

Oweninny Wind Farm Phase 3

Environmental Impact Assessment Report

Appendix 8.1 Avi Fauna Flightline Data

APPENDIX 8-1: AVI-FAUNA RESULTS – DATA, LOCATIONS AND FIGURES

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Table 1: Key and Secondary Target Species Recorded Onsite, Including BTO Code.

Species	BTO Codes	Species	BTO Codes
Hen Harrier (<i>Circus cyaneus</i>)	HH	Egyptian Vulture (<i>Neophron percnopterus</i>)	EGYVU
Kestrel (<i>Falco tinnunculus</i>)	K.	Curlew (<i>Numenius arquata</i>)	CU
Merlin (<i>Falco columbarius</i>)	ML	Whimbrel (<i>Numenius phaeopus</i>)	WM
Peregrine (<i>Falco peregrinus</i>)	PE	Dunlin (<i>Calidris alpina</i>)	DN
Golden Plover (<i>Pluvialis apricaria</i>)	GP	Redshank (<i>Tringa totanus</i>)	RK
Snipe (<i>Gallinago gallinago</i>)	SN	Greenshank (<i>Tringa nebularia</i>)	GK
Red Grouse (<i>Lagopus lagopus</i>)	RG	Lapwing (<i>Vanellus vanellus</i>)	L
Whooper Swan (<i>Cygnus cygnus</i>)	WS	Ringed Plover (<i>Charadrius hiaticula</i>)	RP
Mute Swan (<i>Cygnus olor</i>)	MS	Common Sandpiper (<i>Actitis hypoleucos</i>)	CS
Mallard (<i>Anas platyrhynchos</i>)	MA	Woodcock (<i>Scolopax rusticola</i>)	WK
Teal (<i>Anas crecca</i>)	T	Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	BH
Tufted Duck (<i>Aythya fuligula</i>)	TU	Lesser Black-backed Gull (<i>Larus fuscus</i>)	LB
Little Grebe (<i>Tachybaptus ruficollis</i>)	LG	Herring Gull (<i>Larus argentatus</i>)	HG
Cormorant (<i>Phalacrocorax carbo</i>)	CA	Common Gull (<i>Larus canus</i>)	CM
Grey Heron (<i>Ardea cinerea</i>)	H.	Great Black-backed Gull (<i>Larus marinus</i>)	GB
Sparrowhawk (<i>Accipiter nisus</i>)	SH	Kingfisher (<i>Alcedo atthis</i>)	KF
Buzzard (<i>Buteo buteo</i>)	BZ	Meadow Pipit (<i>Anthus pratensis</i>)	MP
Golden Eagle (<i>Aquila chrysaetos</i>)	EA	Grey Wagtail (<i>Motacilla cinerea</i>)	GL

Note: **Bold** are Key Target Species.

1.0 Hen Harrier

Vantage Points Surveys											
Ref.	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes
0083	4	28/08/2019	15:31	HH	1	62					Ringtail from Dahybaun quartered and left
0148	5	29/10/2019	17:24	HH	1	12					Male in from east dropped into heather
0149	5	30/10/2019	07:27	HH	1	40					Immature male flew east over bog and dropped into heather for 12mins
0150	5	30/10/2019	07:39	HH	1	45					Same bird rose up and flew east
0151	5	31/10/2019	07:37	HH	1	65					Flew out from roost in a southeast direction
0152	5	12/11/2019	07:41	HH	1	4					Brief view of bird above ridge
0153	5	12/11/2019	07:55	HH	2	360					Two immatures rose from bog interacted one flew south over VP and other flew east
0236	6	28/11/2019	15:55	HH	1	120	600				Male flew in from east along ridge then joined by a ringtail
0237	6	28/11/2019	16:03	HH	1	240	150				Ringtail interacted with male in area of ridge. Not seen to land
0087	4	07/12/2019	13:30	HH	1		45				Flew into site from the south and continued towards ridge
0154	6	09/12/2019	15:31	HH	1	7					Appeared from south dipped out of view quickly

Vantage Points Surveys											
Ref.	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes
0155	6	09/12/2019	16:40	HH	1	5					Rose briefly above ridge line
0238	5	09/12/2019	15:30	HH	1	300					Male flew in from east and flew low along ridge and then dropped into heather to roost
0239	5	09/12/2019	16:26	HH	1	5					Male and female in from east and landed
0156	5	20/01/2020	16:19	HH	1	29					Hunting along ridge before roosting
0092	4	21/01/2020	16:56	HH	3	360					Male seen on ridge of lake, headed east then joined by another male and a ringtail. All three interacted for 5 mins and then went to roost
0094	4	12/02/2020	16:55	HH	1	30					Ringtail flying low into roost
0158	5	13/02/2020	16:40	HH	1	65					Adult male flew low in front of VP hunting. Continued east and went out of view
0159	5	13/02/2020	16:50	HH	1	300					2 nd calendar female hunting over ridge.
0260	6	12/11/2020	15:25	HH	1	75					Male flying west past VP
0202	5	09/12/2020	15:10	HH	1	100					Male Hen Harrier flew past VP down to lake edge and then flew west out of view
0052	2	10/12/2020	14:48	HH	1	25					Ringtail Hen Harrier in flight/hunting low to ground, 2-3m above ground
0262	6	12/12/2020	15:55	HH	1	48					Adult male flying east hovering and hunting

Vantage Points Surveys											
Ref.	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes
0121	4	14/01/2021	12:45	HH	1	80	45				Adult male hunting north of VP
0125	4	14/01/2021	16:30	HH	1	35	25				Female flying likely to roost flew southwest
0205	5	10/02/2021	14:55	HH	1	50	20				Male Hen Harrier flew past VP from west and headed east, out of view
0067	3	25/02/2021	08:12	HH	1	80					Hunting over bog in a northerly direction
0068	3	08/03/2021	15:56	HH	1	35					Male Hen Harrier hunting low to ground (5m) over area of cutover bog/scrub
0056	2	11/03/2021	17:52	HH	1	35	20				
W034	7	16/12/2021	14:12	HH	1	35					
W043	5	11/01/2022	15:16	HH	1	30	35				Female Hen Harrier circled over ridge to northeast hunting
W050	1	17/01/2022	16:23	HH	1	30					Male Hen Harrier hunting
W059	3	02/03/2022	15:35	HH	1	95					Male Hen Harrier hunting over cutover bog/blanket bog
W061	1	03/03/2022	15:58	HH	1	15					Male Hen Harrier seen briefly hunting, low to ground
W064	7	09/03/2022	16:37	HH	1	35					Male Hen Harrier hunting low to ground, flying easterly direction
B59	5	12/08/2022	09:09	HH	1		23				Female Hen Harrier flying over heather and across road

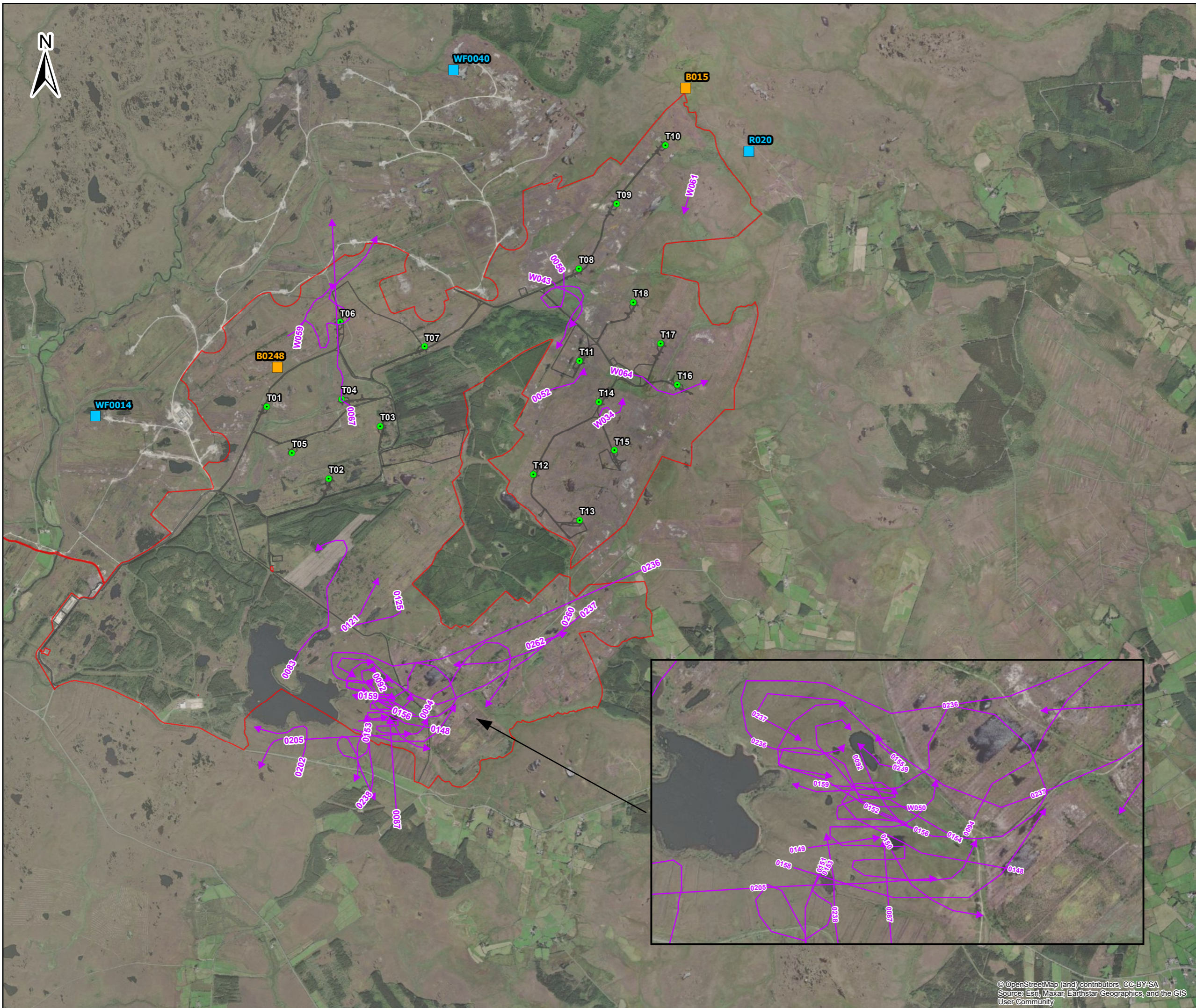
Roost Watch Survey Observations											
Season	Site	HHVP	Map Reference No.	Date	BTO	No. of Birds	Time of flight	Duration of flight (s)	Habitat Code	Activity	Surveyor
Non-Breeding	Oweninny	1		13/10/2020	HH	1	18:17	12	HD1	Ringtail flying low into roost	JM
Non-Breeding	Oweninny	1		13/10/2020	HH	1	18:48	17	HD1	Ringtail/female flying low in from north; went to roost	JM
Non-Breeding	Oweninny	1		15/01/2021	HH	1	08:55	55	PB3	Female leaving roost area and headed over brow of hill to north	JM
Non-Breeding	Oweninny	1		09/02/2021	HH	1	16:40	120	PB3	Female flew in from south, went to roost	JM
Non-Breeding	Oweninny	1		09/02/2021	HH	1	17:27	45	PB3	Female flying on the hill north, went to roost	JM
Non-Breeding	Oweninny	1		09/02/2021	HH	1	17:36	62	PB3	Female flew in from north, went to roost	JM
Non-Breeding	Oweninny	1		12/03/2021	HH	1	07:30	100	FL1	Female flying east over lake area and bog	JM
Non-Breeding	Oweninny	2	1	13/10/2021	HH	1	18:13	20	PB3	In flight	TK
Non-Breeding	Oweninny	1	1	07/11/2021	HH	2	17:12	20	PB3	Roosting	TK
Non-Breeding	Oweninny	5	3	11/11/2021	HH	1	08:08	45	PB3	Flying low	JM
Non-Breeding	Oweninny	1	1	01/12/2021	HH	1	16:13	555	PB3	Hunting	TK
Non-Breeding	Oweninny	5	3	15/12/2021	HH	3	16:15	315	PB3	Flying/going to roost	JM
Non-Breeding	Oweninny	5	3	14/01/2022	HH	3	09:06	195	PB3	Flying together and interacting close to roost	JM
Non-Breeding	Oweninny	1	1	21/02/2022	HH	1	17:27	265	PB3	Hunting	TK
Non-Breeding	Oweninny	1	2	21/02/2022	HH	1	17:47	90	PB3	Hunting/Roosting	TK
Non-Breeding	Oweninny	2	1	22/02/2022	HH	2	16:52	15	PB3	Roosting- took flight from roost	TK
Non-Breeding	Oweninny	2	2	22/02/2022	HH	1	18:09	35	PB3	Flying over/going to roost	TK
Non-Breeding	Oweninny	1	1	10/03/2022	HH	2	07:14	10	PB3	Leaving roost	TK
Non-Breeding	Oweninny	1	2	10/03/2022	HH	1	07:30	30	PB3	Flying over	TK
Non-Breeding	Oweninny	1	3	10/03/2022	HH	1	07:30	8	PB3	Flying over	TK

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0014	11/11/2020	HH	1	FL1	Feeding	TK
Non Breeding	WF0040	17/12/2020	HH	1	PB4	Feeding	TK

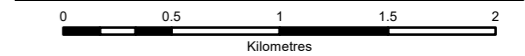
Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R020	Non-Breeding	Eastern Transects	24/11/2020	HH	1	PB4	Seen hunting >1km east of north east transect, in north to northwest direction	SC

Breeding Bird Survey Data									
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor	
Raptor	B015	23/04/2020	10:10:00	HH	1	PB3	Female/ringtail hunting in suitable habitat	JM	

HEN HARRIER FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Hen Harrier (*Circus cyaneus*) - Breeding Season 2020-2022
 - Hen Harrier (*Circus cyaneus*) - Non-Breeding Season 2020-2022
 - Hen Harrier (*Circus cyaneus*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 8
All Hen Harrier (*Circus cyaneus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

2.0 Kestrel

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0137	Breeding	5	18/04/2019	10:10	K.	1	30	60				Male hunting	BM
0226	Breeding	6	27/04/2019	12:10	K.	1		90				Hunting	JH
0141	Breeding	5	11/07/2019	16:56	K.	1	30	90				Dropped on prey	BM
0003	Breeding	1	23/07/2019	11:15	K.	1	50	100				Hunting	MH
0005	Breeding	1	24/07/2019	11:11	K.	1		160				Female hunting	MH
0145	Breeding	5	23/08/2019	15:19	K.	1	30	90				Hunting	JH
0278	Breeding	7	28/08/2019	11:32	K.	1		30					JH
0007	Breeding	1	20/09/2019	10:45	K.	1		90				Female hunting	MH
0231	Breeding	6	22/09/2019	16:45	K.	1	20					Went to ground	JH
0232	Breeding	6	22/09/2019	19:17	K.	1		220				Hunting	JH
0011	Breeding	5	26/09/2019	07:35	K.	1	450	90				Hunting along ridge	JA
0234	Breeding	7	28/09/2019	13:56	K.	1	200	40					JH
0084	Non-Breeding	1	21/10/2019	14:40	K.	1	60						MH
0015	Non-Breeding	6	25/10/2019	07:53	K.	1	300	60				Actively hunting	JH
0016	Non-Breeding	4	29/10/2019	16:40	K.	1		180				Hunting	MH
0086	Non-Breeding	1	15/11/2019	12:02	K.	1		180				Hunting over bog	MH
0291	Non-Breeding	1	15/11/2019	12:55	K.	1	160					Hunting between turbines in Phase 1	MH
0246	Non-Breeding	4	07/12/2019	16:06	K.	1	8						MH

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0047	Breeding	7	11/05/2020	15:06	K.	1	126					Adult male Kestrel hunting along line of forestry/blanket bog. Hovering and flying on	TK
0251	Breeding	6	14/05/2020	12:15	K.	1	30						JM
0032	Breeding	2	10/06/2020	16:18	K.	1	20	30				Male Kestrel flew from forestry over cutover bog, dropped rapidly towards ground before flying west	TK
0048	Breeding	6	11/06/2020	07:24	K.	1	10	18					JM
0255	Breeding	1	13/07/2020	09:13	K.	1	25					Kestrel seen briefly in flight	TK
0258	Breeding	2	16/07/2020	12:28	K.	1	180	15				Male Kestrel hunting, hovering and flying on	TK
0122	Breeding	6	16/07/2020	17:17	K.	1	15					Adult female hunting near VP	JM
0206	Non-Breeding	6	16/10/2020	13:51	K.	1	25	40				Male Kestrel hunting over bog	JM
0214	Non-Breeding	4	14/01/2021	14:40	K.	1	25	20				Male hunting and hovering flew northeast	JM
0218	Non-Breeding	5	10/02/2021	15:14	K.	1	65	60				Male K hovering in front of VP then flew east	JM
0136	Breeding	5	05/05/2021	19:30	K.	1	25	85				Male hunting over bog area	JM
0304	Breeding	5	07/07/2021	21:43	K.	1	130	65				Male Kestrel hunting	TK

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0221	Breeding	4	06/09/2021	19:56	K.	1	30	125	20			Kestrel hunting over cutover bog	TK
0072	Breeding	7	07/09/2021	14:21	K.	1	130	342	90			Kestrel hunting over cutover bog	TK
0270	Breeding	5	08/09/2021	17:05	K.	1		95				Kestrel hunting over cutover bog	TK
0271	Breeding	6	09/09/2021	17:52	K.	1	20	165				Kestrel hunting over cutover bog	TK
0146	Breeding	6	09/09/2021	18:48	K.	1		118	25			Kestrel hunting over cutover bog	TK
0279	Breeding	3	09/09/2021	16:35	K.	1	10	25				Hunting male	JM
W001	Non-Breeding	5	11/10/2021	08:13	K.	1	25	195				Male Kestrel hunting/hovering	TK
W003	Non-Breeding	4	13/10/2021	09:18	K.	1	25	210				Male Kestrel hunting/hovering	TK
W005	Non-Breeding	2	13/10/2021	11:28	K.	1	35	125				Male Kestrel hunting/hovering	TK
W008	Non-Breeding	6	20/10/2021	10:12	K.	1	10	145	25			Kestrel hunting	TK
W011	Non-Breeding	6	09/11/2021	11:06	K.	1	15	95	30			Kestrel hunting	TK
W012	Non-Breeding	6	09/11/2021	16:32	K.	1	25	170	15			Kestrel hunting	TK
W014	Non-Breeding	4	10/11/2021	11:56	K.	1	110	175				Kestrel hunting	TK
W017	Non-Breeding	4	10/11/2021	16:08	K.	1	25	215				Kestrel hunting	TK
W018	Non-Breeding	7	15/11/2021	15:22	K.	1	15	90				Kestrel hunting	TK
W022	Non-Breeding	7	15/11/2021	15:38	K.	1		115				Kestrel hunting	TK

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
W023	Non-Breeding	6	16/11/2021	16:10	K.	1		70	240			Kestrel hunting	TK
W033	Non-Breeding	5	13/12/2021	14:12	K.	1	10	135				Kestrel hunting	TK
W036	Non-Breeding	4	21/12/2021	09:48	K.	1		192					TK
W044	Non-Breeding	6	12/01/2022	15:20	K.	1	40	80	100			Kestrel male hunting	JM
W048	Non-Breeding	3	19/01/2022	14:48	K.	1	120	35					TK
W054	Non-Breeding	7	20/01/2022	16:22	K.	1	35	315					TK
W055	Non-Breeding	7	08/02/2022	13:04	K.	1	45	212				Kestrel hunting/hovering over cutover bog and forestry	KL
B33	Breeding	7	23/05/2022	14:15	K.	1		10	50	60		Kestrel flew towards edge of forest circled, then flew north west	KL
B56	Breeding	6	13/07/2022	10:15	K.	2	10	200	90			On arrival, two Kestrels seen hovering above VP	KL

Roost Watch Observations											
Season	Site	HHVP	Date	BTO	No. of Birds	Time of flight	Duration of flight (s)	Habitat Code	Activity	Surveyor	
Non-Breeding	Oweninny	5	11/11/2021	K.	1	08:31	70	PB3	Male Kestrel hunting near VP	JM	

Winter Transects Surveys									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R018	Non-Breeding	Western Transect	18/12/2020	13:10	K.	1	WD4	Male Kestrel hunting over area of bog and forestry	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Raptor	B014	23/04/2020	07:50:00	K.	1	PB3	Female Kestrel hunting in suitable habitat	JM
Raptor	B063	21/05/2020	10:13:00	K.	1	PB4	Male Kestrel hunting and hovering	JM
Raptor	B073	18/06/2020	09:05:00	K.	1	PB4		JM
Raptor	B180	23/07/2020	15:40:00	K.	1			JM
Transect	B165	24/08/2020	12:42:00	K.	2	WD4		TK
Raptor	B174	26/08/2020	14:11:00	K.	1	GA1		TK
Raptor	B175	26/08/2020	18:26:00	K.	1	GS4		TK
Raptor	B181	21/09/2020	13:11:00	K.	1	GA1		TK
Raptor	B182	21/09/2020	17:46:00	K.	1	PB2		TK
Transect	B438	16/04/2021		K.	1	PB4		JM
Transect	B225	29/04/2021	10:45:00	K.	1	PB4	Male Kestrel hunting	TK
Transect	B227	29/04/2021	12:12:00	K.	1	PB4	Male Kestrel hunting	JM
Transect	B278	28/05/2021	11:44:00	K.	1	GA1	Male Kestrel hunting and hovering	JM
Transect	B322	18/06/2021	08:02:00	K.	1	PB4	Male Kestrel hunting	JM
Raptor	B364	14/07/2021	08:46:00	K.	1	PB4	Male Kestrel hunting	JM
Raptor	B383	20/08/2021	08:46:00	K.	1	PB4	Male Kestrel hunting	
Raptor	B400	14/09/2021	14:33:00	K.	1	PB4	Female Kestrel hunting	JM

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B401	16/09/2021		K.	1	PB4	Kestrel hunting/hovering	TK
Raptor	B0001	04/04/2022	13:26:00	K	1	GS4	Male Kestrel hunting over wet grassland/bog	TK
Raptor	B0002	05/04/2022	14:06:00	K	1	PB4	Kestrel hunting over bog and forestry	TK
Raptor	B0062	09/05/2022	13:48:00	K.	1	PB4	Male Kestrel hunting/hovering	TK
Raptor	B0063	10/05/2022	14:02:00	K.	1	PB4	Kestrel hunting	TK
Raptor	B0064	10/05/2022	14:18:00	K.	1	PB4	kestrel hunting	TK
Raptor	B0142	14/06/2022	14:12:00	K.	2	GS4	Pir of Kestrels hunting over an area of wet grassland/bog	TK
Transect	B0157	20/06/2022	11:00:00	K.	1	PB4	Kestrel hunting	TK
Raptor	B0173	22/06/2022	13:46:00	K.	1	PB4	Male Kestrel hunting	TK
Raptor	B0181	11/07/2022	14:26:00	K.	1	GS4	Kestrel hunting/hovering	TK
Raptor	B0196	14/07/2022	17:31:00	K.	2	PB4	Pair of Kestrel hunting/hovering, possibly juveniles/female	TK
Raptor	B0219	19/07/2022	10:14:00	K.	2	PB4	Pair of juvenile Kestrels hunting, practicing flying skills in area of bog/grassland/forestry	TK
Raptor	B0220	19/07/2022	13:23:00	K.	1	PB4	Male Kestrel hunting/hovering	TK

KESTREL FIGURES

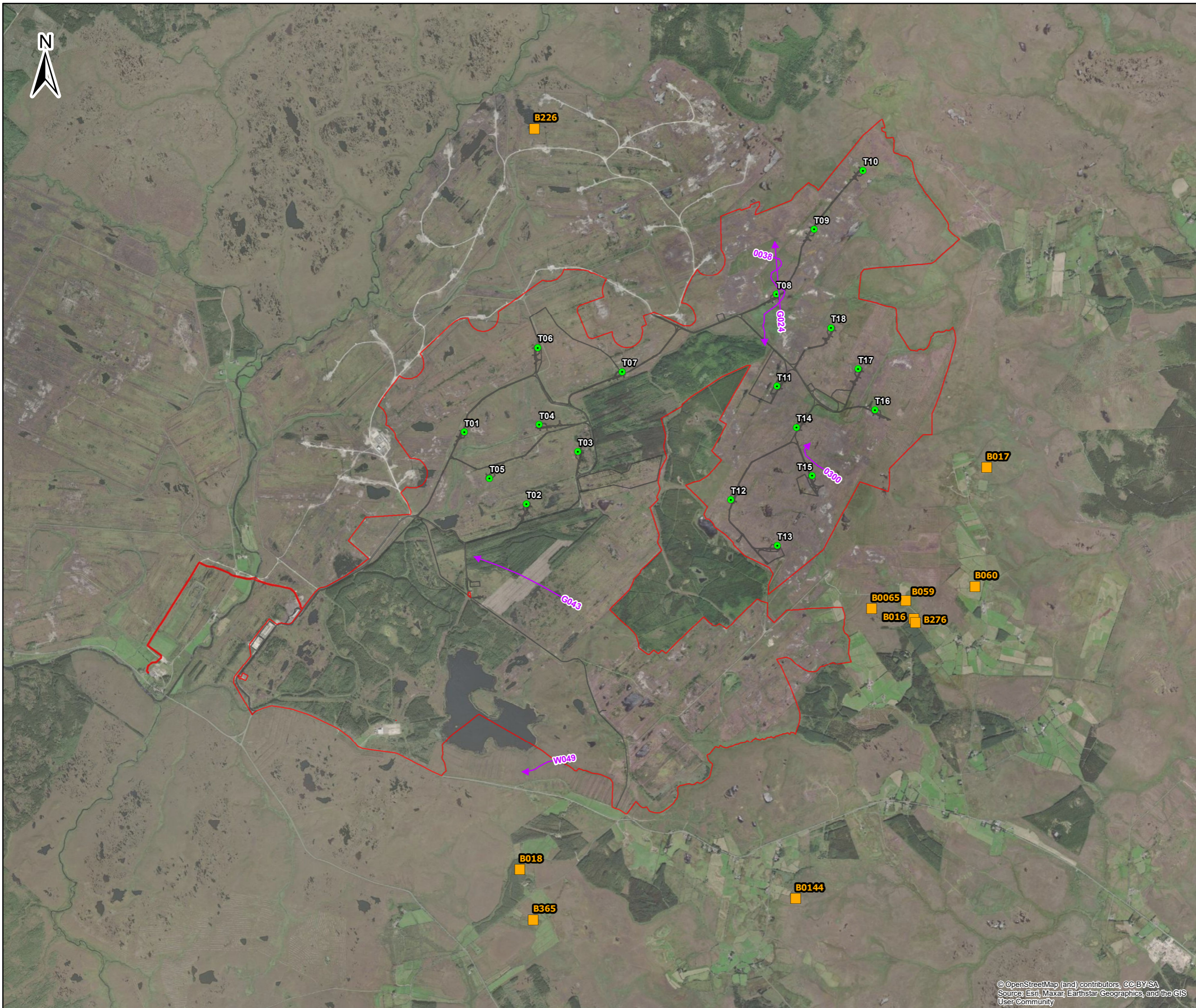
3.0 Merlin

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0046	Breeding	2	14/05/2020	21:02	ML	1	10					Male Merlin in flight low to ground 0-1m. Possible suitable nesting habitat 1-2km to the east/northeast of VP 2	TK
0038	Non-Breeding	1	13/10/2020	11:57	ML	1	46	20				Merlin in flight, chasing a Meadow Pipit	TK
0300	Breeding	7	14/04/2021	06:50	ML	1	30					Female Merlin hunting, chasing a Meadow Pipit	TK
W049	Non-Breeding	5	11/01/2022	14:22	ML	1	45					Male Merlin flew in from east, perched on small tree for 125s then flew east	JM
B15	Breeding	2	08/04/2022	09:01	ML	1		8				Merlin flying north	KL
B36	Breeding	4	15/06/2022	13:32	ML	1		25	10			Merlin flew east over hill	KL

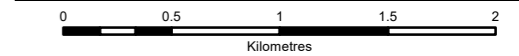
Waterfowl Surveys							
Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-Breeding	WF0023	25/11/2020	ML	1	PB4	Flying	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Merlin	B016	21/04/2020	11:35:00	ML	1	PB3	Likely breeding site	JM
Merlin	B017	21/04/2020	13:40:00	ML	1	PB3	Plucking post found in area	JM
Merlin	B018	22/04/2020	09:10:00	ML	1	PB3	Suitable breeding area	JM
Merlin	B059	20/05/2020	08:25:00	ML	1	PB4	Male Merlin flying low over bog	JM
Merlin	B060	20/05/2020	09:20:00	ML	1	PB4	Female Merlin flying low over bog	JM
Transect	B226	27/04/2021	10:05:00	ML	1	PB3	Male Merlin hunting	JM
Transect	B276	26/05/2021	08:42:00	ML	1	PB3	Female hunting	JM
Raptor	B365	16/07/2021	12:15:00	ML	1	PB4	Male Merlin hunting	JM
Raptor	B0065	11/05/2022	13:22:00	ML	1	PB4	Merlin hunting low over cutover bog	TK
Raptor	B0144	15/06/2022	17:43:00	ML	1	PB4	Merlin seen briefly in flight low to ground	TK

MERLIN FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Merlin (*Falco columbarius*) - Breeding Season 2020-2022
 - Merlin (*Falco columbarius*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
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 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 10 Merlin (*Falco columbarius*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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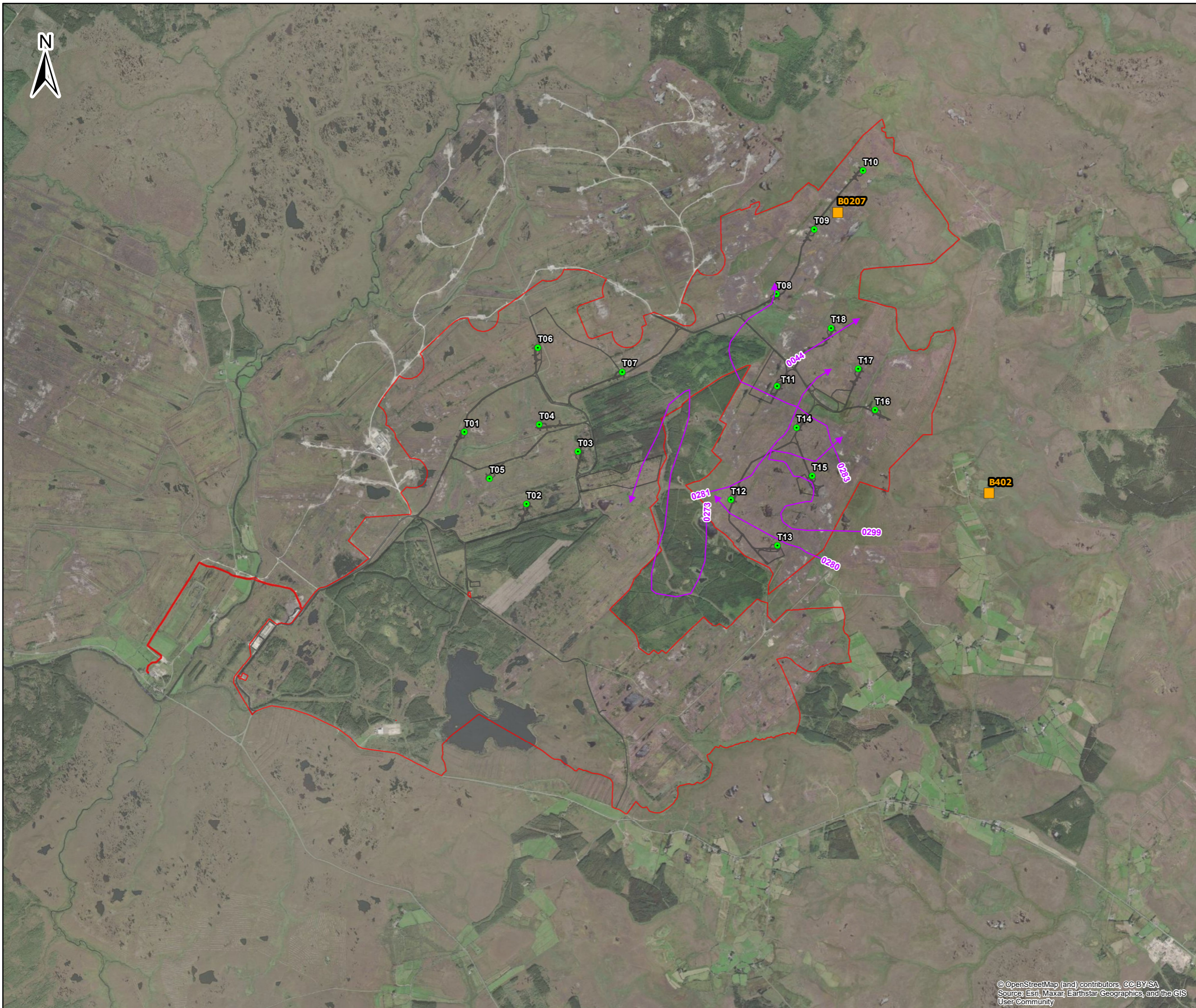
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4.0 Peregrine

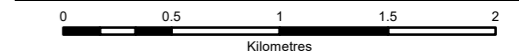
Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0273	Breeding	7	01/06/2019	11:32	PE	1		360	240			Flying over Corvoderry.	JA
0280	Non-Breeding	7	28/10/2019	12:06	PE	1	12					Flying low and landed	JH
0281	Non-Breeding	7	28/10/2019	12:18	PE	1	15					Hunting low	JH
0283	Non-Breeding	7	31/12/2019	12:02	PE	1	100	50				Female at rest for 22min then flew and landed again	MH
0044	Non-Breeding	2	20/03/2020	14:10	PE	1	10					Adult in fast flight chasing MP	JA
0299	Non-Breeding	7	09/11/2020	12:02	PE	1	75					Peregrine Falcon hunting low to ground	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Raptor	B402	15/09/2021	10:22:00	PE	1	PB4	Peregrine flying low	JM
Transect	B0207	15/07/2022	11:50:00	PE	1	PB4	Peregrine flying over	TK

PEREGRINE FALCON FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Peregrine (*Falco peregrinus*) - Breeding Season 2020-2022
 - Peregrine (*Falco peregrinus*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 11
Peregrine (*Falco peregrinus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-028-PE-FLIGHT-TOB-D01

5.0 Golden Plover

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0008	Breeding	1	20/09/2019	11:30	GP	22	30	180	270			Flying over then landed on bog	MH
0009	Breeding	6	28/09/2019	09:00	GP	3	12	60				Landed on bog	JH
0010	Non-Breeding	1	21/10/2019	13:35	GP	80	30	100	50			Continued flying	MH
0013	Non-Breeding	1	21/10/2019	12:21	GP	8	150	100				Flew in and landed	MH
0019	Non-Breeding	1	29/10/2019	12:29	GP	150	30	150				Rose from bog circled and landed again	MH
0020	Non-Breeding	1	21/11/2019	09:50	GP	9	160					Disturbed by vehicle from bog then landed again	MH
0282	Non-Breeding	1	22/11/2019	11:09	GP	5	150					Flew in from VP7 direction	MH
0017	Non-Breeding	7	25/11/2019	10:35	GP	27						Flock on ground	MH
0021	Non-Breeding	1	27/11/2019	13:35	GP	4	40	140				Took off then landed again	MH
0022	Non-Breeding	1	17/12/2019	13:40	GP	22		170				New flock arrived	MH
0023	Non-Breeding	1	21/01/2020	12:13	GP	15	100	600	600			Flock rose from bog flew around for 20 min and landed on bog	MH
0024	Non-Breeding	1	21/01/2020	09:35	GP	11		11				Flock in flight	MH
0026	Non-Breeding	1	23/01/2020	11:09	GP	62	20	460				Flock rose from bog circled around for 8 min then	MH

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
												landed on same area	
0243	Non-Breeding	1	23/01/2020	13:33	GP	19		63				New flock flying in	MH
0027	Non-Breeding	6	14/02/2020	11:51	GP	17		180				Flock in flight	MH
0284	Non-Breeding	7	26/02/2020	10:31	GP	32	20	160				Flock in flight	MH
0285	Non-Breeding	7	26/02/2020	10:15	GP	24		31				Flock in flight	MH
0286	Non-Breeding	1	26/02/2020	12:37	GP	9	160					Flock in flight	MH
0287	Non-Breeding	7	26/02/2020	13:06	GP	3	39					Flock in flight	MH
0028	Non-Breeding	7	18/03/2020	17:40	GP	8	20	480				Flock in flight	MH
0244	Non-Breeding	1	20/03/2020	12:03	GP	14						Flock at roost in regular location	MH
0036	Non-Breeding	6	31/03/2020	16:55	GP	19						Flock on ground in Breeding plumage	MH
0037	Non-Breeding	1	13/10/2020	10:42	GP	13			115			Flock of Golden Plover in flight	TK
0049	Non-Breeding	1	13/10/2020	10:58	GP	8	15					Flock of Golden Plover in flight	TK
0063	Non-Breeding	2	14/10/2020	10:07	GP	24	10	105				Flock of Golden Plover in flight	TK
0120	Non-Breeding	3	15/10/2020	10:28	GP	13			85			Flock of 13 Golden Plover in flight	TK
0297	Non-Breeding	4	15/10/2020	14:48	GP	12		35	70			Flock of 12 Golden Plover in flight	JM

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0039	Non-Breeding	7	16/10/2020	11:09	GP	11	25	50	30			Flock of 11 Golden Plover circled before landing on bog	TK
0040	Non-Breeding	1	10/11/2020	12:48	GP	15	30	50	235			Flock of 15 Golden Plover circling before landing on bog	TK
0053	Non-Breeding	1	10/11/2020	14:06	GP	15	20	25	40			Flock of 15 Golden Plover in flight	TK
0055	Non-Breeding	2	13/01/2021	10:26	GP	15	20	25	10			Four Mallard in flight, land on bog	TK
0233	Non-Breeding	2	11/03/2021	14:23	GP	100	15	50	145	280		Flock of approx. 100 Golden Plover circling over bog and forestry	TK
W026	Non-Breeding	3	15/10/2021	11:28	GP	35		120	80	60		GP flock circling and calling over cutover bog	JM
W007	Non-Breeding	7	21/10/2021	13:20	GP	30			125	440		Flock of 30 Golden Plover circling over site	TK
W030	Non-Breeding	3	12/11/2021	13:45	GP	12		70				GP flock circling and calling over cutover bog	JM
W039	Non-Breeding	2	14/12/2021	10:35	GP	10		350	220			Small flock soaring and went out of view, east	JM
W035	Non-Breeding	7	16/12/2021	14:26	GP	25			50	285			TK
W041	Non-Breeding	1	17/01/2022	13:12	GP	25			385				TK

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
W042	Non-Breeding	1	17/01/2022	12:49	GP	11	10	20	45				TK
W046	Non-Breeding	3	19/01/2022	15:37	GP	60				436			TK
W058	Non-Breeding	1	01/03/2022	09:13	GP	65	10	20	390	70		Flock of 65 Golden Plover circling, landed on area of degraded cutover bog	TK
W060	Non-Breeding	1	03/03/2022	15:58	GP	100	30	20	70	100	410	Flock of 100 Golden Plover circling over site	TK
W062	Non-Breeding	1	03/03/2022	13:38	GP	60	15		100	500	280	Flock of 60 Golden Plover circling over site	TK
W063	Non-Breeding	7	04/03/2022	12:59	GP	60			70			Flock of 60 Golden Plover flying over	TK
B63	Breeding	7	15/09/2022	11:21	GP	9				90	30	9 Golden Plover seen flying from east to west	KL

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R004	Non-Breeding	Western Transect	28/10/2020	GP	11	PB4	Roosting flock of 11 Golden Plover roosting on bare peat/cutover bog	TK
R006	Non-Breeding	Eastern Transects	29/10/2020	GP	18	PB4	Roosting, flock of 18 Golden Plover roosting on area of bare peat/cutover bog	TK

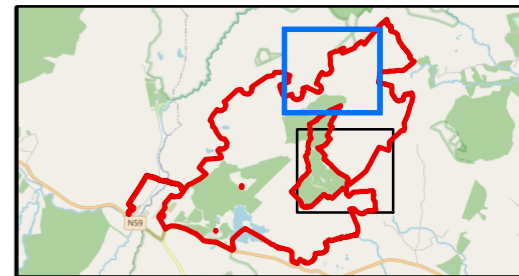
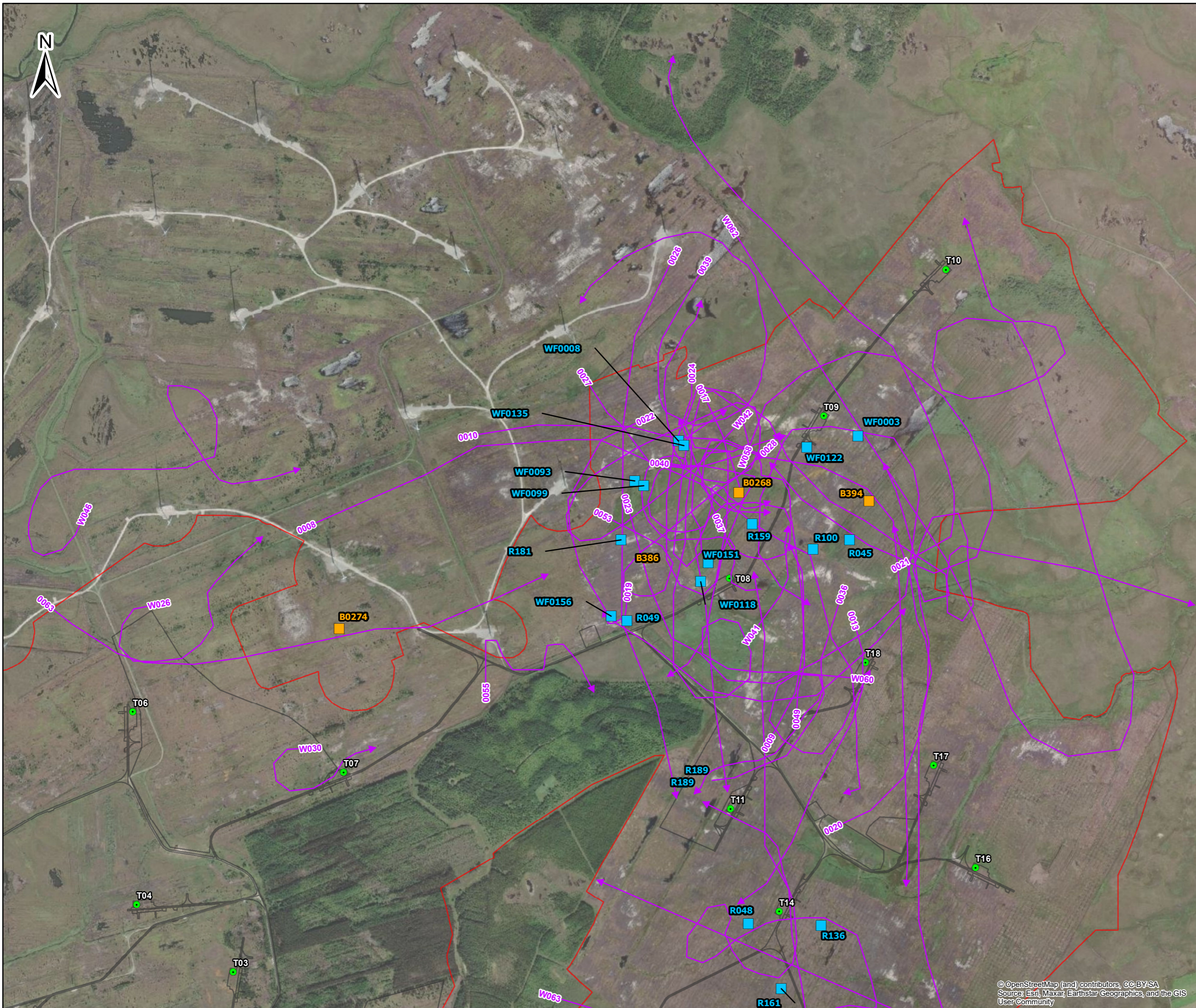
Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R009	Non-Breeding	Eastern Transects	16/12/2020	GP	5	PB4	Roosting, small flock of five Golden Plover roosting on area of cutover bog	TK
R014	Non-Breeding	Eastern Transects	16/12/2020	GP	12	PB4	Roosting, Small flock of 12 Golden Plover roosting on area of cutover bog	TK
R045	Non-Breeding	Eastern Transects	22/02/2021	GP	400	PB4	Flying and calling, flock of Golden Plover circling and calling approx. 80m above bog	SC
R048	Non-Breeding	Eastern Transects	22/02/2021	GP	8	PB4	Flying and calling, flying northeast calling, approx. 30m high	SC
R049	Non-Breeding	Eastern Transects	22/02/2021	GP	1	PB4	Flying northeast calling, approx. 30m high	SC
R058	Non-Breeding	Western Transect	24/02/2021	GP	50	PB4	Circled bog and then headed west approx. 80m high	SC
R100	Non-Breeding	Eastern Transects	14/10/2021	GP	11	PB4	Roosting	TK
R136	Non-Breeding	Eastern Transects	02/12/2021	GP	8	PB4	Flock of eight Golden Plover roosting on patch of degraded cutover bog	TK
R159	Non-Breeding	Eastern Transect	21/01/2022	GP	8	PB4	Small flock of eight Golden Plover roosting on degraded bog	TK
R161	Non-Breeding	Eastern Transect	21/01/2022	GP	12	PB4	Small flock of 12 Golden Plover roosting on degraded bog	TK
R181	Non-Breeding	Eastern Transects	09/03/2022	GP	25	PB4	Flock of 25 Golden Plover roosting on bog	TK
R189	Non-Breeding	Western Transect	11/03/2022	GP	150	PB4	Flock of 150 Golden Plover circling over bog	TK

Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0003	12/10/2020	GP	53	PB4	Roosting	TK
Non-breeding	WF0008	27/10/2020	GP	90	PB4	Roosting	TK

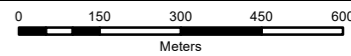
Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0013	27/10/2020	GP	16	PB4	Roosting	TK
Non Breeding	WF0032	07/12/2020	GP	8	PB4	Roosting	TK
Non Breeding	WF0044	17/12/2020	GP	11	PB4	Feeding	TK
Non Breeding	WF0093	11/10/2021	GP	12	PB4	Roosting	TK
Non Breeding	WF0099	22/10/2021	GP	15	PB4	Roosting	JM
Non Breeding	WF0118	19/11/2021	GP	18	PB4	Roosting	TK
Non Breeding	WF0122	01/12/2021	GP	70	PB4	Approx. 70 GP roosting, took flight, circling over site	TK
Non Breeding	WF0135	10/01/2022	GP	15	PB4	Roosting	TK
Non Breeding	WF0151	07/02/2022	GP	7	PB4	Roosting	TK
Non Breeding	WF0156	22/02/2022	GP	300	PB4	Flying	TK

Breeding Bird Survey Data							
Survey Type	Ref.	Date	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B386	15/09/2021	GP	5	PB4	Small flock of Golden Plover roosting on cutover bog	TK
Transect	B394	16/09/2021	GP	5	PB4	Small flock of Golden Plover roosting on cutover bog	TK

GOLDEN PLOVER FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Golden Plover (*Pluvialis apricaria*) - Breeding Season 2020-2022
 - Golden Plover (*Pluvialis apricaria*) - Non-Breeding Season 2020-2022
 - Golden Plover (*Pluvialis apricaria*) Flightlines
 - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 12 - Sheet 2 of 3 - Golden Plover (*Pluvialis apricaria*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:14,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

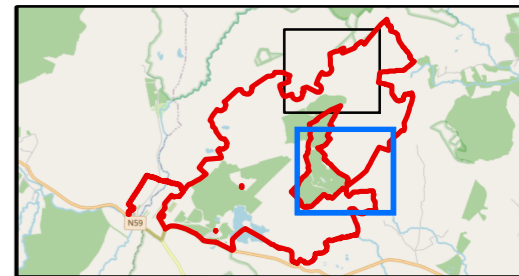
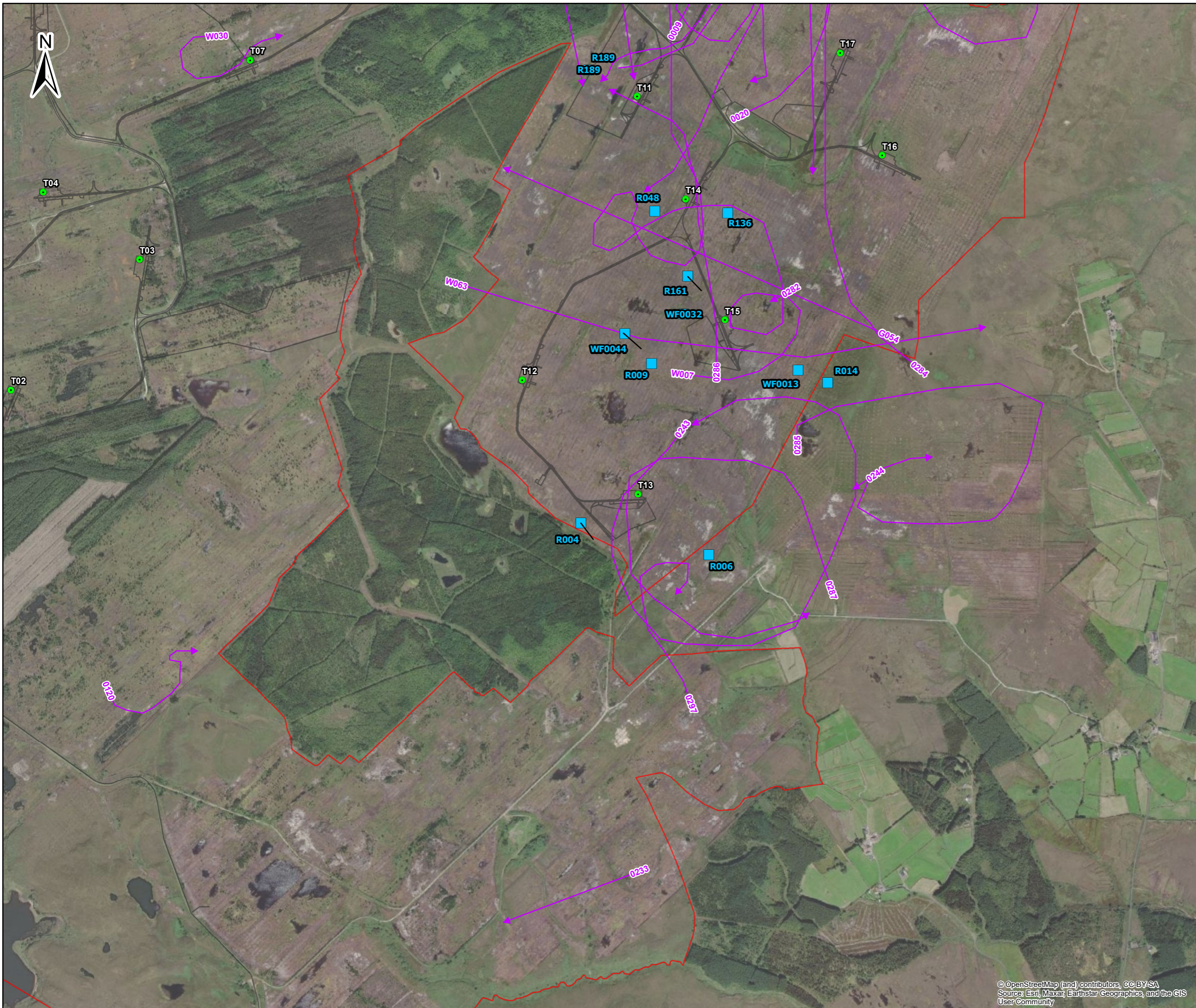
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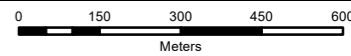
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- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Golden Plover (*Pluvialis apricaria*) - Breeding Season 2020-2022
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 - Flightlines Breeding and Non-Breeding 2019-2022



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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 12 - Sheet 3 of 3 - Golden Plover (*Pluvialis apricaria*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:14,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-029-GP-FLIGHT-TOB-D01

6.0 Snipe

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0179	Breeding	5	12/05/2020	14:45	SN	2	55						JM
0248	Breeding	6	14/05/2020	15:20	SN	1	25						JM
0184	Breeding	5	09/06/2020	08:35	SN	1	15	5				Likely breeding	JM
0250	Breeding	6	11/06/2020	06:06	SN	2	25	20	15			Suitable breeding habitat	JM
0189	Breeding	5	14/07/2020	12:17	SN	1	60	75	15			Male display flight and chipping	JM
0062	Breeding	3	15/07/2020	19:57	SN	1	28					Snipe circling/displaying overhead before landing on bog	TK
0110	Breeding	4	15/07/2020	12:12	SN	1	15	65				Male drumming in display flight	JM
0196	Non-Breeding	5	14/10/2020	14:41	SN	1	25					Snipe in flight near VP	JM
0200	Non-Breeding	5	09/12/2020	11:21	SN	1	35					Adult flying past VP	JM
0198	Non-Breeding	5	12/01/2021	16:15	SN	1						Adult calling from bog near VP	JM
0124	Non-Breeding	4	14/01/2021	15:24	SN	1		15				Brief view of adult calling and flying west	JM
0213	Breeding	5	05/05/2021	17:12	SN	2	28	40				Males chipping and drumming near VP	JM
0058	Breeding	2	07/07/2021	18:54	SN	1	16					Flew southwest low to ground, landed out of site on bog	JC

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0059	Breeding	2	07/07/2021	19:02	SN	1	5					Same bird as previous, short flight across bog	JC
W051	Non-Breeding	5	11/01/2022	16:05	SN	1						Snipe heard chipping from bog	JM
B64	Breeding	3	16/09/2022	08:45	SN	1	5	5	20			Snipe flushed from near VP, flew in circle and then away	KL

Vantage Point Non-Flight Observations										
Season	Site	VP	Date	Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor	
Non-Breeding	Oweninny	7	08/02/2022	10:29	SN	2	PB4	Two Snipe flushed from ground	TK	
Breeding	Oweninny	7	26/04/2022	07:13	SN	2	PB4	Two Snipe calling throughout VP	KL	
Breeding	Oweninny	1	27/04/2022	08:04	SN	2	PB4	Two Snipe heard calling north west of VP	KL	
Breeding	Oweninny	4	11/05/2022	20:00	SN	2	PB4	Two Snipe heard calling during VP	KL	
Breeding	Oweninny	7	23/05/2022	14:30	SN	2	PB4	Snipe heard chipping throughout survey.	KL	
Breeding	Oweninny	7	14/06/2022	10:30	SN	2	PB4	Two snipe heard chipping throughout VP	KL	
Breeding	Oweninny	4	15/06/2022	10:05	SN	3	PB4	Two snipe heard drumming and 1 heard chipping	KL	

Vantage Point Non-Flight Observations									
Season	Site	VP	Date	Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor
Breeding	Oweninny	6	16/06/2022	09:52	SN	2	PB4	Two Snipe heard chipping throughout VP	KL

Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0004	12/10/2020	SN	1	PB4	Flushed from ground	TK
Non-breeding	WF0009	27/10/2020	SN	1	PB4	Flushed from ground	TK
Non Breeding	WF0031	07/12/2020	SN	2	PB4	Roosting	TK
Non Breeding	WF0033	07/12/2020	SN	1	PB4	Roosting	TK
Non Breeding	WF0034	07/12/2020	SN	1	PB4	Roosting	TK
Non Breeding	WF0041	17/12/2020	SN	2	PB4	Feeding	TK
Non Breeding	WF0045	17/12/2020	SN	1	PB4	Feeding	TK
Non Breeding	WF0046	17/12/2020	SN	1	PB4	Feeding	TK
Non Breeding	WF0049	11/01/2021	SN	3		Roosting- flushed from ground	TK
Non Breeding	WF0051	11/01/2021	SN	2		Roosting- flushed from ground	TK
Non Breeding	WF0052	11/01/2021	SN	1		Roosting- flushed from ground	TK
Non Breeding	WF0053	11/01/2021	SN	1		Roosting- flushed from ground	TK

Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0061	08/02/2021	SN	1	PB4	Flushed from ground	TK
Non Breeding	WF0062	08/02/2021	SN	3	PB4	Flushed from ground	TK
Non Breeding	WF0068	08/02/2021	SN	1	PB4	Flushed from ground	TK
Non-breeding	WF0070	24/02/2021	SN	1	PB4	Calling	SC
Non Breeding	WF0075	08/03/2021	SN	1	PB4	Flushed from ground	TK
Non Breeding	WF0076	08/03/2021	SN	2	PB4	Flushed from ground	TK
Non Breeding	WF0107	08/11/2021	SN	1	PB4	Roosting	TK
Non Breeding	WF0108	08/11/2021	SN	1	PB4	Roosting	TK
Non Breeding	WF0109	08/11/2021	SN	1	PB4	Roosting	TK
Non Breeding	WF0111	08/11/2021	SN	2	PB4	Roosting	TK
Non Breeding	WF0130	14/12/2021	SN	2	PB4	Flushed from ground	TK
Non Breeding	WF0153	22/02/2022	SN	1	PB4	Flying	TK

Winter Transects surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R001	Non-Breeding	Western Transect	28/10/2020	SN	1	PB4	Flushed from ground	TK

Winter Transects surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R002	Non-Breeding	Western Transect	28/10/2020	SN	2	PB4	Flushed from ground	TK
R005	Non-Breeding	Western Transect	28/10/2020	SN	1	PB4	Flushed from ground	TK
R007	Non-Breeding	Eastern Transects	29/10/2020	SN	1	PB4	Flushed from ground	TK
R010	Non-Breeding	Eastern Transects	23/11/2020	SN	1	PB4	Flushed by surveyor	SC
R011	Non-Breeding	Eastern Transects	24/11/2020	SN	2	PB4	Flushed by surveyor	SC
R013	Non-Breeding	Eastern Transects	24/11/2020	SN	3	PB4	Flushed by surveyor	SC
R015	Non-Breeding	Eastern Transects	24/11/2020	SN	10	PB4	Flushed by surveyor	SC
R017	Non-Breeding	Eastern Transects	24/11/2020	SN	1	PB4	Flushed by surveyor	SC
R019	Non-Breeding	Eastern Transects	24/11/2020	SN	1	PB4	Flushed by surveyor	SC
R021	Non-Breeding	Eastern Transects	24/11/2020	SN	1	PB4	Flushed by surveyor	SC
R022	Non-Breeding	Eastern Transects	24/11/2020	SN	1	PB4	Flushed by surveyor	SC
R023	Non-Breeding	Eastern Transects	24/11/2020	SN	2	PB4	Flushed by surveyor	SC
R024	Non-Breeding	Western Transect	25/11/2020	SN	1	PB4	Flushed by surveyor	SC
R025	Non-Breeding	Western Transect	25/11/2020	SN	1	PB4	Flushed by surveyor	SC
R026	Non-Breeding	Western Transect	25/11/2020	SN	1	PB4	Flushed by surveyor	SC
R028	Non-Breeding	Western Transect	25/11/2020	SN	3	PB4	Flushed by surveyor	SC

Winter Transects surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R029	Non-Breeding	Eastern Transects	16/12/2020	SN	1	PB4	Flushed from ground	TK
R033	Non-Breeding	Eastern Transects	16/12/2020	SN	1	PB3	Flushed from ground	TK
R037	Non-Breeding	Eastern Transects	16/12/2020	SN	2	PB3	Flushed from ground	TK
R038	Non-Breeding	Western Transect	18/12/2020	SN	1	PB3	Flushed from ground	TK
R039	Non-Breeding	Western Transect	18/12/2020	SN	1	PB4	Flushed from ground	TK
R040	Non-Breeding	Eastern Transects	25/01/2021	SN	1	PB4	Flushed by surveyor	SC
R041	Non-Breeding	Eastern Transects	25/01/2021	SN	1	PB4	Flushed by surveyor	SC
R042	Non-Breeding	Eastern Transects	25/01/2021	SN	1	PB4	Flushed by surveyor	SC
R044	Non-Breeding	Eastern Transects	25/01/2021	SN	1	PB4	Flushed by surveyor	SC
R046	Non-Breeding	Eastern Transects	22/02/2021	SN	1	PB4	Flushed by surveyor	SC
R047	Non-Breeding	Eastern Transects	22/02/2021	SN	1	PB4	Flushed by surveyor	SC
R050	Non-Breeding	Eastern Transects	22/02/2021	SN	1	PB4	Flushed by surveyor	SC
R060	Non-Breeding	Eastern Transects	22/02/2021	SN	1	PB4	Flushed by surveyor	SC
R062	Non-Breeding	Eastern Transects	01/04/2021	SN	1	PB4	Flying	SC
R064	Non-Breeding	Eastern Transects	01/04/2021	SN	1	PB4	Flying	SC
R065	Non-Breeding	Eastern Transects	01/04/2021	SN	2	PB4	Flying	SC

Winter Transects surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R067	Non-Breeding	Eastern Transects	01/04/2021	SN	2	PB4	Flying	SC
R069	Non-Breeding	Eastern Transects	01/04/2021	SN	1	PB4	Flying	SC
R081	Non-Breeding	Eastern Transects	01/04/2021	SN	1	PB4	Flying	SC
R085	Non-Breeding	Western Transect	12/10/2021	SN	2	PB4	In suitable habitat	TK
R088	Non-Breeding	Western Transect	12/10/2021	SN	1	PB4	In suitable habitat	TK
R091	Non-Breeding	Western Transect	12/10/2021	SN	2	PB4	In suitable habitat	TK
R095	Non-Breeding	Western Transect	12/10/2021	SN	1	PB4	In suitable habitat	TK
R098	Non-Breeding	Eastern Transects	14/10/2021	SN	1	PB4	In suitable habitat	TK
R099	Non-Breeding	Eastern Transects	14/10/2021	SN	2	PB4	In suitable habitat	TK
R101	Non-Breeding	Eastern Transects	14/10/2021	SN	1	PB4	In suitable habitat	TK
R104	Non-Breeding	Eastern Transects	14/10/2021	SN	1	PB4	In suitable habitat	TK
R106	Non-Breeding	Eastern Transects	11/11/2021	SN	1	PB4	Flushed from ground	TK
R108	Non-Breeding	Eastern Transects	11/11/2021	SN	1	PB4	Flushed from ground	TK
R112	Non-Breeding	Eastern Transects	11/11/2021	SN	1	PB4	Flushed from ground	TK
R115	Non-Breeding	Eastern Transects	11/11/2021	SN	1	PB4	Flushed from ground	TK

Winter Transects surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R125	Non-Breeding	Eastern Transects	11/11/2021	SN	2	PB4	Flushed from ground	TK
R126	Non-Breeding	Western Transects	17/11/2021	SN	1	PB4	Flushed from ground	TK
R131	Non-Breeding	Western Transects	17/11/2021	SN	1	PB4	Flushed from ground	TK
R134	Non-Breeding	Eastern Transects	02/12/2021	SN	1	PB4	Flushed from ground	TK
R135	Non-Breeding	Eastern Transects	02/12/2021	SN	3	PB4	Flushed from ground	TK
R140	Non-Breeding	Eastern Transects	02/12/2021	SN	2	PB4	Flushed from ground	TK
R142	Non-Breeding	Western Transect	20/12/2021	SN		PB4	Flushed from ground	TK
R144	Non-Breeding	Western Transect	20/12/2021	SN		PB4	Flushed from ground	TK
R146	Non-Breeding	Western Transect	20/12/2021	SN		PB4	Flushed from ground	TK
R148	Non-Breeding	Western Transect	18/01/2022	SN	1	PB4	Flushed from ground	TK
R149	Non-Breeding	Western Transect	18/01/2022	SN	2	PB4	Flushed from ground	TK
R150	Non-Breeding	Western Transect	18/01/2022	SN	1	PB4	Flushed from ground	TK
R156	Non-Breeding	Western Transect	18/01/2022	SN	3	PB4	Flushed from ground	TK

Winter Transects surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R160	Non-Breeding	Eastern Transect	21/01/2022	SN	1	PB4	Flushed from ground	TK
R163	Non-Breeding	Eastern Transect	21/01/2022	SN	1	PB4	Flushed from ground	TK
R164	Non-Breeding	Eastern Transects	11/02/2022	SN	1	PB4	Flushed from ground	TK
R165	Non-Breeding	Eastern Transects	11/02/2022	SN	2	PB4	Flushed from ground	TK
R172	Non-Breeding	Eastern Transects	11/02/2022	SN	1	PB4	Flushed from ground	TK
R174	Non-Breeding	Western Transect	21/02/2022	SN	1	PB4	Flushed from ground	TK
R179	Non-Breeding	Eastern Transects	09/03/2022	SN	2	PB4	In suitable habitat	TK
R180	Non-Breeding	Eastern Transects	09/03/2022	SN	2	PB4	In suitable habitat	TK
R185	Non-Breeding	Eastern Transects	09/03/2022	SN	1	PB4	In suitable habitat	TK
R188	Non-Breeding	Western Transect	11/03/2022	SN	1	PB4	In suitable habitat	TK
R001	Non-Breeding	Western Transect	11/03/2022	SN	1	PB4	In suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B019	21/04/2020	07:45:00	SN	1	PB3	Male drumming	JM
Wader	B024	22/04/2020	11:15:00	SN	1	PB3	Chipping male	JM
Wader	B026	22/04/2020	15:15:00	SN	1	PB3	Calling male	JM
Transect	B006	28/04/2020	08:30:00	SN	2		Displaying pair	JM
Transect	B009	29/04/2020	07:50:00	SN	2		Displaying pair	JM
Transect	B031	19/05/2020	09:00:00	SN	3		Calling/chipping and displaying flight and drumming	JS
Transect	B036	19/05/2020	09:32:00	SN	3		Flushed a pair who began drumming and calling then joined by another	JS
Transect	B043	19/05/2020	10:59:00	SN	1	.	Drumming	JS
Transect	B057	19/05/2020	11:20:00	SN	3	WD4		JM
Wader	B044	20/05/2020	11:27:00	SN	1	PB3	Calling/chipping to the south of transect	JS
Wader	B045	20/05/2020	11:30:00	SN	1	PB3	Flushed and flew south	JS
Transect	B067	16/06/2020	07:30-15:30	SN	6	WD4		JM
Transect	B076	16/06/2020	12:09:00	SN	3	PB4		JS
Transect	B086	16/06/2020	10:30:00	SN	1	WD4		JS
Transect	B092	16/06/2020	09:34:00	SN	2	WD4		JS
Transect	B097	16/06/2020	08:43:00	SN	4	PB4		JS
Wader	B105	17/06/2020	08:53:00	SN	2	PB4	In suitable Breeding habitat	JS
Wader	B107	17/06/2020	09:41:00	SN	1	PB4	In suitable Breeding habitat	JS
Wader	B117	17/06/2020	15:01:00	SN	2	PB4	In suitable Breeding habitat	JS
Wader	B118	17/06/2020	15:11:00	SN	1	PB4	In suitable Breeding habitat	JS

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B420	18/06/2020	.	SN	3	PB4	Three Snipe drumming over lake	JS
Gull	B423	18/06/2020		SN	2	PB4	Two Snipe feeding along pond edge	JS
Transect	B127	21/07/2020	08:40:00	SN	1	PB4		JS
Transect	B130	21/07/2020	09:31:00	SN	1	PB4		JS
Transect	B140	21/07/2020	10:56:00	SN	1	PB4		JS
Wader	B146	22/07/2020	10:26:00	SN	1	PB4		JS
Wader	B147	22/07/2020	11:11:00	SN	1	PB4		JS
Gull	B436	23/07/2020	10:20:00	SN	1		Snipe flushed at ING 100557 319893, flew west	JS
Transect	B153	24/08/2020	10:42:00	SN	1	PB4		TK
Transect	B168	24/08/2020		SN	2	PB4		TK
Wader	B172	26/08/2020	08:35:00	SN	1	PB4		TK
Wader	B194	23/09/2020		SN	2	PB4		TK
Wader	B205	23/09/2020	16:24:00	SN	1	PB4		TK
Transect	B444	16/04/2021		SN	1	PB4		JM
Wader	B209	26/04/2021	08:21:00	SN	1	PB4	Snipe drumming	TK
Wader	B212	26/04/2021	09:45:00	SN	1	PB4	Snipe in suitable breeding habitat	TK
Wader	B213	26/04/2021	09:55:00	SN	1	PB4	Snipe chipping	TK
Transect	B235	12/05/2021		SN	1	PB3		TK
Transect	B242	24/05/2021		SN	1			TK
Transect	B244	24/05/2021		SN	1			TK
Transect	B254	24/05/2021		SN	1			TK
Wader	B261	25/05/2021		SN	1			TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B265	26/05/2021		SN	1			TK
Wader	B266	26/05/2021		SN	1			TK
Transect	B283	02/06/2021	09:06:00	SN	3	PB3	Suitable breeding habitat	TK
Transect	B284	02/06/2021	09:45:00	SN	1	PB3	Suitable breeding habitat	TK
Transect	B291	02/06/2021	12:02:00	SN	1	PB4	Pair of Ringed Plover, agitated behaviour, probable breeding	TK
Wader	B312	16/06/2021		SN	1	PB4	Snipe flushed. Suitable habitat	TK
Wader	B314	16/06/2021		SN	1	PB4	Snipe flushed. Suitable habitat	TK
Wader	B315	16/06/2021		SN	1	PB4	Snipe flushed. Suitable habitat	TK
Wader	B319	17/06/2021		SN	1	PB4	Snipe flushed. Suitable habitat	TK
Transect	B326	09/07/2021		SN	1	PB3		JC
Wader	B338	14/07/2021		SN	2	PB4	Snipe flushed from ground	TK
Wader	B352	15/07/2021		SN	1	PB4	Snipe flushed from ground	TK
Wader	B353	15/07/2021		SN	1	PB4	Snipe flushed from ground	TK
Transect	B359	16/07/2021		SN	1	PB4	Snipe flushed from ground	TK
Transect	B368	16/08/2021		SN	1	PB3	Snipe flushed from ground	TK
Transect	B370	16/08/2021		SN	1	PB3	Snipe flushed from ground	TK
Wader	B380	19/08/2021	08:46:00	SN	1	PB4	Snipe in suitable habitat	

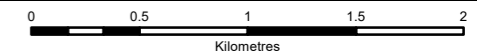
Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B382	19/08/2021	10:50:00	SN	1	PB4	Snipe in suitable habitat	
Wader	B384	15/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Wader	B385	15/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Wader	B387	15/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Wader	B388	15/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Wader	B389	15/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Transect	B395	16/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Transect	B396	16/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Transect	B399	16/09/2021		SN	1	PB4	Snipe in suitable habitat	TK
Transect	B0016	08/04/2022	09:47:00	SN	1	PB4	Snipe flushed from suitable habitat	TK
Transect	B0017	08/04/2022	10:15:00	SN	2	PB4	Snipe flushed from suitable habitat	TK
Transect	B0044	26/04/2022		SN	1	PB4	Snipe flushed from suitable habitat	TK
Transect	B0045	26/04/2022		SN	2	PB4	Snipe flushed from suitable habitat	TK
Transect	B0101	24/05/2022	10:52:00	SN	1	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0102	24/05/2022	11:45:00	SN	1	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0103	24/05/2022	11:46:00	SN	2	PB4	Snipe in suitable habitat	TK
Wader	B0115	25/05/2022		SN	1	PB4	Snipe in suitable breeding habitat	TK
Wader	B0116	25/05/2022		SN	1	PB4	Snipe in suitable breeding habitat	TK
Transect	B0137	27/05/2022		SN	1	PB4	Snipe in suitable breeding habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0138	27/05/2022		SN	1	PB4	Snipe in suitable breeding habitat	TK
Transect	B0151	15/06/2022	11:26:00	SN	1	PB4	Snipe flushed from ground	TK
Transect	B0166	20/06/2022	11:54:00	SN	1	PB4	Snipe flushed from ground	TK
Wader	B0172	21/06/2022	13:21:00	SN	1	PB4	Snipe flushed from ground	TK
Wader	B0194	13/07/2022	11:26:00	SN	1	PB4	Snipe in suitable habitat	TK
Transect	B0215	15/07/2022	10:45:00	SN	1	PB4	Snipe in suitable habitat	TK
Transect	B0239	20/07/2022		SN	1	PB4	Snipe in suitable habitat	TK

SNIPE FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Snipe (*Gallinago gallinago*) - Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) - Non-Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 6 - Sheet 1 of 6 - Snipe (*Gallinago gallinago*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

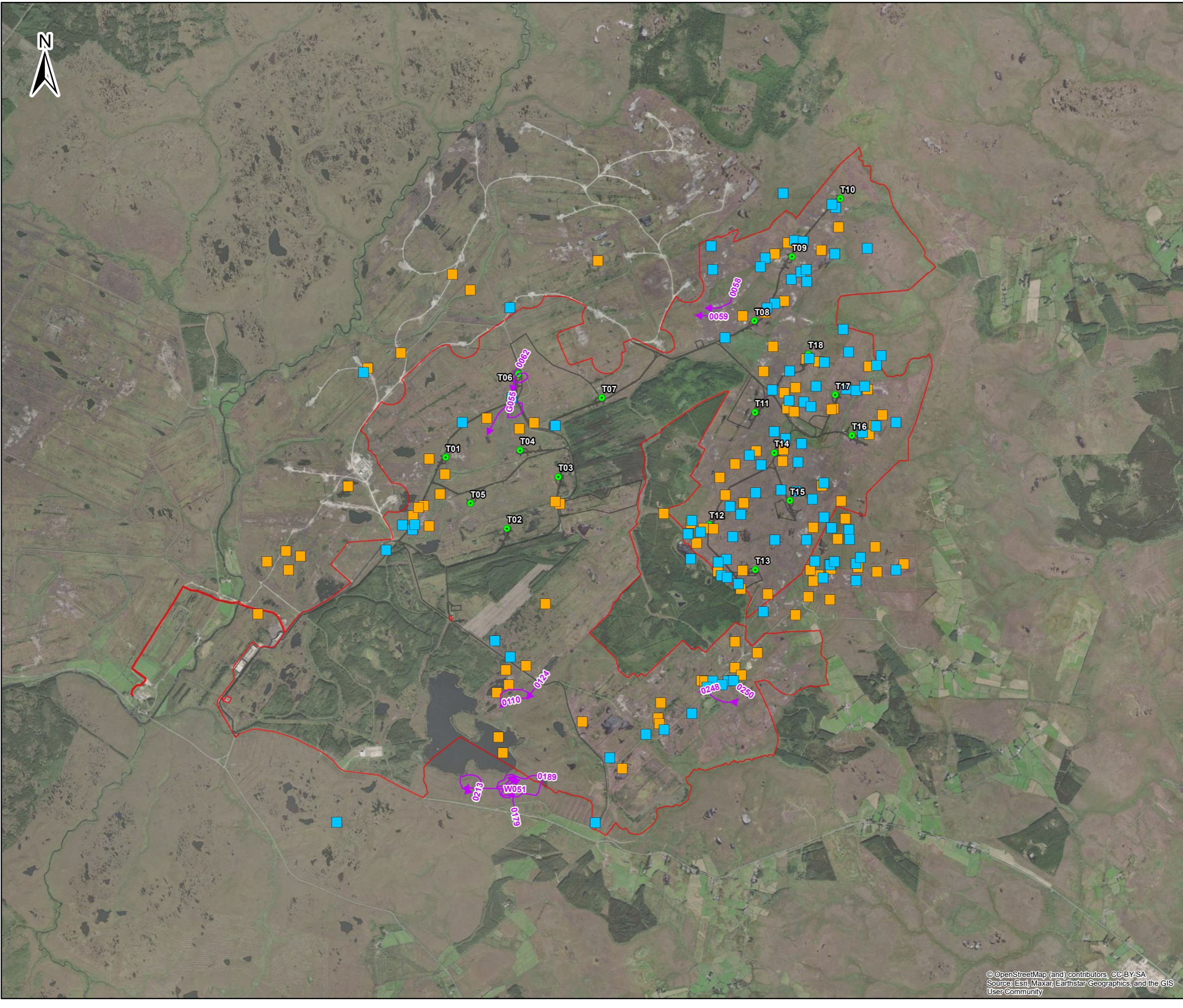
Project Director: D.Grehan

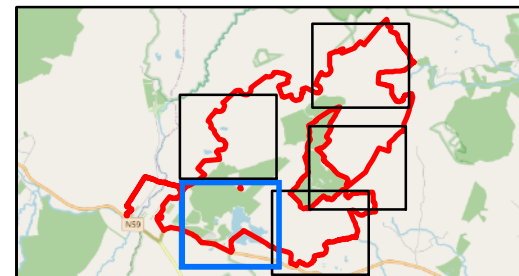
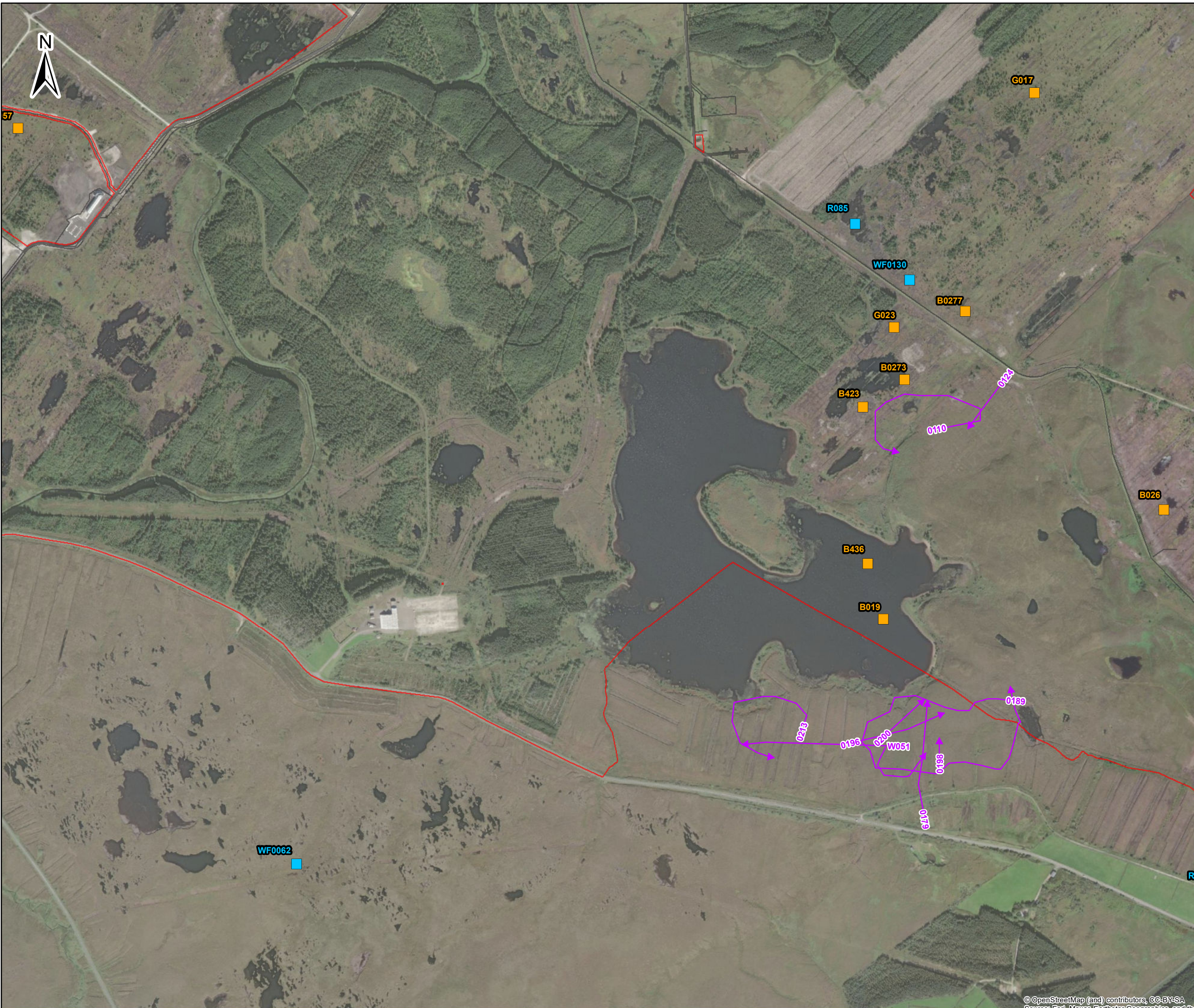
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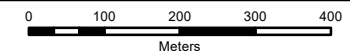
Draft: **D01**

10889-030-SN-FLIGHT-TOB-D01





- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Snipe (*Gallinago gallinago*) - Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) - Non-Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	27/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 6 - Sheet 2 of 6 - Snipe (*Gallinago gallinago*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:10,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

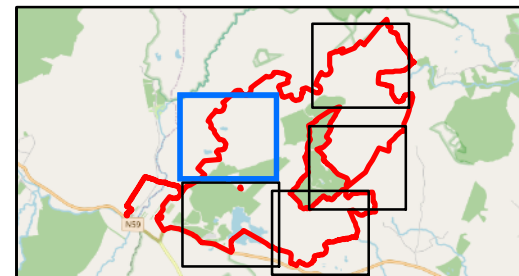
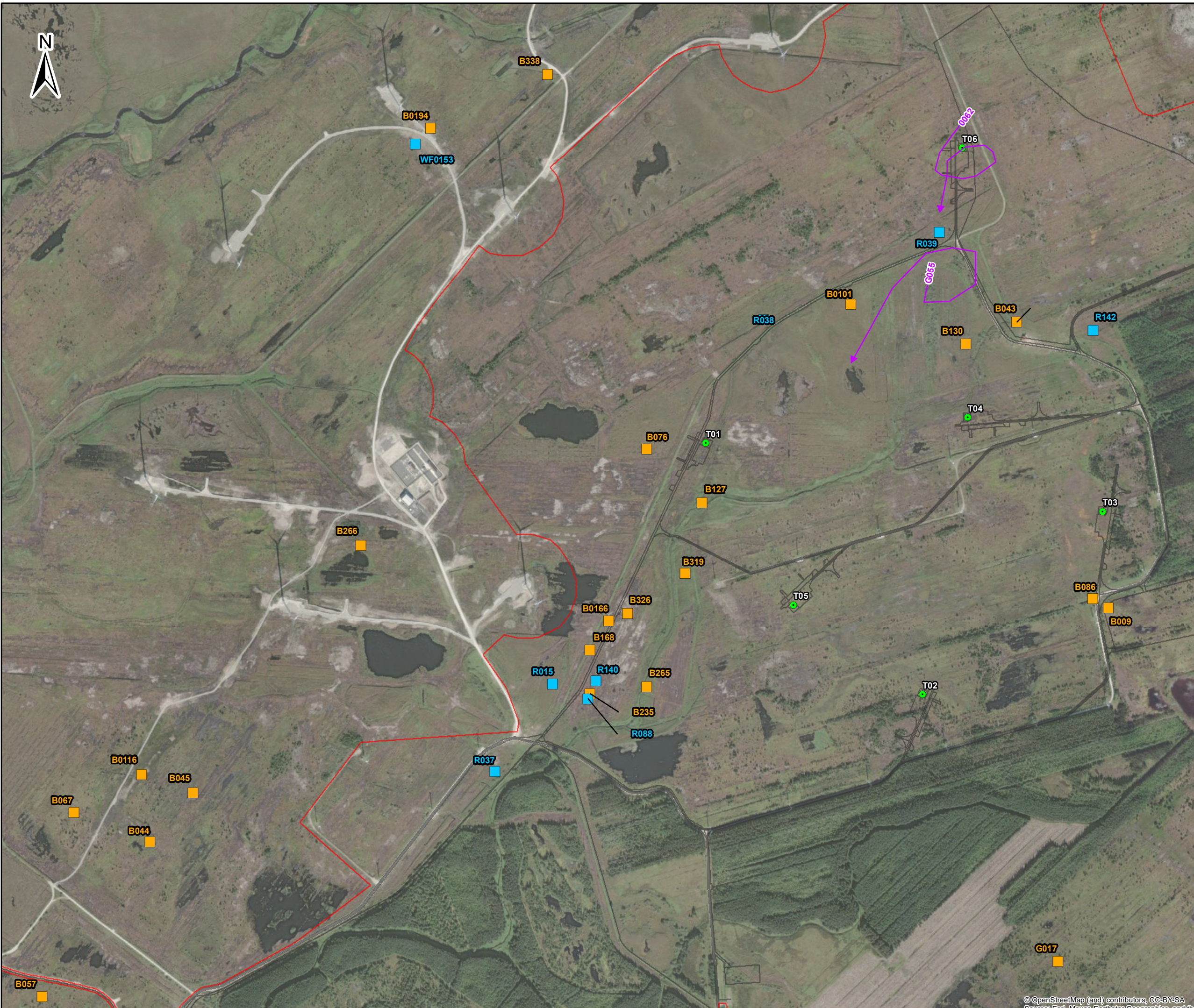
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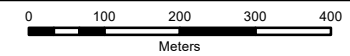
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- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Snipe (*Gallinago gallinago*) - Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) - Non-Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	27/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: Oweninny Wind Farm Phase 3

Title: Appendix 8-1 Figure 6 - Sheet 3 of 6 - Snipe (*Gallinago gallinago*) observations over the survey period (Apr 2019 - Sept 2022)

Scale @ A3: 1:10,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

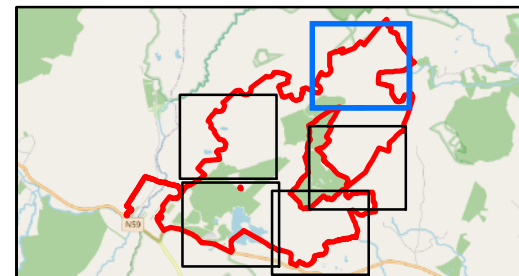
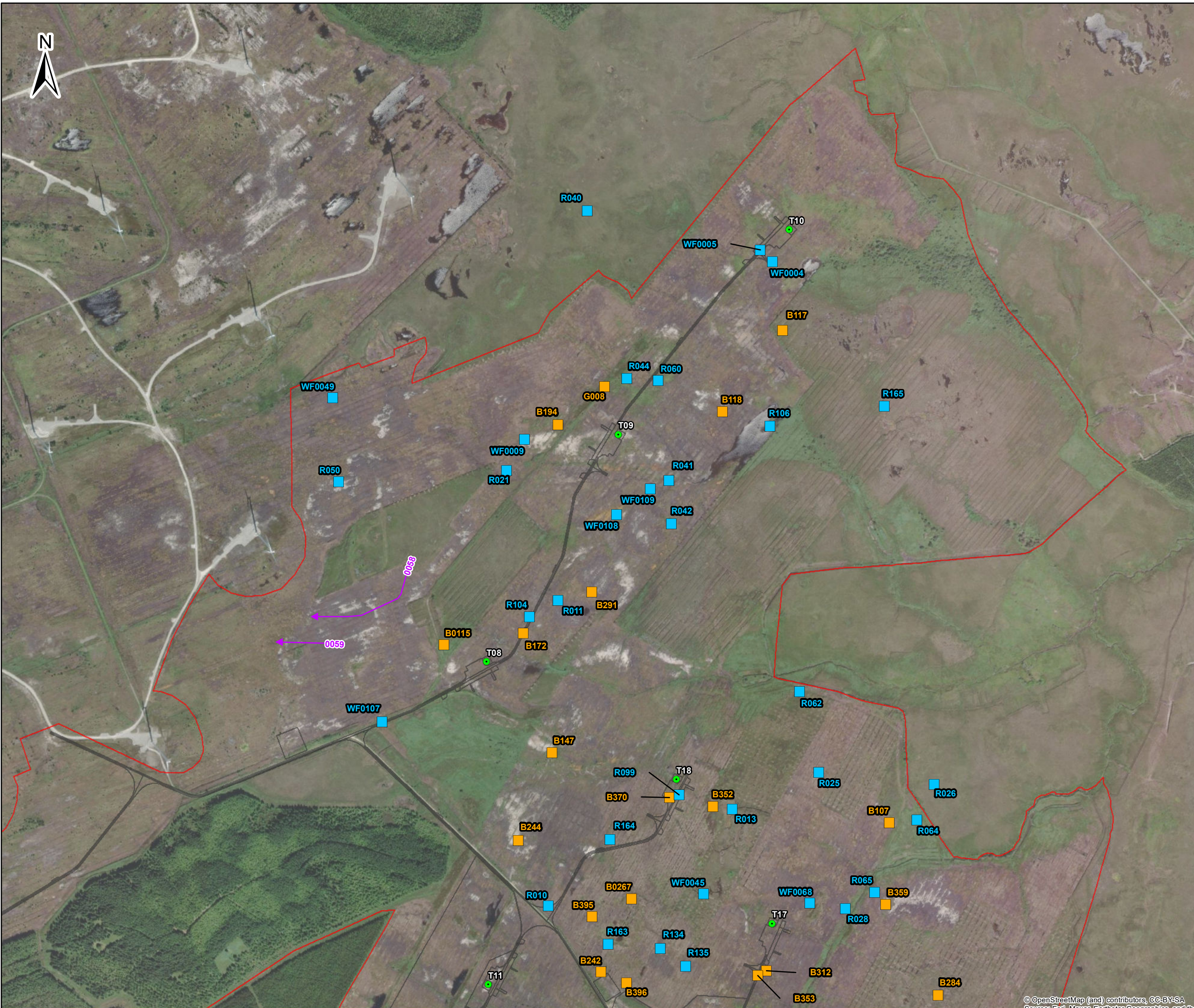
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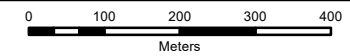
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- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Snipe (*Gallinago gallinago*) - Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) - Non-Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) Flightlines -
 - ↔ Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	27/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 6 - Sheet 4 of 6 - Snipe (*Gallinago gallinago*) observations over the survey period (Apr 2019 - Sept 2022)**

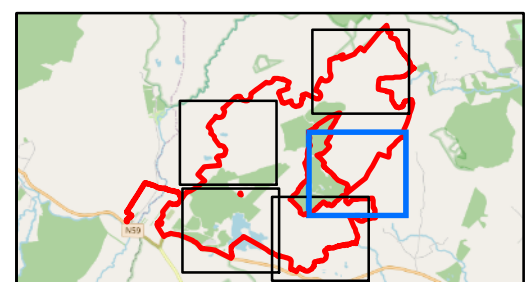
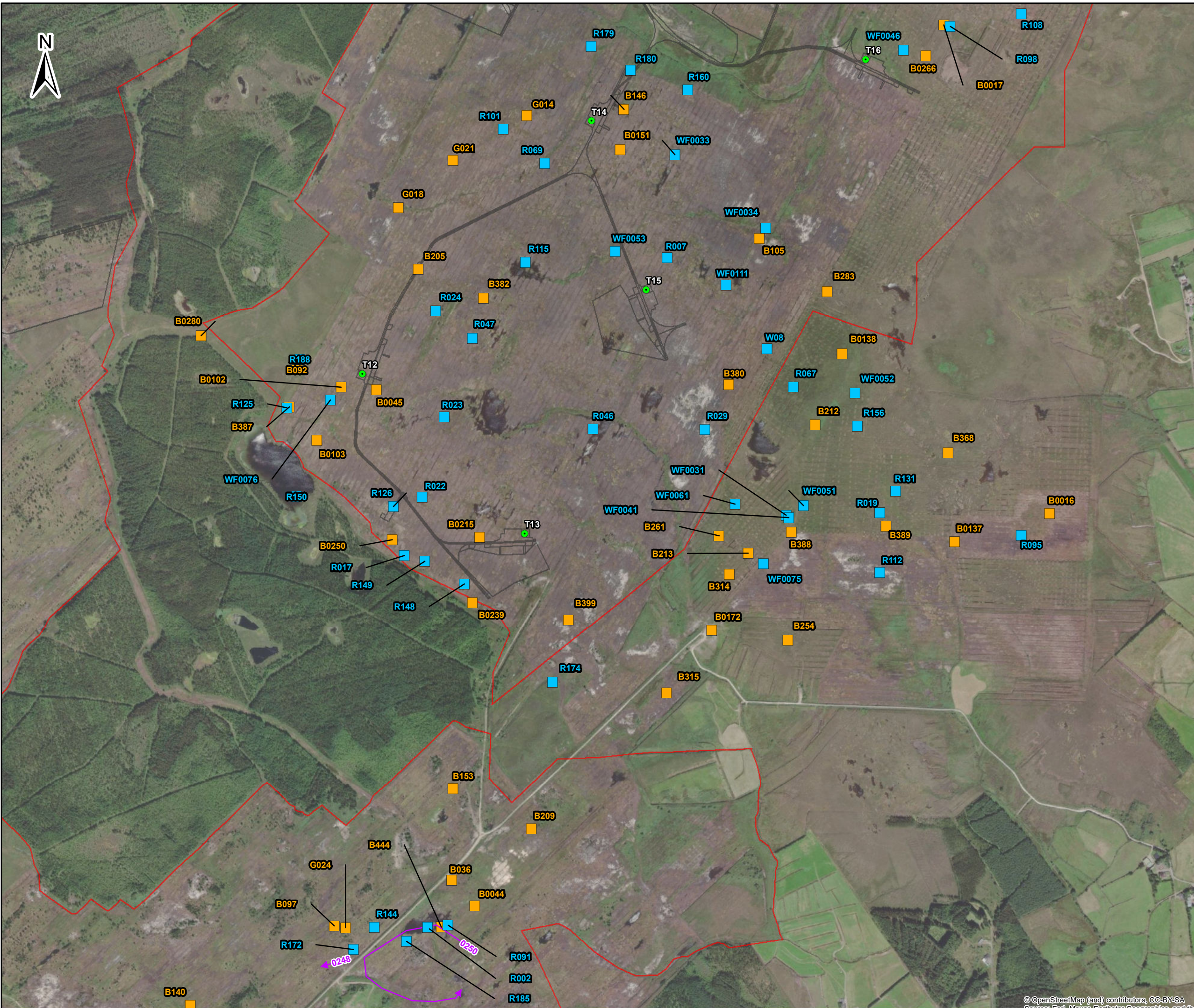
Scale @ A3: 1:10,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Snipe (*Gallinago gallinago*) - Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) - Non-Breeding Season 2020-2022
 - Snipe (*Gallinago gallinago*) Flightlines - Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	27/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 6 - Sheet 5 of 6 - Snipe (*Gallinago gallinago*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:10,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

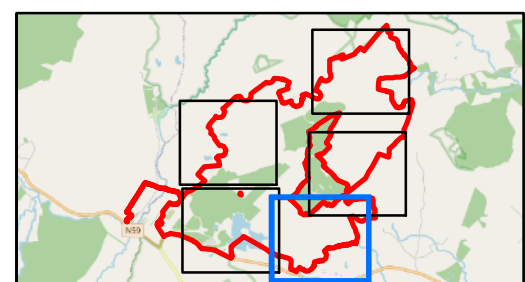
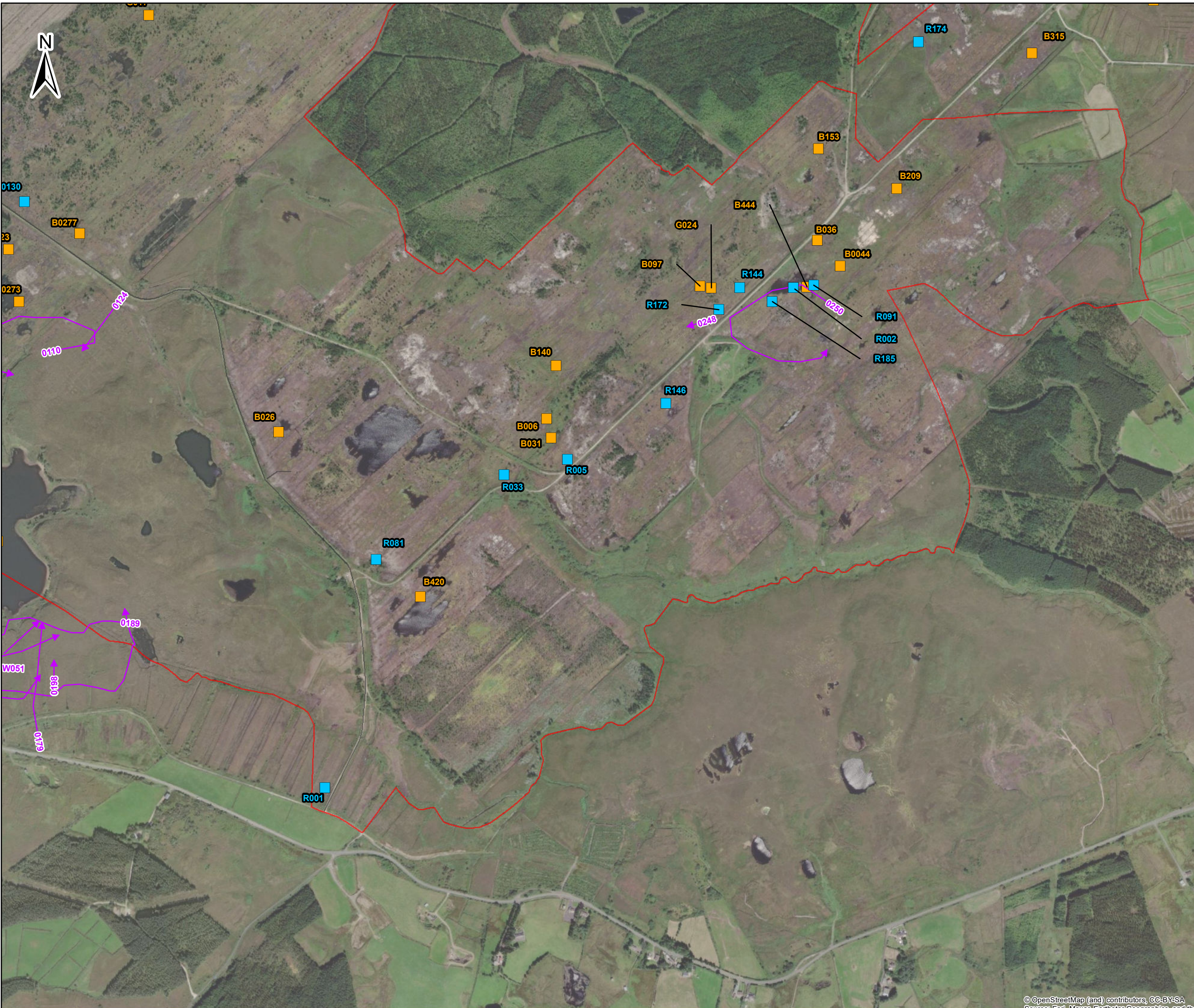
Project Director: D.Grehan

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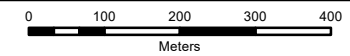
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Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Snipe (*Gallinago gallinago*) - Breeding Season 2020-2022
- Snipe (*Gallinago gallinago*) - Non-Breeding Season 2020-2022
- Snipe (*Gallinago gallinago*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	27/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 6 - Sheet 6 of 6 - Snipe (*Gallinago gallinago*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:10,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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7.0 Red Grouse

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0225	Breeding	5	04/04/2022	17:40	RG	1	10					Red Grouse flying low from heather towards lake	KL

Vantage Point Non-Flight Observations										
Season	Site	VP	Date	Observation Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor	
Breeding	Oweninny	7	26/04/2022	07:01	RG	1	PB4	Calling	KL	

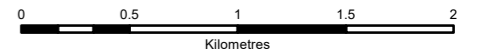
Breeding Bird Survey Data									
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor	
Wader	B148	22/07/2020	11:52:00	RG	2	PB4	Flushed	JS	
Wader	B196	23/09/2020	09:25:00	RG	1	PB4		TK	
Transect	B245	24/05/2021		RG	1	PB3		TK	

RED GROUSE FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Red Grouse (*Lagopus lagopus*) - Breeding Season 2020-2022
- Red Grouse (*Lagopus lagopus*) - Non-Breeding Season 2020-2022
- Red Grouse (*Lagopus lagopus*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



NOTES

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4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client:

Bord na Móna

Project:

Oweninny Wind Farm
Phase 3

Title:

Appendix 8-1 Figure 7
Red Grouse (*Lagopus lagopus*)
observations over the survey period
(Apr 2019 - Sept 2022)

Scale @ A3:

1:35,000

Prepared by:

S.Pezzetta

Checked:

J.Sherry

Date:

March 2023

Project Director: D.Grehan

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D01

8.0 Whooper Swan

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0235	Non-Breeding	6	26/10/2019	08:45	WS	1		30				Flying east	JH
0147	Non-Breeding	5	27/10/2019	07:20	WS	1	45					Flew low southeast from Lake Dahybaun	JA
0012	Non-Breeding	1	29/10/2019	11:20	WS	3	10	150				Flew into pond and stayed for duration	MH
0014	Non-Breeding	1	29/10/2019	13:17	WS	5		8				Flying	MH
0085	Non-Breeding	4	27/11/2019	08:30	WS	2	30					Two roosting on nearby pod then took off	MH
0240	Non-Breeding	6	11/12/2019	08:43	WS	1	18					Flew across Dahybaun westwards	MH
0018	Non-Breeding	1	17/12/2019	09:04	WS	8	20	17				Took off from overnight roost	MH
0241	Non-Breeding	6	22/01/2020	10:17	WS	5	180					Flew in from northeast and landed on bog pool near VP. Then took flight again	MH
0242	Non-Breeding	6	22/01/2020	16:36	WS	2	20	140				Two adults landed on bog pool near VP	MH
0025	Non-Breeding	1	23/01/2020	13:13	WS	2		47				In flight	MH
0093	Non-Breeding	4	12/02/2020	15:00	WS	3	160					2 adults and juveniles flew between bog pools	MH

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0035	Non-Breeding	1	13/10/2020	08:31	WS	2	30					Two Whooper Swans in flight, landed on small lake	TK
0050	Non-Breeding	2	14/10/2020	10:58	WS	1	45					Whooper Swan took flight from small lake	TK
0298	Non-Breeding	7	09/11/2020	10:53	WS	8	122	20				Eight Whooper Swans in flight	TK
0064	Non-Breeding	3	11/12/2020	14:17	WS	4	15	10				Four Whooper Swans in flight within site	TK
W027	Non-Breeding	3	15/10/2021	12:40	WS	6	50	100				Small flock of WS flying S through site with four juveniles	JM

Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-Breeding	WF0016	11/11/2020	WS	5	FL1	Feeding	TK
Non-Breeding	WF0022	24/11/2020	WS	6	FL1	Foraging	JM
Non-Breeding	WF0096	22/10/2021	WS	1	FL1	Feeding	TK
Non-Breeding	WF0100	22/10/2021	WS	7	FL1	Feeding	TK
Non-Breeding	WF0104	08/11/2021	WS	3	FL1	Feeding	TK
Non-Breeding	WF0161	01/03/2022	WS	6	FL1	Two feeding, four roosting	TK

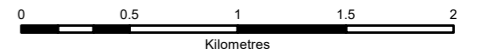
Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R031	Non-Breeding	Western Transect	25/11/2020	WS	4	FL1	Flying southwest over bog	SC
R074	Non-Breeding	Western Transect	30/03/2021	WS	2	PB4	Took off from small lake to north of track and flew southeast	SC

WHOOPEER SWAN FIGURE



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Whooper Swan (*Cygnus cygnus*) - Non-Breeding Season 2020-2022
- Whooper Swan (*Cygnus cygnus*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 8
Whooper Swan (*Cygnus cygnus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

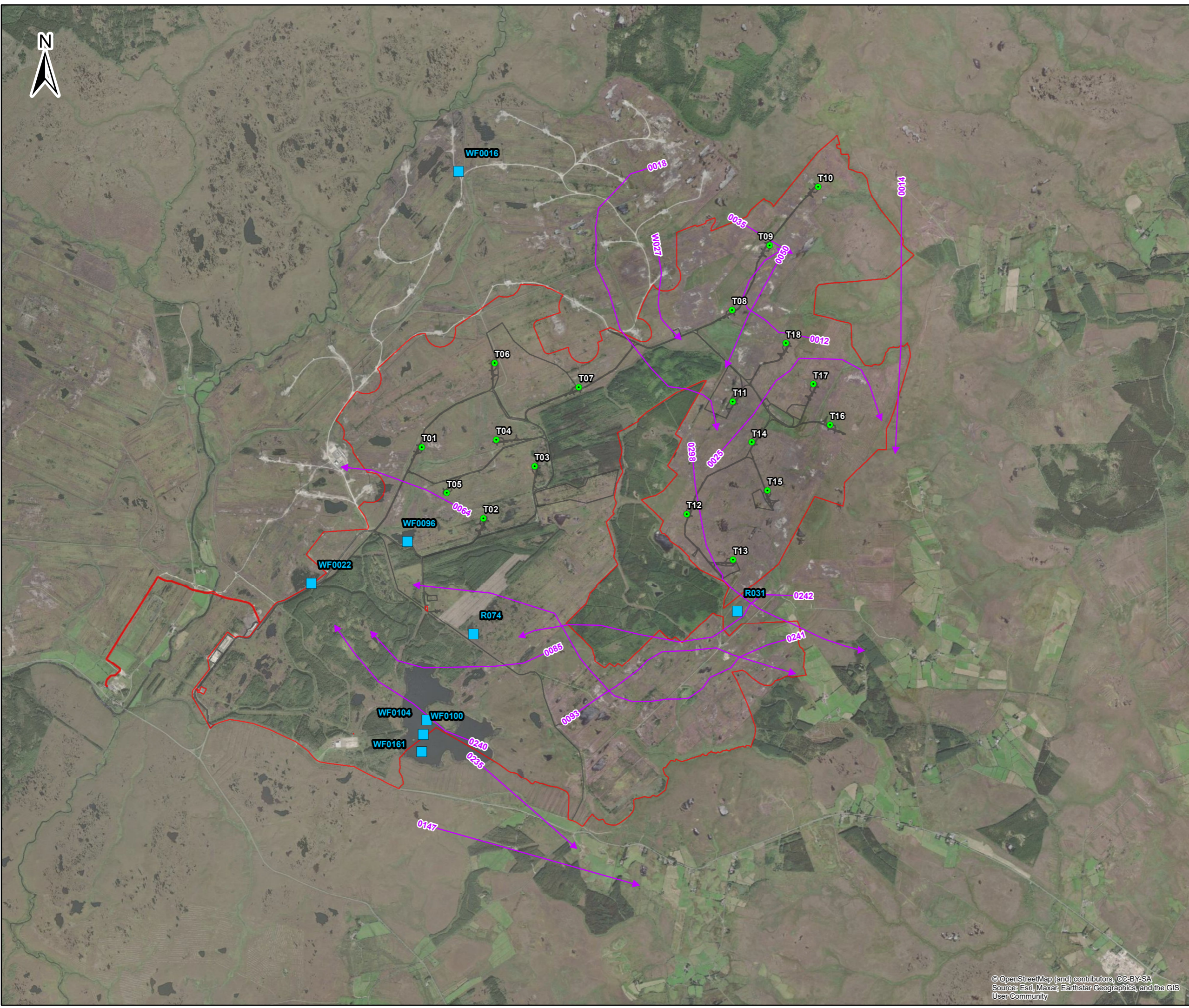
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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9.0 Mute Swan

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0144	Breeding	5	23/08/2019	10:29	MS	3	25	35					BM
0181	Breeding	5	12/05/2020	18:30	MS	2							TK
0185	Breeding	5	09/06/2020	09:42	MS	2						Likely breeding	JM
0190	Breeding	5	14/07/2020	12:42	MS	2						Pair swimming on lake	JM

Vantage Points Surveys Non-Flight Observations											
Season	Site	VP	Date	Observation Time	BTO Code	Abundance	Sex/Age	Habitat Code	Activity	Surveyor	
Non-Breeding	Oweninny	5	13/12/2021	10:21	MS	2	Adult	FL1	Feeding	TK	
Breeding	Oweninny	5	25/04/2022	14:20	MS	1	Adult	FL2	Swimming	KL	
Breeding	Oweninny	5	15/07/2022	06:47	MS	2	Adult	FL2	Feeding and swimming	KL	
Breeding	Oweninny	5	15/07/2022	09:47	MS	4	Adult and juvenile	FL2	Feeding and swimming	KL	
Breeding	Oweninny	5	12/08/2022	09:23	MS	4	Adult and juvenile	FL2	Feeding and swimming	KL	
Breeding	Oweninny	4	14/09/2022	07:27	MS	1	Adult	PB4	Swimming	KL	

Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0001	12/10/2020	MS	6	FL2	Feeding	TK
Non Breeding	WF0035	17/12/2020	MS	2	FL1	Feeding	TK
Non Breeding	WF0055	11/01/2021	MS	2		Feeding	TK
Non Breeding	WF0065	08/02/2021	MS	4	FL1	Feeding	TK
Non-breeding	WF0080	31/03/2021	MS	4	PB4	Flying. Flew in and landed on lake	TK
Non Breeding	WF0113	19/11/2021	MS	2	FL1	Feeding	TK
Non Breeding	WF0124	01/12/2021	MS	2	FL1	Feeding	TK
Non Breeding	WF0137	22/01/2022	MS	2	FL1	Feeding	TK
Non Breeding	WF0148	07/02/2022	MS	4	FL1	Feeding	TK
Non Breeding	WF0152	22/02/2022	MS	2	FL1	Feeding	TK
Non Breeding	WF0170	14/03/2022	MS	2	FL1	Feeding	TK

Winter Transects									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R197	Non-Breeding	Western Transect	11/03/2022	12:37	MS	1	FLQ	Feeding	TK

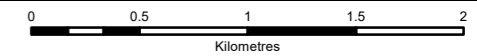
Winter Transects									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R198	Non-Breeding	Western Transect	11/03/2022	13:18	MS	2	FL1	Feeding	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B409	24/04/2020	13:02:00	MS	1			JS
Gull	B425	18/06/2020		MS	6	PB4	Six Mute Swans, 2 adult and 4 cygnets	JS
Gull	B435	23/07/2020	10:02:00	MS	3		Three Mute Swan in reeds on small island, 2 adults and 1 cygnet (possibly more in reeds)	JS
Transect	B0095	24/05/2022	09:41:00	MS	1	FL1	Mute Swan feeding on small lake	TK
Transect	B0164	20/06/2022	13:10:00	MS	1	PB4	Mute Swan feeding on small wetland area	TK
Transect	B0234	20/07/2022		MS	1	FL1	Mute Swan on lake edge	TK

MUTE SWAN FIGURES



- Legend**
- Proposed Turbine Locations
 - Planning Application Boundary
 - Proposed Infrastructure
 - Mute Swan (Cygnus olor) - Breeding Season 2020-2022
 - Mute Swan (Cygnus olor) - Non-Breeding Season 2020-2022
 - Mute Swan (Cygnus olor) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client:
Bord na Móna

Project:
Oweninny Wind Farm
Phase 3

Title:
Appendix 8-1 Figure 9
Mute Swan (Cygnus olor)
observations over the survey period
(Apr 2019 - Sept 2022)

Scale @ A3: 1:35,000

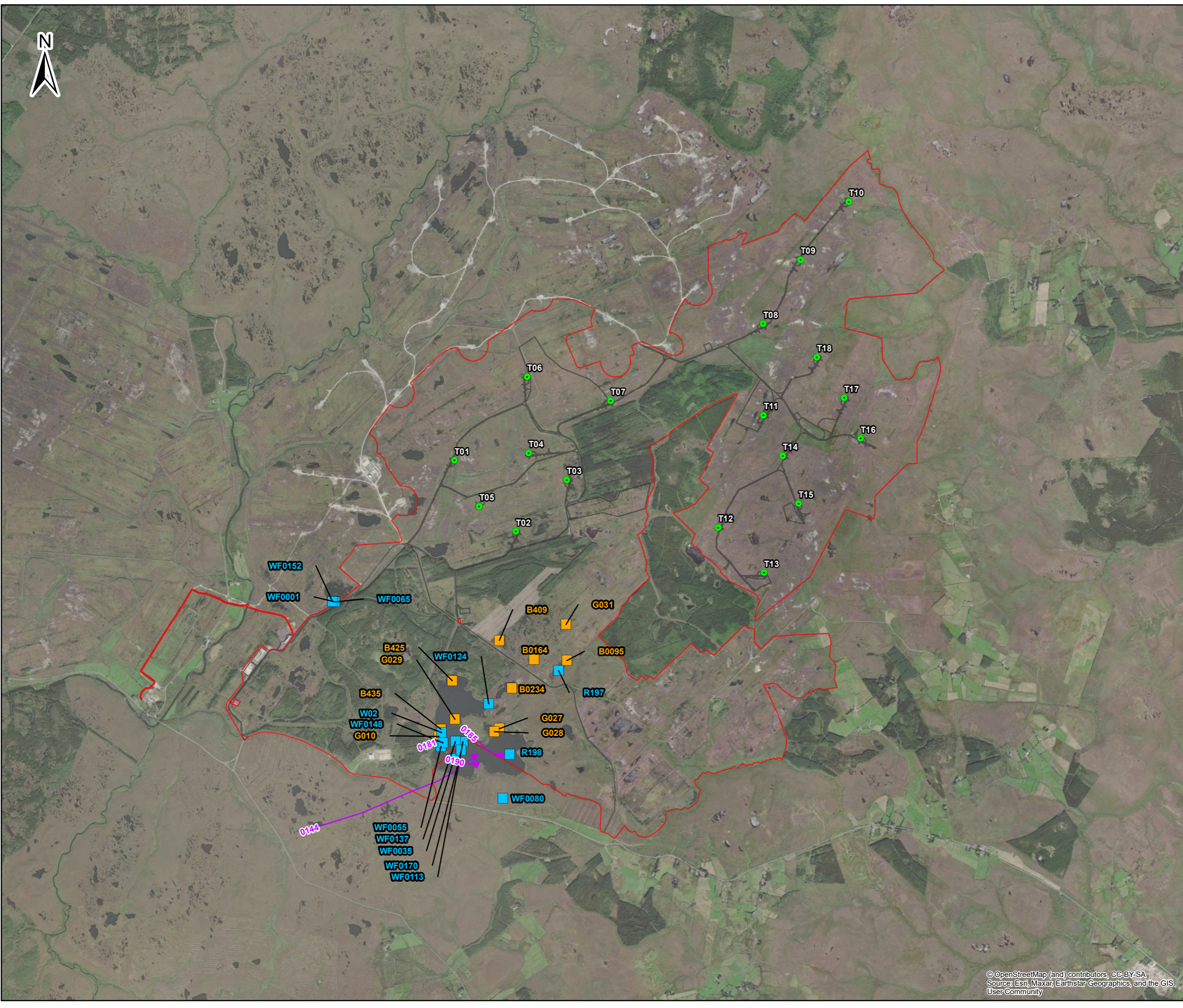
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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Draft:
D01



10.0 Mallard

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0209	Breeding	4	22/04/2020	12:44	MA	1	17					Flew from south, low over ground ~10m, flew behind forestry	TK
0210	Breeding	4	22/04/2020	07:21	MA	2	12					Male and female, flying fast and low over ground traveling to Lough Dahybaun	TK
0211	Breeding	5	12/05/2020	11:26	MA	2	0						TK
0212	Breeding	1	13/05/2020	11:26	MA	2	48					Two Mallard in flight, landed on small lake	TK
0213	Breeding	4	13/05/2020	11:15	MA	2	25						TK
0214	Breeding	4	10/06/2020	05:40	MA	3	60					Suitable breeding habitat	TK
0215	Breeding	4	15/07/2020	12:44	MA	2	20					Adults flying between lakes	TK
0216	Breeding	4	15/07/2020	21:45	MA	5						Adult with four juveniles on lake	TK
0217	Non-Breeding	7	16/10/2020	09:38	MA	2	30					Two Mallard in flight, landed on small lake	TK
0218	Non-Breeding	6	16/10/2020	12:40	MA	2	50					Two Mallard in flight	JM
0219	Non-Breeding	6	12/11/2020	14:36	MA	2		45				Two Mallard in flight flying west	JM
0220	Non-Breeding	2	13/01/2021	12:40	MA	4	20						TK
0221	Non-Breeding	4	14/01/2021	15:15	MA	2	40					Pair flew west to northwest of VP	JM

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0222	Non-Breeding	5	10/02/2021	10:41	MA	5						Small flock of males and females on lake most of day	JM
0223	Non-Breeding	5	09/03/2021	16:15	MA	2						Adult flying west in strong wind	JM
0224	Breeding	6	15/04/2021	10:31	MA	2	12	18	30			Pair flying west past VP	JM
0225	Breeding	5	05/05/2021	17:06	MA	2	45	52				Pair flew from east into lake	JM
0226	Breeding	4	06/05/2021	20:05	MA	2	40	20				Pair flying west past VP	JM
0227	Breeding	5	08/09/2021	19:48	MA	4	10	30				Mallards in flight, landed on large lake	TK
0228	Breeding	3	09/09/2021	18:30	MA	2		35				Pair flying between ponds	JM
W046	Non-Breeding	6	09/11/2021	14:39	MA	4	10	40				Four Mallards flying over	TK
W047	Non-Breeding	1	09/11/2021	16:05	MA	4	35	55				Mallard flying over VP	JM
W048	Non-Breeding	4	10/11/2021	15:17	MA	2	10	20				Two Mallards flying over	TK
W049	Non-Breeding	7	15/11/2021	14:40	MA	2	10	23				Two Mallard flying over.	TK
W050	Non-Breeding	5	16/11/2021	13:23	MA	4	20					Four Mallard in flight over lake, landed on lake	TK
W051	Non-Breeding	5	16/11/2021	14:12	MA	6	20					Six Mallard in flight over lake.	TK
W052	Non-Breeding	1	13/12/2021	09:14	MA	2	70	52				Mallard pair in flight	JM
W053	Non-Breeding	6	12/01/2022	13:45	MA	4	36	75				Four Mallards flying over	JM
W054	Non-Breeding	3	19/01/2022	15:02	MA	2	20	0					TK

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
B01	Breeding	4	05/04/2022	13:14	MA	1		10				Male Mallard flew west over hill	KL
B13	Breeding	3	06/04/2022	09:42	MA	1			10			Male Mallard flew south over road	KL
B14	Breeding	3	06/04/2022	12:45	MA	1	5	10				Female Mallard flying south	KL
B18	Breeding	5	25/04/2022	15:15	MA	1			20	20		Male mallard flew east then turned and flew west	KL
B19	Breeding	7	26/04/2022	06:48	MA	1			30			Male Mallard flew east	KL
B21	Breeding	6	10/05/2022	19:02	MA	2	5	10				Two male Mallard flew from west and landed on pool in front of VP	KL
B22	Breeding	6	10/05/2022	19:59	MA	1		10	10			Male Mallard flew from pool west over woods	KL
B39	Breeding	6	16/06/2022	12:04	MA	1	2	20				Male Mallard flew southeast	KL
B41	Breeding	6	16/06/2022	13:37	MA	3	25					Male Mallard flew east	KL
B53	Breeding	4	12/07/2022	10:32	MA	1	3					Mallards flew up to mob a Heron and returned to pool	KL
B54	Breeding	4	12/07/2022	12:22	MA	1	10	25				Mallard flew up from pool over trees	KL

Waterfowl Surveys							
Season	Ref.	Date	BTO code	No. of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0006	12/10/2020	MA	6	FL2	Feeding	TK
Non-breeding	WF0010	27/10/2020	MA	1	FL2	Feeding	TK
Non-breeding	WF0012	27/10/2020	MA	6	FL2	Feeding	TK
Non Breeding	WF0017	11/11/2020	MA	11	FL1	Feeding	TK
Non Breeding	WF0018	11/11/2020	MA	2	FL1	Feeding	TK
Non Breeding	WF0027	07/12/2020	MA	2	FL1	Feeding	TK
Non Breeding	WF0029	07/12/2020	MA	5	FL1	Feeding	TK
Non Breeding	WF0038	17/12/2020	MA	2	FL1	Feeding	TK
Non Breeding	WF0043	17/12/2020	MA	2	FL1	Feeding	TK
Non Breeding	WF0047	11/01/2021	MA	2		Feeding	TK
Non Breeding	WF0048	11/01/2021	MA	2		Feeding	TK
Non Breeding	WF0050	11/01/2021	MA	4		Feeding - took flight	TK
Non Breeding	WF0056	11/01/2021	MA	2		Feeding - took flight	TK
Non-breeding	WF0058	26/01/2021	MA	1	FL1	Foraging	SC
Non-breeding	WF0059	26/01/2021	MA	2	PB4	Foraging	SC
Non Breeding	WF0063	08/02/2021	MA	4	FL1	Feeding	TK

Waterfowl Surveys							
Season	Ref.	Date	BTO code	No. of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0072	24/02/2021	MA	2	FW4	Flying	SC
Non Breeding	WF0074	08/03/2021	MA	2	FL1	Flying	TK
Non Breeding	WF0078	08/03/2021	MA	2	PB4	Flying	TK
Non Breeding	WF0079	08/03/2021	MA	2	PB4	Flying	TK
Non-breeding	WF0084	31/03/2021	MA	2	FL2	Foraging	SC
Non Breeding	WF0086	11/10/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0089	11/10/2021	MA	3	FL1	Feeding	TK
Non Breeding	WF0091	11/10/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0097	22/10/2021	MA	3	FL1	Feeding	TK
Non Breeding	WF0098	22/10/2021	MA	3	PB4	Roosting	TK
Non Breeding	WF0101	22/10/2021	MA	4	FL1	Feeding	TK
Non Breeding	WF0103	08/11/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0105	08/11/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0106	08/11/2021	MA	4	FL1	Feeding	TK
Non Breeding	WF0110	08/11/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0112	19/11/2021	MA	2	FL1	Feeding	TK

Waterfowl Surveys							
Season	Ref.	Date	BTO code	No. of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0117	19/11/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0119	19/11/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0121	01/12/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0123	01/12/2021	MA	6	PB4	Took flight from river	TK
Non Breeding	WF0125	14/12/2021	MA	2	FL1	Feeding	TK
Non Breeding	WF0127	14/12/2021	MA	8	FL1	Feeding	TK
Non Breeding	WF0128	14/12/2021	MA	2	PB4	In flight	TK
Non Breeding	WF0132	10/01/2022	MA	2	FL1	Flying	TK
Non Breeding	WF0136	10/01/2022	MA	4	FL1	Feeding	TK
Non Breeding	WF0140	22/01/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0141	22/01/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0143	22/01/2022	MA	4	FL1	Feeding	TK
Non Breeding	WF0144	07/02/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0150	07/02/2022	MA	3	FL1	Feeding	TK
Non Breeding	WF0154	22/02/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0155	22/02/2022	MA	2	FL1	Feeding	TK

Waterfowl Surveys							
Season	Ref.	Date	BTO code	No. of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0165	01/03/2022	MA	1	FL1	Feeding	TK
Non Breeding	WF0166	01/03/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0167	01/03/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0175	14/03/2022	MA	2	FL1	Feeding	TK
Non Breeding	WF0177	14/03/2022	MA	2	FL1	Feeding	TK

Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R003	Non-Breeding	Western Transect	28/10/2020	MA	2	FL2	In flight	TK
R012	Non-Breeding	Eastern Transects	24/11/2020	MA	2	FW2	Pair flushed from river by surveyor	SC
R027	Non-Breeding	Western Transect	25/11/2020	MA	2	PB4	Flushed from wetted area and flew northwest and out of view	SC
R032	Non-Breeding	Western Transect	25/11/2020	MA	1	PB4		SC
R035	Non-Breeding	Eastern Transects	16/12/2020	MA	4	PB3	Flushed from ground	TK
R052	Non-Breeding	Western Transect	24/02/2021	MA	2	PB4	Circling above lake	SC
R053	Non-Breeding	Western Transect	24/02/2021	MA	2	PB4	Flushed from wetland, circled and headed northeast	SC
R055	Non-Breeding	Western Transect	24/02/2021	MA	2	PB4	Flushed from wetland, circled and headed northeast	SC

Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R057	Non-Breeding	Western Transect	24/02/2021	MA	2	FL2	Circled lake and headed west	SC
R063	Non-Breeding	Western Transect	30/03/2021	MA	2	FL2	On lake to north of track	SC
R071	Non-Breeding	Western Transect	30/03/2021	MA	5	FL2	A pair on lake	SC
R073	Non-Breeding	Western Transect	30/03/2021	MA	2	PB4	Pair flew out of ditch, flushed by surveyor	SC
R075	Non-Breeding	Eastern Transects	01/04/2021	MA	1	PB4	Flying south	SC
R076	Non-Breeding	Eastern Transects	01/04/2021	MA	3	PB4	Flushed by surveyor off wet area	SC
R082	Non-Breeding	Western Transect	12/10/2021	MA	4	PB4	In suitable habitat	TK
R107	Non-Breeding	Eastern Transects	11/11/2021	MA	2	PB4	Took flight from small lake	TK
R116	Non-Breeding	Eastern Transects	11/11/2021	MA	2	FL1	Took flight from small lake	TK
R119	Non-Breeding	Western Transects	17/11/2021	MA	2	FL1	Feeding	TK
R121	Non-Breeding	Western Transects	17/11/2021	MA	2	FL1	Feeding	TK
R138	Non-Breeding	Eastern Transects	02/12/2021	MA	4	FL1	Four Mallard took flight from small lake	TK
R167	Non-Breeding	Eastern Transects	11/02/2022	MA	4	FL1	Flushed from ground	TK

Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R186	Non-Breeding	Western Transect	11/03/2022	MA	2	FL1	Feeding	TK

Roost Watch Observations										
Season	Site	HHVP	Date	BTO	No. of Birds	Time of flight	Duration of flight (s)	Habitat Code	Activity	Surveyor
Non-Breeding	Oweninny	1	15/01/2021	MA	4	None		FL1	2 Pairs of MA on lake	JM
Non-Breeding	Oweninny	1	09/02/2021	MA	5	16:01	NA	FL1	Small flock on lake	JM

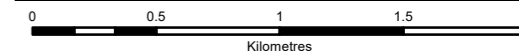
Breeding Bird Survey Data							
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Key Observations	Surveyor
Gull	B410	24/04/2020	13:13:00	MA	1		JS
Transect	B003	28/04/2020	07:45:00	MA	3	Males and one female on lake	JM
Transect	B039	19/05/2020	10:12:00	MA	3	Female with two ducklings	JS
Transect	B058	19/05/2020	11:40:00	MA	2		JM
Gull	B414	21/05/2020	08:45:00	MA	1		JS
Gull	B416	21/05/2020	09:00:00	MA	1		JS
Transect	B070	16/06/2020	07:30-15:30	MA	2		JM
Transect	B077	16/06/2020	12:09:00	MA	1		JS
Transect	B089	16/06/2020	09:34:00	MA	1		JS
Transect	B098	16/06/2020	08:43:00	MA	2		JS

Breeding Bird Survey Data							
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Key Observations	Surveyor
Gull	B422	18/06/2020		MA	1	One Mallard	JS
Transect	B136	21/07/2020	10:15:00	MA	4		JS
Gull	B430	23/07/2020	09:35:00	MA	1	Flushed Mallard female on small pond at ING 100437 320466	JS
Gull	B431	23/07/2020	09:53:00	MA	1	Male Mallard flushed at ING 100121 320121	JS
Gull	B433	23/07/2020	10:02:00	MA	2	Two Mallards on lake	JS
Transect	B149	24/08/2020		MA	1		TK
Transect	B149	22/09/2020		MA	3		TK
Transect	B442	16/04/2021		MA	1		JM
Transect	B239	12/05/2021		MA			TK
Transect	B0080	24/05/2022	09:30:00	MA	2	Two Mallards flying over	TK
Transect	B0081	24/05/2022	09:42:00	MA	4	Four Mallards on small lake, suitable habitat	TK
Wader	B0112	25/05/2022		MA	3	Three Mallards in wetland area	TK
Transect	B0225	20/07/2022		MA	2	Two Mallards in flight	TK

MALLARD FIGURE



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Mallard (*Anas platyrhynchos*) - Breeding Season 2020-2022
 - Mallard (*Anas platyrhynchos*) - Non-Breeding Season 2020-2022
 - Mallard (*Anas platyrhynchos*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 10
Mallard (*Anas platyrhynchos*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:30,631

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

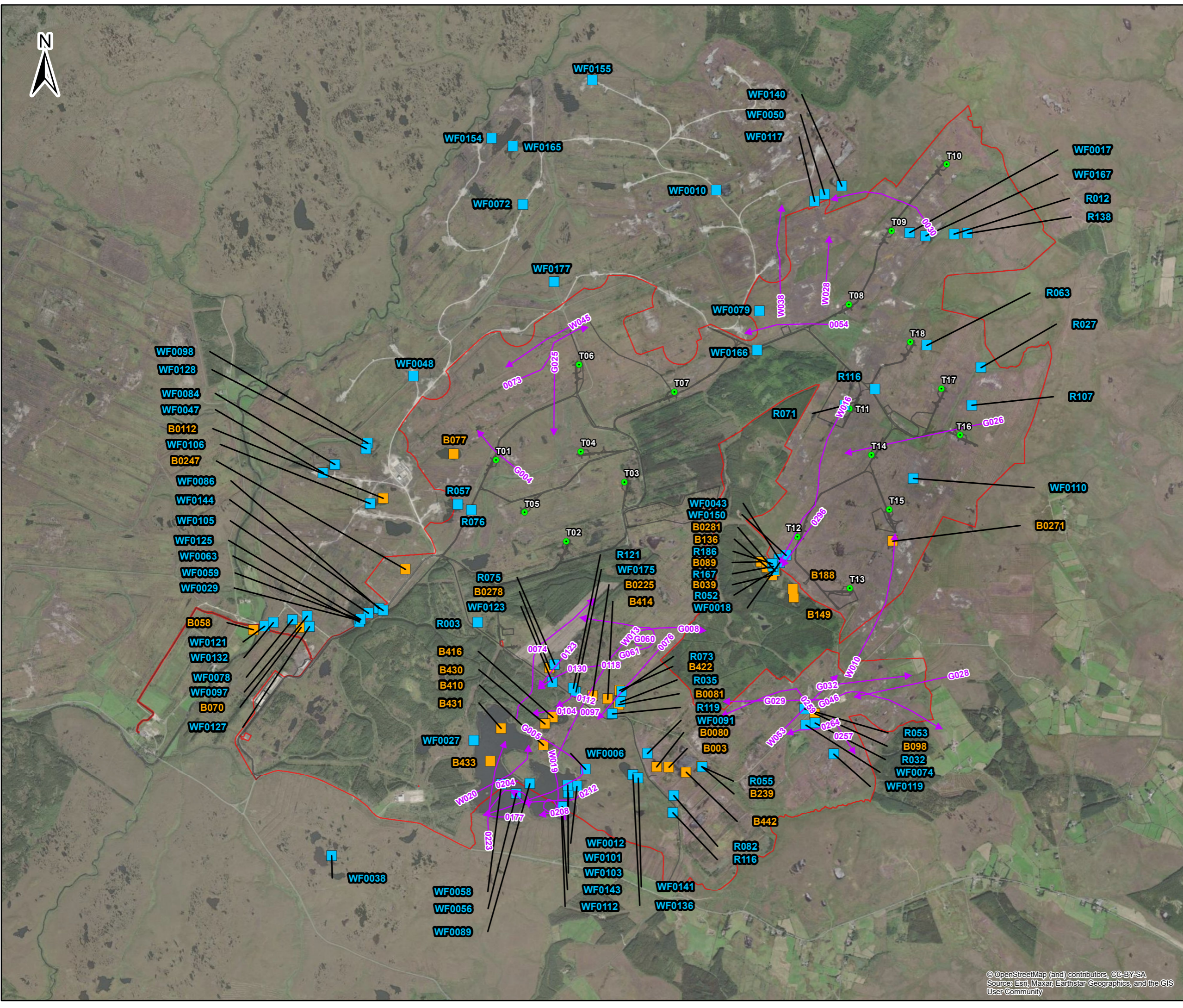
Project Director: D.Grehan

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Draft: **D01**

10889-034-MA-FLIGHT-TOB-D01



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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

11.0 Teal

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0178	Breeding	5	12/05/2020	12:25	T.	2					218		JM
0099	Breeding	4	13/05/2020	12:10	T.	2							JM
0186	Breeding	5	09/06/2020	11:12	T.	2	30					Two Teals in flight and swimming on large lake, likely breeding	JM
0106	Breeding	4	10/06/2020	06:13	T.	5	35					Breeding Teal	JM
0115	Breeding	4	15/07/2020	15:43	T.	2	43					Adult pair flying low between lakes	JM
0117	Breeding	4	15/07/2020	20:31	T.	4						Adult with three young on lake	JM
0065	Non-Breeding	3	14/01/2021	11:58	T.	2	10	15				Two Teal in flight, landed on bog	JM
0127	Breeding	4	14/04/2021	09:42	T.	2	85	35				Pair flying between waterbodies	JM
0128	Breeding	4	06/05/2021	15:42	T.	2	15	35				Pair flying between waterbodies and back	JM
0069	Breeding	3	03/06/2021	11:28	T.	1	20					Male Teal in flight, landed on small lake	TK
0266	Breeding	6	04/06/2021	09:25	T.	2	65					Pair flying together between ponds	JM

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0219	Breeding	5	10/08/2021	06:24	T.	3	15					Three Teal in flight across lake, landed on lake	TK
0042	Breeding	1	07/09/2021	15:23	T.	2	45	50				Pair flying between ponds	JM
W004	Non-Breeding	4	13/10/2021	11:40	T	2	5	30				2 Teal in flight, landed on Lough Dahybaun	TK
W024	Non-Breeding	2	13/10/2021	12:40	T	4	20	70				Four Teal in flight, Two pairs flying between ponds	JM
W029	Non-Breeding	3	12/11/2021	12:15	T	2	25	20				Pair in flight between ponds	JM
W040	Non-Breeding	3	16/12/2021	11:42	T	2	40	25				Pair in flight between ponds	JM
W056	Non-Breeding	3	09/02/2022	08:26	T	1	15	20				Two Teals in flight, landed on bog	TK
B05	Breeding	5	04/04/2022	18:26	T.	2	4					Pair of teal flying low over lake and landing near west shore	KL
B08	Breeding	5	04/04/2022	19:09	T.	2	12					Same as ref 4	KL
B12	Breeding	3	06/04/2022	07:16	T.	2	15					Pair of Teal took off from small pool and flew north	KL

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
B20	Breeding	6	10/05/2022	13:02	T.	1	5	5				Two Teal flew up from one pool to another	KL
B23	Breeding	4	11/05/2022	12:45	T.	2	2	10	5			Two Teal flew in from south west and landed on pool	KL
B24	Breeding	4	11/05/2022	13:02	T.	3	10	10				Two males chased 1 female in circle over pool	KL
B25	Breeding	4	11/05/2022	13:06	T.	1		10	20			One male Teal flew W away from pool	KL
B26	Breeding	4	11/05/2022	13:13	T.	2		20	5			Pair of teal flew up from pool to the north	KL
B37	Breeding	4	15/06/2022	11:47	T.	1	10	20	10			Teal flew from pool west over trees	KL
B38	Breeding	6	16/06/2022	11:32	T.	2	5					Short flight from one pool to another	KL
B40	Breeding	6	16/06/2022	13:23	T.	5						Two Teal flew from one pool to another	KL

Vantage Points Surveys Non-Flight Observations									
Season	Site	VP	Date	Observation Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor
Breeding	Oweninny	6	16/06/2022	08:01	T.	2	PB4, FL2	Two Teal seen swimming on pool	KL

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0126	12/10/2020	T.	1	FW4	Feeding	TK
Non-breeding	WF0133	27/10/2020	T.	5	FL2	Feeding	TK
Non Breeding	WF0139	07/12/2020	T.	4	FL1	Feeding	TK
Non Breeding	WF0145	17/12/2020	T.	4	FL1	Feeding	TK
Non Breeding	WF0147	11/01/2021	T.	2		Feeding	TK
Non Breeding	WF0149	08/02/2021	T.	7	FL1	Feeding	TK
Non Breeding	WF0158	08/03/2021	T.	4	FL1	Feeding	TK
Non Breeding	WF0159	11/10/2021	T.	2	FL1	Feeding	TK
Non Breeding	WF0162	11/10/2021	T.	2	FL1	Feeding	TK
Non Breeding	WF0168	22/10/2021	T.	2	FL1	Feeding	TK

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0173	22/10/2021	T.	2	FL1	Feeding	TK
Non Breeding	WF0007	19/11/2021	T.	3	FL1, PB4	Feeding	TK
Non Breeding	WF0011	19/11/2021	T.	4	FL1, PB4	Feeding	TK
Non Breeding	WF0026	14/12/2021	T.	11	FL1	Feeding	TK
Non Breeding	WF0042	10/01/2022	T.	6	FL1, PB4	Roosting	TK
Non Breeding	WF0054	22/01/2022	T.	4	FL1	Feeding	TK
Non Breeding	WF0064	07/02/2022	T.	2	FL1	Feeding	TK
Non Breeding	WF0073	07/02/2022	T.	5	FL1	Feeding	TK
Non Breeding	WF0087	07/02/2022	T.	9	FL1	Feeding	TK
Non Breeding	WF0092	22/02/2022	T.	2	FL1	Feeding	TK
Non Breeding	WF0094	22/02/2022	T.	6	FL1	Feeding	TK
Non Breeding	WF0102	01/03/2022	T.	2	FL1	Feeding	TK
Non Breeding	WF0114	01/03/2022	T.	2	FL1, PB4	Feeding	TK
Non Breeding	WF0120	14/03/2022	T.	3	FL1	Feeding	TK

Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R008	Non-Breeding	Western Transect	25/11/2020	T.	2	PB4	Foraging	SC
R036	Non-Breeding	Eastern Transects	16/12/2020	T.	2	FW1, PB3	Flushed from ground	TK
R068	Non-Breeding	Eastern Transects	01/04/2021	T.	2	PB4	Foraging	SC
R070	Non-Breeding	Eastern Transects	01/04/2021	T.	2	PB4	Flying	SC
R122	Non-Breeding	Western Transects	17/11/2021	T.	3	FL1	Feeding	TK
R184	Non-Breeding	Western Transect	11/03/2022	T.	4	FL1, PB4	Feeding	TK
R193	Non-Breeding	Western Transect	11/03/2022	T.	3	FL1	Feeding	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B403	24/04/2020	08:23:00	T.	1			JS
Gull	B411	24/04/2020	13:13:00	T.	1			JS
Transect	B056	19/05/2020	11:00:00	T.	2	WD4		JM
Transect	B028	19/05/2020	08:40:00	T.	2		Pair feeding on lake	JS
Transect	B041	19/05/2020	10:12:00	T.	1		Male on water	JS
Gull	B419	21/05/2020	13:00:00	T.	1		One male Teal	JS

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B069	16/06/2020	07:30-15:30	T.	4	WD4		JM
Transect	B099	16/06/2020	08:43:00	T.	3	PB4		JS
Transect	B177	21/07/2020		T.	1			JM
Transect	B443	16/04/2021		T.	1	PB4		JM
Transect	B332	09/07/2021		T.	2	FL1		JC
Transect	B0018	08/04/2022	13:10:00	T.	2	PB4	Pair of Teal on small lake	TK
Transect	B0106	24/05/2022	09:42:00	T.	2	FL1	Two Teal on small lake, suitable breeding habitat	TK
Wader	B0117	25/05/2022		T.	3	PB4	Three Teal in suitable breeding habitat, wetland area of bog.	TK
Transect	B0167	20/06/2022	10:58:00	T.	2	FL1	Pair of Teal in suitable breeding habitat	TK

TEAL FIGURES

12.0 Tufted Duck

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0195	Non-Breeding	5	14/10/2020	11:02	TU	20						Flock feeding on lake	JM
0197	Non-Breeding	5	10/11/2020	13:00	TU	25						Flock feeding on lake	JM
0199	Non-Breeding	5	09/12/2020	10:33	TU	8						Small flock on lake	JM
0217	Breeding	5	07/07/2021	19:40	TU	2	20					Pair of Tufted Ducks landed on lake	TK
W021	Non-Breeding	5	16/11/2021	15:01	TU	20	25					20 Tufted Ducks flew in, landed on lake	TK

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0020	24/11/2020	TU	22	FL1	Foraging on Lough Dahybawn in southwest corner	TK
Non Breeding	WF0025	07/12/2020	TU	5	FL1	Roosting	TK
Non Breeding	WF0036	17/12/2020	TU	12	FL1	Feeding	TK

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0088	11/10/2021	TU	24	FL1	Feeding/roosting	TK
Non Breeding	WF0160	22/02/2022	TU	2	FL1	Feeding	TK
Non Breeding	WF0171	14/03/2022	TU	2	FL1	Feeding	TK

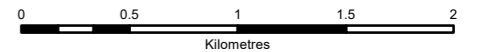
Winter Transects									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R119	Non-Breeding	Western Transect	11/03/2022	13:20	TU	2	FL1	Feeding	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B428	18/06/2020		TU	1	PB4	Tufted Duck male near southeast shore of Lough Daybaun	JS
Gull	B432	23/07/2020	10:02:00	TU	2		Two Tufted Duck on lake	JS

TUFTED DUCK FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Tufted Duck (*Aythya fuligula*) - Breeding Season 2020-2022
 - Tufted Duck (*Aythya fuligula*) - Non-Breeding Season 2020-2022
 - Tufted Duck (*Aythya fuligula*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 12
Tufted Duck (*Aythya fuligula*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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Draft:
D01



13.0 Little Grebe

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0100	Breeding	4	13/05/2020	13:15	LG	1							JM
0105	Breeding	4	10/06/2020	05:55	LG	1						Likely breeding	JM
0114	Breeding	5	14/07/2020	13:12	LG	1						Single bird diving on lake	JM
0191	Breeding	4	15/07/2020	14:18	LG	1						Adult swimming on lake	JM

Vantage Points Surveys Non-Flight Observations										
Season	Site	VP	Date	Observation Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor	
Breeding	Oweninny	4	05/04/2022	08:15	LG	1	PB4, HH3, PB3	Calling and swimming in pond	KL	
Breeding	Oweninny	4	15/06/2022	10:02	LG	1	PB4	Little Grebe heard Calling from pond	KL	
Breeding	Oweninny	5	15/07/2022	06:28	LG	1	FI2	Little Grebe heard calling from lake	KL	
Breeding	Oweninny	5	12/08/2022	09:29	LG	2	FI2	Two Little Grebe seen feeding on lake	KL	

Vantage Points Surveys Non-Flight Observations									
Season	Site	VP	Date	Observation Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor
Breeding	Oweninny	6	16/06/2022	08:04	LG	1	PB4, FL2	Little Grebe seen swimming on pool	KL

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0002	12/10/2020	LG	1	FL2	Feeding	TK
Non Breeding	WF0019	11/11/2020	LG	2	FL1	Feeding	TK
Non Breeding	WF0021	24/11/2020	LG	1	PB4	Foraging	TK
Non Breeding	WF0039	17/12/2020	LG	1	FL1	Feeding	TK
Non Breeding	WF0090	11/10/2021	LG	5	FL1	Feeding	TK
Non Breeding	WF0095	22/10/2021	LG	1	FL1	Feeding	TK
Non Breeding	WF0115	19/11/2021	LG	2	FL1	Feeding	TK
Non Breeding	WF0138	22/01/2022	LG	2	FL1	Feeding	TK
Non Breeding	WF0163	01/03/2022	LG	3	FL1	Feeding	TK
Non Breeding	WF0172	14/03/2022	LG	2	FL1	Feeding	TK

Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R054	Non-Breeding	Western Transect	24/02/2021	LG		FL2	Calling	SC
R077	Non-Breeding	Western Transect	30/03/2021	LG	2	FL2	Foraging	SC
R153	Non-Breeding	Western Transect	18/01/2022	LG	2	FL1	Feeding on lake	TK
R170	Non-Breeding	Western	21/02/2022	LG	1	FL1	Feeding	TK

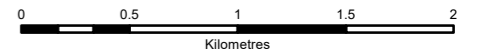
Breeding Bird Survey Data								
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B404	24/04/2020	08:23:00	LG	1			JS
Gull	B405	24/04/2020	08:57:00	LG	1			JS
Transect	B040	19/05/2020	10:12:00	LG	2		Calling	JS
Transect	B053	19/05/2020	09:15:00	LG	2	WD4		JM
Gull	B415	21/05/2020	08:45:00	LG	1			JS
Transect	B072	16/06/2020	07:30-15:30	LG	2	WD4		JM
Transect	B088	16/06/2020	09:34:00	LG	2	WD4		JS
Gull	B426	18/06/2020		LG	2	PB4	Two Little Grebe fishing	JS
Transect	B137	21/07/2020	10:15:00	LG	1	PB4		JS
Gull	B434	23/07/2020	10:02:00	LG	2		Two Little Grebe on lake	JS
Gull	B437	23/07/2020	11:43:00	LG	1		Little Grebe on water	JS
Transect	B161	24/08/2020		LG	1	PB4		TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B166	24/08/2020		LG	2	PB4		TK
Transect	B0005	08/04/2022	11:34:00	LG	1	PB4	Little Grebe on small lake, suitable nesting habitat	TK

LITTLE GREBE FIGURE



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Little Grebe (*Tachybaptus ruficollis*) - Breeding Season 2020-2022
 - Little Grebe (*Tachybaptus ruficollis*) - Non-Breeding Season 2020-2022
 - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 13
Little Grebe (*Tachybaptus ruficollis*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

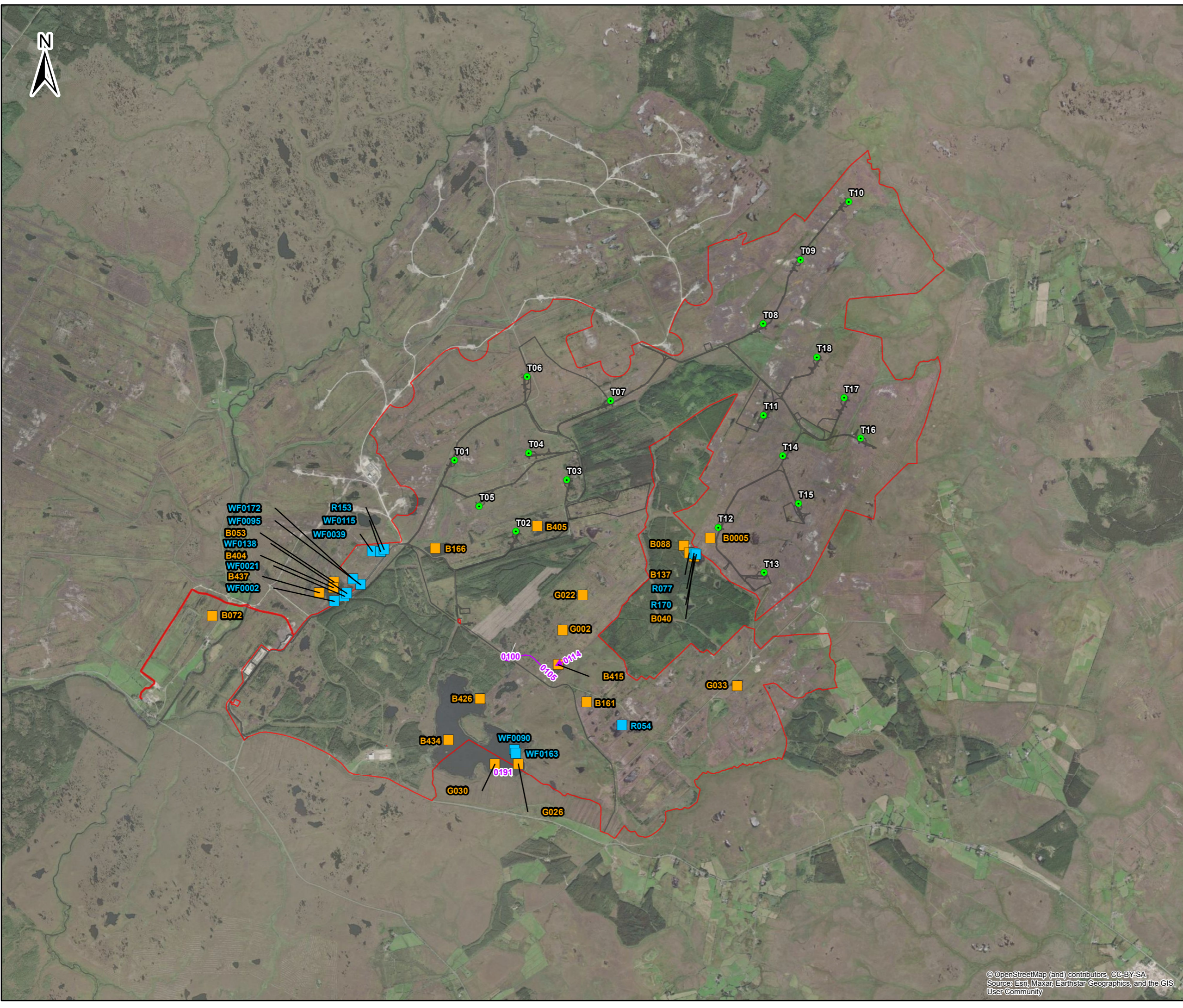
Project Director: D.Grehan

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10889-037-LG-FLIGHT-TOB-D01



14.0 Cormorant

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0272	Breeding	VP 7	16/04/2019	12:10	CA	4		100		320		Flying south - Dahybaun	JH
0139	Breeding	VP 5	23/05/2019	08:49	CA	2	30	60				Flew north from Lake	BM
0157	Non-Breeding	VP 5	13/02/2020	16:35	CA	1	40						JA
0060	Breeding	VP 3	12/05/2020	10:51	CA	1	20	108				Cormorant in flight, possibly heading towards large lake at southern boundaries of site	TK
0176	Breeding	VP 5	12/05/2020	11:00	CA	1							JM
0188	Breeding	VP 5	14/07/2020	12:05	CA	1						Present all day, roosting and swimming	JM
0207	Non-Breeding	VP 5	09/03/2021	11:45	CA	1	30	40				Pair swimming on lake	JM
0210	Breeding	VP 5	13/04/2021	13:50	CA	1	25					Adult flying from perch across lake	JM
0220	Breeding	VP 5	10/08/2021	08:19	CA	2	15	40				Two Cormorant flying over	TK
W002	Non-Breeding	VP 5	11/10/2021	08:55	CA	1		25	80			Cormorant flying over	TK

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
W032	Non-Breeding	VP 5	13/12/2021	12:32	CA	1	15	30	20			Cormorant flight, landed on Lough Dahybaun	TK
B10	Breeding	VP5	04/04/2022	19:16	CA	1	20					Cormorant flew west and landed on lake similar to Ref 2	KL
B55	Breeding	VP4	12/07/2022	12:31	CA	1		20	40			Cormorant flew over hill towards big lake	KL

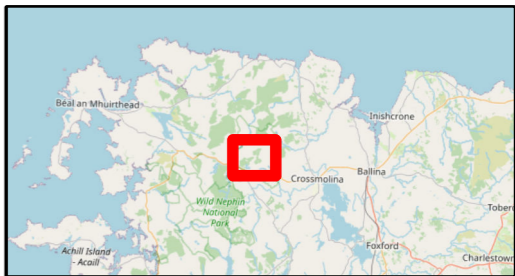
Vantage Points Surveys Non-Flight Observations									
Season	Site	VP	Date	Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor
Non-Breeding	Oweninny	5	13/12/2021	12:33	CA	1	FL1	Feeding	TK

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0030	07/12/2020	CA	1	FL1	Feeding	
Non Breeding	WF0037	17/12/2020	CA	1	FL1	Feeding	

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0131	10/01/2022	CA	1	FL1	Feeding	TK

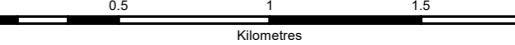
Breeding Bird Survey Data							
Survey Type	Ref.	Date	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B424	18/06/2020	CA	1	PB4	One Cormorant flew along north shore going west to east.	JS

CORMORANT FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Cormorant (*Phalacrocorax carbo*) - Breeding Season 2020-2022
- Cormorant (*Phalacrocorax carbo*) - Non-Breeding Season 2020-2022
- Cormorant (*Phalacrocorax carbo*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 14
Cormorant (*Phalacrocorax carbo*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:25,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-038-CA-FLIGHT-TOB-D01

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15.0 Heron

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0225	Breeding	6	27/04/2019	12:19	H.	1	12	60					JH
0138	Breeding	5	23/05/2019	08:26	H.	1	30					Flew to lake edge	BM
0182	Breeding	5	12/05/2020	19:05	H.	1	20	120					JM
0253	Breeding	6	11/06/2020	10:34	H.	1		55					JM
0034	Breeding	1	13/07/2020	18:06	H.	1	10	130				Heron in flight	TK
0254	Breeding	6	16/07/2020	13:15	H.	1		45				Adult bird flying north	JM
0261	Non-Breeding	6	12/12/2020	14:15	H.	1	30	25				Adult flying north	JM
0066	Non-Breeding	3	14/01/2021	16:04	H.	1	35					Grey Heron in flight, landed on bog	TK
0265	Breeding	6	15/04/2021	13:03	H.	1		74				Single bird in transit flying north	JM
0043	Breeding	1	07/09/2021	17:55	H.	1	50	65				Adult flying west of VP	JM
0222	Breeding	5	08/09/2021	19:32	H.	1		20	70			Heron flying over	TK
W006	Non-Breeding	2	13/10/2021	15:35	H	2	25	80				Two Heron in flight across site	JM
W009	Non-Breeding	6	20/10/2021	13:08	H	1		35				Heron flying over	TK
W025	Non-Breeding	6	09/11/2021	13:12	H	1		15	28			Heron flying over	JM
W037	Non-Breeding	4	21/12/2021	13:20	H	1	10	25					TK
W052	Non-Breeding	6	12/01/2022	11:03	H	1		29	48			Heron flying over	JM
W057	Non-Breeding	3	09/02/2022	11:55	H	2	5	45				Heron flying over	TK

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
B34	Breeding	1	24/05/2022	15:23	H.	1		25	3			Heron flew east along edge of forestry	KL
B52	Breeding	4	12/07/2022	10:32	H.	1	10	30	20			Heron flew from side of pool, was mobbed by Ma and then flew north	KL
B57	Breeding	6	13/07/2022	12:49	H.	1	10	20				Heron flew down and landed on the edge of pool	KL
B58	Breeding	6	13/07/2022	13:49	H.	1	70	10				Heron seen flying low in front of VP	KL
B60	Breeding	5	12/08/2022	10:03	H.	1	5	60	10			Heron seen flying across lake and landing on far bank	KL

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non Breeding	WF0015	11/11/2020	H.	1	FL1	Feeding	
Non-breeding	WF0024	25/11/2020	H.	1	PB4	Foraging	
Non Breeding	WF0066	08/02/2021	H.	1	FW1	Standing in stream	
Non Breeding	WF0067	08/02/2021	H.	1	FW1	Standing in stream	
Non-breeding	WF0071	24/02/2021	H.	1	FW4	Foraging and flying	
Non-breeding	WF0081	31/03/2021	H.	1	PB4	Flying	

Waterfowl surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-breeding	WF0082	31/03/2021	H.	1	PB4	Flying	
Non Breeding	WF0085	11/10/2021	H.	1	FL1	Feeding at lake edge	TK
Non Breeding	WF0116	19/11/2021	H.	1	FL1	Feeding	TK
Non Breeding	WF0134	10/01/2022	H	1	FL1	Feeding	TK
Non Breeding	WF0176	14/03/2022	H	1	PB4	Feeding	TK

Winter Transects								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R043	Non-Breeding	Eastern Transects	25/01/2021	H.	1	PB4	Flying Flying SSW along river	SC
NA	Non-Breeding	Western Transect	27/01/2021	H.	1	PB4	Foraging. Flew northeast due to surveyor	SC

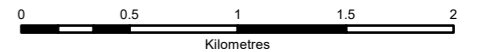
Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B407	24/04/2020	11:29:00	H.	1			JS
Transect	B055	19/05/2020	09:50:00	H.	1	WD4	Moorland/Scrub/Lake/FW and Woodland Birds	JM
Transect	B068	16/06/2020	07:30-15:30	H.	1	WD4	Moorland/Scrub/Lake/FW and Woodland Birds	JM
Transect	B179	21/07/2020		H.	1			JM

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B154	24/08/2020	10:48:00	H.	1	PB4		TK
Transect	B189	22/09/2020		H.	1	PB4		TK
Transect	B441	16/04/2021		H.	1	PB4		JM
Transect	B323	09/07/2021		H.	1	PB3	Heron flying southwest	JC

GREY HERON FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Grey Heron (*Ardea cinerea*) - Breeding Season 2020-2022
 - Grey Heron (*Ardea cinerea*) - Non-Breeding Season 2020-2022
 - Grey Heron (*Ardea cinerea*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 15
Grey Heron (*Ardea cinerea*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

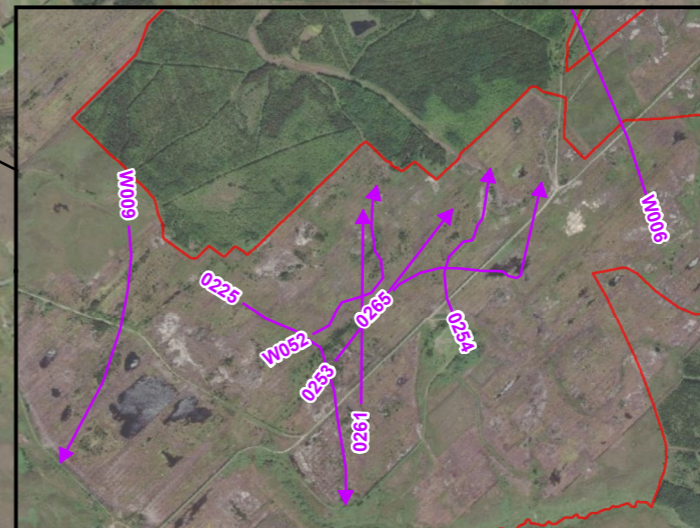
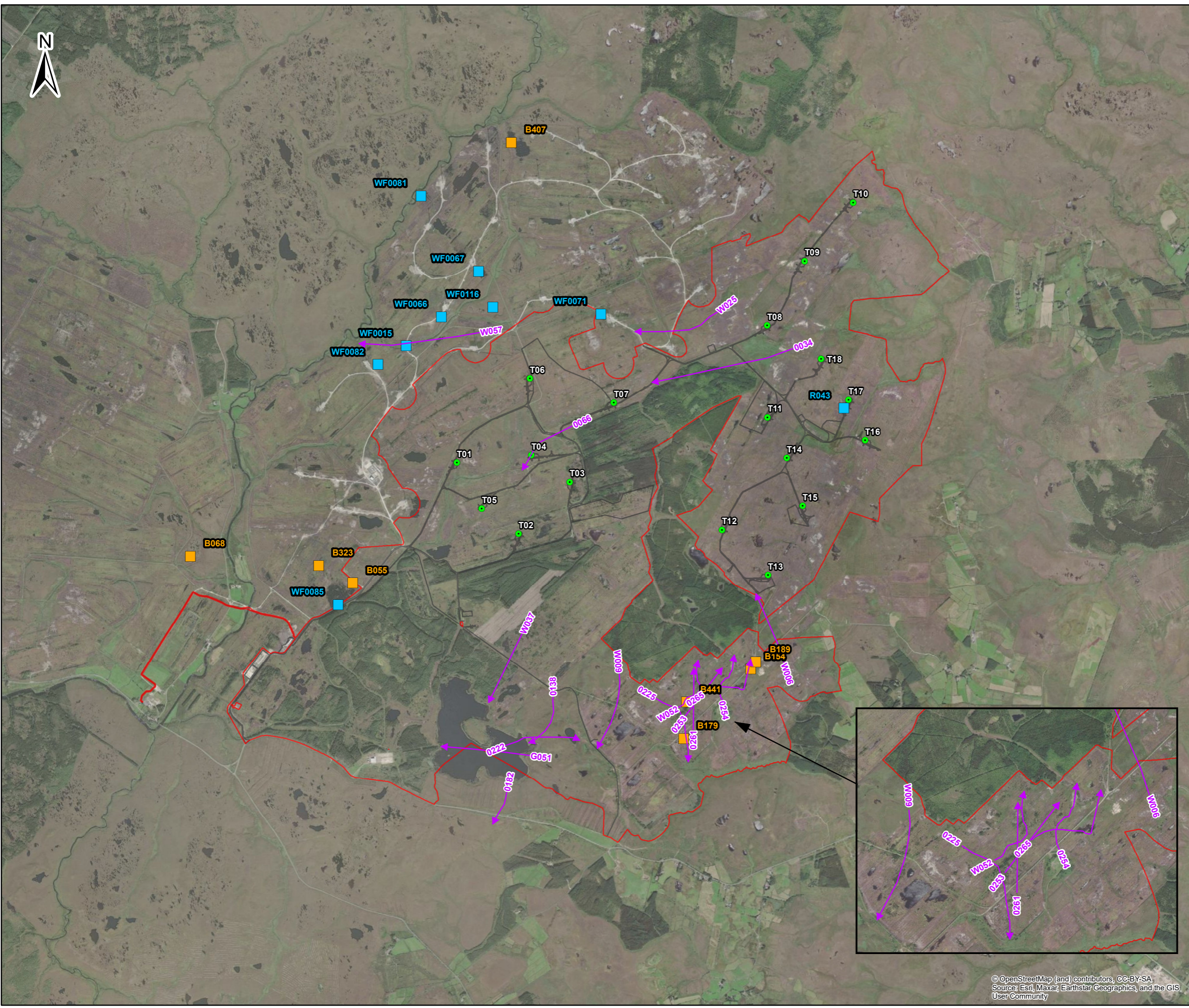
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-039-H.-FLIGHT-TOB-D01



16.0 Sparrowhawk

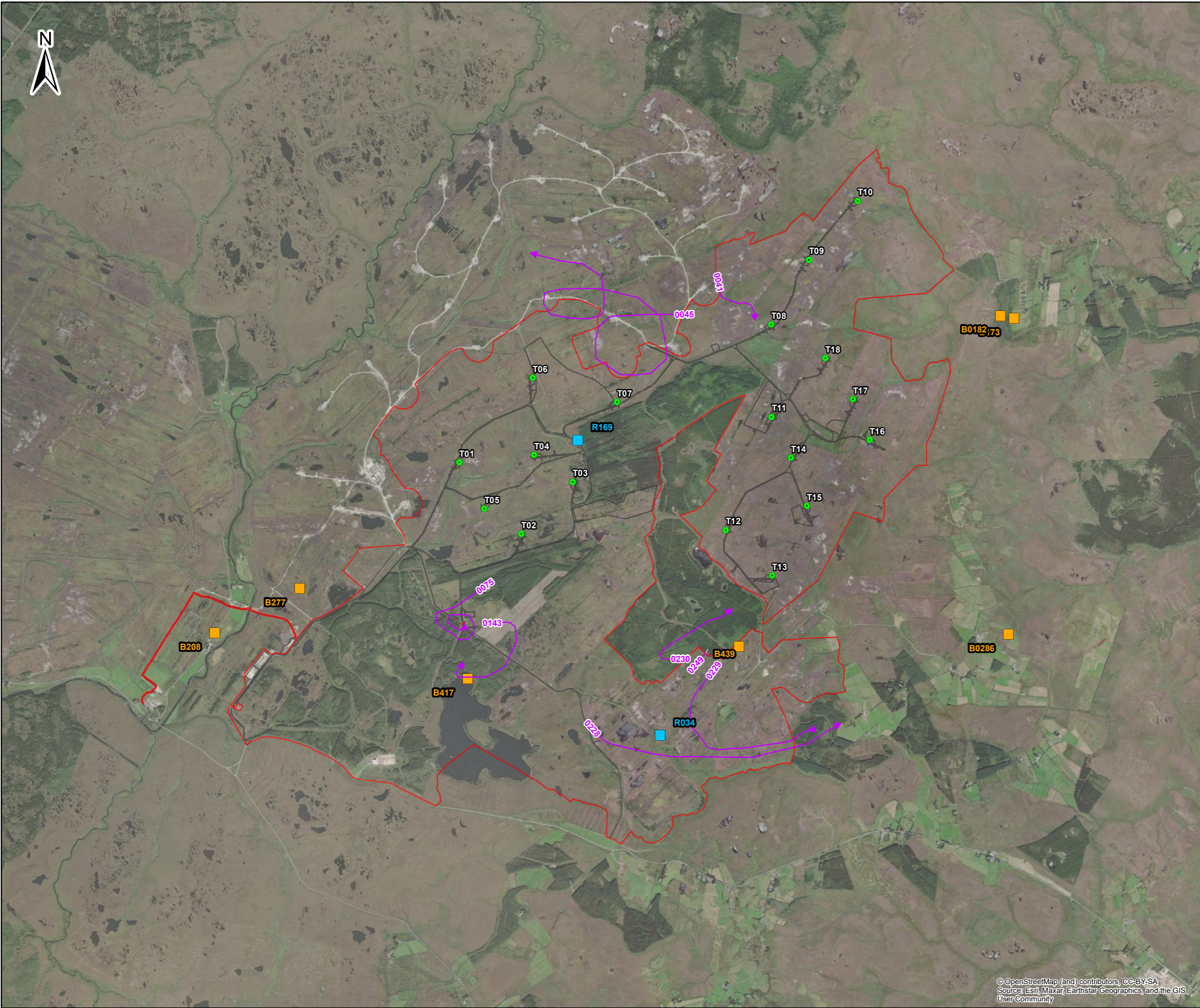
Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0228	Breeding	6	29/07/2019	15:59	SH	1	70	10		60		Female carrying prey dropped into forest for nest	JH
0229	Breeding	6	29/07/2019	16:23	SH	1	158					Taking prey westward then flying to nest	JH
0143	Breeding	5	23/08/2019	09:56	SH	1	30	60				Circling	BM
0230	Breeding	6	28/08/2019	11:32	SH	1	9					Hunting	JH
0075	Breeding	4	21/04/2020	17:47	SH	1			22			Flying high/circling over forestry/track, lost visual over forest in background	JS
0045	Breeding	2	22/04/2020	17:47	SH	1			98	190		Sparrowhawk soaring, being mobbed by Hooded Crow, soared higher to avoid	TK
0249	Breeding	6	14/05/2020	18:40	SH	1	15						JM
0041	Breeding	1	15/04/2021	12	SH	1	15						TK

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R034	Non-Breeding	Western Transect	25/11/2020	SH	1	PB4	Hunting	SC

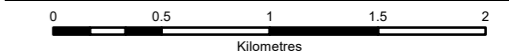
Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R169	Non-Breeding	Western Transect	21/02/2022	SH	1	PB4	In flight, Sparrowhawk took flight from bush, seen briefly	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Observation Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B417	21/05/2020	09:10:00	SH	1		Sparrowhawk flew over lake heading north	JS
Raptor	B173	26/08/2020	13:52:00	SH	1	GS4		TK
Raptor	B208	24/09/2020		SH	1	GS4		TK
Transect	B439	16/04/2021		SH	1	PB4		JM
Transect	B277	27/05/2021	09:13:00	SH	1	WD4	Male hunting	JM
Raptor	B0182	11/07/2022	12:09:00	SH	1	GA1	Female Sparrowhawk soaring over farmland/bog/forestry	TK

SPARROWHAWK FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Sparrowhawk (*Accipiter nisus*) - Breeding Season 2020-2022
 - Sparrowhawk (*Accipiter nisus*) - Non-Breeding Season 2020-2022
 - Sparrowhawk (*Accipiter nisus*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 16 Sparrowhawk (*Accipiter nisus*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-040-SH-FLIGHT-TOB-D01

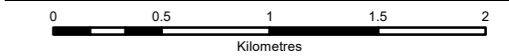
17.0 Buzzard

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0051	Non-Breeding	2	14/10/2020	13:52	BZ	1	40					Buzzard in flight low to ground, hunting.	TK
0119	Non-Breeding	4	15/10/2020	13:22	BZ	1		40				Buzzard in flight	TK
B16	Breeding	7	26/04/2022	12:08	BZ	1				30	60	Buzzard circled over edge of forestry then flew south	KL

BUZZARD FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Buzzard (*Buteo buteo*) Flightlines - Flightlines
 - Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: [REDACTED]

Project: Oweninny Wind Farm Phase 3

Title: Appendix 8-1 Figure 17 Buzzard (*Buteo buteo*) observations over the survey period (Apr 2019 - Sept 2022)

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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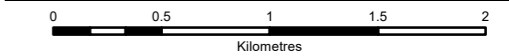
18.0 Golden Eagle

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0006	Breeding	1	28/08/2019	12:25	EA	1			420			Adult circling on thermal	

GOLDEN EAGLE FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Golden Eagle (*Aquila chrysaetos*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 18 Golden Eagle (*Aquila chrysaetos*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-042-EA-FLIGHT-TOB-D01

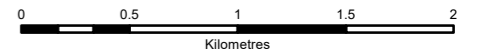
19.0 Egyptian Vulture

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0134	Breeding	4	11/08/2021	14:21	EGYVU	1	10	25	218			Egyptian Vulture soaring to the east of VP 4	TK

EGYPTIAN VULTURE FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Egyptian Vulture (*Neophron percnopterus*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 19 Egyptian Vulture (*Neophron percnopterus*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-043-EGYVU-FLIGHT-TOB-D01 **Draft: D01**



20.0 Curlew

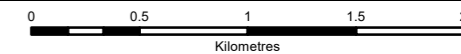
Breeding Bird Survey Data							
Survey Type	Ref.	Date	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B429	18/06/2020	CU	1	PB4	Curlew left south shore of Lough Daybaun, flew west then circled and flew east out of view	JS

CURLEW FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Curlew (*Numenius arquata*) - Breeding Season 2020-2022



NOTES

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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client:

Bord na Móna

Project:

Oweninny Wind Farm
Phase 3

Title:

Appendix 8-1 Figure 20
Curlew (*Numenius arquata*)
observations over the survey period
(Apr 2019 - Sept 2022)

Scale @ A3:

1:35,000

Prepared by:
S.Pezzetta

Checked:
J.Sherry

Date:
March 2023

Project Director: D.Grehan

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D01

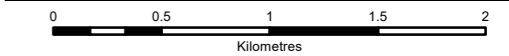
21.0 Whimbrel

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0277	Breeding	7	28/08/2019	11:19	WM	1	38					Flew across bog, landed then went over forestry	JH

WHIMBREL FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Whimbrel (*Numenius phaeopus*) - Flightlines
Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 21
Whimbrel (*Numenius phaeopus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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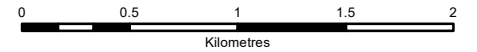
22.0 Dunlin

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B344	14/07/2021		DN	1	PB4	Dunlin in suitable habitat	TK
Wader	B0188	13/07/2022	10:20:00	DN	2	PB4	Pair Of Dunlin roosting/feeding at edge of lake	TK

DUNLIN FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Dunlin (*Calidris alpina*) - Breeding Season 2020-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	27/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 22
Dunlin (*Calidris alpina*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

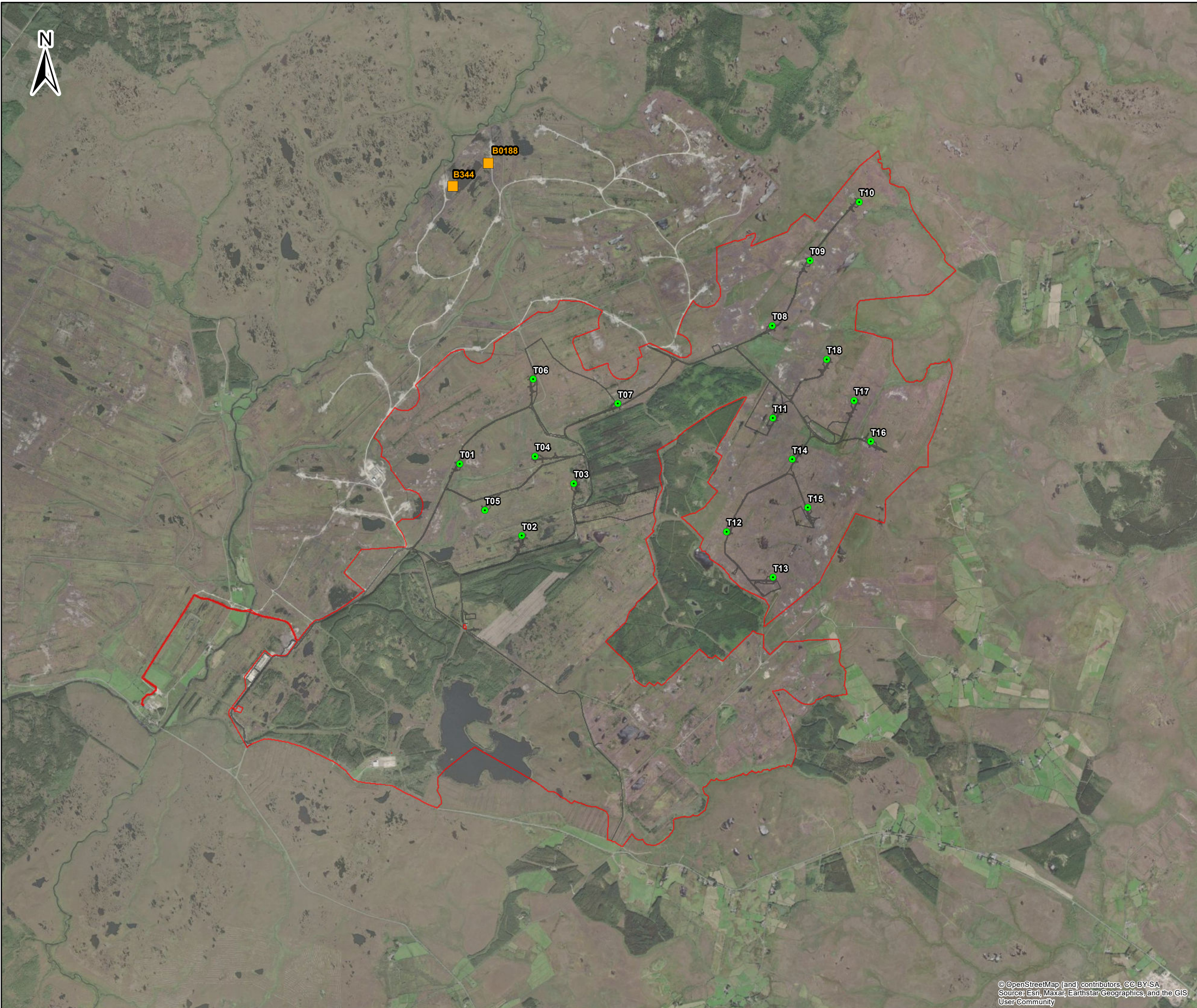
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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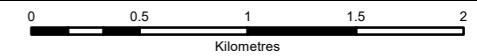
23.0 Redshank

Breeding Bird Survey Data							
Survey Type	Ref.	Date	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B408	19/08/2021	RK	1	PB4	Taken from species list on Gull survey	JM
Gull	B025	24/04/2021	RK	1	PB3	Lone bird at edge of bog pool. Possible breeder or migrant	TK

REDSHANK FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Redshank (*Tringa totanus*) - Breeding Season 2020-2022



- NOTES**
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 4. ALL LEVELS RELATE TO ORDANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 23 Redshank (*Tringa totanus*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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Draft: **D01**

10889-047-RK-FLIGHT-TOB-D01

24.0 Greenshank

Vantage Points Surveys Non-Flight Observations								
Season	VP	Date	Time	BTO Code	Abundance	Habitat Code	Field Notes	Surveyor
Non-Breeding	5	10/02/2021	09:33	GK	1	FL1	Single bird feeding along lakeshore all day	JM

Waterfowl Surveys							
Season	Ref	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-Breeding	WF0057	11/01/2021	GK	1		Feeding	TK
Non-Breeding	WF0060	08/02/2021	GK	1	PB4	Flying	TK
Non-Breeding	WF0129	14/12/2021	GK	1	PB4	Roosting	TK
Non-Breeding	WF0142	22/01/2022	GK	1	FL1	Flying	TK
Non-Breeding	WF0146	07/02/2022	GK	1	PB4	Feeding	TK
Non-Breeding	WF0157	22/02/2022	GK	2	PB4	Flying	TK
Non-Breeding	WF0164	01/03/2022	GK	1	FL1	Feeding	TK
Non-Breeding	WF0174	14/03/2022	GK	1	PB4	Feeding	TK

Winter Transects Surveys									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R139	Non-Breeding	Western Transect	20/12/2021	10:45	GK	2	PB4	In flight, landed at small lake edge two Greenshank in flight, landed at edge of small lake	TK
R194	Non-Breeding	Western Transect	11/03/2022	12:16	GK	1	FL1	Feeding	TK

Roost Watch Survey Observations									
Season	Site	HHVP	Date	BTO	No. of Birds	Time of flight	Habitat Code	Activity	Surveyor
Non-Breeding	Oweninny	1	09/02/2021	GK	1	16:00	FL1	Single bird foraging on edge of lake	JM

Breeding Bird Survey Data							
Survey Type	Ref.	Date	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B215	27/04/2021	GK	1	PB4	Greenshank present in possibly suitable breeding habitat	TK
Wader	B268	26/05/2021	GK	1	FL1		TK
Wader	B0051	27/04/2022	GK	2	PB4	Pair of Greenshank in suitable nesting habitat	TK
Wader	B0111	25/05/2022	GK	1	PB4	Greenshank in suitable breeding habitat	TK
Wader	B0176	23/06/2022	GK	1	PB4	Greenshank flushed from wetland area, probably breeding	TK

GREENSHANK FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Greenshank (*Tringa nebularia*) - Breeding Season 2020-2022
- Greenshank (*Tringa nebularia*) - Non-Breeding Season 2020-2022
- ↗ Greenshank (*Tringa nebularia*) - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 24
Greenshank (*Tringa nebularia*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:26,781

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-048-GK-FLIGHT-TOB-D01



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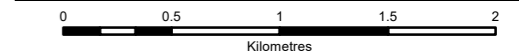
25.0 Lapwing

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0269	Breeding	6	15/07/2021	21.37	L.	2			85			Pair of Lapwing flying over	TK

LAPWING FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Lapwing (*Vanellus vanellus*) Flightlines -
Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 25
Lapwing (*Vanellus vanellus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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26.0 Ringed-Plover

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0289	Breeding	7	21/04/2020	08:57	RP	1	10					Ringed Plover seen briefly in flight before land on area of bare peat with stony patches and wet areas	TK
0098	Breeding	4	13/05/2020	11:55	RP	1	30						JM
0109	Breeding	4	10/06/2020	14:05	RP	2	25					Likely breeding	JM
0033	Breeding	1	13/07/2020	16:11	RP	1	15					Ringed Plover seen in flight , landed on bare patch of cutover bog	TK
0111	Breeding	4	15/07/2020	12:25	RP	2	10					Adults calling in flight	JM
W015	Non-Breeding	7	15/11/2021	12:58	RP	1	5	20				Ringed Plover in flight, landed on bog	TK

Winter Transects surveys									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R051	Non-Breeding	Eastern Transects	22/02/2021		RP	2	PB4	Flew in and landed by car, near turbine no. 10. Agitated pair	SC
R059	Non-Breeding	Eastern Transects	01/04/2021		RP	4	PB4	Two pairs	SC
R061	Non-Breeding	Eastern Transects	01/04/2021		RP	3	PB4	Heard alarm calling	SC
R066	Non-Breeding	Eastern Transects	01/04/2021		RP	1	PB4	Heard calling	SC

Winter Transects surveys									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R176	Non-Breeding	Eastern Transects	09/03/2022	12:49	RP	2	PB4	Pair of Ringed Plover back on breeding grounds, in suitable habitat	TK
R177	Non-Breeding	Eastern Transects	09/03/2022	12:50	RP	2	PB4	Pair of Ringed Plover back on breeding grounds, In suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B021	21/04/2020	09:50:00	RP	1	PB3	Displaying pair	JM
Wader	B023	22/04/2020	09:55:00	RP	1	PB3	Displaying male	JM
Wader	B027	22/04/2020	15:20:00	RP	2	PB3	Displaying pair	JM
Transect	B005	28/04/2020	08:10:00	RP	2		Displaying pair	JM
Transect	B012	29/04/2020	08:40:00	RP	2		Displaying pair	JM
Wader	B061	20/05/2020	08:35:00	RP	1	PB4	Male displaying near lake	JM
Gull	B413	21/05/2020	08:25:00	RP	2		Two Ringed Plover flushed at ING 101233 319951	JS
Transect	B078	16/06/2020	12:09:00	RP	1	PB4		JS
Wader	B106	17/06/2020	09:07:00	RP	1	PB4	In suitable breeding habitat	JS
Wader	B108	17/06/2020	10:10:00	RP	2	PB4	In suitable breeding habitat	JS
Wader	B109	17/06/2020	10:45:00	RP	2	PB4	In suitable breeding habitat	JS
Wader	B110	17/06/2020	11:14:00	RP	1	PB4	In suitable breeding habitat	JS

Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B111	17/06/2020	11:31:00	RP	1	PB4	In suitable breeding habitat	JS
Wader	B112	17/06/2020	11:49:00	RP	1	PB4	In suitable breeding habitat	JS
Wader	B113	17/06/2020	11:52:00	RP	1	PB4	In suitable breeding habitat	JS
Wader	B114	17/06/2020	12:07:00	RP	1	PB4	In suitable breeding habitat	JS
Wader	B116	17/06/2020	15:01:00	RP	1	PB4	In suitable breeding habitat	JS
Wader	B119	17/06/2020	15:21:00	RP	2	PB4	In suitable breeding habitat	JS
Gull	B421	18/06/2020		RP	2	PB4	Two Ringed Plover feeding along pond edge	JS
Wader	B143	22/07/2020	09:20:00	RP	2	PB4		JS
Wader	B144	22/07/2020	09:38:00	RP	1	PB4		JS
Wader	B145	22/07/2020	10:15:00	RP	2	PB4		JS
Transect	B440	16/04/2021		RP	1	PB4		JM
Wader	B210	26/04/2021	08:56:00	RP	2	PB4	Pair of Ringed Plover in suitable breeding habitat	TK
Wader	B211	26/04/2021	09:11:00	RP	2	PB4	Pair of Ringed Plover in suitable breeding habitat	TK
Transect	B236	12/05/2021		RP	2	PB4		TK
Transect	B246	24/05/2021		RP	2	PB3		TK
Wader	B257	25/05/2021		RP	2	PB3		TK
Wader	B258	25/05/2021		RP	2	PB3		TK

Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B260	25/05/2021		RP	2	PB3		TK
Wader	B263	26/05/2021		RP	2	PB4		TK
Wader	B271	26/05/2021		RP	1	PB4		TK
Transect	B286	02/06/2021	10:12:00	RP	3	PB4	Pair of Ringed Plover, one chick seen with adult	TK
Transect	B287	02/06/2021	10:20:00	RP	2	PB4	Pair Of Ringed Plover, agitated behaviour, probable breeding	TK
Transect	B289	02/06/2021	11:56:00	RP	2	PB4	Suitable breeding habitat.	TK
Transect	B307	09/06/2021		RP		PB3	Suitable breeding habitat.	TK
Wader	B310	16/06/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B311	16/06/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B317	17/06/2021		RP	2	PB4	Ringed Plover with chick	TK
Wader	B339	14/07/2021		RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B341	14/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B342	14/07/2021		RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B343	14/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B345	14/07/2021		RP	1	PB4	Ringed Plover in suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B346	14/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B347	14/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B349	15/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B350	15/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B351	15/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B354	15/07/2021		RP	1	PB4	Ringed Plover in suitable habitat	TK
Transect	B360	16/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Transect	B361	16/07/2021		RP	2	PB4	Pair of Ringed Plover, agitated behaviour	TK
Wader	B381	19/08/2021	09:48:00	RP	1	PB4	Ringed Plover in suitable habitat	
Transect	B0013	08/04/2022	11:06:00	RP	4	PB4	Two pairs of Ringed Plover seen in flight over area of degraded bog, suitable breeding habitat	TK
Transect	B0041	26/04/2022		RP	2	PB4	Pair of Ringed Plover in suitable nesting habitat	TK
Wader	B0052	27/04/2022		RP	2	PB4	Pair of Ringed Plover in suitable nesting habitat	TK
Wader	B0055	28/04/2022		RP	2	PB4	Pair of Ringed Plover in suitable nesting habitat	TK
Wader	B0056	28/04/2022		RP	2	PB4	Pair of Ringed Plover in suitable nesting habitat	TK
Wader	B0057	28/04/2022		RP	2	PB4	Pair of Ringed Plover in suitable nesting habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B0113	25/05/2022		RP	2	PB4	Pair of Ringed Plover in suitable breeding habitat	TK
Wader	B0114	25/05/2022		RP	1	PB4	Ringed Plover in suitable breeding habitat	TK
Wader	B0119	26/05/2022		RP	2	PB4	Pair of Ringed Plover in suitable breeding habitat	TK
Wader	B0120	26/05/2022		RP	1	PB4	Ringed Plover in suitable breeding habitat	TK
Wader	B0121	26/05/2022		RP	2	PB4	Pair of Ringed Plover in suitable breeding habitat	TK
Transect	B0133	27/05/2022		RP	2	PB4	Pair of Ringed Plover in suitable breeding habitat	TK
Transect	B0149	15/06/2022	09:50:00	RP	2	PB4	Pair of Ringed Plover in suitable Breeding habitat. Alarm calling	TK
Transect	B0150	15/06/2022	10:40:00	RP	2	PB4	Pair of Ringed Plover in suitable Breeding habitat. Alarm calling	TK
Transect	B0165	20/06/2022	11:32:00	RP	1	PB4	Ringed Plover in suitable breeding habitat	TK
Wader	B0168	21/06/2022	10:56:00	RP	2	PB4	Pair of Ringed Plover on degraded bog, agitated behaviour	TK
Wader	B0169	21/06/2022	11:33:00	RP	2	PB4	Pair of Ringed Plover on degraded bog, agitated behaviour	TK

Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B0170	21/06/2022	11:50:00	RP	2	PB4	Pair of Ringed Plover on degraded bog, agitated behaviour	TK
Wader	B0171	21/06/2022	12:10:00	RP	2	PB4	Pair of Ringed Plover took flight, landed again on bog	TK
Wader	B0177	23/06/2022		RP	2	PB4	Pair of Ringed Plover on bog, agitated behaviour	TK
Wader	B0178	23/06/2022		RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B0179	23/06/2022		RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B0180	23/06/2022		RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B0189	13/07/2022	10:11:00	RP	2	PB4	Pair of Ringed Plover at edge of small lake, agitated behaviour.	TK
Wader	B0190	13/07/2022	12:02:00	RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B0191	13/07/2022	12:21:00	RP	2	PB4	Pair of Ringed Plover in suitable habitat	TK
Wader	B0192	13/07/2022	12:30:00	RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B0193	13/07/2022	12:35:00	RP	1	PB4	Ringed Plover in suitable habitat	TK
Wader	B0197	14/07/2022	10:23:00	RP	3	PB4	One adult and two juvenile Ringed Plovers in suitable breeding habitat	TK
Wader	B0198	14/07/2022	12:08:00	RP	2	PB4	Pair of Ringed Plover in suitable habitat	TK

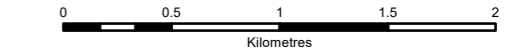
Breeding Bird Survey Data								
Survey Type	Ref	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0209	15/07/2022	09:24:00	RP	1	PB4	Ringed Plover in suitable habitat	TK
Transect	B0210	15/07/2022	10:11:00	RP	2	PB4	Ringed Plovers in suitable habitat	TK
Transect	B0211	15/07/2022	11:45:00	RP	1	PB4	Ringed Plover in suitable habitat	TK

RINGED PLOVER FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Ringed Plover (*Charadrius hiaticula*) - Breeding Season 2020-2022
- Ringed Plover (*Charadrius hiaticula*) - Non-Breeding Season 2020-2022
- Ringed Plover (*Charadrius hiaticula*) - Flightlines Breeding and Non-Breeding 2019-2022



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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 26 Ringed Plover (*Charadrius hiaticula*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

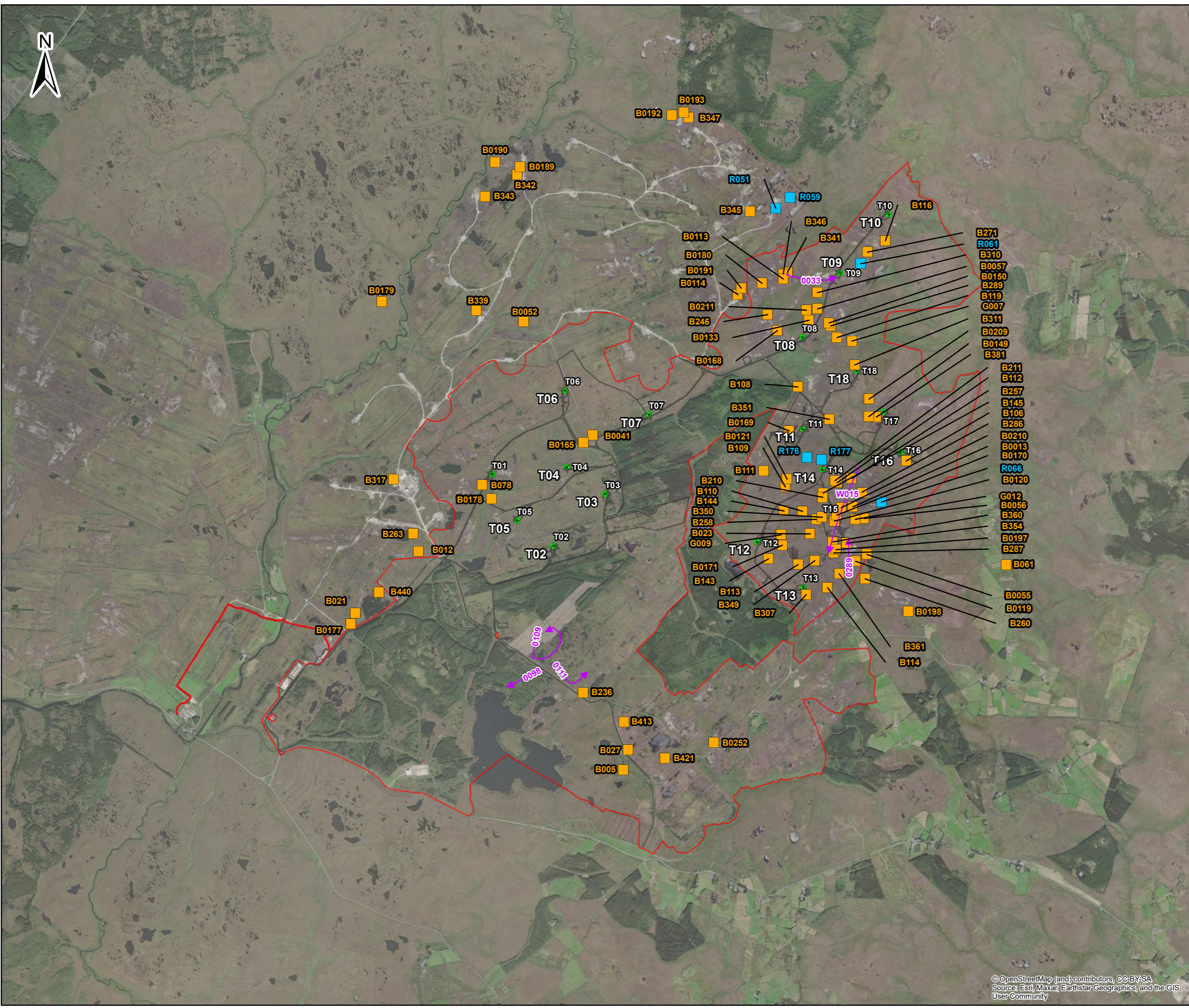
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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Draft: **D01**



27.0 Common Sandpiper

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0102	Breeding	4	13/05/2020	17:00	CS	2	15						JM
0107	Breeding	4	10/06/2020	08:23	CS	2	10					Likely Breeding	JM
0252	Breeding	6	11/06/2020	08:16	CS	2	25						JM
0116	Breeding	4	15/07/2020	18:05	CS	2	15					Adults briefly in flight	JM
0126	Breeding	4	14/04/2021	08:12	CS	1	10	15				Adult calling and flying	JM
0129	Breeding	4	06/05/2021	18:12	CS	1	25					Male in brief song flight	JM
0267	Breeding	6	04/06/2021	10:12	CS	2	35					Pair in song flight near VP	JM

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B020	21/04/2020	09:40:00	CS	1	PB3	Displaying pair	JM
Wader	B022	22/04/2020	07:50:00	CS	1	PB3	Calling male	JM
Gull	B406	24/04/2020	11:25:00	CS	1			JS
Gull	B412	24/04/2020	13:16:00	CS	1			JS
Transect	B013	29/04/2020	09:00:00	CS	2		Displaying pair	JM

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B029	19/05/2020	08:49:00	CS	1		Flew from road to pond	JS
Transect	B054	19/05/2020	09:40:00	CS	2	WD4		JM
Wader	B046	20/05/2020	13:17:00	CS	1	PB3	Flushed and flew southwest down river/stream	JS
Wader	B062	20/05/2020	11:45:00	CS	2	PB4	Pair in flight near small lake	JM
Gull	B418	21/05/2020	09:37:00	CS	1		Common Sandpiper at ING 100296 319915, flew from shore S over water and turned east	JS
Transect	B066	16/06/2020	07:30-15:30	CS	2	WD4		JM
Transect	B079	16/06/2020	12:09:00	CS	1	PB4		JS
Transect	B104	16/06/2020	08:19:00	CS	1	PB4		JS
Wader	B115	17/06/2020	12:13:00	CS	1	PB4	In suitable breeding habitat	JS
Gull	B427	18/06/2020		CS	1	PB4	One Common Sandpiper flushed from lake shore of tombola	JS
Wader	B214	27/04/2021		CS	2	PB4	Pair of Common Sandpipers in suitable breeding habitat	TK
Wader	B216	27/04/2021		CS	2	PB4	Pair of Common Sandpipers in suitable breeding habitat	TK
Wader	B217	27/04/2021		CS	2	PB4	Pair of Common Sandpipers in suitable breeding habitat	TK
Wader	B259	25/05/2021		CS	1	PB3		TK
Wader	B262	26/05/2021		CS	1	FL1		TK
Wader	B264	26/05/2021		CS	1	PB4		TK
Wader	B267	26/05/2021		CS	1	PB4		TK
Wader	B269	26/05/2021		CS	1	PB4		TK
Wader	B270	26/05/2021		CS	1	PB4		TK
Transect	B304	09/06/2021		CS	2	PB4	Agitated behaviour	TK

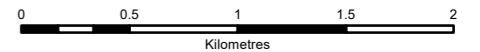
Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B313	16/06/2021		CS	1	PB4	Common Sandpiper alarm calling	TK
Wader	B316	17/06/2021		CS	2	PB4	Pair of Common Sandpipers	TK
Wader	B318	17/06/2021		CS	1	PB4	Common Sandpiper agitated behaviour	TK
Wader	B320	17/06/2021		CS	1	PB4	Common Sandpiper agitated behaviour	TK
Wader	B321	17/06/2021		CS	2	PB4	Pair of Common Sandpipers	TK
Wader	B337	14/07/2021		CS	1	PB4	Common Sandpiper. Agitated Behaviour.	TK
Wader	B340	14/07/2021		CS	1	PB4	Common Sandpiper. Agitated Behaviour.	TK
Wader	B348	15/07/2021		CS	1	PB4	Common Sandpiper. Agitated Behaviour.	TK
Transect	B372	16/08/2021		CS	1	PB3	Common Sandpiper. Alarm calling	TK
Wader	B376	17/08/2021		CS	1	PB4	Common Sandpiper. Alarm calling	TK
Wader	B377	17/08/2021		CS	1	PB4	Common Sandpiper. Alarm calling	TK
Wader	B379	19/08/2021	08:12:00	CS	1	PB4	Common Sandpiper in suitable habitat	
Wader	B0048	27/04/2022		CS	2	PB4	Pair of Common Sandpiper in suitable breeding habitat.	TK
Wader	B0049	27/04/2022		CS	1	PB4	Common Sandpiper in suitable breeding habitat.	TK
Wader	B0050	27/04/2022		CS	1	PB4	Common Sandpiper in suitable breeding habitat.	TK
Wader	B0053	28/04/2022		CS	1	PB4	One Common Sandpiper in suitable nesting habitat.	TK
Wader	B0054	28/04/2022		CS	2	PB4	Pair of Common Sandpiper in suitable breeding habitat.	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B0109	25/05/2022		CS	1	PB4	Common Sandpiper in suitable breeding habitat	TK
Wader	B0110	25/05/2022		CS	1	PB4	Common Sandpiper in suitable breeding habitat	TK
Wader	B0118	26/05/2022		CS	1	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0123	27/05/2022		CS	1	PB4	Common Sandpiper in suitable breeding habitat	TK
Transect	B0143	15/06/2022	11:50:00	CS	1	PB4	Common Sandpiper at edge of small pond, suitable breeding habitat.	TK
Wader	B0174	23/06/2022		CS	1	PB4	Pair of Common Sandpipers in suitable habitat	TK
Wader	B0175	23/06/2022		CS	2	PB4	Pair of Common Sandpipers at edge of lake, agitated behaviour	TK
Wader	B0186	13/07/2022	10:32:00	CS	1	PB4	Common Sandpiper in suitable habitat	TK
Wader	B0187	13/07/2022	11:05:00	CS	1	PB4	Common Sandpiper circling over small lake, alarm calling	TK
Wader	B0195	14/07/2022	10:34:00	CS	1	PB4	One Common Sandpiper in suitable breeding habitat.	TK

COMMON SANDPIPER FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Common Sandpiper (*Actitis hypoleucos*) - Breeding Season 2020-2022
 - ↖ Common Sandpiper (*Actitis hypoleucos*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P.	J.S.

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 27
Common Sandpiper (*Actitis hypoleucos*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

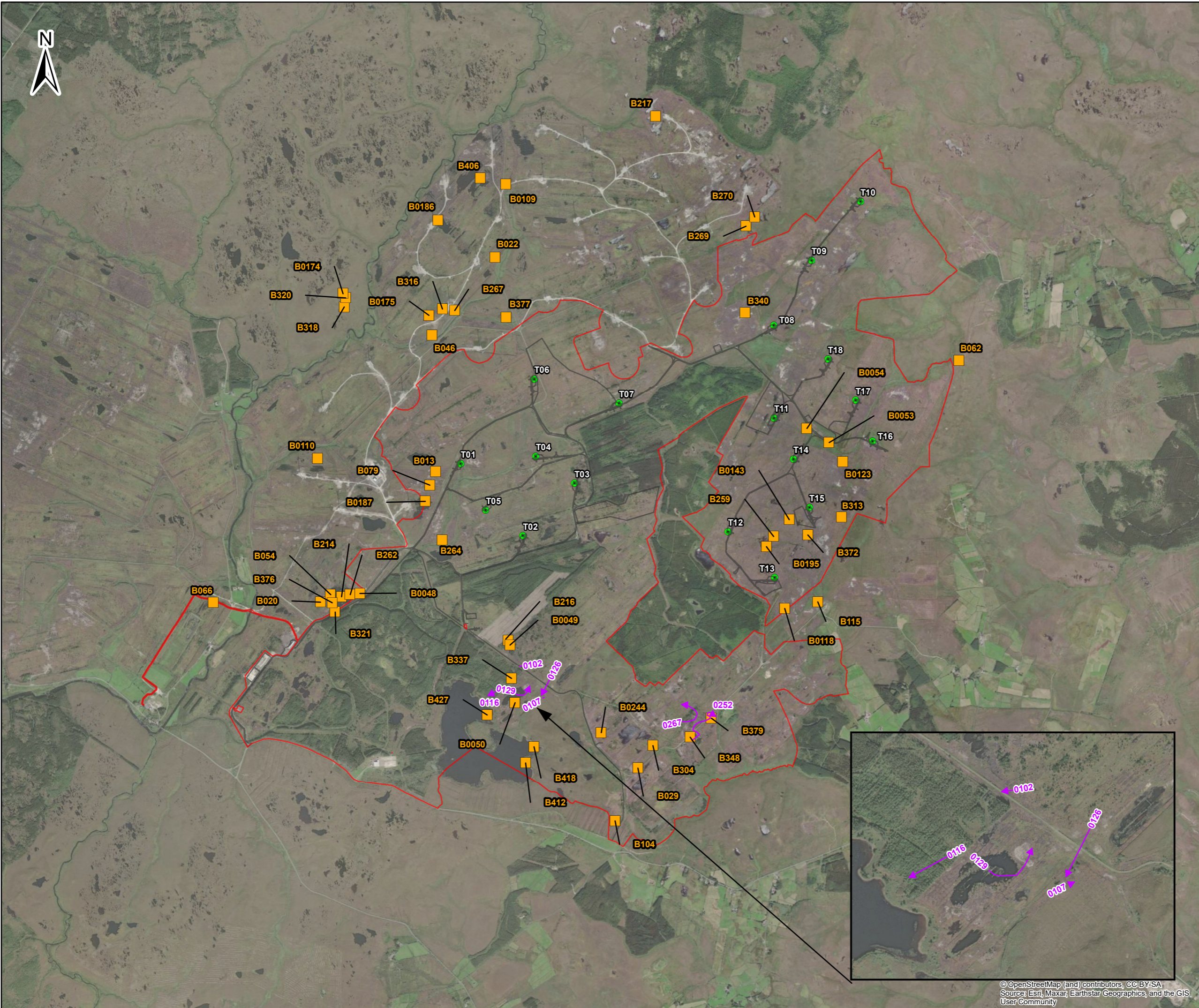
Project Director: D.Grehan

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10889-051-CS-FLIGHT-TOB-D01



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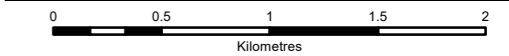
28.0 Woodcock

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R016	Non-Breeding	Western Transect	18/12/2020	WK	1	WS	Woodcock flushed from ground in area of scrub and blanket bog	TK
R056	Non-Breeding	Western Transect	24/02/2021	WK	1	PB4	Flushed from undergrowth. Flew south into conifer forestry	SC

WOODCOCK FIGURES



- Legend**
- Planning Application
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - R Woodcock (*Scolopax rusticola*) - Non-Breeding Season 2020-2022



- NOTES**
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 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 28 Woodcock (*Scolopax rusticola*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-052-WK-FLIGHT-TOB-D01

29.0 Black-Headed Gull

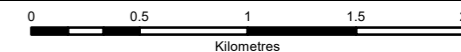
Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
W047	Non-Breeding	7	20/01/2022	11:16	BH	2		15	45				TK

BLACK-HEADED GULL FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Black-headed Gull (*Chroicocephalus ridibundus*) - Flightlines Breeding and Non-Breeding 2019-2022



NOTES

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4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client:

Bord na Móna

Project:

Oweninny Wind Farm
Phase 3

Title: Appendix 8-1 Figure 29
Black-headed Gull
(*Chroicocephalus ridibundus*)
observations over the survey period
(Apr 2019 - Sept 2022)

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-053-BH-FLIGHT-TOB-D01

Draft:
D01

30.0 Lesser Black-Backed Gull

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0002	Breeding	1	26/06/2019	13:09	LB	1		37		120		2nd year bird	MH
0276	Breeding	7	23/08/2019	12:53	LB	1		70				Immature	JH
0091	Non-Breeding	4	20/01/2020	12:15	LB	1		150					MH
0095	Non-Breeding	4	20/03/2020	09:12	LB	1		27					MH
0288	Breeding	7	20/04/2020	16:18	LB	2	145					Two Lesser Black-backed Gulls in flight, travelling.	TK
0029	Breeding	5	21/04/2020	06:25	LB	7		27				Commuting from west to east	JS
0160	Breeding	5	21/04/2020	08:38	LB	2		17				Flew from south to north over VP continued north, out of view	JS
0165	Breeding	5	21/04/2020	11:4	LB	1	14					Seen flying briefly, landed in water and began to wash/preen. Drifting towards spit to east of lake	JS
0171	Breeding	7	21/04/2020	12:18	LB	2		132				Two Lesser Black-backed Gulls circling briefly over small lake before flying East.	JS
0290	Breeding	1	21/04/2020	16:48	LB	1			168			Lesser Black-backed Gull in flight	TK
0180	Breeding	5	12/05/2020	17:05	LB	3		40					JM
0031	Breeding	1	13/05/2020	19:39	LB	3					218	Three Lesser Black-backed Gulls in flight	JM
0096	Breeding	4	13/05/2020	11:05	LB	2	40						JM

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0294	Breeding	7	06/07/2020	11:40	LB	1	41					Lesser Black-backed Gulls in flight, landed near small lake	TK
0295	Breeding	7	06/07/2020	12:18	LB	1	70					Lesser Black-backed Gull in flight, took flight from near small lake	TK
0194	Breeding	5	14/07/2020	19:11	LB	1		100				Adult bird flying west to lake	JM
0061	Breeding	3	15/07/2020	13:12	LB	1	35	20				Lesser Black-backed Gull in flight across site	TK
0209	Breeding	5	13/04/2021	12:41	LB	2		30	48			Two Adults flying west over lake and bog	TK
0057	Breeding	2	05/05/2021	19:52	LB	2			130			Two Lesser Black-backed Gulls flying south over site	TK
0070	Breeding	3	03/06/2021	12:52	LB	3				85		Three Lesser Black-backed Gulls in flight over site	TK
0131	Breeding	4	06/07/2021	18:36	LB	2	45	30				Two Lesser Black-backed Gulls flying over site/lough Dahybaun	TK
0132	Breeding	4	06/07/2021	19:02	LB	2		68				Two Lesser Black-backed Gulls flying over site	TK
0133	Breeding	4	06/07/2021	19:21	LB	2	35	70				Lesser Black-backed Gulls flying over site/lough Dahybaun	TK
0216	Breeding	5	07/07/2021	18:21	LB	1		35				Lesser Black-backed Gull flying over lake.	TK
0303	Breeding	7	13/07/2021	19:48	LB	1		20	95			Lesser Black-backed Gull flying over	TK
0071	Breeding	3	09/09/2021	14:17	LB	2	40	66				Pair flying south along ridge	JM

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
B03	Breeding	5	04/04/2022	17:55	LB	2	5	5				Pair of Lesser Black-backed Gulls flying west and landing on lake	KL
B04	Breeding	5	04/04/2022	18:25	LB	2	7					Pair of Lesser Black-backed Gulls flying low and landing on lake similar to flightline 2	KL
B06	Breeding	5	04/04/2022	18:35	LB	2	30	20	10			Pair of LB took off from lake and flew to E shore, circled and then flew off	KL
B07	Breeding	5	04/04/2022	18:53	LB	2	5	30	20			Same as ref 2	KL
B09	Breeding	5	04/04/2022	19:13	LB	1	10	10				Lesser Black-backed Gull flew slowly along edge of lake and landed	KL
B11	Breeding	5	04/04/2022	19:30	LB	2	5	30				Pair of Lesser Black-backed Gulls flew in from in front of VP over lake to west of shore.	KL
B27	Breeding	4	11/05/2022	13:44	LB	1				15		Single Lesser Black-backed Gull flying east	KL
B43	Breeding	6	16/06/2022	15:53	LB	2		60				Two Lesser Black-backed Gulls flew west and then turned and headed back east	KL
B47	Breeding	5	23/06/2022	11:15	LB	1	80					Flying west over lake	JC
B49	Breeding	5	23/06/2022	12:37	LB	1	100					Flying west over lake	JC
B61	Breeding	5	12/08/2022	10:47	LB	1	2	40				LB seen flying over lake and landing on east bank	KL

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R030	Non-Breeding	Western Transect	25/11/2020	LB	1	PB4	Flying; Commuting southwest from bog and over conifer plantation	SC

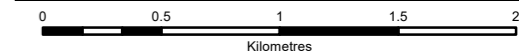
Roost Watch Survey Observations									
Season	Site	HHVP	Date	BTO	No. of Birds	Time of flight	Habitat Code	Activity	Surveyor
Non-Breeding	Oweninny	HHVP 1	09/02/2021	LB	1	16:42	FL1, PB3	Single bird flying over lake flew east	JM

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B004	28/04/2020	08:00:00	LB	1		Bird on lake	JM
Gull	B048	21/05/2020	09:37:00	LB	1		One Lesser Black-backed Gull flew over lake from east to west	JS
Gull	B124	23/07/2020	11:43:00	LB	1			JS
Gull	B0061	29/04/2022		LB	1	FL1	One Lesser Black-backed Gull circling over Lough Dahybaun	TK

LESSER BLACK-BACKED GULL FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Lesser Black-backed Gull (*Larus fuscus*) - Breeding Season 2020-2022
 - Lesser Black-backed Gull (*Larus fuscus*) - Non-Breeding Season 2020-2022
 - Lesser Black-backed Gull (*Larus fuscus*) - Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 29
Lesser Black-backed Gull (*Larus fuscus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:31,960

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

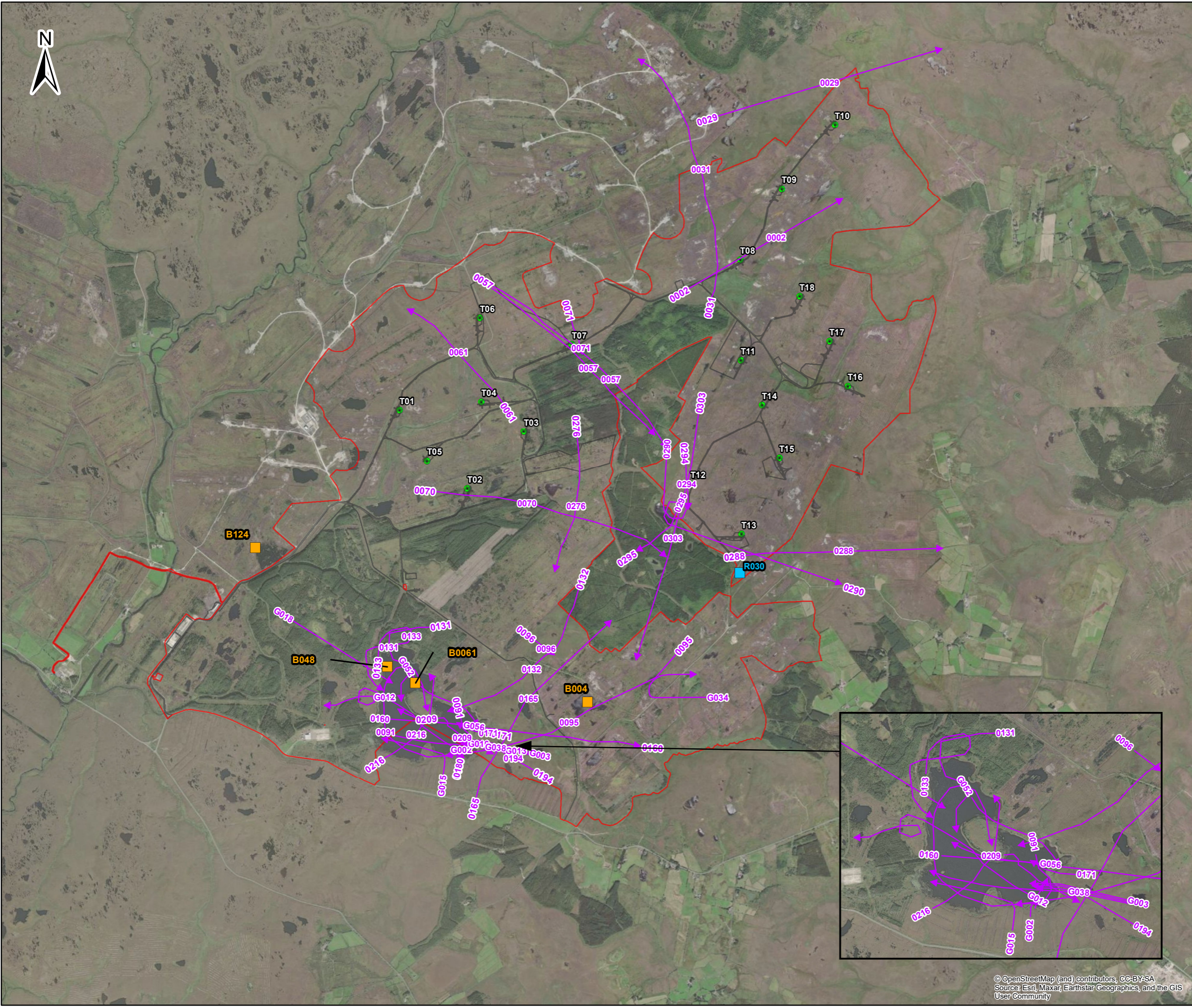
Project Director: D.Grehan

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10889-054-LB-FLIGHT-TOB-D01



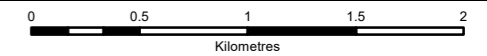
31.0 Herring Gull

Vantage Points Surveys													
Ref.	Season	VP	Date	Observation Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
W031	Non-Breeding	5	13/12/2021	11:06	HG	1			95			Herring Gull flying north over site	TK

HERRING GULL



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Herring Gull (*Larus argentatus*) - Flightlines
Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client:
Bord na Móna

Project:
Oweninny Wind Farm
Phase 3

Title:
Appendix 8-1 Figure 30
Herring Gull (*Larus argentatus*)
observations over the survey period
(Apr 2019 - Sept 2022)

Scale @ A3: 1:35,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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32.0 Common Gull

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0081	Breeding	4	24/07/2019	14:30	CM	1		260				Circling over lake	MH
0161	Breeding	5	21/04/2020	07:37	CM	3	7					Flew from southeast, calling and circling over Lough Nagrumpaun before landing	JS
0162	Breeding	5	21/04/2020	07:50	CM	3	14					Left L. Nagrumpaun over L. Dayhbaun and landed on small spit on lake shore	JS
0163	Breeding	5	21/04/2020	08:15	CM	2	13					Flew from spit back to L. Nagrumpaun	JS
0164	Breeding	5	21/04/2020	08:37	CM	2	10					Flew back to spit, same flight as flight ref. 3	JS
0166	Breeding	5	21/04/2020	08:49	CM	2	24					Left spit and flew south past VP	JS
0167	Breeding	5	21/04/2020	08:51	CM	2	22					Same pair as flight ref 7, flew from south, low over bog and landed on L. Nagrumpaun	JS
0168	Breeding	5	21/04/2020	10:43	CM	3	40					Three bird flying/circling over water and land	JS
0169	Breeding	5	21/04/2020	11:16	CM	2		17				Flew from north to south calling	JS
0170	Breeding	5	21/04/2020	11:25	CM	6		22				Flock has similar flightlines as flightline ref. 2	JS
0175	Breeding	5	12/05/2020	11:00	CM	2		35					JM
0103	Breeding	4	13/05/2020	20:05	CM	2		100					JM
0245	Breeding	6	14/05/2020	11:45	CM	2	45						JM

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0292	Breeding	7	08/06/2020	05:31	CM	1	135					Flew towards VP alarm calling, flew back towards small lake. Could possibly be breeding near lake, although initial impressions are that it is too small.	TK
0293	Breeding	7	08/06/2020	06:11	CM	1	45					Flew from ground near small lake	TK
0183	Breeding	5	09/06/2020	07:45	CM	2	60					Common Gulls present on both lakes throughout the day	JM
0187	Breeding	5	09/06/2020	11:50	CM	1	55					Flew over bog	JM
0192	Breeding	5	14/07/2020	14:36	CM	2						Adult and juvenile present at lake	JM
0193	Breeding	5	14/07/2020	16:41	CM	3	50	45				Three adults flew from large lake east to small lake	JM
0256	Breeding	6	16/07/2020	21:04	CM	2		30				Adult flying west past VP	JM
0263	Breeding	6	15/04/2021	08:15	CM	1		55				Single bird flying SW	JM
0211	Breeding	5	05/05/2021	15:40	CM	2	18	43	50			Territorial pair chasing each other around lake and over bog	JM
0301	Breeding	7	11/05/2021	09:16	CM	2		35	90				JM
0268	Breeding	6	04/06/2021	14:14	CM	2		105				Pair of Common Gulls flying over VP to southwest	JM
0302	Breeding	7	18/06/2021	09:16	CM	2	20	25				Pair of Common Gulls flying over	TK
0215	Breeding	5	07/07/2021	16:18	CM	1	25	45				Common Gulls flying over lake	TK
0135	Breeding	4	11/08/2021	15:33	CM	1	30	20	20				TK
B17	Breeding	5	25/04/2022	14:38	CM	2	20	10				Two Common Gulls took off from edge of lake, circled and the flew east to smaller pool	KL

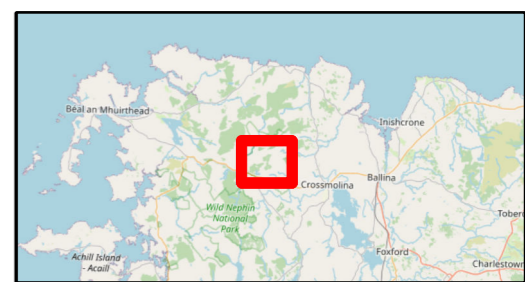
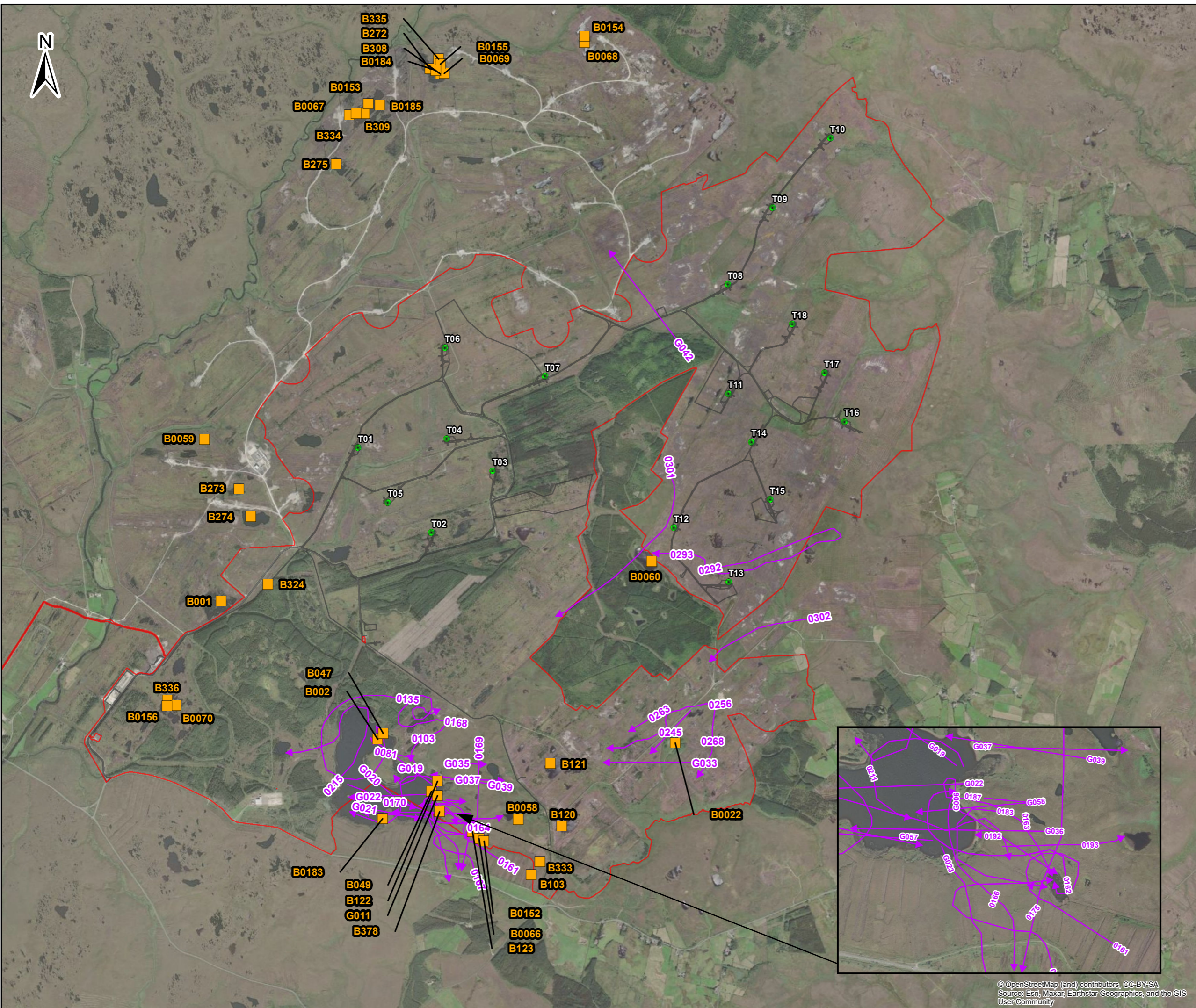
Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
B28	Breeding	5	13/05/2022	06:23	CM	1	30	90				Common Gull flew slowly along far bank and then disappeared behind island	KL
B29	Breeding	5	13/05/2022	06:33	CM	2		45	10			Two Common Gulls flew from island towards VP then turned and headed west	KL
B30	Breeding	5	13/05/2022	07:15	CM	1	10	20				Common Gull flew along bank and disappeared behind ridge	KL
B31	Breeding	5	13/05/2022	07:21	CM	2	70	60				Two Common Gulls flew west across lake	KL
B32	Breeding	5	13/05/2022	10:26	CM	2	10	50	50			Two Common Gulls flew over VP towards fields behind	KL
B42	Breeding	6	16/06/2022	15:53	CM			40				Four Common Gulls flew west behind VP	KL
B35	Breeding	2	17/06/2022	08:29	CM	3		25	30			Three Common Gulls flew over woodland heading northwest	KL
B44	Breeding	5	23/06/2022	14:10	CM	1	30					Flew east	JC
B45	Breeding	5	23/06/2022	14:53	CM	2	50					Flew west over lake	JC
B46	Breeding	5	23/06/2022	15:00	CM	2		40				Flying east	JC
B48	Breeding	5	23/06/2022	11:24	CM	1	70					Flying west over lake	JC
B50	Breeding	5	23/06/2022	12:41	CM	2	80					Flying west over lake	JC
B51	Breeding	5	23/06/2022	13:02	CM	1	50					landed on lake	JC

Vantage Point Non-Flight Observations									
Season	Site	VP	Date	Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor
Breeding	Oweninny	5	25/04/2022	14:23	CM	2	FI2	Foraging; Two Common Gulls foraging on the edge of the lake	KL

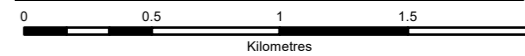
Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Gull	B001	24/04/2020	08:23:00	CM	2		Common Gull pair, circled over water and landed on lake	JS
Gull	B002	24/04/2020	13:16:00	CM	2			JS
Gull	B047	21/05/2020	09:10:00	CM	2		Two Common Gulls flew over lake heading south. Sparrowhawk flew over lake heading north	JS
Gull	B049	21/05/2020	10:40:00	CM	1		Common Gull was sitting on stump in lake and began to mob	JS
Transect	B103	16/06/2020	08:19:00	CM	1	PB4		JS
Gull	B120	18/06/2020		CM	1	PB4	Flying over	JS
Gull	B121	18/06/2020		CM	3	PB4	Flying over	JS
Gull	B122	18/06/2020		CM	7	PB4	Flying over/mobbing	JS
Gull	B123	18/06/2020		CM	1	PB4	Flying over/mobbing	JS
Gull	B272	27/05/2021		CM	1	FL1	Common Gull sitting on nest on small tussock in middle of small lake	TK
Gull	B275	27/05/2021		CM	1	FL1		TK
Gull	B274	27/05/2021		CM	5	FL1		TK
Gull	B273	27/05/2021		CM	2	FL1		TK
Gull	B308	15/06/2021		CM	1	FL1	Adult seen sitting on nest	TK
Gull	B309	15/06/2021		CM	1	FL1	Adult seen sitting on nest	TK
Transect	B324	09/07/2021		CM	3	PB3		JC
Transect	B333	09/07/2021		CM	2	PB3		JC
Gull	B334	13/07/2021	08:50:00	CM	2	FL1	Pair of Common Gulls, agitated behaviour over probable nest site	TK
Gull	B335	13/07/2021	10:05:00	CM	4	FL1	Adults and two well developed chicks/juveniles.	TK
Gull	B336	13/07/2021	10:25:00	CM	2	FL1	Pair of Common Gulls, agitated behaviour over probable nest site	TK
Gull	B378	18/08/2021		CM	1	FL1	Adult Common Gull resting at edge of Lough Dahybaun	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0022	26/04/2022		CM	2	FL1	Pair of Common Gulls on small lake, possibly breeding	TK
Gull	B0058	29/04/2022		CM	1	FL1	One Common Gull on small lake, took flight, possible suitable nesting site.	TK
Gull	B0059	29/04/2022		CM	4	PB4	Four Common Gulls circling in the air together	TK
Gull	B0060	29/04/2022		CM	1	FL1	One Common Gull circling over Lough Nacrom, possible nesting site	TK
Gull	B0066	23/05/2022	11:40:00	CM	6	FL1	Adult on nest	TK
Gull	B0067	23/05/2022	13:05:00	CM	1	FL1	Adult on nest	TK
Gull	B0068	23/05/2022	14:26:00	CM	1	FL1	Adult on nest	TK
Gull	B0069	23/05/2022	15:00:00	CM	1	FL1	Adult on nest	TK
Gull	B0070	23/05/2022	16:12:00	CM	6	FL1	Three Pairs of Common Gulls on Small Lake, three adults on nests	TK
Gull	B0152	16/06/2022	11:10:00	CM	2	FL1	Three nests, Common Gull adults on two nests	TK
Gull	B0153	16/06/2022	11:50:00	CM	1	FL1	Adult Common Gull on nest	TK
Gull	B0154	16/06/2022	12:05:00	CM	1	FL1	Adult Common Gull on nest	TK
Gull	B0155	16/06/2022	12:18:00	CM	1	FL1	Adult Common Gull on nest	TK
Gull	B0156	16/06/2022	13:46:00	CM	3	FL1	2 chicks in nest	TK
Gull	B0183	12/07/2022	12:56:00	CM	1	FL1	Adult flying over lake	TK
Gull	B0184	12/07/2022	13:48:00	CM	3	FL1	One Adult on lake with two fully developed fledglings	TK
Gull	B0185	12/07/2022	14:07:00	CM	4	FL1	One adult on lake with three fully developed fledglings	TK

COMMON GULL FIGURES



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Common Gull (*Larus canus*) Flightlines - Breeding Season 2020-2022
 - Common Gull (*Larus canus*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 31
Common Gull (*Larus canus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:29,575

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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10889-056-CM-FLIGHT-TOB-D01 Draft: **D01**

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

33.0 Great Black-Backed Gull

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0224	Breeding	6	27/04/2019	08:50	GB	1	12					Flying south	MH
0227	Breeding	6	27/04/2019	14:38	GB	1		66				Over Corvoderry	MH
0274	Breeding	7	01/06/2019	11:32	GB	1	70	48					JA
0082	Breeding	5	14/06/2019	11:19	GB	1	30	150				Circling and dropped to lake	BM
0140	Breeding	4	14/06/2019	11:19	GB	1	100					Over forest and bog	MH
0142	Breeding	5	14/06/2019	11:19	GB	1	20	160					BM
0001	Breeding	1	19/06/2019	13:30	GB	1		26					MH
0004	Breeding	1	23/07/2019	10:00	GB	1		45					MH
0078	Breeding	4	23/07/2019	13:07	GB	1		45				2nd winter bird	MH
0079	Breeding	4	23/07/2019	15:34	GB	1		150				Adult	MH
0080	Breeding	4	24/07/2019	13:59	GB	1		70				Hunting	MH
0275	Breeding	7	29/07/2019	18:39	GB	1	24	300					JH
0088	Non-Breeding	4	07/12/2019	14:50	GB	1		65					MH
0089	Non-Breeding	4	13/12/2019	15:35	GB	1		150					MH
0090	Non-Breeding	4	13/12/2019	15:56	GB	1		30					MH

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
0172	Breeding	5	21/04/2020	11:54	GB	2	10	0	0	0	0	Pair flying low over ground/quartering and landed	JS
0173	Breeding	5	21/04/2020	11:56	GB	1	55	15	0	0	0	Individual began circling pair on ground then drifted east gaining height	JS
0174	Breeding	5	21/04/2020	11:56	GB	2	10	0	0	0	0	Pair form flight ref. 5, rose when bird from flight ref. 6 circled, both drifted east	JS
0077	Breeding	4	22/04/2020	09:13	GB	2	0	17	0	0	0	Pair flew from northeast and travelled south	JS
0101	Breeding	4	13/05/2020	13:45	GB	1	10	30	45	0	0		JM
0247	Breeding	6	14/05/2020	14:35	GB	2	20	40	0	0	0		JM
0201	Non-Breeding	5	09/12/2020	14:45	GB	1	80	30				Single bird in flight heading east	JM

Waterfowl Surveys							
Season	Ref.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
Non-Breeding	WF0069	24/02/2021	GB	1	PB4	Commuting southwest, heading southwest at 10m high	SC

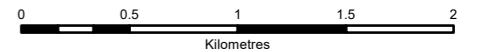
Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R078	Non-Breeding	Western Transect	30/03/2021	GB	2	PB4	Standing on side of lake	SC

GREAT BLACK-BACKED GULL FIGURE



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Great Black-backed Gull (*Larus marinus*) - Non-Breeding Season 2020-2022
- Great Black-backed Gull (*Larus marinus*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 33
Great Black-backed Gull (*Larus marinus*)
observations over the survey period
(Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

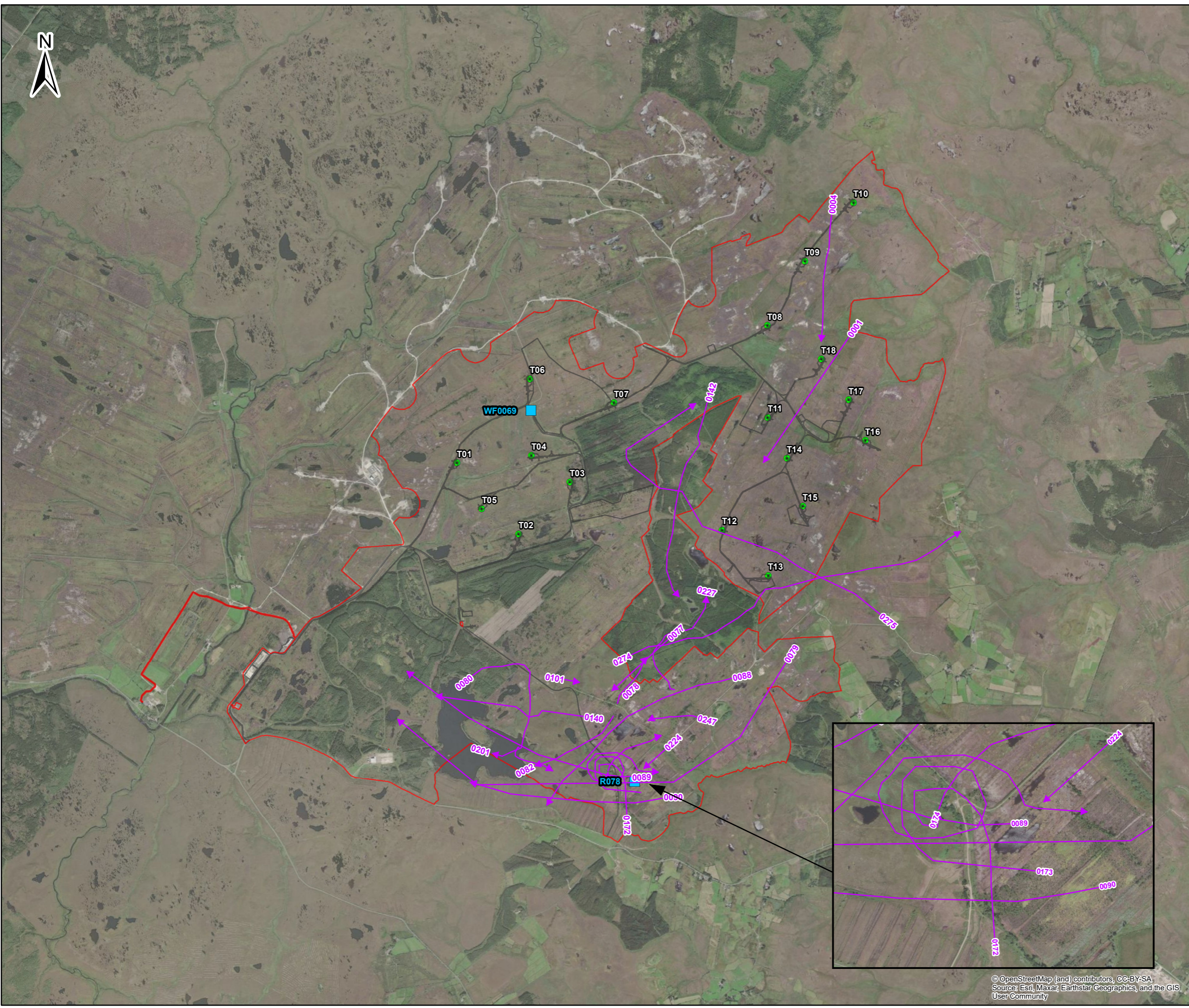
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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Draft: **D01**



34.0 Meadow Pipit

Vantage Points Surveys													
Ref.	Season	VP	Date	Time	BTO Code	Abundance	Seconds in Band 1 (0-25m)	Seconds in Band 2 (26-50m)	Seconds in Band 3 (51-150m)	Seconds in Band 4 (151-200m)	Seconds in Band 5 (201+m)	Field Notes	Surveyor
B62	Breeding	7	24/08/2022	07:02	MP	6	-	30				Small flock of Meadow Pipits seen flying over bog	KL

Vantage Point Non-Flight Observations										
Season	Site	VP	Date	Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor	
Non-Breeding	Oweninny	4	13/10/2021		MP	5	PB3	Five Meadow Pipits seen around VP in suitable habitat	TK	
Non-Breeding	Oweninny	5	13/12/2021		MP	2	PB4	Two Meadow Pipits around VP	TK	
Non-Breeding	Oweninny	7	16/12/2021	12:18	MP	2	PB4	Three Meadow Pipits around VP	TK	
Non-Breeding	Oweninny	4	21/12/2021		MP	2	PB4	Two Meadow Pipits around VP	TK	
Non-Breeding	Oweninny	7	20/01/2022	16:55	MP	8	PB3	A total of eight Meadow Pipits seen going to roost near VP 7	TK	
Non-Breeding	Oweninny	7	08/02/2022		MP	4	PB4	Four Meadow Pipits around VP during survey	JM	
Non-Breeding	Oweninny	7	09/03/2022	18:20	MP	8	PB3	A total of 10 meadow pipits seen going to roost on hill around VP 7	TK	
Non-Breeding	Oweninny	2	10/03/2022		MP	2	PB4	Two Meadow Pipits around VP during survey	TK	
Breeding	Oweninny	3	06/04/2022	07:00	MP	6	PB4	Six Meadow Pipits around VP, some displaying	KL	

Vantage Point Non-Flight Observations									
Season	Site	VP	Date	Time	BTO Code	Abundance	Habitat Code	Activity	Surveyor
Breeding	Oweninny	2	08/04/2022	07:00	MP	4	PB4	Four Meadow Pipits near VP, some displaying	KL
Breeding	Oweninny	2	08/04/2022	10:30	MP	6	PB4	Six Meadow Pipits around VP, some displaying	KL
Breeding	Oweninny	1	27/04/2022	06:45	MP	2	PB4	Two Meadow Pipits calling and displaying near VP	KL
Breeding	Oweninny	4	11/05/2022	18:45	MP	5	PB4	Five Meadow Pipits seen and heard during VP, some displaying	KL
Breeding	Oweninny	3	13/06/2022	17:00	MP	4	PB4	Four Meadow Pipits seen displaying around VP	KL
Breeding	Oweninny	7	14/06/2022	10:20	MP	3	PB4	Three Meadow Pipits seen displaying throughout VP	KL
Breeding	Oweninny	6	16/06/2022	10:05	MP	2	PB4	Two Meadow Pipits calling and displaying	KL

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R079	Non-Breeding	Western Transect	28/10/2020	MP	3	PB4		TK
R080	Non-Breeding	Western Transect	28/10/2020	MP	2	PB4		TK
R083	Non-Breeding	Eastern Transects	29/10/2020	MP	1	PB4	Flushed from ground	TK
R084	Non-Breeding	Western Transect	18/12/2020	MP	4	PB3		TK
R086	Non-Breeding	Western Transect	18/12/2020	MP	3	PB3		TK
R087	Non-Breeding	Western Transect	18/12/2020	MP	1	PB3		TK

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R089	Non-Breeding	Western Transect	12/10/2021	MP	2	PB4	In suitable habitat	TK
R090	Non-Breeding	Western Transect	12/10/2021	MP	1	PB4	In suitable habitat	TK
R092	Non-Breeding	Western Transect	12/10/2021	MP	2	PB4	In suitable habitat	TK
R093	Non-Breeding	Western Transect	12/10/2021	MP	2	PB4	In suitable habitat	TK
R094	Non-Breeding	Western Transect	12/10/2021	MP	3	PB4	In suitable habitat	TK
R096	Non-Breeding	Western Transect	12/10/2021	MP	9	PB4	In suitable habitat	TK
R097	Non-Breeding	Western Transect	12/10/2021	MP	3	PB4	In suitable habitat	TK
R102	Non-Breeding	Western Transect	12/10/2021	MP	2	PB4	In suitable habitat	TK
R103	Non-Breeding	Western Transect	12/10/2021	MP	3	PB4	In suitable habitat	TK
R105	Non-Breeding	Eastern Transects	14/10/2021	MP	2	PB4	In suitable habitat	TK
R109	Non-Breeding	Eastern Transects	14/10/2021	MP	2	PB4	In suitable habitat	TK
R110	Non-Breeding	Eastern Transects	14/10/2021	MP	4	PB4	In suitable habitat	TK
R111	Non-Breeding	Eastern Transects	14/10/2021	MP	3	PB4	In suitable habitat	TK
R114	Non-Breeding	Eastern Transects	14/10/2021	MP	2	PB4	In suitable habitat	TK
R117	Non-Breeding	Eastern Transects	14/10/2021	MP	3	PB4	In suitable habitat	TK
R118	Non-Breeding	Eastern Transects	11/11/2021	MP	1	PB4	Flushed from ground	TK

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R120	Non-Breeding	Eastern Transects	11/11/2021	MP	1	PB4	Flushed from ground	TK
R123	Non-Breeding	Eastern Transects	11/11/2021	MP	1	PB4	Flushed from ground	TK
R124	Non-Breeding	Eastern Transects	11/11/2021	MP	2	PB4	Flushed from ground	TK
R127	Non-Breeding	Eastern Transects	11/11/2021	MP	1	PB4	Flushed from ground	TK
R128	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R129	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R130	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R132	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R133	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R137	Non-Breeding	Western Transects	17/11/2021	MP	2	PB4	Flushed from ground	TK
R141	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R143	Non-Breeding	Western Transects	17/11/2021	MP	1	PB4	Flushed from ground	TK
R145	Non-Breeding	Western Transects	17/11/2021	MP	3	PB4	Flushed from ground	TK
R147	Non-Breeding	Eastern Transects	02/12/2021	MP	2	PB4	Flushed from ground	TK
R151	Non-Breeding	Eastern Transects	02/12/2021	MP	1	PB4	Flushed from ground	TK
R152	Non-Breeding	Eastern Transects	02/12/2021	MP	4	PB4	Flushed from ground	TK

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R154	Non-Breeding	Western Transect	20/12/2021	MP		PB4	Flushed from ground	TK
R157	Non-Breeding	Western Transect	20/12/2021	MP		PB4	Flushed from ground.	TK
R158	Non-Breeding	Western Transect	18/01/2022	MP	1	PB4	flushed from ground	TK
R162	Non-Breeding	Western Transect	18/01/2022	MP	1	PB4	flushed from ground	TK
R166	Non-Breeding	Western Transect	18/01/2022	MP	1	PB4	flushed from ground	TK
R168	Non-Breeding	Western Transect	18/01/2022	MP	1	PB4	flushed from ground	TK
R171	Non-Breeding	Western Transect	18/01/2022	MP	1	PB4	flushed from ground	TK
R173	Non-Breeding	Eastern Transect	21/01/2022	MP	2	PB4	flushed from ground	TK
R175	Non-Breeding	Eastern Transect	21/01/2022	MP	1	PB4	flushed from ground	TK
R178	Non-Breeding	Eastern Transects	11/02/2022	MP	2	PB4	Flushed from ground	TK
R182	Non-Breeding	Eastern Transects	11/02/2022	MP	1	PB4	Flushed from ground	TK
R183	Non-Breeding	Western Transect	21/02/2022	MP	1	PB4	Flushed from ground	TK
R187	Non-Breeding	Western Transect	21/02/2022	MP	2	PB4	Flushed from ground	TK
R190	Non-Breeding	Western Transect	21/02/2022	MP	2	PB4	Flushed from ground	TK
R191	Non-Breeding	Eastern Transects	09/03/2022	MP	1	PB4	In suitable habitat	TK

Winter Transects Surveys								
Ref.	Season	Trans No./Loc.	Date	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R195	Non-Breeding	Eastern Transects	09/03/2022	MP	2	PB4	In suitable habitat	TK
R196	Non-Breeding	Western Transect	11/03/2022	MP	2	PB4	In suitable habitat	TK
R079	Non-Breeding	Western Transect	11/03/2022	MP	2	PB4	In suitable habitat	TK
R080	Non-Breeding	Western Transect	11/03/2022	MP	3	PB4	In suitable habitat	TK
R083	Non-Breeding	Western Transect	11/03/2022	MP	1	PB4	In suitable habitat	TK
R084	Non-Breeding	Western Transect	11/03/2022	MP	2	PB4	In suitable habitat	TK
R086	Non-Breeding	Western Transect	11/03/2022	MP	1	PB4	In suitable habitat	TK
R087	Non-Breeding	Western Transect	11/03/2022	MP	2	PB4	In suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B007	28/04/2020	12:15:00	MP	14		Singing males, flying and perched	JM
Transect	B010	29/04/2020	07:55:00	MP	18		Singing males, flying and perched	JM
Transect	B030	19/05/2020	08:51:00	MP	3		All calling to north of transect	JS
Transect	B034	19/05/2020	09:13:00	MP	3		Flying from south to north	JS
Transect	B033	19/05/2020	09:22:00	MP	2		Meadow Pipits displaying	JS

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B037	19/05/2020	09:34:00	MP	2		Meadow Pipits mobbing Cuckoo, flew south	JS
Transect	B042	19/05/2020	10:21:00	MP	2		Pair with food	JS
Transect	B052	19/05/2020	08:30:00	MP	12	WD4		JM
Transect	B064	16/06/2020	07:30-15:30	MP	10	WD4		JM
Transect	B075	16/06/2020	12:09:00	MP	9	PB4		JS
Transect	B080	16/06/2020	12:02:00	MP	4	PB3		JS
Transect	B082	16/06/2020	11:57:00	MP	1	PB3		JS
Transect	B084	16/06/2020	11:55:00	MP	1	PB3		JS
Transect	B085	16/06/2020	11:05:00	MP	4	PB3		JS
Transect	B087	16/06/2020	09:34:00	MP	7	WD4		JS
Transect	B094	16/06/2020	09:18:00	MP	5	WD4		JS
Transect	B095	16/06/2020	08:43:00	MP	10	PB4		JS
Transect	B100	16/06/2020	08:34:00	MP	5	PB4		JS
Transect	B101	16/06/2020	08:19:00	MP	2	PB4		JS
Transect	B125	21/07/2020	08:40:00	MP	7	PB4		JS
Transect	B128	21/07/2020	09:01:00	MP	7	PB4		JS
Transect	B131	21/07/2020	09:31:00	MP	4	PB4		JS
Transect	B133	21/07/2020	09:30:00	MP	1	PB4		JS
Transect	B134	21/07/2020	09:43:00	MP	4	PB4		JS
Transect	B135	21/07/2020	10:15:00	MP	5	PB4		JS
Transect	B138	21/07/2020	10:56:00	MP	4	PB4		JS
Transect	B141	21/07/2020	11:18:00	MP	5	PB4		JS
Transect	B142	21/07/2020	11:26:00	MP	4	PB4		JS
Transect	B176	21/07/2020		MP	1			JM
Transect	B151	24/08/2020		MP	2	PB3		TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B152	24/08/2020		MP	4	PB4		TK
Transect	B150	24/08/2020		MP	3	PB4		TK
Transect	B155	24/08/2020		MP	1	PB4		TK
Transect	B156	24/08/2020		MP	8	PB4		TK
Transect	B157	24/08/2020		MP	5	PB4		TK
Transect	B158	24/08/2020		MP	4	PB4		TK
Transect	B160	24/08/2020		MP	1	PB4		TK
Transect	B162	24/08/2020		MP	2	PB4		TK
Transect	B163	24/08/2020		MP	1	PB4		TK
Transect	B164	24/08/2020		MP	1	PB4		TK
Transect	B167	24/08/2020		MP	1	PB4		TK
Transect	B170	24/08/2020		MP	2	PB4		TK
Transect	B169	24/08/2020		MP	2	PB4		TK
Transect	B171	24/08/2020		MP	2	PB4		TK
Transect	B183	22/09/2020		MP	2	PB4		TK
Transect	B184	22/09/2020		MP	1	PB4		TK
Transect	B185	22/09/2020		MP	1	PB4		TK
Transect	B186	22/09/2020		MP	1	PB4		TK
Transect	B187	22/09/2020		MP	2	wd4		TK
Transect	B190	22/09/2020		MP	11	PB4		TK
Transect	B191	22/09/2020		MP	4	PB4		TK
Transect	B192	22/09/2020		MP	2	PB4		TK
Transect	B193	22/09/2020		MP	2	PB4		TK
Wader	B195	23/09/2020	09:12:00	MP	2	PB4		TK
Wader	B197	23/09/2020		MP	3	PB4		TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Wader	B198	23/09/2020		MP	2	PB4		TK
Wader	B199	23/09/2020		MP	2	PB4		TK
Wader	B200	23/09/2020		MP	1	PB4		TK
Wader	B201	23/09/2020		MP	3	PB4		TK
Wader	B202	23/09/2020		MP	2	PB4		TK
Wader	B203	23/09/2020		MP	1	PB4		TK
Wader	B204	23/09/2020		MP	1	PB4		TK
Wader	B206	23/09/2020		MP	1	PB4		TK
Transect	B218	29/04/2021		MP	2	PB4	Suitable breeding habitat	TK
Transect	B219	29/04/2021		MP	3	PB4	Suitable breeding habitat	TK
Transect	B220	29/04/2021		MP	1	PB4	Suitable breeding habitat	TK
Transect	B222	29/04/2021		MP	4	PB4	Suitable breeding habitat	TK
Transect	B223	29/04/2021		MP	2	PB4	Suitable breeding habitat	TK
Transect	B224	29/04/2021		MP	8	PB4	Suitable breeding habitat	TK
Transect	B228	12/05/2021		MP	2	PB3		TK
Transect	B229	12/05/2021		MP	4	PB3		TK
Transect	B230	12/05/2021		MP	2	PB3		TK
Transect	B231	12/05/2021		MP	1	PB3		TK
Transect	B232	12/05/2021		MP	3	PB3		TK
Transect	B233	12/05/2021		MP	2	PB3		TK
Transect	B234	12/05/2021		MP	2	PB3		TK
Transect	B240	24/05/2021		MP	4			TK
Transect	B241	24/05/2021		MP	4			TK
Transect	B243	24/05/2021		MP	2			TK
Transect	B247	24/05/2021		MP	4			TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B248	24/05/2021		MP	2			TK
Transect	B249	24/05/2021		MP	2			TK
Transect	B250	24/05/2021		MP	2			TK
Transect	B251	24/05/2021		MP	2			TK
Transect	B252	24/05/2021		MP	2			TK
Transect	B253	24/05/2021		MP	2			TK
Transect	B279	02/06/2021	08:22:00	MP	2	PB3	Suitable breeding habitat, adults carrying food	TK
Transect	B280	02/06/2021	08:35:00	MP	4	PB3	Suitable breeding habitat	TK
Transect	B281	02/06/2021	08:45:00	MP	6	PB3	Suitable breeding habitat	TK
Transect	B282	02/06/2021	08:50:00	MP	2	PB3	Suitable breeding habitat	TK
Transect	B285	02/06/2021	09:52:00	MP	4	PB3	Suitable breeding habitat	TK
Transect	B288	02/06/2021	10:41:00	MP	2	PB4	Suitable breeding habitat	TK
Transect	B292	09/06/2021		MP	2	PB3	Suitable breeding habitat	TK
Transect	B293	09/06/2021		MP	1	PB3	Suitable breeding habitat	TK
Transect	B294	09/06/2021		MP	3	PB3	Suitable breeding habitat	TK
Transect	B295	09/06/2021		MP	2	PB3	Suitable breeding habitat	TK
Transect	B296	09/06/2021		MP	3	PB3	Suitable breeding habitat	TK
Transect	B297	09/06/2021		MP	5	PB3	Suitable breeding habitat	TK
Transect	B298	09/06/2021		MP	4	PB3	Suitable breeding habitat	TK
Transect	B299	09/06/2021		MP	4	PB3	Suitable breeding habitat	TK
Transect	B300	09/06/2021		MP	3	PB3	Suitable breeding habitat	TK
Transect	B301	09/06/2021		MP	4	PB3	Suitable breeding habitat	TK
Transect	B302	09/06/2021		MP	2	PB3	Suitable breeding habitat	TK
Transect	B303	09/06/2021		MP	4	PB3	Suitable breeding habitat	TK
Transect	B325	09/07/2021		MP	5	PB3		JC

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B327	09/07/2021		MP	3	PB3		JC
Transect	B328	09/07/2021		MP	3	PB3		JC
Transect	B329	09/07/2021		MP	9	PB3		JC
Transect	B330	09/07/2021		MP	4	PB3		JC
Transect	B331	09/07/2021		MP	3	PB3		JC
Transect	B355	16/07/2021		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B356	16/07/2021		MP	6	PB4	Meadow Pipits in suitable habitat	TK
Transect	B357	16/07/2021		MP	8	PB4	Meadow Pipits in suitable habitat	TK
Transect	B358	16/07/2021		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B362	16/07/2021		MP	5	PB4	Meadow Pipits in suitable habitat	TK
Transect	B363	16/07/2021		MP	3	PB4	Meadow Pipits in suitable habitat	TK
Transect	B366	16/08/2021		MP	2	PB3	Meadow Pipits in suitable breeding habitat	TK
Transect	B367	16/08/2021		MP	4	PB3	Meadow Pipits in suitable breeding habitat	TK
Transect	B369	16/08/2021		MP	8	PB3	Meadow Pipits in suitable breeding habitat	TK
Transect	B371	16/08/2021		MP	2	PB3	Meadow Pipits in suitable breeding habitat	TK
Transect	B373	16/08/2021		MP	4	PB3	Meadow Pipits in suitable breeding habitat	TK
Transect		10/09/2021		MP	1			JM
Transect	B390	16/09/2021		MP	4	PB4	Meadow Pipits in suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B391	16/09/2021		MP	6	PB4	Meadow Pipits in suitable habitat	TK
Transect	B392	16/09/2021		MP	8	PB4	Meadow Pipits in suitable habitat	TK
Transect	B393	16/09/2021		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B397	16/09/2021		MP	3	PB4	Meadow Pipits in suitable habitat	TK
Transect	B398	16/09/2021		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0006	08/04/2022	09:38:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0007	08/04/2022	09:45:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0008	08/04/2022	09:56:00	MP	3	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0009	08/04/2022	09:58:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0010	08/04/2022	13:22:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0027	26/04/2022		MP	3	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0028	26/04/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0029	26/04/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0030	26/04/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0031	26/04/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0032	26/04/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0033	26/04/2022		MP	1	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0034	26/04/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0035	26/04/2022		MP	1	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0036	26/04/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0037	26/04/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0083	24/05/2022	09:05:00	MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0084	24/05/2022	09:10:00	MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0085	24/05/2022	09:18:00	MP	3	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0086	24/05/2022	09:20:00	MP	3	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0087	24/05/2022	09:55:00	MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0088	24/05/2022	10:32:00	MP	4	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0089	24/05/2022	10:40:00	MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0090	24/05/2022	11:38:00	MP	4	PB4	Snipe in suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0091	24/05/2022	11:58:00	MP	2	PB4	Snipe in suitable habitat	TK
Transect	B0092	24/05/2022	12:35:00	MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0093	24/05/2022	12:38:00	MP	4	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0094	24/05/2022	12:40:00	MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0125	27/05/2022		MP	4	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0126	27/05/2022		MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0127	27/05/2022		MP	5	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0128	27/05/2022		MP	2	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0129	27/05/2022		MP	1	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0130	27/05/2022		MP	1	PB4	Meadow Pipits in suitable habitat, some carrying food for young	TK
Transect	B0145	15/06/2022	09:15:00	MP	3	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0146	15/06/2022	09:20:00	MP	4	PB4	Meadow Pipits in suitable Breeding habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0147	15/06/2022	09:32:00	MP	2	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0148	15/06/2022	12:16:00	MP	4	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0158	20/06/2022	09:52:00	MP	3	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0159	20/06/2022	10:00:00	MP	4	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0160	20/06/2022	10:07:00	MP	2	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0161	20/06/2022	10:20:00	MP	5	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0162	20/06/2022	10:45:00	MP	2	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0163	20/06/2022	11:41:00	MP	2	PB4	Meadow Pipits in suitable Breeding habitat	TK
Transect	B0200	15/07/2022	08:20:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0201	15/07/2022	08:38:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0202	15/07/2022	08:45:00	MP	3	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0203	15/07/2022	08:52:00	MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0204	15/07/2022	10:20:00	MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0205	15/07/2022	10:50:00	MP	5	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0206	15/07/2022	12:12:00	MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0226	20/07/2022		MP	3	PB4	Meadow Pipits in suitable habitat	TK

Breeding Bird Survey Data								
Survey Type	Ref.	Date	Time	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B0227	20/07/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0228	20/07/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0229	20/07/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0230	20/07/2022		MP	2	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0231	20/07/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0232	20/07/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK
Transect	B0233	20/07/2022		MP	4	PB4	Meadow Pipits in suitable habitat	TK

MEADOW PIPIT FIGURES



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 - Proposed Turbine Locations
 - Meadow Pipit (*Anthus pratensis*) - Breeding Season 2020-2022
 - Meadow Pipit (*Anthus pratensis*) - Non-Breeding Season 2020-2022
 - Meadow Pipit (*Anthus pratensis*) Flightlines - Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
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 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 34 - Sheet 1 of 6 - Meadow Pipit (*Anthus pratensis*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:35,000

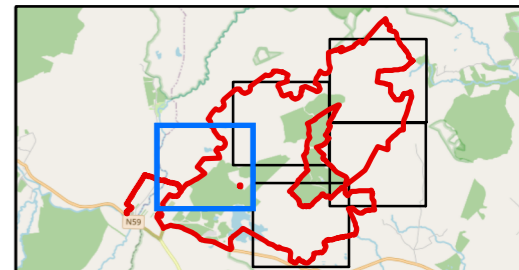
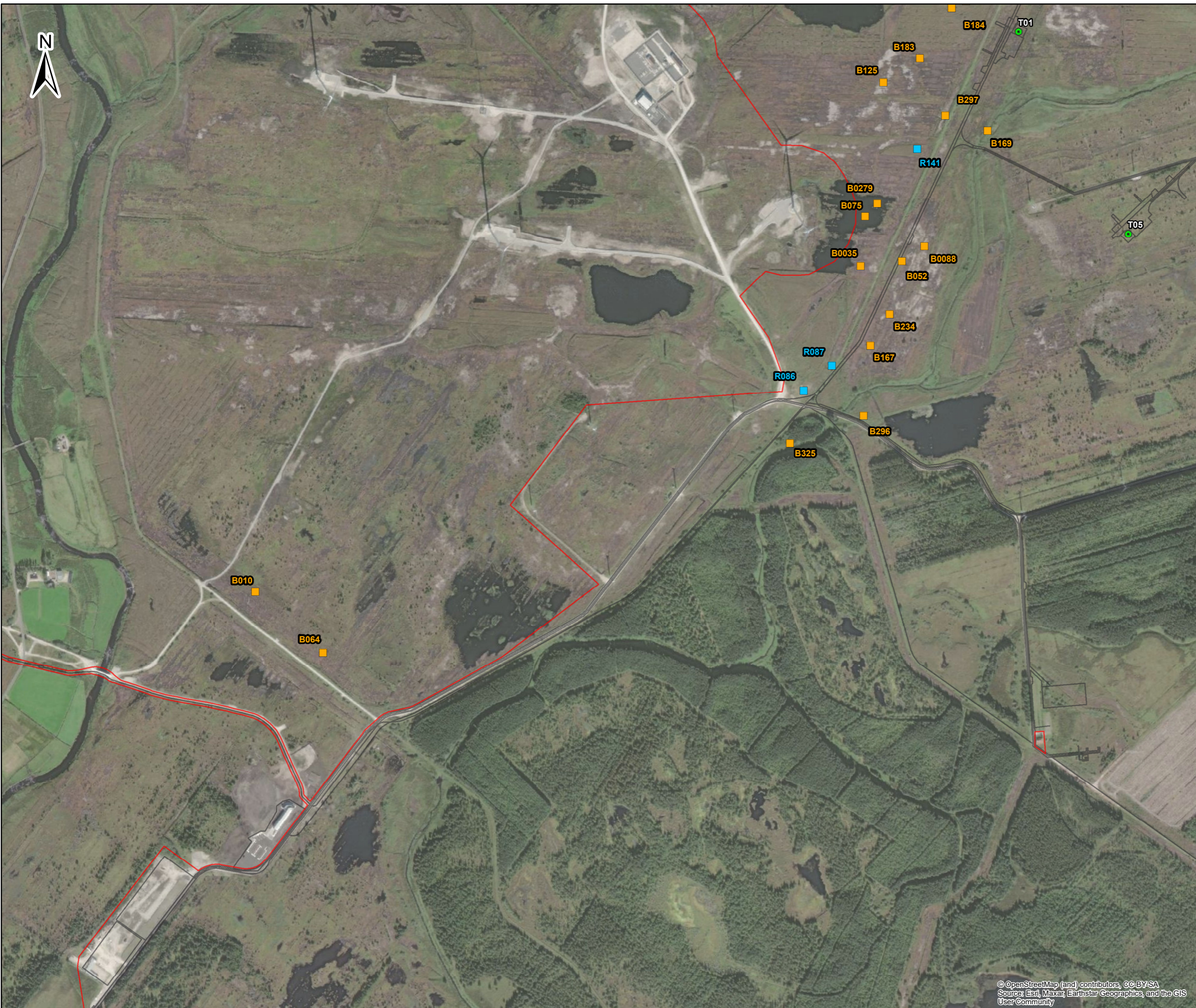
Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

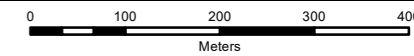
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Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 34 - Sheet 2 of 6 - Meadow Pipit (*Anthus pratensis*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:8,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

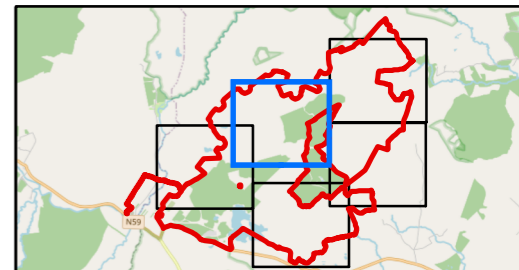
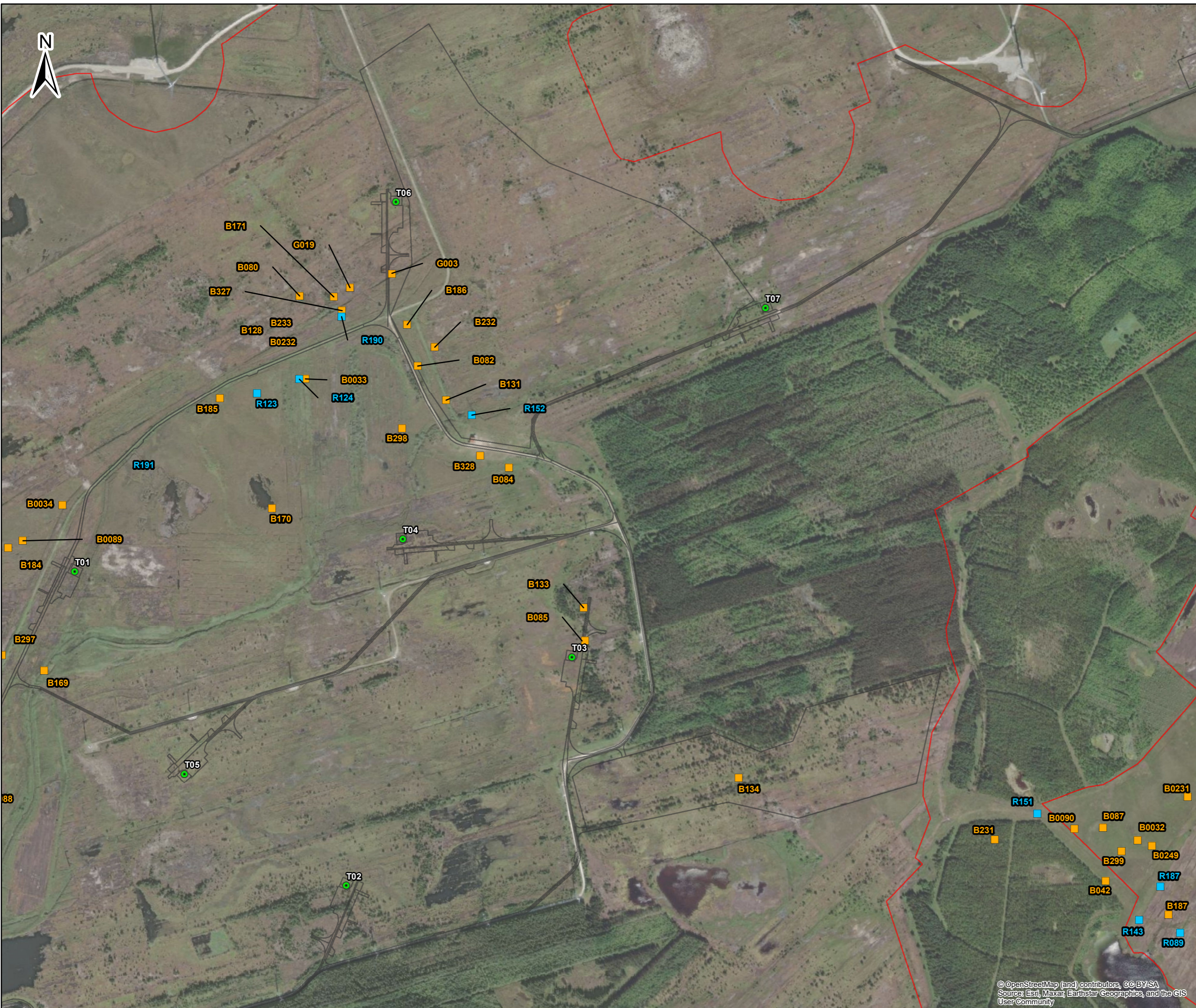
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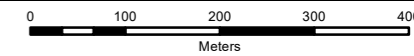
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Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 34 - Sheet 3 of 6 - Meadow Pipit (*Anthus pratensis*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:8,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

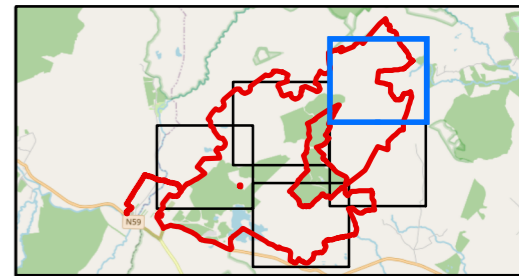
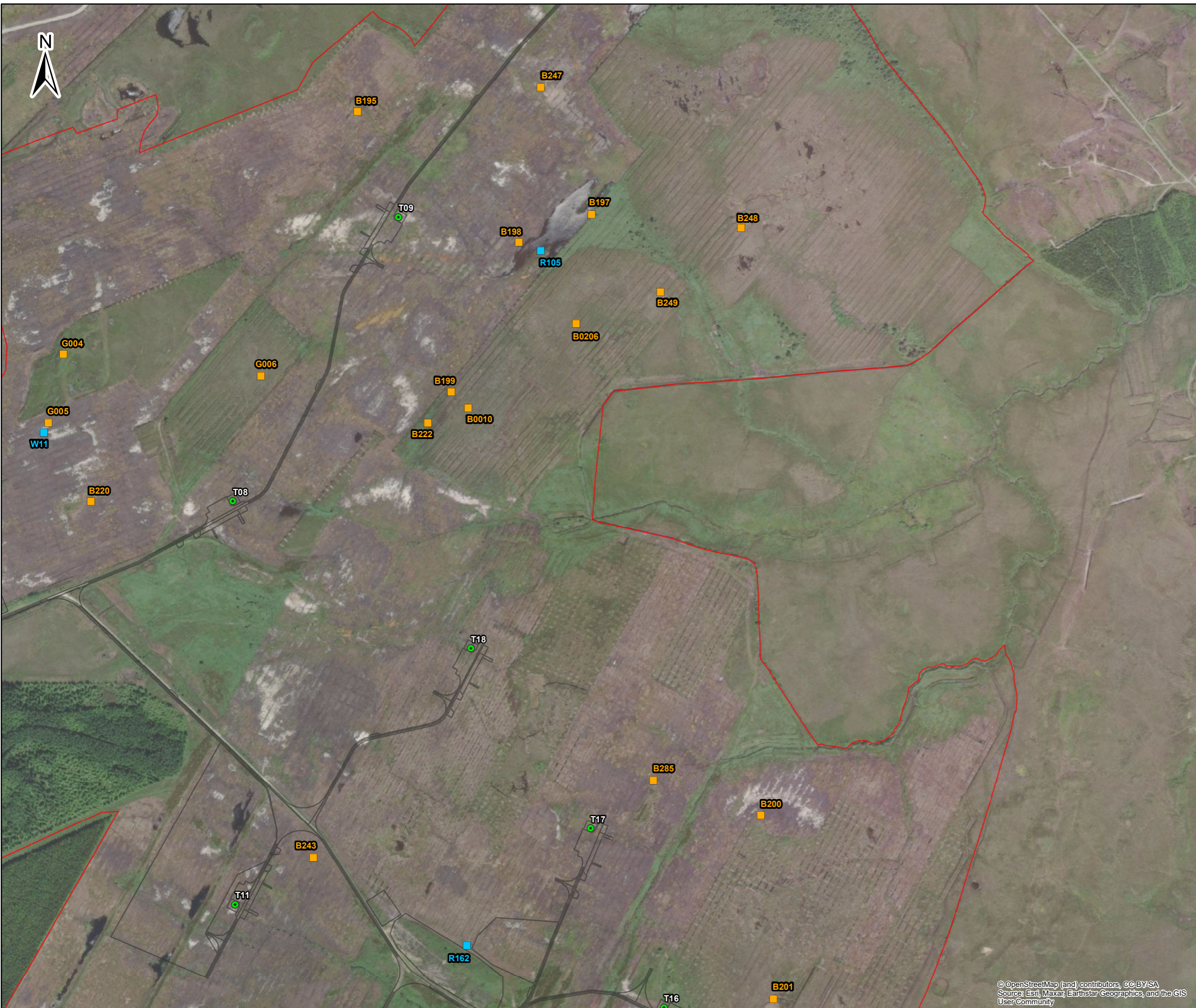
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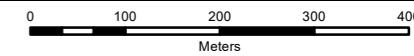
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Draft: **D01**

10889-058-MP-FLIGHT-TOB-D01



- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Meadow Pipit (*Anthus pratensis*) - Breeding Season 2020-2022
 - Meadow Pipit (*Anthus pratensis*) - Non-Breeding Season 2020-2022
 - Meadow Pipit (*Anthus pratensis*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 34 - Sheet 4 of 6 - Meadow Pipit (*Anthus pratensis*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:8,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

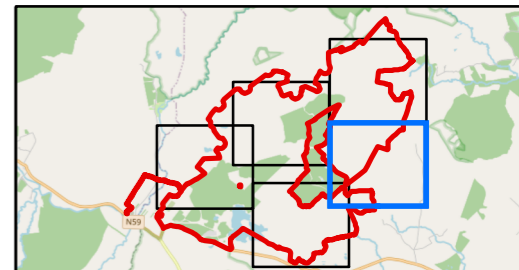
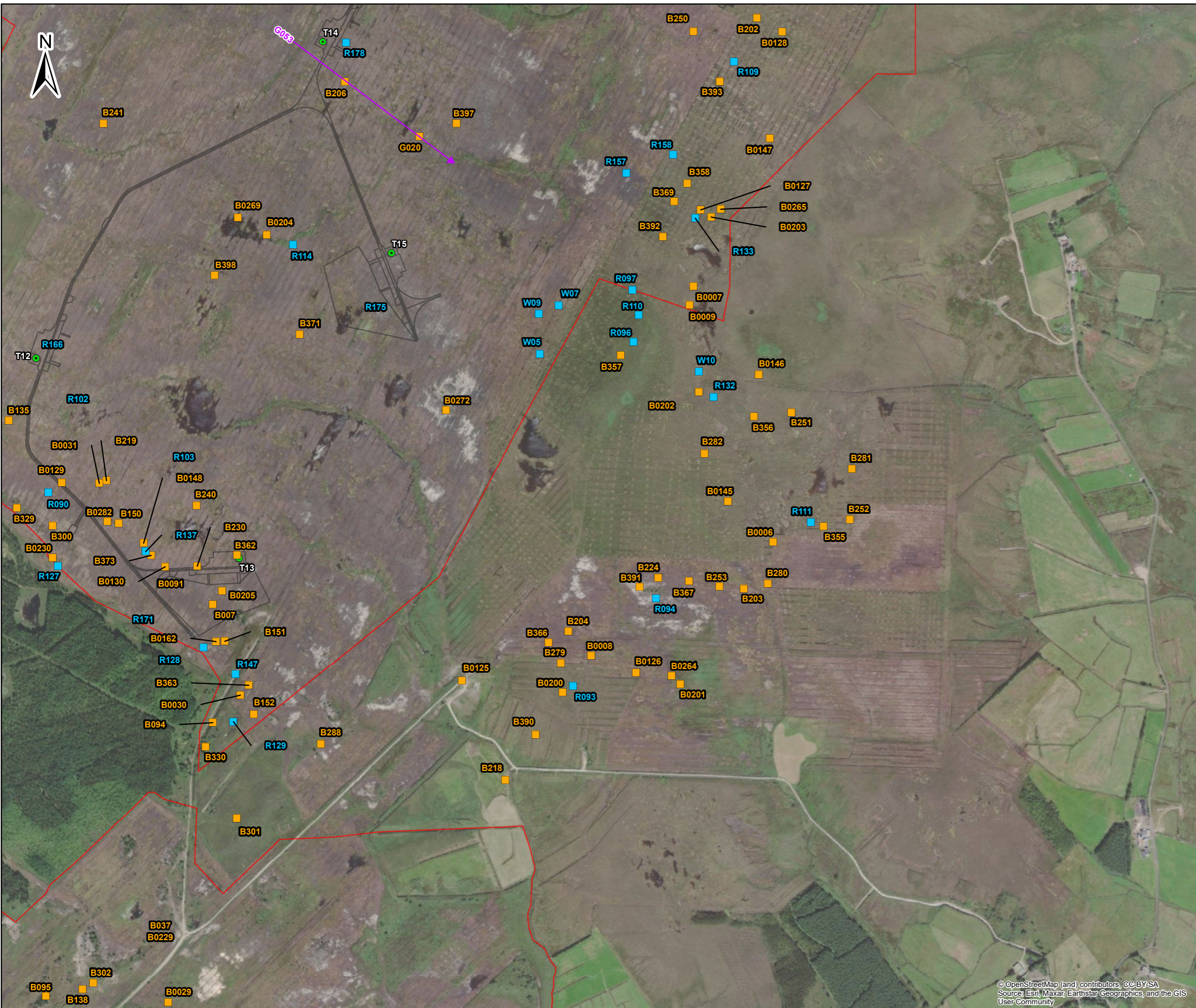
Project Director: D.Grehan

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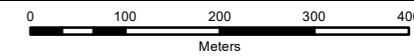
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- Legend**
- Planning Application Boundary
 - Proposed Infrastructure
 - Proposed Turbine Locations
 - Meadow Pipit (*Anthus pratensis*) - Breeding Season 2020-2022
 - Meadow Pipit (*Anthus pratensis*) - Non-Breeding Season 2020-2022
 - Meadow Pipit (*Anthus pratensis*) Flightlines - Flightlines Breeding and Non-Breeding 2019-2022



- NOTES**
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 4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client: **Bord na Móna**

Project: **Oweninny Wind Farm Phase 3**

Title: **Appendix 8-1 Figure 34 - Sheet 5 of 6 - Meadow Pipit (*Anthus pratensis*) observations over the survey period (Apr 2019 - Sept 2022)**

Scale @ A3: 1:8,000

Prepared by: S.Pezzetta Checked: J.Sherry Date: March 2023

Project Director: D.Grehan

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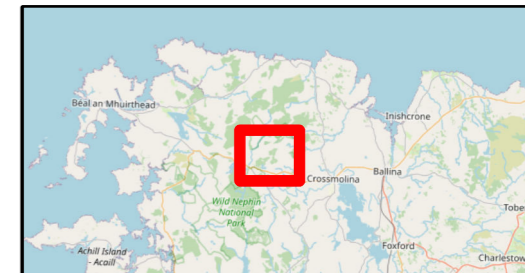
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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

35.0 Grey Wagtail

Winter Transects Surveys									
Ref.	Season	Trans No./Loc.	Date	Time	BTO code	Number of birds	Habitat Code	Activity	Surveyor
R113	Non-Breeding	Eastern Transects	11/11/2021		GL	1	FW1	Feeding	GL
R155	Non-Breeding	Eastern Transect	21/01/2022		GL	1	PB4	In small stream	GL
R192	Non-Breeding	Western Transect	11/03/2022	12:04	GL	1	WD4	In suitable habitat	GL

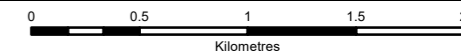
Breeding Bird Survey Data							
Survey Type	Ref.	Date	BTO Code	Abundance	Habitat Code	Key Observations	Surveyor
Transect	B159	24/08/2020	GL	2	PB4		TK

GREY WAGTAIL FIGURES



Legend

- Planning Application Boundary
- Proposed Infrastructure
- Proposed Turbine Locations
- Grey Wagtail (*Motacilla cinerea*) - Breeding Season 2020-2022



NOTES

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4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Issue	Date	Description	By	Chkd.
D01	24/03/2023	Draft issue	S.P	J.S

Client:

Bord na Móna

Project:

Oweninny Wind Farm
Phase 3

Title:

Appendix 8-1 Figure 35
Grey Wagtail (*Motacilla cinerea*)
observations over the survey period
(Apr 2019 - Sept 2022)

Scale @ A3:

1:35,000

Prepared by:
S.Pezzetta

Checked:
J.Sherry

Date:
March 2023

Project Director: D.Grehan

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