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APPENDIX 7-7

CONFIDENTIAL SURVEY DATA

**Sensitive Information – Not for
Widespread Distribution**

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Table of Contents

1. PEREGRINE FALCON.....	3
2. KESTREL	4
3. WOODCOCK.....	18
4. BUZZARD.....	20
5. LONG-EARED OWL	28
6. SPARROWHAWK	31

Table of Tables

Table 7-7-1- 1 Peregrine Falcon Breeding Raptor Survey Confidential Observations.....	1
Table 7-7-2- 1 Kestrel Breeding Raptor Survey Confidential Observations.....	4
Table 7-7-2- 2 Kestrel Supplementary Vantage Point Confidential Observations.....	6
Table 7-7-4- 1 Buzzard Vantage Point Survey Confidential Observations.....	20
Table 7-7-4- 2 Buzzard Breeding Walkover Survey Confidential Observations.....	20
Table 7-7-4- 3 Buzzard Breeding Raptor Survey Confidential Observations.....	21
Table 7-7-4- 4 Buzzard Supplementary Vantage Point Survey Confidential Observations.....	22
Table 7-7-5- 1 Long-eared Owl Incidental Confidential Observations.....	28
Table 7-7-6- 1 Sparrowhawk Vantage Point Survey Confidential Observations	31
Table 7-7-6- 2 Sparrowhawk Breeding Raptor Survey Confidential Observations	31
Table 7-7-6- 3 Sparrowhawk Supplementary Vantage Point Survey Confidential Observations.....	32
Table 7-7-6- 4 Sparrowhawk Supplementary Breeding Walkover Survey Confidential Observations	32

Table of Figures

Figure 7-7-1- 1 Peregrine Falcon Breeding Raptor Survey Confidential Observations.....	2
Figure 7-7-1- 2 Peregrine Falcon Breeding Territories.....	3
Figure 7-7-2- 1 Kestrel Breeding Raptor Survey Confidential Observations	15
Figure 7-7-2- 2 Kestrel Supplementary Vantage Point Confidential Observation	16
Figure 7-7-2- 3 Kestrel Breeding Territories.....	17
Figure 7-7-3- 1 Woodcock Breeding Territories.....	18
Figure 7-7-4- 1 Buzzard Vantage Point Survey Confidential Observations.....	23
Figure 7-7-4- 2 Buzzard Breeding Walkover Survey Confidential Observations	24
Figure 7-7-4- 3 Buzzard Breeding Raptor Survey Confidential Observations.....	25
Figure 7-7-4- 4 Buzzard Supplementary Vantage Point Survey Confidential Observations.....	26



Figure 7-7-4- 5 Buzzard Breeding Territories	27
Figure 7-7-5- 1 Long-eared Owl Incidental Confidential Observations	29
Figure 7-7-5- 2 Long-eared Owl Breeding Territories.....	30
Figure 7-7-6- 1 Sparrowhawk Vantage Point Survey Confidential Observations	33
Figure 7-7-6- 2 Sparrowhawk Breeding Raptor Survey Confidential Observations	34
Figure 7-7-6- 3 Sparrowhawk Supplementary Vantage Point Survey Confidential Observations	35
Figure 7-7-6- 4 Sparrowhawk Supplementary Breeding Walkover Survey Confidential Observations	36
Figure 7-7-6- 5 Sparrowhawk Breeding Territories.....	37

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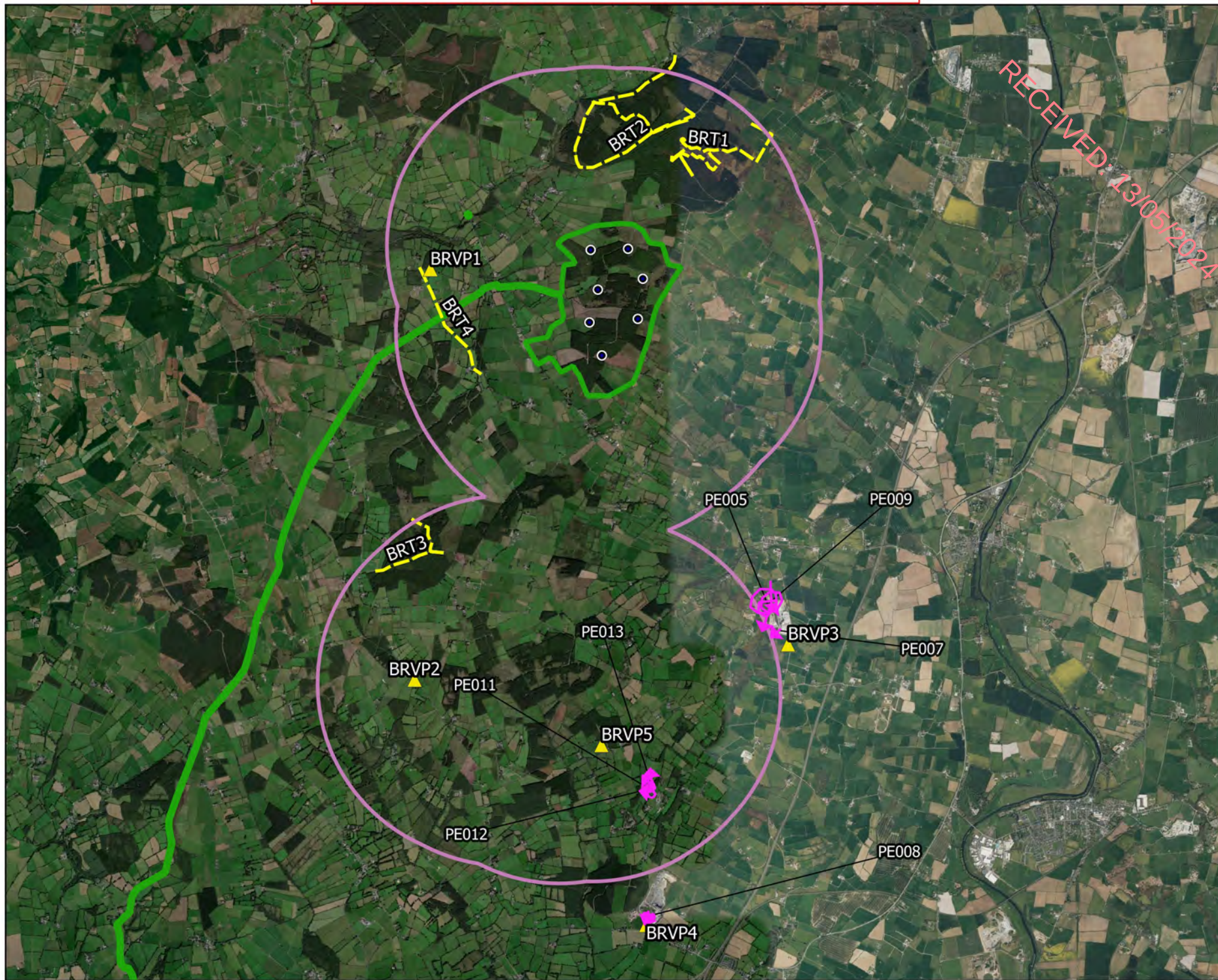
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1.

PEREGRINE FALCON

Table 7-7-1- 1 Peregrine Falcon Breeding Raptor Survey Confidential Observations

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
PE005	BRVP3	27/04/2021	19:12	Peregrine Falcon	2	active quarries and mines, scrub and mixed broadleaved woodland, flying into land., both birds back in view over quarry. after 3 mins one bird flies into oak tree.	pair; probable breeding	PW
PE007	BRVP3	13/05/2021	16:27	Peregrine Falcon	1	active quarries and mines, dropping down into quarry., spotted briefly dropping down into quarry out of view.	suitable nesting habitat; possible breeder	PW
PE008	BRVP4	19/05/2021	18:03	Peregrine Falcon	1	active quarries and mines and spoil and bare ground, flying to perch., female. appeared above quarry cliff face flying back and forth diving down below north facing clifftop nearest public road and soaring back up again in figure of 8 altogether 6x facing into breeze. dropped down apparently coming to perch on south face.	suitable nesting habitat; possible breeder	PW
PE009	BRVP3	02/06/2021	20:19	Peregrine Falcon	1	active quarries and mines, mixed broadleaved woodland and scrub, flying, male. flew along edge of quarry. lost from view by trees on slope. possibly perched out of view.	permanent territory; probable breeding	PW
PE011	BRVP5b	20/06/2021	20:35	Peregrine Falcon	1	recolonising bare ground, flying around old quarry.	suitable nesting habitat; possible breeder	PW
PE012	BRVP5b	20/06/2021	20:37	Peregrine Falcon	1	recolonising bare ground, flying into land., flew into land on quarry wall 15m from where male kestrel was perched.	suitable nesting habitat; possible breeder	PW
PE013	BRVP5b	20/06/2021	20:39	Peregrine Falcon	1	recolonising bare ground, hedgerows and scrub, flying and being mobbed by kestrel., flew from quarry wall and was mobbed by male kestrel. then flew off out over trees out of view.	suitable nesting habitat; possible breeder	PW



Map Legend

- EIAR Site Boundary
- Turbine Layout
- ▲ BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

Breeding Raptor Survey
Peregrine Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.7.1.1

Scale

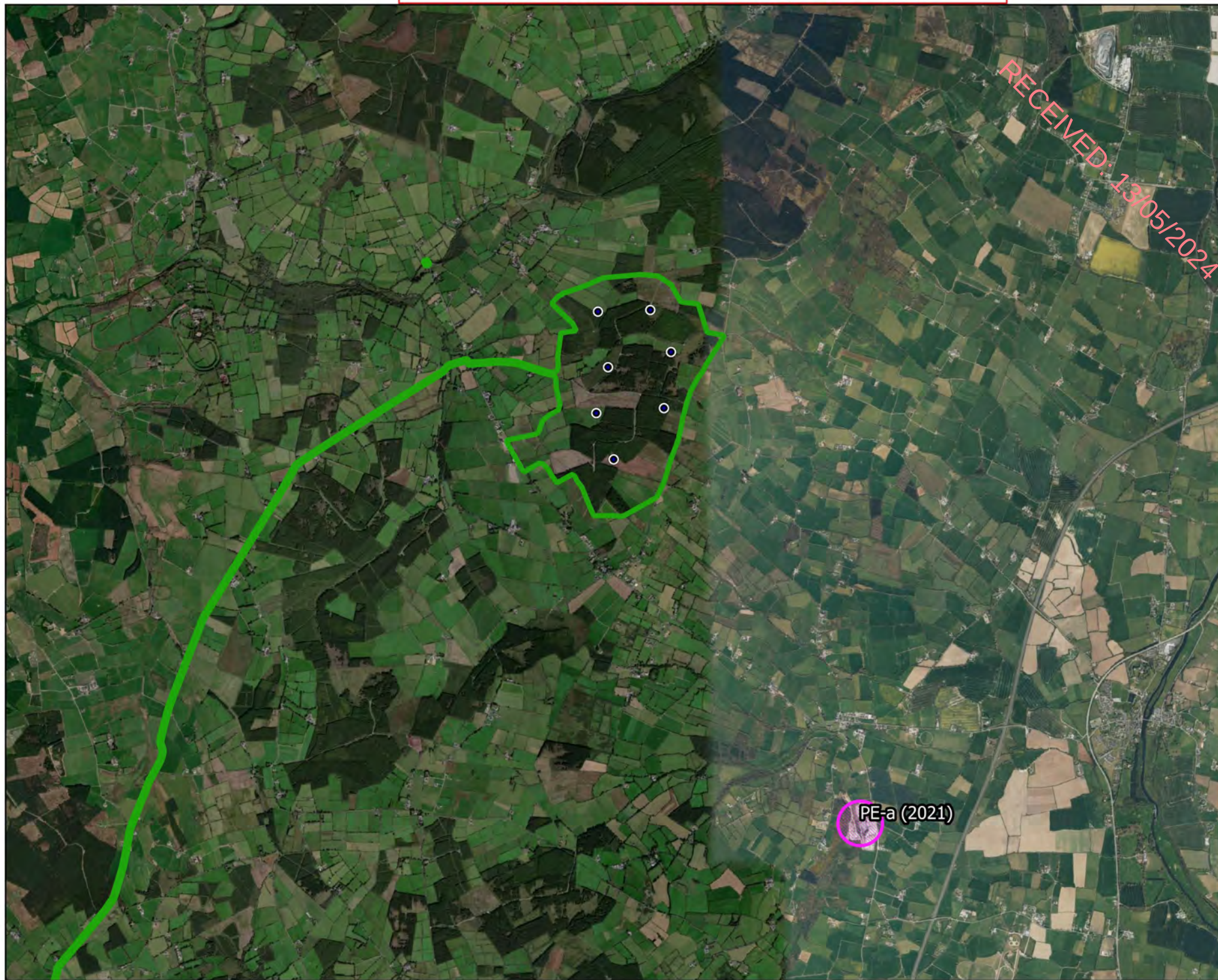
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Date

16.01.24



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Map Legend

- EIA Site Boundary
- Turbine Layout
- Breeding Territories
 - Confirmed
 - Probable



Drawing Title

Peregrine Breeding Territories

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By	Checked By
D. Woods	P. Cregg
Project No.	Drawing No.
220246	Fig. 7.7.1.2
Scale	Date
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2.

KESTREL

Table 7-7-2- 1 Kestrel Breeding Raptor Survey Confidential Observations

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.001	BRVP1	24/05/2020	08:16	Kestrel	1	improved agricultural grassland and scrub, male flew from GA1 to ws1 in quarry and dropped down behind scrub out of view, reappeared briefly 08:17 for 5 secs	occupied nest; confirmed breeding	PW
K.002	BRVP1	24/05/2020	08:24	Kestrel	2	male flew to perch on quarry wall then flew off and did a loop hovering in the same place. Female then appeared and didn't land but continued flying and was lost from view behind scrub. Male flew to another ledge in cliff face of suspected nest site, before flying off again	occupied nest; confirmed breeding	PW
K.009	BRT3	02/06/2020	09:06	Kestrel	1	improved agricultural grassland, flew back to spruce tree without prey to perch. female	permanent territory; probable breeding	PW
K.010	BRT3	02/06/2020	09:06	Kestrel	1	improved agricultural grassland, moments later after perching the kestrel flew from perch to mob a raven and called briefly. it followed the raven north-east but didn't dive bomb it. it then returned to the quarry	permanent territory; probable breeding	PW
K.011	BRT3	02/06/2020	09:20	Kestrel	1	improved agricultural grassland, kestrel chicks could be heard calling from nest vicinity in quarry. after 30 seconds a female emerged and flew to perch on telegraph pole, female and chicks	nest with young; confirmed breeding	PW
K.013	BRT3	02/06/2020	09:29	Kestrel	1	came in and fed chicks at nest, then flew back out over quarry well out of view	adult carrying food/faecal sac; confirmed breeding	PW
K.019	BRVP2 & BRT3	20/07/2020	09:58	Kestrel	1	Improved agricultural grassland, juvenile hunting by hovering over WL1 and GA1 edge by road. moved out of view.	fledged young; confirmed breeding	PW
K.031	BRVP3	02/06/2021	19:23	Kestrel	1	active quarries and mines, hedgerows and improved agricultural grassland, flying to perch, calling., female flew from quarry calling to perch on telegraph pole at hedge in adjoining field. then flew back to quarry out of view to near where male was perched on stone spoil heap.	agitated behaviour; probable breeding	PW
K.033	BRVP3	02/06/2021	19:28	Kestrel	1	active quarries and mines, mixed broadleaved woodland and improved agricultural grassland, flying out of quarry.	pair; probable breeding	PW

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
K.035	BRVP3	02/06/2021	20:06	Kestrel	1	hedgerows, improved agricultural grassland and active quarries and mines, perched and flying, female. perched on telegraph pole before flying to perch on spoil heap at quarry. flew off again then down into quarry out of view as two jackdaws perched alongside it. in view for 120s.	permanent territory; probable breeding	PW
K.038	BRVP5b	20/06/2021	20:39	Kestrel	1	recolonising bare ground and scrub, perched, calling and flying mobbing pe., male bird perched on quarry wall about 15m from where pe flew into perch. flew and mobbed pe when it left its perch calling too. it then flew back to quarry wall out of view.	agitated behaviour; probable breeding	PW
K.043	BRVP3	08/07/2021	11:26	Kestrel	1	recolonising bare ground, improved agricultural grassland and hedgerows, flying into quarry., mobbed by some swifts. dropped down out of view in quarry.	probable nest site; probable breeding	PW
K.044	BRVP3	08/07/2021	11:29	Kestrel	1	improved agricultural grassland, hedgerows and active quarries and mines, flying into perch. then flying into quarry., female. flew in and perched on wires for 15 mins before dropping off into quarry out of view.	probable nest site; probable breeding	PW
K.045	BRVP3	08/07/2021	11:55	Kestrel	1	active quarries and mines, hedgerows and improved agricultural grassland, flying in with small mammal prey to nest site., male.	adult carrying food/faecal sac; confirmed breeding	PW
K.047	BRVP5	20/07/2021	20:20	Kestrel	1	recolonising bare ground, improved agricultural grassland and treelines, flying, perch hunting, flying. probably provisioning nest with young., landed on tree at edge of top of quarry. then dropped down into quarry out of view in dive. moments later faint begging calls could be heard from this direction. then flew to tree in quarry to perch briefly before flying out of quarry then. 9 min obs.	nest with young; confirmed breeding	PW
K.048	BRVP5	20/07/2021	20:31	Kestrel	1	improved agricultural grassland, alarm calling., adult heard alarm calling over field beside quarry 2 min after flying out of view. not seen.	agitated behaviour; probable breeding	PW
K.049	BRVP5	20/07/2021	20:51	Kestrel	1	recolonising bare ground, treelines and improved agricultural grassland, perch hunting. probably provisioning nest., flew to perch in tree at edge of quarry. then dropped into quarry down out of view briefly in same area as before, before flying low out over farmyard out of view.	probable nest site; probable breeding	PW

Table 7-7-2- 2 Kestrel Supplementary Vantage Point Confidential Observations

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH ¹ (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.005	VP2	21/04/2020	06:46	Kestrel	1	12	0	12	0	0	recolonising bare ground and scrub; flew and perched in old quarry	PW
K.006	VP2	21/04/2020	06:46	Kestrel	1	7	0	7	0	0	recolonising bare ground and scrub; same bird as above flew around scrub back quarry	PW
K.015	VP2	06/05/2020	18:27	Kestrel	1	58	50	8	0	0	spoil and bare ground, recolonising bare ground and scrub; with prey flew quickly into abandoned quarry flying low and fast out to a second kestrel	PW
K.017	VP2	06/05/2020	18:31	Kestrel	1	10	10			0	spoil and bare ground, recolonising bare ground and scrub; flew low back into quarry quickly without prey and lost from view behind cliff in quarry appeared to fly to perch on wall of quarry	PW
K.020	VP2	10/06/2020	16:32	Kestrel	1	20	0	20	0	0	improved agricultural grassland, mixed broadleaved/conifer woodland and recolonising bare ground; chicks could be heard calling. adult then observed flying out to quarry to perch on telegraph pole, adult and chicks	PW
K.023	VP2	10/06/2020	17:01	Kestrel	1	4	4	0	0	0	spoil and bare ground and recolonising bare ground; chicks heard calling for food, indicating food provisioning. moments later adult flew out nest site and away from site, adult and chicks	PW
K.026	VP2	10/06/2020	17:12	Kestrel	1	10	0	10	0	0	spoil and bare ground, recolonising bare ground and scrub; female mobbing hooded crows away from nest site and calling before returning to nest, when chicks began calling, adult and chicks	PW
K.031	VP2	10/06/2020	17:49	Kestrel	1	20	20	0	0	0	improved agricultural grassland, hedgerows and recolonising bare ground; female flew out onto telegraph	PW

¹ Potential Collision Height

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											pole in field adjacent to quarry, chicks heard calling, adult and chicks	
K.033	VP2	10/06/2020	18:02	Kestrel	1	10	10	0	0	0	improved agricultural grassland and scrub; female flew out of nest site to perch on pole in field. chicks heard calling. same flight path as observation 15	PW
K.037	VP2	10/06/2020	18:49	Kestrel	1	16	0	16	0	0	treelines, spoil and bare ground and treelines; female picked up flying from quarry over GA1 and WL2. chicks heard from quarry, adult and chicks	PW
K.039	VP2	23/06/2020	14:56	Kestrel	1	12	12	0	0	0	improved agricultural grassland, recolonising bare ground and hedgerows; female flying about over old quarry to ga1 and back over WS1 lost from view	PW
K.040	VP2	23/06/2020	15:01	Kestrel	1	15	15	0	0	0	recolonising bare ground and hedgerows; flying low over gorse and cliff face in quarry	PW
K.042	VP2	23/06/2020	15:17	Kestrel	1	45	0	45	0	0	conifer plantation, improved agricultural grassland and hedgerows; female hovering flew into wood after feeding juveniles	PW
K.043	VP2	23/06/2020	15:23	Kestrel	1	25	25	0	0	0	improved agricultural grassland, conifer plantation and hedgerows; female flew from beside fledged juvenile perched on wall, which was calling. landed briefly and flew again before chocks could be heard calling at nest site	PW
K.044	VP2	23/06/2020	15:23	Kestrel	1	780	780	0	0	0	improved agricultural grassland; juvenile perched on old concrete wall in GA1. perched until 15:35 when not seen any more following observation 8	PW
K.046	VP2	23/06/2020	15:40	Kestrel	1	16	16	0	0	0	recolonising bare ground and hedgerows; juvenile flew to bank landed briefly and then flew to another part of quarry	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.048	VP2	23/06/2020	15:46	Kestrel	1	13	13	0	0	0	recolonising bare ground; perched juvenile on ground. perched for 160 secs. then flew for 13 secs low from mound to quarry wall and turned back before disappearing behind hedge	PW
K.050	VP2	23/06/2020	16:06	Kestrel	3	803	63	100	340	0	conifer plantation, hedgerows and recolonising bare ground; female feeding chicks and hunting flying from nest site to WD4, catching prey, feeding juveniles 3 times, arrived 1st time with food in beak as 2 chicks flew out from quarry to eat it and then all flew into quarry. next time food in talons straight live from the WD4 to ED3 again. last time arrived back at VP2 and into quarry with prey and chick from quarry edge flew to nest site to meet adult. eventually lost from view when dropped into WD4 in dive. chicks in flight at 15m	PW
K.051	VP2	23/06/2020	16:33	Kestrel	1	141	0	95	146	0	conifer plantation, hedgerows and recolonising bare ground; female alarm calling at nest flying about quarry, chicks calling flew down to nest area and then out over to hunt again. dropped out of view	PW
K.052	VP2	23/06/2020	16:42	Kestrel	1	118	0	44	74	0	conifer plantation, hedgerows and recolonising bare ground; female picked up at quarry again and not seen meeting with food this time. left and began hunting again	PW
K.053	VP2	23/06/2020	16:47	Kestrel	1	282	0	100	282	0	conifer plantation, hedgerows and recolonising bare ground; female picked up at quarry feeding young. 2 chicks flying briefly. left to hunt, this time flying further away and dropping out overview over forestry	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.054	VP2	23/06/2020	17:07	Kestrel	2	207	207	0	0	0	recolonising bare ground; 2 chicks perched on ground in quarry	PW
K.055	VP2	23/06/2020	17:08	Kestrel	2	2	0	2	0	0	conifer plantation; presumed male returned and fed chicks/dropped food. single chick left on rock. male then flew south to road and VP2 before flying back over quarry and ne out of view	PW
K.056	VP2	23/06/2020	17:10	Kestrel	1	1	20	8	0	0	recolonising bare ground and scrub; chicks heard calling again, but no adult seen	PW
K.057	VP2	02/07/2020	13:12	Kestrel	1	180	50	130	0	0	recolonising bare ground and improved agricultural grassland; hovering and then flying over quarry where chicks were before flying back out over grassland to hover again	PW
BZ041	VP2	02/07/2020	13:14	Buzzard	1	10	0	10	0	0	hedgerows; flying mobbed by 1 of the kestrels	PW
K.058	VP2	02/07/2020	13:14	Kestrel	5	60	0	60	0	0	recolonising bare ground and hedgerows; 6 kestrels over quarry	PW
K.061	VP2	02/07/2020	13:27	Kestrel	1	40	0	40	0	0	improved agricultural grassland, recolonising bare ground and hedgerows; male provisioning young calling in spruce treeline. then flew to quarry calling	PW
K.062	VP2	02/07/2020	13:27	Kestrel	2	5	5	0	0	0	treelines, improved agricultural grassland and hedgerows; 2 juveniles kestrels joined other juveniles on spruce where male had provisioned single juvenile. 3 juveniles on tree now	PW
K.069	VP2	02/07/2020	14:03	Kestrel	1	173	6	140	27	0	improved agricultural grassland, recolonising bare ground and stone walls and other stonework; female kestrel landed in WL2 with prey calling. then flew to another tree nearby when 3 juveniles flew to her and called. female then flew to forestry where it caught prey	PW

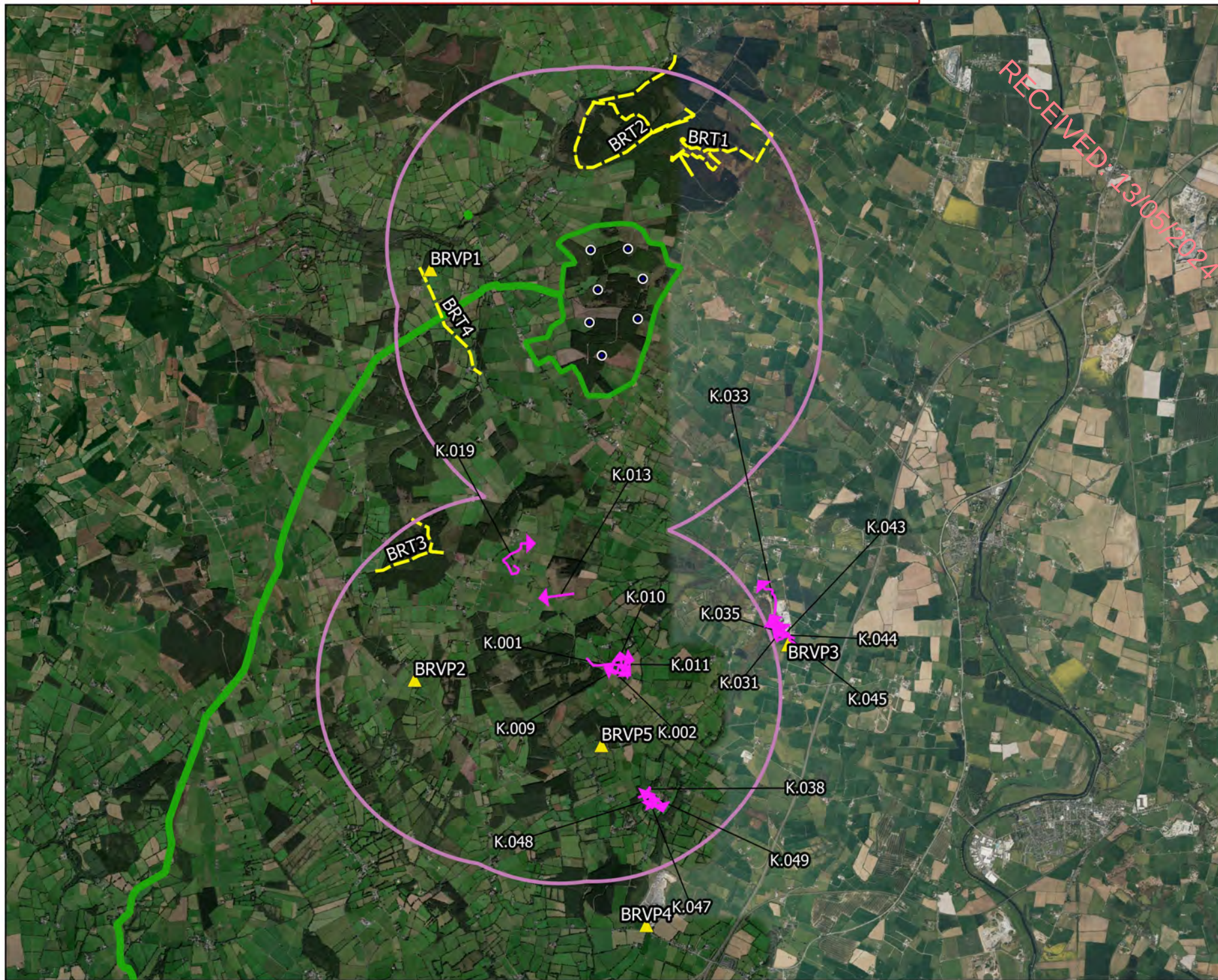
Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.070	VP2	02/07/2020	14:05	Kestrel	1	5	5	0	0	0	stone walls and other stonework and improved agricultural grassland; juvenile flying after adult female with prey	PW
K.071	VP2	02/07/2020	14:06	Kestrel	2	10	25	0	0	0	recolonising bare ground, scrub and stone walls and other stonework; flew from quarry to telegraph pole in field (juvenile) another juvenile perched on wall nearby. flew from perch to ground and then to a well and back to the ground	PW
K.072	VP2	02/07/2020	14:20	Kestrel	2	-	-	-	-	-	treelines, improved agricultural grassland and hedgerows; 2 kestrel juveniles perched on well then flew away	PW
K.074	VP2	02/07/2020	14:24	Kestrel	1	10	10	0	0	0	treelines, hedgerows and improved agricultural grassland; 3 juveniles in sight. this one flew from over GA1 to WL2 near others and called.	PW
K.075	VP2	02/07/2020	14:36	Kestrel	4	35	25	10	0	0	hedgerows, treelines and improved agricultural grassland; 3 juveniles began calling and flew to meet adult female in GA1. all birds landed at well and flew again	PW
K.078	VP2	02/07/2020	14:50	Kestrel	1	60	5	35	20	0	improved agricultural grassland and hedgerows; juvenile flew calling at PCH to meet female and descended to meet her and flew to perch in quarry near nest site calling. couldn't see prey item	PW
K.079	VP2	02/07/2020	14:51	Kestrel	1	200	20	180	0	0	improved agricultural grassland, hedgerows and recolonising bare ground; adult female met by juvenile continued over edge of WD4 to GA1 flying out of view in distance	PW
K.080	VP2	02/07/2020	14:52	Kestrel	1	40	40	0	0	0	improved agricultural grassland and hedgerows; juvenile another juvenile flew to nest. female then landed on telegraph pole in GA1.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.081	VP2	02/07/2020	15:22	Kestrel	1	55	0	55	0	0	hedgerows; flying and hovering. called at first (at quarry)	PW
K.082	VP2	02/07/2020	15:31	Kestrel	1	-	-	-	-	-	treelines and improved agricultural grassland; juvenile in view perched on spruce in WL2. 15:39 still perched. 15:42 2nd juvenile joined it and two birds perched. the second bird flew away	PW
SH014	VP2	05/09/2020	08:31	Sparrowhawk	2	16	0	16	0	0	conifer plantation; mobbing, 2 sparrowhawks mobbing each other while a hooded crow mobbed them both. possibly not mapped.	PW
SH017	VP2	05/09/2020	11:57	Sparrowhawk	1	206	0	62	144	0	conifer plantation and improved agricultural grassland; circling and mobbing, circling among a flock of hirundines before descending and mobbing a kestrel for 67s before lost from view below treeline.	PW
SH025	VP2	17/11/2020	09:49	Sparrowhawk	1	26	0	26	0	0	conifer plantation; flying, being mobbed by kestrel	PW
K.254	VP2	30/03/2021	06:42	Kestrel	1	-	-	-	-	-	scrub and recolonising bare ground; calling., calling from location of last year's nest site in old quarry.	PW
BZ147	VP2	14/04/2021	16:37	Buzzard	1	268	0	0	268	0	conifer plantation; being mobbed flying, circling, displaying., mobbed by hooded crow at first before rising in height to soar. then descended in a series of stooping display dives.	PW
K.271	VP2	14/04/2021	19:10	Kestrel	1	58	0	0	0	0	scrub, recolonising bare ground and treelines; flying displaying male., male. displayed over quarry in vicinity of female before perching on spruce tree for 10s.	PW
K.272	VP2	14/04/2021	19:11	Kestrel	2	46	5	0	0	0	scrub, recolonising bare ground and treelines; flying., male and female flying together. both birds flew into land at edge of quarry on spruce treeline in separate trees. female perched for 656s	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											during which she was mated with by the male twice, before dropping off perch flying out of view.	
K.273	VP2	14/04/2021	19:15	Kestrel	1	6	0	0	0	0	scrub, recolonising bare ground and treelines; flying, mating, flying., male flew to mate with female for the first time before flying back to perch out of view. birds calling.	PW
K.274	VP2	14/04/2021	19:23	Kestrel	1	6	0	0	0	0	treelines, recolonising bare ground and scrub; flying, mating, flying., male flew to mate with female for second time on spruce before flying behind treeline out of view. birds calling.	PW
K.276	VP2	14/04/2021	19:28	Kestrel	1	76	0	16	0	0	improved agricultural grassland, recolonising bare ground and treelines; flying to perch., female, flew from quarry to perch in treeline. perched from 176s.	PW
BZ149	VP2	14/05/2021	10:50	Buzzard	1	111	0	0	75	0	conifer plantation, improved agricultural grassland and wet grassland; flying, displaying., circled before flying and gliding and diving swooping display flight before dropping down out of view.	PW
K.308	VP2	06/07/2021	14:11	Kestrel	1	22	0	5	0	0	recolonising bare ground, scrub and improved agricultural grassland; flew from quarry wall out to field., male. possibly provisioning nest site. flew low from obscured quarry wall where nest was last year out over field.	PW
K.309	VP2	06/07/2021	14:28	Kestrel	1	4	4	0	0	0	recolonising bare ground and scrub; flying., female. flew low across quarry.	PW
K.312	VP2	06/07/2021	14:48	Kestrel	1	27	5	15	7	0	conifer plantation, improved agricultural grassland and hedgerows; flying and perched alarm calling., male alarm calling and flying around at buzzard perched at edge of forestry. then dropped below treeline out of view.	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
K.313	VP2	06/07/2021	14:49	Kestrel	1	492	6	4	482	0	improved agricultural grassland, wet grassland and conifer plantation; flying in to perch. hunting by hovering., female. flew into land briefly after male mobbed buzzard. perched at edge of WD4 for 506s. after rain shower began hunting by hovering over clearfelled areas and GS4 and BL1.	PW
K.349	VP2	10/08/2021	16:16	Kestrel	1	26	8	18	0	0	improved agricultural grassland, scrub and recolonising bare ground; flying into land., juvenile/ immature bird from this year. flew into land on pile of rocks in quarry. perched in view for a further 32s before flying over ridge in quarry out of view.	PW
K.350	VP2	10/08/2021	16:24	Kestrel	1	-	-	-	-	-	improved agricultural grassland; perched., juvenile /immature from this year. perched for 118s.	PW
K.351	VP2	10/08/2021	16:36	Kestrel	1	-	-	-	-	-	improved agricultural grassland, treelines and buildings and artificial surfaces; perched and preening., juvenile/ immature bird. perched on telegraph pole near yard. perched in view for 121s before dropping off out of view.	PW
K.373	VP2	10/09/2021	14:31	Kestrel	1	139	29	40	29	0	recolonising bare ground, improved agricultural grassland and hedgerows; calling, perched, flying, preening, hunting by hovering., flew into land in old quarry calling. perched for 23s before flying to telegraph pole. perched for 95s before flying to next pole. perched preening for 131s. then hunted WL1 by hovering picking up small mammal before flying back to quarry out of view.	PW
K.382	VP2	10/09/2021	19:12	Kestrel	1	19	19	0	0	0	improved agricultural grassland, recolonising bare ground and scrub;	PW

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH' (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
											flying to perch on quarry wall, flew from telegraph pole to quarry wall out of view.	



Map Legend

- EIA Site Boundary
- Turbine Layout
- ▲ BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

Breeding Raptor Survey
Kestrel Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

220246

Drawing No.

Fig. 7.7.2.1

Scale

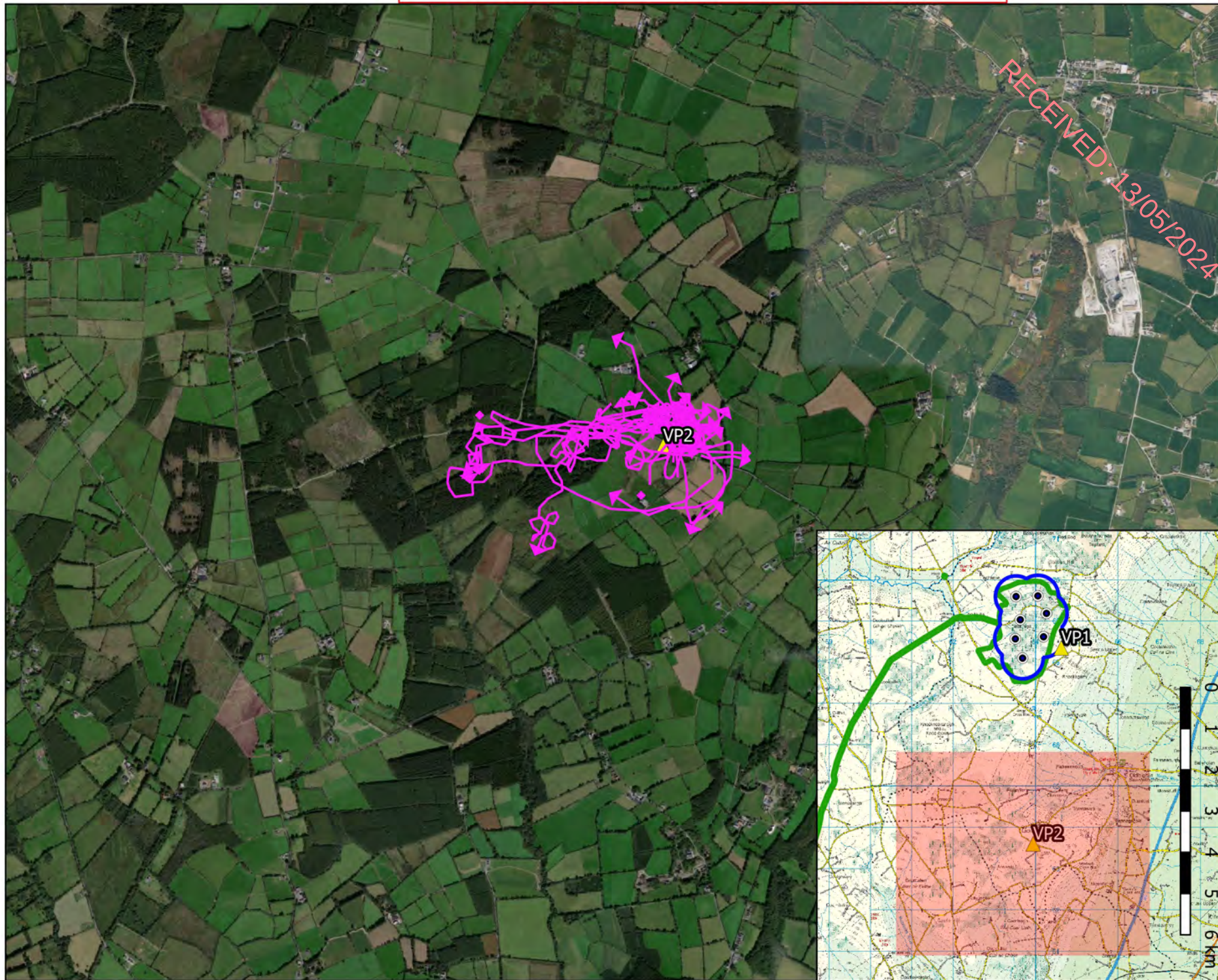
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Map Legend

- EIA Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- ▲ Supplementary VP Location
- Flight Observation

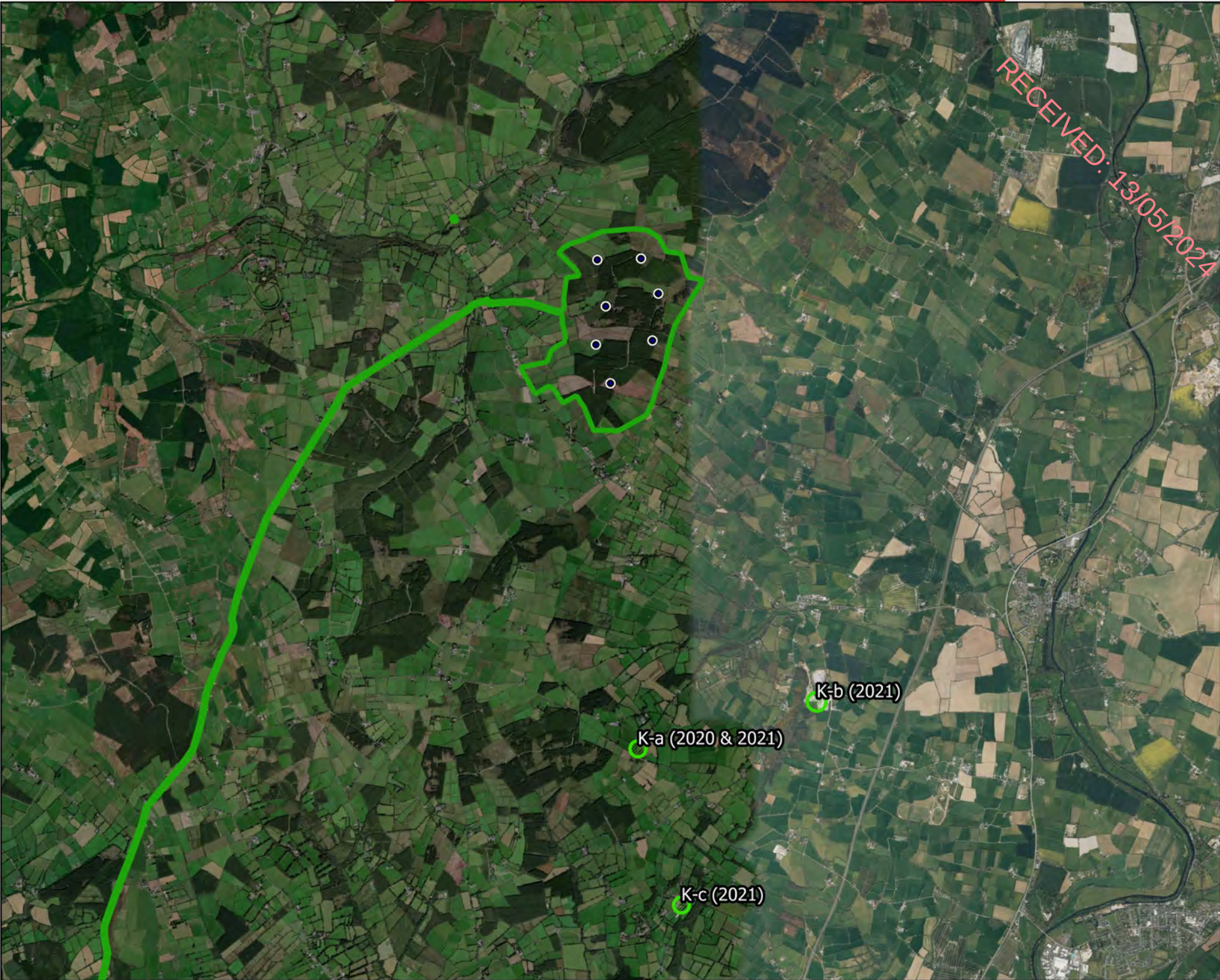


Drawing Title
Supplementary Vantage Point Survey
Kestrel Observations

Project Title
Seskin Wind Farm, Co. Carlow

Drawn By D. Woods	Checked By P. Cregg
Project No. 220246	Drawing No. Fig. 7.7.2.2
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Map Legend

- EIA Site Boundary
- Turbine Layout
- Breeding Territories
 - Confirmed
 - Probable

Drawing Title

Kestrel Breeding Territories

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By	Checked By
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Project No.	Drawing No.
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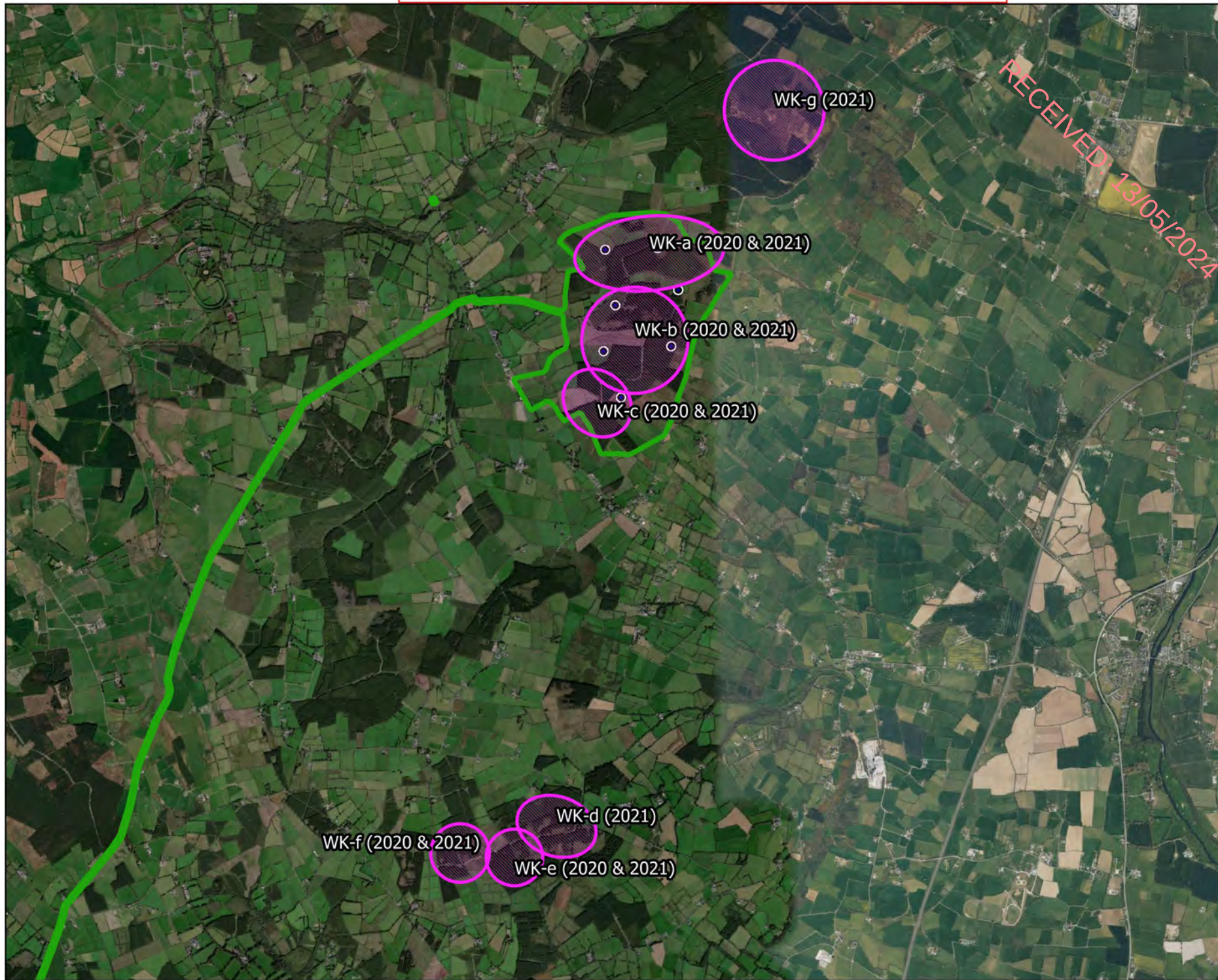


3.

WOODCOCK

Individual flight data provided in Appendix 7-4. Breeding territory locations are shown below.

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- Breeding Territories
 - Confirmed
 - Probable



Drawing Title

Woodcock Breeding Territories

Project Title

Seskin Wind Farm, Co. Carlow

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4.

BUZZARD

Table 7-7-4- 1 Buzzard Vantage Point Survey Confidential Observations

Vantage point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ065	VP1	22/08/2020	20:36	Buzzard	1	-	-	-	-	-	improved agricultural grassland and hedgerows; calling, juvenile buzzard heard calling (but not seen) in this area for 120s.	PW
BZ194	VP1	13/07/2021	14:28	Buzzard	1	67	0	0	67	0	conifer plantation, wet grassland, and hedgerows; displaying flying., undulating flight display. dropped down and back up 12x in a row before moving to below treeline out of view.	PW

Table 7-7-4- 2 Buzzard Breeding Walkover Survey Confidential Observations

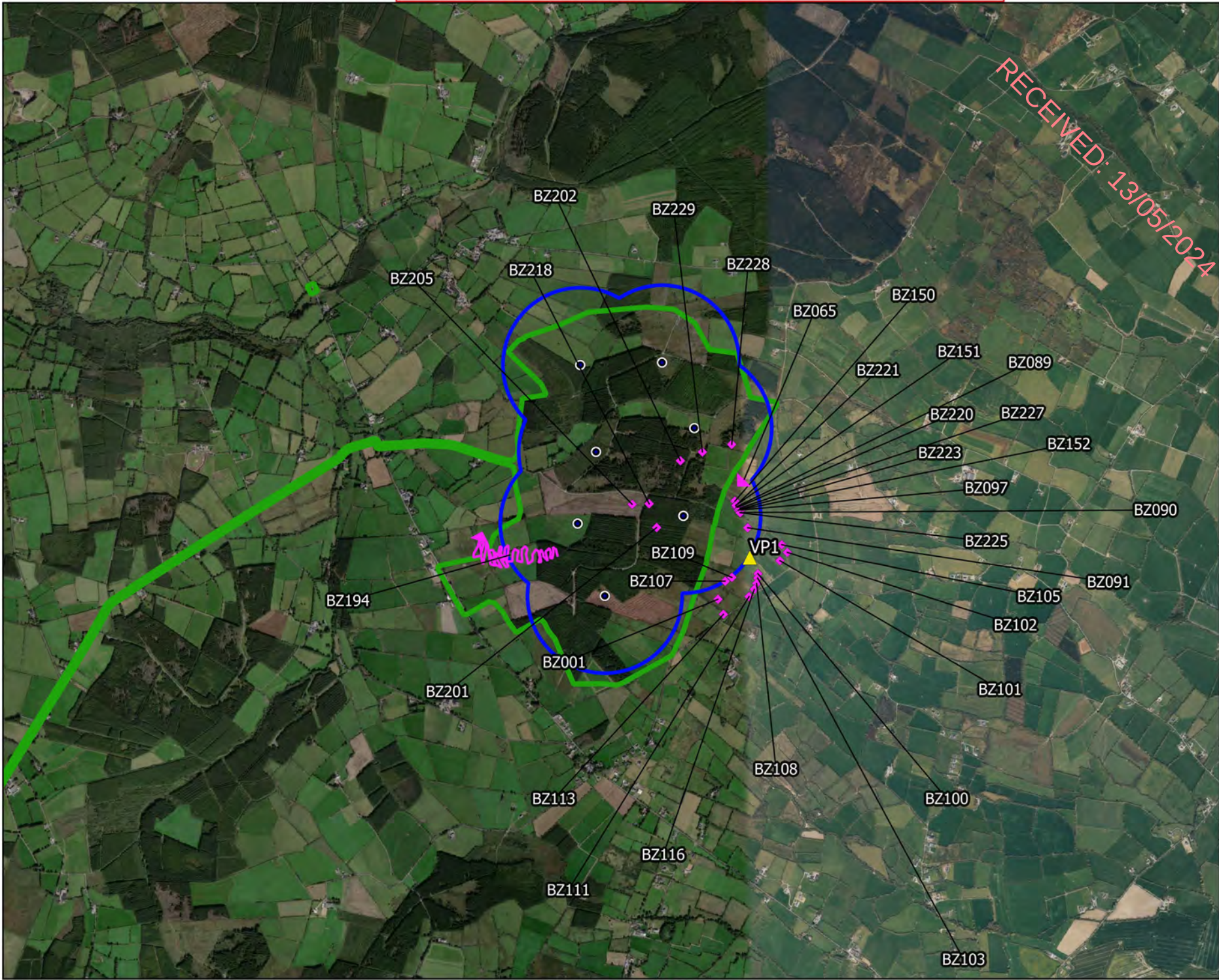
Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
BZ037	23/06/2021	11:46	Buzzard	1	conifer plantation, treelines and wet grassland; alarm calling at first for 10 min before flying. (agitated behaviour; probable breeding)	PW
BZ039	26/07/2021	10:54	Buzzard	1	hedgerows, wet grassland and treelines; calling, perched., juvenile fledged buzzard calling perched on hedgerow near nest site. calling for 10 mins. (nest with young; confirmed breeding)	PW
BZ040	26/07/2021	11:04	Buzzard	1	conifer plantation; calling, perched., adult alarm calling and flying from perch to perch at edge of mature WD4 within clearfelled areas. in view for 17 mins. flew at 11:16. 11:19 & 11:21 each time perching at a different tree. (agitated behaviour; probable breeding)	PW
BZ041	26/07/2021	12:00	Buzzard	1	treelines, hedgerows and wet grassland; calling., fledged juvenile calling again, heard, not seen. (nest with young; confirmed breeding)	PW
BZ043	26/07/2021	12:20	Buzzard	1	conifer plantation; fledged juvenile calling., juvenile calling from within trees near edge of forestry. (nest with young; confirmed breeding)	PW

Table 7-7-4- 3 Buzzard Breeding Raptor Survey Confidential Observations

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
BZ049	BRVP2 & BRT3	20/07/2020	10:10	Buzzard	2	improved agricultural grassland, 1 juvenile calling not visible, another perched in ash trees nearby	fledged young; confirmed breeding	PW
BZ051	BRVP2 & BRT3	20/07/2020	10:15	Buzzard	2	improved agricultural grassland, second calling buzzard now perched beside first one in ash tree	fledged young; confirmed breeding	PW
BZ052	BRVP2 & BRT3	20/07/2020	10:17	Buzzard	2	improved agricultural grassland, both flew from ash tree further along treeline to another tree, juvenile still calling consistently	fledged young; confirmed breeding	PW
BZ057	BRVP2 & BRT3	20/07/2020	12:01	Buzzard	1	improved agricultural grassland and hedgerows, juvenile calling	fledged young; confirmed breeding	PW
BZ072	BRVP2	19/05/2021	15:37	Buzzard	2	conifer plantation, improved agricultural grassland and hedgerows, flying, circling, soaring, displaying., second bird spotted 1 minute after the first. the first bird began undulating flight display dropping and rising again 8 times. the two birds soared together then. one bird dropped down out of view first before other descended below treeline at 15:47.	courtship and display; probable breeding	PW
BZ088	BRT3	01/06/2021	12:55	Buzzard	1	conifer plantation and improved agricultural grassland, circling calling displaying., joined three buzzard high up circling calling. then displayed in undulating flight as descended in height before dropping down below horizon near its presumed partner out of view. in view for 7 mins.	courtship and display; probable breeding	PW
BZ098	BRVP4	13/07/2021	11:48	Buzzard	1	recolonising bare ground, dry meadows and grassy verges and conifer plantation, perched, hunting, soaring, provisioning nest. in view 15 mins., flew & soared to height transferring food from beak to talons before gliding back & diving into provision nest.	adult carrying food/faecal sac; confirmed breeding	PW
BZ099	BRVP4	13/07/2021	12:05	Buzzard	1	mixed broadleaved woodland, conifer plantation and recolonising bare ground, flying back from provisioning nest to perch hunt., same bird came back into view from forestry 102s later to fly to perch hunt at edge of quarry again. in view for 3 mins.	occupied nest; confirmed breeding	PW

Table 7-7-4- 4 Buzzard Supplementary Vantage Point Survey Confidential Observations

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
BZ041	VP2	02/07/2020	13:14	Buzzard	1	10	0	10	0	0	hedgerows; flying mobbed by 1 of the kestrels	PW
BZ147	VP2	14/04/2021	16:37	Buzzard	1	268	0	0	268	0	conifer plantation; being mobbed flying, circling, displaying., mobbed by hooded crow at first before rising in height to soar. then descended in a series of stooping display dives.	PW
BZ149	VP2	14/05/2021	10:50	Buzzard	1	111	0	0	75	0	conifer plantation, improved agricultural grassland and wet grassland; flying, displaying., circled before flying and gliding and diving swooping display flight before dropping down out of view.	PW



Map Legend

-  EIAR Site Boundary
-  Turbine Layout
-  500m Radius of Turbines
-  VP Locations
-  Flight Observation



Drawing Title

Vantage Point Survey Buzzard Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Project No. _____

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Map Legend

- EIA Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title

Breeding Walkover Survey
Buzzard Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Clegg

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Drawing No.

Fig. 7.7.4.2

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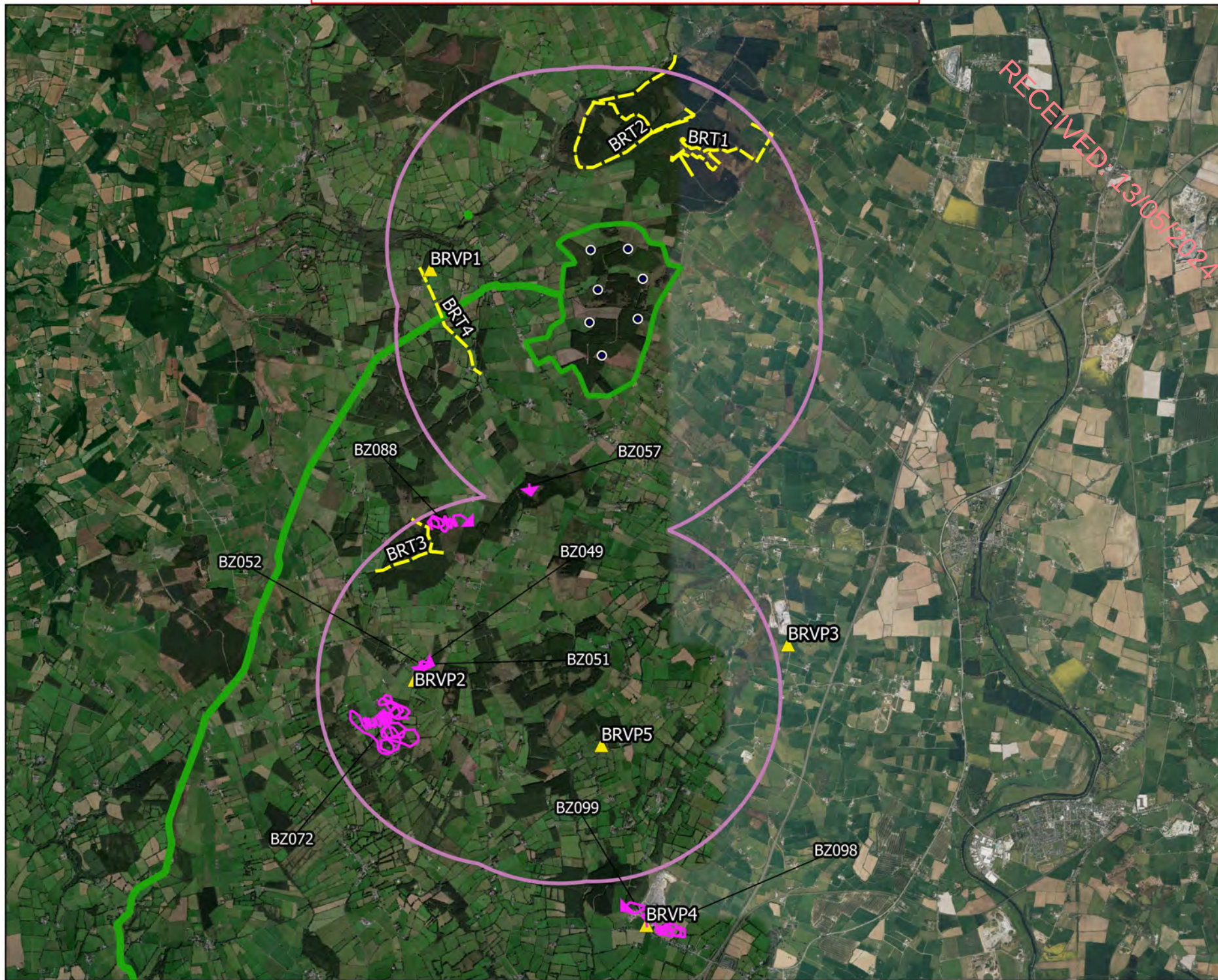
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Map Legend

- EIA Site Boundary
- Turbine Layout
- ▲ BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

Breeding Raptor Survey
Buzzard Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

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Project No.

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Drawing No.

Fig. 7.7.4.3

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Date

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Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- Supplementary VP Location
- Flight Observation

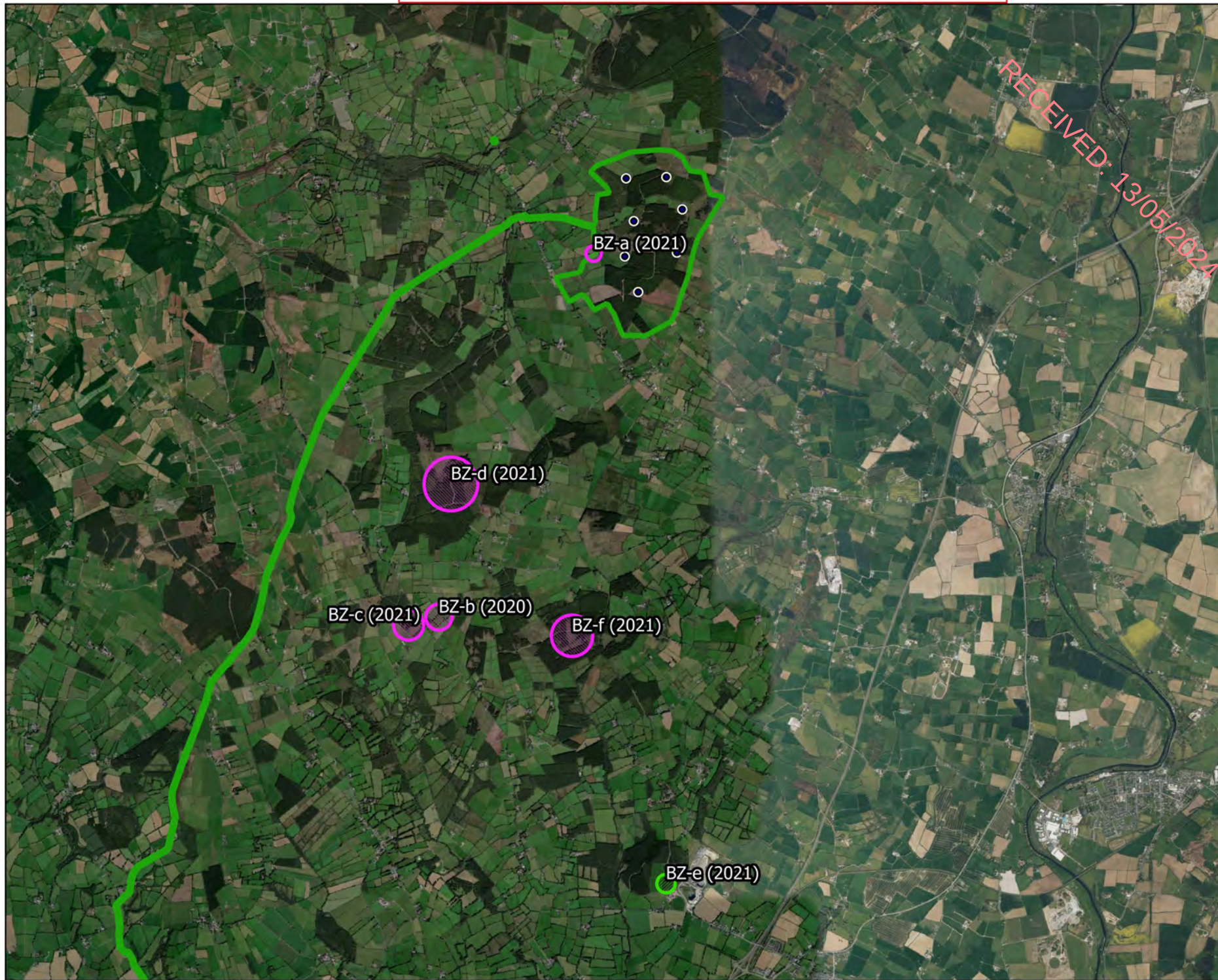


Drawing Title
Supplementary Vantage Point Survey
Buzzard Observations

Project Title
Seskin Wind Farm, Co. Carlow

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Project No. 220246	Drawing No. Fig. 7.7.4.4
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Map Legend

- EIA Site Boundary
- Turbine Layout
- Breeding Territories
 - Confirmed
 - Probable



Drawing Title

Buzzard Breeding Territories

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By	Checked By
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Project No.	Drawing No.
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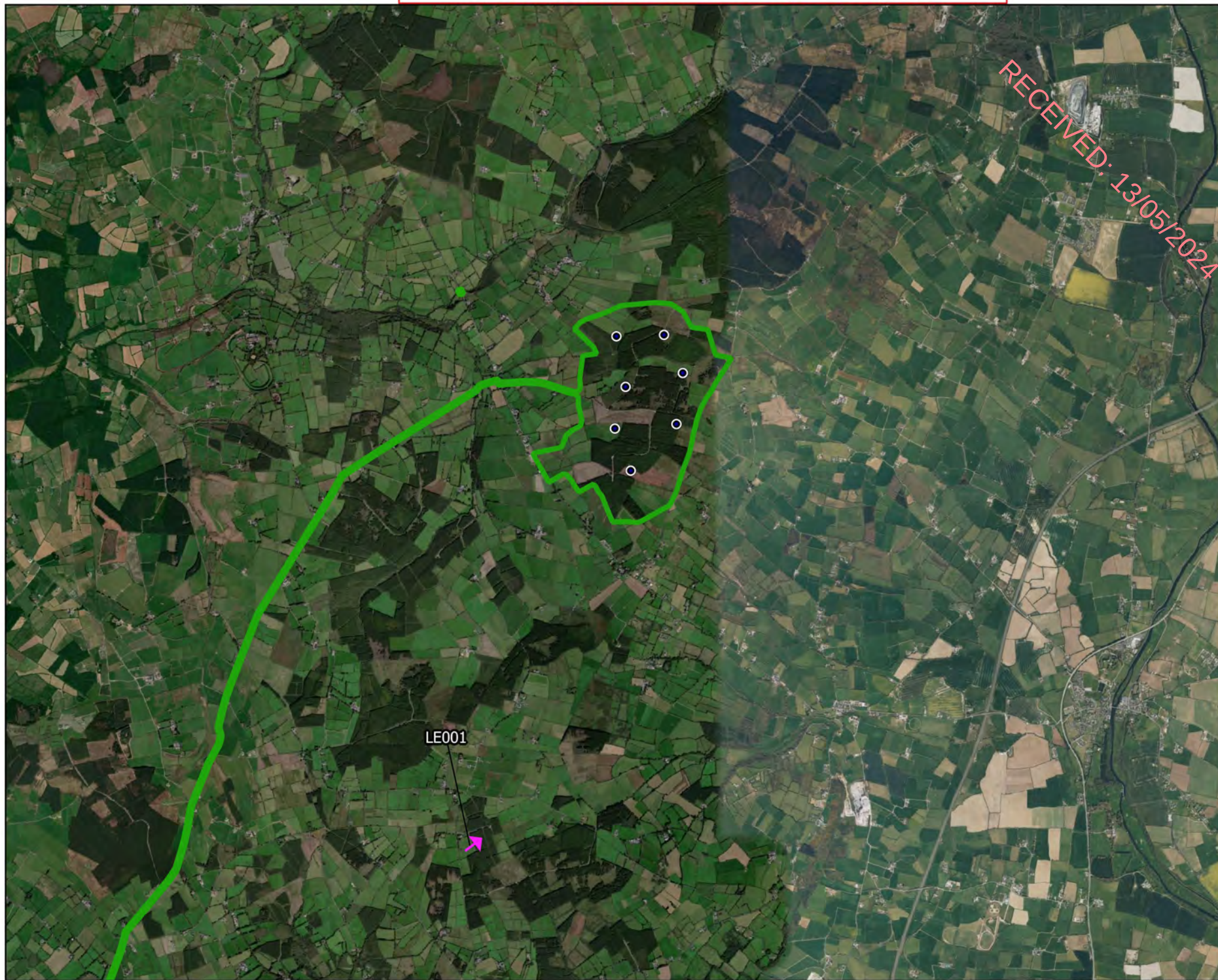


5.

LONG-EARED OWL

Table 7-7-5- 1 Long-eared Owl Incidental Confidential Observations

Incidental Observations							
Ref.	Location	Date	Time	Species	Number	Habitat and activity	Surveyor
LE001	Breeding Woodcock Survey; T2	15/06/2020	21:38	Long-Eared Owl	1 adult and juvenile	treelines; adult called followed by juvenile. adult perched on spruce along roadside ash in WL2 of ash by house. then adult flew to shed at house out of view to and chick began calling repeatedly from ash tree	PW



Map Legend

-  EIAR Site Boundary
-  Turbine Layout
-  Flight Observation



Drawing Title

Incidental Long-eared Owl Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

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Drawing No.

Fig. 7.7.5.1

Scale

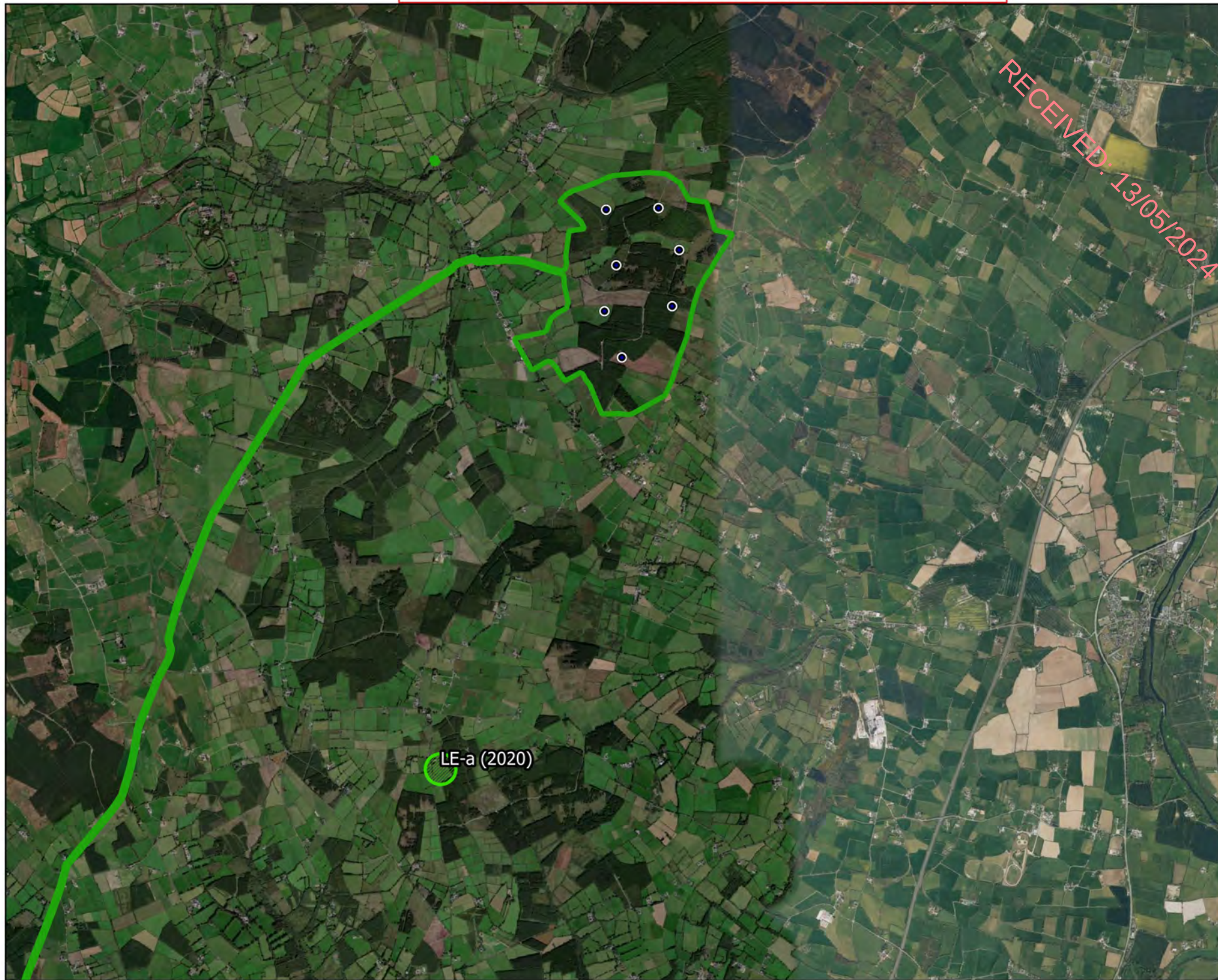
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Map Legend

EIA Site Boundary

Turbine Layout

Breeding Territories

Confirmed

Probable



Drawing Title

Long-eared Owl Breeding Territories

Project Title

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Drawn By

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Fig. 7.7.5.2

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6.

SPARROWHAWK

Table 7-7-6- 1 Sparrowhawk Vantage Point Survey Confidential Observations

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH044	VP1	15/02/2021	12:33	Sparrowhawk	1	198	0	2	196	0	conifer plantation; displaying, female, circling at first before commencing undulating flight display. second last dive was into forestry before appearing again and finally diving below treeline into forestry out of view	PW
SH046	VP1	26/03/2021	06:29	Sparrowhawk	1	275	0	0	275	0	conifer plantation; flying and displaying,, female. undulating flight display. dropped down below treeline into forestry then.	PW
SH047	VP1	26/03/2021	06:50	Sparrowhawk	1	88	0	0	82	5	conifer plantation; displaying before dropping into forestry., female.	PW

Table 7-7-6- 2 Sparrowhawk Breeding Raptor Survey Confidential Observations

Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH002	BRVP1	24/05/2020	10:29	Sparrowhawk	1	conifer plantation, calling in WD4 near path	agitated behaviour; probable breeding	PW
SH014	BRVP2 & BRT3	20/07/2020	09:46	Sparrowhawk	1	conifer plantation, improved agricultural grassland and hedgerows, a second sparrowhawk briefly appeared above WD4 flying below other one before dropping back down into forestry	pair; probable breeding	PW
SH015	BRT2	20/07/2020	17:57	Sparrowhawk	1	conifer plantation, improved agricultural grassland and hedgerows., chicks calling from wd4WD4. . calling until 18:41 on and off. heard again in same general area at 20:25	nest with young; confirmed breeding	PW

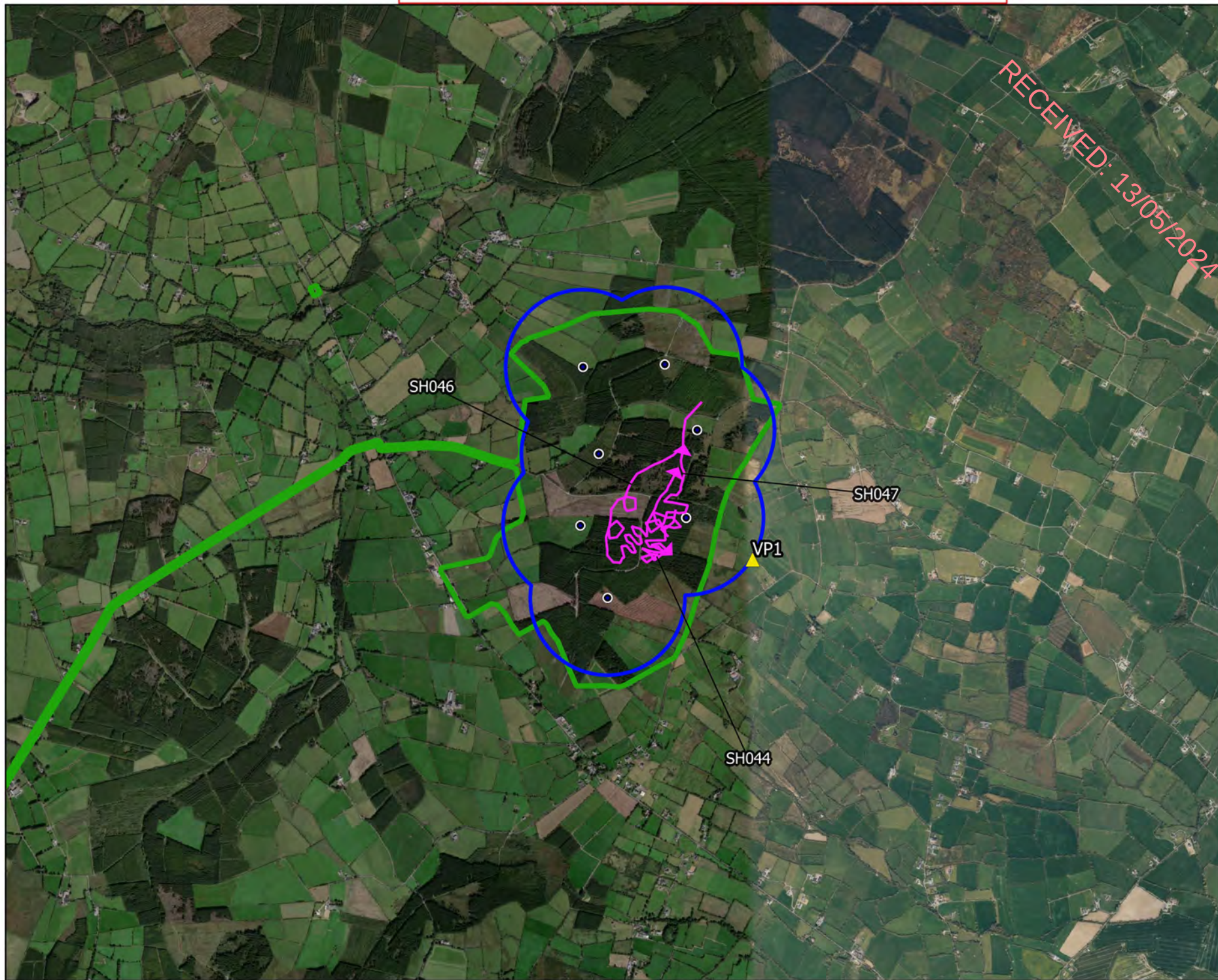
Breeding Raptor Surveys								
Ref.	BR	Date	Time	Species	Number	Habitat and activity	Breeding status	Surveyor
SH016	BRT2	20/07/2020	18:04	Sparrowhawk	1	conifer plantation, male flew across clear fell areas to perch in whitethorn in open clear felled areas. perched for 70 secs before flying across clear fell area back to mature WD4 to nest area, out of view between trees	probable nest site; probable breeding	PW

Table 7-7-6- 3 Sparrowhawk Supplementary Vantage Point Survey Confidential Observations

Supplementary Vantage Point Surveys												
Ref.	VP	Date	Time	Species	Number	Duration of flight (s)	Band 1 (0-15m)	Band 2 (15-25m)	PCH (25-200m)	Band 4 (>200m)	Habitat and activity	Surveyor
SH014	VP2	05/09/2020	08:31	Sparrowhawk	2	16	0	16	0	0	conifer plantation; mobbing, 2 sparrowhawks mobbing each other while a hooded crows mobbed them both. possibly not mapped.	PW
SH017	VP2	05/09/2020	11:57	Sparrowhawk	1	206	0	62	144	0	conifer plantation and improved agricultural grassland; circling and mobbing, circling among a flock of hirundines before descending and mobbing a kestrel for 67s before lost from view below treeline.	PW
SH025	VP2	17/11/2020	09:49	Sparrowhawk	1	26	0	26	0	0	conifer plantation; flying, being mobbed by kestrel	PW

Table 7-7-6- 4 Sparrowhawk Supplementary Breeding Walkover Survey Confidential Observations

Supplementary Breeding Walkover Surveys						
Ref.	Date	Time	Species	Number	Habitat and activity	Surveyor
SH002	22/07/2020	09:13	Sparrowhawk	2	conifer plantation; chicks calling from wood (nest with young; confirmed breeding)	PW
SH004	22/07/2020	09:56	Sparrowhawk	2	conifer plantation; at least 2 chicks calling from woods behind road (nest with young; confirmed breeding)	PW



Map Legend

- EIA Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- ▲ VP Locations
- Flight Observation



Drawing Title

Vantage Point Survey
Sparrowhawk Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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Drawing No.

Fig. 7.7.6.1

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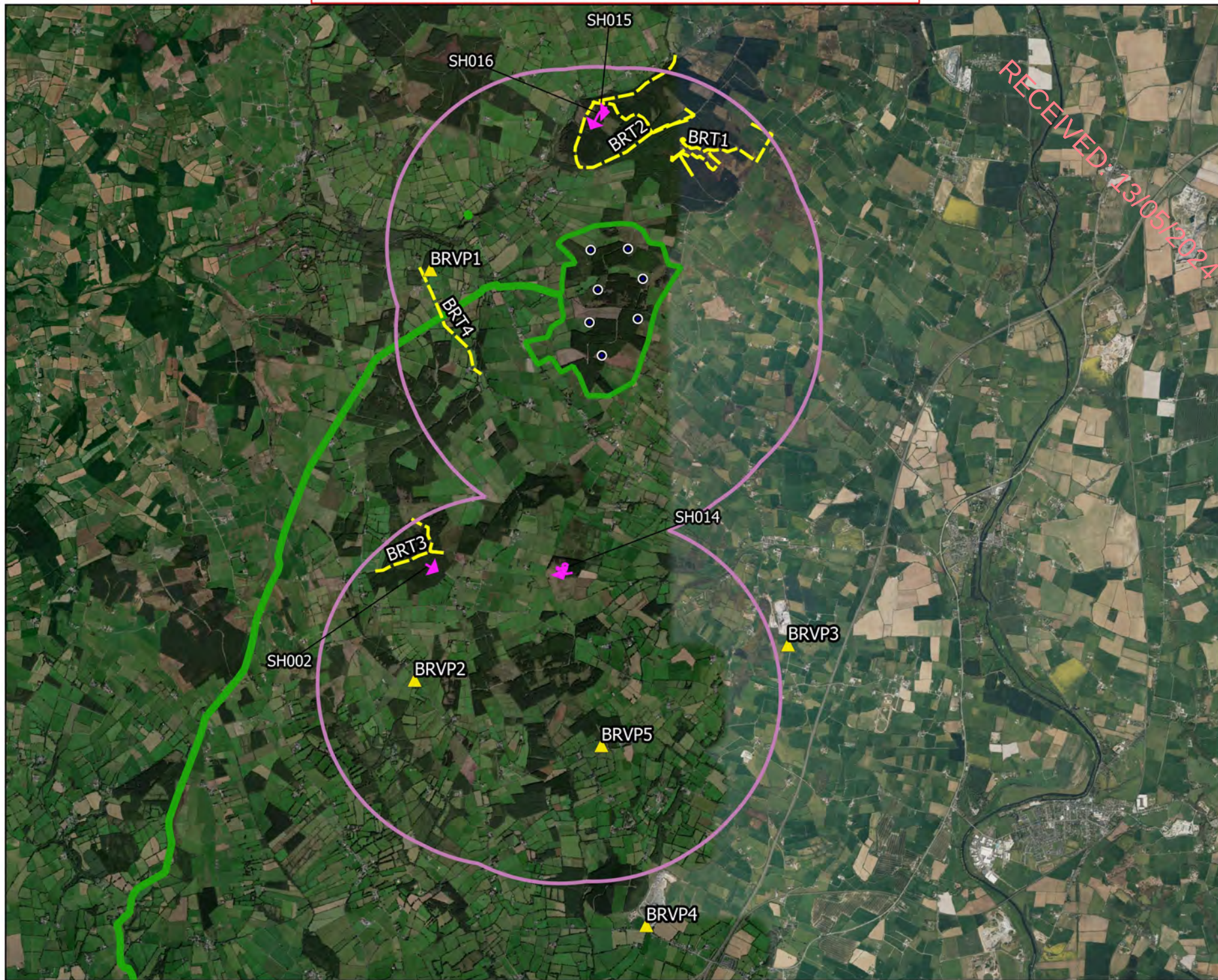
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Map Legend

- EIAR Site Boundary
- Turbine Layout
- BRVP Locations
- BR Transect Locations
- 2km Buffer of Site Boundary
- Flight Observation



Drawing Title

Breeding Raptor Survey
Sparrowhawk Observations

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By

D. Woods

Checked By

P. Cregg

Project No.

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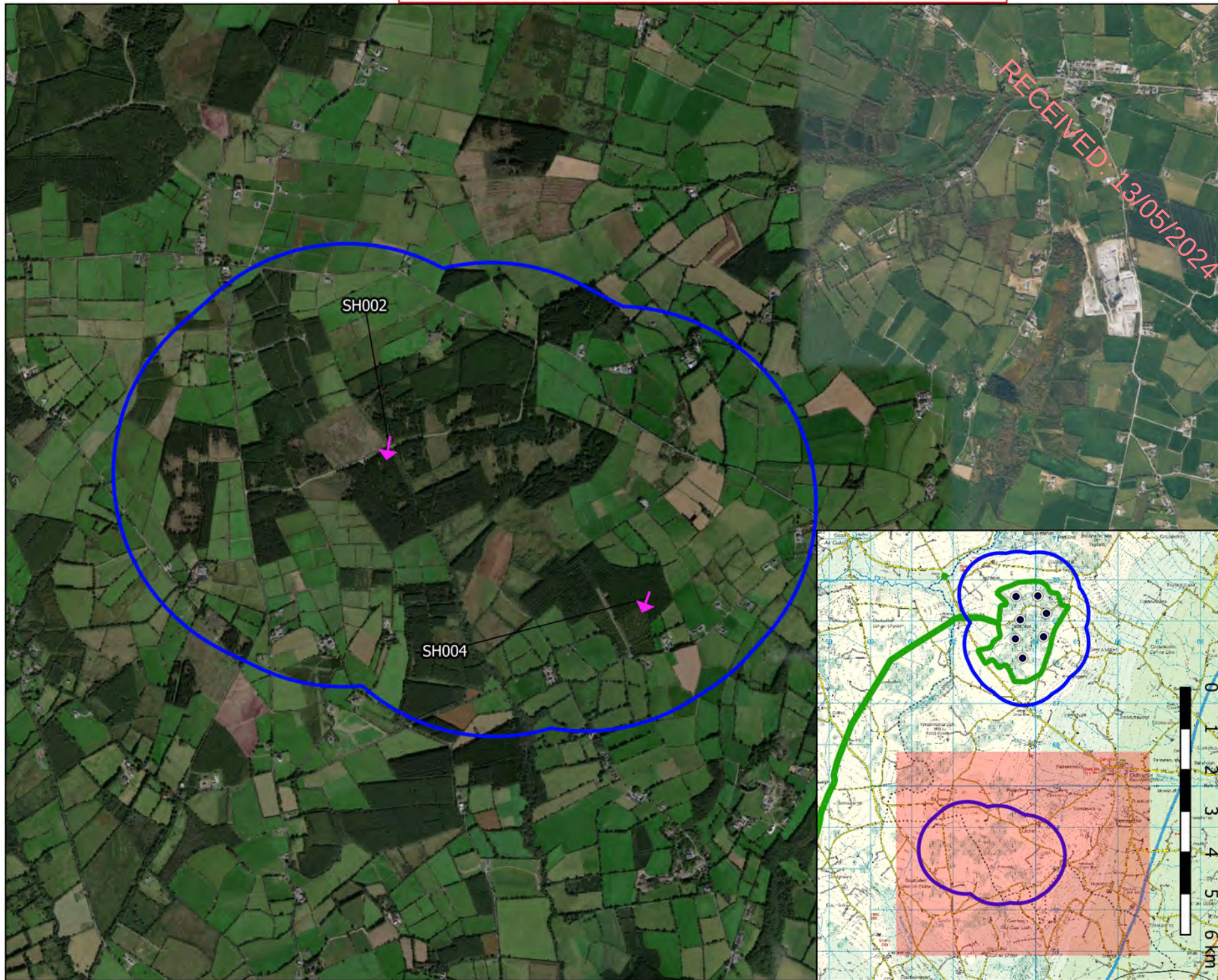


Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Radius of Turbines
- ▲ Supplementary VP Location
- Flight Observation

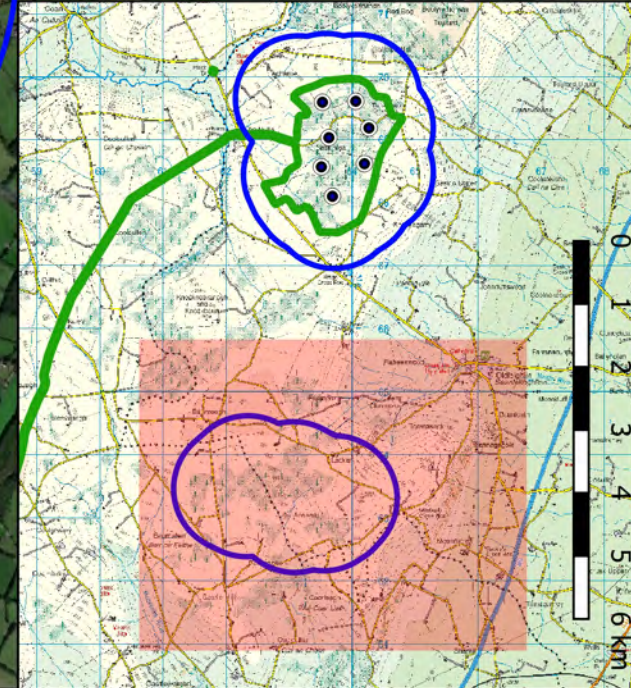


Drawing Title Supplementary Vantage Point Survey Sparrowhawk Observations	
Project Title Seskin Wind Farm, Co. Carlow	
Drawn By D. Woods	Checked By P. Clegg
Project No. 220246	Drawing No. Fig. 7.7.6.3
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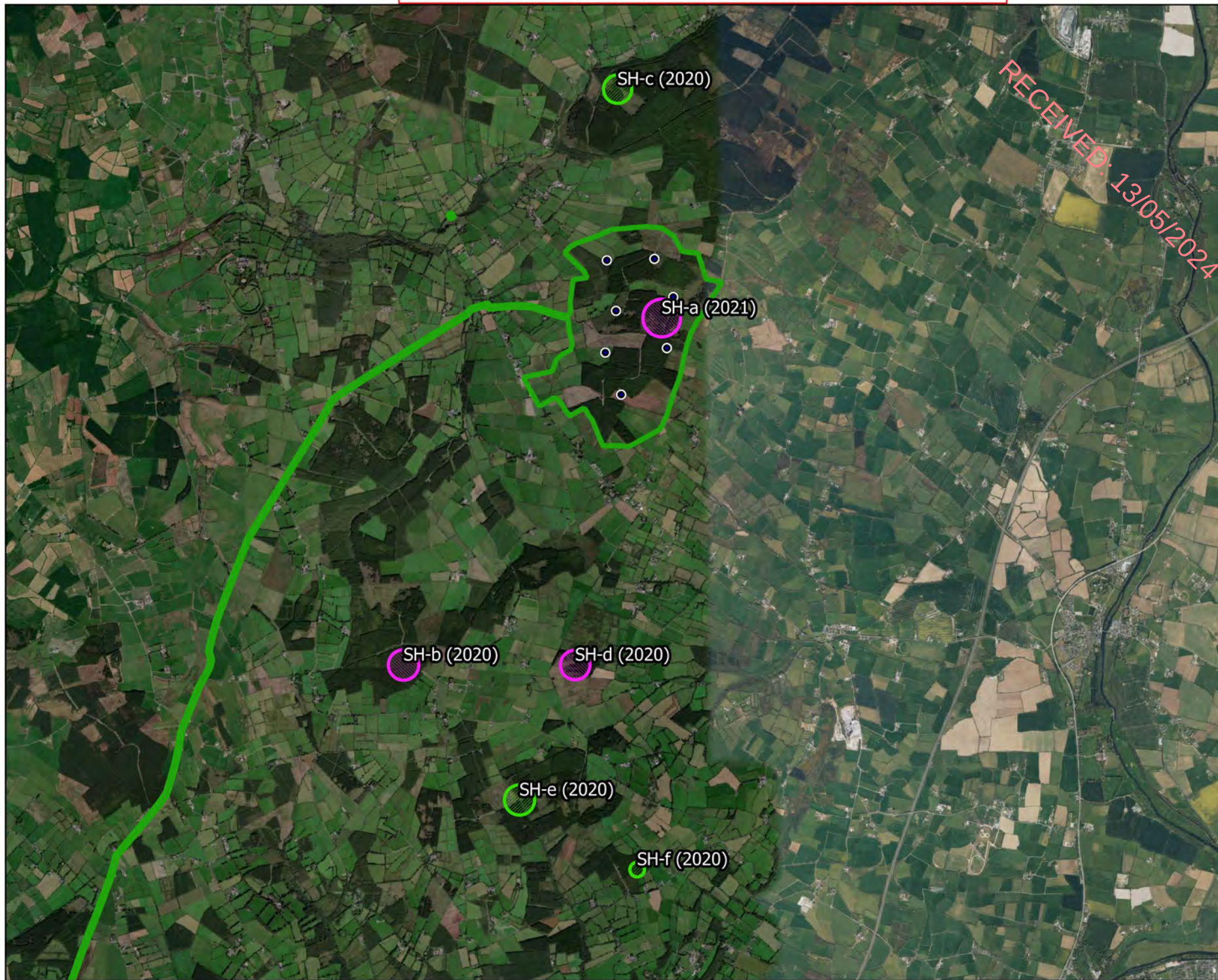


Map Legend

- EIAR Site Boundary
- Turbine Layout
- 500m Survey Area
- Flight Observation



Drawing Title	
Supplementary Breeding Walkover Survey Sparrowhawk Observations	
Project Title	
Seskin Wind Farm, Co. Carlow	
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D. Woods	P. Cregg
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Map Legend

- EIA Site Boundary
- Turbine Layout
- Breeding Territories
 - Confirmed
 - Probable



Drawing Title

Sparrowhawk Breeding Territories

Project Title

Seskin Wind Farm, Co. Carlow

Drawn By	Checked By
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Project No.	Drawing No.
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