservoir, where five observations were recorded, also had a count of nine Herons on one occasion in the winter 2020/21 season. Sullane Delta had 14 records of Grey Heron across the winter 2020/21 and 2021/22 seasons as well as the summer 2022 season.

Other sites with Heron sightings were Desert Bridge with eight observations across winter 2020/21, summer 2021 and summer 2022; River Bandon SAC with seven observations across winter 2021/22 and summer 2022; Murragh Lake with six records across all survey seasons; Warren's Court with six records across winter 2020/21, winter 2021/22 and summer 2022. Castlemoor and Toon Flats had one record each, both in the 2020/21 winter season.

3.6.4 Hen Harrier

This Annex 1 raptor species was recorded once during Hinterland surveys. A male was seen flying over a field from Warren's Court on the 16th of April 2021.

3.6.5 Herring Gull

There were two observations of this Amber-listed Gull species during Hinterland surveys. Both observations were recorded at The Gearagh in the Summer of 2021. These sightings were from the 12th of May 2021 and the 14th of July 2021 and on both occasions single Gulls were noted.

3.6.6 Kestrel

This Red-listed raptor species was recorded on six occasions throughout Hinterland surveys. Two of these observations were at Desert Bridge, the first was on the 14th of July 2021 when one Kestrel was seen, the second on the 20th of September 2021 when two Kestrels were seen. One record was from The Gearagh, where a Kestrel was seen on the 20th of September 2021. The other three sightings were from within a 2km radius around the Proposed Development site, with the first on the 3rd of August 2021, the second on the 12th of February 2022 and the last on the 1st of June 2022, when a Kestrel was seen with prey.



3.6.7 Lesser Black-backed Gull

This Amber-listed Gull species was frequently observed across all survey seasons. It was most often recorded at The Gearagh, with 13 observations across winter 2021/22, summer 2021 and summer 2022. This is also the site with the largest flock numbers. On the 12th of September 2022 a flock of 254 Lesser Black-backed Gulls was recorded at The Gearagh. Flocks ranging from 36 - 54 birds were seen at The Gearagh on three occasions. At the River Bandon SAC there were four sightings of this Gull species across the winter 2021/22 and summer 2022 seasons. On three occasions, flocks of between 19-30 individuals were observed.

There were four sightings of this species at Sullane Delta, all from the summer 2022 season. On three occasions less than five birds were seen there, while on the 1st of June 2022, a total of 13 Gulls were observed. At Desert Bridge there were three sightings across the winter 2020/21 and 2021/22 seasons, where two observations both recorded 14 Gulls. At Warren's Court there were two sightings of Lesser Black-backed Gull; both in the summer of 2021. On the first occasion in April, 28 Gulls were seen, while on the second occasion in September 12 Gulls were noted. There was just one record of an individual gull, observed at Castlemoor on the 20th of September 2021. Five further sightings of this species were noted within a 2km site radius across the summer of 2021 and winter of 2021/22.

3.6.8 Mallard

This Amber-listed duck was frequently observed across all survey seasons and all Hinterland sites with the exception of Kilmicheal/ Mid Cork Quarries. The five highest counts of Mallard (ranging between 51 and 254 ducks) all occurred at The Gearagh, where this bird species was noted on 20 separate occasions across all four survey seasons. Sullane Delta also had high counts of 48 and 37 individuals on two occasions and Mallard was observed at this site on 13 separate occasions throughout both winter seasons and the summer 2022 season. Desert Bridge had observations of Mallard on 13 separate occasions, with a high count of 31 individuals, this bird species was noted here across all survey seasons.

Mallard was observed at Warren's Court on 14 occasions and at Murragh Lake on 12 occasions across all survey seasons. At River Bandon SAC, Mallard was noted on nine occasions across the winter 2021/22 and summer 2022 seasons. At Inishcarra reservoir, it was noted on six separate occasions throughout the winter 2020/21 season. At Castlemoor it was noted five times across both winter seasons. It was noted once at Toon flats in the 2020/21 winter season and once at Castlilack Lake in the winter 2021/22 season. Additionally, there were two records of Mallard within the 2km site radius and one within the 5km site radius.

3.6.9 Peregrine

A total of five observations of this Annex 1 raptor species were recorded throughout the survey period and all records were of individual Peregrines. On the 3rd of August 2021, a male was seen perching on a cliff at Kilmicheal/Mid Cork Quarries. There were two sightings of this species at The Gearagh in winter 2021/22 - one on the 12th of February 2022 and the other on the 26th of January 2022. One observation was made at the River Bandon SAC on the 26th of January 2022. On the 4th of August 2022, Peregrine was noted within the 5km site radius.

3.6.10 Snipe

This Red-listed wader species was noted on nine occasions across all survey seasons. Of these, five observations were at The Gearagh: On the 20th of September 2021, four Snipe were seen there; on the 16th of October 2021 four Snipe were again observed; on November 15th, 2021, a total of 13 Snipe were counted, and on the 26th of January 2022 only one individual was detected. On the 12th of September 2022 a high count of 30 Snipe was recorded at The Gearagh.



Snipe was detected at Sullane Delta on two occasions: four birds were seen there on the 15th of November 2021 and one Snipe was seen on the 12th of September 2022. A total of three birds were seen at Inishcarra Reservoir on the 20th of January 2021 and one Snipe was seen at Castlemoor on the 26th of January 2022.

3.6.11 Sparrowhawk

This Green-listed raptor species was noted on six occasions across both summer seasons and the winter 2021/22 season. A female was observed at Kilmichael/Mid Cork Quarries on the 3rd of August 2021. There was a sighting of Sparrowhawk at The Gearagh on the 20th of September 2021 and a sighting at Castlemoor on the 15th of November 2021.

Three sightings were made within the 2km site radius. On the 3rd of August 2021, two Sparrowhawks were seen flying together. Two further sightings of individuals occurred on the 31st of December 2021 and on the 4th of August 2022.

3.6.12 Swift

This Red-listed hirundine was noted twice at hinterland sites in the summer 2021 season. One observation was of four birds was at The Gearagh on the 12th of May 2021. The other observation, involving four birds was at Warren's Court on the 10th of June 2021.

3.6.13 Annex 1 species

In addition to the species already discussed (Golden Plover, Hen Harrier and Peregrine), there were six additional Annex 1 species recorded during Hinterland surveys. These were Barnacle Goose, Greater White-fronted Goose (Greenland), Kingfisher, Little Egret, Ruff and Whooper Swan. None of these species were recorded at the Proposed Development site during VP surveys.

Barnacle Goose was observed five times across both winter seasons. It was observed at Toon Flats, Inishcarra Reservoir and Sullane Delta. On each occasion between one and three geese were observed.

Greater White-fronted Goose was noted four times across the winter 2020/21 season, three times at Toon Flats and once at Inishcarra Reservoir.

Kingfisher was noted on ten occasions across both winter seasons and the summer 2022 season. On each occasion either one or two birds were seen. Four of the sightings were at Desert Bridge, three were at The Gearagh, and one sighting each occurred at Inishcarra Reservoir, Warren's Court and Sullane Delta.

Little Egret was frequently observed across both winter seasons, while just one observation made in April 2022, at Sullane Delta. This small Heron species was most frequently observed at The Gearagh where ten observations were made, and a high count of 18 birds was recorded. Four observations of Little Egret were made at Toon Flats, where a high count of 18 birds was recorded. Three observations each were from Inishcarra Reservoir, Desert Bridge River Bandon SAC and Sullane Delta.

Ruff was observed twice at The Gearagh, three birds were seen on the 20th of September 2021, and two Ruff were noted on the 16th of October 2021.



Whooper Swan was frequently noted across both winter seasons, with two additional observations in the summer 2021 season and one observation in the summer 2022 season. At The Gearagh there were eight observations of this swan species with a high count of 59 Whooper Swan on the 31st of December 2021. Other observations here were of six swans or less. Flocks of Whooper Swan were observed on six occasions at Toon Flats, with flock sizes between 22 and 75 swans. At River Bandon SAC, five separate observations of Whooper Swan were made with flock sizes between 17 to 48 swans. A total of five observations were made at Desert Bridge with counts ranging from 4 - 42 birds. A further two observations of one Whooper Swan each were made at Murragh Lake and one observation of three swans at Inishcarra Reservoir.

3.6.14 Red-listed target species

In addition to the species already discussed above, seven further Red-listed target species were recorded during hinterland surveys. These were Black-tailed Godwit, Curlew, Dunlin, Goldeneye, Lapwing, Shoveler and Woodcock. None of these species were recorded at the Proposed Development site during VP or Transect surveys.

Black-tailed Godwit was noted twice, once at Inishcarra Reservoir on the 20th of January 2021 where two birds were seen, and once at The Gearagh on the 15th of November 2021 where 12 birds were seen.

Curlew was frequently seen throughout both winter seasons, with additional summer season records at The Gearagh on the 20th of September 2021 and the 12th of September 2022. There was also a record of Curlew at Sullane Delta on the 12th of September 2022. This wader species was most frequently seen at The Gearagh, with 12 separate observations and a high count of 149 Curlew. At Sullane Delta, six observations of Curlew were recorded, with a high count of 129 birds. A total of two records were from Inishcarra Reservoir with a high count of 120 Curlew. Two further records of Curlew were from River Bandon SAC with a high count of 26 birds.

Dunlin was noted throughout both winter seasons only. It was most frequently seen at The Gearagh, with a total of seven records. On each occasion between 67 and 206 of these waders were seen. Dunlin was seen once at Inishcarra Reservoir, where 80 birds were counted, and twice at Sullane Delta, where between 25-53 birds were counted.

Lapwing was frequently noted throughout both winter seasons, with occasional records during both summer seasons. It was most often seen at The Gearagh and Sullane Delta, with 11 observations at each site. At Sullane Delta a high count of 726 Lapwing was made on the 26th of January 2022. At The Gearagh, a high count of 417 was made on the 12th of February 2022. Lapwing was seen at Inishcarra Reservoir on four separate occasions throughout the winter of 2020/2021, where a high count of 579 birds was recorded on the 4th of February 2021. Lapwing was seen twice at Toon Flats in the winter season of 2020/2021 where on one occasion 60 birds were counted.

Shoveler, a Red-listed duck species, was observed once on the 3rd of March 2021 at Inishcarra Reservoir, where an individual was noted. Woodcock, a woodland wader species was also noted just once on the 20th of January 2021 at Sullane Delta where an individual was observed.

3.6.15 Amber-listed target species

In addition to the species already discussed above, 11 further Amber-listed target species were recorded during hinterland surveys. These were Black-headed Gull, Brent Goose, Common Sandpiper, Cormorant, Gadwall, Garganey, Greylag Goose, Mute Swan, Teal, Tufted Duck and Wigeon.



Black-headed Gull was frequently observed across both winter seasons, with occasional records throughout both summer seasons. This Gull species was observed on 16 separate occasions across all seasons at The Gearagh, with a high count of 120 on the 16th of October 2021. At Sullane Delta, this species was observed on 12 separate occasions, with a high count of 216 Gulls on the 26th of January 2022 followed by a count of 160 birds on the 31st of December 2021. At Inishcarra Reservoir, seven observations were made in the winter 2020/21 season with counts of up to 22 Gulls. Single observations of Black-headed Gull were made at Toon Flats and Castlelack Lake.

A single Brent Goose was noted on the 3rd of February 2021 at Toon Flats.

Common Sandpiper was noted twice during Hinterland surveys in the summer 2022 season; both records were at Sullane delta.

Cormorant was frequently noted across both winter seasons and the summer 2022 season, with occasional records in the summer 2021 season. It was seen 11 times at both Sullane Delta and The Gearagh, seven times at Inishcarra, four times both at Desert Bridge and River Bandon SAC, three times at Castlemoor and twice at Muragh Lake.

Gadwall was noted twice during hinterland surveys, with both observations from The Gearagh. On the 15th of November 2021, three Gadwall were seen and on the 1st of April 2022 two birds were noted. Garganey was also recorded at The Gearagh, where one male was seen on the 11th of May 2022.

Greylag Goose was noted across all four survey seasons. At The Gearagh it was noted on seven separate occasions, with a high count of 203 geese on the 20th of September 2021. It was noted five times at Toon Flats with flock sizes ranging between 6-57 individuals. Greylag Goose was noted once at Inishcarra Reservoir, where a flock of 93 birds was seen on the 20th of January 2021. Three further observations of one to three geese were recorded at Warren's Court.

Mute Swan was frequently observed at Hinterland sites across all four survey seasons. It was observed on 15 separate occasions at The Gearagh, where on the 4th of August 2022 a heigh count of 112 swans was achieved, and a further four flocks with more than 20 individuals were noted. This swan species was observed 12 times at Warren's Court, where numbers did not exceed 12 birds per observation. Five observations of small numbers of swans were each made at Desert Bridge and River Bandon SAC. There were three observations of low numbers of swans at Sullane Delta, and one observation each at Inishcarra Reservoir and Castlelack Lake. At Murragh Lake, Mute Swan was observed on nine separate occasions; during each observation, one or two birds were seen at a time. At Toon Flats, Mute Swan were noted on five occasions where flock sizes ranged between 5-49 swans.

Teal was noted frequently throughout both winter seasons and occasionally during both summer seasons over the Hinterland survey period. This duck species was most frequently seen at The Gearagh, where it was observed on 19 separate occasions. On the 15th of November 2021, 1,040 Teal were counted at The Gearagh, and on six other occasions between 111 and 735 ducks were counted. Seven observations were made at both Inishcarra Reservoir and Sullane Delta, where high counts of 55 and 49 Teal were made respectively. Four observations were made at Murragh Lake, three at Castlemoor, and one each at Castlelack Lake, Toon Flats, Desert Bridge and Warren's Court.

Tufted Duck was seen across all four survey seasons, though it was most frequently noted throughout both winter seasons. It was observed nine times at Warren's Court, seven times at Castlemoor and six times at Murragh Lake. The largest number (26 ducks) was seen at Warren's Court on the 1st of April 2022.



Wigeon was noted frequently throughout both winter seasons and occasionally during both summer seasons. It was most frequently seen at The Gearagh where it was noted on 16 occasions. At The Gearagh, Wigeon was frequently seen in high numbers, with the largest number of 127 Wigeon counted on the 15th of November 2021. It was noted six times each at both Sullane Delta and Inishcarra Reservoir, where between 31-128 Wigeon and between 3-59 Wigeon were seen respectively. Wigeon was seen on one occasion each at Warren's Court and Castlelack Lake.

Green-listed target species In addition to the species already discussed above, eight further Green-listed target species were recorded during hinterland surveys. These were, Egyptian Goose, Great Black-backed Gull, Great White Egret, Green Sandpiper, Greenshank, Little Grebe, Pink-footed Goose and Whimbrel. None of these species were picked up at the Proposed Development site during VP or Transect surveys.

and A single Egyptian Goose was observed at The Gearagh on the 20th of September 2021, which was considered to be feral.

Great Black-backed Gull was occasionally observed throughout all survey seasons. It was seen in numbers between one and four Gulls. It was observed six times at Sullane Delta, three times at The Gearagh and Inishcarra Reservoir and once at the River Bandon SAC.

Great Egret was observed twice throughout Hinterland surveys, both times at The Gearagh. One Egret was observed on the 20th of September 2021 and three Great White Egrets were seen on the 15th of November 2021. Green Sandpiper was seen on three occasions, and each time an individual was observed. These sightings were at Inishcarra Reservoir, Sullane Delta and River Bandon SAC. Greenshank was observed just once at The Gearagh on the 23rd of November 2020. Little Grebe was seen on three occasions; seven individuals were seen on two separate occasions at Murragh Lake, and an individual was seen at Warren's Court. Pink-footed Goose was observed on three occasions in the winter 2020/2021 season; individuals were seen on each occasion. Two observations of this goose species were at Toon Flats and one observation was at Inishcarra Reservoir. Whimbrel was noted just once, at The Gearagh on the 11th of May 2022.

Table 3-5: Status of Bird Species recorded during Hintterland surveys

Common Name	Scientific Name	Conservation Status	
		BoCCI*	Annex 1**
Barnacle Goose	<i>Branta leucopsis</i>	Amber	Yes
Blackbird	<i>Turdus merula</i>	Green	No
Blackcap	<i>Sylvia atricapilla</i>	Green	No
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	Amber	No
Black-tailed Godwit	<i>Limosa limosa</i>	Red	No
Blue Tit	<i>Cyanistes caeruleus</i>	Green	No
Brambling	<i>Fringilla montifringilla</i>	Amber	No
Brent Goose	<i>Branta bernicla</i>	Amber	No



Common Name	Scientific Name	Conservation Status	
		BoCCI*	Annex 1**
Bullfinch	<i>Pyrrhula pyrrhula</i>	Green	No
Buzzard	<i>Buteo buteo</i>	Green	No
Chaffinch	<i>Fringilla coelebs</i>	Green	No
Chiffchaff	<i>Phylloscopus collybita</i>	Green	No
Coal Tit	<i>Parus ater</i>	Green	No
Collared Dove	<i>Streptopelia decaocto</i>	Green	No
Common Crossbill	<i>Loxia curvirostra</i>	Green	No
Common Sandpiper	<i>Actitis hypoleucos</i>	Amber	No
Coot	<i>Fulica atra</i>	Amber	No
Cormorant	<i>Phalacrocorax carbo</i>	Amber	No
Curlew	<i>Numenius arquata</i>	Red	No
Dipper	<i>Cinclus cinclus</i>	Green	No
Dunlin	<i>Calidris alpina</i>	Red	No
Dunnock	<i>Prunella modularis</i>	Green	No
Egyptian Goose	<i>Alopochen aegyptiaca</i>	Green	No
Fieldfare	<i>Turdus pilaris</i>	Green	No
Gadwall	<i>Anas strepera</i>	Amber	No
Garden Warbler	<i>Sylvia borin</i>	Green	No
Garganey	<i>Anas querquedula</i>	Amber	No
Goldcrest	<i>Regulus regulus</i>	Amber	No
Golden Plover	<i>Pluvialis apricaria</i>	Red	Yes



Common Name	Scientific Name	Conservation Status	
		BoCCI*	Annex 1**
Goldeneye	<i>Bucephala clangula</i>	Red	No
Goldfinch	<i>Carduelis carduelis</i>	Green	No
Goosander	<i>Mergus merganser</i>	Amber	No
Great Black-backed Gull	<i>Larus marinus</i>	Green	No
Great Crested Grebe	<i>Podiceps cristatus</i>	Amber	No
Great Tit	<i>Parus major</i>	Green	No
Great White Egret	<i>Ardea alba</i>	Green	No
Green Sandpiper	<i>Tringa ochropus</i>	Green	No
Greenfinch	<i>Carduelis chloris</i>	Amber	No
Greenshank	<i>Tringa nebularia</i>	Green	No
Grey Heron	<i>Ardea cinerea</i>	Green	No
Grey Wagtail	<i>Motacilla cinerea</i>	Red	No
Greylag Goose	<i>Anser anser</i>	Amber	No
Hen Harrier	<i>Circus cyaneus</i>	Amber	Yes
Herring Gull	<i>Larus argentatus</i>	Amber	No
Hooded Crow	<i>Corvus cornix</i>	Green	No
House Martin	<i>Delichon urbicum</i>	Amber	No
House Sparrow	<i>Passer domesticus</i>	Amber	No
Jackdaw	<i>Corvus monedula</i>	Green	No
Jay	<i>Garrulus glandarius</i>	Green	No
Kestrel	<i>Falco tinnunculus</i>	Red	No



Common Name	Scientific Name	Conservation Status	
		BoCCI*	Annex 1**
Kingfisher	<i>Alcedo atthis</i>	Amber	Yes
Lapwing	<i>Vanellus vanellus</i>	Red	No
Lesser Black-backed Gull	<i>Larus fuscus</i>	Amber	No
Lesser Redpoll	<i>Carduelis cabaret</i>	Green	No
Linnet	<i>Carduelis cannabina</i>	Amber	No
Little Egret	<i>Egretta garzetta</i>	Green	Yes
Little Grebe	<i>Tachybaptus ruficollis</i>	Green	No
Long-tailed Tit	<i>Aegithalos caudatus</i>	Green	No
Magpie	<i>Pica pica</i>	Green	No
Mallard	<i>Anas platyrhynchos</i>	Amber	No
Meadow Pipit	<i>Anthus pratensis</i>	Red	No
Mistle Thrush	<i>Turdus viscivorus</i>	Green	No
Moorhen	<i>Gallinula chloropus</i>	Green	No
Mute Swan	<i>Cygnus olor</i>	Amber	No
Peregrine	<i>Falco peregrinus</i>	Green	Yes
Pheasant	<i>Phasianus colchicus</i>	Green	No
Pied/White Wagtail	<i>Motacilla alba</i>	Green	No
Pink-footed Goose	<i>Anser brachyrhynchus</i>	Green	No
Raven	<i>Corvus corax</i>	Green	No
Redwing	<i>Turdus iliacus</i>	Red	No
Reed Bunting	<i>Emberiza schoeniclus</i>	Green	No



Common Name	Scientific Name	Conservation Status	
		BoCCI*	Annex 1**
Robin	<i>Erithacus rubecula</i>	Green	No
Rook	<i>Corvus frugilegus</i>	Green	No
Ruff	<i>Philomachus pugnax</i>	Amber	Yes
Sand Martin	<i>Riparia riparia</i>	Amber	No
Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	Green	No
Shoveler	<i>Anas clypeata</i>	Red	No
Siskin	<i>Carduelis spinus</i>	Green	No
Skylark	<i>Alauda arvensis</i>	Amber	No
Snipe	<i>Gallinago gallinago</i>	Red	No
Song Thrush	<i>Turdus philomelos</i>	Green	No
Sparrowhawk	<i>Accipiter nisus</i>	Green	No
Starling	<i>Sturnus vulgaris</i>	Amber	No
Stock Dove	<i>Columba oenas</i>	Red	No
Stonechat	<i>Saxicola rubicola</i>	Green	No
Swallow	<i>Hirundo rustica</i>	Amber	No
Swift	<i>Apus apus</i>	Red	No
Teal	<i>Anas crecca</i>	Amber	No
Treecreeper	<i>Certhia familiaris</i>	Green	No
Tufted Duck	<i>Aythya fuligula</i>	Amber	No
Water Rail	<i>Rallus aquaticus</i>	Green	No
Wheatear	<i>Oenanthe oenanthe</i>	Amber	No



Common Name	Scientific Name	Conservation Status	
		BoCCI*	Annex 1**
Whimbrel	<i>Numenius phaeopus</i>	Green	No
White-fronted Goose	Anser albifrons	Amber	Yes
Whooper Swan	<i>Cygnus cygnus</i>	Amber	Yes
Wigeon	<i>Anas penelope</i>	Amber	No
Willow Warbler	<i>Phylloscopus trochilus</i>	Amber	No
Woodcock	<i>Scolopax rusticola</i>	Red	No
Woodpigeon	<i>Columba palumbus</i>	Green	No
Wren	<i>Troglodytes troglodytes</i>	Green	No
Yellowhammer	<i>Emberiza citrinella</i>	Red	No

* refers to the conservation status of the species according to Birds of Conservation Concern in Ireland

** refers to species listed on Annex 1 of the EU Birds Directive



4. DISCUSSION

FT carried out two full years of ornithological surveys at the Proposed Development site between October 2020 and September 2022 inclusive. The following surveys were undertaken: Vantage point surveys, winter transect surveys, general breeding bird and breeding wader surveys and hinterland surveys.

In total there were 247 flights of 13 target species observed during the survey period. Detailed records of two stationary birds (both Buzzards) were also recorded. Additional records were made of birds heard or seen perched or on the ground for Golden Plover, Grey Heron and Lesser Black-backed Gull.

Buzzard was the target species most frequently sighted across all seasons during VP surveys with between 16-29 sightings per season. Lesser Black-backed Gull was observed the next most frequently with 66 observations, of which 64 occurred during the second year of surveys. Kestrel was also seen in good numbers during the second year of surveys with a total of 33 observations during this period and just five observations during the first year of surveys. There was a total of 18 observations of Sparrowhawk, with a few records from each season. All other target species had less than ten records throughout VP surveys.

Buzzard was frequently observed hunting during VP surveys and was also seen carrying prey. Birds were observed in territorial displays and a pair of adult Buzzards was observed chasing off another Buzzard from their territory in January 2021. These records were from the winter seasons. Due to the territorial behaviour observed and activity levels recorded, Buzzard are considered likely to be breeding in the area in which the Proposed Development site is located. No nest sites were observed during surveys. Buzzard is established in the area, as evidenced by the regularity of sightings during VP surveys and hinterland surveys.

Hen Harrier is an infrequent visitor to the area. This species was only observed twice during VP surveys and once during hinterland surveys. Both VP observations were in the winter 2021/2022 season with one observation of a male commuting over the Proposed Development site from north to south and one ringtail hunting over the Proposed Development site, also moving north to south. A male was observed flying over a field at Warren's Court in April 2021 during hinterland surveys. Warren's Court is approximately 3.5 km from the Proposed Development site. There was no indication of any breeding behaviour associated with this record.

Kestrel activity during VP and hinterland surveys was mostly observed throughout the summer months. Kestrel was frequently observed hunting over the Proposed Development site and was seen carrying and consuming prey. It was observed within 2km of the Proposed Development site boundary during hinterland surveys, as well as at the Gearagh and Desert Bridge. Based on activity patterns observed, Kestrel may be breeding in the area surrounding the Proposed Development site. No nest sites were observed during surveys.

Peregrine activity recorded during VP and hinterland surveys was predominantly during the winter months. It was not recorded hunting and only individuals were observed. One male Peregrine was observed perching on a cliff in August 2021 at Kilmichael/ Mid Cork Quarries (c. 5 km from the Proposed Development site). Quarries often provide potential nesting habitat for this species. No breeding activity or potential breeding habitat was observed at or near the Proposed Development site.

Sparrowhawk was observed throughout the summer and winter seasons during VP surveys. Sparrowhawk was observed hunting over the Proposed Development site and on one occasion a bird was seen with a prey item. Most observations were of individual Sparrowhawks, except for one instance where two Sparrowhawks were seen commuting over the Proposed Development site in May 2022. Sparrowhawk was also recorded during hinterland surveys in the 2km site buffer, at Kilmichael/ Mid Cork Quarries, the Gearagh and Castlemoor, with no indications of breeding activity recorded at those sites. Due to the limited size of Sparrowhawk territories and the activity patterns recorded during VP surveys, it is considered likely that this species breeds in the area in which the Proposed Development site is located. No nest sites were observed during surveys.



Golden Plover, Lesser Black-backed Gull, Herring Gull and Mallard were observed landing/foraging in fields on and near the Proposed Development site. Snipe was flushed on one occasion from near VP1. Some of the fields in and around the Proposed Development site have moderate suitability as foraging habitat for these species.

Breeding bird transects recorded 34 bird species including Red-listed Meadow Pipit, Grey Wagtail and Kestrel. Species recorded in the 0-25m distance band were Red-listed Meadow Pipit and Grey Wagtail as well as Amber-listed Goldcrest, Linnet, Starling, Swallow and Willow Warbler and a number of Green-listed species. The higher-quality, unmanaged hedgerows onsite are suitable for a number of breeding passerines, and areas of rougher grassland are suitable for breeding Meadow pipit.

Swift is emerging as a species which is susceptible to turbine collision and was recorded during VP surveys in the summer seasons of both 2021 and 2022, with flight activity details recorded from 2022. The Swift activity recorded is negligible however, with only two records over two years and no suitable breeding habitat present at the Proposed Development site.

A flock of eight Snipe was seen flying over fields to the west of the Proposed Development site in November 2020, and a flock of 23 Snipe was seen flying along the southern tip of the Proposed Development site in October 2021. These records are indicative of migratory movements. During March and April 2021, potential migratory movements of Golden Plover were observed when 100 and 60 plovers respectively were seen flying over the Proposed Development site. Another possible migratory movement of Golden Plover was picked up at Warren's Court in April 2021 when 311 Plovers were seen flying past the Proposed Development site to the east at a height of ca. 150m.

During breeding wader surveys Snipe was the only target species detected. Both records were of Snipe heard calling in April 2021. There were no records of Snipe drumming or chipping. The absence of any breeding displays and absence of further records for Snipe indicate this species does not breed at the Proposed Development site.

Hinterland surveys were conducted to show the general breeding occupancy and bird occupancy throughout the survey period in a c. 10 km radius around the Proposed Development site. During these surveys a total of 101 species of bird were observed. Among these were eight Annex 1 species, 16 Red-listed species and 33 Amber-listed species.

Hinterland sites identified as being of high value to bird species of conservation interest are The Gearagh (distance to site: c. 7.5 km), Sullane Delta (distance to site: c. 7 km), Inishcarra Reservoir (distance to site: c. 6.3 km), Desert Bridge (distance to site: c. 9.7 km), Murragh Lake (distance to site: c. 9.3 km), Bandon River SAC (distance to site: c. 9.5 km), Warren's Court (distance to site: c. 3.5 km) and Toon Flats (distance to site: c. 8 km). Mid-Cork Quarry supports some raptor activity. There are several Hinterland sites which support large numbers and a good diversity of waterfowl and gulls. Most of these species were not recorded during VP surveys; however, occasional flyovers of these species cannot be ruled out. The species recorded at both the Proposed Development site and nearby hinterland sites are discussed below.

Target species which were seen during both VP surveys and at the closest hinterland sites to the Proposed Development (Warren's Court and Kilmichael/ Mid Cork Quarries) were: Golden Plover, Hen Harrier, Lesser Black-backed Gull, Mallard, Peregrine and Swift. These species are likely to use the habitat mosaic provided by the wider landscape in which the Proposed Development site is located.



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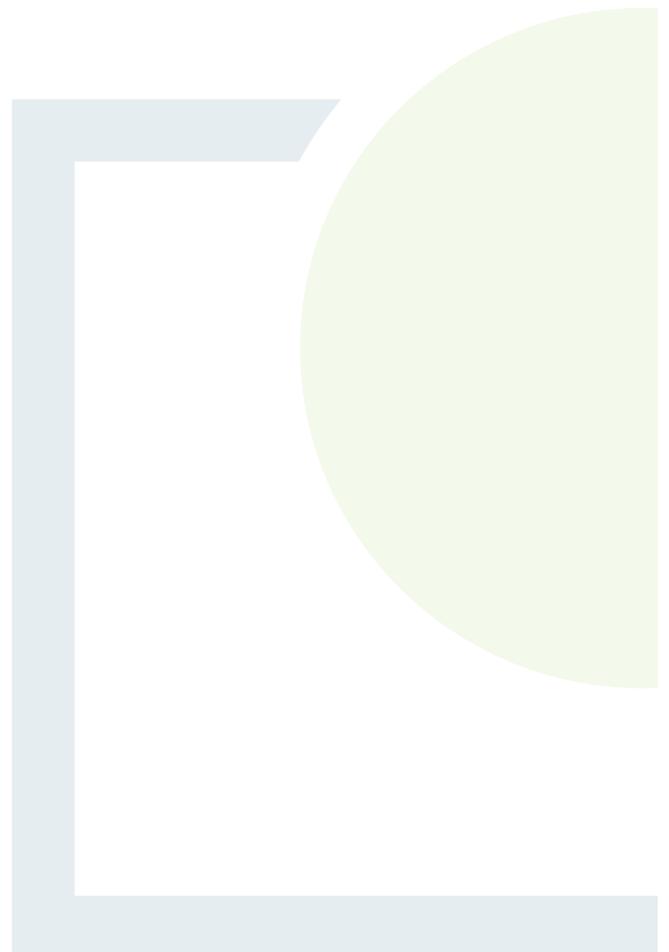
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APPENDIX 1

VP - Target Species Results
and Survey Conditions



VP - Survey Conditions

VP	Date	Start	End	Cloud (/8)	Is the viewshed fully Visible?	Rain	Wind Speed (Beaufort)	Wind Direction
1	02/11/2020	10:10	13:40	3	Yes	Showers	4	
1	09/11/2020	11:00	13:30	8	Yes	Heavy showers	2	SE
2	09/11/2020	14:30	16:30	8	Yes	Dry	3	SE
2	13/11/2020	12:05	16:05	8	Yes	Dry	4	SE
1	20/11/2020	10:25	16:25	8	Yes	Drizzle	3	SW
2	30/11/2020	09:10	15:10	8	Yes	Light rain	2	W
1	11/12/2020	10:05	16:05	6	Yes	Drizzle and rain	1	NW
2	21/12/2020	10:00	16:00	8	Yes	Mist & fog	3	SW
1	13/01/2021	09:00	12:00	8	Yes	Mist	3	SW
2	14/01/2021	09:30	12:30	4	Yes	Dry	4	N
2	14/01/2021	13:00	16:00	3	Yes	Dry	4	N
2	14/01/2021	09:30	12:30	4	Yes	Dry	4	N
2	01/02/2021	08:30	11:30	8	Yes	Dry	2	
2	02/02/2021	12:00	15:00	7	Yes	Heavy showers	4	S
1	07/03/2021	10:00	13:00	8	Yes	Light showers	3	SW
2	15/03/2021	09:45	12:45	6	Yes	Dry	3	W
2	15/03/2021	13:15	16:15	7	Yes	Drizzle	3	W
1	09/04/2021	15:55	17:55	8	Yes	Showers	2	NW
1	11/04/2021	08:31	12:31		Yes	Dry	2	NW
2	08/04/2021	10:13	11:13	6	Yes	Dry	3	SW
2	09/04/2021	09:30	14:30	8	Yes	Dry	2	N
1	09/05/2021	13:25	17:25	8	Yes	Showers	4	S
1	15/05/2021	18:25	20:21	8	Yes	Showers	3	SE
2	11/05/2021	09:18	12:18	5	Yes	Dry/Showers	4	S

VP	Date	Start	End	Cloud (/8)	Is the viewshed fully Visible?	Rain	Wind Speed (Beaufort)	Wind Direction
2	11/05/2021	13:03	16:03	5	Yes	Dry	4	S
2	17/06/2021	13:05	19:05	4	Yes	Dry	4	NW
1	16/06/2021	09:56	15:56	8	Yes	Dry	2	SW
2	05/07/2021	08:16	12:46	2	Yes	Dry	3	SW
2	05/07/2021	14:22	15:22	2	Yes	Dry	2	SW
1	02/07/2021	09:15	12:45	8	Yes	Dry	2	SE
1	02/07/2021	14:20	16:50	8	Yes	Dry	2	SE
2	01/08/2021	08:20	14:20	8	Yes	Dry	3	N
1	02/08/2021	08:58	12:58	7	Yes	Dry	2	NW
1	02/08/2021	16:31	18:31	8	Yes	Dry	1	NW
1	03/09/2021	09:40	15:40	8	Yes	Dry	2	NE
1	08/10/2021	09:26	12:26	8	Yes	Showers	3	S
1	30/10/2021	08:28	11:28	2	Yes	Dry	1	SW
1	10/11/2021	09:16	13:31	6	Yes	Dry	1	NE
1	10/11/2021	14:58	16:53	7	Yes	Dry	2	NE
1	15/12/2021	08:29	13:14	8	Yes	Drizzle/Dry	2	SW
1	15/12/2021	14:30	15:45	8	Yes	Dry	3	SW
2	02/11/2021	12:16	15:16	6	Yes	Dry	4	NW
2	06/11/2021	08:07	11:07	8	Yes	Drizzle	4	SW
2	06/09/2021	10:20	16:20	8	Yes	Dry	2	SE
2	17/10/2021	09:25	15:25	3	Yes	Dry	3	SW
2	21/12/2021	08:42	11:42	8	Yes	Dry	4	SE
2	21/12/2021	12:58	15:58	8	Yes	Dry	4	SE
2	12/01/2022	08:20	11:20	2	Yes	Dry	1	NW
1	12/01/2022	11:50	14:50	1	Yes	Dry	1	NW
2	19/01/2022	08:35	11:35	7	Yes	Dry	4	NW

VP	Date	Start	End	Cloud (/8)	Is the viewshed fully Visible?	Rain	Wind Speed (Beaufort)	Wind Direction
1	19/01/2022	12:20	13:20	7	Yes	Dry	4	NW
1	19/01/2022	14:31	16:31	8	Yes	Dry	3	NW
1	02/02/2022	08:45	12:45	7	Yes	Dry	2	SW
2	16/02/2022	15:12	17:12	5	Yes	Showers	5	SW
1	02/02/2022	14:33	17:33	8	Yes	Dry	2	SW
1	05/02/2022	10:28	13:28	8	Yes	Dry	5	SW
1	02/03/2022	14:53	17:53	8	Yes	Showers	4	S
1	12/03/2022	11:32	13:23	8	Yes	Dry followed by heavy rain	0	
1	15/03/2022	11:54	12:54	8	Yes	Dry	3	S
1	15/03/2022	08:40	11:40	8	Yes	Dry	4	S
1	18/03/2022	14:31	17:31	7	Yes	Dry	4	SE
1	05/04/2022	13:54	15:54	7	Yes	Dry	4	SW
1	06/04/2022	13:45	16:45	7	Yes	Showers	5	SW
1	27/04/2022	09:49	10:49	0	Yes	Dry	2	E
2	03/04/2022	09:26	11:26	0	Yes	Dry	2	NW
2	22/04/2022	13:03	15:03	7	Yes	Dry	5	NE
2	27/04/2022	11:04	13:04	4	Yes	Dry	4	E
1	17/05/2022	17:39	19:39	8	Yes	Dry	4	S
1	25/05/2022	18:32	20:32	7	Yes	Dry	3	W
1	26/05/2022	19:14	21:14		Yes	Dry	3	W
2	20/05/2022	19:30	20:40	4	Yes	Dry	4	SW
2	23/05/2022	16:59	19:59		Yes	Dry	5	NW
2	24/05/2022	17:31	19:21	8	Yes	Dry	5	W
2	08/06/2022	08:14	11:14	3	Yes	Dry	3	SW
2	08/06/2022	09:25	12:25	7	Yes	Dry	2	SW
1	07/06/2022	08:29	11:29	8	Yes	Dry	2	SE

VP	Date	Start	End	Cloud (/8)	Is the viewshed fully Visible?	Rain	Wind Speed (Beaufort)	Wind Direction
2	14/06/2022	09:25	12:25	7	Yes	Dry	2	SW
1	19/06/2022	11:25	14:25	8	Yes	Dry	5	N
2	11/07/2022	18:50	21:50	7	Yes	Dry	2	SE
2	27/07/2022	18:32	21:32	8	Yes	Dry	3	SE
1	13/07/2022	14:17	17:17	4	Yes	Dry	3	NW
1	21/07/2022	17:42	20:42	7	Yes	Dry	2	NE
1	13/08/2022	08:22	11:22	0	Yes	Dry	2	N
1	18/08/2022	17:12	20:12	2	Yes	Dry	4	W
2	11/08/2022	16:45	17:45		Yes	Dry	1	SE
2	12/08/2022	09:28	12:28		Yes	Dry	3	E
2	15/09/2022	14:16	17:16	8	Yes	Dry	4	NE
2	21/09/2022	07:47	09:47	8	Yes	Dry	3	SW
2	25/09/2022	11:14	12:14	8	Yes	Dry	2	W
1	21/09/2022	17:28	19:28	8	Yes	Dry	4	SW
1	28/09/2022	12:27	15:27	7	Yes	Dry	4	NW
1	28/09/2022	17:05	18:05	5	Yes	Dry	4	NW

VP - Target Species Survey Results (height bands 0-20m/20-50m/50-100m/100-150m)

VP	Date	Mapnote / Flightline No.	Map Name	Species	No.	Start	In/ Out	Duration (s)	0- 20m (s)	20- 50m (s)	50- 100m (s)	100- 150m (s)	>150m (s)
2	14/01/21	10	SH	Sparrowhawk	1	10:22	In	20	20				
2	14/01/21	10	SH	Sparrowhawk	1	10:22	Out	10	10				
2	14/01/21	11	PE	Peregrine	1	10:22	In	20	20				
2	14/01/21	11	PE	Peregrine	1	10:22	Out	10	10				
2	14/01/21	12	BZ	Buzzard	1	10:28	In	55		55			
2	14/01/21	12	BZ	Buzzard	1	10:28	out	32		32			
2	14/01/21	13	BZ	Buzzard	2	11:10	Out	64		64			
2	14/01/21	14	PE	Peregrine	1	11:17	In	53		53			
2	14/01/21	15	BZ	Buzzard	2	11:20	Out	243			243		
2	14/01/21	16	BZ	Buzzard	2	11:28	In	28		28			
2	14/01/21	16	BZ	Buzzard	2	11:28	Out	120		120			
2	14/01/21	17	PE	Peregrine	1	11:42	In	47	47				
2	14/01/21	17	PE	Peregrine	1	11:42	Out	6	6				
2	14/01/21	18	BZ	Buzzard	3	13:13	In	50		50			
2	14/01/21	18	BZ	Buzzard	3	13:13	Out	233		233			
2	14/01/21	19	BZ	Buzzard	1	14:25	In	97		97			
2	14/01/21	19	BZ	Buzzard	1	14:25	Out	10		10			
2	14/01/21	20	SH	Sparrowhawk	1	14:31	In	38	38				
2	14/01/21	21	PE	Peregrine	1	14:50	In	67		67			
2	14/01/21	21	PE	Peregrine	1	14:50	out	90		90			
2	14/01/21	22	BZ	Buzzard	1	15:13	in	25	25				
2	14/01/21	22	BZ	Buzzard	1	15:13	out	35	35				
2	14/01/21	23	BZ	Buzzard	2	15:23	in	83			83		

VP	Date	Mapnote / Flightline No.	Map Name	Species	No.	Start	In/ Out	Duration (s)	0- 20m (s)	20- 50m (s)	50- 100m (s)	100- 150m (s)	>150m (s)
2	14/01/21	23	BZ	Buzzard	2	15:23	out	110			110		
2	14/01/21	24	BZ	Buzzard	2	15:37	in	114			114		
2	14/01/21	24	BZ	Buzzard	2	15:37	out	90			90		
2	02/02/21	25	GP	Golden Plover	60	12:19	In		30	28			
1	07/03/21	26	BZ	Buzzard	2	11:17	In	600		60	120	360	60
1	07/03/21	26	BZ	Buzzard	2	11:17	Out	179		25	25	120	9
1	07/03/21	27	BZ	Buzzard	2	11:17	in	720		60	150	480	30
1	07/03/21	27	BZ	Buzzard	2	11:17	OUT	257		17	60	120	60
1	07/03/21	28	MA	Mallard	2	12:18	in	17	17				
2	15/03/21	29	BZ	Buzzard	1	09:50	in	120	120				
2	15/03/21	30	BZ	Buzzard	1	09:56	IN	222			222		
2	15/03/21	31	BZ	Buzzard	3	09:56	IN	20			20		
2	15/03/21	31	BZ	Buzzard	3	09:56	OUT	60			60		
2	15/03/21	32	BZ	Buzzard	2	10:36	in	141		141			
2	15/03/21	32	BZ	Buzzard	2	10:36	OUT	100		100			
2	15/03/21	33	BZ	Buzzard	1	11:44	IN	360	360				
2	15/03/21	34	BZ	Buzzard	1	11:50	IN	28	28				
2	15/03/21	35	GP	Golden Plover	1	12:09	OUT	70					
2	15/03/21	36	PE	Peregrine	1	12:19	OUT	96		96			
2	15/03/21	36	PE	Peregrine	1	12:19	IN	36		36			
2	15/03/21	37	BZ	Buzzard	2	12:24	IN	300	30	120	30	30	90
2	15/03/21	37	BZ	Buzzard	2	12:24	OUT	52					52
2	15/03/21	38	BZ	Buzzard	1	12:34	IN	96	10	30	56		
2	15/03/21	39	GP	Golden Plover	100	13:36	out	229				229	
2	15/03/21	40	BZ	Buzzard	2	14:18	IN	137			137		

VP	Date	Mapnote / Flightline No.	Map Name	Species	No.	Start	In/ Out	Duration (s)	0- 20m (s)	20- 50m (s)	50- 100m (s)	100- 150m (s)	>150m (s)
2	15/03/21	41	BZ	Buzzard	3	15:00	OUT	74		74			
2	15/03/21	42	BZ	Buzzard	1	15:27	IN	5	5				
2	15/03/21	43	BZ	Buzzard	5	15:59	OUT	60			60		
2	15/03/21	43	BZ	Buzzard	5	15:59	IN	192			192		
2	15/03/21	N/A	GP	Golden Plover									

VP - Targe Species Survey Results (height bands 0-10m/10-20m/20-30m/30-50m/50-100m/100-185m)

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	02/11/20	1	K.	Kestrel	1	10:33	In	48	48					
1	02/11/20	2	BZ	Buzzard	1	11:53	In	74	71	3				
1	02/11/20	3	BZ	Buzzard	1	12:25	In	39	35	4				
1	02/11/20	4	BZ	Buzzard	2	12:48	out	540			250	290		
1	02/11/20	5	BZ	Buzzard	1	13:27	out	236		94	142			
1	02/11/20	6	BZ	Buzzard	1	13:41	out	15	15					
1	02/11/20	7	BZ	Buzzard	1	13:50	out	168		14	24	130		
1	09/11/20	8	SN	Snipe	8	13:09	In	38	38					
1	11/12/20	N/A	H.	Grey Heron										
2	21/12/20	9	SH	Sparrowhawk	1	14:05	Out	4	4					
1	09/04/21	44	LB	Lesser Black-backed Gull	10	16:59	IN	75	15	10	10	10	30	
1	09/04/21	45	LB	Lesser Black-backed Gull	4	17:32	IN	40	10	10	10	10		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	09/04/21	46	LB	Lesser Black-backed Gull	3	17:38	IN	15				15		
1	09/04/21	46	LB	Lesser Black-backed Gull	3	17:38	OUT	20					20	
1	11/04/21	47	LB	Lesser Black-backed Gull	2	08:33	IN	55					45	10
1	11/04/21	48	SH	Sparrowhawk	1	11:46	IN	51		10	10	10	21	
1	11/04/21	49	LB	Lesser Black-backed Gull	3	12:26	IN	70					70	
1	11/04/21	50	K.	Kestrel	1	12:26	IN	20			20			
1	11/04/21	50	K.	Kestrel	1	12:26	out	32				32		
2	08/04/21	51	BZ	Buzzard	1	10:46	IN	150			30	120		
2	08/04/21	52	BZ	Buzzard	1	11:02	IN	20			10	10		
2	09/04/21	53	BZ	Buzzard	1	11:24	IN	160				100	60	
2	09/04/21	54	BZ	Buzzard	1	11:45	IN	210					140	70
2	09/04/21	54	BZ	Buzzard	1	11:45	OUT	10						10
2	09/04/21	55	SH	Sparrowhawk	1	11:57	IN	180				180		
2	09/04/21	56	BZ	Buzzard	1	13:01	IN	480				80	300	100
2	09/04/21	57	GP	Golden Plover	60	13:50	OUT	300						300
2	09/04/21	58	BZ	Buzzard	2	14:19	IN	360					360	
2	09/04/21	59	K.	Kestrel	1	14:20	IN	200						200
1	09/05/21	60	LB	Lesser Black-backed Gull	1	14:37	IN	45					45	
1	09/05/21	61	HG	Herring Gull	1	14:42	OUT	20			20			
1	09/05/21	62	LB	Lesser Black-backed Gull	27	15:05	OUT	50				50		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	09/05/21	62	LB	Lesser Black-backed Gull	27	15:05	IN	100					100	
1	09/05/21	63	BZ	Buzzard	1	15:24	OUT	60					60	
1	09/05/21	63	BZ	Buzzard	1	15:24	IN	360			60	100	160	40
1	09/05/21	64	BZ	Buzzard	1	16:04	IN	35				35		
1	09/05/21	65	K.	Kestrel	2	16:06	IN	48			10	20	18	
1	09/05/21	66	BZ	Buzzard	1	17:09	OUT	20				20		
1	15/05/21	67	LB	Lesser Black-backed Gull	1	19:13	IN	45			25	20		
1	15/05/21	68	BZ	Buzzard	1	19:16	IN	15				15		
1	15/05/21	68	BZ	Buzzard	1	19:16	OUT	10				10		
2	11/05/21	69	LB	Lesser Black-backed Gull	1	09:35	IN	140		30	50	40	20	
2	11/05/21	70	K.	Kestrel	1	10:14	IN	20				20		
2	11/05/21	71	BZ	Buzzard	2	12:03	OUT	30				30		
2	11/05/21	71	BZ	Buzzard	2	12:03	IN	150	20	20	60	50		
2	11/05/21	72	LB	Lesser Black-backed Gull	2	14:04	IN	90				90		
2	11/05/21	73	LB	Lesser Black-backed Gull	31	14:19	IN	240				140	100	
2	17/06/21	74	LB	Lesser Black-backed Gull	5	14:07	IN	60					60	
2	17/06/21	74	LB	Lesser Black-backed Gull	5	14:07	OUT	33					33	
2	17/06/21	75	BZ	Buzzard	1	14:39	IN	200			40	30	130	
2	17/06/21	75	BZ	Buzzard	1	14:39	OUT	40				40		
2	17/06/21	76	BZ	Buzzard	1	15:55	IN	45				45		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
2	17/06/21	77	LB	Lesser Black-backed Gull	1	17:21	IN	240			50	100	50	
2	17/06/21	77	LB	Lesser Black-backed Gull	1	17:21	OUT	60				30	30	
2	17/06/21	78	K.	Kestrel	1	18:48	IN	120			50	70		
2	17/06/21	79	K.	Kestrel	1	18:54	in	155				100	55	
2	17/06/21	80	BZ	Buzzard	1	17:01	IN	30			20	10		
2	17/06/21	N/A	SI	Swift										
1	16/06/21	81	BZ	Buzzard	1	12:17	IN	90					90	
1	16/06/21	81	BZ	Buzzard	1	12:17	OUT	90			30	30	30	
1	16/06/21	82	LB	Lesser Black-backed Gull	60	12:43	IN	240						240
1	16/06/21	83	K.	Kestrel	1	13:40	IN	45			30	15		
1	16/06/21	84	SH	Sparrowhawk	1	14:11	IN	15		15				
1	16/06/21	85	K.	Kestrel	1	14:56	in	75					55	20
1	16/06/21	86	K.	Kestrel	2	15:15	IN	50			20	30		
2	05/07/21	87	BZ	Buzzard	1	10:47	IN	10	10					
1	02/07/21	88	LB	Lesser Black-backed Gull	1	09:51	OUT	30					30	
1	02/07/21	89	LB	Lesser Black-backed Gull	1	10:52	IN	10		10				
1	02/07/21	89	LB	Lesser Black-backed Gull	1	10:52	OUT	10		10				
1	02/07/21	90	BZ	Buzzard	1	10:58	IN	90				90		
1	02/07/21	90	BZ	Buzzard	1	10:58	OUT	90				90		
1	02/07/21	91	K.	Kestrel	1	11:28	IN	120	60	20	20	20		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	02/07/21	92	LB	Lesser Black-backed Gull	1	14:32	IN	10	10					
1	02/07/21	92	LB	Lesser Black-backed Gull	1	14:32	OUT	10	10					
1	02/07/21	93	K.	Kestrel	1	14:51	IN	45				20	25	
1	02/07/21	94	SH	Sparrowhawk	1	14:55	IN	15				15		
1	02/07/21	95	BZ	Buzzard	1	16:50	IN	100				40	60	
1	02/07/21	95	BZ	Buzzard	1	16:50	OUT	40					40	
2	01/08/21	96	LB	Lesser Black-backed Gull	4	08:41	IN	38	18	10	10			
2	01/08/21	97	K.	Kestrel	1	08:47	IN	180			40	100	40	
2	01/08/21	98	K.	Kestrel	1	09:48	IN	240			100	140		
2	01/08/21	99	BZ	Buzzard	1	11:33	OUT	36			16	20		
2	01/08/21	99	BZ	Buzzard	1	11:33	IN	60				60		
2	01/08/21	100	PE	Peregrine	1	11:37	IN	18			18			
2	01/08/21	101	SH	Sparrowhawk	1	11:37	IN	5			5			
2	01/08/21	102	K.	Kestrel	1	13:26	out	190				190		
2	01/08/21	102	K.	Kestrel	1	13:26	in	10				10		
1	02/08/21	103	BZ	Buzzard	1	10:58	IN	15	15					
1	02/08/21	104	K.	Kestrel	1	11:28	OUT	115				70	45	
1	02/08/21	105	H.	Grey Heron	1	16:10	IN	56		56				
1	02/08/21	106	K.	Kestrel	1	18:21	OUT	20						
1	02/08/21	106	K.	Kestrel	1	18:01	IN	400	20	40	60	200	80	
1	03/09/21	107	K.	Kestrel	1	12:08	IN	35				35		
1	03/09/21	107	K.	Kestrel	1	12:08	OUT	10				10		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	03/09/21	108	LB	Lesser Black-backed Gull	1	12:39	OUT	76					76	
1	03/09/21	109	K.	Kestrel	1	13:46	IN	25			25			
1	03/09/21	109	K.	Kestrel	1	13:46	OUT	7		7				
1	08/10/21	110	SN	Snipe	23	09:57	IN	20				15	5	
1	08/10/21	111	LB	Lesser Black-backed Gull	4	10:04	IN	40				40		
1	08/10/21	111	LB	Lesser Black-backed Gull	4	10:04	OUT	5			5			
1	08/10/21	112	BZ	Buzzard	1	10:16	IN	80			20	50	10	
1	08/10/21	112	BZ	Buzzard	1	10:16	OUT	30				30		
1	30/10/21	113	SH	Sparrowhawk	1	09:09	IN	13						
1	30/10/21	114	BZ	Buzzard	1	10:18	IN	10						
1	30/10/21	115	BZ	Buzzard	1	11:11	IN	240			40	100	100	
1	10/11/21	116	SH	Sparrowhawk	1	10:06	IN	15						
1	10/11/21	117	K.	Kestrel	1	11:54	IN	45			20	25		
1	15/12/21	118	K.	Kestrel	1	12:39	OUT	10						
1	15/12/21	119	H.	Grey Heron	1	15:38	IN	10						
2	02/11/21	120	K.	Kestrel	1	12:53	OUT	45			20	25		
2	02/11/21	121	BZ	Buzzard	1	13:23	IN	170		30	40	80		
2	02/11/21	122	BZ	Buzzard	1	13:39	IN	120			30	90		
2	02/11/21	123	HH	Hen Harrier	1	14:39	IN	360			60	250	50	
2	06/09/21	124	LB	Lesser Black-backed Gull	2	11:22	OUT	25				25		
2	06/09/21	125	LB	Lesser Black-backed Gull	2	12:21	IN	60			30	30		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
2	06/09/21	125	LB	Lesser Black-backed Gull	2	12:21	OUT	27				10	17	
2	17/10/21	126	LB	Lesser Black-backed Gull	70	10:29	IN	50			20	30		
2	17/10/21	127	SN	Snipe	1	11:59	IN	20			20			
2	17/10/21	128	BZ	Buzzard	2	12:34	OUT	230				100	130	
2	21/12/21	129	BZ	Buzzard	1	10:44	IN	50				50		
2	21/12/21	130	GP	Golden Plover	6	11:32	IN	30			30			
2	21/12/21	130	GP	Golden Plover	6	11:32	OUT	58				20	38	
2	21/12/21	131	HH	Hen Harrier	1	15:46	IN	86			46	40		
2	19/01/22	132	SN	Snipe	1	08:48	IN	8	8					
2	19/01/22	133	BZ	Buzzard	2	09:45	IN	1680			100	580	1000	
2	19/01/22	134	SH	Sparrowhawk	1	10:10	IN	300					150	150
2	19/01/22	135	PE	Peregrine	1	11:12	IN	300					240	60
1	02/02/22	136	SH	Sparrowhawk	1	08:47	IN	3	3					
1	02/02/22	137	SN	Snipe	1	09:01	IN	66	10	10	10	10	10	16
2	16/02/22	138	BZ	Buzzard	1	15:30	IN	33				33		
2	16/02/22	139	SH	Sparrowhawk	1	15:44	IN	5	5					
2	16/02/22	140	PE	Peregrine	1	17:05	IN	20			10	10		
2	16/02/22	140	PE	Peregrine	1	17:05	OUT	19					19	
1	02/02/22	141	SH	Sparrowhawk	1	15:00	OUT	33			33			
1	05/02/22	142	BZ	Buzzard	1	11:14	IN	300			40	100	100	60
1	05/02/22	142	BZ	Buzzard	1	11:14	OUT	60						60
1	02/03/22	143	SN	Snipe	1	15:04	OUT	28	5	5	10	5	3	
1	12/03/22	144	BZ	Buzzard	3	11:38	IN	75				50	25	

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	12/03/22	145	MA	Mallard	2	11:50	OUT	28				28		
1	12/03/22	146	K.	Kestrel	1	11:51	OUT	40			40			
1	12/03/22	147	SN	Snipe	3	12:22	OUT	49	3	5	5	10	26	
1	15/03/22	148	BZ	Buzzard	1	11:56	IN	90					90	
1	15/03/22	149	BZ	Buzzard	1	12:46	IN	36				200	160	
1	15/03/22	149	BZ	Buzzard	1	12:46	OUT	10				10		
1	18/03/22	150	BZ	Buzzard	1	15:32	OUT	35				35		
1	18/03/22	151	BZ	Buzzard	1	16:29	IN	75				50	25	
1	18/03/22	152	BZ	Buzzard	1	16:56	IN	180				80	100	
1	05/04/22	153	K.	Kestrel	1	15:22		240			100	140		
1	05/04/22	154	K.	Kestrel	1	15:36		40					100	60
1	05/04/22	155	LB	Lesser Black-backed Gull	2	15:42		160					100	60
1	06/04/22	156	LB	Lesser Black-backed Gull	11	15:15		250				80	100	70
1	06/04/22	157	BZ	Buzzard	2	15:34		240				130	80	70
1	06/04/22	158	MA	Mallard	2	16:23		12	12					
1	27/04/22	159	LB	Lesser Black-backed Gull	2	10:01		75					75	
1	27/04/22	160	LB	Lesser Black-backed Gull	1	10:25		60				60		
1	27/04/22	161	K.	Kestrel	1	10:38		180				130	50	
2	22/04/22	162	LB	Lesser Black-backed Gull	6	13:41		45				45		
2	22/04/22	163	LB	Lesser Black-backed Gull	1	13:49		40			10	30		

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
2	22/04/22	164	BZ	Buzzard	1	13:57		45				45		
2	22/04/22	165	LB	Lesser Black-backed Gull	2	14:39		120				40	80	
2	27/04/22	166	LB	Lesser Black-backed Gull	1	11:13		50		5	5	40		
2	27/04/22	167	LB	Lesser Black-backed Gull	26	11:29		70				50	20	
2	27/04/22	168	HG	Herring Gull	1	12:39		35	5	5	20	5		
1	17/05/22	169	LB	Lesser Black-backed Gull	1	17:48		30				30		
1	17/05/22	170	MA	Mallard	3	17:53		33				20	13	
1	17/05/22	171	BZ	Buzzard	1	18:00		25				25		
1	17/05/22	172	BZ	Buzzard	1	18:09		180				100	80	
1	17/05/22	173	SH	Sparrowhawk	2	18:17		60	10	20	20	10		
1	17/05/22	174	BZ	Buzzard	1	18:49		240				140	100	
1	17/05/22	175	LB	Lesser Black-backed Gull	4	19:03		45					45	
1	25/05/22	176	LB	Lesser Black-backed Gull	11	16:59		60					60	
1	25/05/22	177	BZ	Buzzard	1	17:16		300					150	150
1	25/05/22	178	LB	Lesser Black-backed Gull	1	17:38		70					70	
1	26/05/22	179	LB	Lesser Black-backed Gull	2	19:38		150					100	50
1	26/05/22	180	BZ	Buzzard	2	20:32		30					30	
1	26/05/22	181	LB	Lesser Black-backed Gull	61	20:50		60					60	

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	26/05/22	182	LB	Lesser Black-backed Gull	29	20:52		45					45	
2	20/05/22	183	LB	Lesser Black-backed Gull	1	20:09		15			15			
2	20/05/22	184	LB	Lesser Black-backed Gull	6	20:39		10		10				
2	23/05/22	185	SI	Swift	4	17:18		110			20	40	50	
2	23/05/22	186	LB	Lesser Black-backed Gull	1	17:28		60		20	40			
2	23/05/22	187	BZ	Buzzard	1	18:13		360					300	60
2	23/05/22	188	BZ	Buzzard	1	18:51		420					320	100
2	23/05/22	189	LB	Lesser Black-backed Gull	8	19:36		300						300
2	24/05/22	190	LB	Lesser Black-backed Gull	1	18:18		35		15	20			
2	24/05/22	191	LB	Lesser Black-backed Gull	1	18:49		20			20			
2	24/05/22	N/A	LB	Lesser Black-backed Gull										
2	08/06/22	192	BZ	Buzzard	1	08:16		20			20			
2	08/06/22	193	K.	Kestrel	1	08:38		30			30			
2	08/06/22	194	K.	Kestrel	1	09:28		20			20			
2	08/06/22	195	BZ	Buzzard	1	09:59		40			10	30		
2	08/06/22	196	LB	Lesser Black-backed Gull	1	10:09		70				70		
2	08/06/22	197	BZ	Buzzard	1	10:22		720			270	500		
2	08/06/22	198	PE	Peregrine	1	10:33		13		13				

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	07/06/22	199	BZ	Buzzard	1	9:54		620				220	400	
2	07/06/22	200	BZ	Buzzard	1	10:40		60				20	40	
2	14/06/22	201	BZ	Buzzard	1	9:29		50				50		
2	14/06/22	202	HG	Herring Gull	2	09:52		240				40	200	
1	19/06/22	203	LB	Lesser Black-backed Gull	2	12:51		30				30		
1	19/06/22	204	BZ	Buzzard	1	13:10		120				60	60	
1	19/06/22	205	HG	Herring Gull	2	13:36		35			20	15		
1	19/06/22	206	LB	Lesser Black-backed Gull	1	13:38		20			20			
1	19/06/22	207	LB	Lesser Black-backed Gull	1	14:06		36					36	
2	11/07/22	208	BZ	Buzzard	1	18:59		45			45			
2	27/07/22	209	BZ	Buzzard	1	19:05		20						
1	13/07/22	210	BZ	Buzzard	1	14:32		50				50		
1	13/07/22	211	SH	Sparrowhawk	1	14:40		5	5					
1	13/07/22	212	K.	Kestrel	1	14:43		15			15			
1	13/07/22	213	K.	Kestrel	1	15:13		45			20	25		
1	13/07/22	214	BZ	Buzzard	1	15:45		50			40	10		
1	13/07/22	215	K.	Kestrel	1	16:09		40			40			
1	13/07/22	216	BZ	Buzzard	1			90					90	
1	21/07/22	217	BZ	Buzzard	1	17:03		40				40		
1	21/07/22	218	K.	Kestrel	1	19:37		150			30	80	40	
1	13/08/22	219	BZ	Buzzard	1	10:03		120				80	40	
1	13/08/22	220	BZ	Buzzard	1	11:00		180						180

VP	Date	Mapnote / Flightline No.	Map Name	Species	Quantity	Start	In/ Out	Duration (s)	0- 10m (s)	10- 20m (s)	20- 30m (s)	30- 50m (s)	50- 100m (s)	100- 185m (s)
1	13/08/22	221	K.	Kestrel	1	11:17		25			25			
1	18/08/22	222	SH	Sparrowhawk	1	20:01		54				20	20	14
2	12/08/22	223	GS	Great Spotted Woodpecker	1	10:31		50			30	20		
2	12/08/22	224	LB	Lesser Black-backed Gull	1	10:36		30				30		
2	12/08/22	225	BZ	Buzzard	1	10:53		480	450	15	15			
2	12/08/22	226	LB	Lesser Black-backed Gull	1	11:29		190					90	100
2	12/08/22	227	LB	Lesser Black-backed Gull	19	11:57		150					50	100
2	15/09/22	228	K.	Kestrel	1	14:42		80		40	40			
2	15/09/22	229	K.	Kestrel	1	14:49		30			30		160	
2	15/09/22	230	BZ	Buzzard	1	15:22		360			80	120	160	
2	15/09/22	231	LB	Lesser Black-backed Gull	8	15:29		180				100	80	
2	21/09/22	232	LB	Lesser Black-backed Gull	1	08:36		10		10				
2	21/09/22	233	LB	Lesser Black-backed Gull	1	09:05		96			96			
2	25/09/22	234	BZ	Buzzard	1	11:17		50				50		
2	25/09/22	235	LB	Lesser Black-backed Gull	4	11:37		25			15	10		
2	25/09/22	236	SN	Snipe	1	11:50		40				20	20	
1	21/09/22	237	LB	Lesser Black-backed Gull	21	17:54		30					30	

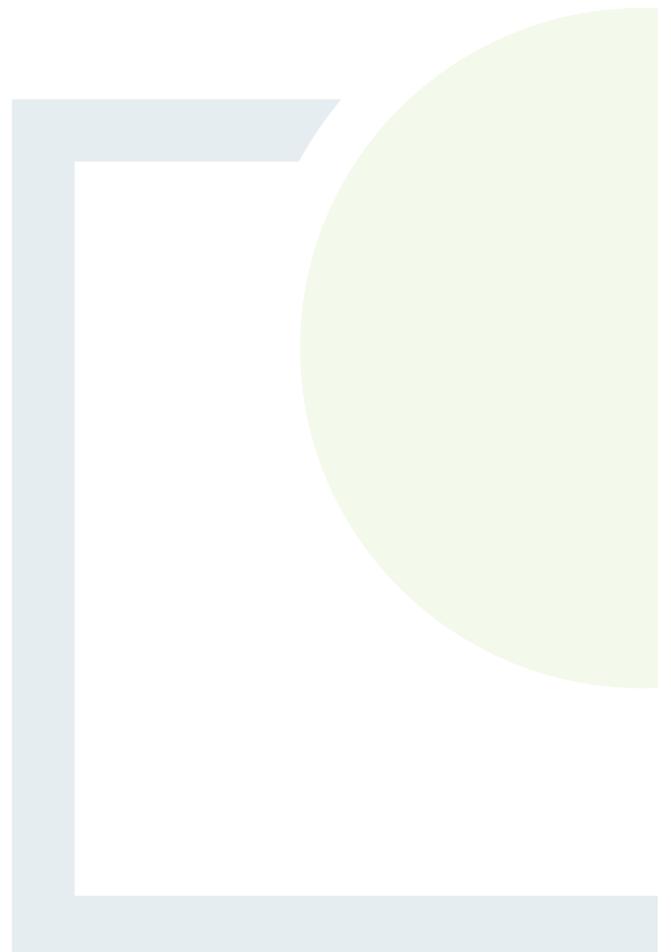
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1	21/09/22	238	LB	Lesser Black-backed Gull	5	18:00		30					30	
1	21/09/22	239	LB	Lesser Black-backed Gull	4	18:19		50				10	40	
1	21/09/22	240	LB	Lesser Black-backed Gull	1	18:29		25				25		
1	21/09/22	241	LB	Lesser Black-backed Gull	6	18:42		40					40	
1	28/09/22	242	LB	Lesser Black-backed Gull	3	12:53		40				40		
1	28/09/22	243	K.	Kestrel	1	13:15		120				80	40	
1	28/09/22	244	LB	Lesser Black-backed Gull	16	14:05		50					50	
1	28/09/22	245	K.	Kestrel	1	14:35		110				110		
1	28/09/22	246	SH	Sparrowhawk	1	14:41		238					100	138
1	28/09/22	247	LB	Lesser Black-backed Gull	47	17:08		40				40		
1	28/09/22	248	K.	Kestrel	1	17:19		57			57			
1	28/09/22	249	LB	Lesser Black-backed Gull	1	17:51		64				30	34	

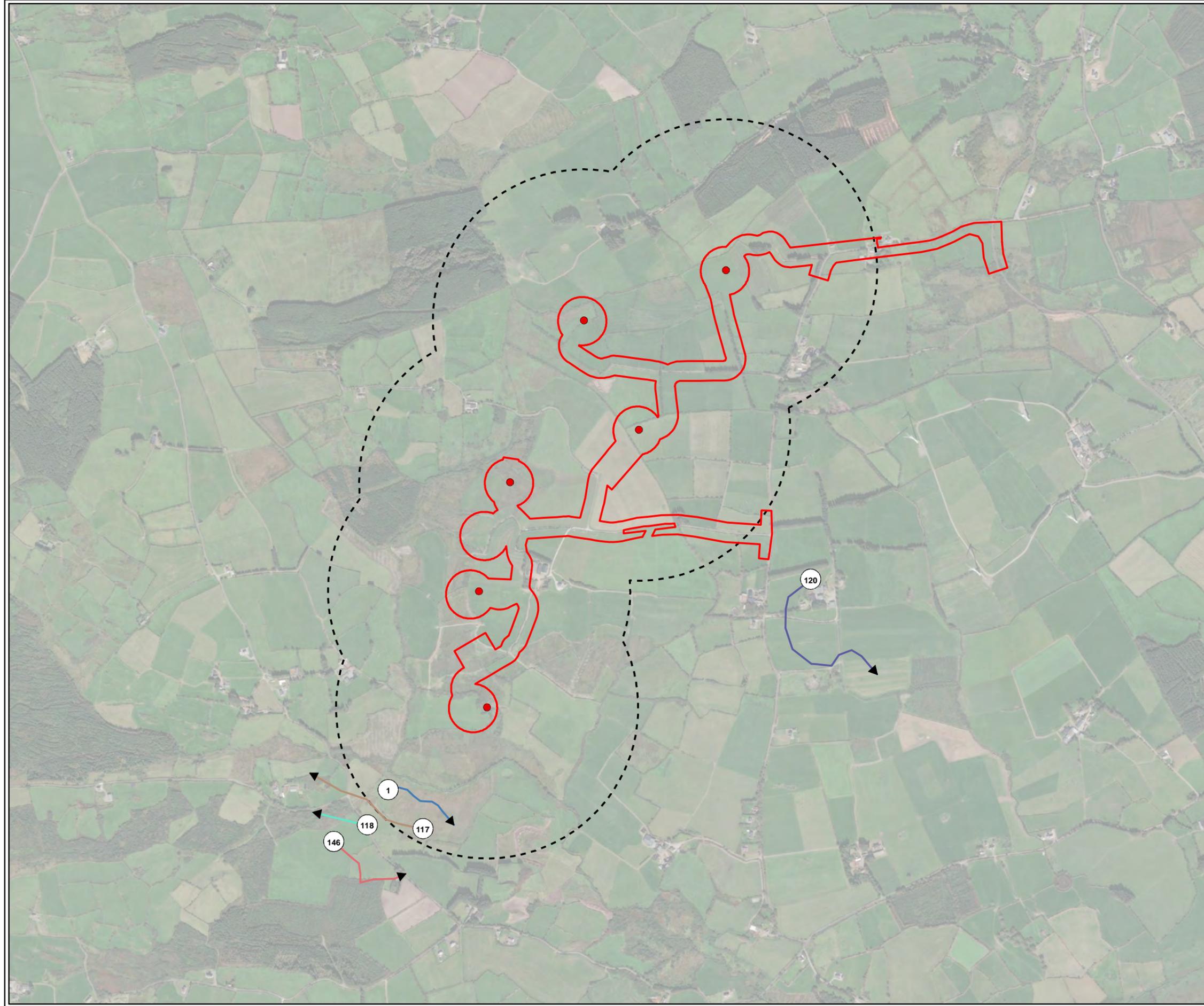


CONSULTANTS IN ENGINEERING,
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APPENDIX 2

Flight Line Maps





Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines

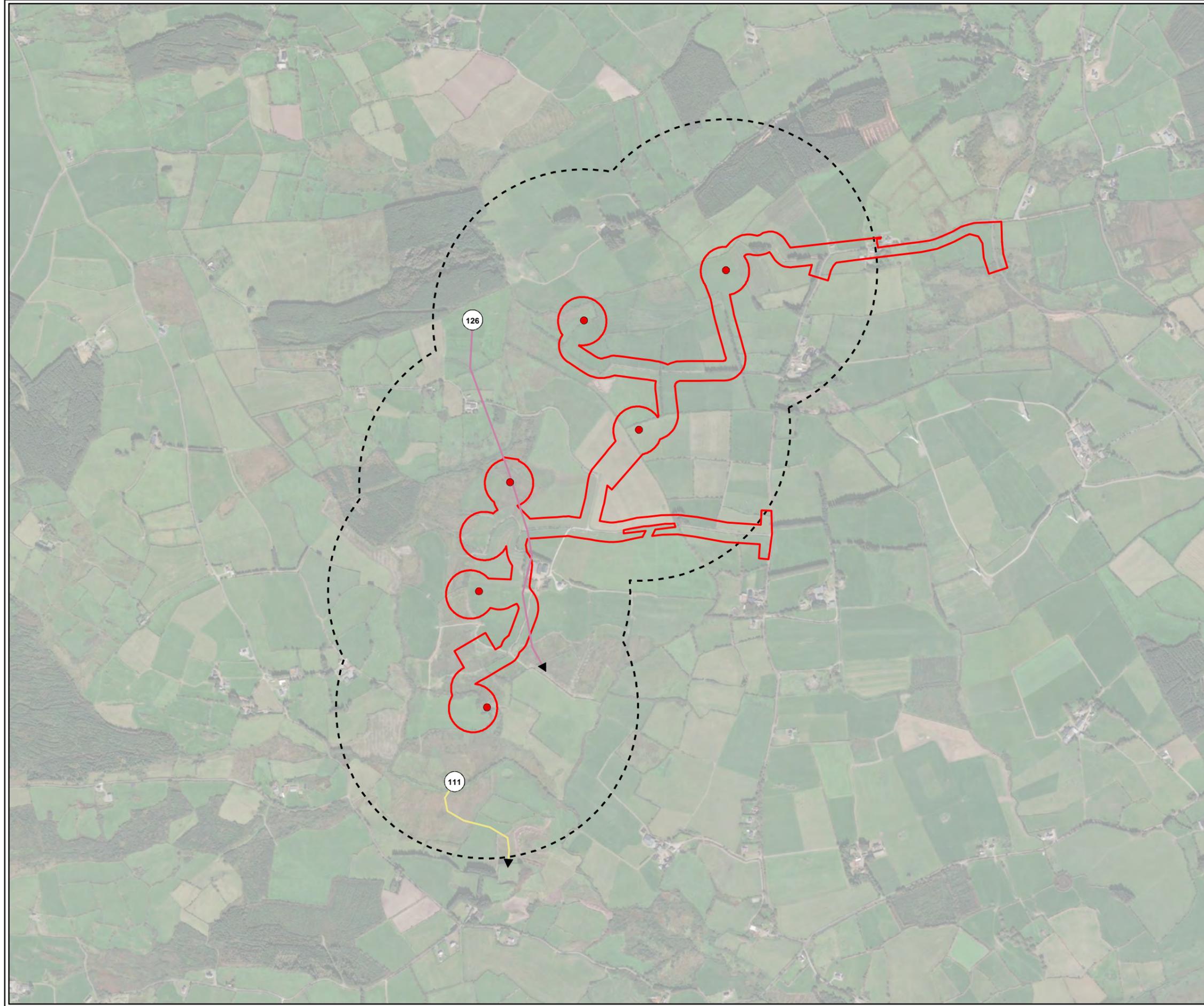
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- 117, 10/11/2021, 11:54:00
- 118, 15/12/2021, 12:39:00
- 120, 02/11/2021, 12:53:00
- 146, 12/03/2022, 11:51:00

TITLE: Winter 2020/2021 and 2021/2022 Kestrel	
PROJECT: Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO.: -	
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:12500	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3

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Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

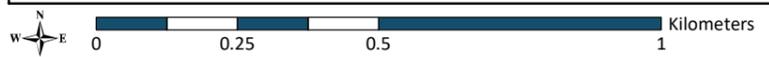
Flightlines

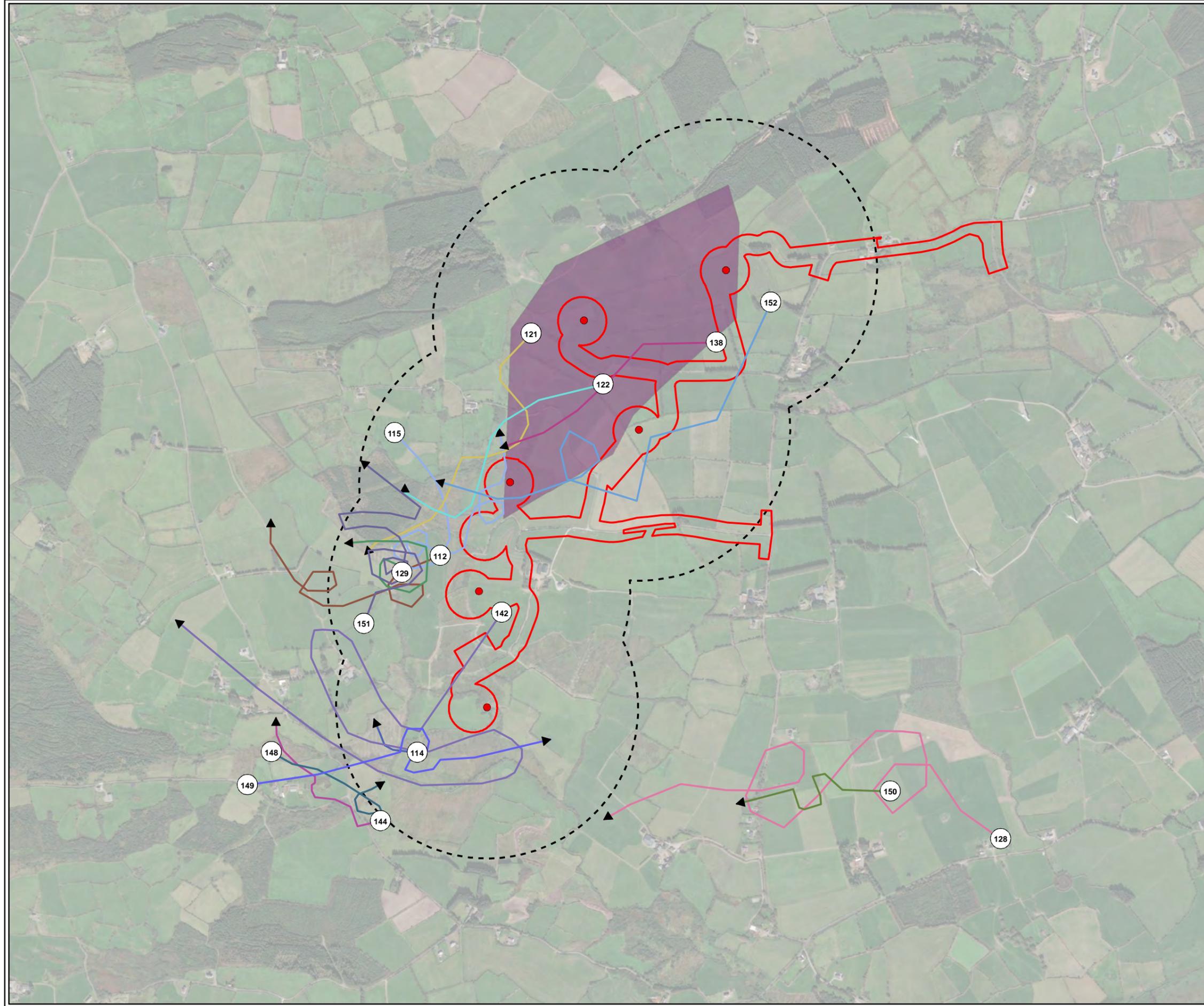
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- ▶ 111, 08/10/2021, 10:04:00
- ▶ 126, 17/10/2021, 10:29:00

TITLE:	Winter 2021/2022 Lesser Black-backed Gull		
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork		
FIGURE NO:	-		
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.		
SCALE:	1:12500	REVISION:	0
DATE:	23/02/2023	PAGE SIZE:	A3

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Legend

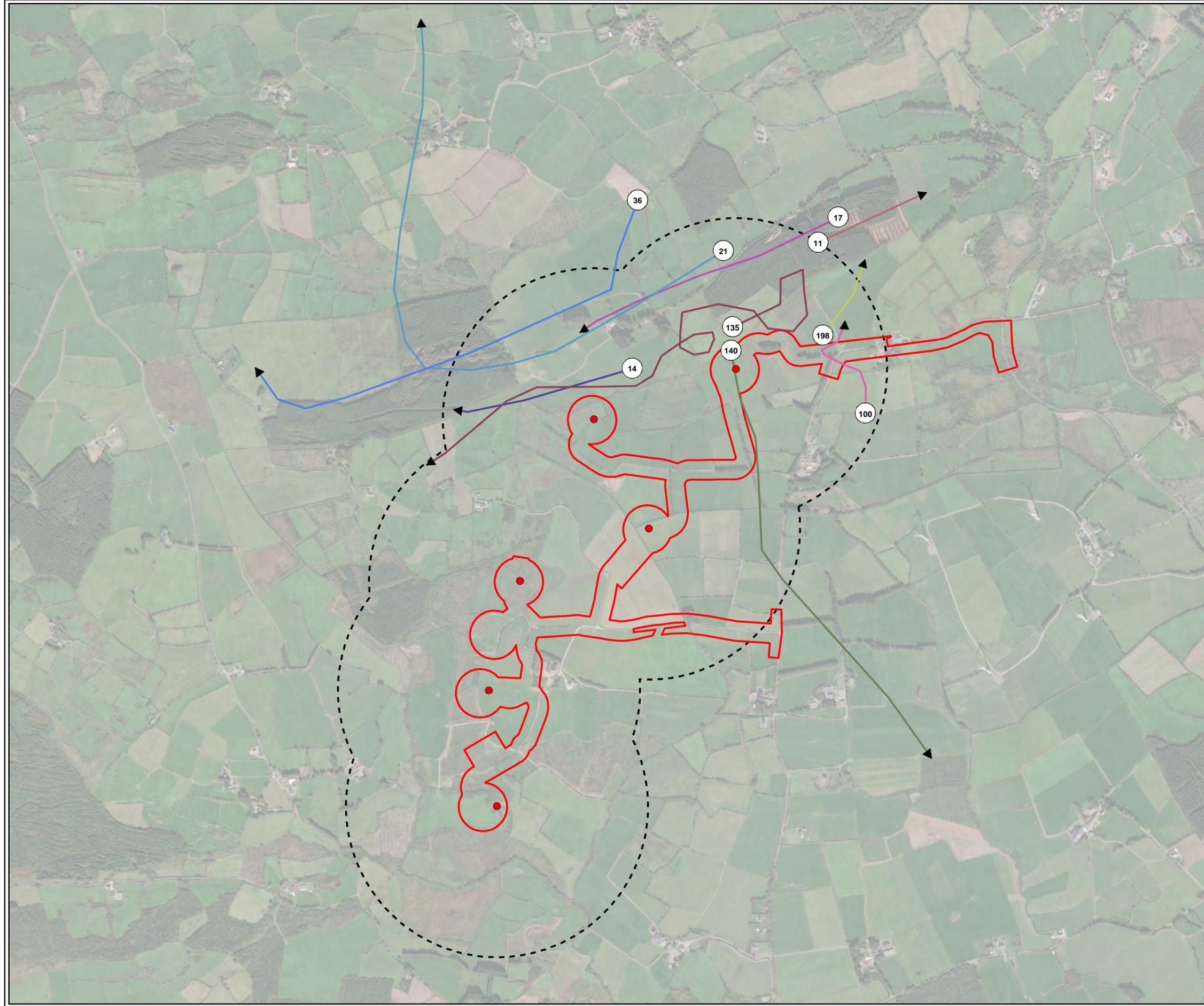
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

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- ➔ 114, 30/10/2021, 10:18:00
- ➔ 115, 30/10/2021, 11:11:00
- ➔ 121, 02/11/2021, 13:23:00
- ➔ 122, 02/11/2021, 13:39:00
- ➔ 128, 17/10/2021, 12:34:00
- ➔ 129, 21/12/2021, 10:44:00
- ➔ 138, 16/02/2022, 15:30:00
- ➔ 142, 05/02/2022, 11:14:00
- ➔ 144, 12/03/2022, 11:38:00
- ➔ 148, 15/03/2022, 11:56:00
- ➔ 149, 15/03/2022, 12:46:00
- ➔ 150, 18/03/2022, 15:32:00
- ➔ 151, 18/03/2022, 16:29:00
- ➔ 152, 18/03/2022, 16:56:00
- 133, 19/01/2022, 09:45:00

TITLE:	Winter 2021/2022 Buzzard
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

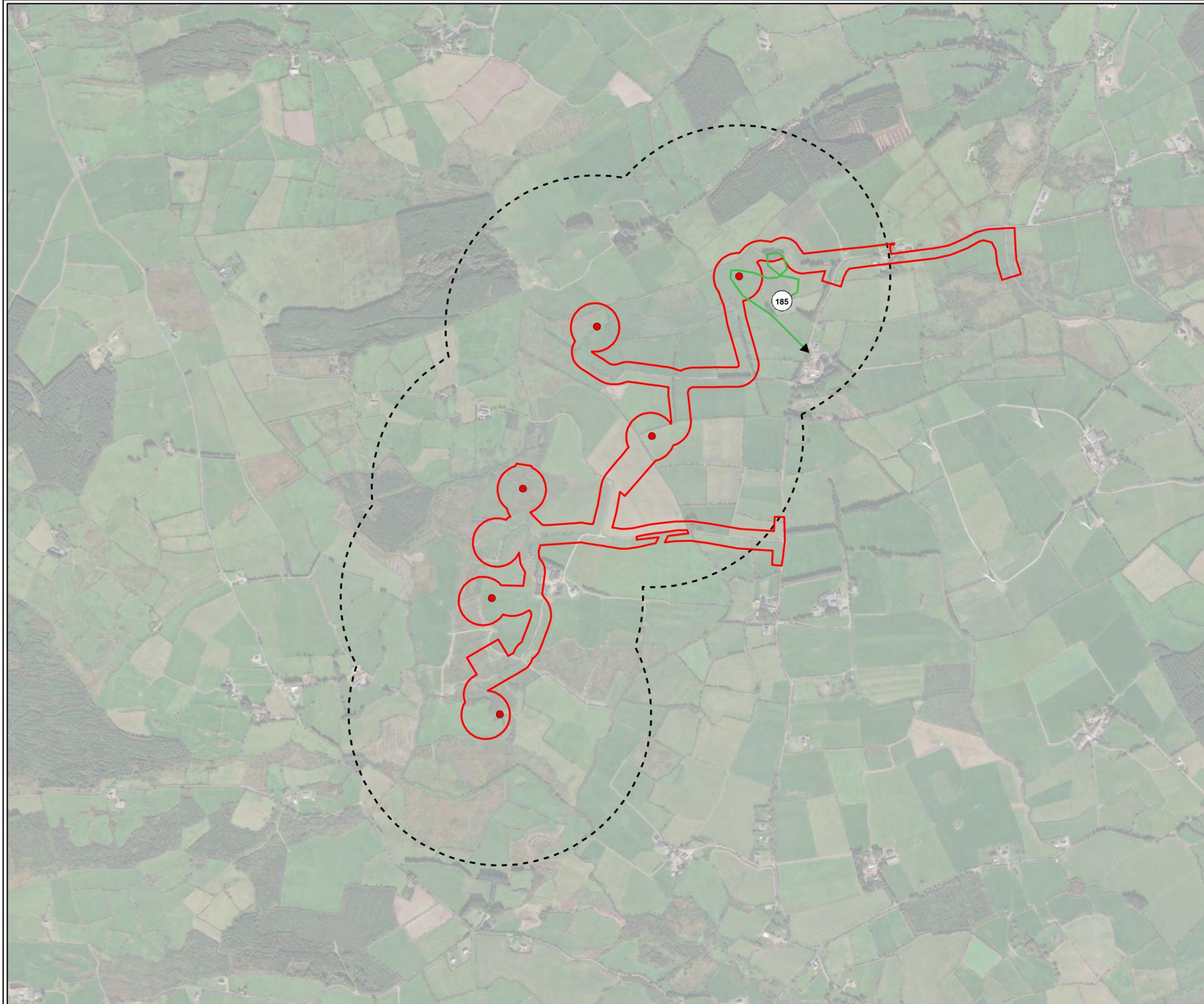
Flightlines

FlightNo, Date, Time

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- ▶ 14, 14/01/2021, 11:17:00
- ▶ 17, 14/01/2021, 11:42:00
- ▶ 21, 14/01/2021, 14:50:00
- ▶ 36, 15/03/2021, 12:19:00
- ▶ 100, 01/08/2021, 11:37:00
- ▶ 135, 19/01/2022, 11:12:00
- ▶ 140, 16/02/2022, 17:05:00
- ▶ 198, 08/06/2022, 10:33:00

TITLE:	Peregrine
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
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DATE:	23/02/2023
PAGE SIZE:	A3





Legend

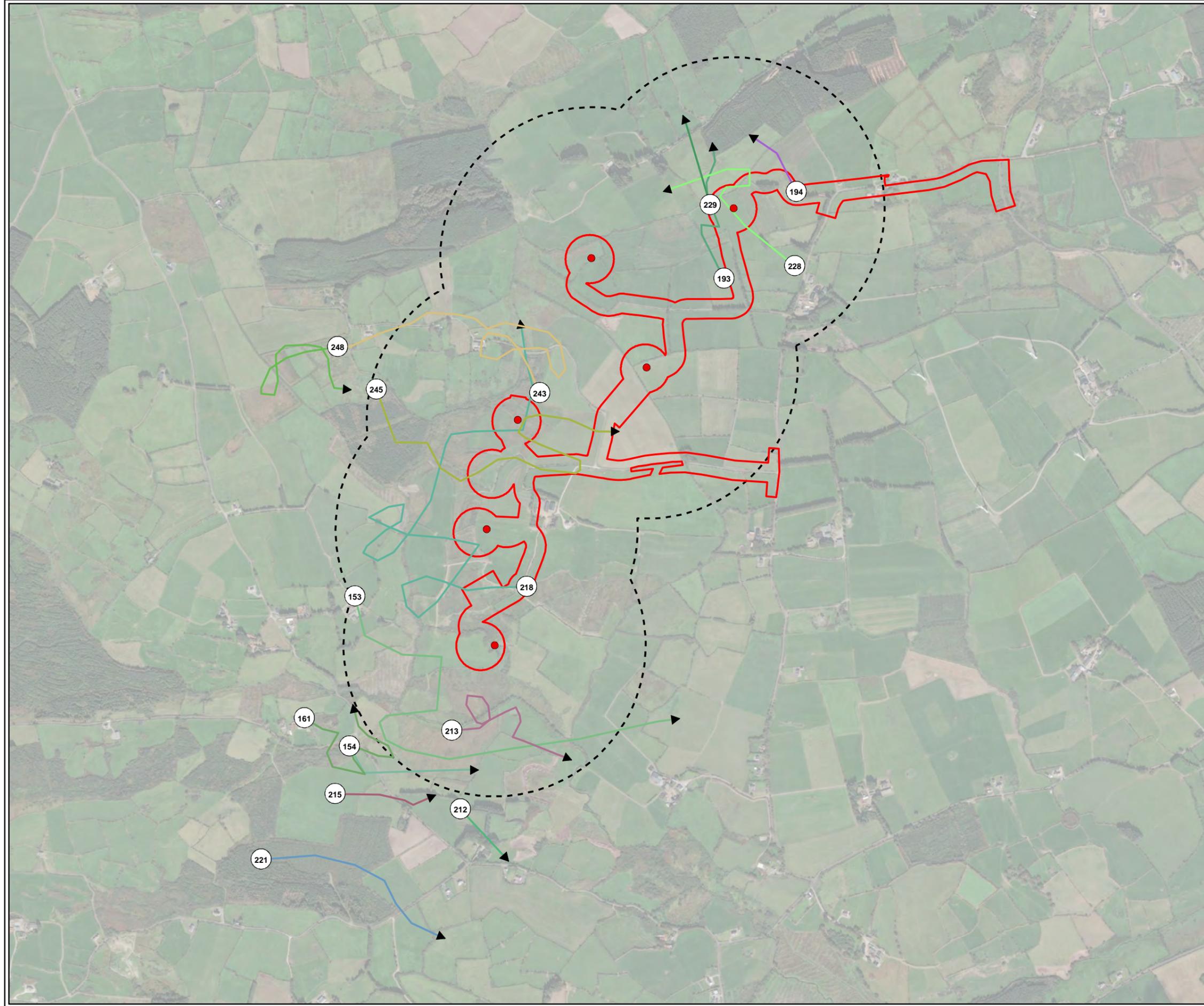
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

- 185, 23/05/2022, 17:18:00

TITLE:	Swift
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3



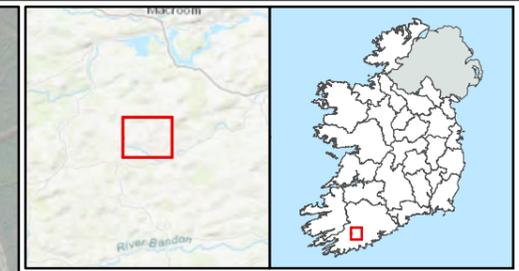
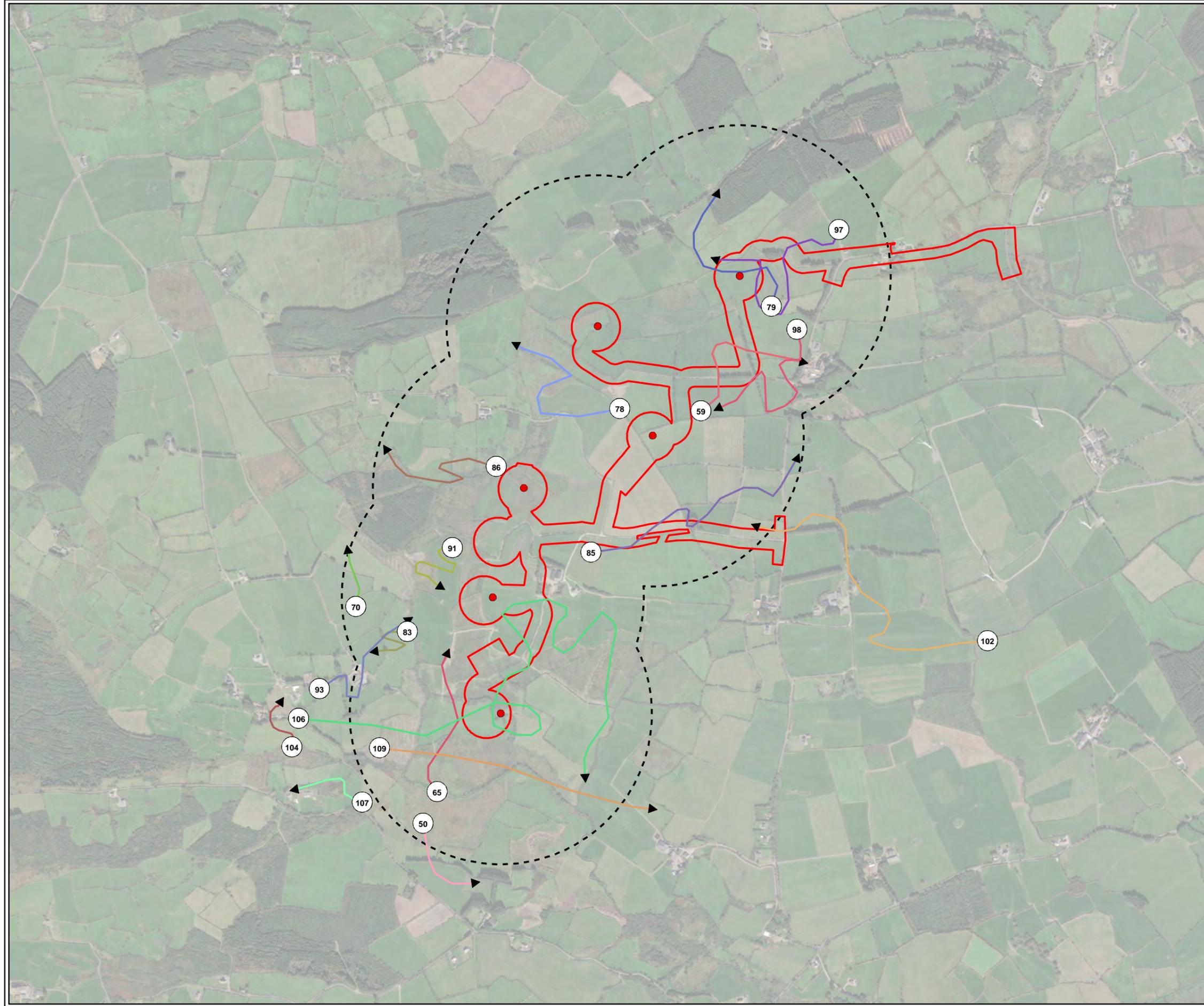


- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout

- Flightlines**
FlightNo, Date, Time
- ▶ 153, 05/04/2022, 15:22:00
 - ▶ 154, 05/04/2022, 15:36:00
 - ▶ 161, 27/04/2022, 10:38:00
 - ▶ 193, 08/06/2022, 08:38:00
 - ▶ 194, 08/06/2022, 09:28:00
 - ▶ 212, 13/07/2022, 14:43:00
 - ▶ 213, 13/07/2022, 15:13:00
 - ▶ 215, 13/07/2022, 16:09:00
 - ▶ 218, 21/07/2022, 19:37:00
 - ▶ 221, 13/08/2022, 11:17:00
 - ▶ 228, 15/09/2022, 14:42:00
 - ▶ 229, 15/09/2022, 14:49:00
 - ▶ 243, 28/09/2022, 13:15:00
 - ▶ 245, 28/09/2022, 14:35:00
 - ▶ 248, 28/09/2022, 17:19:00

TITLE:	Summer 2022 Kestrel
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





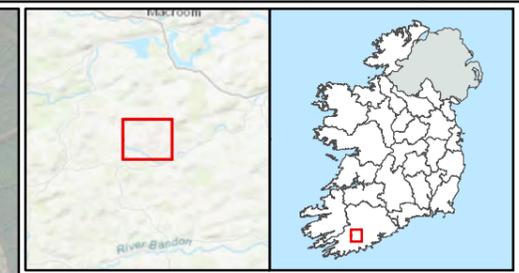
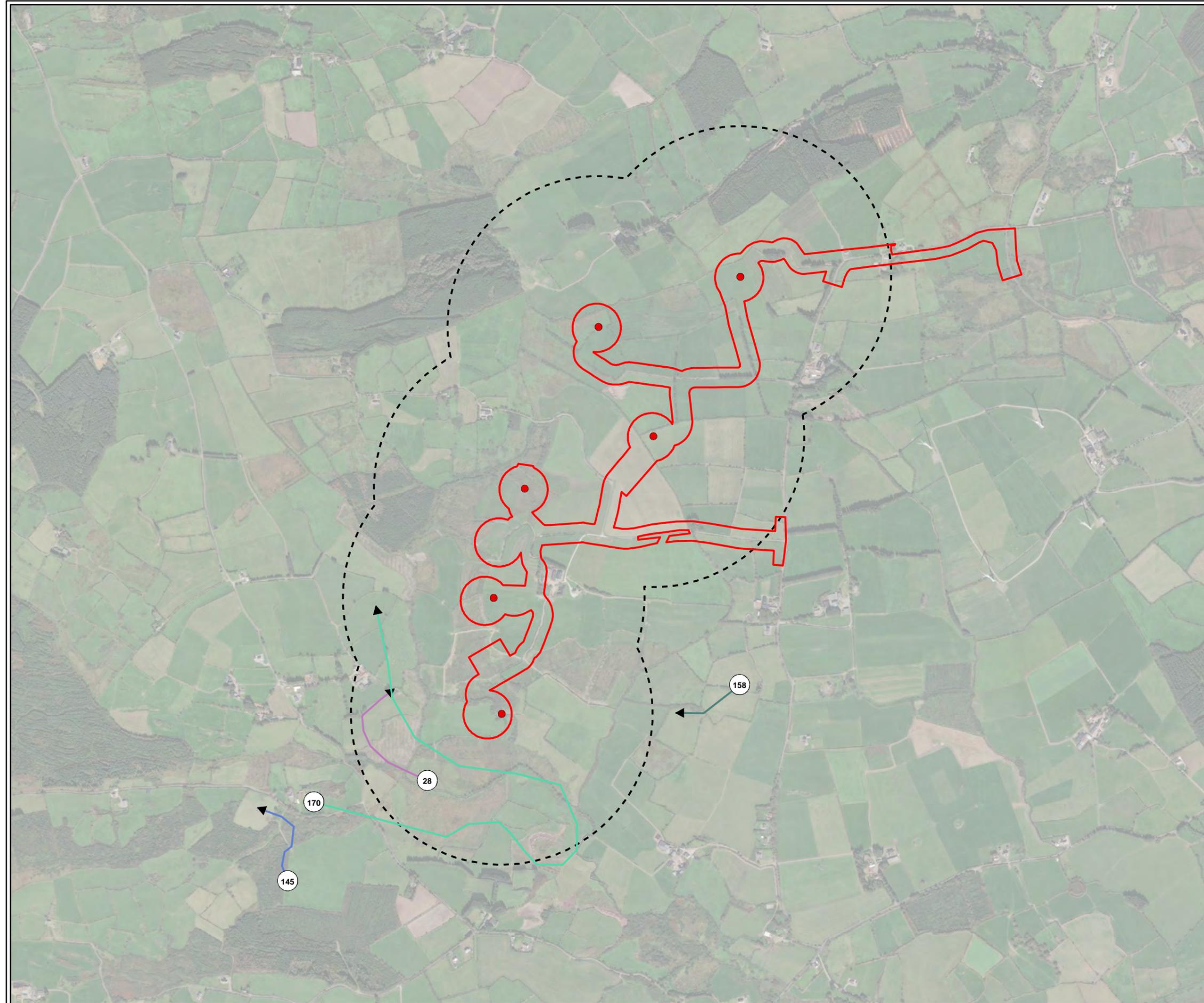
- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

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▶	59, 09/04/2021, 14:20:00
▶	65, 09/05/2021, 16:06:00
▶	70, 11/05/2021, 10:14:00
▶	78, 17/06/2021, 18:48:00
▶	79, 17/06/2021, 18:54:00
▶	83, 16/06/2021, 13:40:00
▶	85, 16/06/2021, 14:56:00
▶	86, 16/06/2021, 15:15:00
▶	91, 02/07/2021, 11:28:00
▶	93, 02/07/2021, 14:51:00
▶	97, 01/08/2021, 08:47:00
▶	98, 01/08/2021, 09:48:00
▶	102, 01/08/2021, 13:26:00
▶	104, 02/08/2021, 11:28:00
▶	106, 02/08/2021, 18:21:00
▶	107, 03/09/2021, 12:08:00
▶	109, 03/09/2021, 13:46:00

TITLE:	Summer 2021 Kestrel
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3



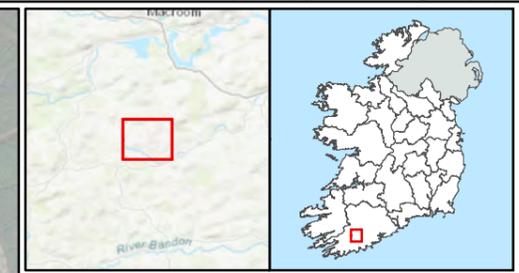
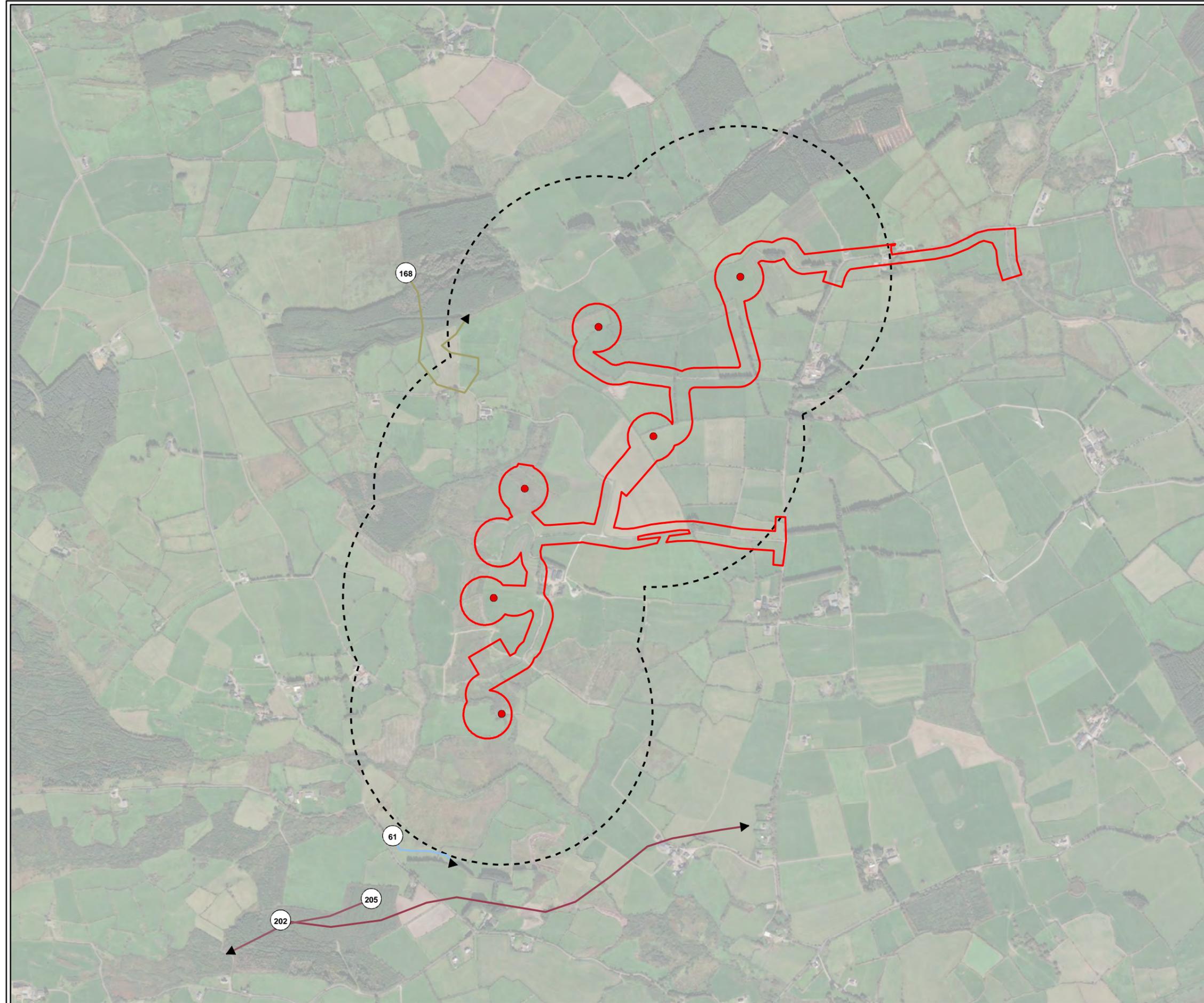


- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout
- Flightlines**
- FlightNo, Date, Time**
- 28, 07/03/2021, 12:18:00
 - 145, 12/03/2022, 11:50:00
 - 158, 06/04/2022, 16:23:00
 - 170, 17/05/2022, 17:53:00

TITLE:	Mallard
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:12500	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3

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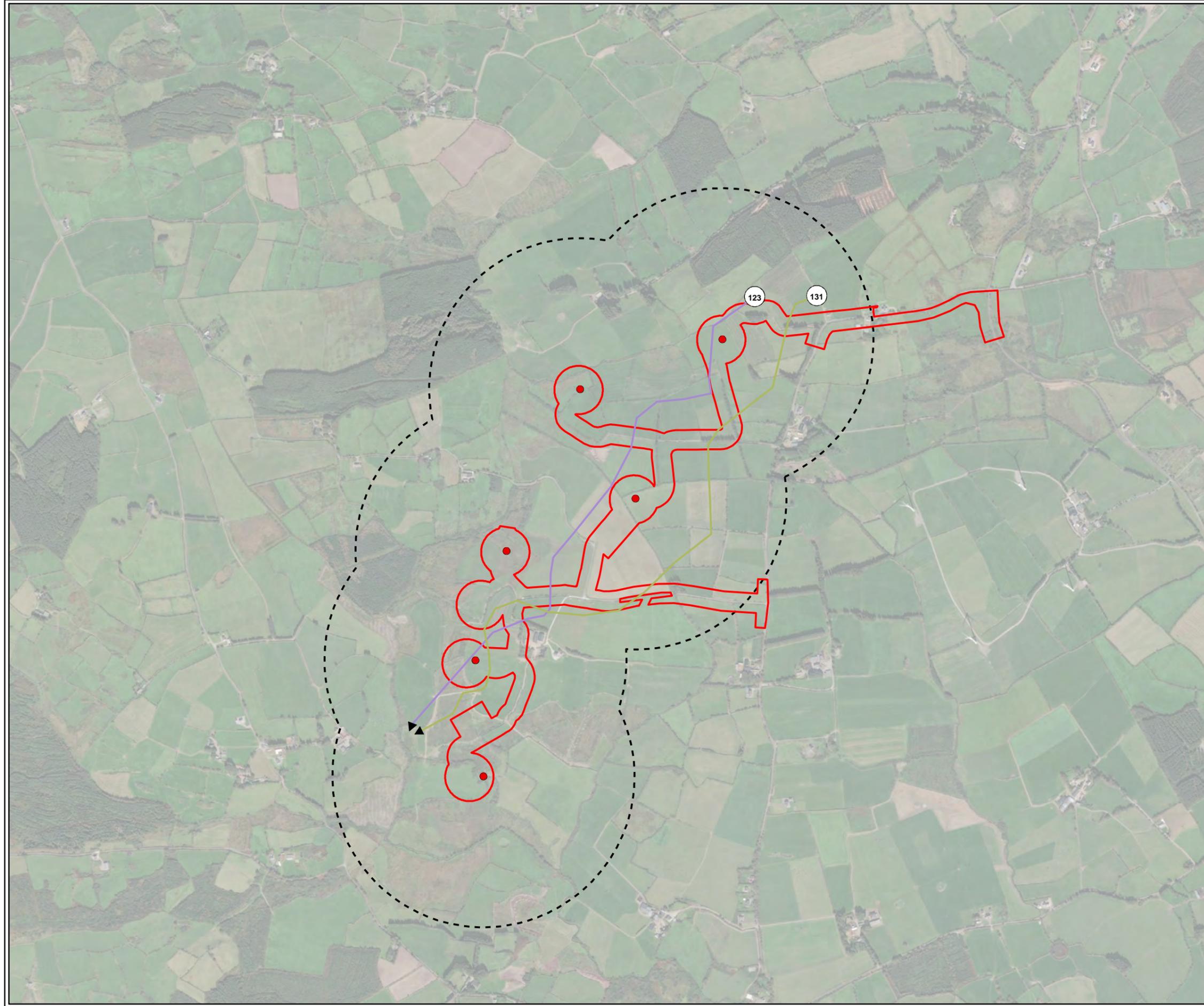




- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout
- Flightlines**
- FlightNo, Date, Time**
- ▶ 61, 09/05/2021, 14:42:00
 - ▶ 168, 27/04/2022, 12:39:00
 - ▶ 202, 14/06/2022, 09:52:00
 - ▶ 205, 19/06/2022, 13:36:00

TITLE:	Herring Gull
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

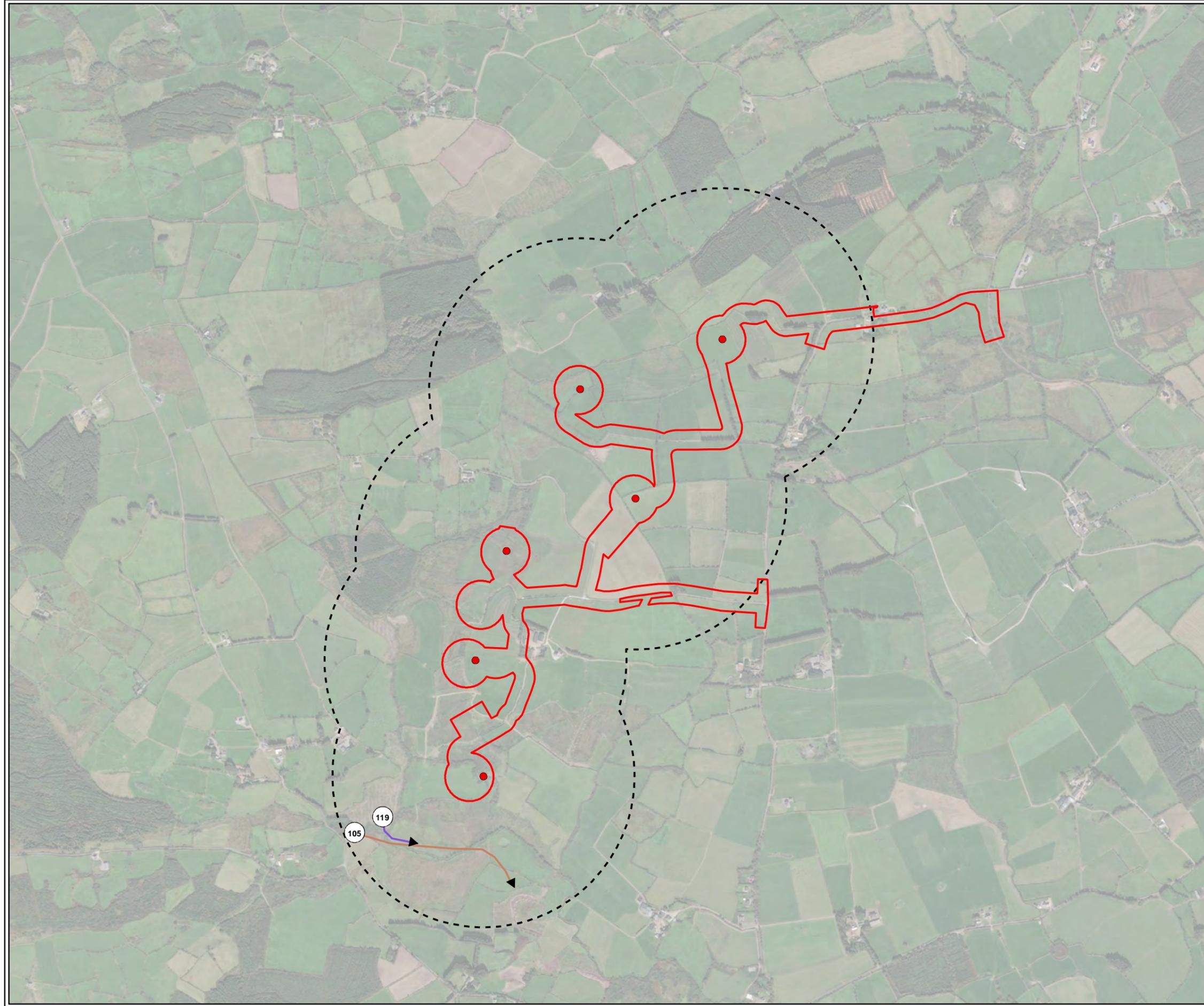
Flightlines

FlightNo, Date, Time

- ▶ 123, 02/11/2021, 14:39:00
- ▶ 131, 21/12/2021, 15:46:00

TITLE:	
Hen Harrier	
PROJECT:	
Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO:	
-	
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:12500	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3





Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

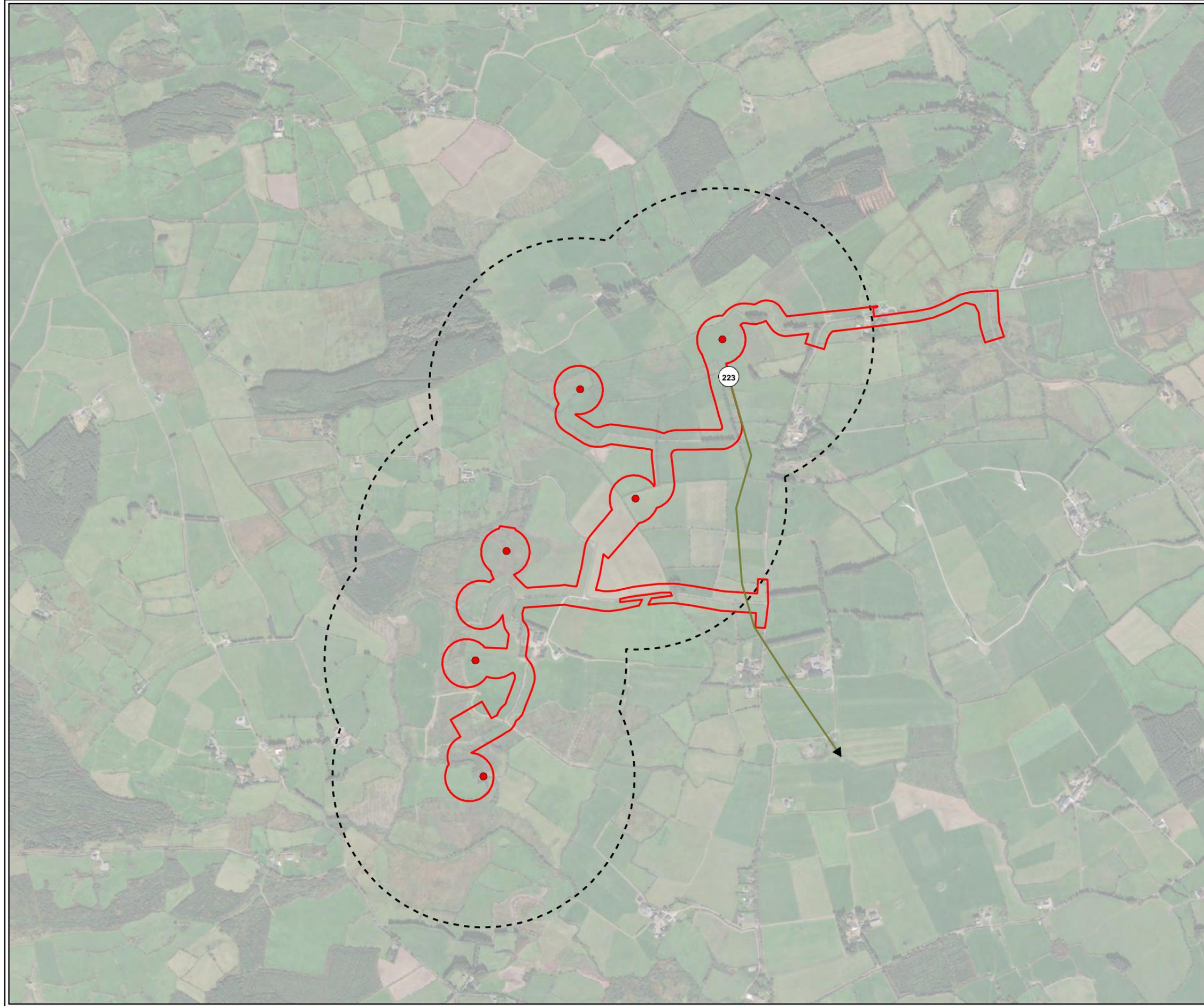
Flightlines

FlightNo, Date, Time

- 105, 02/08/2021, 16:10:00
- 119, 15/12/2021, 15:38:00

TITLE:	
Grey Heron	
PROJECT:	
Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO:	
-	
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:12500	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3





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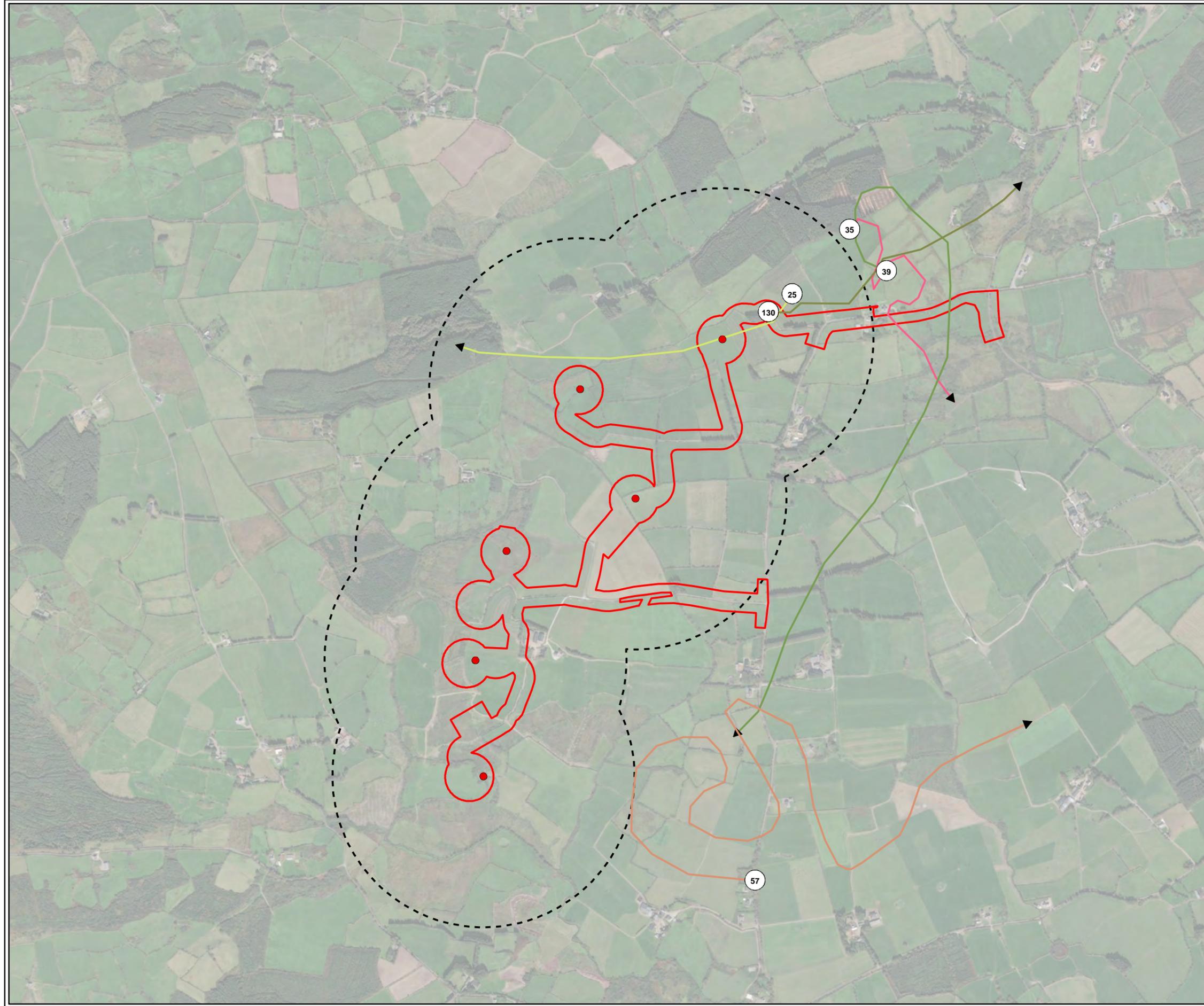
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

- 223, 12/08/2022, 10:31:00

TITLE:	Great Spotted Woodpecker		
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork		
FIGURE NO.:	-		
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.		
SCALE:	1:12500	REVISION:	0
DATE:	23/02/2023	PAGE SIZE:	A3

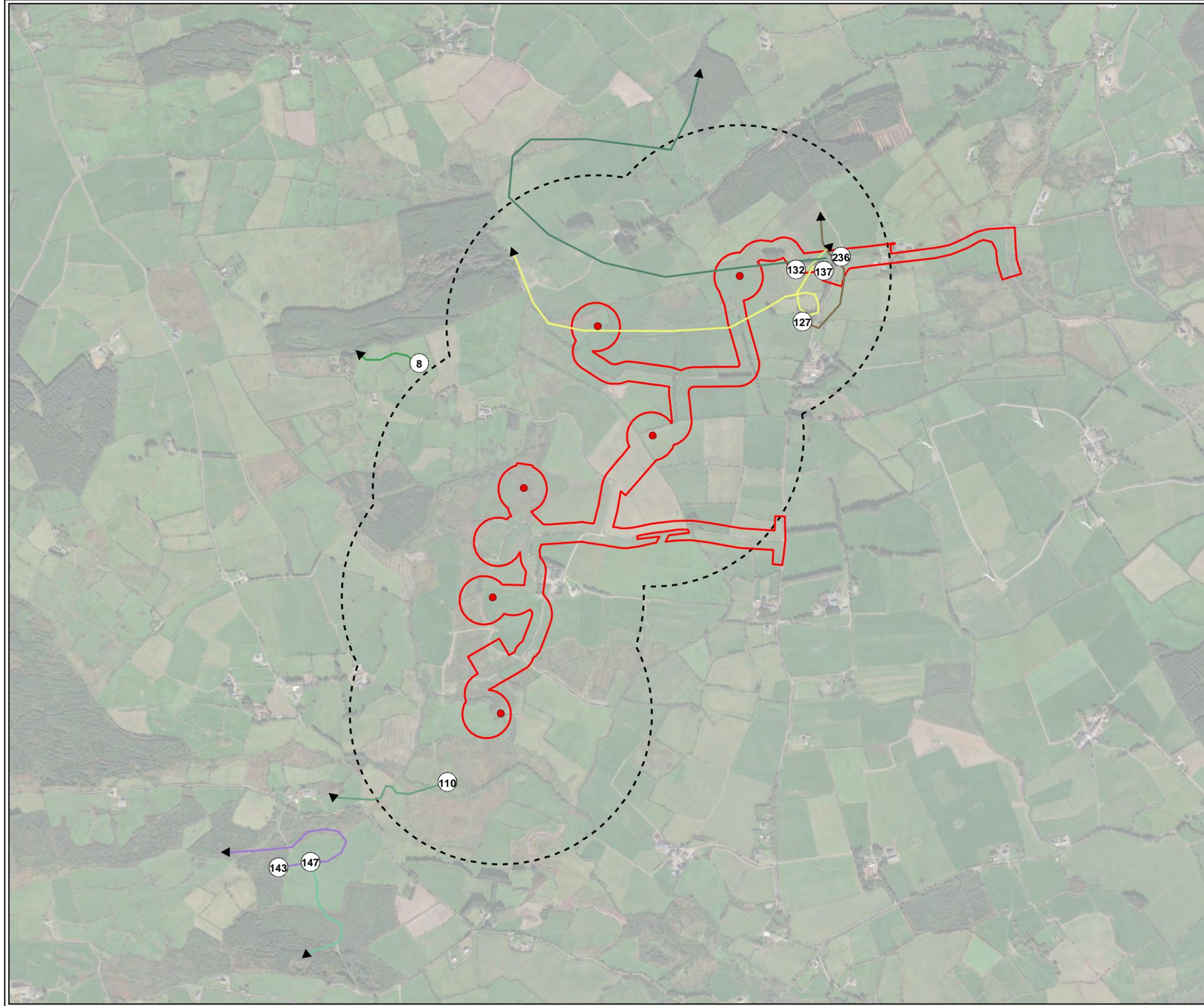




- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout
- Flightlines**
FlightNo, Date, Time
- ▶ 25, 02/02/2021, 12:19:00
 - ▶ 35, 15/03/2021, 12:09:00
 - ▶ 39, 15/03/2021, 13:36:00
 - ▶ 57, 09/04/2021, 13:50:00
 - ▶ 130, 21/12/2021, 11:32:00

TITLE:	Golden Plover
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3

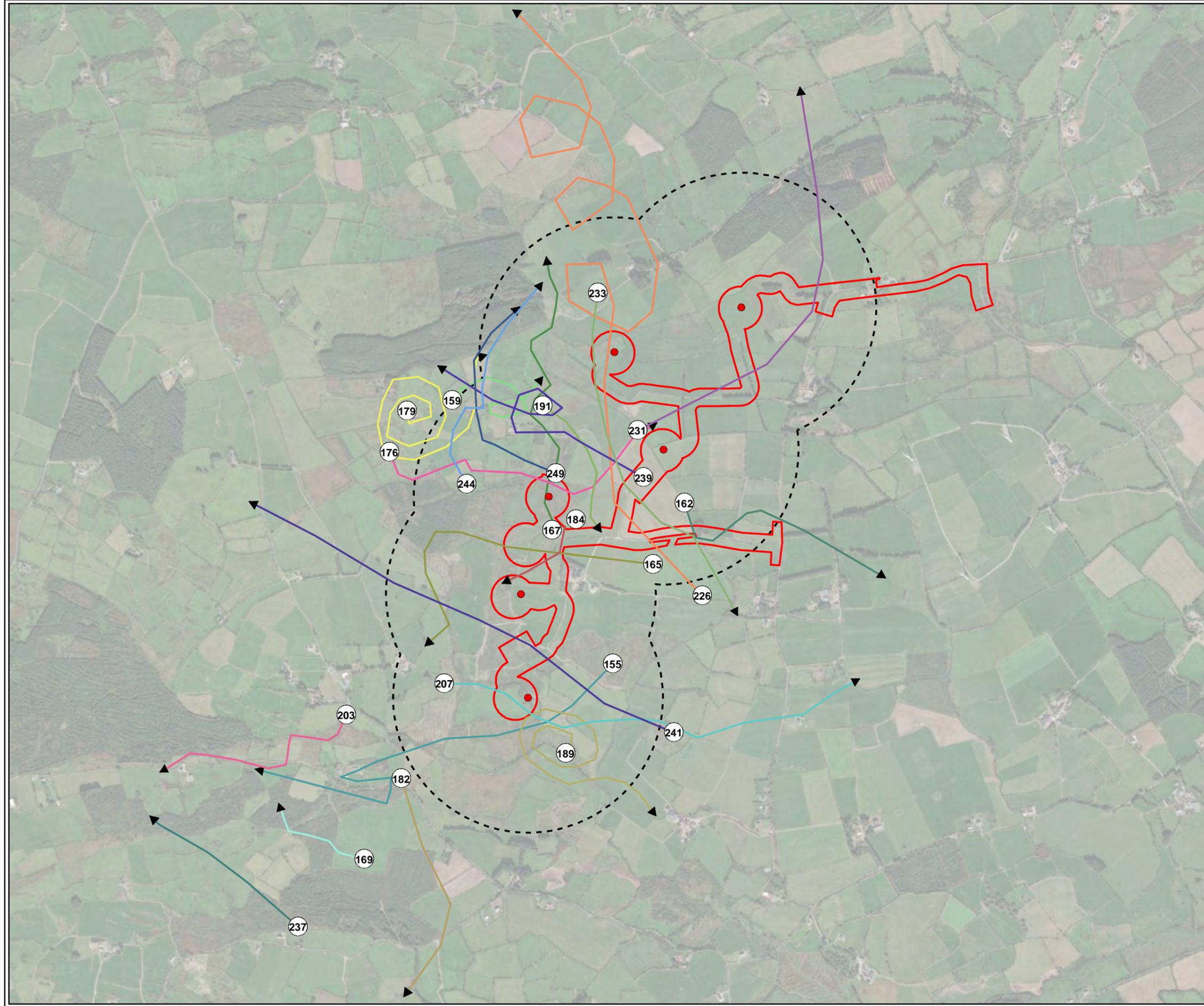




- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout
- Flightlines**
FlightNo, Date, Time
- ➔ 8, 09/11/2020, 13:09:00
 - ➔ 110, 08/10/2021, 09:57:00
 - ➔ 127, 17/10/2021, 11:59:00
 - ➔ 132, 19/01/2022, 08:48:00
 - ➔ 137, 02/02/2022, 09:01:00
 - ➔ 143, 02/03/2022, 15:04:00
 - ➔ 147, 12/03/2022, 12:22:00
 - ➔ 236, 25/09/2022, 11:50:00

TITLE:	Snipe
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:12500	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3





Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines

FlightNo, Date, Time

- 155, 05/04/2022, 15:42:00
- 159, 27/04/2022, 10:01:00
- 162, 22/04/2022, 13:41:00
- 165, 22/04/2022, 14:39:00
- 167, 27/04/2022, 11:29:00
- 169, 17/05/2022, 17:48:00
- 176, 25/05/2022, 16:59:00
- 179, 26/05/2022, 19:38:00
- 182, 26/05/2022, 20:52:00
- 184, 20/05/2022, 20:39:00
- 189, 23/05/2022, 19:36:00
- 191, 24/05/2022, 18:49:00
- 203, 19/06/2022, 12:51:00
- 207, 19/06/2022, 14:06:00
- 226, 12/08/2022, 11:29:00
- 231, 15/09/2022, 15:29:00
- 233, 21/09/2022, 09:05:00
- 237, 21/09/2022, 17:54:00
- 239, 21/09/2022, 18:19:00
- 241, 21/09/2022, 18:42:00
- 244, 28/09/2022, 14:05:00
- 249, 28/09/2022, 17:51:00

TITLE:	Summer 2022 Lesser Black-backed Gull 1	
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO.:	-	
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE:	1:14000	REVISION: 0
DATE:	23/02/2023	PAGE SIZE: A3





- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout

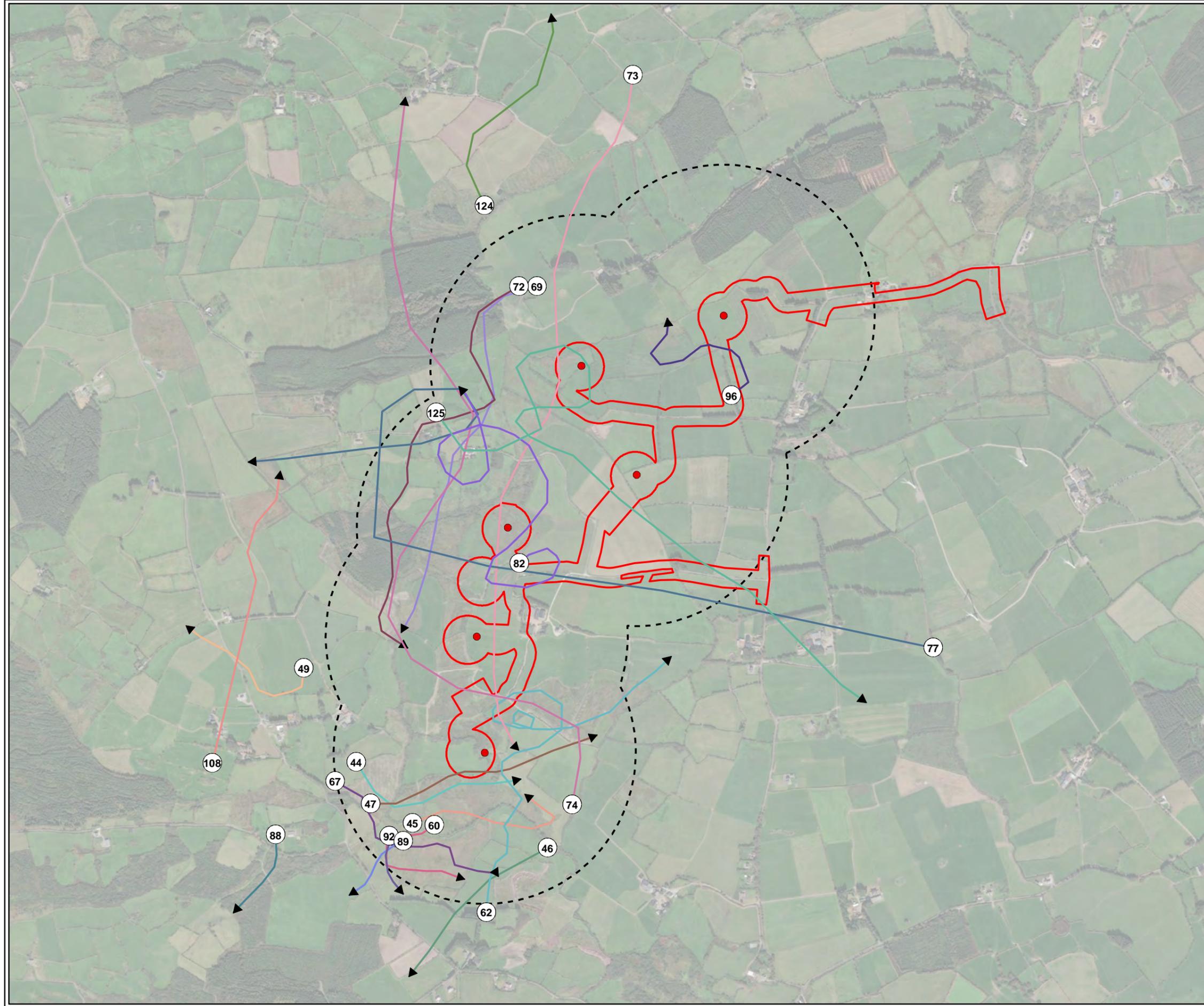
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FlightNo, Date, Time

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→	160, 27/04/2022, 10:25:00
→	163, 22/04/2022, 13:49:00
→	166, 27/04/2022, 11:13:00
→	175, 17/05/2022, 19:03:00
→	178, 25/05/2022, 17:38:00
→	181, 26/05/2022, 20:50:00
→	183, 20/05/2022, 20:09:00
→	186, 23/05/2022, 17:28:00
→	190, 24/05/2022, 18:18:00
→	196, 08/06/2022, 10:09:00
→	206, 19/06/2022, 13:38:00
→	224, 12/08/2022, 10:36:00
→	227, 12/08/2022, 11:57:00
→	232, 21/09/2022, 08:36:00
→	235, 25/09/2022, 11:37:00
→	238, 21/09/2022, 18:00:00
→	240, 21/09/2022, 18:29:00
→	242, 28/09/2022, 12:53:00
→	247, 28/09/2022, 17:08:00

TITLE:	Summer 2022 Lesser Black-backed Gull 2
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:14000
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





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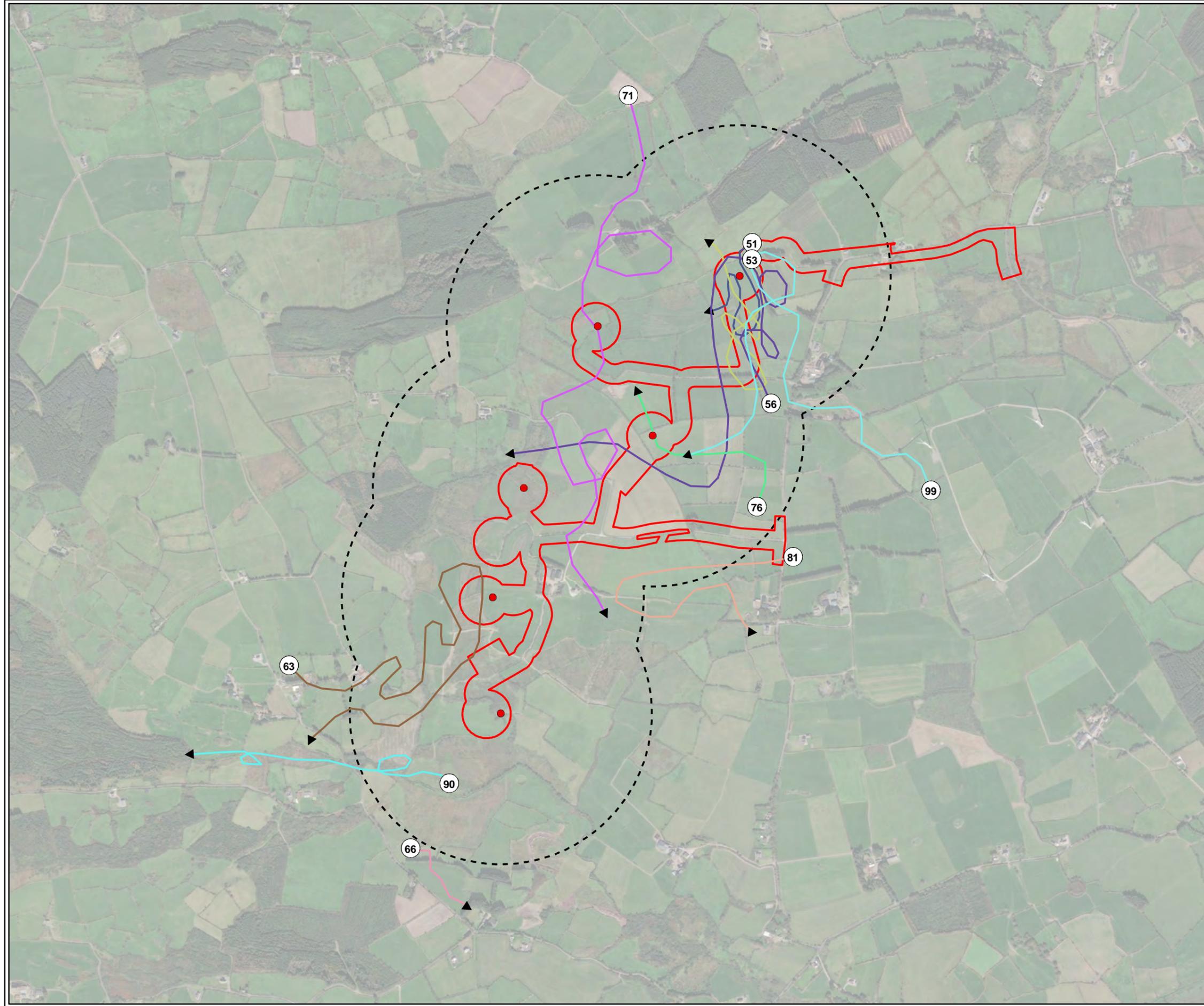
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

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- ▶ 45, 09/04/2021, 17:32:00
- ▶ 46, 09/04/2021, 17:38:00
- ▶ 47, 11/04/2021, 08:33:00
- ▶ 49, 11/04/2021, 12:26:00
- ▶ 60, 09/05/2021, 14:37:00
- ▶ 62, 09/05/2021, 15:05:00
- ▶ 67, 15/05/2021, 19:13:00
- ▶ 69, 11/05/2021, 09:35:00
- ▶ 72, 11/05/2021, 14:04:00
- ▶ 73, 11/05/2021, 14:19:00
- ▶ 74, 17/06/2021, 14:07:00
- ▶ 77, 17/06/2021, 17:21:00
- ▶ 82, 16/06/2021, 12:43:00
- ▶ 88, 02/07/2021, 09:51:00
- ▶ 89, 02/07/2021, 10:52:00
- ▶ 92, 02/07/2021, 14:32:00
- ▶ 96, 01/08/2021, 08:41:00
- ▶ 108, 03/09/2021, 12:39:00
- ▶ 124, 06/09/2021, 11:22:00
- ▶ 125, 06/09/2021, 12:21:00

TITLE:	Summer 2021 Lesser Black-backed Gull
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
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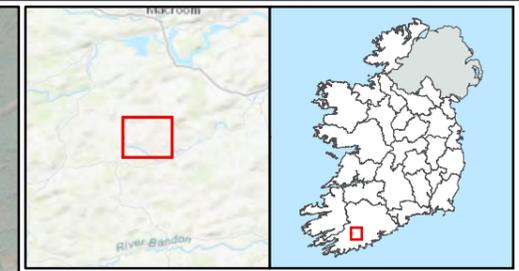
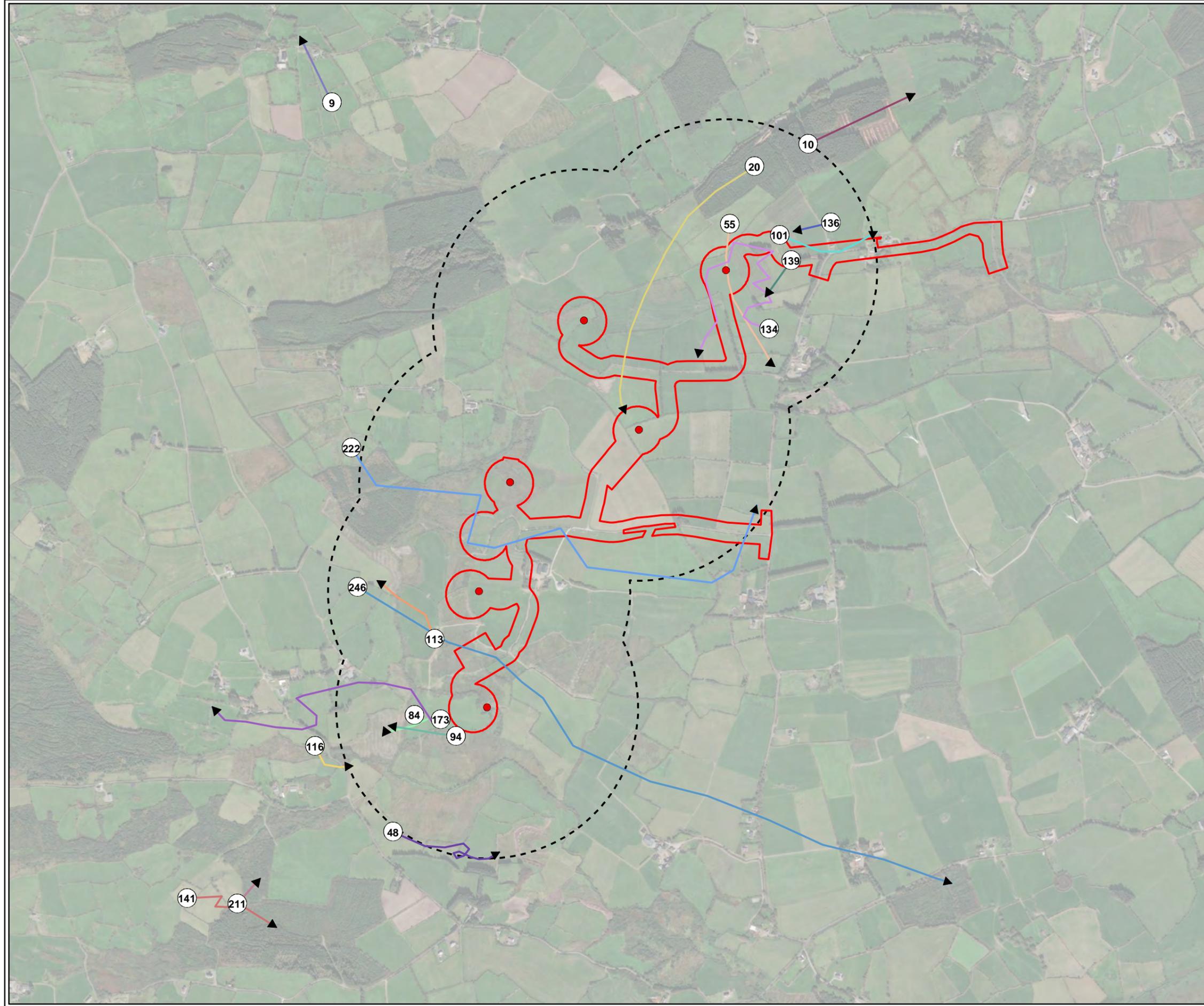
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

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- 53, 09/04/2021, 11:24:00
- 56, 09/04/2021, 13:01:00
- 63, 09/05/2021, 15:24:00
- 66, 09/05/2021, 17:09:00
- 71, 11/05/2021, 12:03:00
- 76, 17/06/2021, 15:55:00
- 81, 16/06/2021, 12:17:00
- 90, 02/07/2021, 10:58:00
- 99, 01/08/2021, 11:33:00

TITLE:	Summer 2021 Buzzard 1
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
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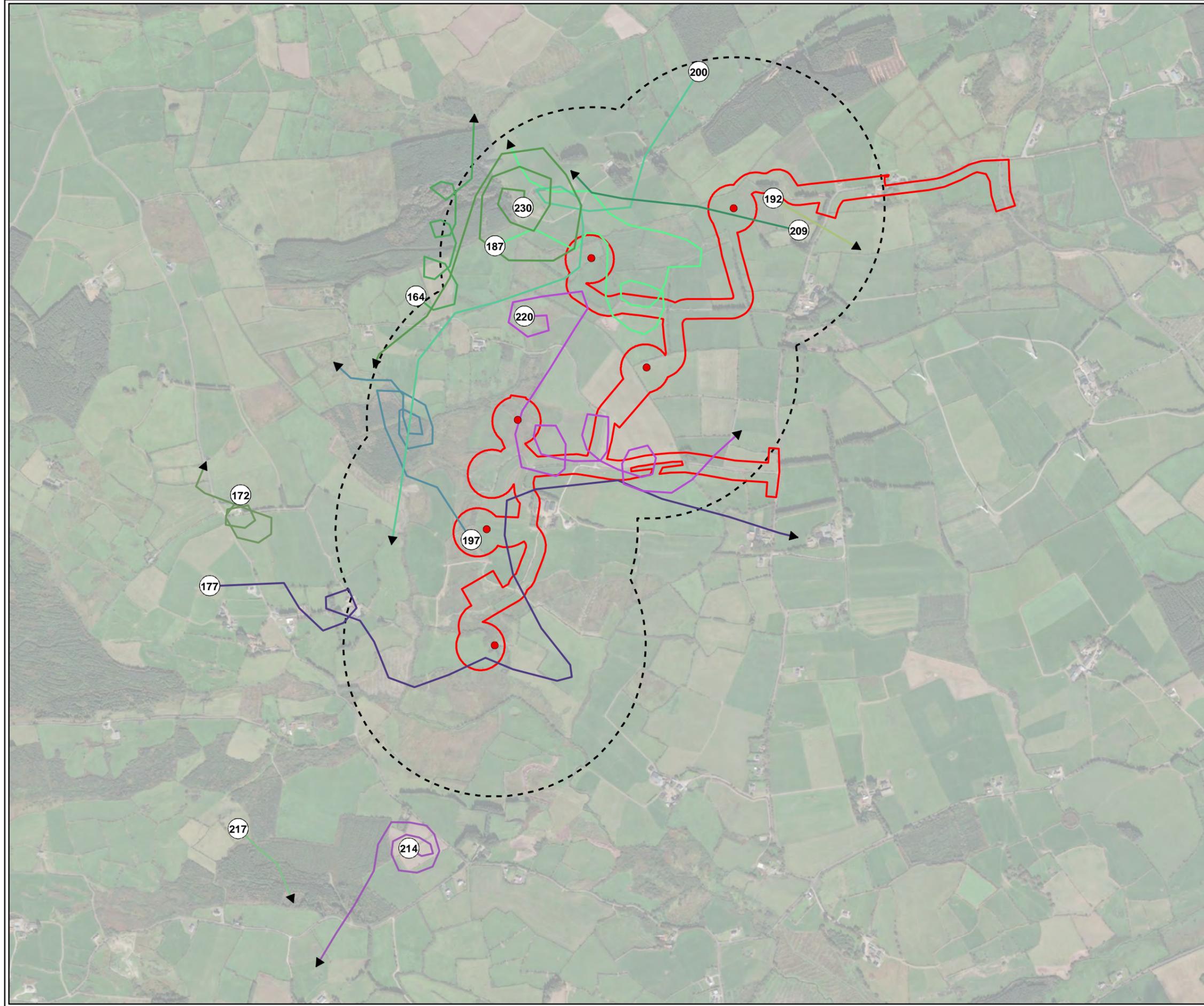
- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

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▶	10, 14/01/2021, 10:22:00
▶	20, 14/01/2021, 14:31:00
▶	48, 11/04/2021, 11:46:00
▶	55, 09/04/2021, 11:57:00
▶	84, 16/06/2021, 14:11:00
▶	94, 02/07/2021, 14:55:00
▶	101, 01/08/2021, 11:37:00
▶	113, 30/10/2021, 09:09:00
▶	116, 10/11/2021, 10:06:00
▶	134, 19/01/2022, 10:10:00
▶	136, 02/02/2022, 08:47:00
▶	139, 16/02/2022, 15:44:00
▶	141, 02/02/2022, 15:00:00
▶	173, 17/05/2022, 18:17:00
▶	211, 13/07/2022, 14:40:00
▶	222, 18/08/2022, 20:01:00
▶	246, 28/09/2022, 14:41:00

TITLE:	
Sparrowhawk	
PROJECT:	
Barnadivane Wind Farm and Substation, Co. Cork	
FIGURE NO:	
-	
CLIENT: Barna Wind Energy Ltd. & Arran Windfarm Ltd.	
SCALE: 1:12500	REVISION: 0
DATE: 23/02/2023	PAGE SIZE: A3





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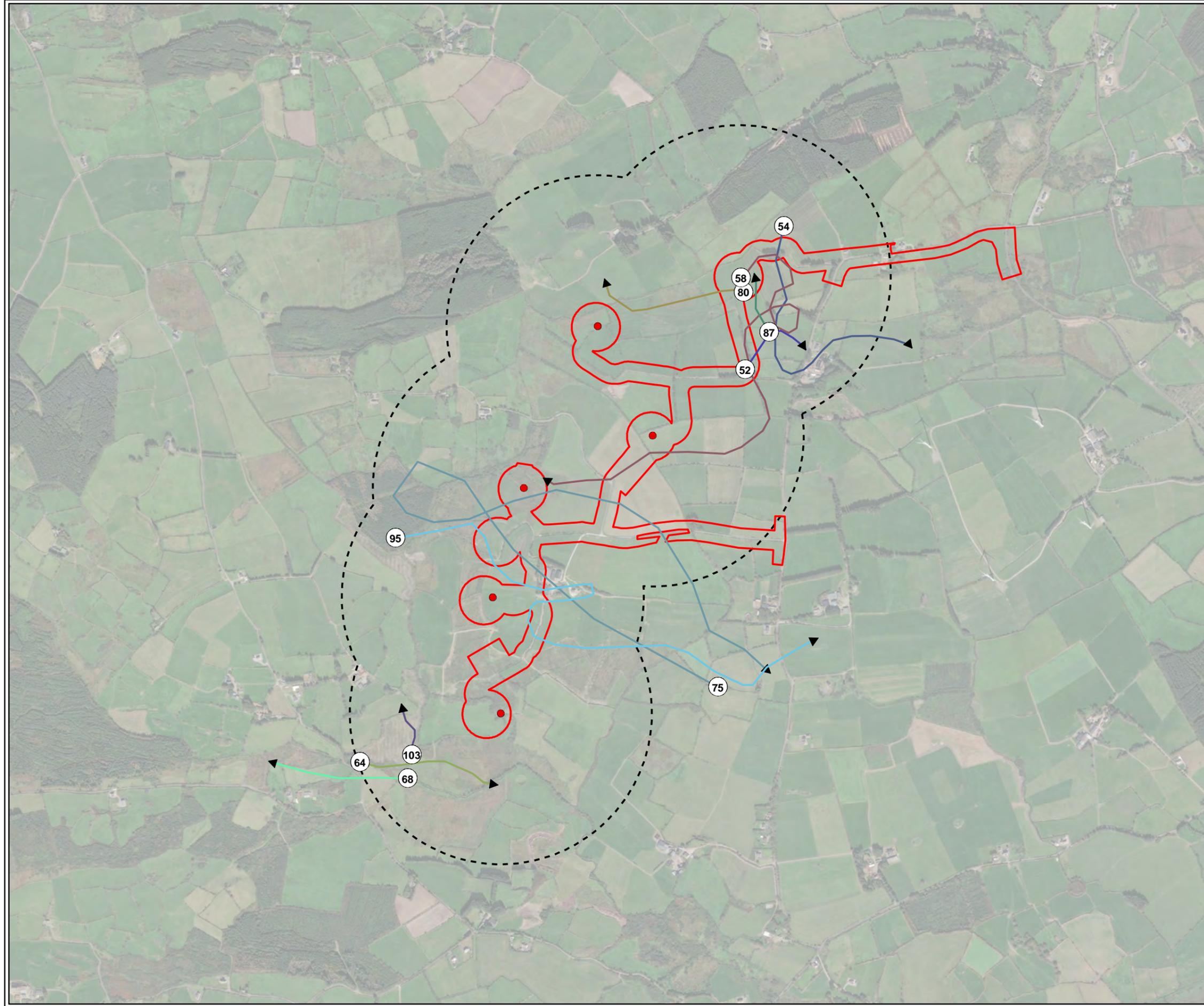
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

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- ▶ 172, 17/05/2022, 18:09:00
- ▶ 177, 25/05/2022, 17:16:00
- ▶ 187, 23/05/2022, 18:13:00
- ▶ 192, 08/06/2022, 08:16:00
- ▶ 197, 08/06/2022, 10:22:00
- ▶ 200, 07/06/2022, 10:40:00
- ▶ 209, 27/07/2022, 19:05:00
- ▶ 214, 13/07/2022, 15:45:00
- ▶ 217, 21/07/2022, 17:03:00
- ▶ 220, 13/08/2022, 11:00:00
- ▶ 230, 15/09/2022, 15:22:00

TITLE:	Summer 2022 Buzzard 2
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





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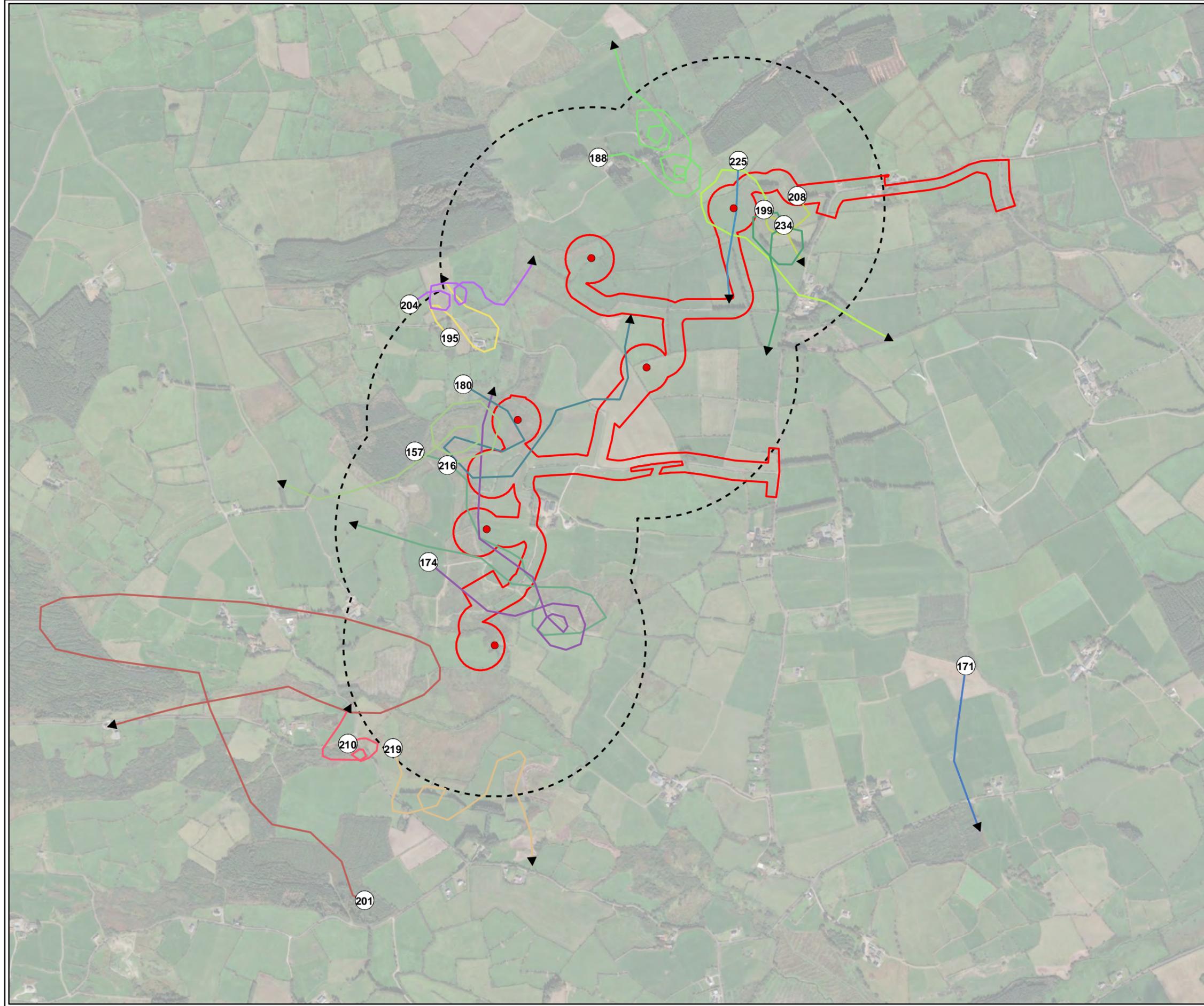
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

- ➔ 52, 08/04/2021, 11:02:00
- ➔ 54, 09/04/2021, 11:45:00
- ➔ 58, 09/04/2021, 14:19:00
- ➔ 64, 09/05/2021, 16:04:00
- ➔ 68, 15/05/2021, 19:16:00
- ➔ 75, 17/06/2021, 14:39:00
- ➔ 80, 17/06/2021, 17:01:00
- ➔ 87, 05/07/2021, 10:47:00
- ➔ 95, 02/07/2021, 16:50:00
- ➔ 103, 02/08/2021, 10:58:00

TITLE:	Summer 2021 Buzzard 2
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





Legend

- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

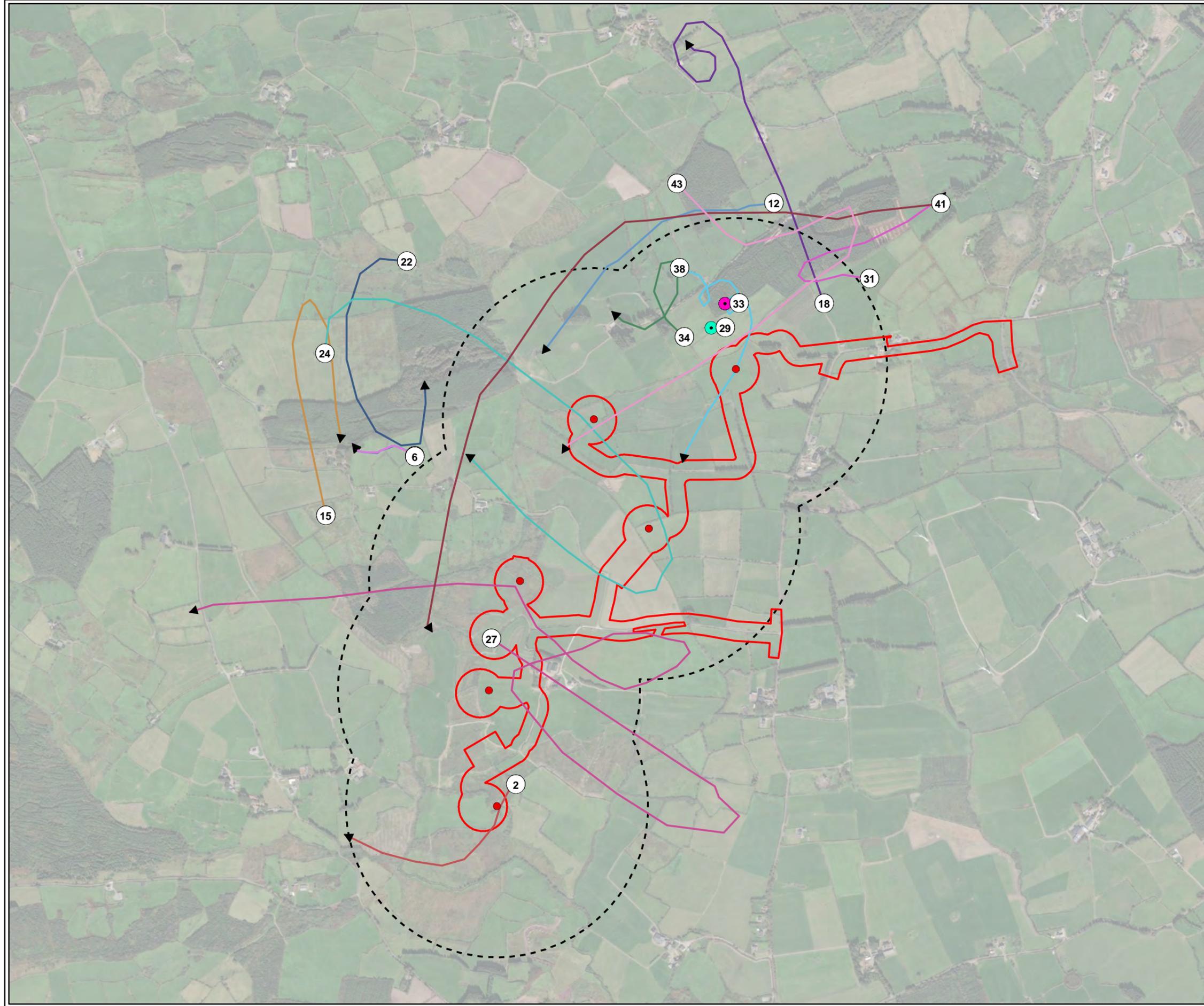
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FlightNo, Date, Time

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- 171, 17/05/2022, 18:00:00
- 174, 17/05/2022, 18:49:00
- 180, 26/05/2022, 20:32:00
- 188, 23/05/2022, 18:51:00
- 195, 08/06/2022, 09:59:00
- 199, 07/06/2022, 09:54:00
- 201, 14/06/2022, 09:29:00
- 204, 19/06/2022, 13:10:00
- 208, 11/07/2022, 18:59:00
- 210, 13/07/2022, 14:32:00
- 216, 13/07/2022,
- 219, 13/08/2022, 10:03:00
- 225, 12/08/2022, 10:53:00
- 234, 25/09/2022, 11:17:00

TITLE:	Summer 2022 Buzzard 1
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
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DATE:	23/02/2023
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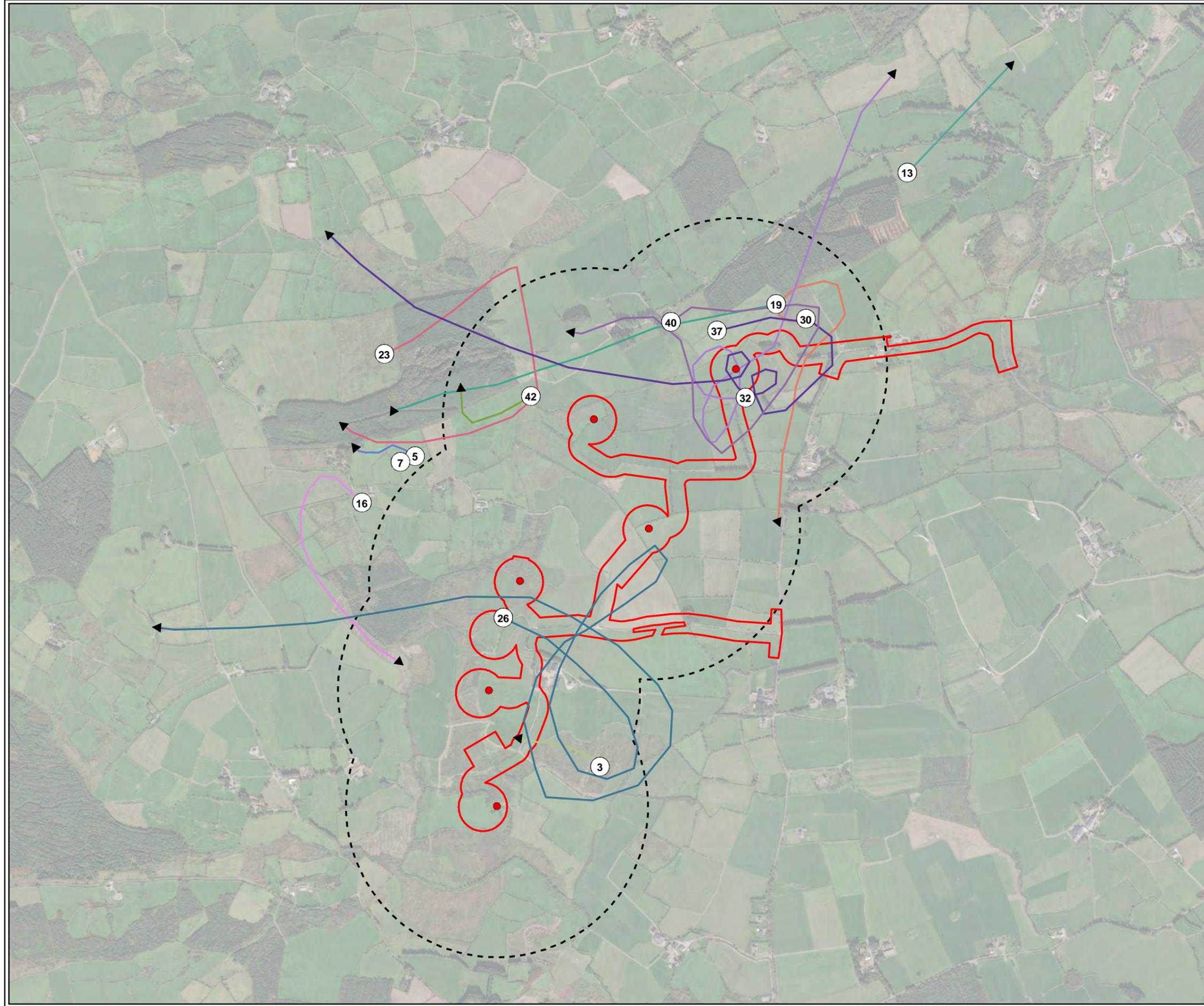
- Development Planning Boundary
- SNH Buffer
- Proposed Turbine Layout

Flightlines
FlightNo, Date, Time

- 2, 02/11/2020, 11:53:00
- 4, 02/11/2020, 12:48:00
- 6, 02/11/2020, 13:41:00
- 12, 14/01/2021, 10:28:00
- 15, 14/01/2021, 11:20:00
- 18, 14/01/2021, 13:13:00
- 22, 14/01/2021, 15:13:00
- 24, 14/01/2021, 15:37:00
- 27, 07/03/2021, 11:17:00
- 31, 15/03/2021, 09:56:00
- 34, 15/03/2021, 11:50:00
- 38, 15/03/2021, 12:34:00
- 41, 15/03/2021, 15:00:00
- 43, 15/03/2021, 15:59:00
- 29, 15/03/2021, 09:50:00
- 33, 15/03/2021, 11:44:00

TITLE:	Winter 2020/2021 Buzzard 1
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3





- Legend**
- Development Planning Boundary
 - SNH Buffer
 - Proposed Turbine Layout
- Flightlines**
FlightNo, Date, Time
- ▶ 3, 02/11/2020, 12:25:00
 - ▶ 5, 02/11/2020, 13:27:00
 - ▶ 7, 02/11/2020, 13:50:00
 - ▶ 13, 14/01/2021, 11:10:00
 - ▶ 16, 14/01/2021, 11:28:00
 - ▶ 19, 14/01/2021, 14:25:00
 - ▶ 23, 14/01/2021, 15:23:00
 - ▶ 26, 07/03/2021, 11:17:00
 - ▶ 30, 15/03/2021, 09:56:00
 - ▶ 32, 15/03/2021, 10:36:00
 - ▶ 37, 15/03/2021, 12:24:00
 - ▶ 40, 15/03/2021, 14:18:00
 - ▶ 42, 15/03/2021, 15:27:00

TITLE:	Winter 2020/2021 Buzzard 2
PROJECT:	Barnadivane Wind Farm and Substation, Co. Cork
FIGURE NO.:	-
CLIENT:	Barna Wind Energy Ltd. & Arran Windfarm Ltd.
SCALE:	1:12500
REVISION:	0
DATE:	23/02/2023
PAGE SIZE:	A3

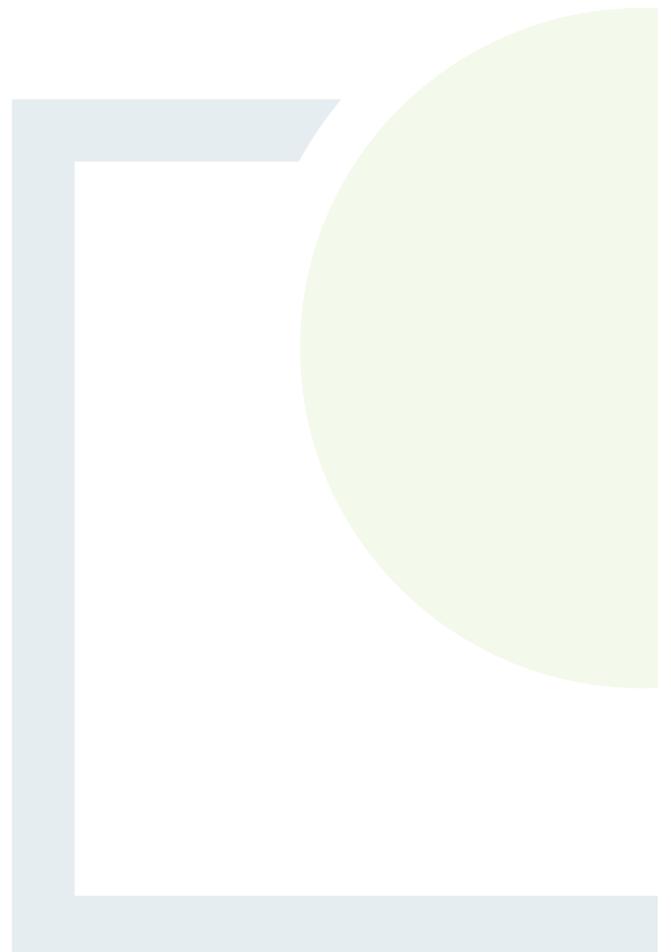




CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 3

Hinterland Results



Site Name	Date	Common name	No ¹
Castlemoor	23/11/2020	Mallard	5
Castlemoor	23/11/2020	Tufted Duck	5
Warren's Court	23/11/2020	Mallard	4
Warren's Court	23/11/2020	Grey Heron	1
Inishcarra Reservoir	23/11/2020	Mallard	17
Inishcarra Reservoir	23/11/2020	Black-headed Gull	22
Inishcarra Reservoir	23/11/2020	Grey Heron	1
Inishcarra Reservoir	23/11/2020	Great Black-backed Gull	1
Inishcarra Reservoir	23/11/2020	Lapwing	43
Inishcarra Reservoir	23/11/2020	Teal	16
Inishcarra Reservoir	23/11/2020	Little Egret	1
Inishcarra Reservoir	23/11/2020	Cormorant	7
Sullane delta	23/11/2020	Grey Heron	2
Sullane delta	23/11/2020	Black-headed Gull	57
Sullane delta	23/11/2020	Mallard	2
Sullane delta	23/11/2020	Lapwing	20
Sullane delta	23/11/2020	Cormorant	1
The Gearagh	23/11/2020	Mallard	64
The Gearagh	23/11/2020	Teal	247
The Gearagh	23/11/2020	Wigeon	106
The Gearagh	23/11/2020	Cormorant	6
The Gearagh	23/11/2020	Little Egret	18
The Gearagh	23/11/2020	Dunlin	67
The Gearagh	23/11/2020	Lesser Black-backed Gull	3
The Gearagh	23/11/2020	Curlew	149
The Gearagh	23/11/2020	Greenshank	1
The Gearagh	23/11/2020	Lapwing	192
The Gearagh	23/11/2020	Whooper Swan	1
The Gearagh	23/11/2020	Grey Heron	6
The Gearagh	23/11/2020	Golden Plover	40
The Gearagh	23/11/2020	Black-headed Gull	26
The Gearagh	23/11/2020	#N/A	1
Toon Flats	23/11/2020	Whooper Swan	39
Toon Flats	23/11/2020	Mute Swan	30

¹ Counts for non-target species as well as species noted within 2,5 &10 km of the Proposed Development site boundary are generally not provided

Site Name	Date	Common name	No ¹
Toon Flats	23/11/2020	Greylag Goose	6
Toon Flats	23/11/2020	Lapwing	60
Murragh Lake	28/11/2020	Mallard	2
Murragh Lake	28/11/2020	Teal	1
Desert Bridge	28/11/2020	Whooper Swan	11
Sullane delta	01/12/2020	Cormorant	2
Sullane delta	01/12/2020	Wigeon	5
Sullane delta	01/12/2020	Grey Heron	1
Sullane delta	01/12/2020	Black-headed Gull	35
Warren's Court	01/12/2020	Mallard	10
Inishcarra Reservoir	01/12/2020	Cormorant	3
Inishcarra Reservoir	01/12/2020	Black-headed Gull	20
Inishcarra Reservoir	01/12/2020	Mallard	8
Inishcarra Reservoir	01/12/2020	Wigeon	35
Inishcarra Reservoir	01/12/2020	Teal	25
Inishcarra Reservoir	01/12/2020	Grey Heron	2
Toon flats	01/12/2020	Grey Heron	3
Toon flats	01/12/2020	Greylag Goose	43
Toon flats	01/12/2020	Whooper Swan	38
Toon flats	01/12/2020	Mute Swan	24
Toon flats	01/12/2020	Lapwing	15
The Gearagh	01/12/2020	Wigeon	80
The Gearagh	01/12/2020	Teal	132
The Gearagh	01/12/2020	Black-headed Gull	10
The Gearagh	01/12/2020	Little Egret	7
The Gearagh	01/12/2020	Whooper Swan	1
The Gearagh	01/12/2020	#N/A	2
The Gearagh	01/12/2020	Grey Heron	1
The Gearagh	01/12/2020	Curlew	12
The Gearagh	01/12/2020	Lapwing	90
The Gearagh	01/12/2020	Dunlin	150
Murragh Lake	01/12/2020	Mallard	7
Desert Bridge	01/12/2020	Whooper Swan	4
Desert Bridge	01/12/2020	Little Egret	1
Castlemoor	01/12/2020	Mallard	4
Castlemoor	01/12/2020	Tufted Duck	6
Castlemoor	01/12/2020	Cormorant	1

Site Name	Date	Common name	No ¹
Castlemoor	14/12/2020	Tufted Duck	8
Inishcarra Reservoir	14/12/2020	Lapwing	15
Inishcarra Reservoir	14/12/2020	Black-headed Gull	21
Inishcarra Reservoir	14/12/2020	Wigeon	14
Inishcarra Reservoir	14/12/2020	Teal	13
Inishcarra Reservoir	14/12/2020	Moorhen	2
Inishcarra Reservoir	14/12/2020	Mallard	3
Inishcarra Reservoir	14/12/2020	Cormorant	4
Sullane Delta	14/12/2020	Grey Heron	1
The Gearagh	14/12/2020	Mallard	28
The Gearagh	14/12/2020	Wigeon	26
The Gearagh	14/12/2020	Black-headed Gull	2
The Gearagh	14/12/2020	Little Egret	3
The Gearagh	14/12/2020	Teal	2
The Gearagh	14/12/2020	Moorhen	2
The Gearagh	14/12/2020	Grey Heron	1
Toon Flats	14/12/2020	Mute Swan	49
Toon Flats	14/12/2020	Little Egret	2
Toon Flats	14/12/2020	Whooper Swan	22
Toon Flats	14/12/2020	Greylag Goose	32
Toon Flats	14/12/2020	Barnacle Goose	1
Toon Flats	14/12/2020	White-fronted Goose	1
Desert Bridge	14/12/2020	Whooper Swan	14
Desert Bridge	14/12/2020	Little Egret	2
Murragh Lake	14/12/2020	#N/A	n/a
Murragh Lake	20/01/2021	Tufted Duck	7
Murragh Lake	20/01/2021	Little Grebe	7
Murragh Lake	20/01/2021	Coot	4
Murragh Lake	20/01/2021	Moorhen	1
Murragh Lake	20/01/2021	Grey Heron	1
Desert Bridge	20/01/2021	Grey Heron	5
Desert Bridge	20/01/2021	Mallard	10
Desert Bridge	20/01/2021	Whooper Swan	29
Desert Bridge	20/01/2021	Mute Swan	1
Desert Bridge	20/01/2021	Lesser Black-backed Gull	1
Desert Bridge	20/01/2021	Little Egret	7
Castlemoor	20/01/2021	Tufted Duck	2

Site Name	Date	Common name	No ¹
Castlemoor	20/01/2021	Mallard	12
Castlemoor	20/01/2021	Teal	14
Inishcarra Reservoir	20/01/2021	Curlew	21
Inishcarra Reservoir	20/01/2021	Black-tailed Godwit	2
Inishcarra Reservoir	20/01/2021	Cormorant	5
Inishcarra Reservoir	20/01/2021	Teal	38
Inishcarra Reservoir	20/01/2021	Wigeon	61
Inishcarra Reservoir	20/01/2021	Kingfisher	1
Inishcarra Reservoir	20/01/2021	Snipe	3
Inishcarra Reservoir	20/01/2021	Black-headed Gull	9
Inishcarra Reservoir	20/01/2021	Mallard	1
Inishcarra Reservoir	20/01/2021	Grey Heron	3
Inishcarra Reservoir	20/01/2021	Lapwing	162
Sullane Delta	20/01/2021	Golden Plover	58
Sullane Delta	20/01/2021	Lapwing	285
Sullane Delta	20/01/2021	Woodcock	1
The Gearagh	20/01/2021	Goosander	1
The Gearagh	20/01/2021	Black-headed Gull	9
The Gearagh	20/01/2021	Whooper Swan	3
The Gearagh	20/01/2021	Lapwing	105
The Gearagh	20/01/2021	Wigeon	56
The Gearagh	20/01/2021	Teal	65
The Gearagh	20/01/2021	Mallard	2
The Gearagh	20/01/2021	Curlew	2
The Gearagh	20/01/2021	Grey Heron	5
The Gearagh	20/01/2021	Golden Plover	2
The Gearagh	20/01/2021	Little Egret	5
The Gearagh	20/01/2021	Kingfisher	1
The Gearagh	20/01/2021	#N/A	3
Inishcarra Reservoir	20/01/2021	Teal	2
Inishcarra Reservoir	20/01/2021	Golden Plover	1
Inishcarra Reservoir	20/01/2021	Whooper Swan	3
Inishcarra Reservoir	20/01/2021	Greylag Goose	93
Inishcarra Reservoir	20/01/2021	Pink-footed Goose	1
Inishcarra Reservoir	20/01/2021	Barnacle Goose	1
Inishcarra Reservoir	20/01/2021	White-fronted Goose	1
Toon flats	20/01/2021	Little Egret	11

Site Name	Date	Common name	No ¹
Toon flats	20/01/2021	Teal	3
Toon flats	20/01/2021	Buzzard	1
Toon flats	20/01/2021	Whooper Swan	59
Toon flats	20/01/2021	Mute Swan	31
Toon flats	03/02/2021	Little Egret	18
Toon flats	03/02/2021	Black-headed Gull	3
Toon flats	03/02/2021	Whooper Swan	75
Toon flats	03/02/2021	Mute Swan	29
Toon flats	03/02/2021	Greylag Goose	57
Toon flats	03/02/2021	Brent Goose	1
Toon flats	03/02/2021	Pink-footed Goose	1
Toon flats	03/02/2021	White-fronted Goose	1
The Gearagh	03/02/2021	Wigeon	3
The Gearagh	03/02/2021	Cormorant	1
The Gearagh	03/02/2021	Goldeneye	3
The Gearagh	03/02/2021	Teal	4
The Gearagh	03/02/2021	Coot	1
The Gearagh	03/02/2021	Grey Heron	1
The Gearagh	03/02/2021	Moorhen	1
The Gearagh	03/02/2021	Goosander	2
Inishcarra Reservoir	03/02/2021	Wigeon	18
Inishcarra Reservoir	03/02/2021	Great Crested Grebe	2
Sullane Delta	03/02/2021	Black-headed Gull	16
Castlemoor	03/02/2021	Grey Heron	4
Castlemoor	03/02/2021	Cormorant	6
Castlemoor	03/02/2021	Mallard	20
Castlemoor	03/02/2021	Teal	13
Castlemoor	03/02/2021	Tufted Duck	1
Inishcarra Reservoir	04/02/2021	Lapwing	579
Inishcarra Reservoir	04/02/2021	Cormorant	12
Inishcarra Reservoir	04/02/2021	Wigeon	3
Inishcarra Reservoir	04/02/2021	Mallard	22
Inishcarra Reservoir	04/02/2021	Teal	40
Inishcarra Reservoir	04/02/2021	Grey Heron	9
Inishcarra Reservoir	04/02/2021	Great Black-backed Gull	2
Inishcarra Reservoir	04/02/2021	Black-headed Gull	5
Inishcarra Reservoir	04/02/2021	Curlew	120

Site Name	Date	Common name	No ¹
Inishcarra Reservoir	04/02/2021	Dunlin	80
Inishcarra Reservoir	04/02/2021	Mute Swan	1
Murragh Lake	04/02/2021	Coot	2
Murragh Lake	04/02/2021	Mute Swan	2
Murragh Lake	04/02/2021	Moorhen	1
Murragh Lake	04/02/2021	#N/A	2
Desert Bridge	04/02/2021	Whooper Swan	42
Desert Bridge	04/02/2021	Teal	1
Desert Bridge	04/02/2021	Grey Heron	1
Toon Flats	03/03/2021	Greylag Goose	11
Toon Flats	03/03/2021	Whooper Swan	87
Toon Flats	03/03/2021	Mute Swan	5
Toon Flats	03/03/2021	Barnacle Goose	1
Toon Flats	03/03/2021	White-fronted Goose	1
Toon Flats	03/03/2021	Pink-footed Goose	1
Toon Flats	03/03/2021	Buzzard	2
Toon Flats	03/03/2021	Mallard	2
Toon Flats	03/03/2021	Little Egret	2
The Gearagh	03/03/2021	Wigeon	71
The Gearagh	03/03/2021	Black-headed Gull	4
The Gearagh	03/03/2021	Teal	26
The Gearagh	03/03/2021	Curlew	9
The Gearagh	03/03/2021	Little Egret	8
The Gearagh	03/03/2021	Grey Heron	9
The Gearagh	03/03/2021	Mute Swan	3
The Gearagh	03/03/2021	Cormorant	2
The Gearagh	03/03/2021	Mallard	9
The Gearagh	03/03/2021	#N/A	3
The Gearagh	03/03/2021	Whooper Swan	2
The Gearagh	03/03/2021	Magpie	5
The Gearagh	03/03/2021	Water Rail	1
The Gearagh	03/03/2021	Kingfisher	1
Inishcarra Reservoir	03/03/2021	#N/A	2
Inishcarra Reservoir	03/03/2021	Little Egret	1
Inishcarra Reservoir	03/03/2021	Cormorant	1
Inishcarra Reservoir	03/03/2021	Golden Plover	30
Inishcarra Reservoir	03/03/2021	Black-headed Gull	1

Site Name	Date	Common name	No ¹
Sullane Delta	03/03/2021	Little Egret	1
Sullane Delta	03/03/2021	Black-headed Gull	3
Sullane Delta	03/03/2021	Mallard	3
Inishcarra Reservoir	03/03/2021	Black-headed Gull	12
Inishcarra Reservoir	03/03/2021	Wigeon	59
Inishcarra Reservoir	03/03/2021	Great Black-backed Gull	2
Inishcarra Reservoir	03/03/2021	Shoveler	1
Inishcarra Reservoir	03/03/2021	Mallard	1
Inishcarra Reservoir	03/03/2021	Grey Heron	3
Inishcarra Reservoir	03/03/2021	Great Crested Grebe	10
Inishcarra Reservoir	03/03/2021	Cormorant	10
Inishcarra Reservoir	03/03/2021	Little Egret	1
Inishcarra Reservoir	03/03/2021	Teal	55
Inishcarra Reservoir	03/03/2021	Grey Wagtail	2
Inishcarra Reservoir	03/03/2021	Green Sandpiper	1
Castlemoor	03/03/2021	Cormorant	2
Castlemoor	03/03/2021	Teal	5
Murragh Lake	03/03/2021	Mallard	9
Murragh Lake	03/03/2021	Moorhen	2
Murragh Lake	03/03/2021	Teal	7
Murragh Lake	03/03/2021	Tufted Duck	3
Murragh Lake	03/03/2021	#N/A	1
Desert Bridge	03/03/2021	Kingfisher	1
Desert Bridge	03/03/2021	Mallard	3
Desert Bridge	03/03/2021	Grey Heron	2
Desert Bridge	03/03/2021	Cormorant	4
Warren's Court	16/04/2021	Hen Harrier	1
Warren's Court	16/04/2021	Buzzard	1
Warren's Court	16/04/2021	Golden Plover	311
Warren's Court	16/04/2021	Dipper	1
Warren's Court	17/04/2021	Grey Wagtail	1
Warren's Court	17/04/2021	Greylag Goose	2
Warren's Court	17/04/2021	Sand Martin	100
Warren's Court	17/04/2021	Lesser Black-backed Gull	28
Warren's Court	17/04/2021	Moorhen	1
Warren's Court	17/04/2021	Mallard	2
Barnadivane 2km radius	12/05/2021	Robin	-

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	12/05/2021	Song Thrush	-
Barnadivane 2km radius	12/05/2021	Woodpigeon	-
Barnadivane 2km radius	12/05/2021	Dunnock	-
Barnadivane 2km radius	12/05/2021	Chaffinch	-
Barnadivane 2km radius	12/05/2021	Hooded Crow	-
Barnadivane 2km radius	12/05/2021	Meadow Pipit	-
Barnadivane 2km radius	12/05/2021	Willow Warbler	-
Barnadivane 2km radius	12/05/2021	Rook	-
Barnadivane 2km radius	12/05/2021	Swallow	-
Barnadivane 2km radius	12/05/2021	Starling	-
Barnadivane 2km radius	12/05/2021	Jackdaw	-
Barnadivane 2km radius	12/05/2021	Blackbird	-
Barnadivane 2km radius	12/05/2021	House Sparrow	-
Barnadivane 2km radius	12/05/2021	Sedge Warbler	-
Barnadivane 2km radius	12/05/2021	Wren	-
Barnadivane 2km radius	12/05/2021	Lesser Black-backed Gull	-
Barnadivane 2km radius	12/05/2021	Linnet	-
Barnadivane 2km radius	12/05/2021	Mallard	1
Barnadivane 2km radius	12/05/2021	Goldfinch	-
Barnadivane 2km radius	12/05/2021	Coal Tit	-
Barnadivane 2km radius	12/05/2021	Magpie	-
Barnadivane 2km radius	12/05/2021	Chiffchaff	-
Barnadivane 2km radius	12/05/2021	Pheasant	-
Barnadivane 2km radius	12/05/2021	Blackcap	-
Murragh Lake	12/05/2021	Mute Swan	2
Desert Bridge	12/05/2021	House Martin	2
Desert Bridge	12/05/2021	Sand Martin	1
Desert Bridge	12/05/2021	Grey Wagtail	1
Desert Bridge	12/05/2021	Buzzard	2
Kilmicheal/Mid Cork Quarries	12/05/2021	Sand Martin	6
Kilmicheal/Mid Cork Quarries	12/05/2021	Raven	-
Kilmicheal/Mid Cork Quarries	12/05/2021	Siskin	-
The Gearagh	12/05/2021	Moorhen	4
The Gearagh	12/05/2021	Mute Swan	9
The Gearagh	12/05/2021	Mallard	26
The Gearagh	12/05/2021	Teal	1

Site Name	Date	Common name	No ¹
The Gearagh	12/05/2021	Sand Martin	-
The Gearagh	12/05/2021	Swift	4
The Gearagh	12/05/2021	Great Crested Grebe	26
The Gearagh	12/05/2021	Great Black-backed Gull	3
The Gearagh	12/05/2021	Whooper Swan	2
The Gearagh	12/05/2021	Blackcap	-
The Gearagh	12/05/2021	Sedge Warbler	-
The Gearagh	12/05/2021	Lesser Black-backed Gull	8
The Gearagh	12/05/2021	Herring Gull	1
Warren's Court	12/05/2021	Greylag Goose	1
Warren's Court	12/05/2021	Mallard	1
Warren's Court	12/05/2021	Sand Martin	30
Warren's Court	12/05/2021	House Martin	8
Warren's Court	23/05/2021	Greylag Goose	3
Barnadivane 2km radius	10/06/2021	Sedge Warbler	1
Barnadivane 2km radius	10/06/2021	Rook	-
Barnadivane 2km radius	10/06/2021	Meadow Pipit	-
Barnadivane 2km radius	10/06/2021	Robin	-
Barnadivane 2km radius	10/06/2021	Blackbird	-
Barnadivane 2km radius	10/06/2021	Jackdaw	-
Barnadivane 2km radius	10/06/2021	Wren	-
Barnadivane 2km radius	10/06/2021	Dunnock	-
Barnadivane 2km radius	10/06/2021	Willow Warbler	-
Barnadivane 2km radius	10/06/2021	Starling	-
Barnadivane 2km radius	10/06/2021	Swallow	-
Barnadivane 2km radius	10/06/2021	Chaffinch	-
Barnadivane 2km radius	10/06/2021	Pied/White Wagtail	-
Barnadivane 2km radius	10/06/2021	Woodpigeon	-
Barnadivane 2km radius	10/06/2021	Great Tit	-
Barnadivane 2km radius	10/06/2021	Blackcap	-
Barnadivane 2km radius	10/06/2021	Hooded Crow	-
Barnadivane 2km radius	10/06/2021	Blue Tit	-
Barnadivane 2km radius	10/06/2021	Magpie	-
Barnadivane 2km radius	10/06/2021	Song Thrush	-
Barnadivane 2km radius	10/06/2021	Mistle Thrush	-
Murragh Lake	10/06/2021	Grey Heron	1

Site Name	Date	Common name	No ¹
Murragh Lake	10/06/2021	Woodpigeon	-
Murragh Lake	10/06/2021	Chaffinch	-
Murragh Lake	10/06/2021	Moorhen	2
Murragh Lake	10/06/2021	Swallow	-
Murragh Lake	10/06/2021	Meadow Pipit	-
Murragh Lake	10/06/2021	Willow Warbler	-
Murragh Lake	10/06/2021	Blackbird	-
Murragh Lake	10/06/2021	Robin	-
Murragh Lake	10/06/2021	Rook	-
Desert Bridge	10/06/2021	Sand Martin	12
Desert Bridge	10/06/2021	Swallow	4
Desert Bridge	10/06/2021	Willow Warbler	-
Desert Bridge	10/06/2021	Blackbird	-
Desert Bridge	10/06/2021	Hooded Crow	-
Kilmicheal/Mid Cork Quarries	10/06/2021	Sand Martin	30
Kilmicheal/Mid Cork Quarries	10/06/2021	Willow Warbler	-
Kilmicheal/Mid Cork Quarries	10/06/2021	Swallow	-
Kilmicheal/Mid Cork Quarries	10/06/2021	Blackbird	-
Kilmicheal/Mid Cork Quarries	10/06/2021	Dunnock	-
Kilmicheal/Mid Cork Quarries	10/06/2021	Chaffinch	-
Kilmicheal/Mid Cork Quarries	10/06/2021	Hooded Crow	-
The Gearagh	10/06/2021	Reed Bunting	-
The Gearagh	10/06/2021	Willow Warbler	-
The Gearagh	10/06/2021	Bullfinch	1
The Gearagh	10/06/2021	Chiffchaff	-
The Gearagh	10/06/2021	Mallard	2
The Gearagh	10/06/2021	Wren	-
The Gearagh	10/06/2021	Chaffinch	-
The Gearagh	10/06/2021	Teal	2
The Gearagh	10/06/2021	Cormorant	1
The Gearagh	10/06/2021	Great Black-backed Gull	4
The Gearagh	10/06/2021	Swallow	30
The Gearagh	10/06/2021	House Martin	10
The Gearagh	10/06/2021	Sand Martin	18
The Gearagh	10/06/2021	Blackbird	-
The Gearagh	10/06/2021	Goldcrest	-

Site Name	Date	Common name	No ¹
The Gearagh	10/06/2021	Song Thrush	-
The Gearagh	10/06/2021	Mute Swan	39
The Gearagh	10/06/2021	Sedge Warbler	1
The Gearagh	10/06/2021	Grey Heron	2
The Gearagh	10/06/2021	Great Crested Grebe	23
The Gearagh	10/06/2021	Greylag Goose	8
The Gearagh	10/06/2021	Lesser Black-backed Gull	3
The Gearagh	10/06/2021	Moorhen	3
The Gearagh	10/06/2021	Pheasant	1
Warren's Court	10/06/2021	Moorhen	1
Warren's Court	10/06/2021	Sand Martin	15
Warren's Court	10/06/2021	House Martin	4
Warren's Court	10/06/2021	Swallow	30
Warren's Court	10/06/2021	Swift	4
Barnadivane 2km radius	14/07/2021	Blackcap	3
Barnadivane 2km radius	14/07/2021	Mistle Thrush	1
Barnadivane 2km radius	14/07/2021	Buzzard	1
Barnadivane 2km radius	14/07/2021	Wren	2
Barnadivane 2km radius	14/07/2021	Magpie	1
Barnadivane 2km radius	14/07/2021	Jackdaw	3
Barnadivane 2km radius	14/07/2021	Rook	-
Barnadivane 2km radius	14/07/2021	Goldfinch	6
Barnadivane 2km radius	14/07/2021	Swallow	-
Barnadivane 2km radius	14/07/2021	Dunnock	1
Barnadivane 2km radius	14/07/2021	Blackbird	4
Barnadivane 2km radius	14/07/2021	Willow Warbler	2
Barnadivane 2km radius	14/07/2021	Robin	2
Barnadivane 2km radius	14/07/2021	Siskin	1
Barnadivane 2km radius	14/07/2021	Woodpigeon	4
Barnadivane 2km radius	14/07/2021	House Martin	5
Barnadivane 2km radius	14/07/2021	Meadow Pipit	5
Barnadivane 2km radius	14/07/2021	Chaffinch	1
Barnadivane 2km radius	14/07/2021	Lesser Black-backed Gull	2
Barnadivane 2km radius	14/07/2021	Linnet	4
Barnadivane 2km radius	14/07/2021	Reed Bunting	1
Barnadivane 2km radius	14/07/2021	Stonechat	2
Barnadivane 2km radius	14/07/2021	Sedge Warbler	1

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	14/07/2021	Song Thrush	1
Barnadivane 2km radius	14/07/2021	Hooded Crow	2
Barnadivane 2km radius	14/07/2021	Chiffchaff	1
Barnadivane 10km radius	14/07/2021	Starling	-
Barnadivane 10km radius	14/07/2021	Song Thrush	1
Barnadivane 10km radius	14/07/2021	Magpie	-
Barnadivane 10km radius	14/07/2021	Jackdaw	-
Barnadivane 10km radius	14/07/2021	Rook	-
Barnadivane 10km radius	14/07/2021	Goldfinch	6
Barnadivane 10km radius	14/07/2021	House Martin	2
Barnadivane 10km radius	14/07/2021	Woodpigeon	-
Barnadivane 10km radius	14/07/2021	Meadow Pipit	-
Barnadivane 10km radius	14/07/2021	Hooded Crow	-
Barnadivane 10km radius	14/07/2021	Buzzard	1
Barnadivane 10km radius	14/07/2021	Chaffinch	-
Barnadivane 10km radius	14/07/2021	Wren	-
Barnadivane 10km radius	14/07/2021	Swallow	-
Barnadivane 10km radius	14/07/2021	Blackbird	1
Murragh Lake	14/07/2021	Mallard	3
Murragh Lake	14/07/2021	Moorhen	1
Murragh Lake	14/07/2021	Mute Swan	2
Desert Bridge	14/07/2021	Buzzard	1
Desert Bridge	14/07/2021	Kestrel	1
Desert Bridge	14/07/2021	Reed Bunting	1
Desert Bridge	14/07/2021	Hooded Crow	-
Desert Bridge	14/07/2021	Rook	-
Desert Bridge	14/07/2021	Jackdaw	-
Desert Bridge	14/07/2021	Magpie	-
Desert Bridge	14/07/2021	Wren	-
Desert Bridge	14/07/2021	Swallow	-
Desert Bridge	14/07/2021	Chaffinch	-
Desert Bridge	14/07/2021	Pied/White Wagtail	-
Kilmicheal/Mid Cork Quarries	14/07/2021	Sand Martin	30
Kilmicheal/Mid Cork Quarries	14/07/2021	Willow Warbler	1
Kilmicheal/Mid Cork Quarries	14/07/2021	Blackcap	1
Kilmicheal/Mid Cork Quarries	14/07/2021	Lesser Redpoll	2
Kilmicheal/Mid Cork Quarries	14/07/2021	Wren	1

Site Name	Date	Common name	No ¹
Kilmicheal/Mid Cork Quarries	14/07/2021	Blackbird	1
Kilmicheal/Mid Cork Quarries	14/07/2021	Swallow	-
The Gearagh	14/07/2021	Great Crested Grebe	21
The Gearagh	14/07/2021	Grey Heron	1
The Gearagh	14/07/2021	Black-headed Gull	12
The Gearagh	14/07/2021	Lesser Black-backed Gull	36
The Gearagh	14/07/2021	#N/A	1
The Gearagh	14/07/2021	Herring Gull	1
The Gearagh	14/07/2021	Moorhen	1
The Gearagh	14/07/2021	Sedge Warbler	1
The Gearagh	14/07/2021	Blackcap	2
The Gearagh	14/07/2021	Swallow	-
The Gearagh	14/07/2021	Woodpigeon	-
The Gearagh	14/07/2021	Wren	-
The Gearagh	14/07/2021	Bullfinch	-
The Gearagh	14/07/2021	Reed Bunting	1
The Gearagh	14/07/2021	Magpie	-
The Gearagh	14/07/2021	Mallard	4
The Gearagh	14/07/2021	Mute Swan	4
Warren's Court	14/07/2021	Tufted Duck	5
Warren's Court	14/07/2021	Mallard	9
Warren's Court	14/07/2021	Mute Swan	5
Barnadivane 2km radius	03/08/2021	Sparrowhawk	2
Barnadivane 2km radius	03/08/2021	Chiffchaff	1
Barnadivane 2km radius	03/08/2021	Swallow	-
Barnadivane 2km radius	03/08/2021	Rook	-
Barnadivane 2km radius	03/08/2021	Robin	3
Barnadivane 2km radius	03/08/2021	Wren	1
Barnadivane 2km radius	03/08/2021	House Martin	7
Barnadivane 2km radius	03/08/2021	Song Thrush	1
Barnadivane 2km radius	03/08/2021	Blackbird	4
Barnadivane 2km radius	03/08/2021	Dunnock	1
Barnadivane 2km radius	03/08/2021	Hooded Crow	-
Barnadivane 2km radius	03/08/2021	Stock Dove	1
Barnadivane 2km radius	03/08/2021	Meadow Pipit	3
Barnadivane 2km radius	03/08/2021	Linnet	1
Barnadivane 2km radius	03/08/2021	Bullfinch	1

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	03/08/2021	Chaffinch	10
Barnadivane 2km radius	03/08/2021	Starling	-
Barnadivane 2km radius	03/08/2021	Woodpigeon	-
Barnadivane 2km radius	03/08/2021	Willow Warbler	3
Barnadivane 2km radius	03/08/2021	Goldfinch	2
Barnadivane 2km radius	03/08/2021	Lesser Black-backed Gull	2
Barnadivane 2km radius	03/08/2021	Kestrel	1
Barnadivane 2km radius	03/08/2021	Magpie	1
Barnadivane 2km radius	03/08/2021	Jackdaw	1
Barnadivane 10km radius	03/08/2021	Magpie	2
Barnadivane 10km radius	03/08/2021	House Sparrow	9
Barnadivane 10km radius	03/08/2021	Jackdaw	-
Barnadivane 10km radius	03/08/2021	Rook	-
Barnadivane 10km radius	03/08/2021	Swallow	-
Barnadivane 10km radius	03/08/2021	Wren	1
Barnadivane 10km radius	03/08/2021	Blackbird	1
Barnadivane 10km radius	03/08/2021	Dunnock	1
Barnadivane 10km radius	03/08/2021	Hooded Crow	1
Barnadivane 10km radius	03/08/2021	Starling	-
Barnadivane 10km radius	03/08/2021	Willow Warbler	1
Barnadivane 10km radius	03/08/2021	Goldfinch	2
Barnadivane 10km radius	03/08/2021	Linnet	1
Barnadivane 10km radius	03/08/2021	Woodpigeon	-
Desert Bridge	03/08/2021	Grey Heron	2
Desert Bridge	03/08/2021	Swallow	-
Desert Bridge	03/08/2021	Woodpigeon	-
Desert Bridge	03/08/2021	Wren	1
Murragh Lake	03/08/2021	Mallard	7
Murragh Lake	03/08/2021	Moorhen	3
Murragh Lake	03/08/2021	Mute Swan	2
Murragh Lake	03/08/2021	Swallow	-
Murragh Lake	03/08/2021	Willow Warbler	1
Murragh Lake	03/08/2021	House Martin	11
Murragh Lake	03/08/2021	Woodpigeon	-
Kilmicheal/Mid Cork Quarries	03/08/2021	Peregrine	1
Kilmicheal/Mid Cork Quarries	03/08/2021	Sparrowhawk	1
Kilmicheal/Mid Cork Quarries	03/08/2021	Willow Warbler	1

Site Name	Date	Common name	No ¹
Kilmicheal/Mid Cork Quarries	03/08/2021	Woodpigeon	2
The Gearagh	03/08/2021	Sedge Warbler	1
The Gearagh	03/08/2021	Mallard	14
The Gearagh	03/08/2021	Mute Swan	13
The Gearagh	03/08/2021	Great Crested Grebe	22
The Gearagh	03/08/2021	Grey Heron	2
The Gearagh	03/08/2021	Willow Warbler	1
The Gearagh	03/08/2021	Chiffchaff	1
The Gearagh	03/08/2021	Chaffinch	1
The Gearagh	03/08/2021	Hooded Crow	2
The Gearagh	03/08/2021	Rook	1
The Gearagh	03/08/2021	Swallow	-
The Gearagh	03/08/2021	Wren	1
The Gearagh	03/08/2021	Blue Tit	1
Warren's Court	03/08/2021	Moorhen	1
Warren's Court	03/08/2021	Mallard	2
Warren's Court	03/08/2021	House Martin	2
Warren's Court	03/08/2021	Swallow	-
Castlemoor	16/10/2021	#N/A	n/a
Warren's Court	16/10/2021	Mute Swan	6
The Gearagh	16/10/2021	Mallard	98
The Gearagh	16/10/2021	Teal	186
The Gearagh	16/10/2021	Lapwing	60
The Gearagh	16/10/2021	Snipe	4
The Gearagh	16/10/2021	Curlew	16
The Gearagh	16/10/2021	Grey Heron	3
The Gearagh	16/10/2021	Mute Swan	14
The Gearagh	16/10/2021	Ruff	2
The Gearagh	16/10/2021	Garden Warbler	-
The Gearagh	16/10/2021	#N/A	1
The Gearagh	16/10/2021	Little Egret	9
The Gearagh	16/10/2021	Moorhen	1
The Gearagh	16/10/2021	Black-headed Gull	120
The Gearagh	16/10/2021	Lesser Black-backed Gull	54
The Gearagh	16/10/2021	Wigeon	35
The Gearagh	16/10/2021	Cormorant	6
Kilmicheal/Mid Cork Quarries	16/10/2021	Reed Bunting	2

Site Name	Date	Common name	No ¹
Kilmicheal/Mid Cork Quarries	16/10/2021	Jackdaw	6
Barnadivane 2km radius	16/10/2021	Chaffinch	20
Barnadivane 2km radius	16/10/2021	Rook	-
Barnadivane 2km radius	16/10/2021	Hooded Crow	-
Barnadivane 2km radius	16/10/2021	Magpie	2
Barnadivane 2km radius	16/10/2021	Wren	5
Barnadivane 2km radius	16/10/2021	Bullfinch	2
Barnadivane 2km radius	16/10/2021	Meadow Pipit	40+
Barnadivane 2km radius	16/10/2021	Linnet	20
Barnadivane 2km radius	16/10/2021	Blue Tit	1
Barnadivane 2km radius	16/10/2021	Lesser Black-backed Gull	4
Barnadivane 2km radius	16/10/2021	Dunnock	1
Barnadivane 2km radius	16/10/2021	Jackdaw	17
Barnadivane 2km radius	16/10/2021	Goldfinch	2
Barnadivane 2km radius	16/10/2021	Pheasant	1
Barnadivane 2km radius	16/10/2021	Robin	6
Barnadivane 2km radius	16/10/2021	Woodpigeon	20
Barnadivane 2km radius	16/10/2021	Starling	-
Barnadivane 2km radius	16/10/2021	Buzzard	1
Murragh Lake	16/10/2021	Mute Swan	2
Desert Bridge	16/10/2021	Mallard	2
Desert Bridge	16/10/2021	Mallard	31
River Bandon SAC	16/10/2021	Lesser Black-backed Gull	28
River Bandon SAC	16/10/2021	Grey Wagtail	1
River Bandon SAC	16/10/2021	Little Egret	5
The Gearagh	20/09/2021	Kestrel	1
The Gearagh	20/09/2021	Swallow	2
The Gearagh	20/09/2021	Great White Egret	1
The Gearagh	20/09/2021	Egyptian Goose	1
The Gearagh	20/09/2021	Black-headed Gull	69
The Gearagh	20/09/2021	Mallard	254
The Gearagh	20/09/2021	Reed Bunting	1
The Gearagh	20/09/2021	Robin	1
The Gearagh	20/09/2021	Chaffinch	5
The Gearagh	20/09/2021	Woodpigeon	1
The Gearagh	20/09/2021	Coot	9
The Gearagh	20/09/2021	Snipe	4

Site Name	Date	Common name	No ¹
The Gearagh	20/09/2021	Ruff	3
The Gearagh	20/09/2021	Blue Tit	1
The Gearagh	20/09/2021	Grey Heron	7
The Gearagh	20/09/2021	Wigeon	14
The Gearagh	20/09/2021	Whooper Swan	2
The Gearagh	20/09/2021	Greylag Goose	203
The Gearagh	20/09/2021	Teal	48
The Gearagh	20/09/2021	Lapwing	50
The Gearagh	20/09/2021	Great Crested Grebe	27
The Gearagh	20/09/2021	Buzzard	1
The Gearagh	20/09/2021	Sparrowhawk	1
The Gearagh	20/09/2021	Mute Swan	13
The Gearagh	20/09/2021	Blackbird	1
The Gearagh	20/09/2021	Lesser Black-backed Gull	37
The Gearagh	20/09/2021	Curlew	1
The Gearagh	20/09/2021	Moorhen	3
Kilmicheal/Mid Cork Quarries	20/09/2021	Magpie	1
Kilmicheal/Mid Cork Quarries	20/09/2021	Rook	1
Kilmicheal/Mid Cork Quarries	20/09/2021	Hooded Crow	2
Kilmicheal/Mid Cork Quarries	20/09/2021	Swallow	1
Kilmicheal/Mid Cork Quarries	20/09/2021	Blackbird	1
Kilmicheal/Mid Cork Quarries	20/09/2021	Dunnock	1
Kilmicheal/Mid Cork Quarries	20/09/2021	Meadow Pipit	4
Murragh Lake	20/09/2021	Cormorant	1
Murragh Lake	20/09/2021	Coot	1
Murragh Lake	20/09/2021	Grey Heron	1
Murragh Lake	20/09/2021	Dunnock	1
Murragh Lake	20/09/2021	Woodpigeon	1
Desert Bridge	20/09/2021	Mute Swan	1
Desert Bridge	20/09/2021	Dipper	1
Desert Bridge	20/09/2021	Mallard	4
Desert Bridge	20/09/2021	Woodpigeon	13
Desert Bridge	20/09/2021	Kestrel	2
Desert Bridge	20/09/2021	Grey Heron	1
Desert Bridge	20/09/2021	Jackdaw	6
Desert Bridge	20/09/2021	Goldfinch	2
Desert Bridge	20/09/2021	Rook	2

Site Name	Date	Common name	No ¹
Desert Bridge	20/09/2021	Hooded Crow	2
Desert Bridge	20/09/2021	Cormorant	1
Desert Bridge	20/09/2021	Chaffinch	1
Desert Bridge	20/09/2021	Magpie	1
Desert Bridge	20/09/2021	Swallow	9
Barnadivane 2km radius	20/09/2021	Meadow Pipit	-
Barnadivane 2km radius	20/09/2021	Jackdaw	-
Barnadivane 2km radius	20/09/2021	Rook	-
Barnadivane 2km radius	20/09/2021	Hooded Crow	-
Barnadivane 2km radius	20/09/2021	Goldfinch	-
Barnadivane 2km radius	20/09/2021	Wren	-
Barnadivane 2km radius	20/09/2021	Starling	-
Barnadivane 2km radius	20/09/2021	Swallow	-
Barnadivane 2km radius	20/09/2021	Robin	-
Barnadivane 2km radius	20/09/2021	Dunnock	-
Barnadivane 2km radius	20/09/2021	Great Tit	-
Barnadivane 2km radius	20/09/2021	Blue Tit	-
Barnadivane 2km radius	20/09/2021	Chaffinch	-
Barnadivane 2km radius	20/09/2021	Lesser Black-backed Gull	-
Barnadivane 2km radius	20/09/2021	Raven	-
Barnadivane 2km radius	20/09/2021	Robin	-
Barnadivane 2km radius	20/09/2021	Woodpigeon	-
Barnadivane 2km radius	20/09/2021	Magpie	-
Barnadivane 2km radius	20/09/2021	Stonechat	-
Barnadivane 2km radius	20/09/2021	Pied/White Wagtail	-
Barnadivane 2km radius	20/09/2021	Wheatear	1
Warren's Court	20/09/2021	Tufted Duck	3
Warren's Court	20/09/2021	Lesser Black-backed Gull	12
Warren's Court	20/09/2021	Mallard	2
Warren's Court	20/09/2021	Mute Swan	1
Castlemoor	20/09/2021	Lesser Black-backed Gull	1
Sullane Delta	15/11/2021	Wigeon	49
Sullane Delta	15/11/2021	Green Sandpiper	1
Sullane Delta	15/11/2021	Curlew	14
Sullane Delta	15/11/2021	Lapwing	125
Sullane Delta	15/11/2021	Great Black-backed Gull	1
Sullane Delta	15/11/2021	Cormorant	10

Site Name	Date	Common name	No ¹
Sullane Delta	15/11/2021	Mallard	48
Sullane Delta	15/11/2021	Black-headed Gull	37
Sullane Delta	15/11/2021	Grey Heron	3
Sullane Delta	15/11/2021	Snipe	4
Sullane Delta	15/11/2021	Teal	38
The Gearagh	15/11/2021	Golden Plover	1300
The Gearagh	15/11/2021	Whooper Swan	6
The Gearagh	15/11/2021	Great White Egret	3
The Gearagh	15/11/2021	Lapwing	348
The Gearagh	15/11/2021	Black-tailed Godwit	12
The Gearagh	15/11/2021	Curlew	68
The Gearagh	15/11/2021	Dunlin	102
The Gearagh	15/11/2021	Great Black-backed Gull	1
The Gearagh	15/11/2021	Teal	1040
The Gearagh	15/11/2021	Mallard	51
The Gearagh	15/11/2021	Mute Swan	19
The Gearagh	15/11/2021	Cormorant	7
The Gearagh	15/11/2021	Grey Heron	4
The Gearagh	15/11/2021	Wigeon	127
The Gearagh	15/11/2021	Lesser Black-backed Gull	26
The Gearagh	15/11/2021	Black-headed Gull	50
The Gearagh	15/11/2021	Gadwall	3
The Gearagh	15/11/2021	Snipe	13
Warren's Court	15/11/2021	Kingfisher	2
Warren's Court	15/11/2021	Tufted Duck	3
Warren's Court	15/11/2021	Wigeon	3
Warren's Court	15/11/2021	Mute Swan	3
Warren's Court	15/11/2021	Grey Heron	1
Warren's Court	15/11/2021	Treecreeper	1
Warren's Court	15/11/2021	Goldcrest	1
Castlemoor	15/11/2021	Sparrowhawk	1
Castlemoor	15/11/2021	Raven	1
Castlemoor	15/11/2021	Blue Tit	1
Barnadivane 2km radius	15/11/2021	Buzzard	1
Murragh Lake	15/11/2021	Tufted Duck	3
Murragh Lake	15/11/2021	Magpie	1
Murragh Lake	15/11/2021	Blackbird	2

Site Name	Date	Common name	No ¹
Murragh Lake	15/11/2021	Jackdaw	2
Desert Bridge	15/11/2021	Cormorant	1
Desert Bridge	15/11/2021	Mute Swan	1
Desert Bridge	15/11/2021	Mallard	4
Desert Bridge	15/11/2021	Lesser Black-backed Gull	14
River Bandon SAC	15/11/2021	Whooper Swan	17
River Bandon SAC	15/11/2021	Mute Swan	4
River Bandon SAC	15/11/2021	Grey Heron	1
River Bandon SAC	15/11/2021	Little Egret	1
River Bandon SAC	15/11/2021	Mallard	2
Sullane Delta	31/12/2021	Grey Heron	1
Sullane Delta	31/12/2021	Teal	37
Sullane Delta	31/12/2021	Wigeon	31
Sullane Delta	31/12/2021	Mallard	6
Sullane Delta	31/12/2021	Black-headed Gull	160
Sullane Delta	31/12/2021	Dunlin	25
Sullane Delta	31/12/2021	Lapwing	46
Sullane Delta	31/12/2021	Curlew	105
The Gearagh	31/12/2021	Grey Heron	2
The Gearagh	31/12/2021	Lapwing	163
The Gearagh	31/12/2021	Cormorant	1
The Gearagh	31/12/2021	Mallard	27
The Gearagh	31/12/2021	Wigeon	68
The Gearagh	31/12/2021	Teal	29
The Gearagh	31/12/2021	Mute Swan	5
The Gearagh	31/12/2021	Greylag Goose	2
The Gearagh	31/12/2021	Curlew	5
The Gearagh	31/12/2021	Dunlin	78
The Gearagh	31/12/2021	Black-headed Gull	80
The Gearagh	31/12/2021	Whooper Swan	59
Castlemoor	31/12/2021	Tufted Duck	12
Castlemoor	31/12/2021	Mallard	7
Warren's Court	31/12/2021	Mute Swan	2
Warren's Court	31/12/2021	Moorhen	1
Barnadivane 2km radius	31/12/2021	Dipper	1
Barnadivane 2km radius	31/12/2021	Sparrowhawk	1
Barnadivane 2km radius	31/12/2021	Redwing	40

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	31/12/2021	Blackbird	3
Barnadivane 2km radius	31/12/2021	Chaffinch	1
Barnadivane 2km radius	31/12/2021	Fieldfare	12
Barnadivane 2km radius	31/12/2021	Hooded Crow	2
Barnadivane 2km radius	31/12/2021	Starling	40
Murragh Lake	31/12/2021	Little Grebe	7
Murragh Lake	31/12/2021	Cormorant	1
Murragh Lake	31/12/2021	Grey Heron	1
Desert Bridge	31/12/2021	Cormorant	1
Desert Bridge	31/12/2021	Mute Swan	1
Desert Bridge	31/12/2021	Mallard	4
Desert Bridge	31/12/2021	Lesser Black-backed Gull	14
River Bandon SAC	31/12/2021	Whooper Swan	34
River Bandon SAC	31/12/2021	Mute Swan	3
River Bandon SAC	31/12/2021	Redwing	20
River Bandon SAC	31/12/2021	Robin	1
River Bandon SAC	31/12/2021	Mallard	15
River Bandon SAC	31/12/2021	Cormorant	1
River Bandon SAC	31/12/2021	Woodpigeon	1
River Bandon SAC	31/12/2021	Blackbird	1
River Bandon SAC	31/12/2021	Curlew	16
River Bandon SAC	31/12/2021	Grey Heron	4
River Bandon SAC	31/12/2021	Great Black-backed Gull	1
River Bandon SAC	31/12/2021	Lesser Black-backed Gull	19
Sullane Delta	12/02/2022	Barnacle Goose	3
Sullane Delta	12/02/2022	Teal	29
Sullane Delta	12/02/2022	Cormorant	12
Sullane Delta	12/02/2022	Wigeon	128
Sullane Delta	12/02/2022	Grey Heron	1
Sullane Delta	12/02/2022	Curlew	129
Sullane Delta	12/02/2022	Great Crested Grebe	11
Sullane Delta	12/02/2022	Mallard	4
Sullane Delta	12/02/2022	Lapwing	300
The Gearagh	12/02/2022	Dunlin	206
The Gearagh	12/02/2022	Lapwing	417
The Gearagh	12/02/2022	Black-headed Gull	56
The Gearagh	12/02/2022	Curlew	46

Site Name	Date	Common name	No ¹
The Gearagh	12/02/2022	Lesser Black-backed Gull	26
The Gearagh	12/02/2022	Goosander	2
The Gearagh	12/02/2022	Teal	158
The Gearagh	12/02/2022	Wigeon	72
The Gearagh	12/02/2022	Grey Heron	1
The Gearagh	12/02/2022	Cormorant	1
The Gearagh	12/02/2022	Buzzard	1
The Gearagh	12/02/2022	Mallard	12
The Gearagh	12/02/2022	Peregrine	1
Warren's Court	12/02/2022	Tufted Duck	18
Warren's Court	12/02/2022	Teal	2
Warren's Court	12/02/2022	Mute Swan	5
Warren's Court	12/02/2022	Grey Heron	1
Barnadivane 2km radius	12/02/2022	Goldfinch	-
Barnadivane 2km radius	12/02/2022	Blue Tit	-
Barnadivane 2km radius	12/02/2022	Dunnock	-
Barnadivane 2km radius	12/02/2022	Chaffinch	-
Barnadivane 2km radius	12/02/2022	Siskin	-
Barnadivane 2km radius	12/02/2022	Magpie	-
Barnadivane 2km radius	12/02/2022	Robin	-
Barnadivane 2km radius	12/02/2022	Wren	-
Barnadivane 2km radius	12/02/2022	Treecreeper	1
Barnadivane 2km radius	12/02/2022	Song Thrush	-
Barnadivane 2km radius	12/02/2022	Bullfinch	-
Barnadivane 2km radius	12/02/2022	Blackbird	-
Barnadivane 2km radius	12/02/2022	Rook	-
Barnadivane 2km radius	12/02/2022	Hooded Crow	-
Barnadivane 2km radius	12/02/2022	Starling	-
Barnadivane 2km radius	12/02/2022	Kestrel	-
Murragh Lake	12/02/2022	Tufted Duck	2
Murragh Lake	12/02/2022	Teal	3
Murragh Lake	12/02/2022	Coot	1
Murragh Lake	12/02/2022	Moorhen	1
Murragh Lake	12/02/2022	Grey Heron	2
Murragh Lake	12/02/2022	Long-tailed Tit	2
Murragh Lake	12/02/2022	Great Tit	1
Murragh Lake	12/02/2022	Blue Tit	1

Site Name	Date	Common name	No ¹
Murragh Lake	12/02/2022	Robin	1
Murragh Lake	12/02/2022	Chaffinch	2
Murragh Lake	12/02/2022	Jackdaw	4
Murragh Lake	12/02/2022	Blackbird	1
Desert Bridge	12/02/2022	Grey Wagtail	1
Desert Bridge	12/02/2022	Chaffinch	2
Desert Bridge	12/02/2022	Dunnock	1
River Bandon SAC	12/02/2022	Whooper Swan	27
River Bandon SAC	12/02/2022	Mute Swan	5
River Bandon SAC	12/02/2022	Curlew	26
River Bandon SAC	12/02/2022	Little Egret	1
River Bandon SAC	12/02/2022	Cormorant	1
River Bandon SAC	12/02/2022	Rook	-
River Bandon SAC	12/02/2022	Fieldfare	-
River Bandon SAC	12/02/2022	Redwing	-
River Bandon SAC	12/02/2022	Woodpigeon	-
River Bandon SAC	12/02/2022	Starling	-
Warren's Court	01/04/2022	Tufted Duck	26
Warren's Court	01/04/2022	Mallard	1
Warren's Court	01/04/2022	Sand Martin	2
Warren's Court	01/04/2022	Mute Swan	3
Warren's Court	01/04/2022	Song Thrush	1
Warren's Court	01/04/2022	Dunnock	2
Warren's Court	01/04/2022	Chiffchaff	2
Warren's Court	01/04/2022	Blackbird	2
Warren's Court	01/04/2022	Woodpigeon	1
Sullane Delta	01/04/2022	Grey Heron	2
Sullane Delta	01/04/2022	Cormorant	7
Sullane Delta	01/04/2022	Teal	7
Sullane Delta	01/04/2022	Mallard	2
Sullane Delta	01/04/2022	Lapwing	1
Sullane Delta	01/04/2022	Little Egret	4
Sullane Delta	01/04/2022	Sand Martin	8
Sullane Delta	01/04/2022	Great Black-backed Gull	1
Sullane Delta	01/04/2022	Lesser Black-backed Gull	1
The Gearagh	01/04/2022	Greylag Goose	16
The Gearagh	01/04/2022	Mute Swan	9

Site Name	Date	Common name	No ¹
The Gearagh	01/04/2022	Teal	38
The Gearagh	01/04/2022	Wigeon	51
The Gearagh	01/04/2022	Cormorant	6
The Gearagh	01/04/2022	Great Crested Grebe	8
The Gearagh	01/04/2022	Gadwall	2
The Gearagh	01/04/2022	Lesser Black-backed Gull	4
The Gearagh	01/04/2022	Sand Martin	1
The Gearagh	01/04/2022	Mallard	2
Murragh Lake	01/04/2022	Coot	2
Murragh Lake	01/04/2022	Teal	2
Murragh Lake	01/04/2022	Mallard	1
Murragh Lake	01/04/2022	Whooper Swan	1
Desert Bridge	01/04/2022	Grey Wagtail	2
Desert Bridge	01/04/2022	Mallard	2
River Bandon SAC	01/04/2022	Mute Swan	1
River Bandon SAC	01/04/2022	Lesser Black-backed Gull	30
River Bandon SAC	01/04/2022	Mallard	4
River Bandon SAC	01/04/2022	Cormorant	2
Barnadivane 5km radius	01/04/2022	Brambling	1
Barnadivane 5km radius	01/04/2022	House Sparrow	-
Barnadivane 5km radius	01/04/2022	Starling	-
Barnadivane 5km radius	01/04/2022	Rook	-
Barnadivane 5km radius	01/04/2022	Blue Tit	-
Barnadivane 5km radius	01/04/2022	Great Tit	-
Barnadivane 5km radius	01/04/2022	Hooded Crow	-
Barnadivane 5km radius	01/04/2022	Coal Tit	-
Barnadivane 5km radius	01/04/2022	Robin	-
Barnadivane 5km radius	01/04/2022	Woodpigeon	-
Barnadivane 5km radius	01/04/2022	Magpie	-
Barnadivane 5km radius	01/04/2022	Dunnock	-
Barnadivane 5km radius	01/04/2022	Wren	-
Barnadivane 5km radius	01/04/2022	Chiffchaff	-
Barnadivane 5km radius	01/04/2022	Jackdaw	-
Barnadivane 5km radius	01/04/2022	Chaffinch	-
Barnadivane 2km radius	01/04/2022	Wren	-
Barnadivane 2km radius	01/04/2022	Stonechat	-
Barnadivane 2km radius	01/04/2022	Mallard	2

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	01/04/2022	Woodpigeon	-
Barnadivane 2km radius	01/04/2022	Chaffinch	-
Barnadivane 2km radius	01/04/2022	Rook	-
Barnadivane 2km radius	01/04/2022	Hooded Crow	-
Barnadivane 2km radius	01/04/2022	Jackdaw	-
Barnadivane 2km radius	01/04/2022	Blackbird	-
Barnadivane 2km radius	01/04/2022	Dunnock	-
Barnadivane 2km radius	01/04/2022	Starling	-
Barnadivane 2km radius	01/04/2022	Robin	-
Barnadivane 2km radius	01/04/2022	Chaffinch	-
Barnadivane 2km radius	01/04/2022	Greenfinch	1
Barnadivane 2km radius	01/04/2022	Blue Tit	-
Barnadivane 2km radius	11/05/2022	Magpie	-
Barnadivane 2km radius	11/05/2022	Dunnock	-
Barnadivane 2km radius	11/05/2022	Robin	-
Barnadivane 2km radius	11/05/2022	Wren	-
Barnadivane 2km radius	11/05/2022	Chaffinch	-
Barnadivane 2km radius	11/05/2022	Common Crossbill	-
Barnadivane 2km radius	11/05/2022	Blue Tit	-
Barnadivane 2km radius	11/05/2022	Blackbird	-
Barnadivane 2km radius	11/05/2022	Woodpigeon	-
Barnadivane 2km radius	11/05/2022	Meadow Pipit	-
Barnadivane 2km radius	11/05/2022	Great Tit	-
Barnadivane 2km radius	11/05/2022	Siskin	-
Barnadivane 2km radius	11/05/2022	Rook	-
Barnadivane 2km radius	11/05/2022	Hooded Crow	-
Barnadivane 5km radius	11/05/2022	Common Crossbill	-
Barnadivane 5km radius	11/05/2022	Great Tit	-
Barnadivane 5km radius	11/05/2022	Chaffinch	-
Barnadivane 5km radius	11/05/2022	Blue Tit	-
Barnadivane 5km radius	11/05/2022	Dunnock	-
Barnadivane 5km radius	11/05/2022	Magpie	-
Barnadivane 5km radius	11/05/2022	Hooded Crow	-
Barnadivane 5km radius	11/05/2022	Mallard	2
Barnadivane 5km radius	11/05/2022	Rook	-
Barnadivane 5km radius	11/05/2022	Blackbird	-

Site Name	Date	Common name	No ¹
Barnadivane 5km radius	11/05/2022	Siskin	-
Barnadivane 5km radius	11/05/2022	Bullfinch	-
Barnadivane 5km radius	11/05/2022	Wren	-
Barnadivane 5km radius	11/05/2022	Woodpigeon	-
Barnadivane 5km radius	11/05/2022	Robin	-
Barnadivane 5km radius	11/05/2022	Pheasant	-
Barnadivane 5km radius	11/05/2022	Song Thrush	-
Barnadivane 5km radius	11/05/2022	Jackdaw	-
Barnadivane 5km radius	11/05/2022	Blackcap	-
Barnadivane 5km radius	11/05/2022	Linnet	-
Barnadivane 5km radius	11/05/2022	Swallow	-
Barnadivane 5km radius	11/05/2022	Willow Warbler	-
Barnadivane 5km radius	11/05/2022	Starling	-
Barnadivane 5km radius	11/05/2022	Sedge Warbler	-
Barnadivane 5km radius	11/05/2022	Pied/White Wagtail	-
Barnadivane 5km radius	11/05/2022	Goldfinch	-
River Bandon SAC	11/05/2022	Grey Wagtail	2
River Bandon SAC	11/05/2022	Sand Martin	2
River Bandon SAC	11/05/2022	Mallard	16
River Bandon SAC	11/05/2022	Grey Heron	1
Desert Bridge	11/05/2022	Dipper	1
Desert Bridge	11/05/2022	Mallard	1
Murragh Lake	11/05/2022	Moorhen	1
Murragh Lake	11/05/2022	Mallard	1
Murragh Lake	11/05/2022	Mute Swan	1
Warren's Court	11/05/2022	Mute Swan	1
Warren's Court	11/05/2022	Moorhen	2
Warren's Court	11/05/2022	Mallard	1
Sullane Delta	11/05/2022	Grey Heron	1
Sullane Delta	11/05/2022	Mute Swan	2
Sullane Delta	11/05/2022	Mallard	7
Sullane Delta	11/05/2022	Sand Martin	-
Sullane Delta	11/05/2022	Great Black-backed Gull	1
Sullane Delta	11/05/2022	Cormorant	1
Sullane Delta	11/05/2022	Lesser Black-backed Gull	3
The Gearagh	11/05/2022	Garganey	1
The Gearagh	11/05/2022	Great Crested Grebe	27

Site Name	Date	Common name	No ¹
The Gearagh	11/05/2022	Moorhen	2
The Gearagh	11/05/2022	Whimbrel	1
The Gearagh	11/05/2022	Mute Swan	25
The Gearagh	11/05/2022	Teal	4
The Gearagh	11/05/2022	Wigeon	2
The Gearagh	11/05/2022	Greylag Goose	14
The Gearagh	11/05/2022	Mallard	21
The Gearagh	11/05/2022	Lesser Black-backed Gull	27
The Gearagh	11/05/2022	Cormorant	1
The Gearagh	11/05/2022	Grey Heron	2
Kilmicheal/Mid Cork Quarries	11/05/2022	Sand Martin	0
Barnadivane 2km radius	01/06/2022	Bullfinch	-
Barnadivane 2km radius	01/06/2022	Wren	-
Barnadivane 2km radius	01/06/2022	Blackcap	-
Barnadivane 2km radius	01/06/2022	Robin	-
Barnadivane 2km radius	01/06/2022	Rook	-
Barnadivane 2km radius	01/06/2022	Chaffinch	-
Barnadivane 2km radius	01/06/2022	Jackdaw	-
Barnadivane 2km radius	01/06/2022	Starling	-
Barnadivane 2km radius	01/06/2022	Swallow	-
Barnadivane 2km radius	01/06/2022	Willow Warbler	-
Barnadivane 2km radius	01/06/2022	Blackbird	-
Barnadivane 2km radius	01/06/2022	Meadow Pipit	-
Barnadivane 2km radius	01/06/2022	Chiffchaff	-
Barnadivane 2km radius	01/06/2022	Pheasant	-
Barnadivane 2km radius	01/06/2022	Pied/White Wagtail	-
Barnadivane 2km radius	01/06/2022	Hooded Crow	-
Barnadivane 2km radius	01/06/2022	Song Thrush	-
Barnadivane 2km radius	01/06/2022	Lesser Redpoll	-
Barnadivane 2km radius	01/06/2022	Reed Bunting	-
Barnadivane 2km radius	01/06/2022	Magpie	-
Barnadivane 2km radius	01/06/2022	Blue Tit	-
Barnadivane 2km radius	01/06/2022	Woodpigeon	-
Barnadivane 2km radius	01/06/2022	Goldfinch	-
Barnadivane 2km radius	01/06/2022	Stonechat	-
Barnadivane 2km radius	01/06/2022	Coal Tit	-

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	01/06/2022	Goldcrest	-
Barnadivane 2km radius	01/06/2022	Dunnock	-
Barnadivane 2km radius	01/06/2022	Mistle Thrush	-
Barnadivane 2km radius	01/06/2022	Kestrel	-
Barnadivane 2km radius	01/06/2022	House Martin	-
Barnadivane 5km radius	01/06/2022	Blackcap	-
Barnadivane 5km radius	01/06/2022	Goldfinch	-
Barnadivane 5km radius	01/06/2022	Chaffinch	-
Barnadivane 5km radius	01/06/2022	House Sparrow	-
Barnadivane 5km radius	01/06/2022	Great Tit	-
Barnadivane 5km radius	01/06/2022	Willow Warbler	-
Barnadivane 5km radius	01/06/2022	Blackbird	-
Barnadivane 5km radius	01/06/2022	Robin	-
Barnadivane 5km radius	01/06/2022	Dunnock	-
Barnadivane 5km radius	01/06/2022	Buzzard	-
Barnadivane 5km radius	01/06/2022	Hooded Crow	-
Barnadivane 5km radius	01/06/2022	Magpie	-
Barnadivane 5km radius	01/06/2022	Jackdaw	-
Barnadivane 5km radius	01/06/2022	Song Thrush	-
Barnadivane 5km radius	01/06/2022	Pied/White Wagtail	-
Barnadivane 5km radius	01/06/2022	Pheasant	-
Barnadivane 5km radius	01/06/2022	Chiffchaff	-
Barnadivane 5km radius	01/06/2022	Starling	-
Barnadivane 5km radius	01/06/2022	Swallow	-
Barnadivane 5km radius	01/06/2022	House Sparrow	-
Barnadivane 5km radius	01/06/2022	Rook	-
Barnadivane 5km radius	01/06/2022	Jackdaw	-
Barnadivane 5km radius	01/06/2022	Magpie	-
Barnadivane 5km radius	01/06/2022	Goldfinch	-
Barnadivane 5km radius	01/06/2022	Wren	-
Barnadivane 5km radius	01/06/2022	Raven	-
Barnadivane 5km radius	01/06/2022	Long-tailed Tit	-
Barnadivane 5km radius	01/06/2022	Jay	-
Barnadivane 5km radius	01/06/2022	Goldcrest	-
Murragh Lake	01/06/2022	Mallard	2
Murragh Lake	01/06/2022	Moorhen	1

Site Name	Date	Common name	No ¹
Desert Bridge	01/06/2022	Grey Heron	1
Desert Bridge	01/06/2022	Mallard	1
River Bandon SAC	01/06/2022	Mallard	1
Warren's Court	01/06/2022	House Martin	-
Warren's Court	01/06/2022	Moorhen	-
Warren's Court	01/06/2022	Mallard	4
Sullane Delta	01/06/2022	Mute Swan	1
Sullane Delta	01/06/2022	Lapwing	2
Sullane Delta	01/06/2022	Mallard	16
Sullane Delta	01/06/2022	Grey Heron	4
Sullane Delta	01/06/2022	Cormorant	1
Sullane Delta	01/06/2022	Black-headed Gull	1
Sullane Delta	01/06/2022	Lesser Black-backed Gull	13
Sullane Delta	01/06/2022	Great Black-backed Gull	1
Sullane Delta	01/06/2022	House Martin	-
The Gearagh	01/06/2022	Grey Heron	3
The Gearagh	01/06/2022	Great Crested Grebe	17
The Gearagh	01/06/2022	Mallard	21
The Gearagh	01/06/2022	Coot	1
The Gearagh	01/06/2022	Mute Swan	36
The Gearagh	01/06/2022	Moorhen	2
The Gearagh	01/06/2022	Lesser Black-backed Gull	9
The Gearagh	01/06/2022	Greylag Goose	6
Warren's Court	26/01/2022	Tufted Duck	10
Warren's Court	26/01/2022	Mallard	3
Warren's Court	26/01/2022	Mute Swan	5
Warren's Court	26/01/2022	Grey Heron	1
Warren's Court	26/01/2022	Blackbird	3
Warren's Court	26/01/2022	Song Thrush	2
Warren's Court	26/01/2022	Robin	4
Warren's Court	26/01/2022	Great Tit	1
Warren's Court	26/01/2022	Hooded Crow	2
Warren's Court	26/01/2022	Wren	2
Castlemoor	26/01/2022	Tufted Duck	8
Castlemoor	26/01/2022	Collared Dove	2
Castlemoor	26/01/2022	Woodpigeon	1
Castlemoor	26/01/2022	Robin	1

Site Name	Date	Common name	No ¹
Castlemoor	26/01/2022	Jackdaw	3
Castlemoor	26/01/2022	Hooded Crow	1
Castlemoor	26/01/2022	Snipe	1
Castlelack Lake	26/01/2022	Mute Swan	7
Castlelack Lake	26/01/2022	Wigeon	12
Castlelack Lake	26/01/2022	Coot	2
Castlelack Lake	26/01/2022	Teal	24
Castlelack Lake	26/01/2022	Mallard	18
Castlelack Lake	26/01/2022	Black-headed Gull	1
Castlelack Lake	26/01/2022	Jackdaw	2
Murragh Lake	26/01/2022	Tufted Duck	3
Murragh Lake	26/01/2022	Coot	1
Murragh Lake	26/01/2022	Mallard	8
Murragh Lake	26/01/2022	Goldcrest	2
Murragh Lake	26/01/2022	Jackdaw	4
Murragh Lake	26/01/2022	Chiffchaff	1
Murragh Lake	26/01/2022	Robin	1
Desert Bridge	26/01/2022	Dipper	1
Desert Bridge	26/01/2022	Chaffinch	1
River Bandon SAC	26/01/2022	Whooper Swan	38
River Bandon SAC	26/01/2022	Robin	4
River Bandon SAC	26/01/2022	Hooded Crow	4
River Bandon SAC	26/01/2022	Jackdaw	3
River Bandon SAC	26/01/2022	Chaffinch	1
River Bandon SAC	26/01/2022	Dunnock	1
River Bandon SAC	26/01/2022	Blackbird	3
River Bandon SAC	26/01/2022	Mallard	3
River Bandon SAC	26/01/2022	Fieldfare	30
River Bandon SAC	26/01/2022	Redwing	5
River Bandon SAC	26/01/2022	Grey Heron	1
River Bandon SAC	26/01/2022	Pied/White Wagtail	1
River Bandon SAC	26/01/2022	Starling	26
River Bandon SAC	26/01/2022	Magpie	1
River Bandon SAC	26/01/2022	Peregrine	1
Barnadivane 2km radius	26/01/2022	Blackbird	2
Barnadivane 2km radius	26/01/2022	Hooded Crow	1
Barnadivane 2km radius	26/01/2022	Wren	1

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	26/01/2022	Blue Tit	2
Barnadivane 2km radius	26/01/2022	Woodpigeon	6
Barnadivane 2km radius	26/01/2022	Robin	2
Barnadivane 2km radius	26/01/2022	Jackdaw	20
Barnadivane 2km radius	26/01/2022	Chaffinch	10
Barnadivane 2km radius	26/01/2022	Dunnock	1
Barnadivane 2km radius	26/01/2022	Fieldfare	25
Barnadivane 2km radius	26/01/2022	Pied/White Wagtail	2
Barnadivane 2km radius	26/01/2022	Starling	20
Barnadivane 2km radius	26/01/2022	Redwing	1
The Gearagh	26/01/2022	Lapwing	61
The Gearagh	26/01/2022	Curlew	44
The Gearagh	26/01/2022	Dunlin	86
The Gearagh	26/01/2022	Snipe	1
The Gearagh	26/01/2022	Black-headed Gull	1
The Gearagh	26/01/2022	Teal	68
The Gearagh	26/01/2022	Little Egret	1
The Gearagh	26/01/2022	Wigeon	26
The Gearagh	26/01/2022	Grey Heron	1
The Gearagh	26/01/2022	Peregrine	1
Sullane Delta	26/01/2022	Barnacle Goose	2
Sullane Delta	26/01/2022	Teal	6
Sullane Delta	26/01/2022	Lapwing	726
Sullane Delta	26/01/2022	Curlew	39
Sullane Delta	26/01/2022	Mallard	9
Sullane Delta	26/01/2022	Dunlin	53
Sullane Delta	26/01/2022	Wigeon	78
Sullane Delta	26/01/2022	Black-headed Gull	216
Sullane Delta	26/01/2022	Grey Heron	2
Sullane Delta	26/01/2022	Cormorant	19
Warren's Court	04/03/2022	Tufted Duck	14
Warren's Court	04/03/2022	Little Grebe	1
Warren's Court	04/03/2022	Mute Swan	5
Barnadivane 2km radius	04/03/2022	Hooded Crow	-
Barnadivane 2km radius	04/03/2022	Rook	-
Barnadivane 2km radius	04/03/2022	Dunnock	-
Barnadivane 2km radius	04/03/2022	Goldfinch	-

Site Name	Date	Common name	No ¹
Barnadivane 2km radius	04/03/2022	Magpie	-
Barnadivane 2km radius	04/03/2022	Redwing	-
Barnadivane 2km radius	04/03/2022	Blackbird	-
Barnadivane 2km radius	04/03/2022	Wren	-
Barnadivane 2km radius	04/03/2022	Chaffinch	-
Barnadivane 2km radius	04/03/2022	Starling	-
Barnadivane 2km radius	04/03/2022	Robin	-
Barnadivane 2km radius	04/03/2022	Mistle Thrush	-
Barnadivane 2km radius	04/03/2022	Raven	-
Barnadivane 2km radius	04/03/2022	Long-tailed Tit	-
Barnadivane 2km radius	04/03/2022	Jackdaw	-
Barnadivane 2km radius	04/03/2022	Goldcrest	-
Barnadivane 2km radius	04/03/2022	Meadow Pipit	-
Barnadivane 2km radius	04/03/2022	Skylark	-
Barnadivane 2km radius	04/03/2022	Fieldfare	-
River Bandon SAC	04/03/2022	Whooper Swan	48
Desert Bridge	04/03/2022	Kingfisher	1
Desert Bridge	04/03/2022	Blackbird	1
Desert Bridge	04/03/2022	Redwing	2
Desert Bridge	04/03/2022	Chaffinch	11
Desert Bridge	04/03/2022	Wren	1
Desert Bridge	04/03/2022	Rook	4
Desert Bridge	04/03/2022	Woodpigeon	2
Desert Bridge	04/03/2022	Mallard	2
Desert Bridge	04/03/2022	Dunnock	1
Murragh Lake	04/03/2022	Tufted Duck	4
Murragh Lake	04/03/2022	Whooper Swan	1
Murragh Lake	04/03/2022	Mute Swan	2
Murragh Lake	04/03/2022	Coot	1
Murragh Lake	04/03/2022	Moorhen	1
Sullane Delta	04/03/2022	Wigeon	71
Sullane Delta	04/03/2022	Mallard	7
Sullane Delta	04/03/2022	House Sparrow	2
Sullane Delta	04/03/2022	Little Egret	1
Sullane Delta	04/03/2022	Teal	36
Sullane Delta	04/03/2022	Cormorant	8
Sullane Delta	04/03/2022	Great Black-backed Gull	1

Site Name	Date	Common name	No ¹
Sullane Delta	04/03/2022	Great Crested Grebe	19
Sullane Delta	04/03/2022	Black-headed Gull	2
Sullane Delta	04/03/2022	Grey Heron	2
Sullane Delta	04/03/2022	Curlew	19
Sullane Delta	04/03/2022	Pied/White Wagtail	-
Sullane Delta	04/03/2022	Song Thrush	-
Sullane Delta	04/03/2022	Magpie	-
Sullane Delta	04/03/2022	Wren	-
Sullane Delta	04/03/2022	Robin	-
Sullane Delta	04/03/2022	Hooded Crow	-
Sullane Delta	04/03/2022	Moorhen	2
The Gearagh	04/03/2022	Mallard	6
The Gearagh	04/03/2022	Teal	111
The Gearagh	04/03/2022	Wigeon	61
The Gearagh	04/03/2022	Curlew	16
The Gearagh	04/03/2022	Little Egret	2
The Gearagh	04/03/2022	Golden Plover	300
The Gearagh	04/03/2022	Dunlin	130
The Gearagh	04/03/2022	Black-headed Gull	52
Barnadivane 2km radius	16/07/2022	Hooded Crow	-
Barnadivane 2km radius	16/07/2022	Blackbird	-
Barnadivane 2km radius	16/07/2022	Jackdaw	-
Barnadivane 2km radius	16/07/2022	Swallow	-
Barnadivane 2km radius	16/07/2022	Willow Warbler	-
Barnadivane 2km radius	16/07/2022	Pied/White Wagtail	-
Barnadivane 2km radius	16/07/2022	Chaffinch	-
Barnadivane 2km radius	16/07/2022	Meadow Pipit	-
Barnadivane 2km radius	16/07/2022	Linnet	-
Barnadivane 2km radius	16/07/2022	Great Tit	-
Barnadivane 2km radius	16/07/2022	Magpie	-
Barnadivane 2km radius	16/07/2022	Woodpigeon	-
Barnadivane 2km radius	16/07/2022	Wren	-
Barnadivane 2km radius	16/07/2022	Rook	-
Barnadivane 2km radius	16/07/2022	Robin	-
Barnadivane 5km radius	16/07/2022	Jay	-
Barnadivane 5km radius	16/07/2022	Blue Tit	-

Site Name	Date	Common name	No ¹
Barnadivane 5km radius	16/07/2022	Great Tit	-
Barnadivane 5km radius	16/07/2022	Goldfinch	-
Barnadivane 5km radius	16/07/2022	Greenfinch	-
Barnadivane 5km radius	16/07/2022	Woodpigeon	-
Barnadivane 5km radius	16/07/2022	Blackbird	-
Barnadivane 5km radius	16/07/2022	Song Thrush	-
Barnadivane 5km radius	16/07/2022	Willow Warbler	-
Barnadivane 5km radius	16/07/2022	Dunnock	-
Barnadivane 5km radius	16/07/2022	Magpie	-
Barnadivane 5km radius	16/07/2022	Rook	-
Barnadivane 5km radius	16/07/2022	House Martin	-
Barnadivane 5km radius	16/07/2022	Goldfinch	-
Barnadivane 5km radius	16/07/2022	Swallow	-
Barnadivane 5km radius	16/07/2022	Stonechat	-
Barnadivane 5km radius	16/07/2022	Meadow Pipit	-
Barnadivane 5km radius	16/07/2022	Wren	-
Barnadivane 5km radius	16/07/2022	Yellowhammer	-
Barnadivane 5km radius	16/07/2022	Stock Dove	-
Murragh Lake	16/07/2022	Mallard	16
Murragh Lake	16/07/2022	Mute Swan	1
Murragh Lake	16/07/2022	Moorhen	1
Desert Bridge	16/07/2022	Dipper	1
Desert Bridge	16/07/2022	Mallard	1
Desert Bridge	16/07/2022	Grey Heron	1
River Bandon SAC	16/07/2022	Mallard	13
River Bandon SAC	16/07/2022	Mute Swan	1
River Bandon SAC	16/07/2022	Grey Wagtail	2
River Bandon SAC	16/07/2022	Grey Heron	2
Warren's Court	16/07/2022	Tufted Duck	3
Warren's Court	16/07/2022	Mallard	2
Warren's Court	16/07/2022	Grey Heron	1
Sullane Delta	16/07/2022	Little Egret	1
Sullane Delta	16/07/2022	Grey Heron	1
Sullane Delta	16/07/2022	Lapwing	3
Sullane Delta	16/07/2022	Black-headed Gull	9
Sullane Delta	16/07/2022	Common Sandpiper	1
Sullane Delta	16/07/2022	Great Black-backed Gull	3

Site Name	Date	Common name	No ¹
Sullane Delta	16/07/2022	Lesser Black-backed Gull	4
Sullane Delta	16/07/2022	Mallard	1
The Gearagh	16/07/2022	Cormorant	1
The Gearagh	16/07/2022	Stock Dove	1
The Gearagh	16/07/2022	Mute Swan	48
The Gearagh	16/07/2022	Lapwing	19
The Gearagh	16/07/2022	Black-headed Gull	12
The Gearagh	16/07/2022	Great Crested Grebe	17
The Gearagh	16/07/2022	Teal	3
The Gearagh	16/07/2022	Mallard	22
The Gearagh	16/07/2022	Grey Heron	2
The Gearagh	16/07/2022	Little Egret	2
Kilmicheal/Mid Cork Quarries	28/07/2022	Raven	-
Kilmicheal/Mid Cork Quarries	28/07/2022	Wren	-
Kilmicheal/Mid Cork Quarries	28/07/2022	Dunnock	-
Kilmicheal/Mid Cork Quarries	28/07/2022	Lesser Redpoll	-
Barnadivane 2km radius	04/08/2022	Sparrowhawk	1
Barnadivane 2km radius	04/08/2022	House Martin	2
Barnadivane 2km radius	04/08/2022	Pied/White Wagtail	1
Barnadivane 2km radius	04/08/2022	Jackdaw	8
Barnadivane 2km radius	04/08/2022	Hooded Crow	2
Barnadivane 2km radius	04/08/2022	Woodpigeon	-
Barnadivane 2km radius	04/08/2022	Chiffchaff	1
Barnadivane 2km radius	04/08/2022	Meadow Pipit	-
Barnadivane 2km radius	04/08/2022	Blue Tit	1
Barnadivane 2km radius	04/08/2022	Stonechat	2
Barnadivane 2km radius	04/08/2022	Swallow	-
Barnadivane 2km radius	04/08/2022	Linnet	3
Barnadivane 2km radius	04/08/2022	Goldfinch	1
Barnadivane 2km radius	04/08/2022	Rook	20
Barnadivane 2km radius	04/08/2022	Magpie	-
Barnadivane 2km radius	04/08/2022	Starling	-
Barnadivane 5km radius	04/08/2022	Yellowhammer	1
Barnadivane 5km radius	04/08/2022	Peregrine	1
Barnadivane 5km radius	04/08/2022	Dunnock	1
Barnadivane 5km radius	04/08/2022	Blackbird	1
Barnadivane 5km radius	04/08/2022	Meadow Pipit	-

Site Name	Date	Common name	No ¹
Barnadivane 5km radius	04/08/2022	Blue Tit	1
Barnadivane 5km radius	04/08/2022	Great Tit	1
Barnadivane 5km radius	04/08/2022	Jay	1
Barnadivane 5km radius	04/08/2022	Greenfinch	3
Barnadivane 5km radius	04/08/2022	Mistle Thrush	2
Barnadivane 5km radius	04/08/2022	Hooded Crow	-
Barnadivane 5km radius	04/08/2022	Rook	-
Barnadivane 5km radius	04/08/2022	Coal Tit	1
Barnadivane 5km radius	04/08/2022	Magpie	-
Barnadivane 5km radius	04/08/2022	Chaffinch	-
Barnadivane 5km radius	04/08/2022	Lesser Redpoll	1
Barnadivane 5km radius	04/08/2022	Bullfinch	2
Barnadivane 5km radius	04/08/2022	Goldfinch	-
Barnadivane 5km radius	04/08/2022	Meadow Pipit	-
Barnadivane 5km radius	04/08/2022	Starling	-
Barnadivane 5km radius	04/08/2022	Woodpigeon	-
Barnadivane 5km radius	04/08/2022	Willow Warbler	-
Barnadivane 5km radius	04/08/2022	Swallow	-
Murragh Lake	04/08/2022	Mallard	7
Murragh Lake	04/08/2022	Moorhen	1
Murragh Lake	04/08/2022	Mute Swan	2
Murragh Lake	04/08/2022	Sand Martin	1
Desert Bridge	04/08/2022	Grey Heron	1
Desert Bridge	04/08/2022	Mallard	12
Desert Bridge	04/08/2022	Dipper	1
Desert Bridge	04/08/2022	Sand Martin	2
Desert Bridge	04/08/2022	Kingfisher	1
River Bandon SAC	04/08/2022	Grey Wagtail	1
River Bandon SAC	04/08/2022	Grey Heron	1
River Bandon SAC	04/08/2022	Mallard	11
River Bandon SAC	04/08/2022	Buzzard	1
River Bandon SAC	04/08/2022	Sand Martin	4
River Bandon SAC	04/08/2022	Swallow	8
Warren's Court	04/08/2022	Mallard	2
Warren's Court	04/08/2022	Moorhen	1
Warren's Court	04/08/2022	Mute Swan	2
Warren's Court	04/08/2022	Sand Martin	1

Site Name	Date	Common name	No ¹
Sullane Delta	04/08/2022	Lapwing	5
Sullane Delta	04/08/2022	Black-headed Gull	26
Sullane Delta	04/08/2022	Mallard	2
Sullane Delta	04/08/2022	Grey Heron	2
Sullane Delta	04/08/2022	Sand Martin	50
Sullane Delta	04/08/2022	Swallow	30
Sullane Delta	04/08/2022	House Martin	1
Sullane Delta	04/08/2022	Cormorant	1
The Gearagh	04/08/2022	Mute Swan	112
The Gearagh	04/08/2022	Sand Martin	14
The Gearagh	04/08/2022	Black-headed Gull	17
The Gearagh	04/08/2022	Lesser Black-backed Gull	13
The Gearagh	04/08/2022	Great Crested Grebe	7
The Gearagh	04/08/2022	Mallard	1
Kilmicheal/Mid Cork Quarries	31/08/2022	Robin	1
Kilmicheal/Mid Cork Quarries	31/08/2022	Wren	1
Kilmicheal/Mid Cork Quarries	31/08/2022	Blackbird	1
Kilmicheal/Mid Cork Quarries	31/08/2022	Hooded Crow	1
Kilmicheal/Mid Cork Quarries	31/08/2022	Woodpigeon	1
The Gearagh	12/09/2022	Little Egret	13
The Gearagh	12/09/2022	Lapwing	80
The Gearagh	12/09/2022	Teal	735
The Gearagh	12/09/2022	Kingfisher	1
The Gearagh	12/09/2022	Grey Heron	7
The Gearagh	12/09/2022	Black-headed Gull	42
The Gearagh	12/09/2022	Mallard	138
The Gearagh	12/09/2022	Moorhen	1
The Gearagh	12/09/2022	Snipe	30
The Gearagh	12/09/2022	Wigeon	12
The Gearagh	12/09/2022	Curlew	21
The Gearagh	12/09/2022	Mute Swan	14
The Gearagh	12/09/2022	Lesser Black-backed Gull	254
The Gearagh	12/09/2022	Greylag Goose	79
The Gearagh	12/09/2022	#N/A	2
Sullane Delta	12/09/2022	Common Sandpiper	2
Sullane Delta	12/09/2022	Kingfisher	2
Sullane Delta	12/09/2022	Lapwing	63

Site Name	Date	Common name	No ¹
Sullane Delta	12/09/2022	Mallard	37
Sullane Delta	12/09/2022	Teal	49
Sullane Delta	12/09/2022	Moorhen	2
Sullane Delta	12/09/2022	Black-headed Gull	72
Sullane Delta	12/09/2022	Grey Heron	2
Sullane Delta	12/09/2022	Cormorant	8
Sullane Delta	12/09/2022	Moorhen	1
Sullane Delta	12/09/2022	Snipe	1
Sullane Delta	12/09/2022	Curlew	23
Sullane Delta	12/09/2022	Mute Swan	3
Warren's Court	12/09/2022	Tufted Duck	1
Warren's Court	12/09/2022	Grey Heron	2
Warren's Court	12/09/2022	Mute Swan	12
Warren's Court	12/09/2022	Mallard	2
Barnadivane 2km radius	12/09/2022	Grey Wagtail	1
Barnadivane 2km radius	12/09/2022	Hooded Crow	3
Barnadivane 2km radius	12/09/2022	Rook	6
Barnadivane 2km radius	12/09/2022	#N/A	1
Barnadivane 2km radius	12/09/2022	Woodpigeon	6
Barnadivane 2km radius	12/09/2022	Magpie	2
Barnadivane 2km radius	12/09/2022	Blackbird	2
Barnadivane 2km radius	12/09/2022	Pheasant	1
Barnadivane 2km radius	12/09/2022	Buzzard	1
Barnadivane 2km radius	12/09/2022	Starling	1
Barnadivane 2km radius	12/09/2022	Goldfinch	4
Barnadivane 2km radius	12/09/2022	Dunnock	1
Barnadivane 2km radius	12/09/2022	Jackdaw	4
Barnadivane 2km radius	12/09/2022	Meadow Pipit	10
Barnadivane 2km radius	12/09/2022	Wren	1
Barnadivane 5km radius	12/09/2022	Jackdaw	-
Barnadivane 5km radius	12/09/2022	Blackbird	-
Barnadivane 5km radius	12/09/2022	Goldfinch	-
Barnadivane 5km radius	12/09/2022	Starling	-
Barnadivane 5km radius	12/09/2022	Hooded Crow	-
Barnadivane 5km radius	12/09/2022	Rook	-
Barnadivane 5km radius	12/09/2022	Woodpigeon	-
Barnadivane 5km radius	12/09/2022	Robin	-

Site Name	Date	Common name	No ¹
Barnadivane 5km radius	12/09/2022	Blue Tit	-
Barnadivane 5km radius	12/09/2022	Goldcrest	-
Barnadivane 5km radius	12/09/2022	Song Thrush	-
Barnadivane 5km radius	12/09/2022	Dunnock	-
Barnadivane 5km radius	12/09/2022	Stonechat	-
Barnadivane 5km radius	12/09/2022	Meadow Pipit	-
Barnadivane 5km radius	12/09/2022	Pied/White Wagtail	-
Barnadivane 5km radius	12/09/2022	Swallow	-
Barnadivane 5km radius	12/09/2022	House Martin	-
Barnadivane 5km radius	12/09/2022	Great Tit	-
Murragh Lake	12/09/2022	Mallard	2
Murragh Lake	12/09/2022	Grey Heron	1
Murragh Lake	12/09/2022	Grey Wagtail	1
Desert Bridge	12/09/2022	Kingfisher	1
Desert Bridge	12/09/2022	Dipper	1
Desert Bridge	12/09/2022	Mute Swan	1
River Bandon SAC	12/09/2022	Green Sandpiper	1
River Bandon SAC	12/09/2022	Buzzard	1
River Bandon SAC	12/09/2022	Lesser Black-backed Gull	1
River Bandon SAC	12/09/2022	House Martin	50
River Bandon SAC	12/09/2022	Sand Martin	15
River Bandon SAC	12/09/2022	Swallow	20
River Bandon SAC	12/09/2022	Grey Heron	2
River Bandon SAC	12/09/2022	Little Egret	2
River Bandon SAC	12/09/2022	Cormorant	1
River Bandon SAC	12/09/2022	Mallard	16



**CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING**

www.fehilytimoney.ie

Cork Office

Core House
Pouladuff Road,
Cork, T12 D773,
Ireland
+353 21 496 4133

Dublin Office

J5 Plaza,
North Park Business Park,
North Road, Dublin 11, D11 PXT0,
Ireland
+353 1 658 3500

Carlow Office

Unit 6, Bagenalstown Industrial
Park, Royal Oak Road,
Muine Bheag,
Co. Carlow, R21 XW81,
Ireland
+353 59 972 3800

