

- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - GOLDEN PLOVER
 - GREAT BLACK-BACKED GULL
 - GREY PLOVER
 - FLOCK COUNT AREAS**
 - GOLDEN PLOVER
 - GREY PLOVER
 - FLIGHT LINES (HEIGHT)**
 - GOLDEN PLOVER: 0-10M
 - GOLDEN PLOVER: >10M
 - GREAT BLACK-BACKED GULL: 0-10M
 - GREAT BLACK-BACKED GULL: >10M
 - GREY PLOVER: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M

0 0.13 0.25 0.5 Km

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Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larród Éireann Irish Rail**

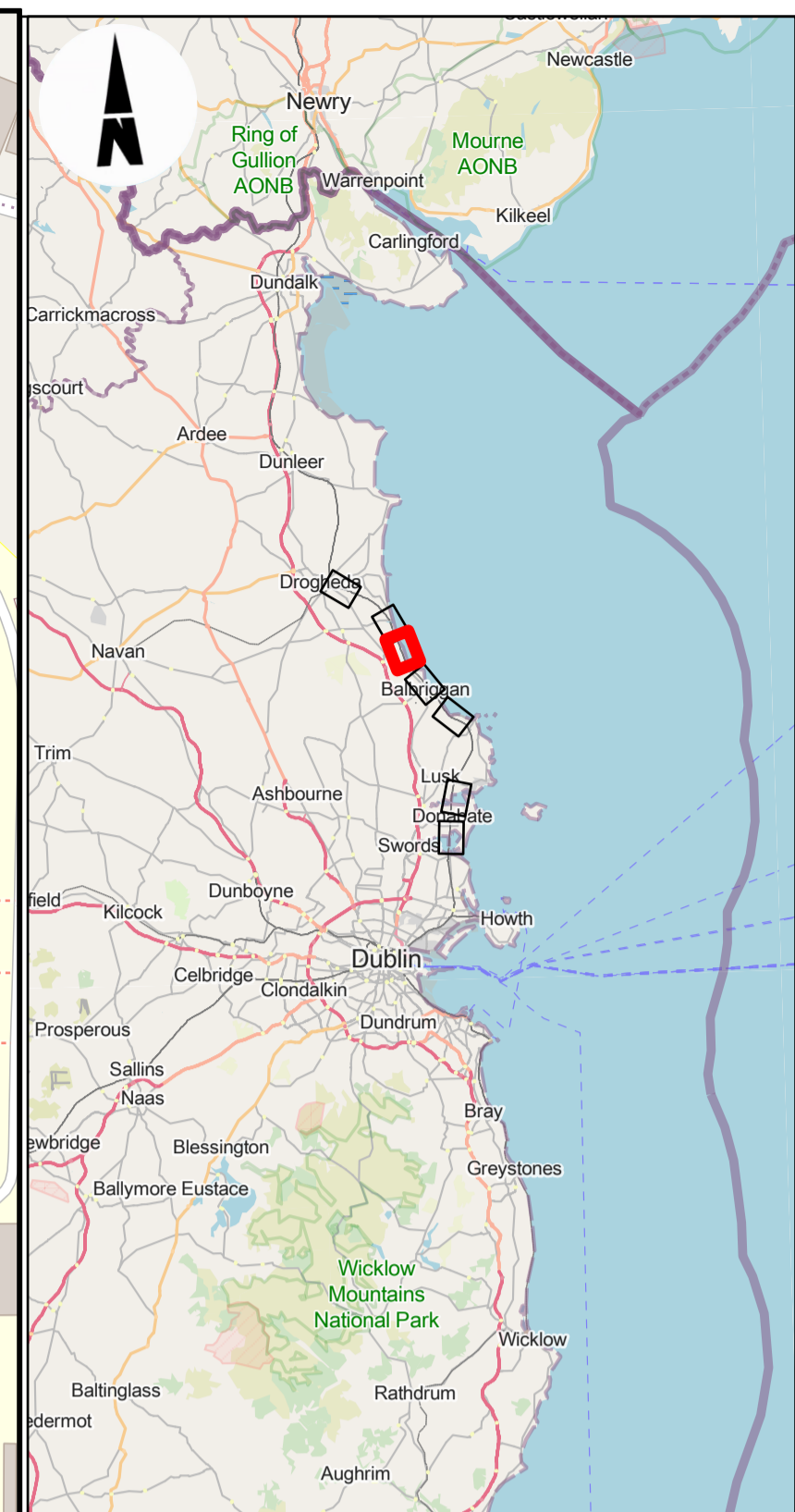
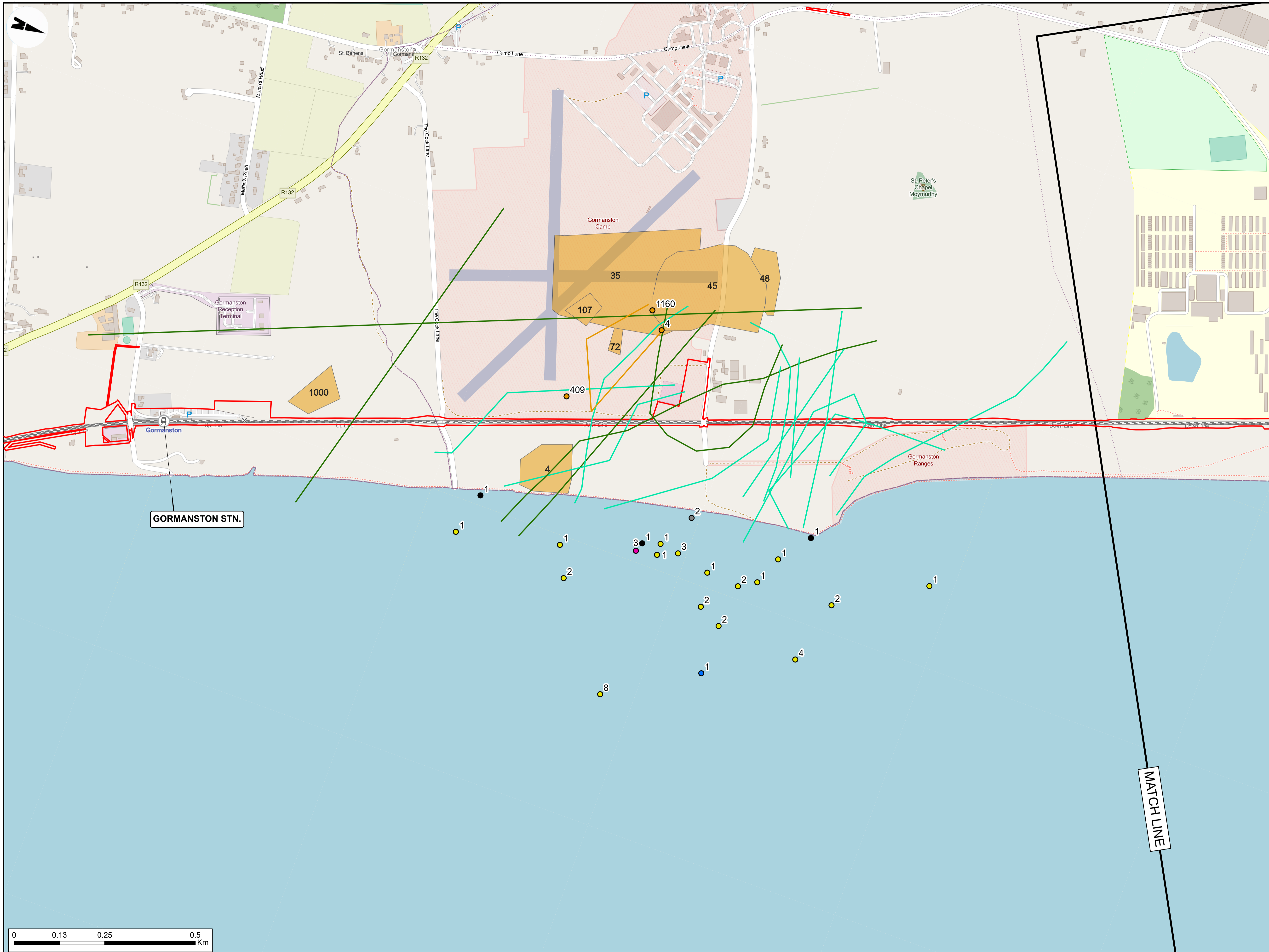
Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 1:10000 @ A3

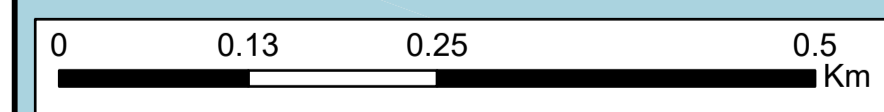
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Project Code: D+WP56 Originator Code: ARP OMS Code: 279933-00

Project Title: DART+ COASTAL NORTH	
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2	
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100144	Sheet Number: 44 of 85
Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - GOLDEN PLOVER
 - GREAT BLACK-BACKED GULL
 - GREAT CRESTED GREBE
 - GREAT NORTHERN DIVER
 - GREY PLOVER
 - GUILLEMOT
 - FLOCK COUNT AREAS**
 - GOLDEN PLOVER
 - FLIGHT LINES (HEIGHT)**
 - GOLDEN PLOVER: 0-10M
 - GOLDEN PLOVER: >10M
 - GREAT BLACK-BACKED GULL: >10M



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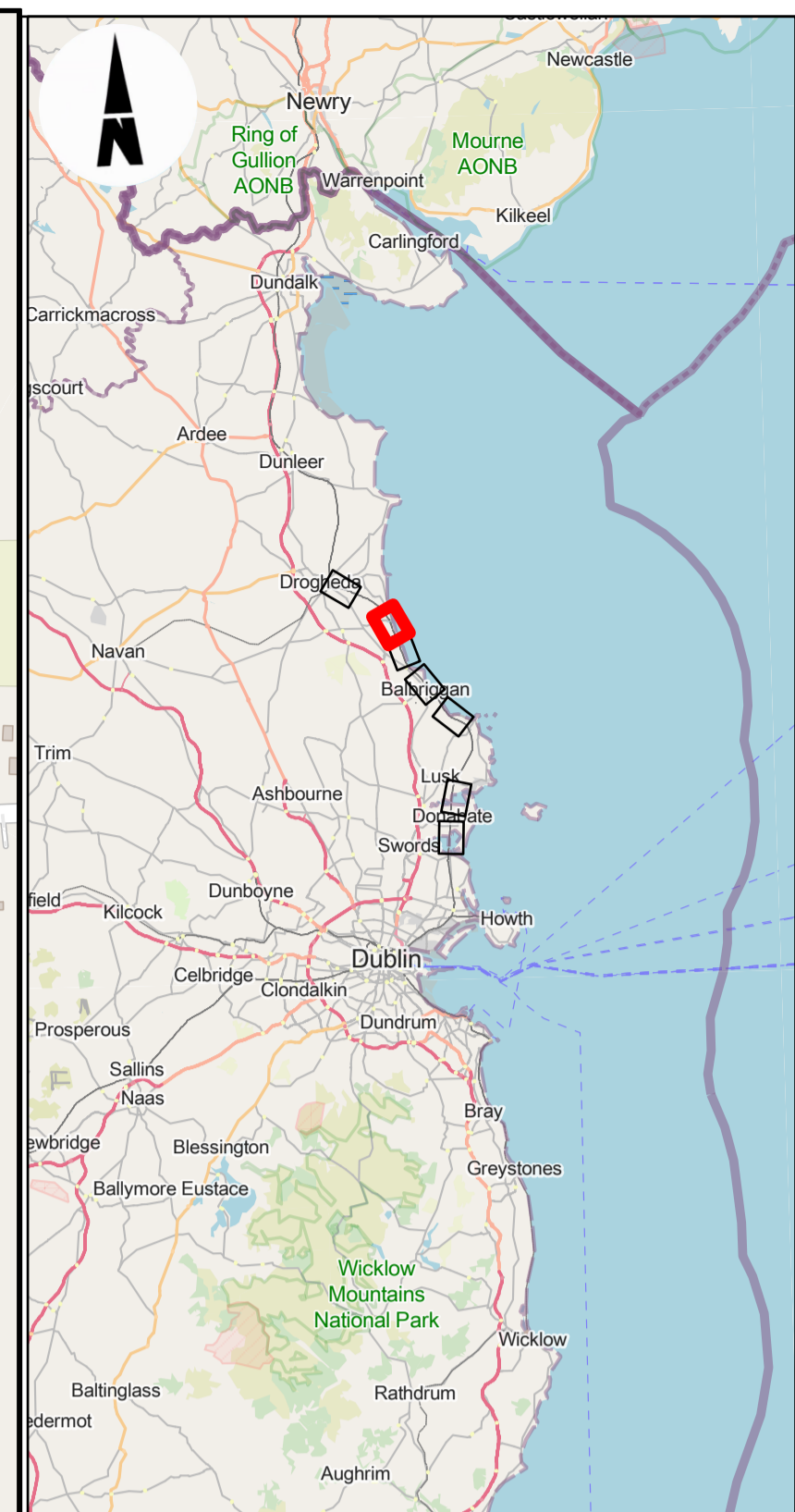
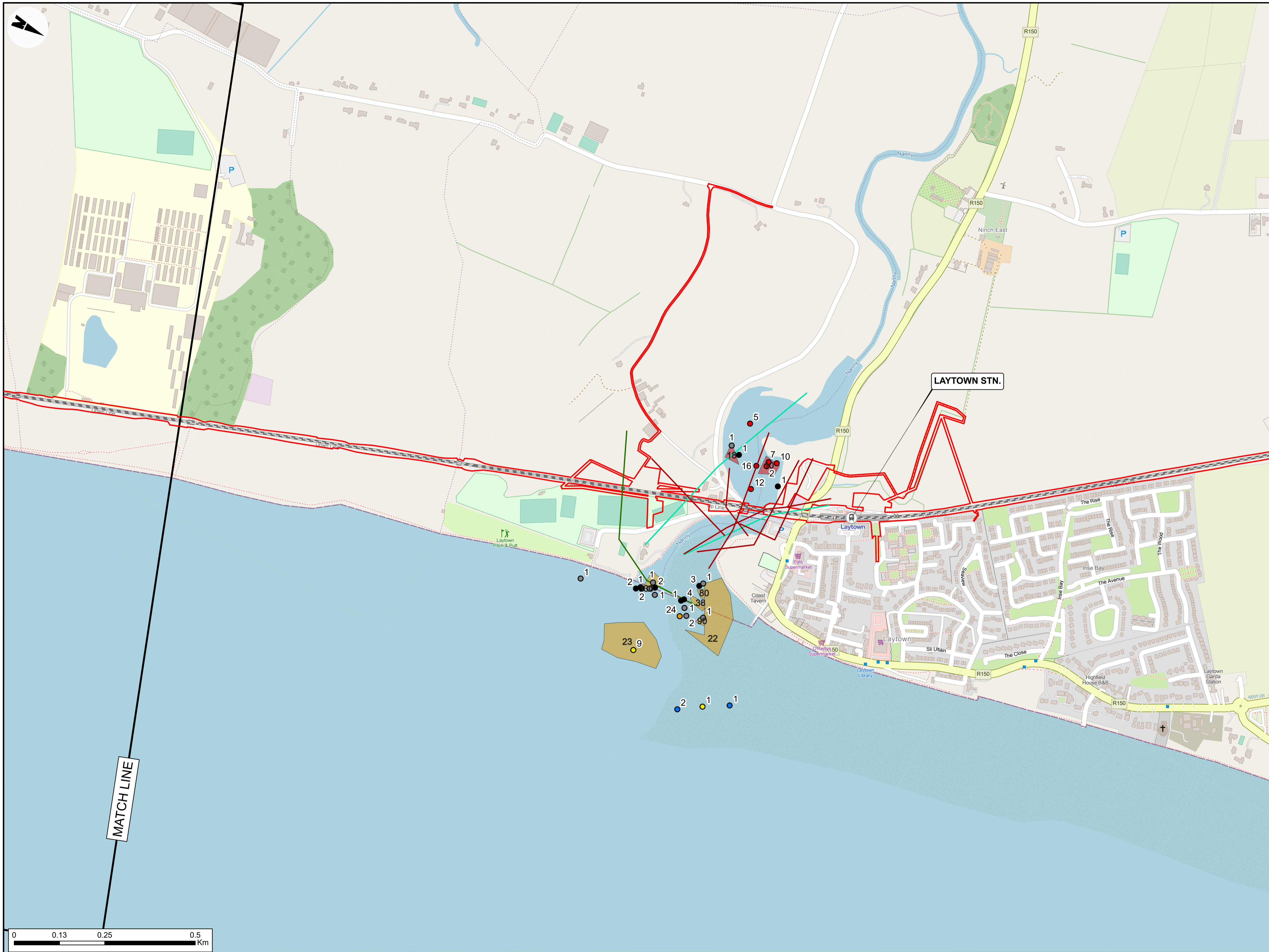
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Client Irish Rail		Engineering Designer ARUP		
Date 07/09/2023	Scale 1:5000 @ A1 1:10000 @ A3	Drawn DM	Checked SQ	Approved COD
Project Code D+WP56	Originator Code ARP	QMS Code 279933-00		

Project Title DART+ COASTAL NORTH			
Drawing Title BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name D+WP56-ARP-ZZ-NL-DR-EVBD-100145	Sheet Number 45 of 85	Status S4	Rev P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - GOLDEN PLOVER
 - GREAT BLACK-BACKED GULL
 - GREAT CRESTED GREBE
 - GREAT NORTHERN DIVER
 - GREY PLOVER
 - FLOCK COUNT AREAS**
 - GOLDEN PLOVER
 - FLIGHT LINES (HEIGHT)**
 - GOLDEN PLOVER: >10M
 - GREAT BLACK-BACKED GULL: 0-10M
 - GREAT BLACK-BACKED GULL: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON

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Engineering Designer: **ARUP**

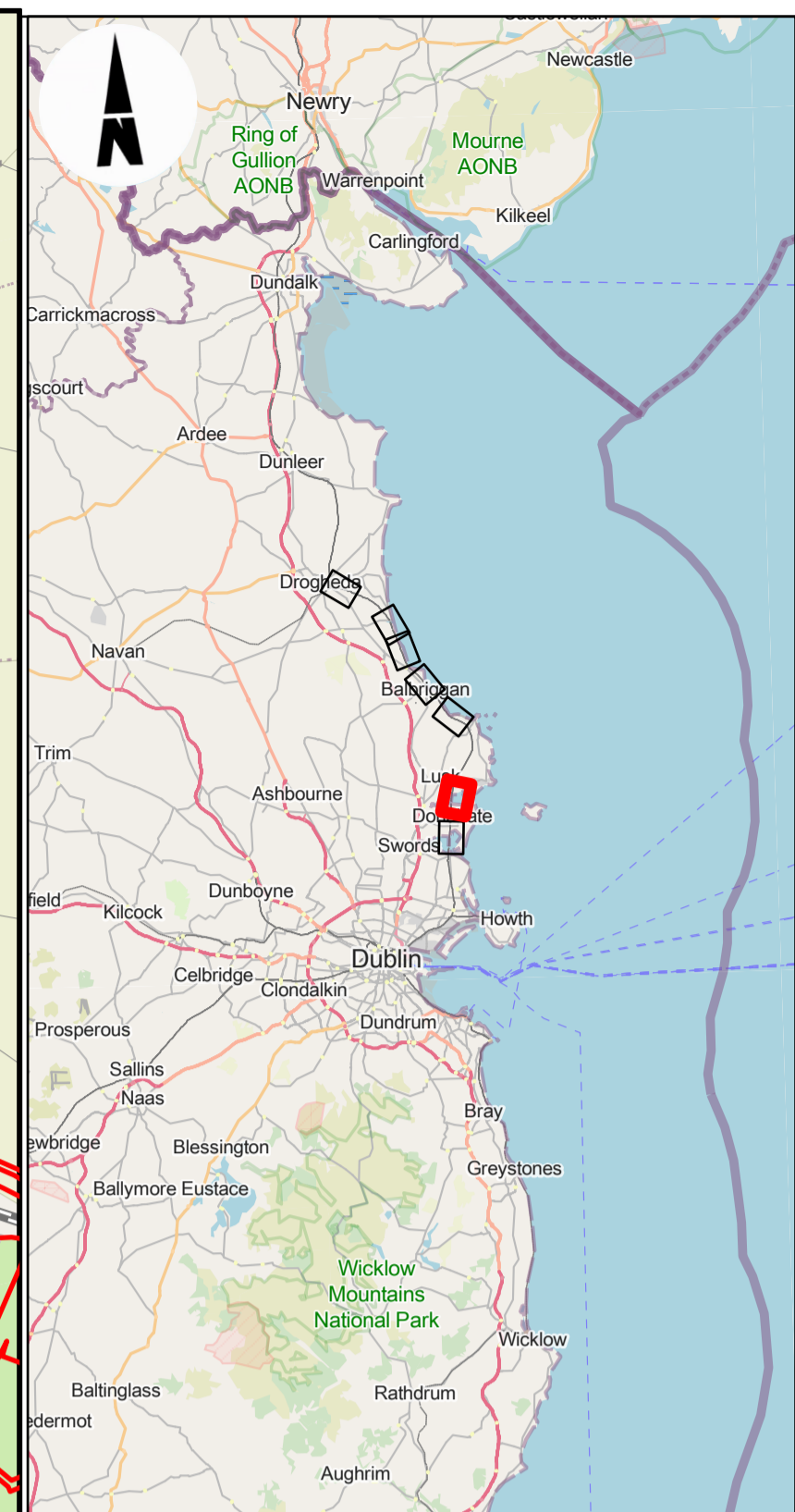
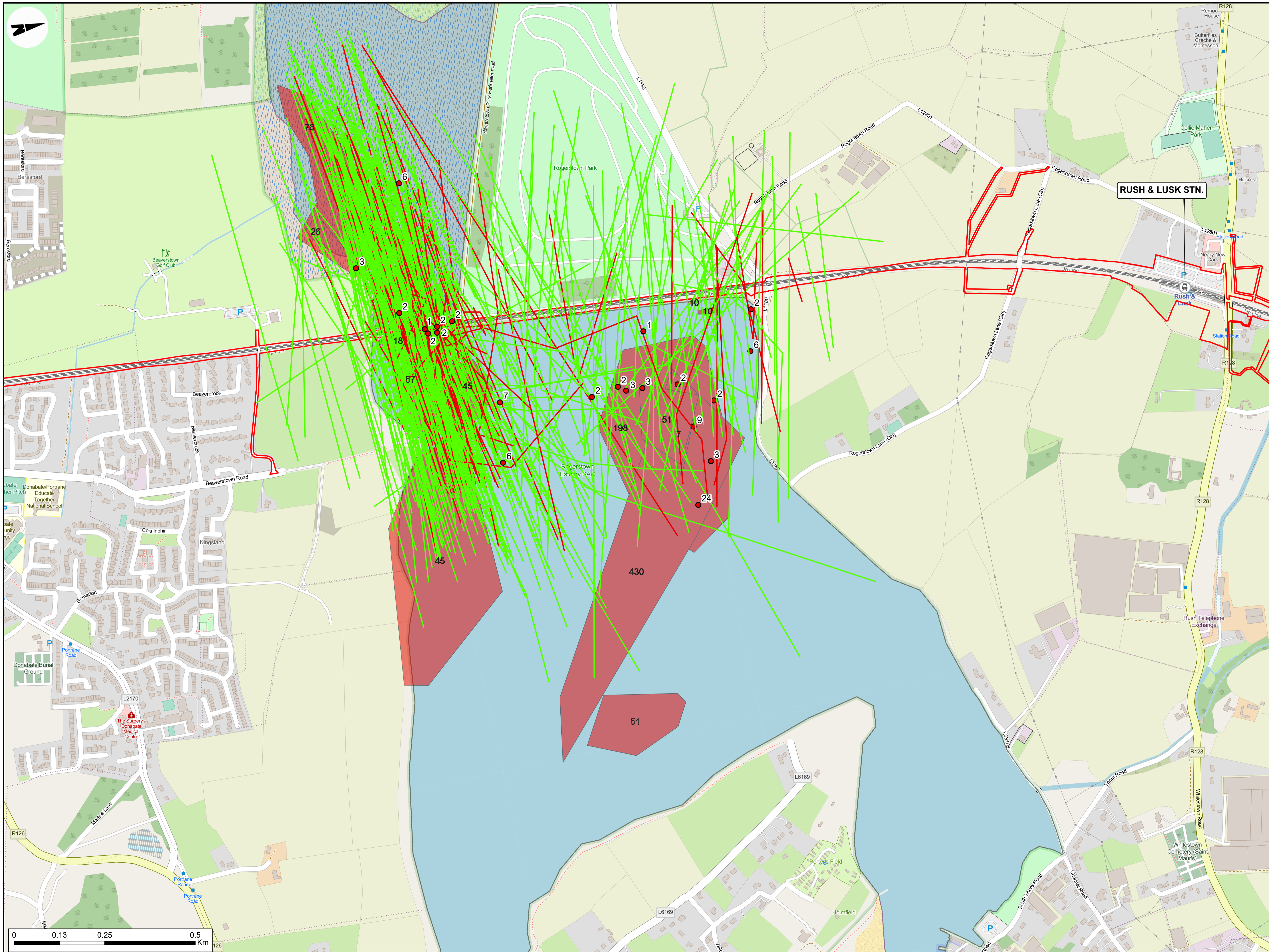
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Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

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Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 6			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100146	Sheet Number: 46 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - HERRING GULL
 - FLIGHT LINES (HEIGHT)
 - HERRING GULL: 0-10M
 - HERRING GULL: >10M
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M

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Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

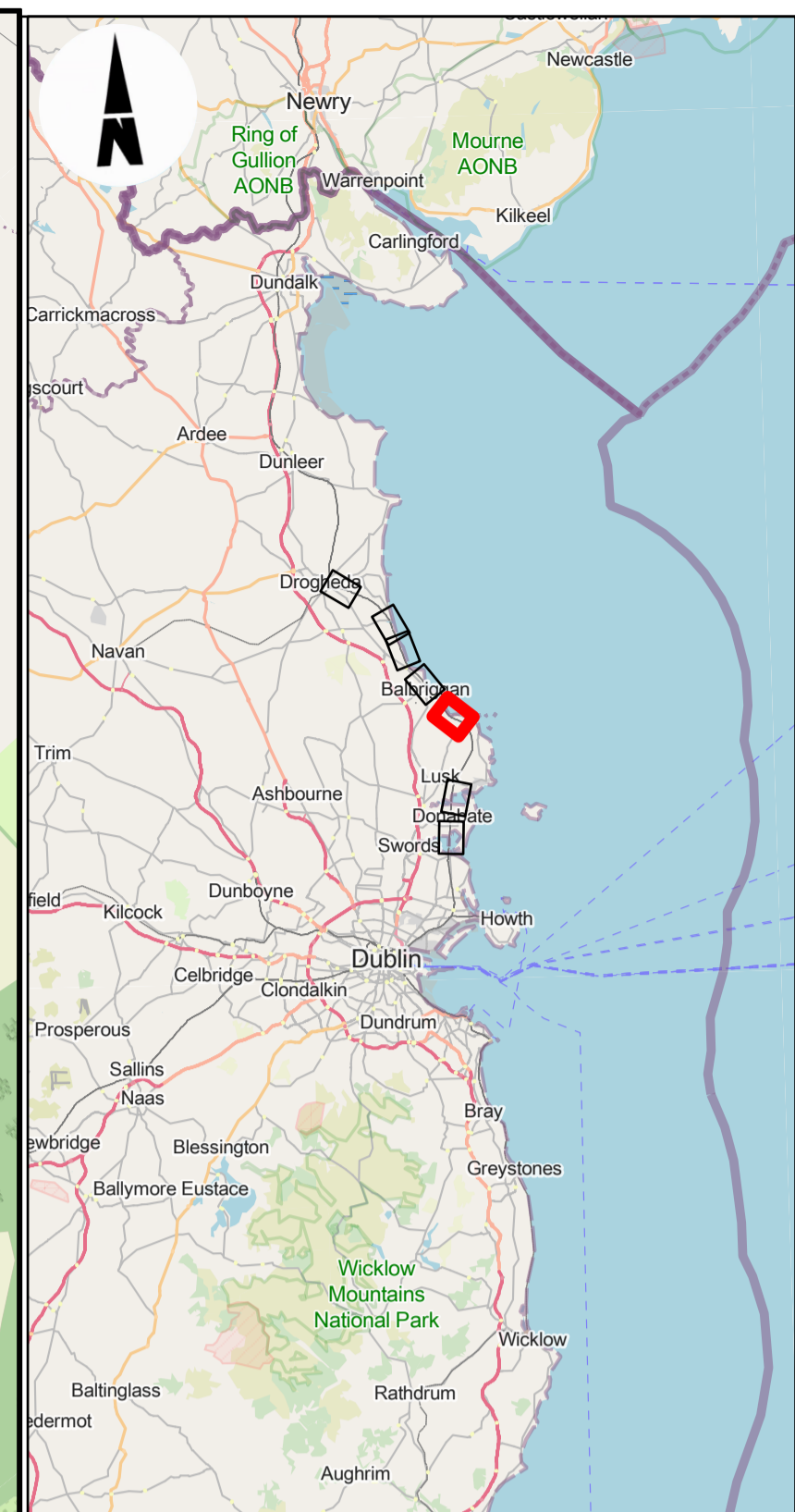
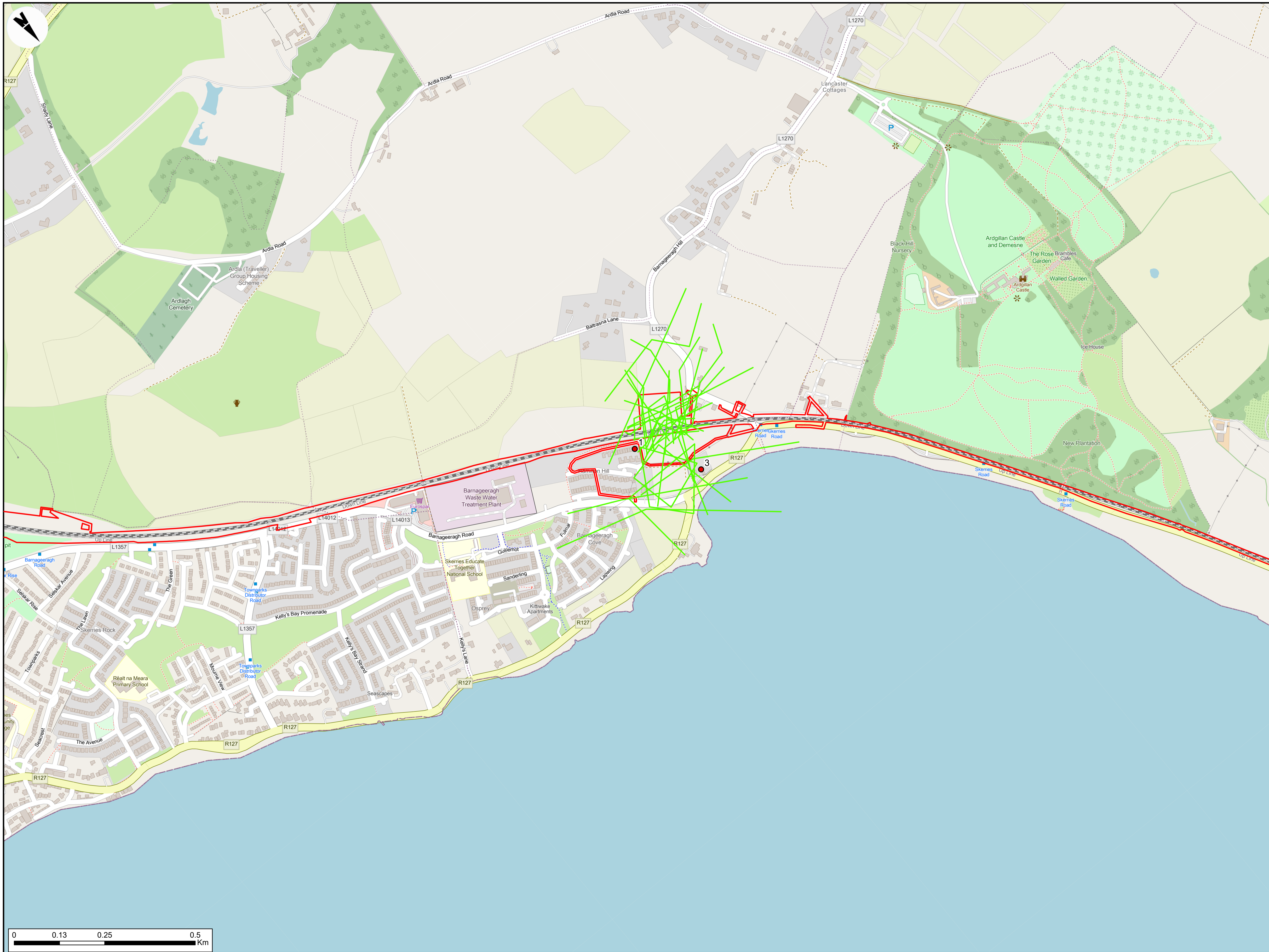
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Project Title: **DART+ COASTAL NORTH**

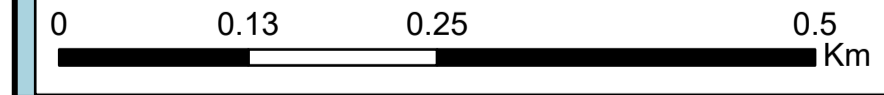
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Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100148

Sheet Number: 48 of 85 Status: S4 Rev: P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - █ FLOCK COUNT
 - HERRING GULL
 - FLIGHT LINES (HEIGHT)
 - HERRING GULL: >10M



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Client: **Irish Rail**

Engineering Designer: **ARUP**

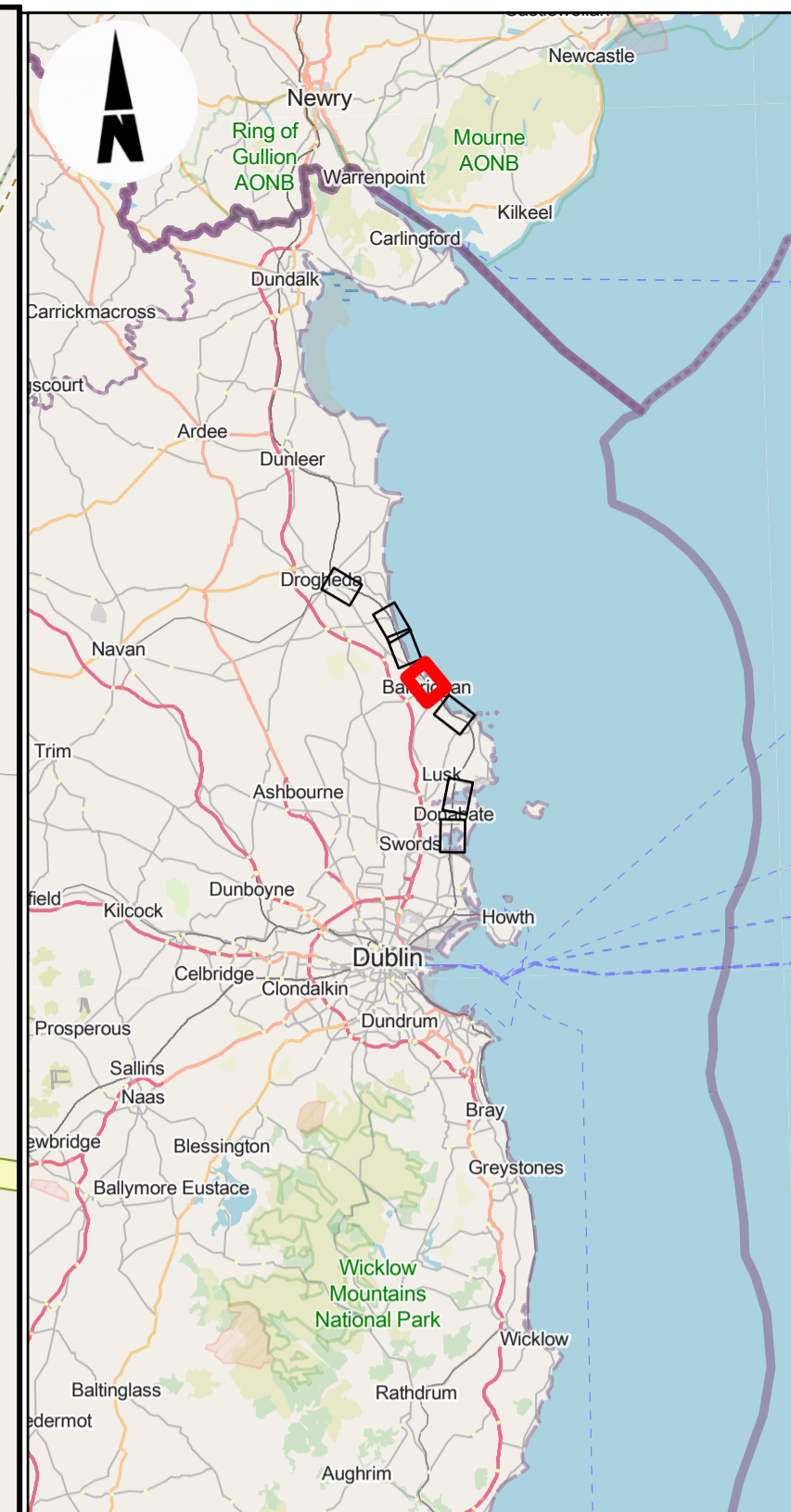
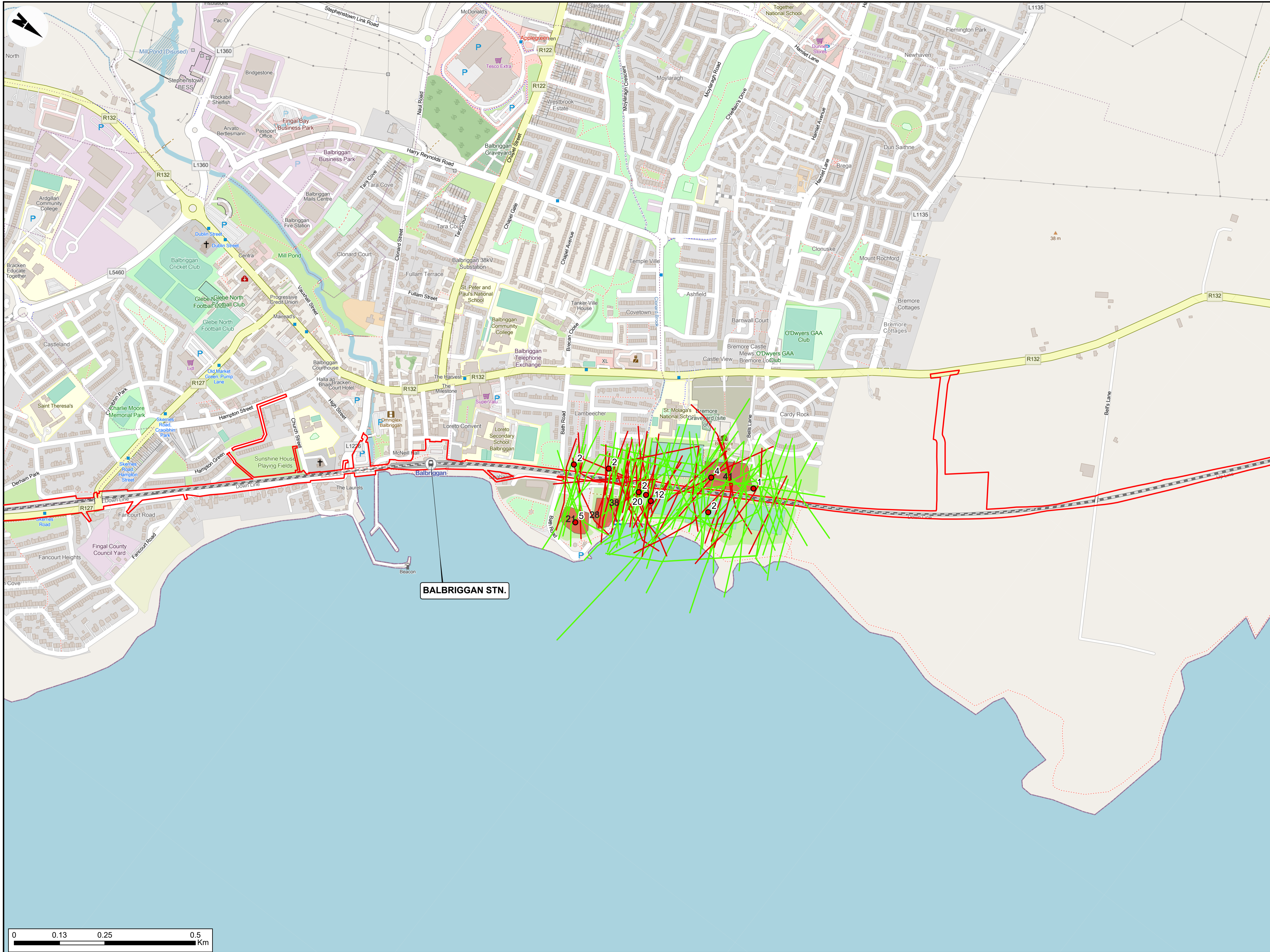
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Project Code: D+WP56 Originator Code: ARP

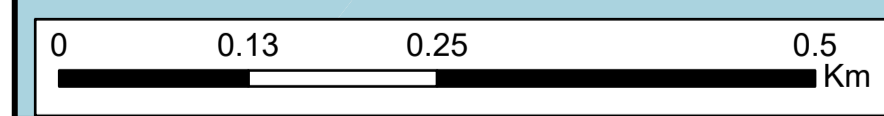
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QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY SURVEY AREA 3			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100149		Sheet Number: 49 of 85	Status: S4
Rev: P02		© Arup	



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - HERRING GULL
 - FLOCK COUNT AREAS**
 - HERRING GULL
 - FLIGHT LINES (HEIGHT)**
 - HERRING GULL: 0-10M
 - HERRING GULL: >10M



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Client: **Irish Rail**

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Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

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Project Title: **DART+ COASTAL NORTH**

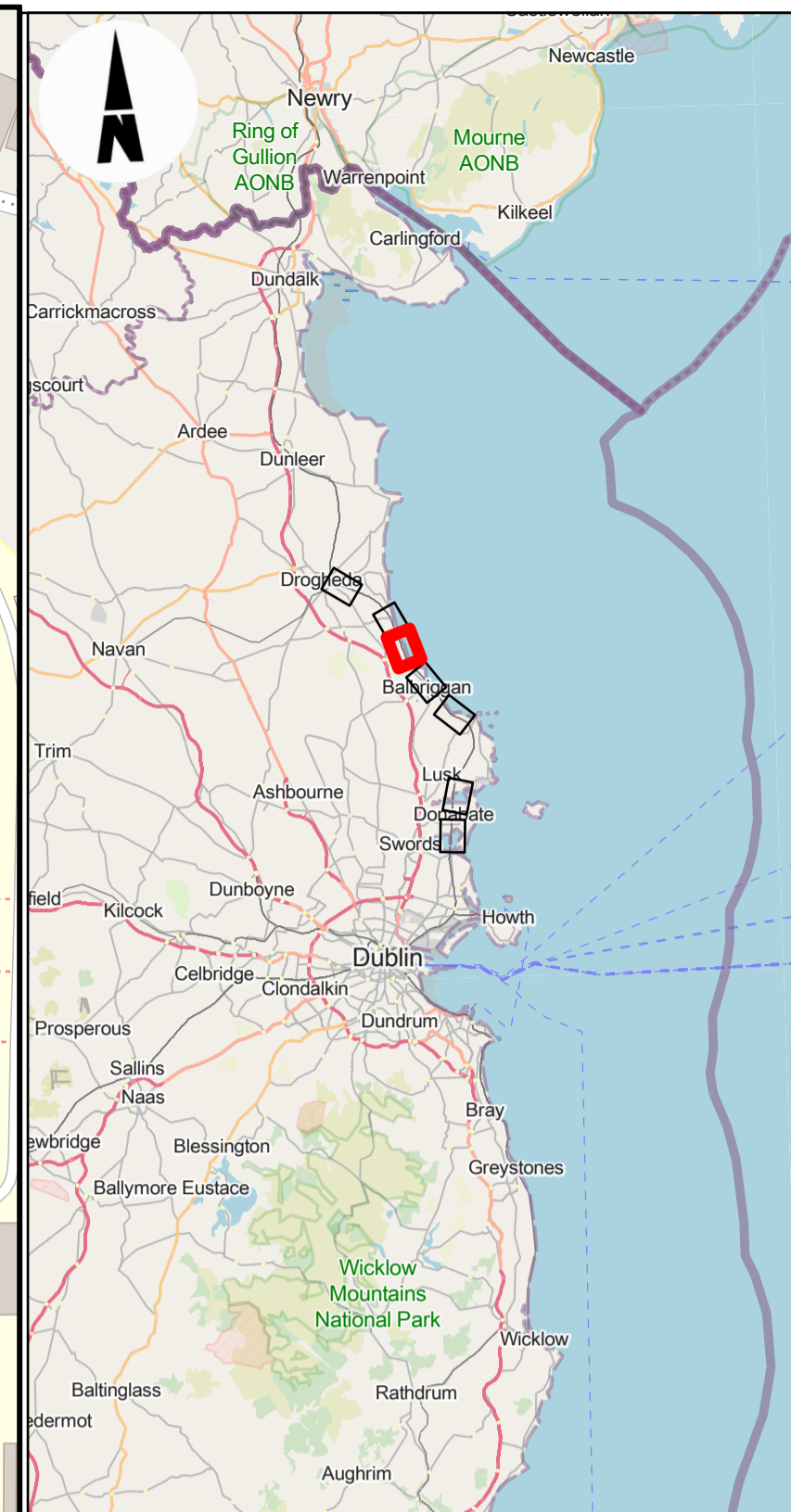
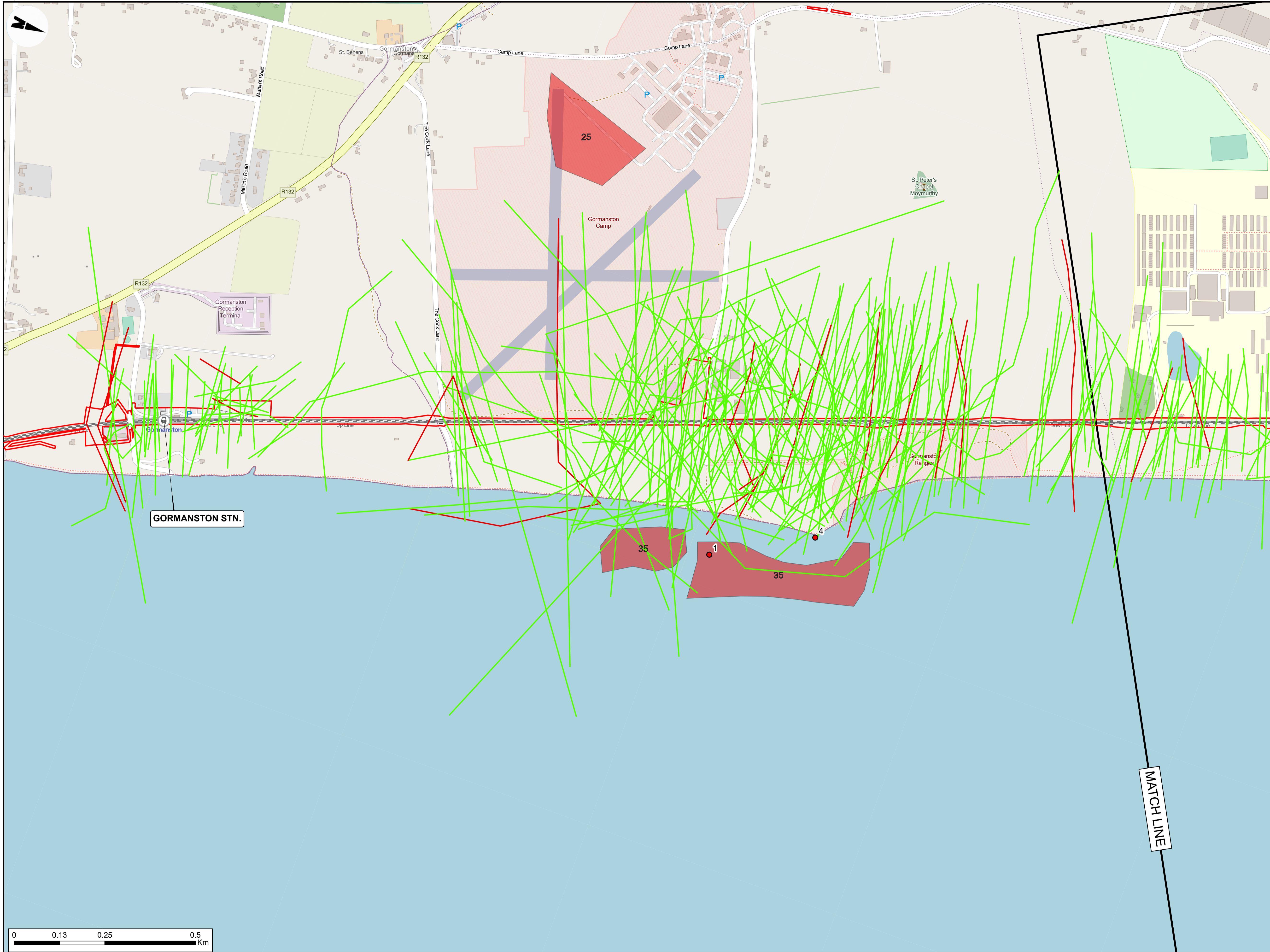
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Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100150

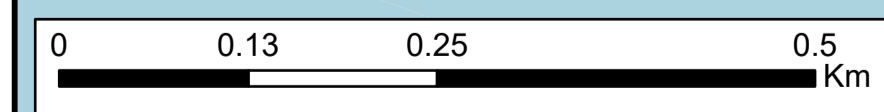
Sheet Number: 50 of 85

Status: S4

Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - HERRING GULL
 - FLOCK COUNT AREAS**
 - HERRING GULL
 - FLIGHT LINES (HEIGHT)**
 - HERRING GULL: 0-10M
 - HERRING GULL: >10M



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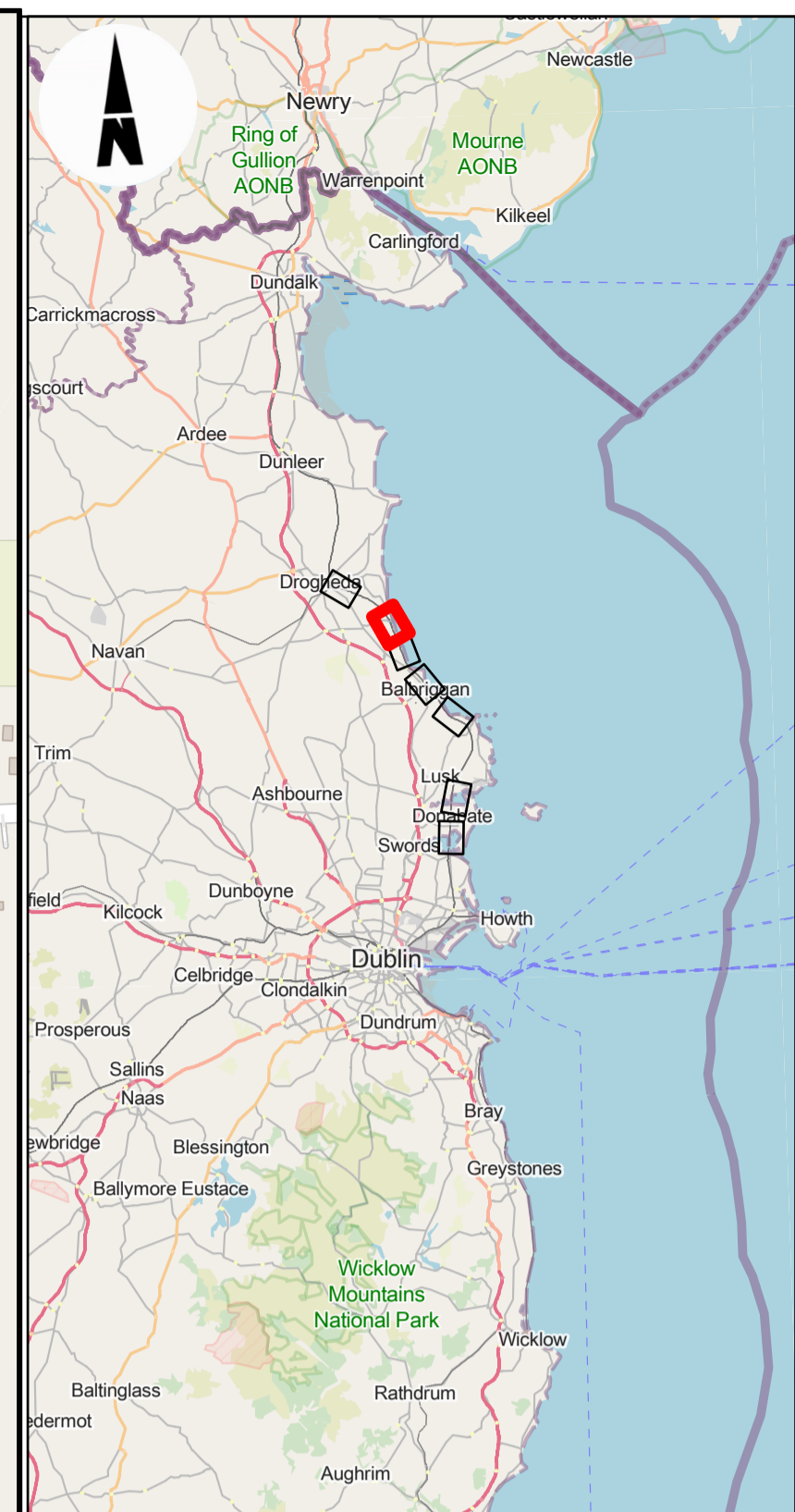
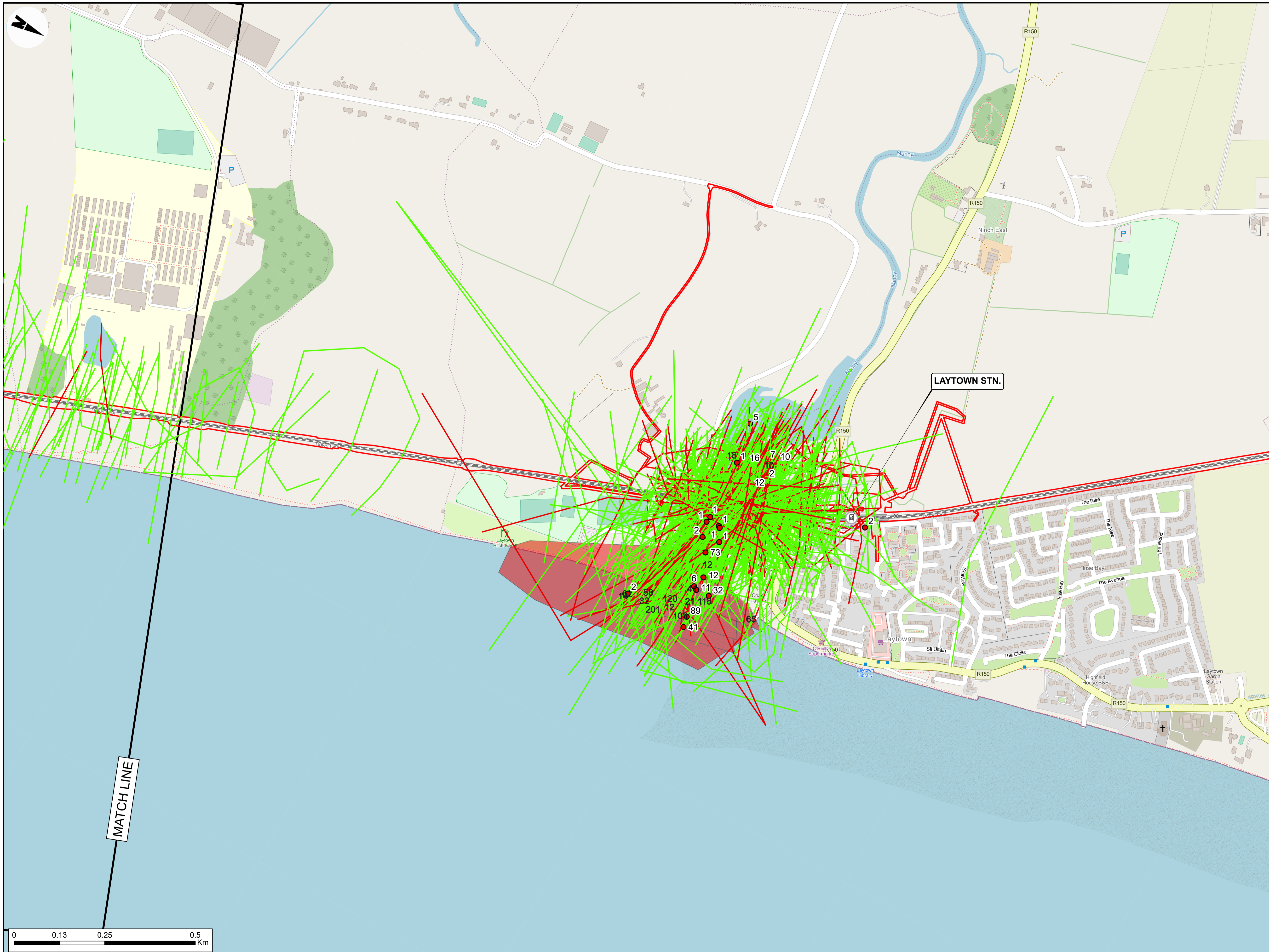
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Client Irish Rail		Engineering Designer ARUP		
Date 07/09/2023	Scale 1:5000 @ A1 1:10000 @ A3	Drawn DM	Checked SQ	Approved COD
Project Code D+WP56	Originator Code ARP	QMS Code 279933-00		

Project Title DART+ COASTAL NORTH			
Drawing Title BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name D+WP56-ARP-ZZ-NL-DR-EVBD-100151	Sheet Number 51 of 85	Status S4	Rev P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - HERRING GULL
 - FLOCK COUNT AREAS**
 - HERRING GULL
 - FLIGHT LINES (HEIGHT)**
 - HERRING GULL: 0-10M
 - HERRING GULL: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON

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Engineering Designer: **ARUP**

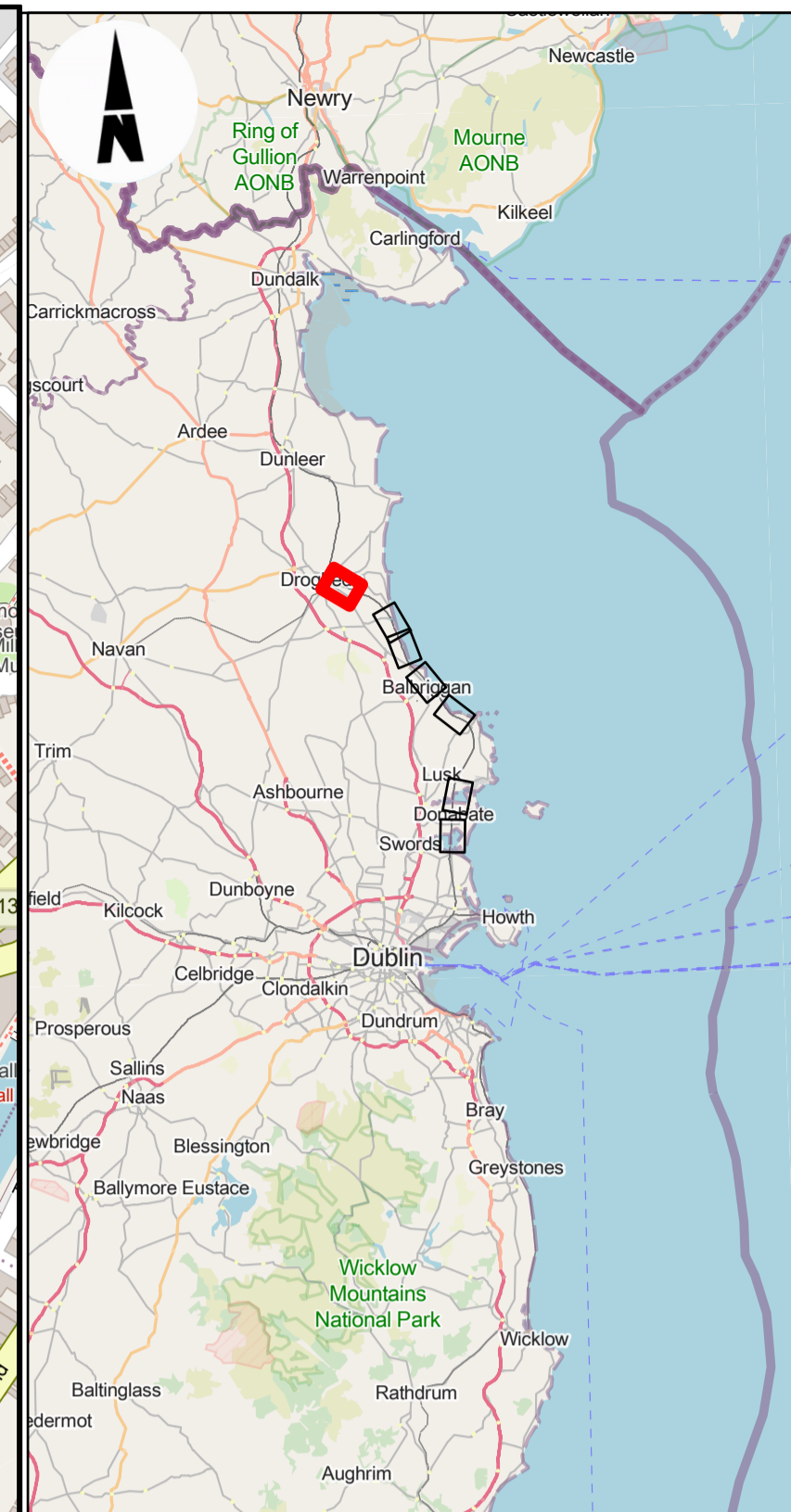
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Drawn: DM Checked: SQ Approved: COD

QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY SURVEY AREA 6			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100152	Sheet Number: 62 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLIGHT LINES (HEIGHT)**
 - HERRING GULL: 0-10M
 - HERRING GULL: >10M

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Project Code: D+WP56 | Originator Code: ARP

QMS Code: 279933-00

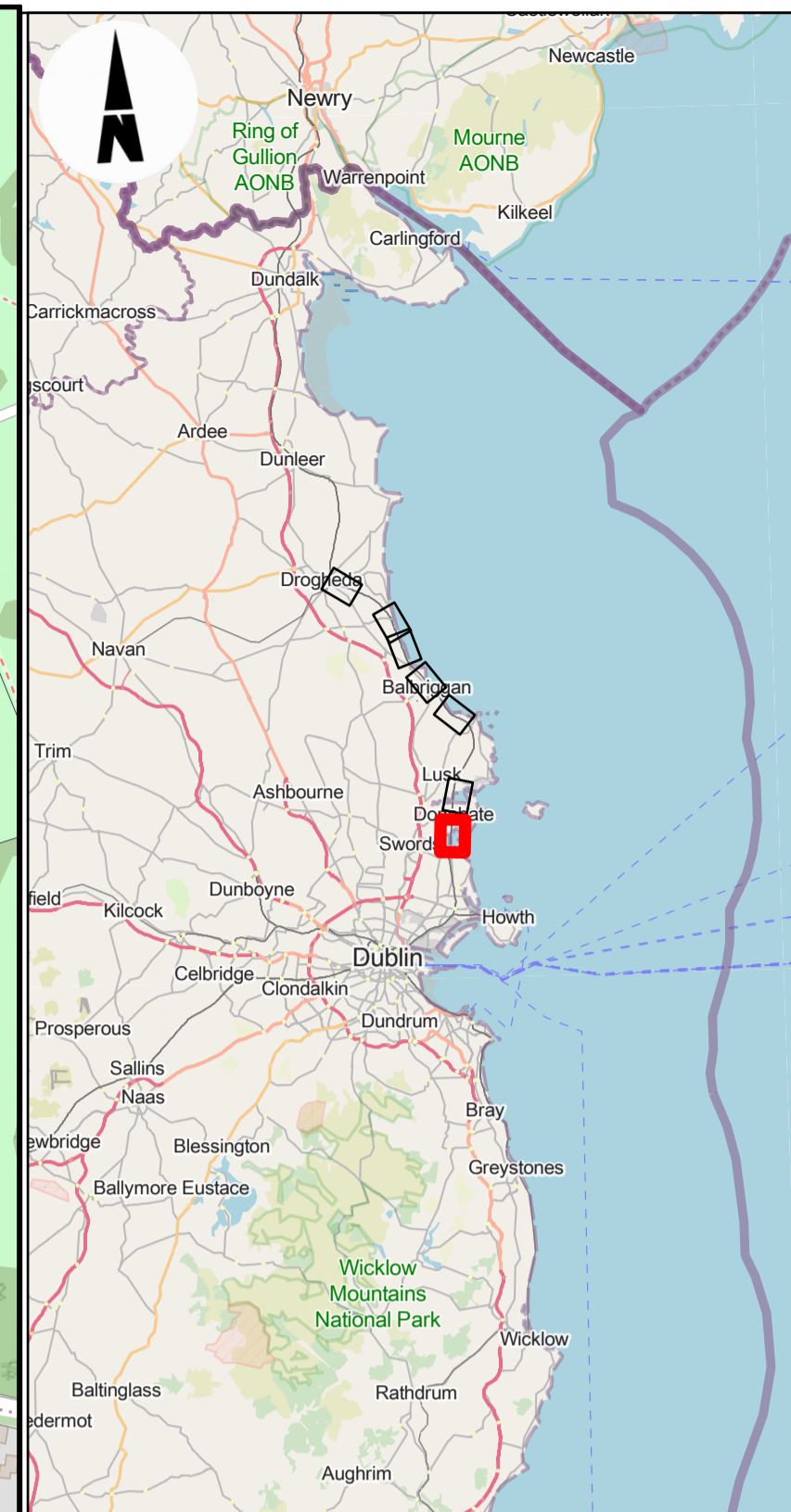
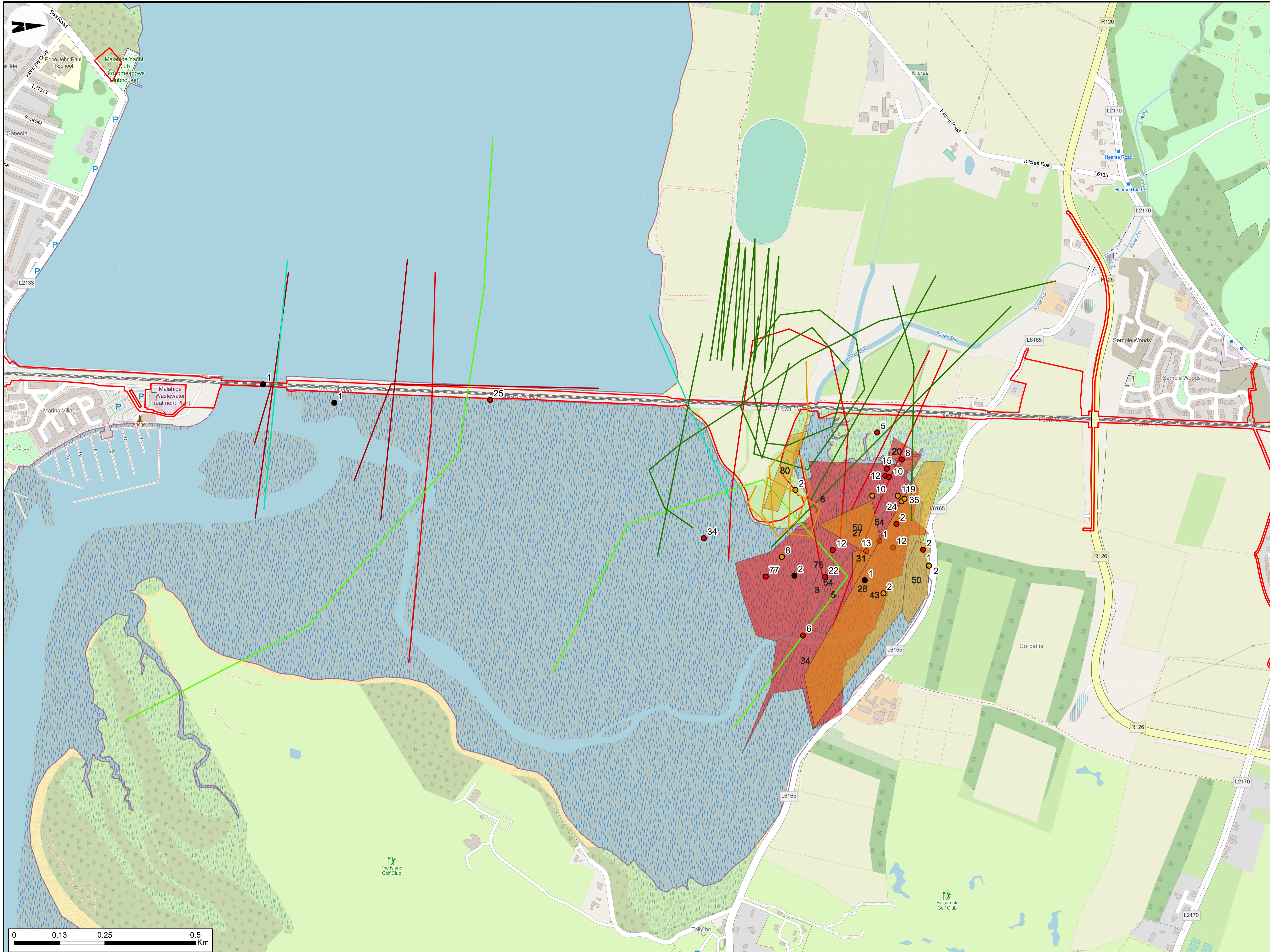
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Project Title: **DART+ COASTAL NORTH**

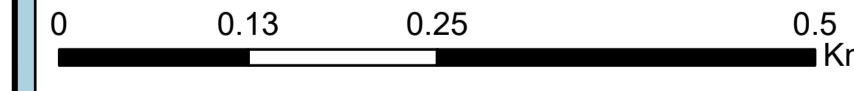
Drawing Title: **BIODIVERSITY SURVEY AREA 7**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100153

Sheet Number: 53 of 85 | Status: S4 | Rev: P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - KNOT
 - LAPWING
 - LESSER BLACK-BACKED GULL
 - FLOCK COUNT AREAS**
 - LAPWING
 - FLIGHT LINES (HEIGHT)**
 - LAPWING: 0-10M
 - LAPWING: >10M
 - LESSER BLACK-BACKED GULL: 0-10M
 - LESSER BLACK-BACKED GULL: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M



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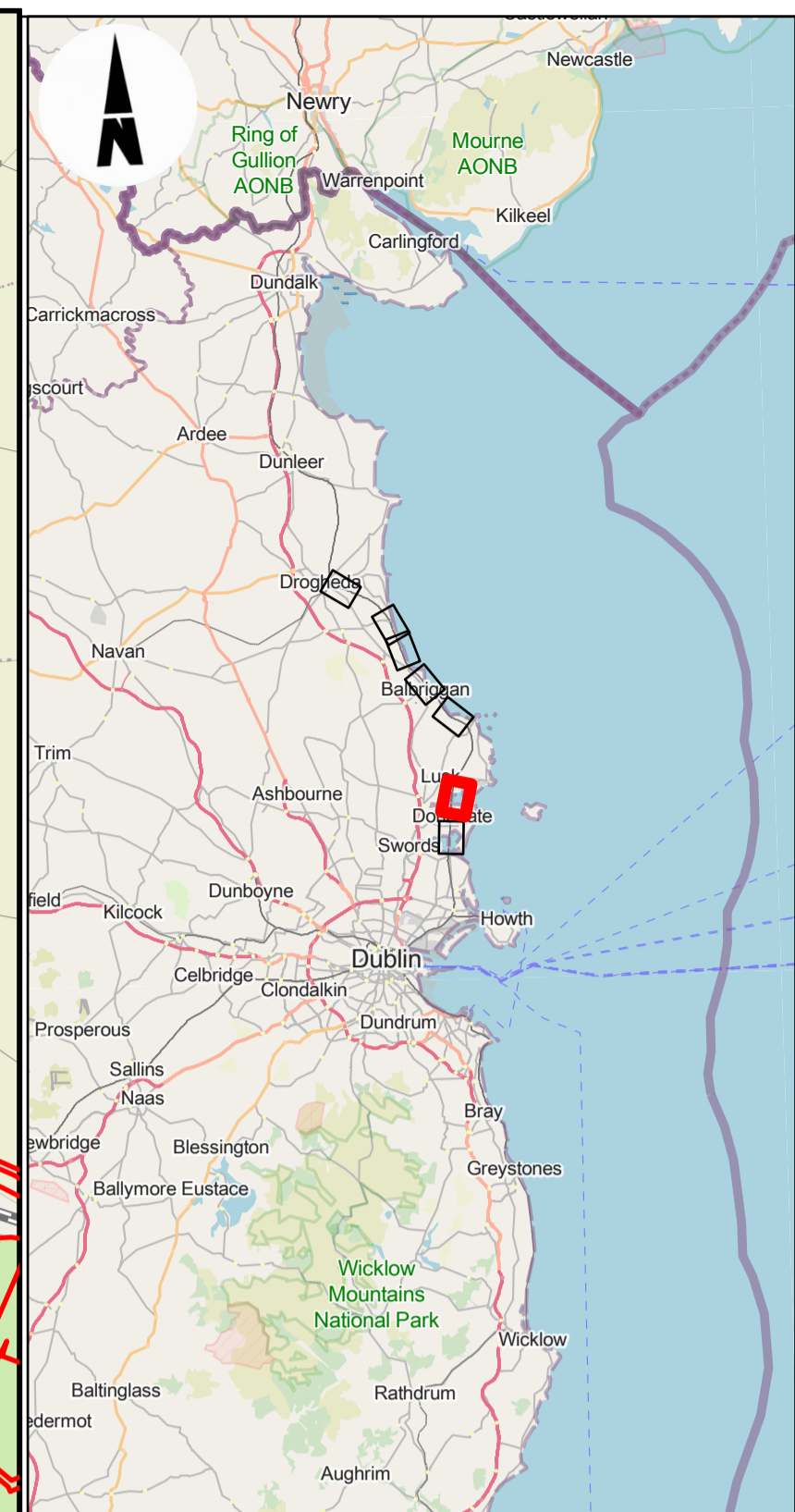
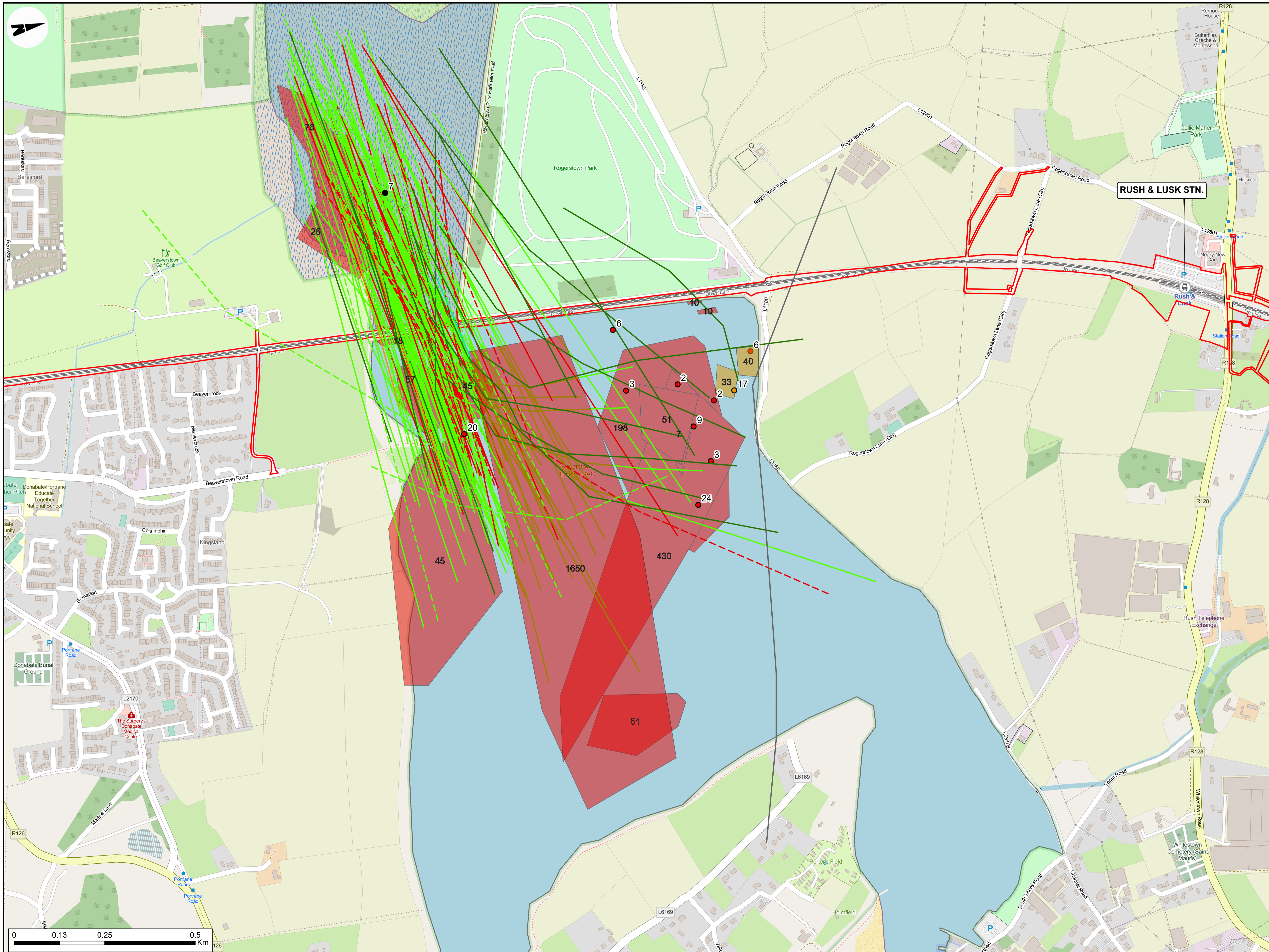
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SQ, Approved: COD

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 1			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100154	Sheet Number: 54 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - KNOT
 - LAPWING
 - LESSER BLACK-BACKED GULL
 - FLOCK COUNT AREAS**
 - KNOT
 - LAPWING
 - FLIGHT LINES (HEIGHT)**
 - KNOT: 0-10M
 - KNOT: >10M
 - LAPWING: 0-10M
 - LAPWING: >10M
 - LESSER BLACK-BACKED GULL: >10M
 - LITTLE GULL: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M

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NOTES
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 2. BIRD COUNTS AT EACH POINT OR WITHIN EACH AREA DISPLAYED AS LABELS.
 3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.



Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

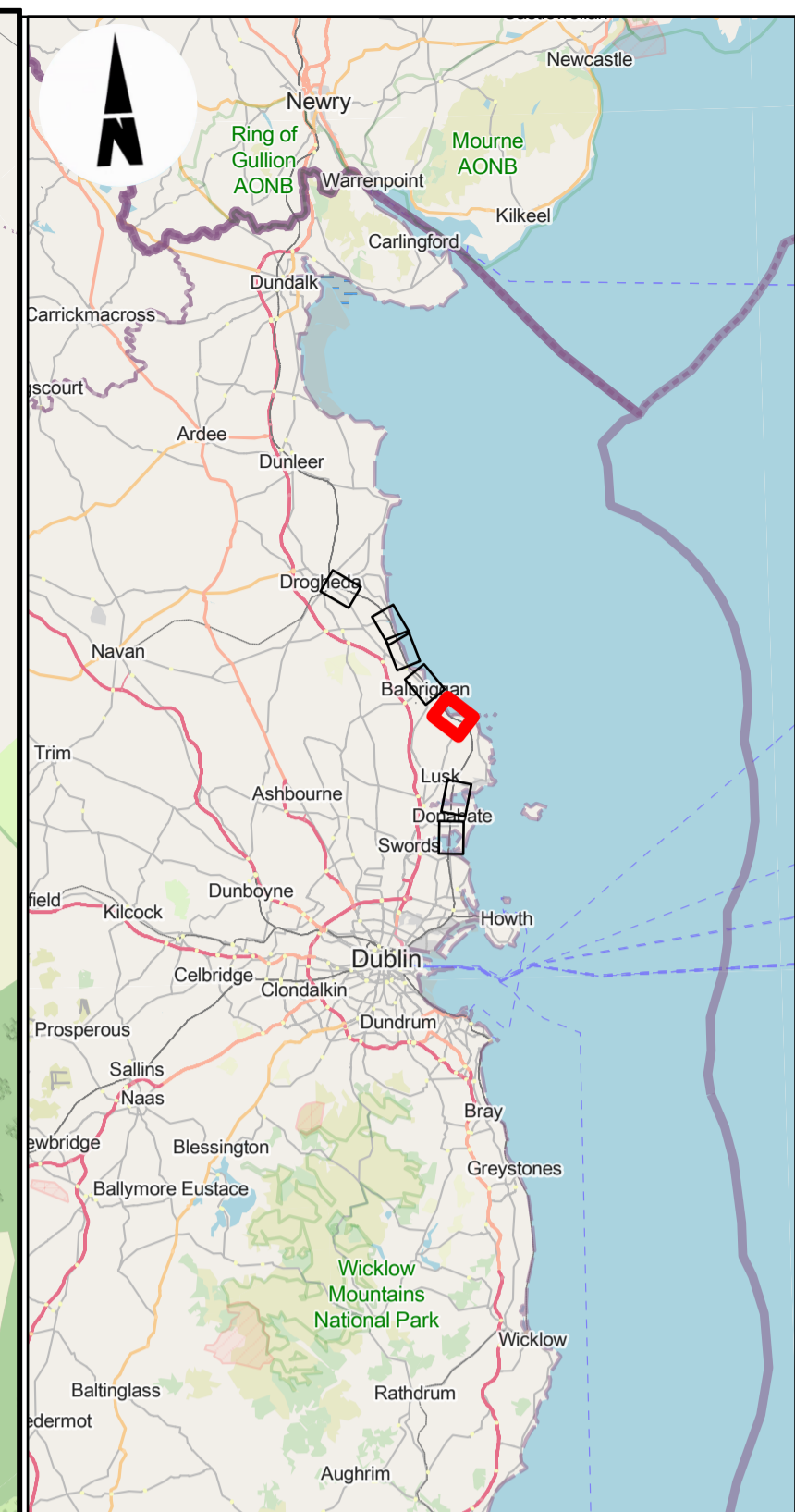
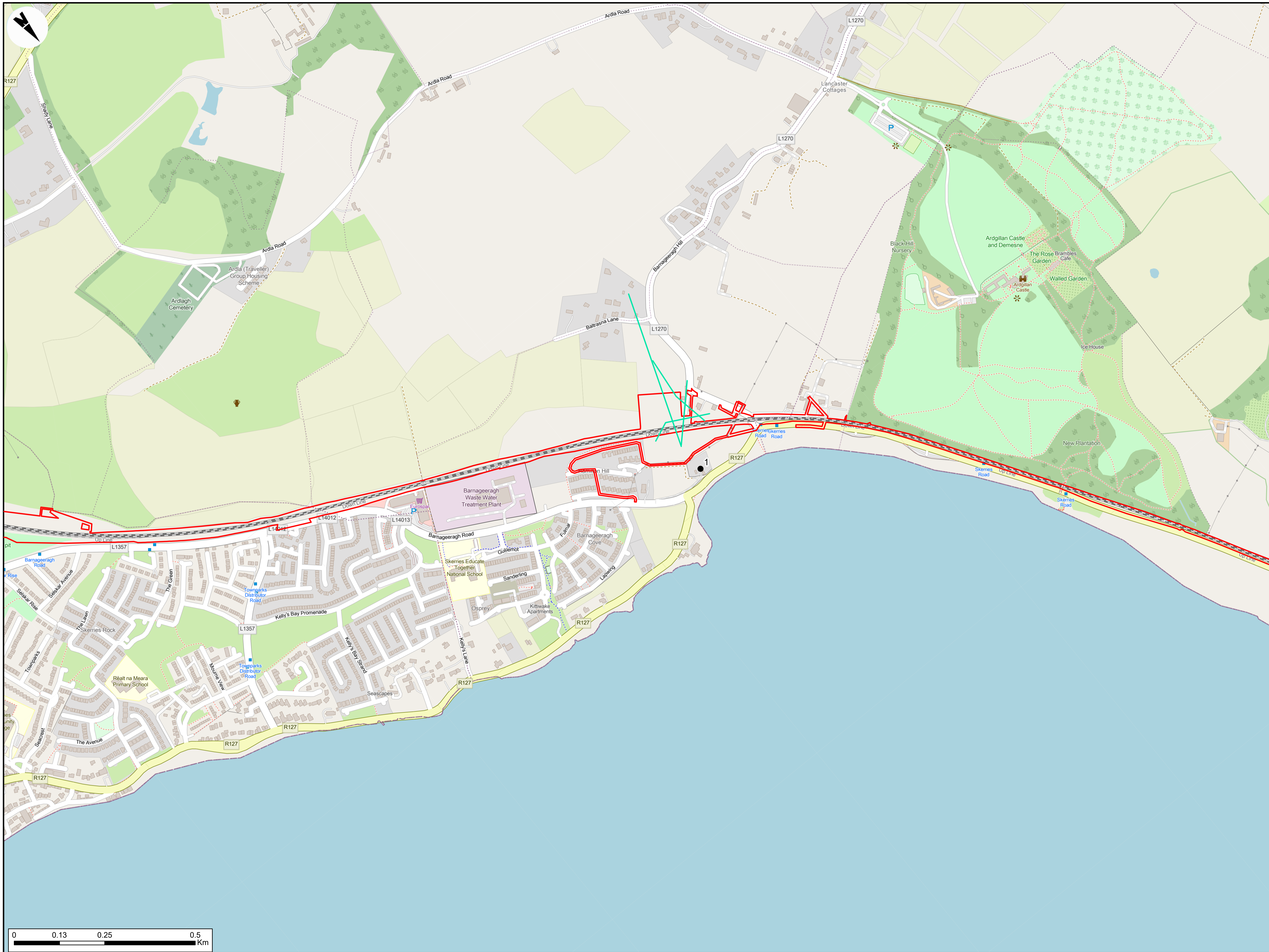
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Project Code: D+WP56 Originator Code: ARP

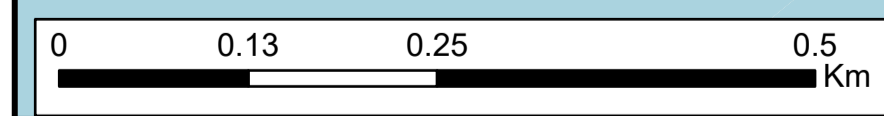
Drawn: DM Checked: SQ Approved: COD

OMS Code: 279933-00

Project Title: DART+ COASTAL NORTH	
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2	
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100155	Sheet Number: 55 of 85
Status: S4	Rev: P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - LESSER BLACK-BACKED GULL
 - FLIGHT LINES (HEIGHT)**
 - LESSER BLACK-BACKED GULL: >10M



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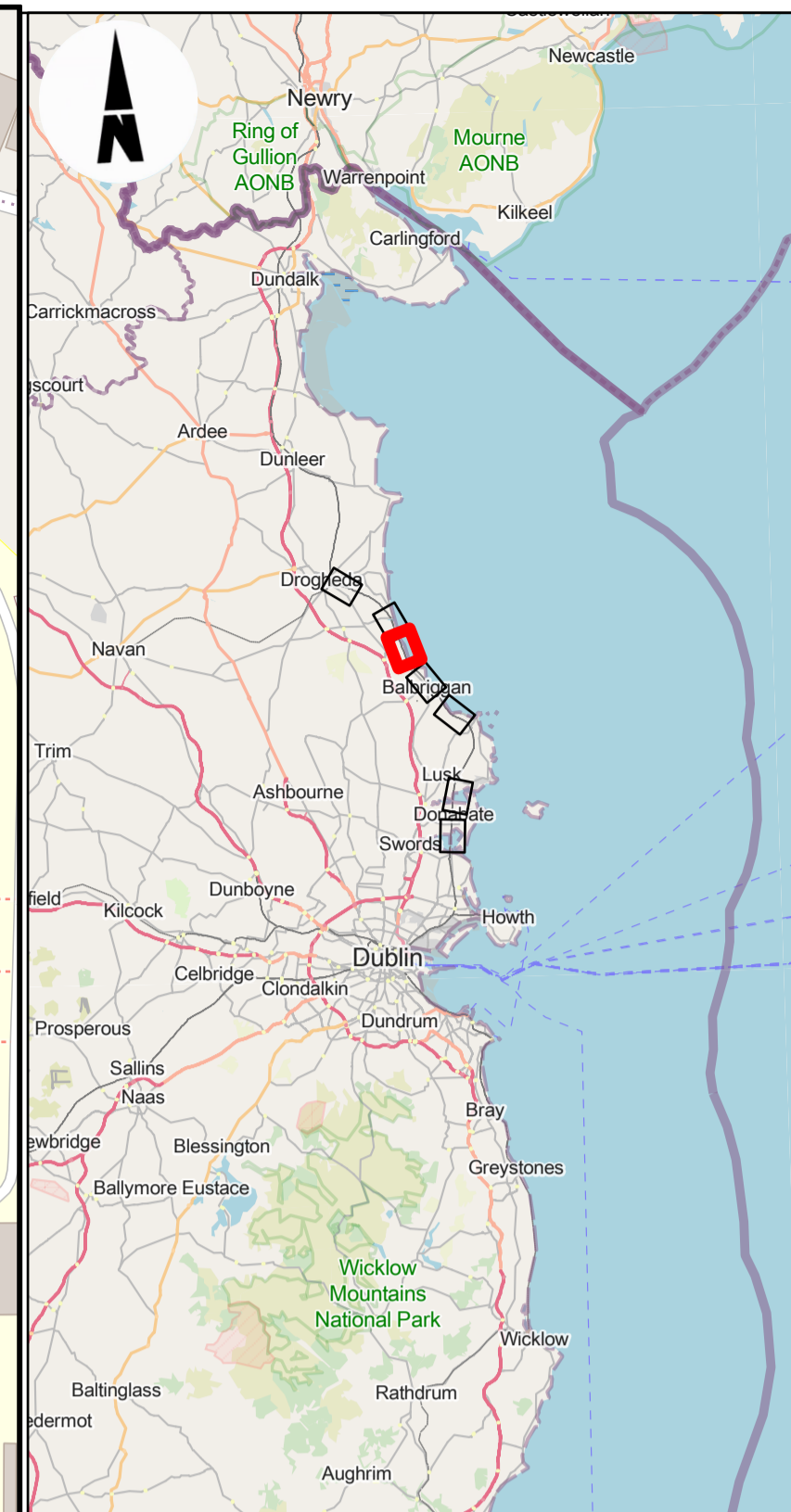
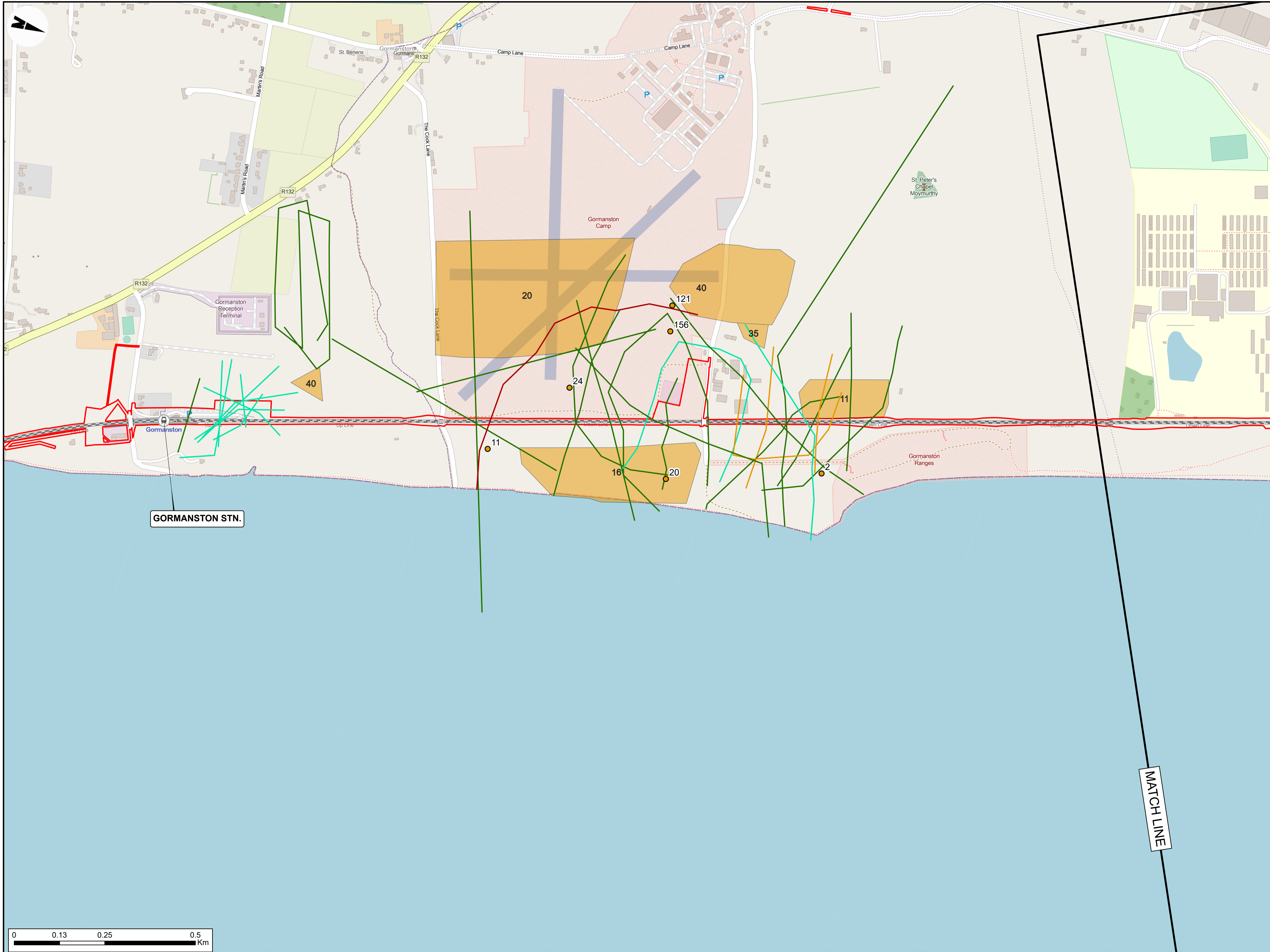
- NOTES**
1. THE DATA SHOWN INCLUDE SURVEY RESULTS FOR THE WINTERS 2021/2022, 2022/2023 AND 2023/2024.
 2. BIRD COUNTS AT EACH POINT OR WITHIN EACH AREA DISPLAYED AS LABELS.
 3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.



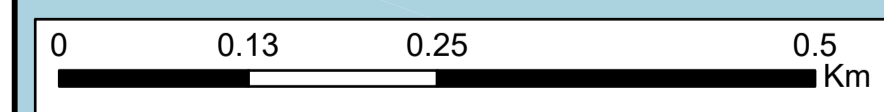
Rev	Date	Dn	Ch'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client Irish Rail		Engineering Designer ARUP		
Date 07/09/2023	Scale 1:5000 @ A1 1:10000 @ A3	Drawn DM	Checked SQ	Approved COD
Project Code D+WP56	Originator Code ARP	QMS Code 279933-00		

Project Title DART+ COASTAL NORTH				
Drawing Title BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 3				
Drawing File Name D+WP56-ARP-ZZ-NL-DR-EVBD-100156	Sheet Number 56 of 85	Status S4	Rev P02	



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - LAPWING
 - FLOCK COUNT AREAS**
 - LAPWING
 - FLIGHT LINES (HEIGHT)**
 - LAPWING: 0-10M
 - LAPWING: >10M
 - LESSER BLACK-BACKED GULL: 0-10M
 - LESSER BLACK-BACKED GULL: >10M



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Rev	Date	Dn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

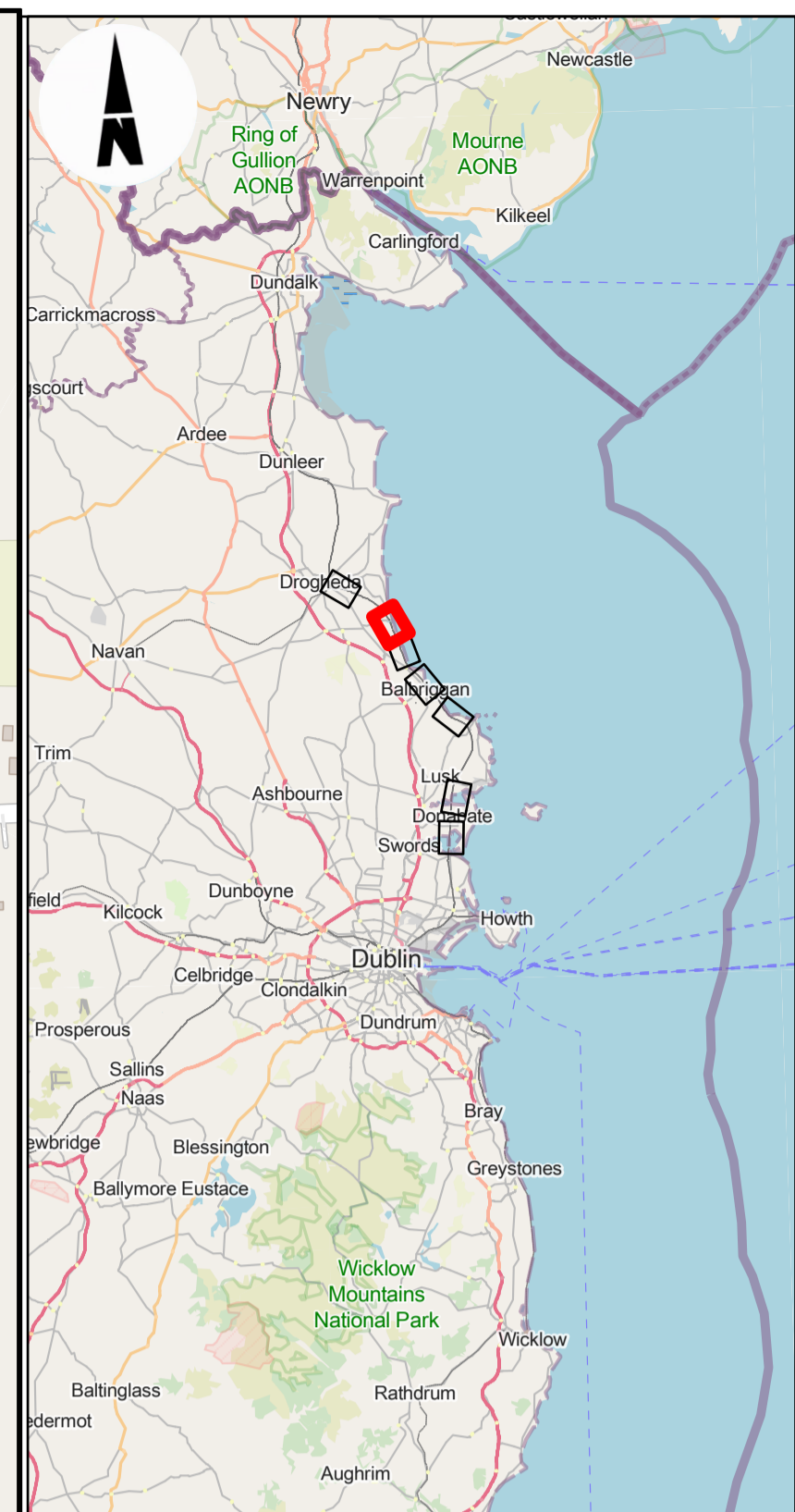
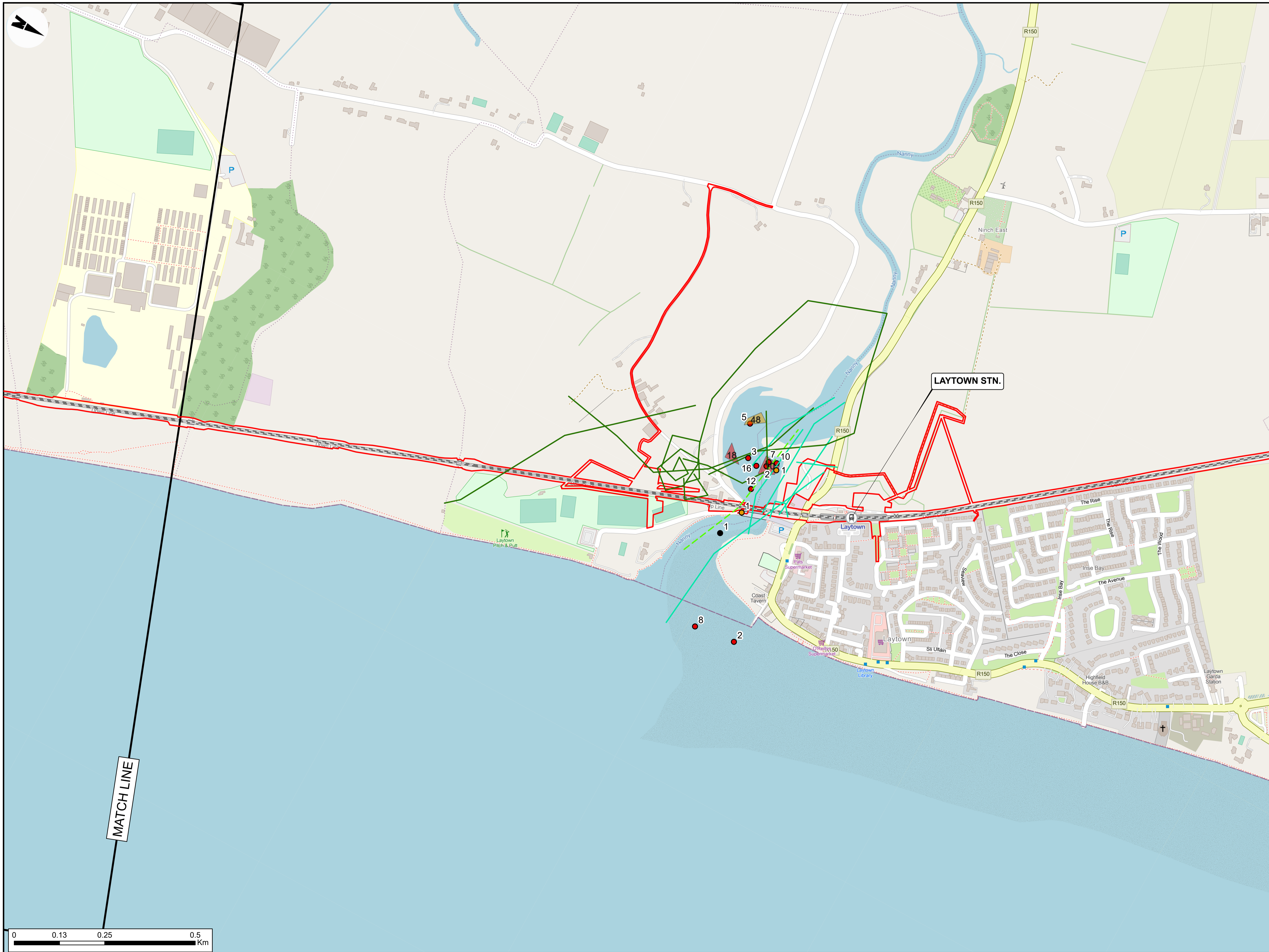
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

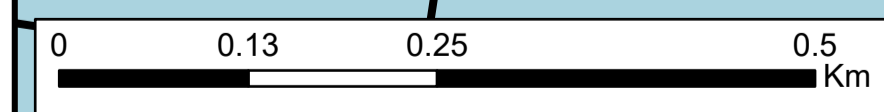
Drawn: DM Checked: SQ Approved: COD

QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100157	Sheet Number: 57 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - KNOT
 - LAPWING
 - LESSER BLACK-BACKED GULL
 - FLOCK COUNT AREAS**
 - LAPWING
 - FLIGHT LINES (HEIGHT)**
 - KNOT: >10M
 - LAPWING: >10M
 - LESSER BLACK-BACKED GULL: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON



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Rev	Date	Dn	Ch'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

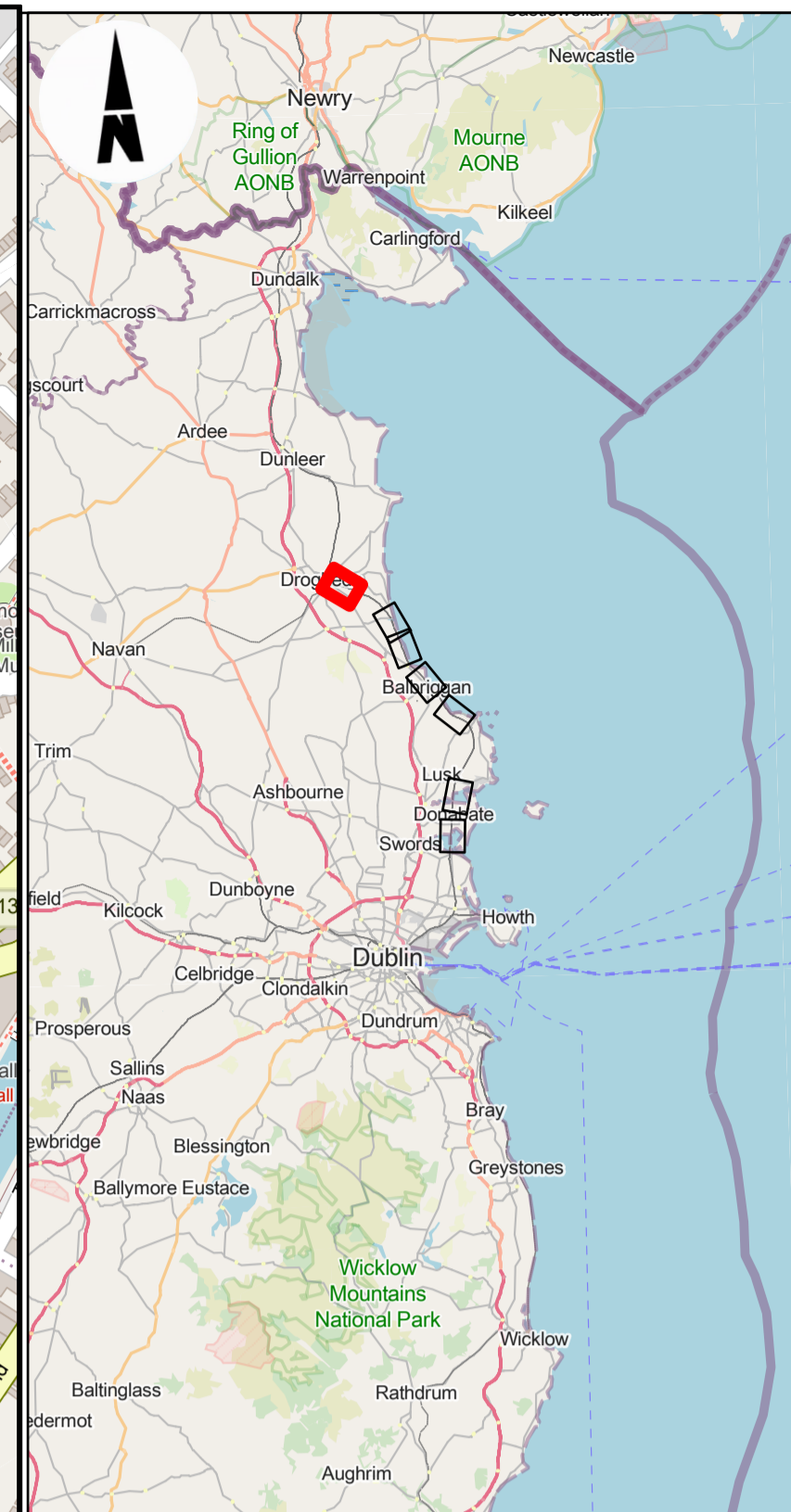
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Project Code: D+WP56 Originator Code: ARP

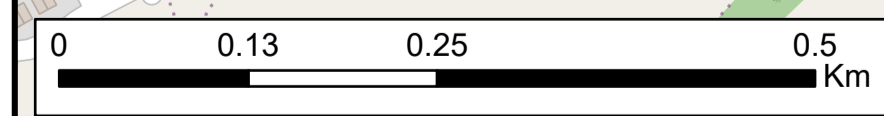
QMS Code: 279933-00

Drawn: DM Checked: SQ Approved: COD

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 6			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100158	Sheet Number: 58 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLIGHT LINES (HEIGHT)
 - LESSER BLACK-BACKED GULL: >10M



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Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

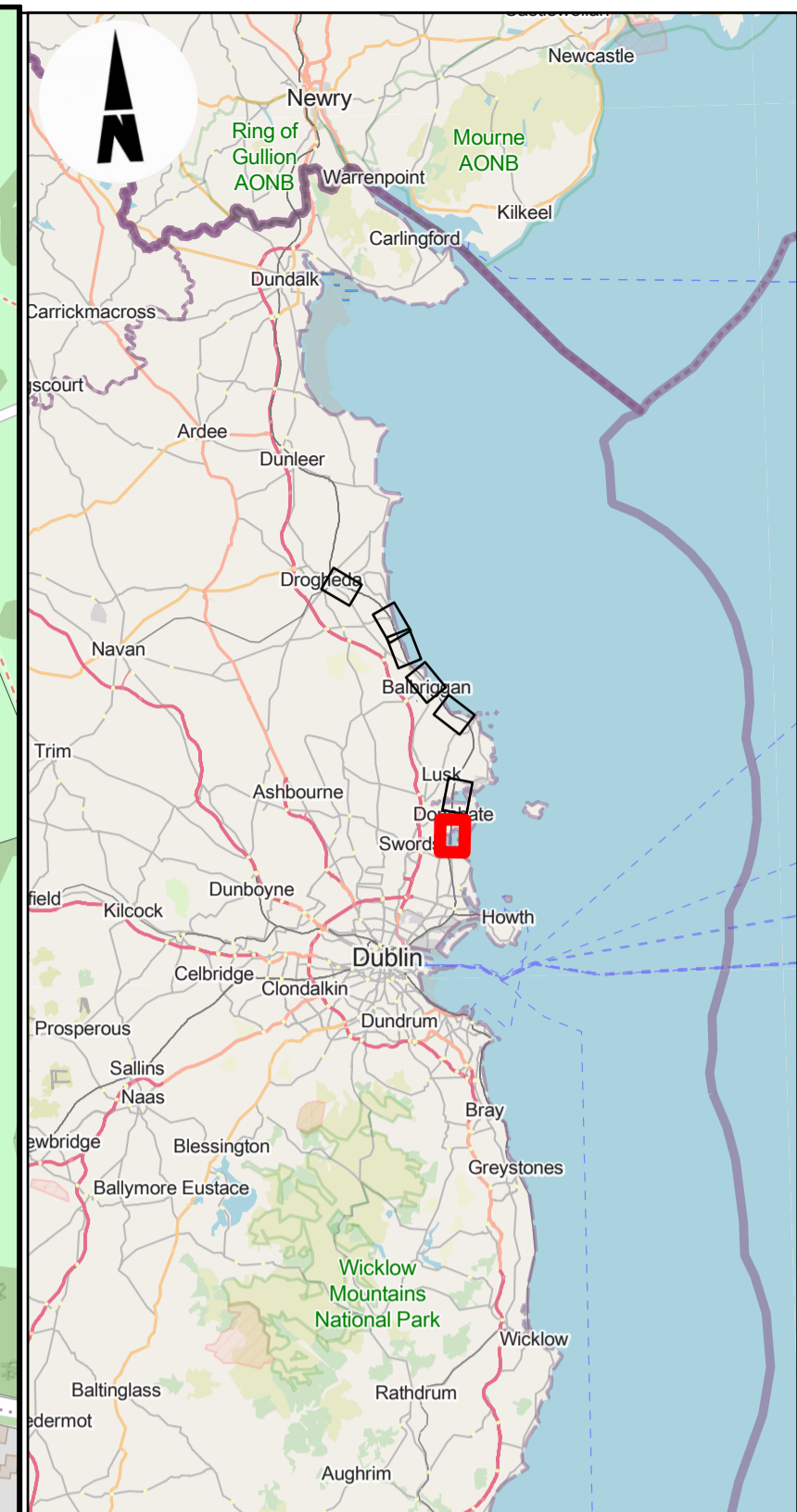
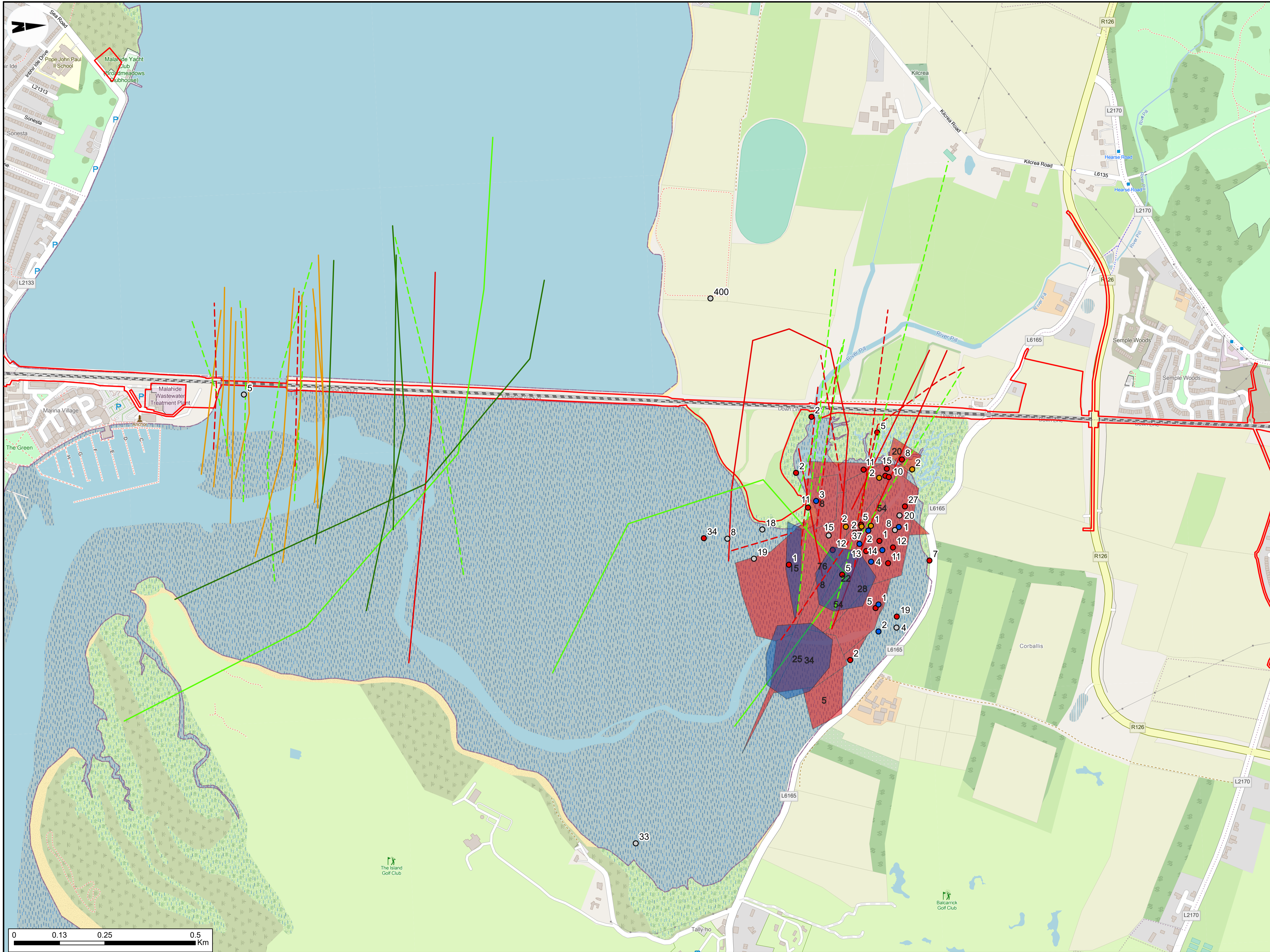
Date: 07/09/2023 | Scale: 1:5000 @ A1 | 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

QMS Code: 279933-00

Drawn: DM | Checked: SQ | Approved: COD

Project Title: DART+ COASTAL NORTH	Drawing Title: BIODIVERSITY SURVEY AREA 7
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100159	Sheet Number: 59 of 85
Status: S4	Rev: P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - MALLARD
 - PALE-BELLIED/LIGHT-BELLIED BRENT GOOSE
 - PINTAIL
 - RED-BREASTED MERGANSER
 - FLOCK COUNT AREAS
 - PINTAIL
 - FLIGHT LINES (HEIGHT)
 - MALLARD: 0-10M
 - MALLARD: >10M
 - RED-BREASTED MERGANSER: 0-10M
 - RED-BREASTED MERGANSER: >10M
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M

0 0.13 0.25 0.5 Km

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Rev	Date	Dn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM Checked: SQ Approved: COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **BIODIVERSITY SURVEY AREA 1**

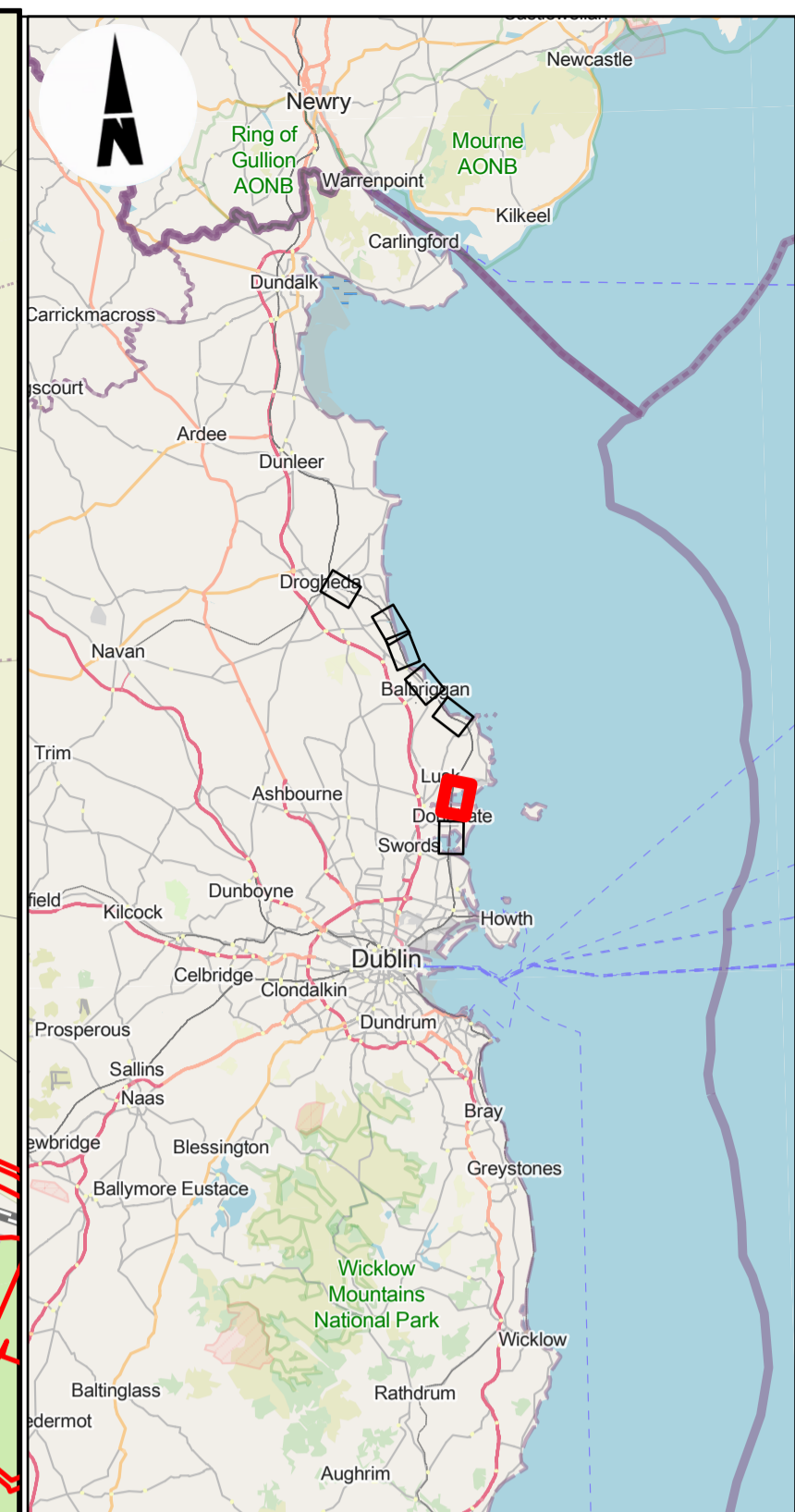
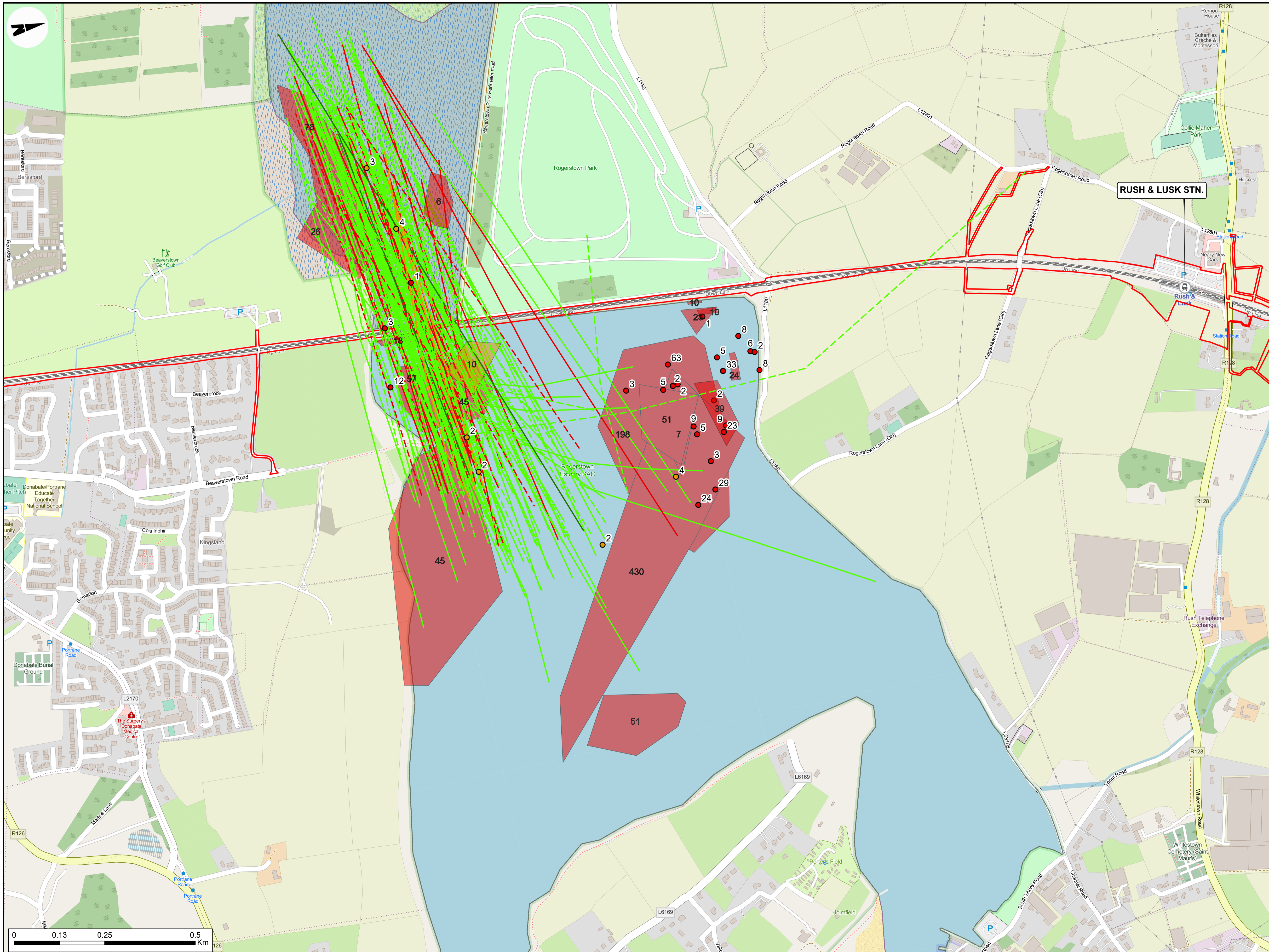
FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 1

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100160

Sheet Number: 60 of 85

Status: S4

Rev: P02



LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT**
- MALLARD
- RED-BREASTED MERGANSER
- FLOCK COUNT AREAS**
- MALLARD
- RED-BREASTED MERGANSER
- FLIGHT LINES (HEIGHT)**
- MALLARD: 0-10M
- MALLARD: >10M
- RED-BREASTED MERGANSER: 0-10M
- RED-BREASTED MERGANSER: >10M
- FLOCK COUNT**
- WIGEON
- FLOCK COUNT AREAS**
- WIGEON
- FLIGHT LINES (HEIGHT)**
- WIGEON: 0-10M
- WIGEON: >10M

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Rev	Date	Dn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Drawn: DM Checked: SQ Approved: COD

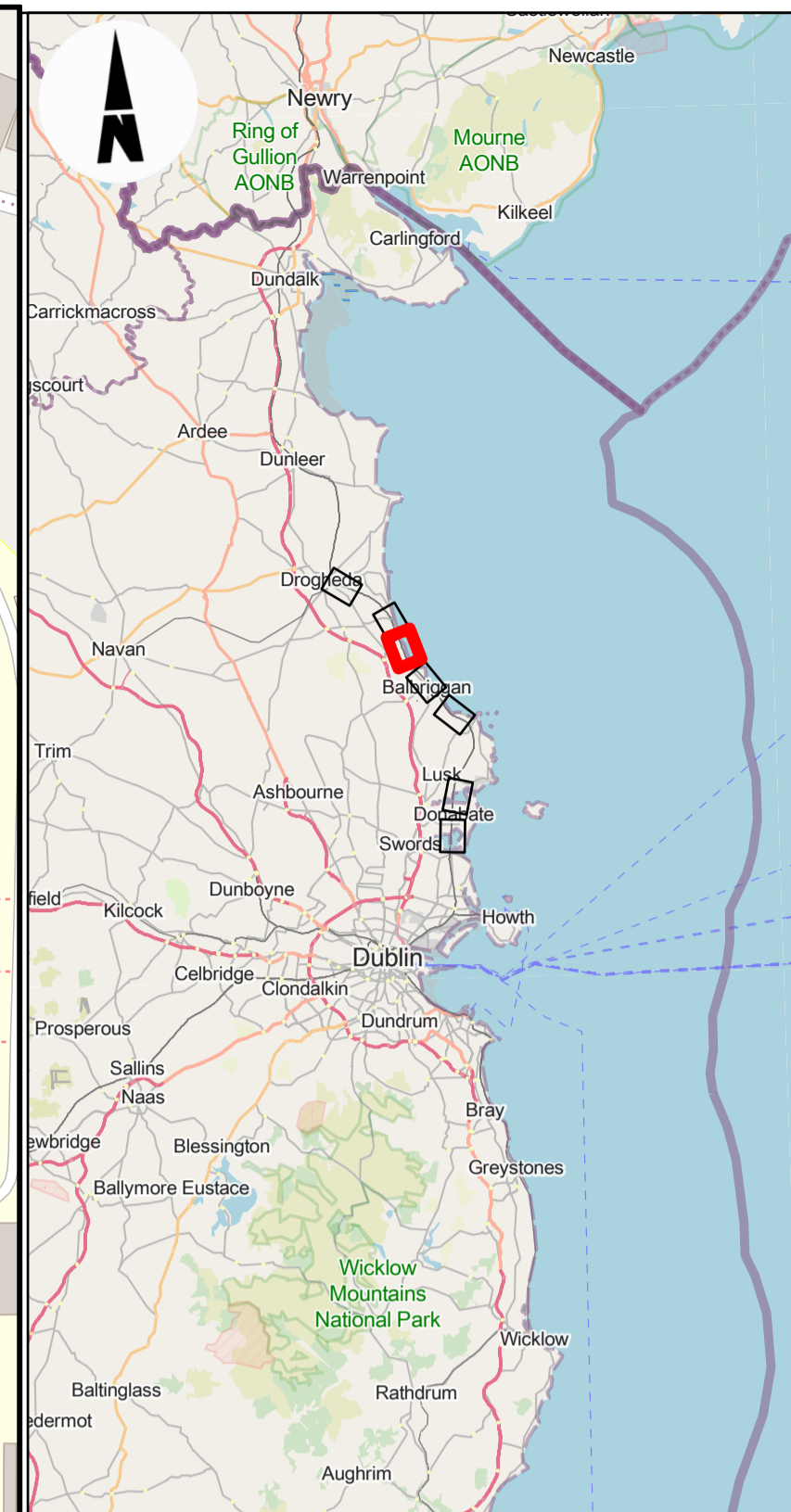
QMS Code: 279933-00

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100161

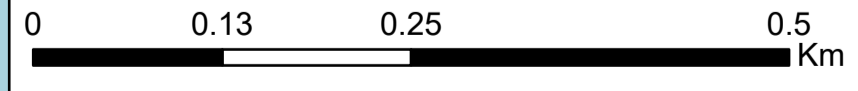
Sheet Number: 61 of 85 Status: S4 Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - RAZORBILL
 - FLIGHT LINES (HEIGHT)
 - MALLARD: >10M

GORMANSTON STN.

MATCH LINE



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- NOTES**
1. THE DATA SHOWN INCLUDE SURVEY RESULTS FOR THE WINTERS 2021/2022, 2022/2023 AND 2023/2024.
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Rev	Date	Dn	Ch'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

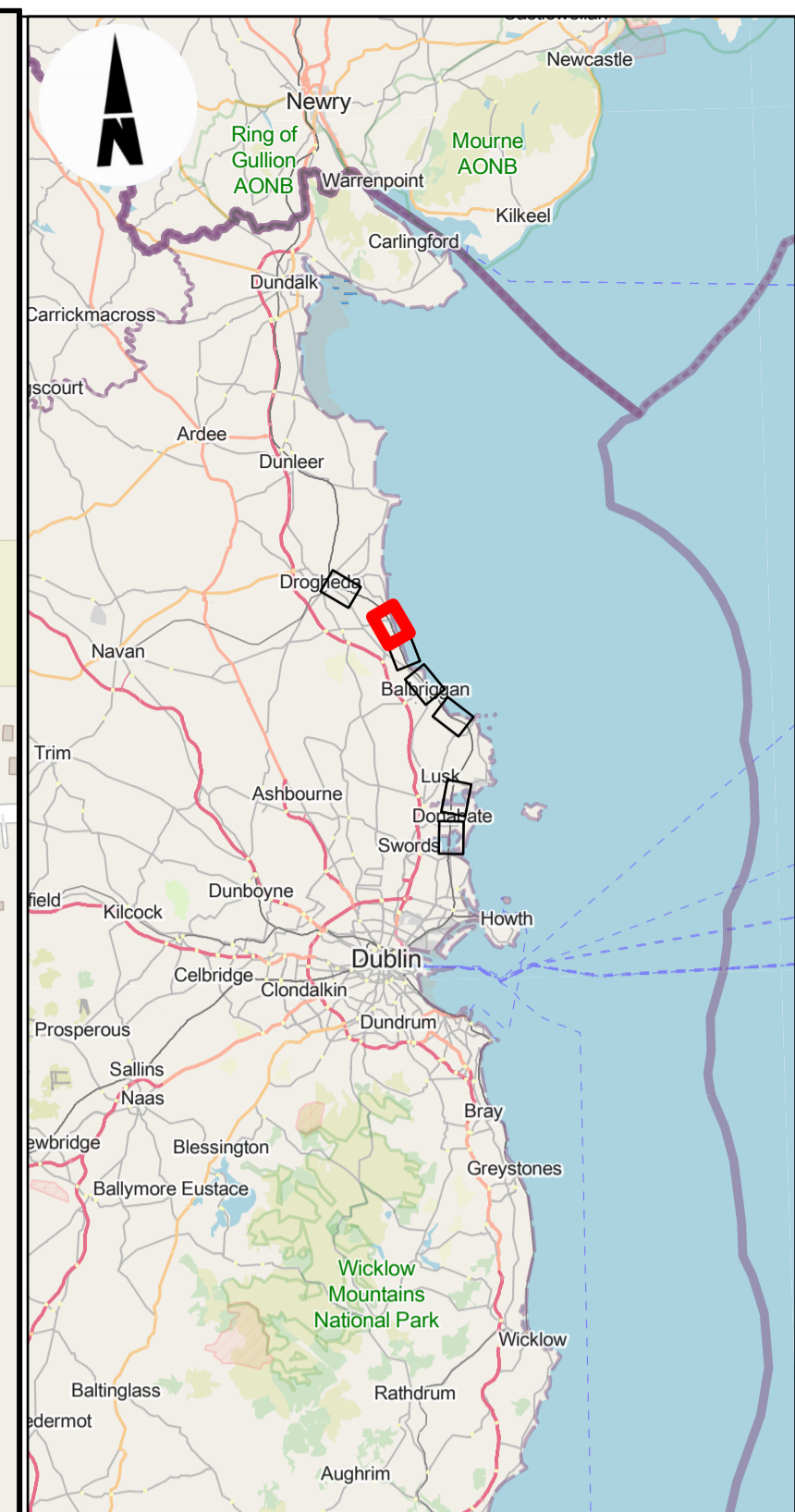
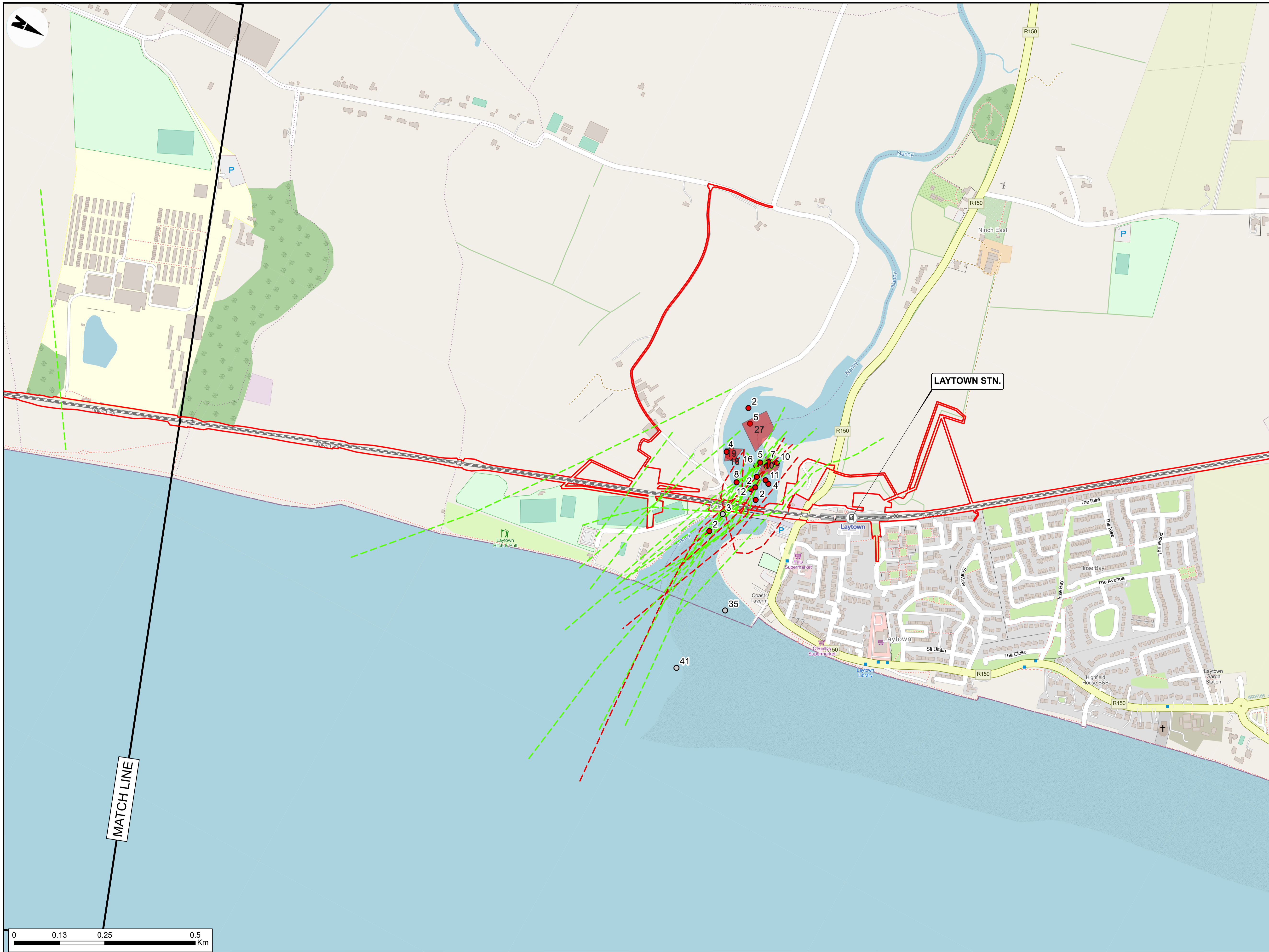
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Drawn: DM Checked: SQ Approved: COD

QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100162	Sheet Number: 62 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - MALLARD
 - PALE-BELLIED/LIGHT-BELLIED BRENT GOOSE
 - FLOCK COUNT AREAS**
 - MALLARD
 - FLIGHT LINES (HEIGHT)**
 - MALLARD: 0-10M
 - MALLARD: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

Drawn: DM | Checked: SQ | Approved: COD

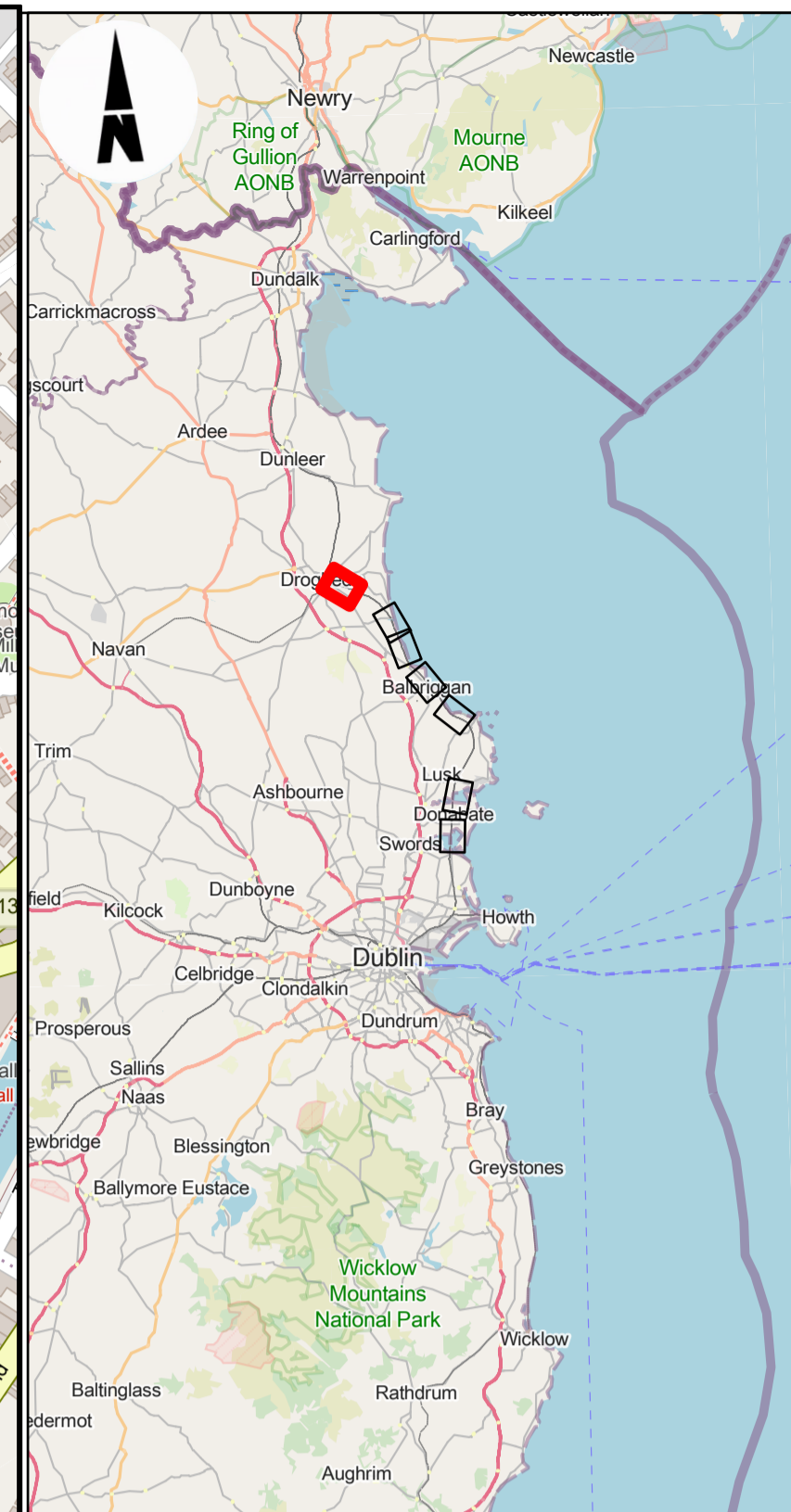
QMS Code: 279933-00

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **BIODIVERSITY SURVEY AREA 6**

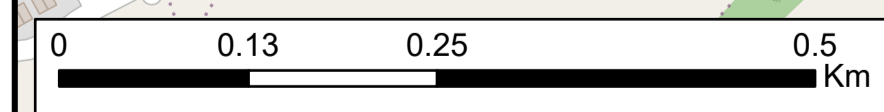
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100163

Sheet Number: 63 of 85 | Status: S4 | Rev: P02



LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLIGHT LINES (HEIGHT)
- MALLARD: >10M



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 3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.



Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

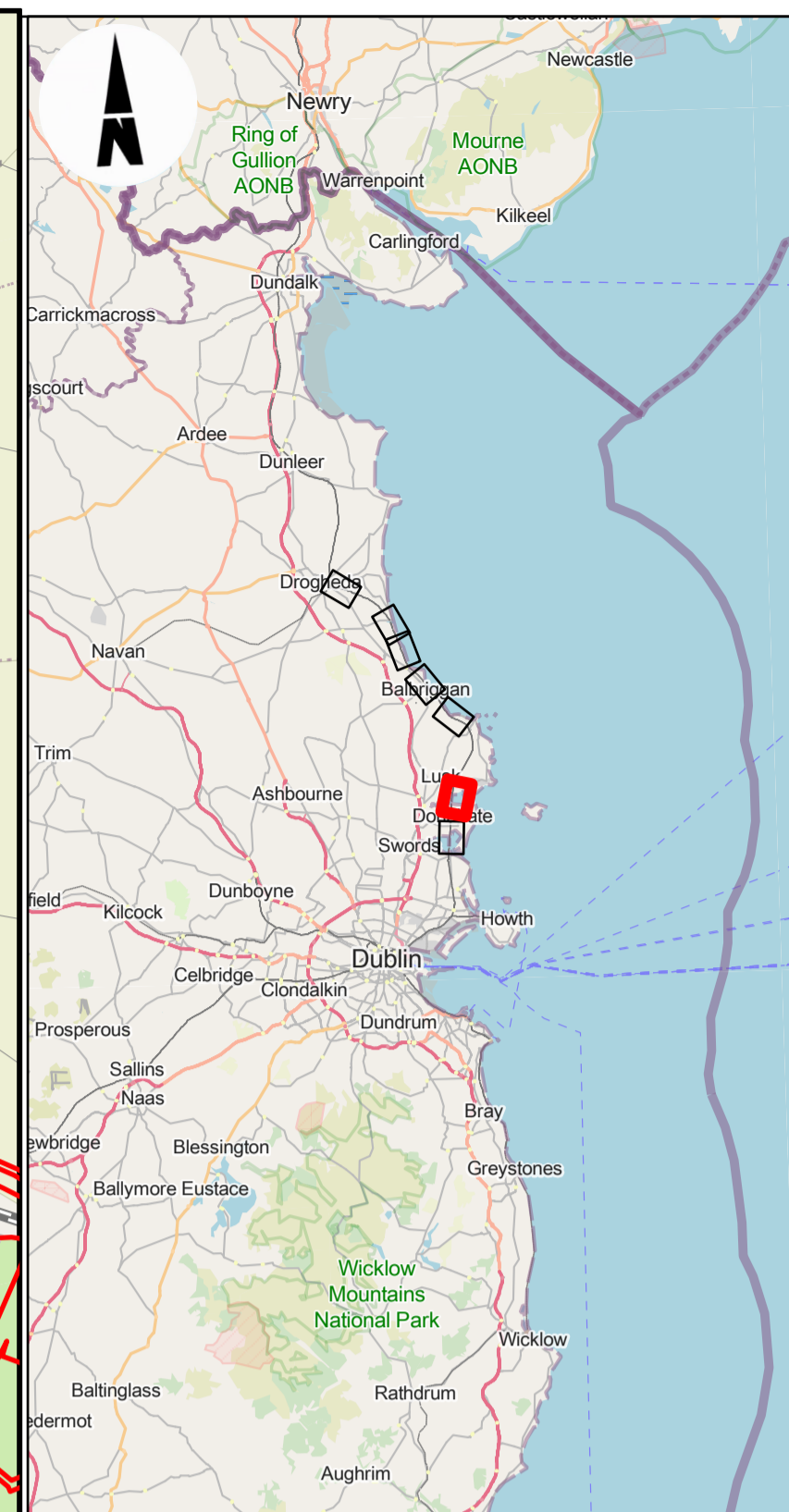
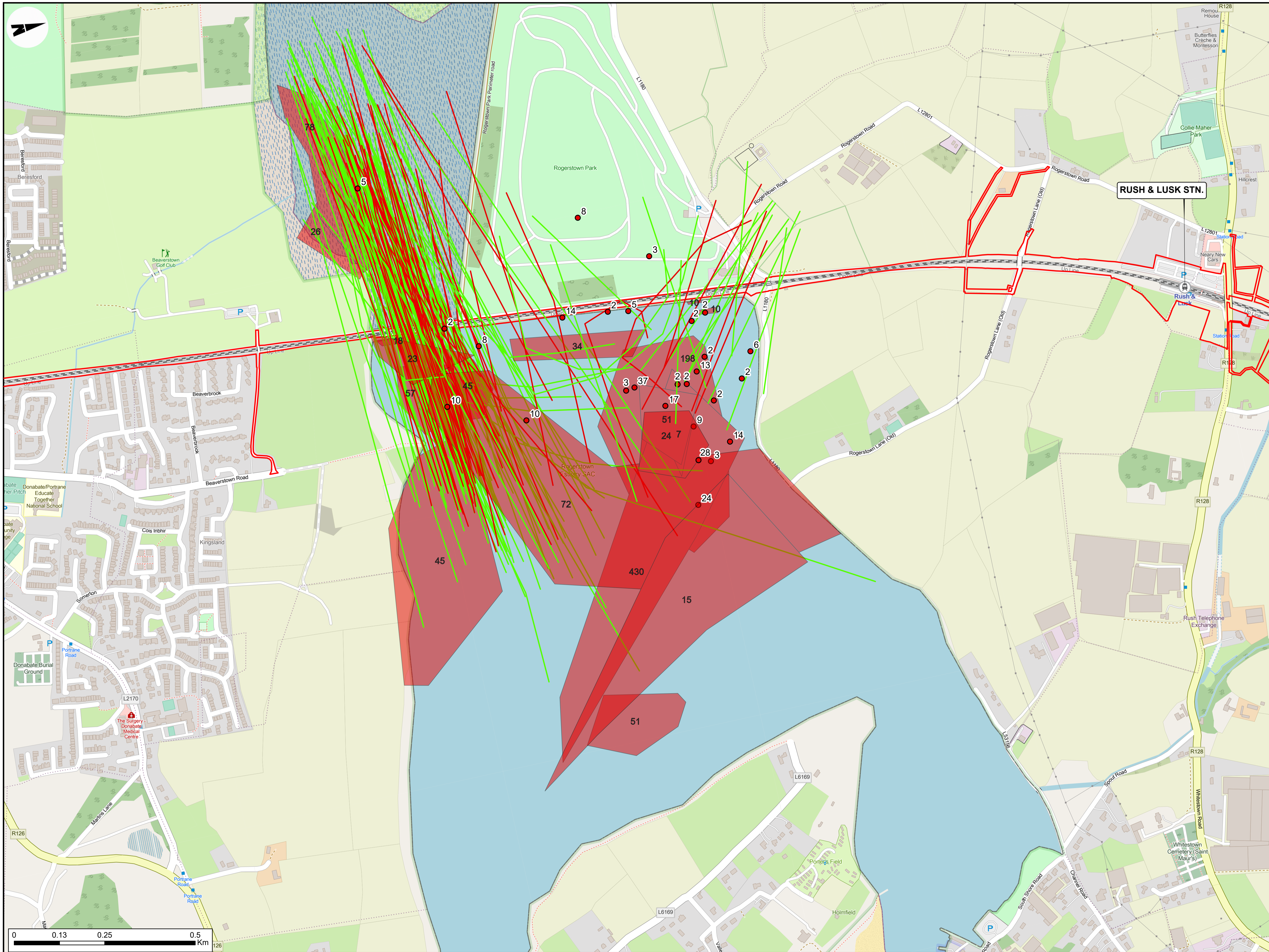
Drawn: DM Checked: SQ Approved: COD

Project Title: **DART+ COASTAL NORTH**

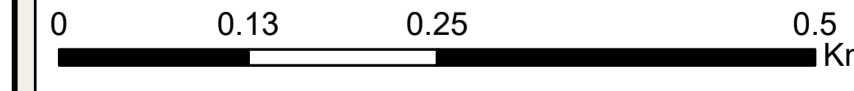
Drawing Title: **BIODIVERSITY SURVEY AREA 7**

Drawing File Name: **D+WP56-ARP-ZZ-NL-DR-EVBD-100164**

Sheet Number: 64 of 85 Status: S4 Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - OYSTERCATCHER
 - FLOCK COUNT AREAS**
 - OYSTERCATCHER
 - FLIGHT LINES (HEIGHT)**
 - OYSTERCATCHER: 0-10M
 - OYSTERCATCHER: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M



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Rev	Date	Dm	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SQ, Approved: COD

Project Title: **DART+ COASTAL NORTH**

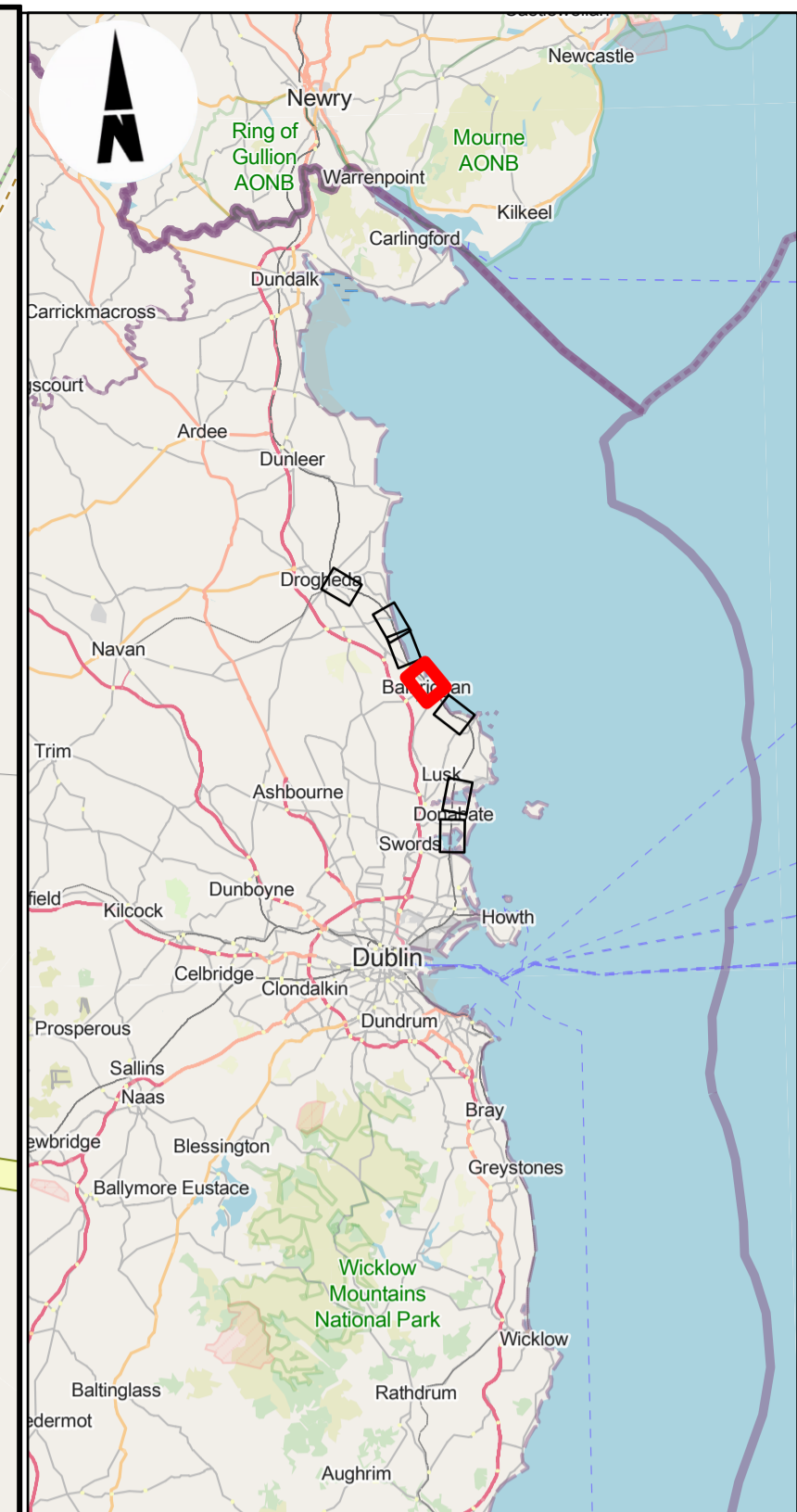
Drawing Title: **BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100166

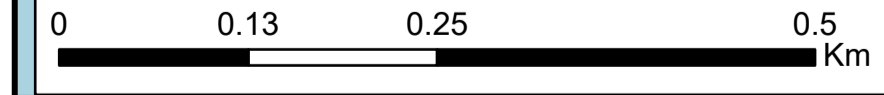
Sheet Number: 66 of 85

Status: S4

Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - OYSTERCATCHER
 - FLOCK COUNT AREAS**
 - OYSTERCATCHER
 - FLIGHT LINES (HEIGHT)**
 - OYSTERCATCHER: 0-10M
 - OYSTERCATCHER: >10M



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 / 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

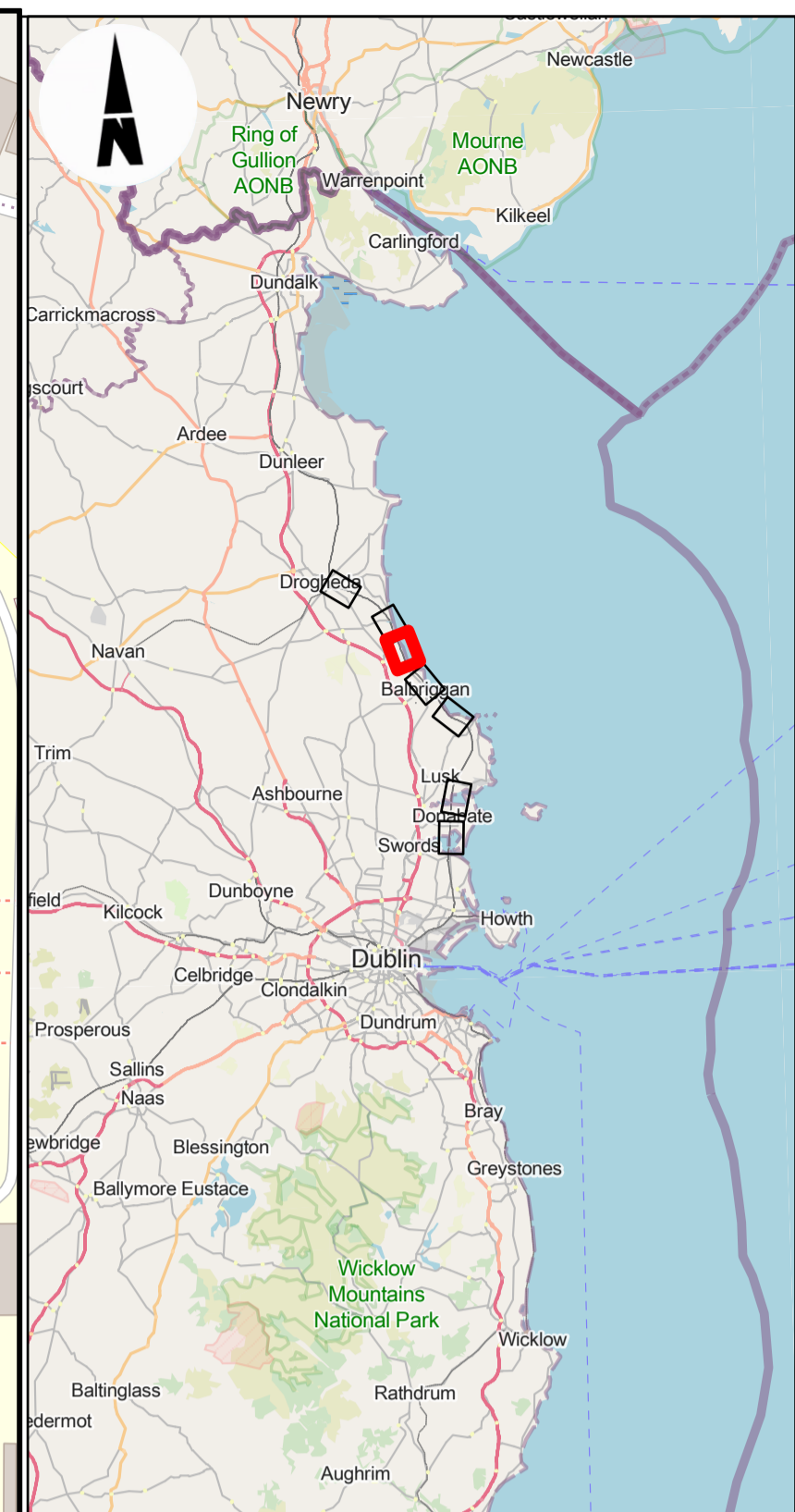
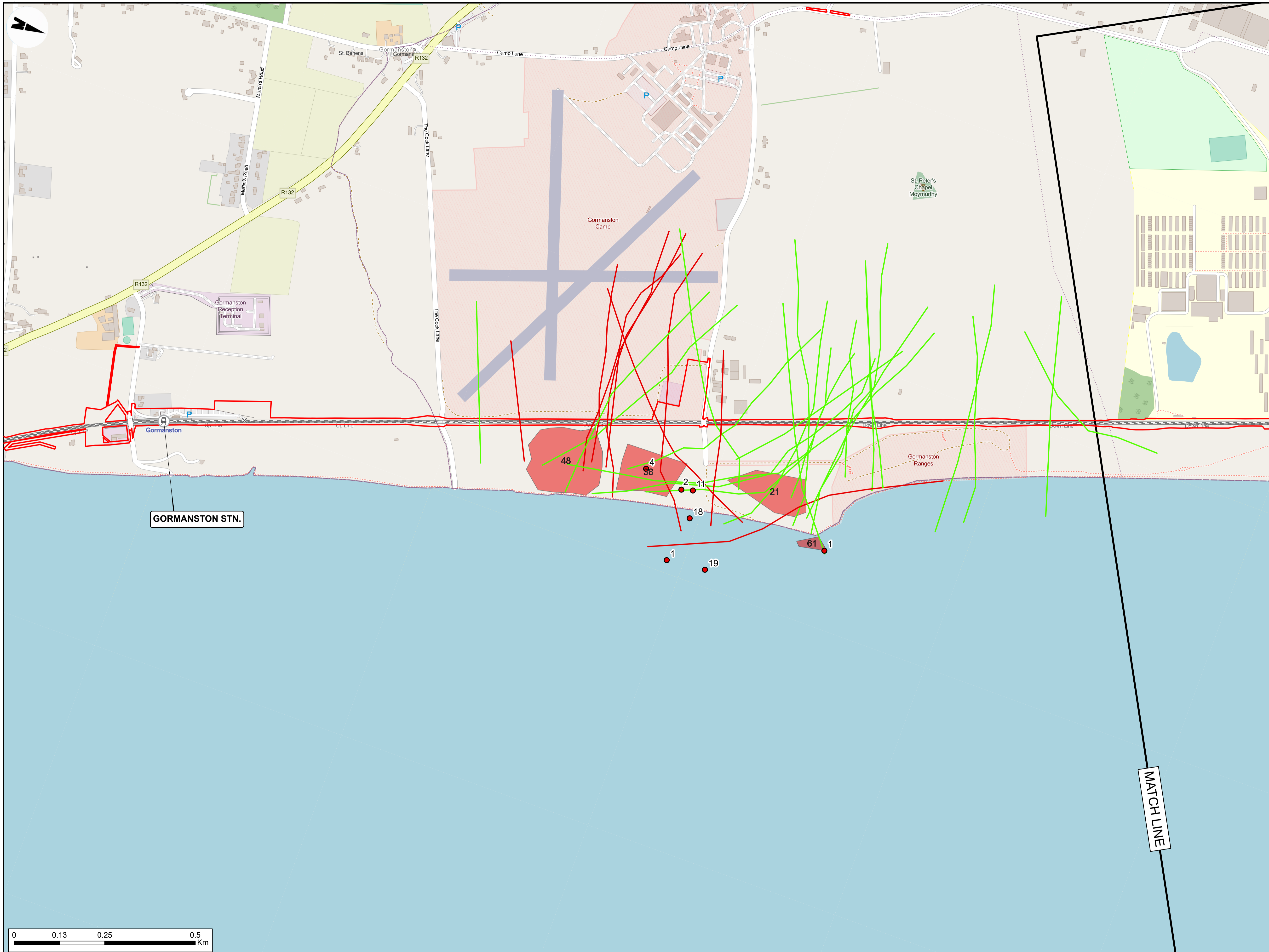
Drawn: DM Checked: SQ Approved: COD

Project Title: **DART+ COASTAL NORTH**

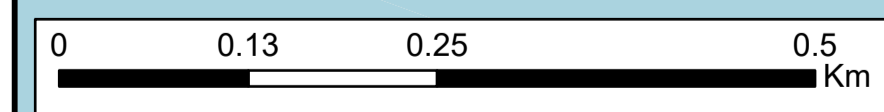
Drawing Title: **BIODIVERSITY
 FIGURE 8.8: WINTERING BIRD SURVEY
 SURVEY AREA 4**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100167

Sheet Number: 67 of 85 Status: S4 Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - OYSTERCATCHER
 - FLOCK COUNT AREAS**
 - OYSTERCATCHER
 - FLIGHT LINES (HEIGHT)**
 - OYSTERCATCHER: 0-10M
 - OYSTERCATCHER: >10M



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Rev	Date	Dn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

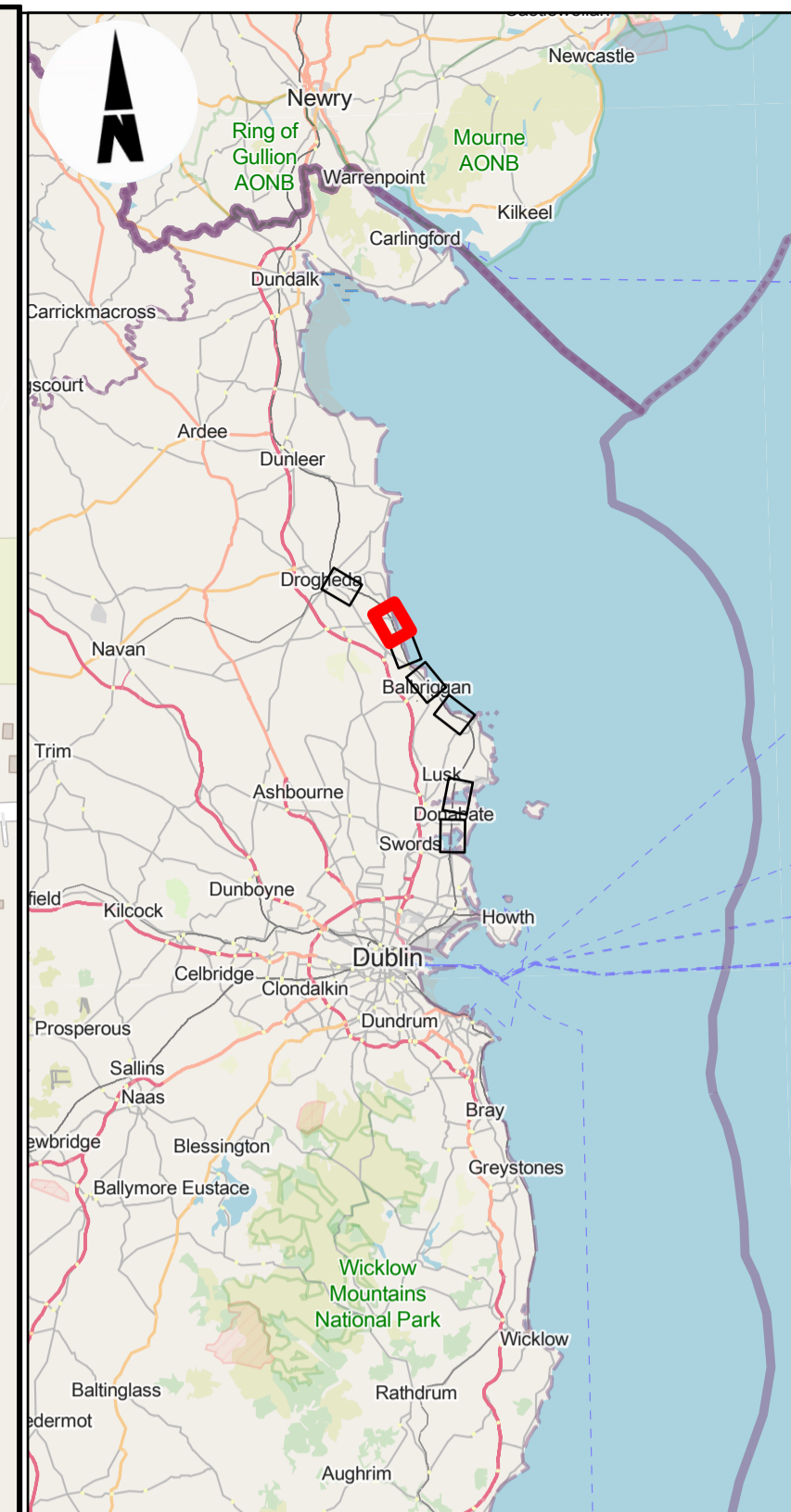
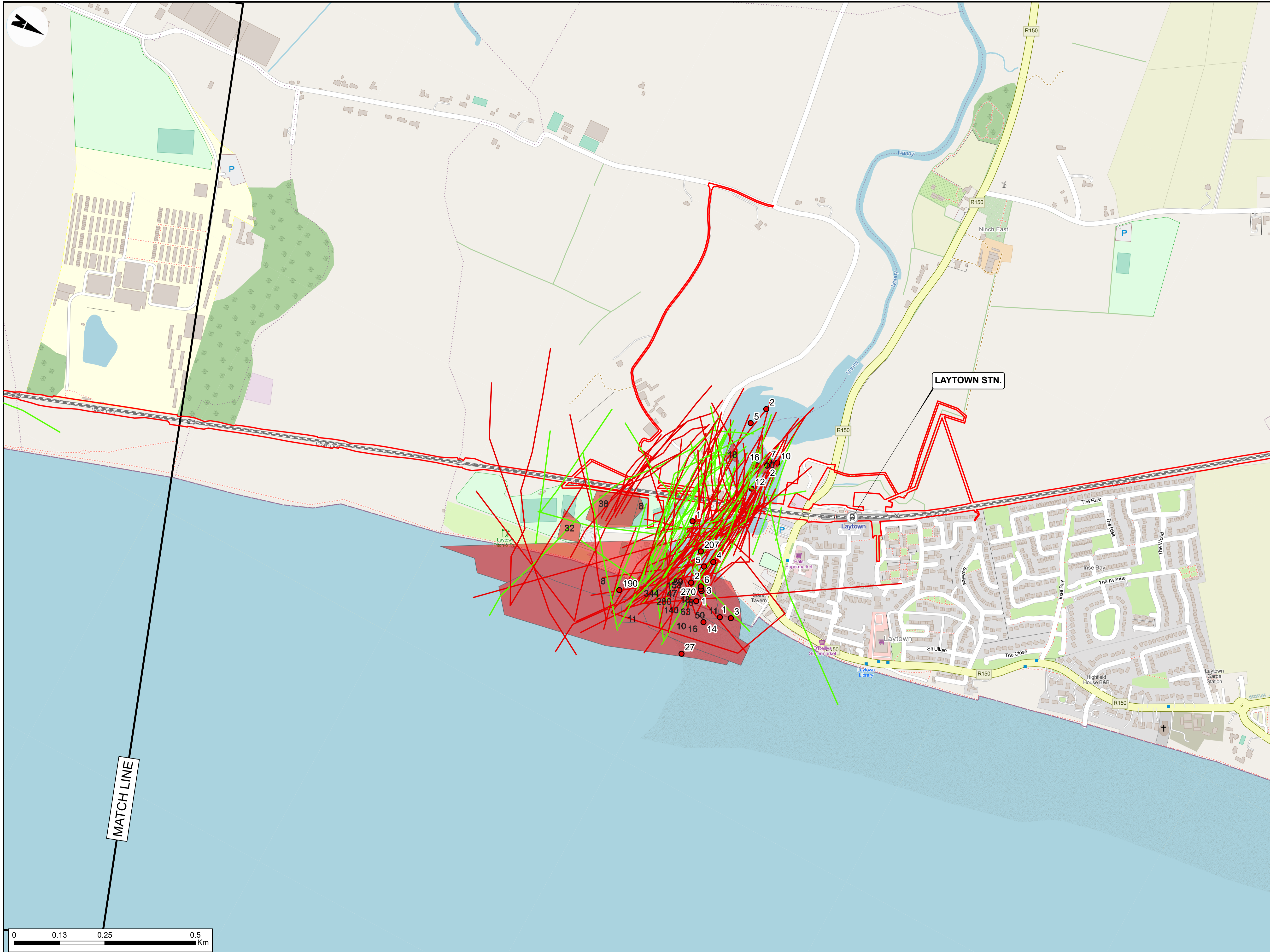
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

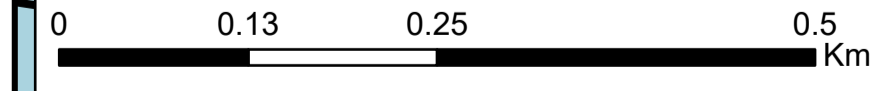
QMS Code: 279933-00

Drawn: DM, Checked: SQ, Approved: COD

Project Title	DART+ COASTAL NORTH				
Drawing Title	BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5				
Drawing File Name	D+WP56-ARP-ZZ-NL-DR-EVBD-100168	Sheet Number	68 of 85	Status	S4
Rev	P02				



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - OYSTERCATCHER
 - FLOCK COUNT AREAS**
 - OYSTERCATCHER
 - FLIGHT LINES (HEIGHT)**
 - OYSTERCATCHER: 0-10M
 - OYSTERCATCHER: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

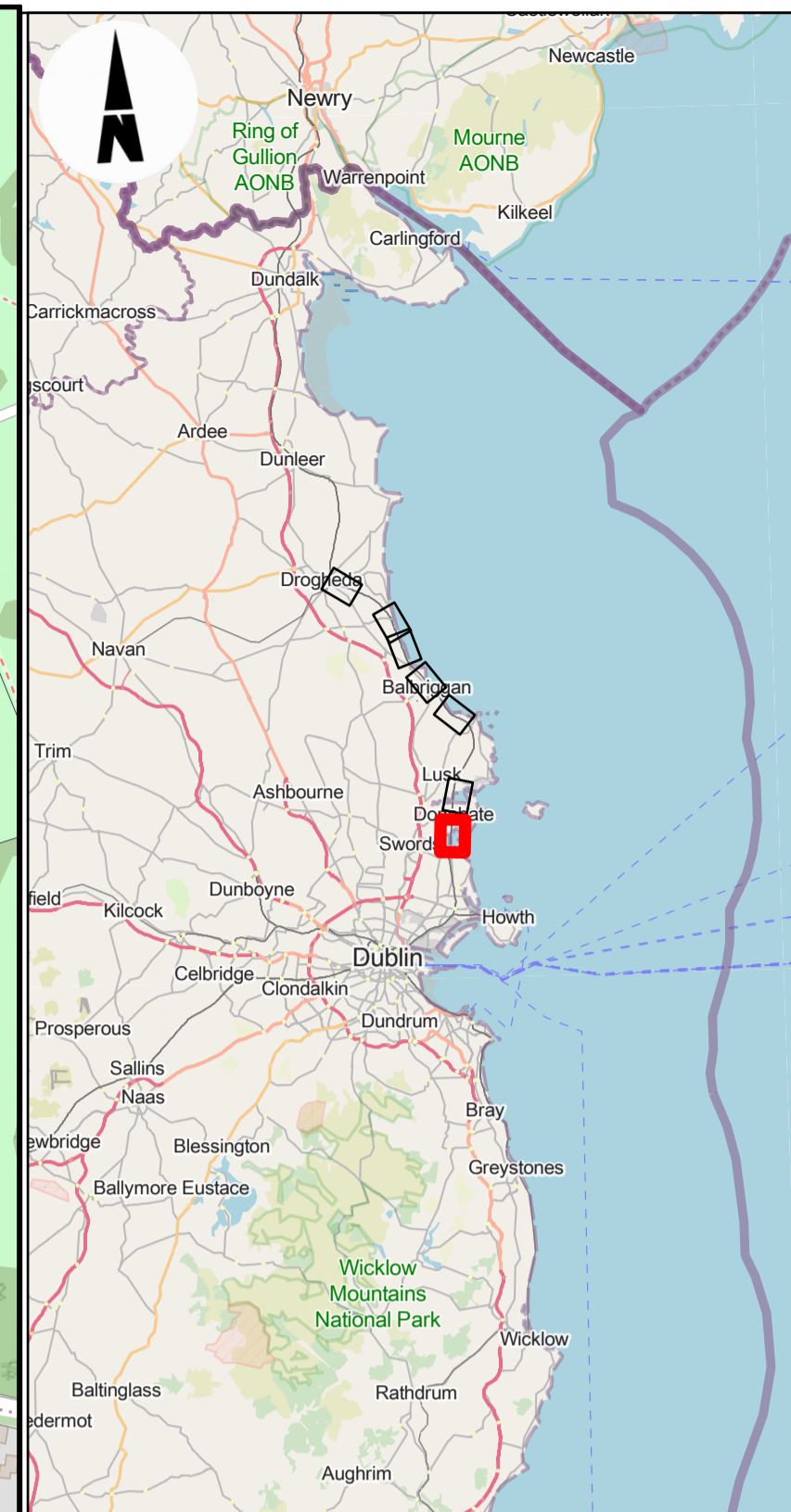
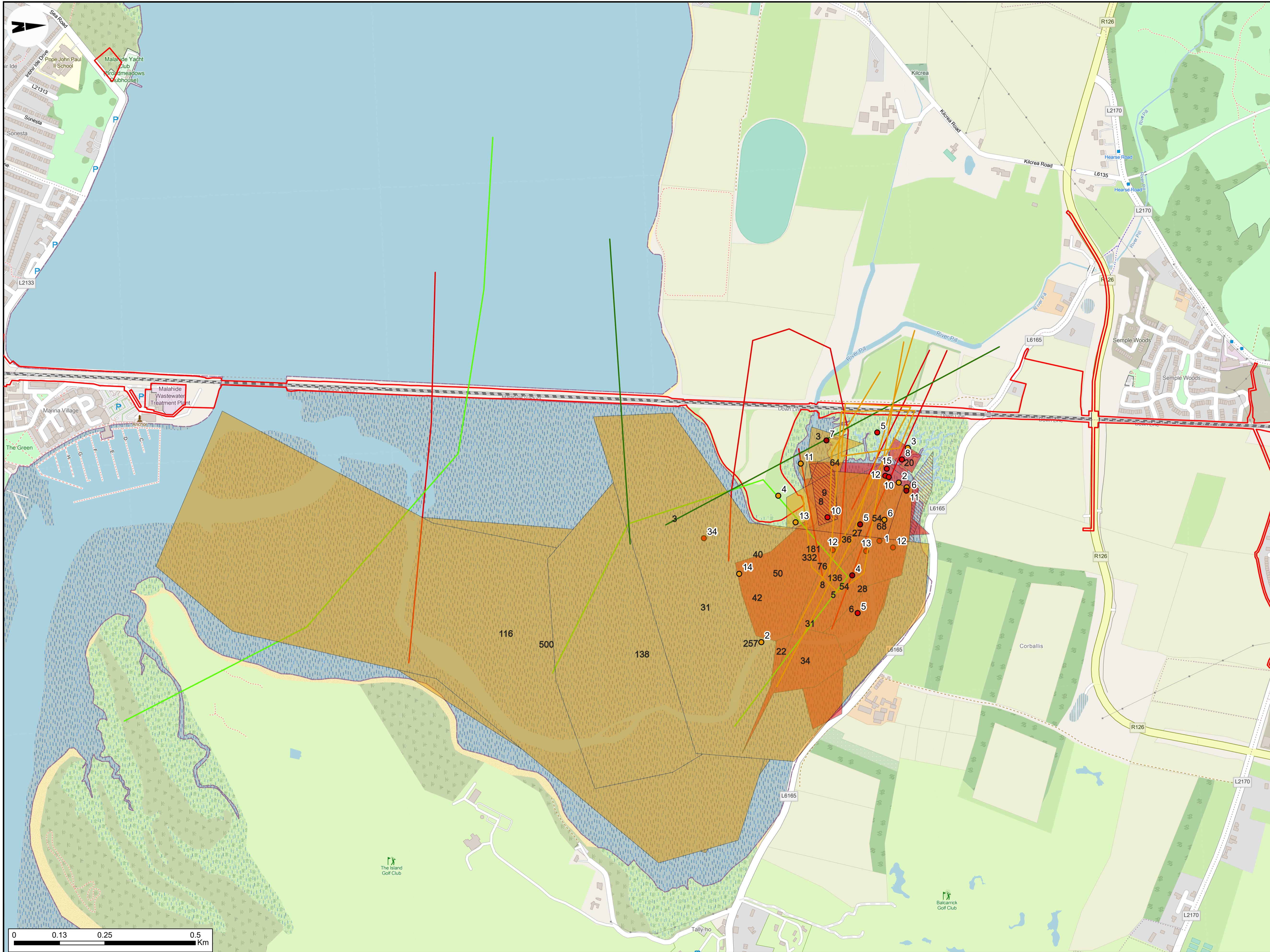
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Project Code: D+WP56 Originator Code: ARP

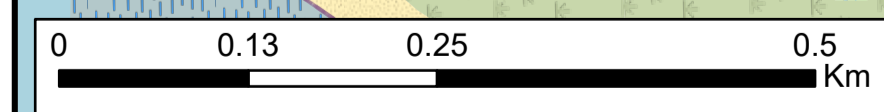
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Drawn: DM, Checked: SQ, Approved: COD

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY SURVEY AREA 6			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100169	Sheet Number: 69 of 85	Status: S4	Rev: P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - RINGED PLOVER
 - SHELDUCK
 - SHOVELER
 - FLOCK COUNT AREAS
 - SHELDUCK
 - SHOVELER
 - FLIGHT LINES (HEIGHT)
 - SHELDUCK: 0-10M
 - SHELDUCK: >10M
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M



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Rev	Date	Dm	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

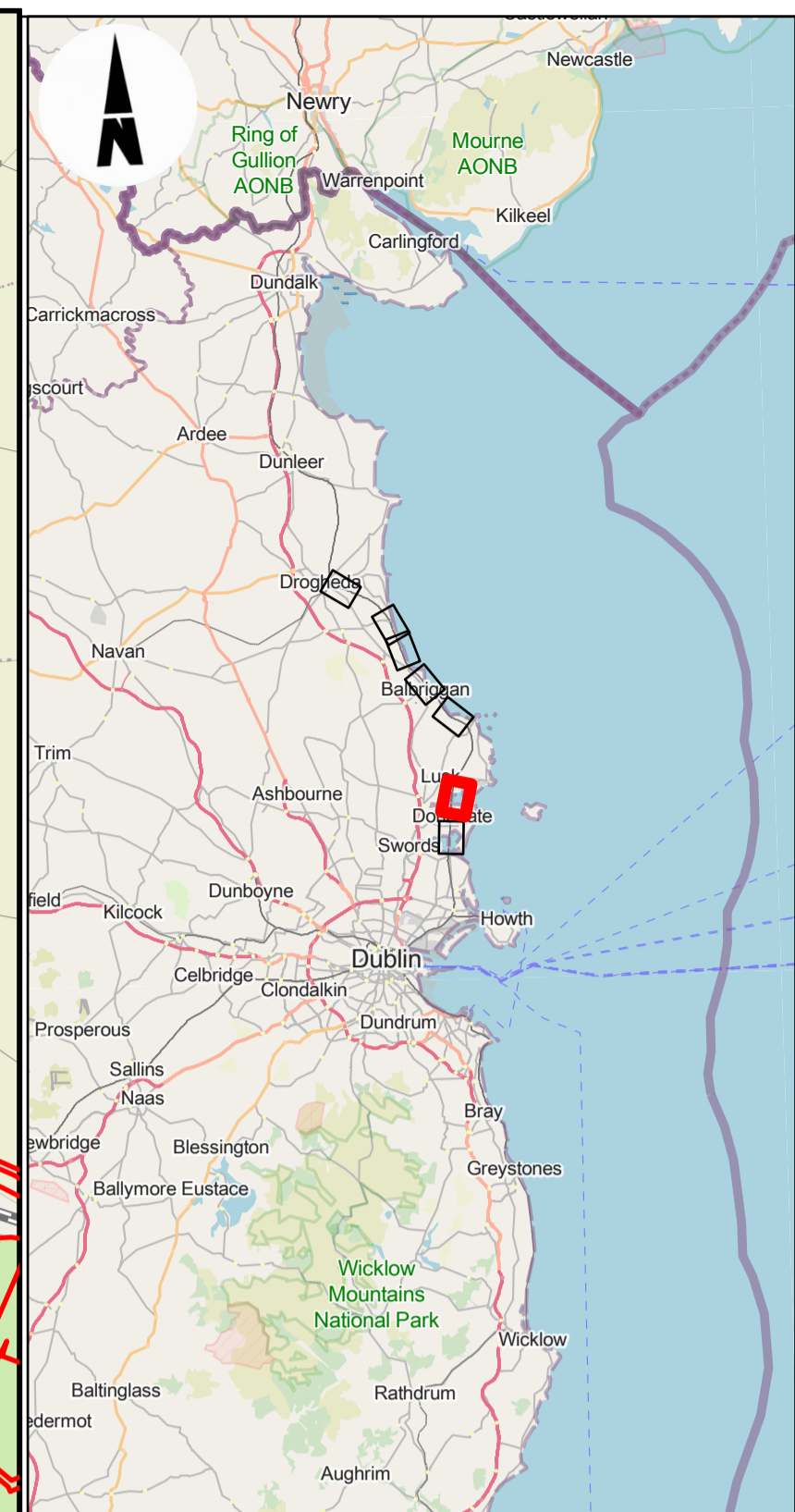
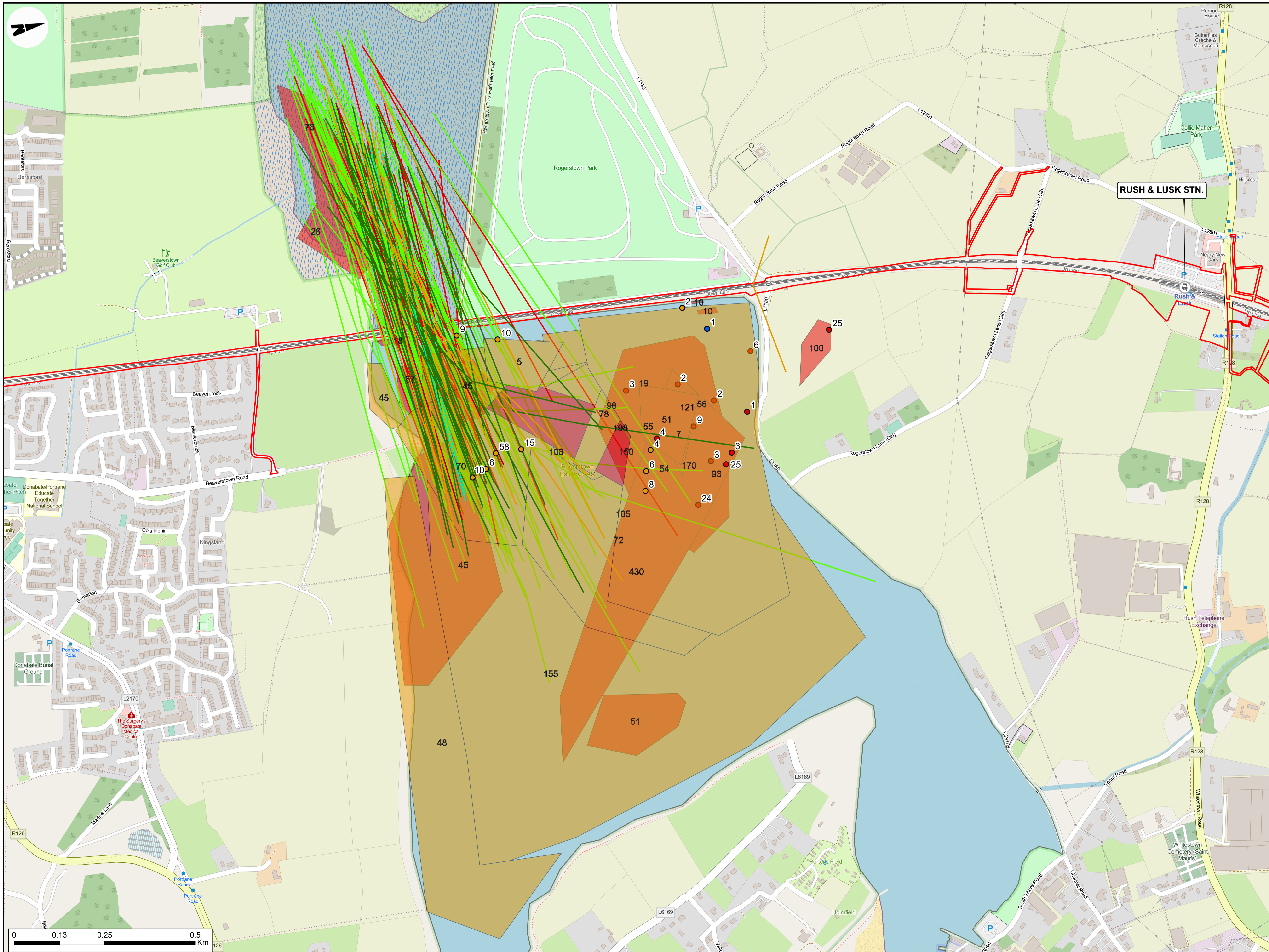
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SQ, Approved: COD

Project Title	DART+ COASTAL NORTH			
Drawing Title	BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 1			
Drawing File Name	D+WP56-ARP-ZZ-NL-DR-EVBD-100170	Sheet Number	70 of 85	Status
			S4	Rev
				P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - RINGED PLOVER
 - SANDERLING
 - SHELDUCK
 - FLOCK COUNT AREAS**
 - RINGED PLOVER
 - SHELDUCK
 - FLIGHT LINES (HEIGHT)**
 - SHELDUCK: 0-10M
 - SHELDUCK: >10M
 - SHOVELER: 0-10M
 - SHOVELER: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M

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Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Drawn: DM Checked: SQ Approved: COD

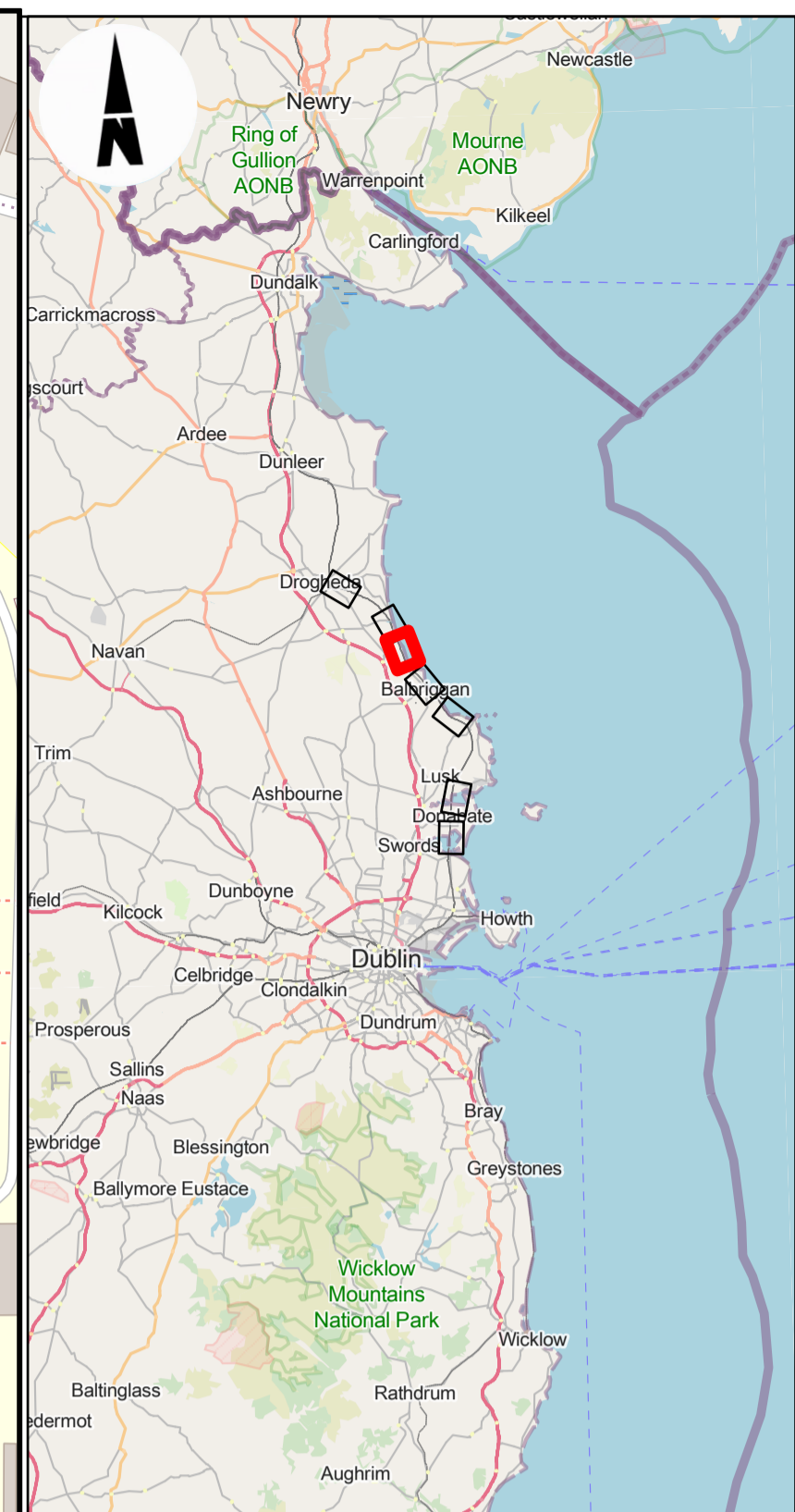
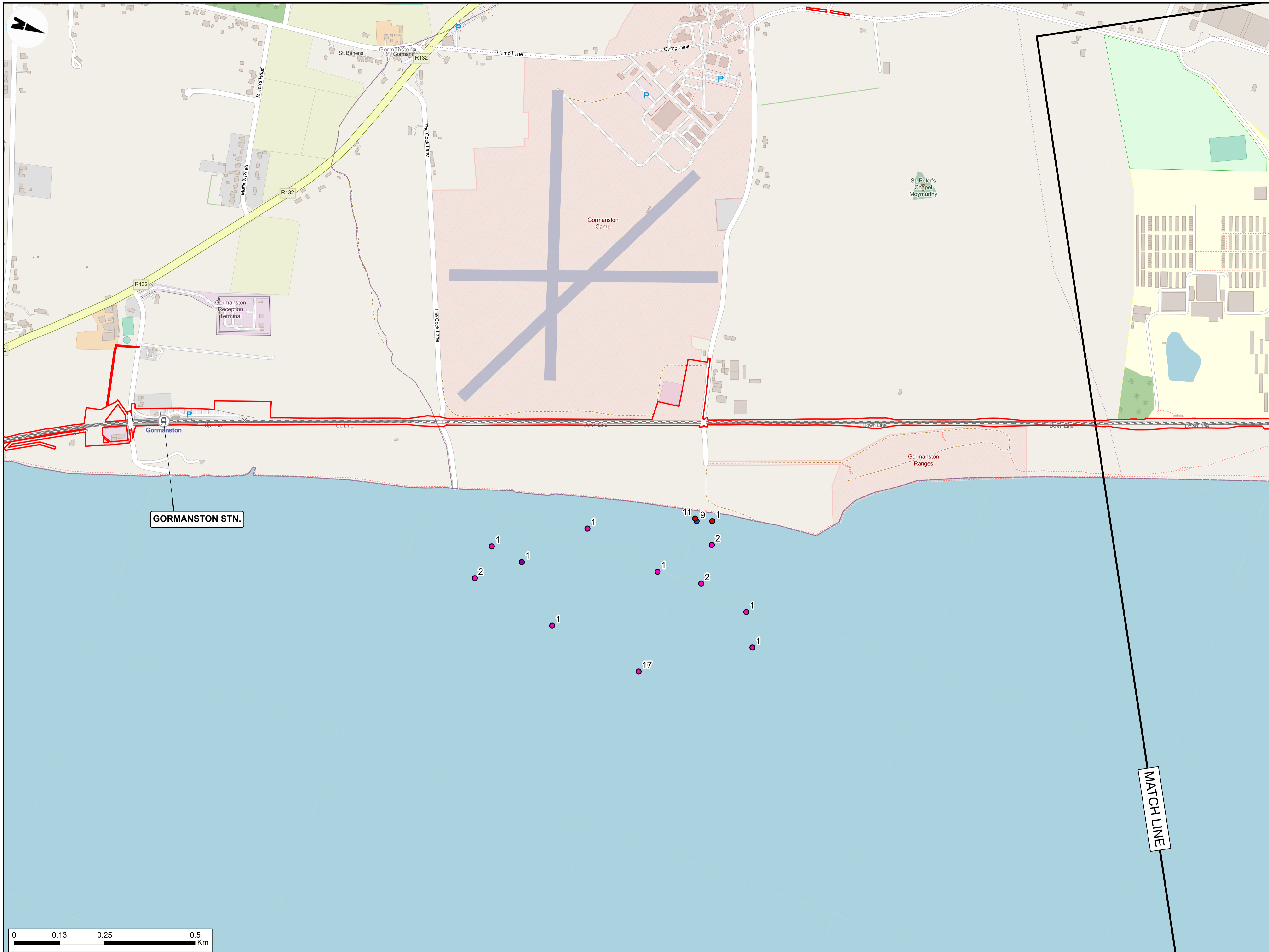
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Project Title: **DART+ COASTAL NORTH**

Drawing Title: **BIODIVERSITY SURVEY AREA 2**

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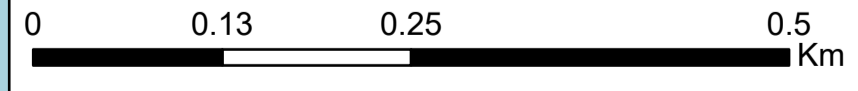
Sheet Number: 71 of 85 Status: S4 Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - RED-THROATED DIVER
 - RINGED PLOVER
 - SANDERLING
 - SHAG

GORMANSTON STN.

MATCH LINE



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Rev	Date	Dn	Ch'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

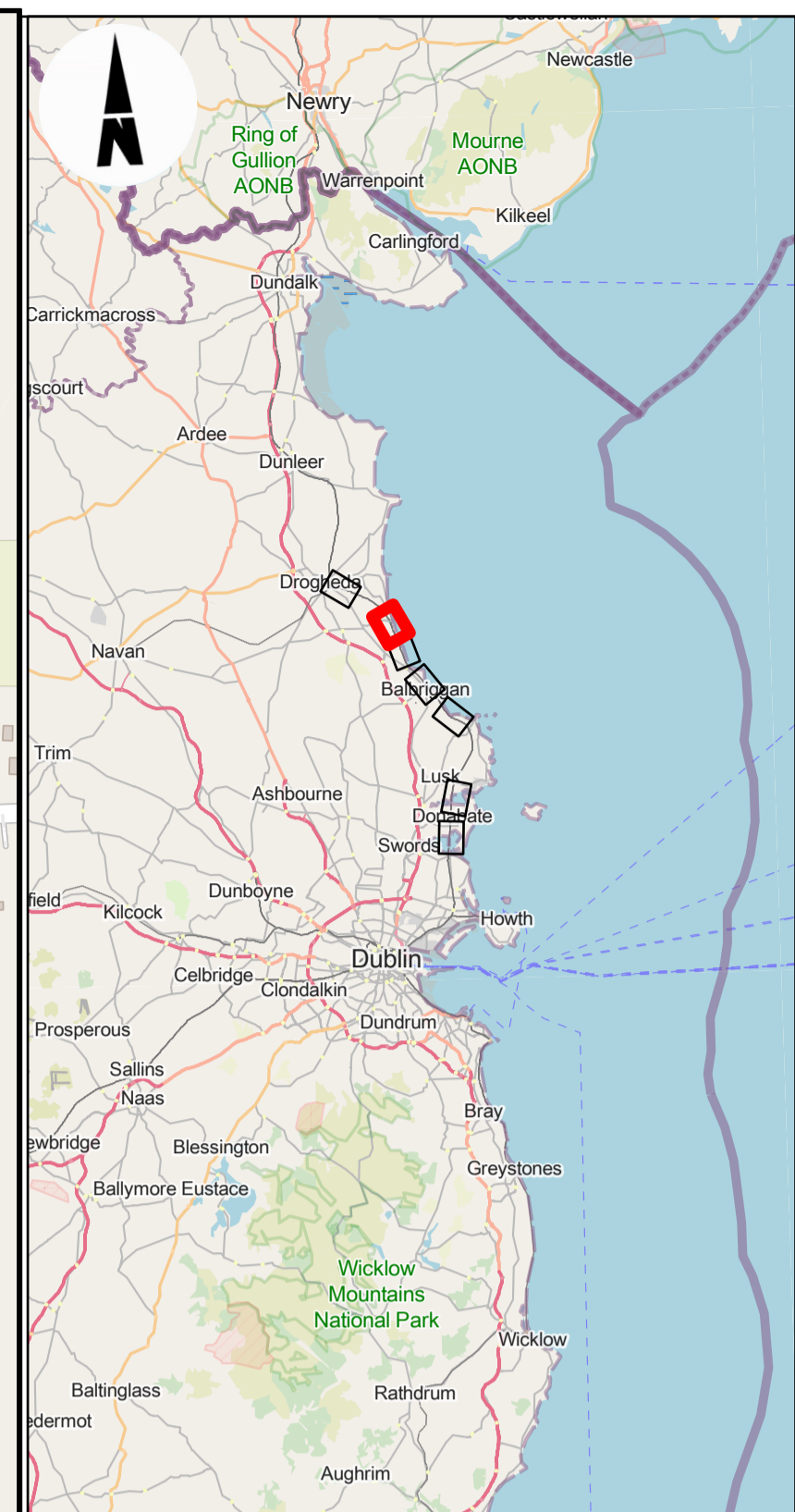
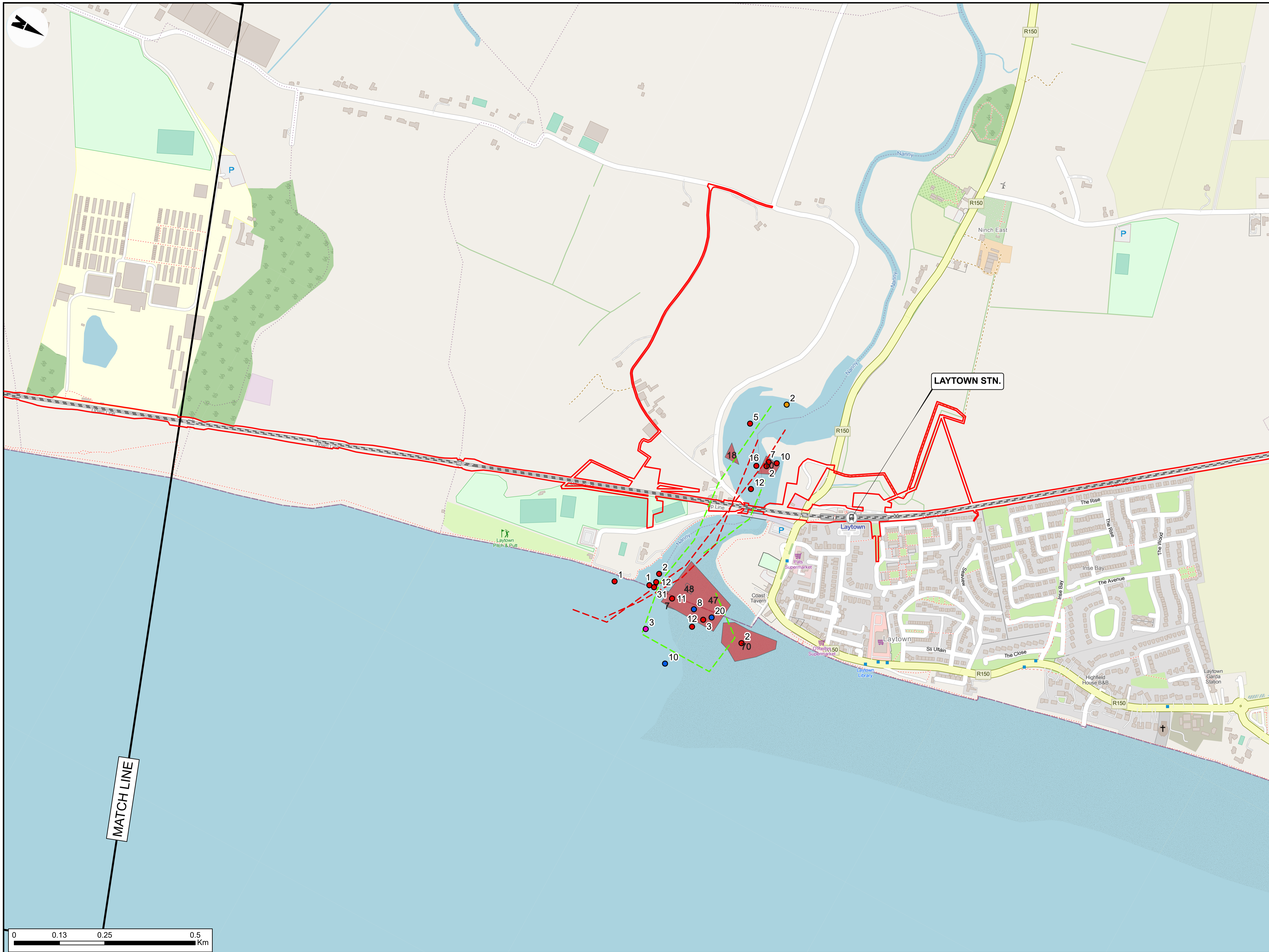
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Drawn: DM Checked: SQ Approved: COD

QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100172	Sheet Number: 72 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - RED-THROATED DIVER
 - RINGED PLOVER
 - SANDERLING
 - SHELDUCK
 - FLOCK COUNT AREAS**
 - RINGED PLOVER
 - FLIGHT LINES (HEIGHT)**
 - RINGED PLOVER: 0-10M
 - RINGED PLOVER: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

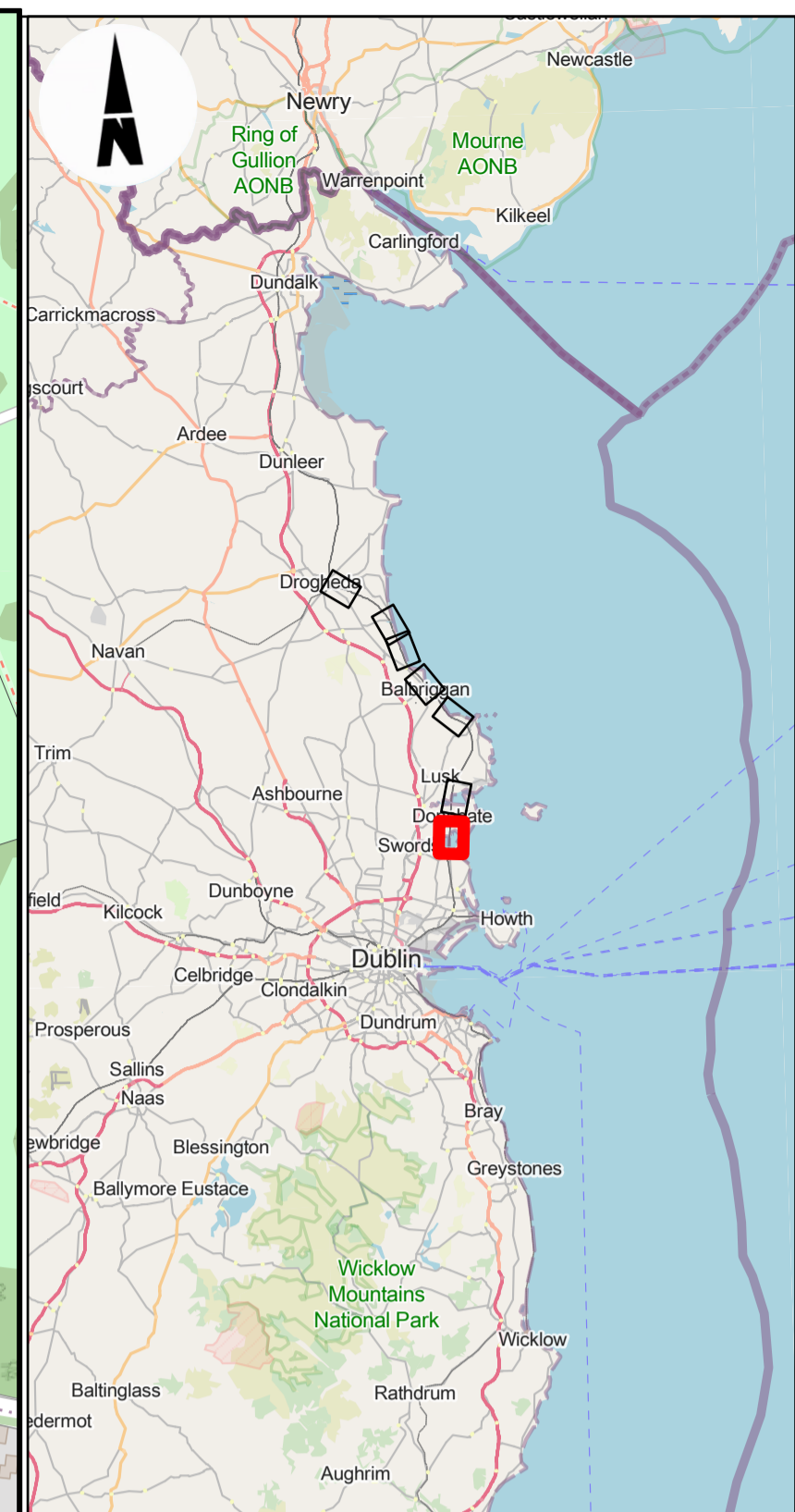
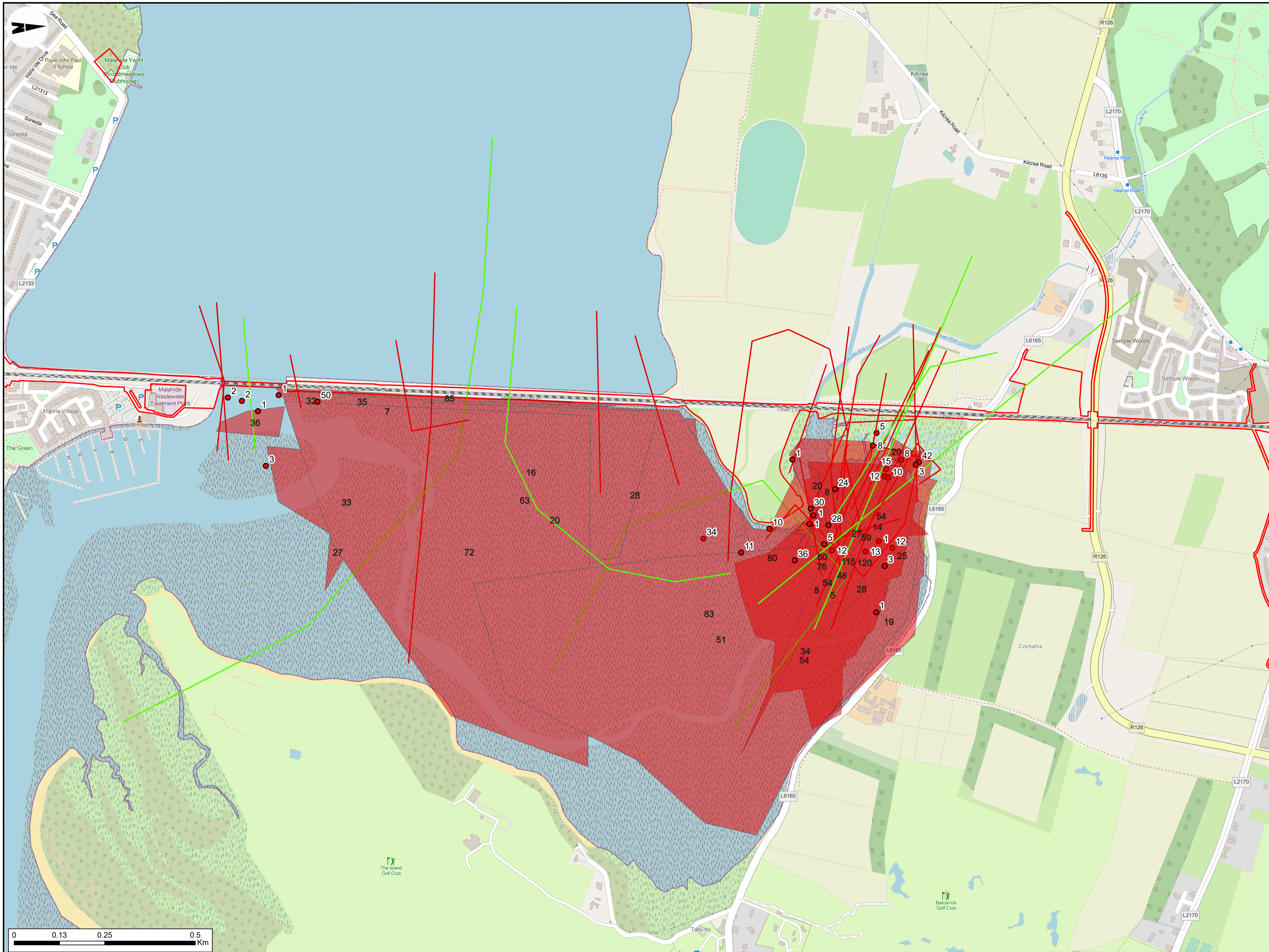
Date: 07/09/2023 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

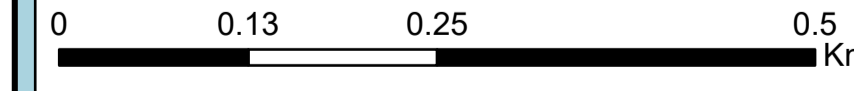
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QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY SURVEY AREA 6			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100173			
Sheet Number: 73 of 85	Status: S4	Rev: P02	© Arup



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - REDSHANK
 - FLOCK COUNT AREAS
 - REDSHANK
 - FLIGHT LINES (HEIGHT)
 - REDSHANK: 0-10M
 - REDSHANK: >10M
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

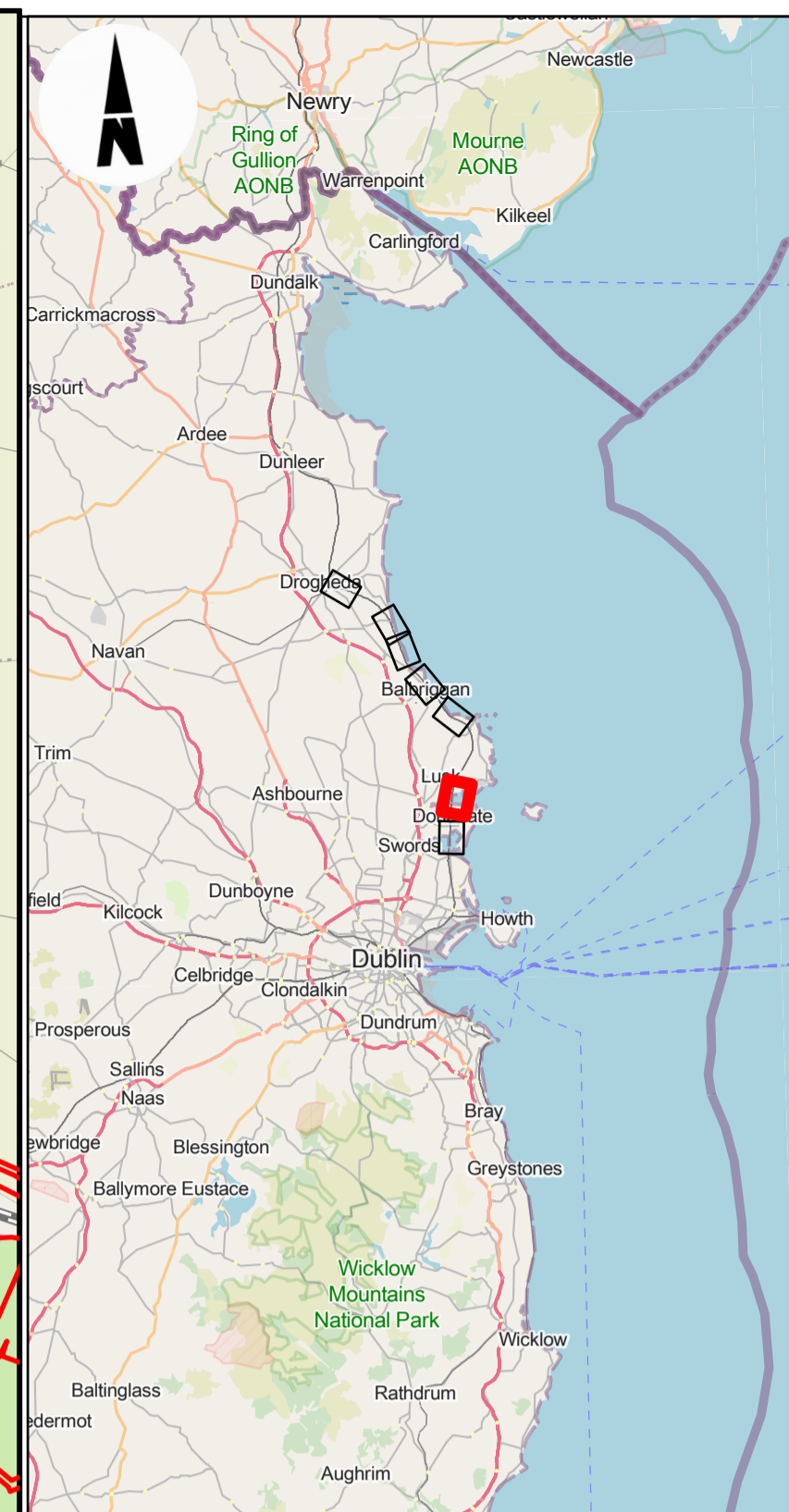
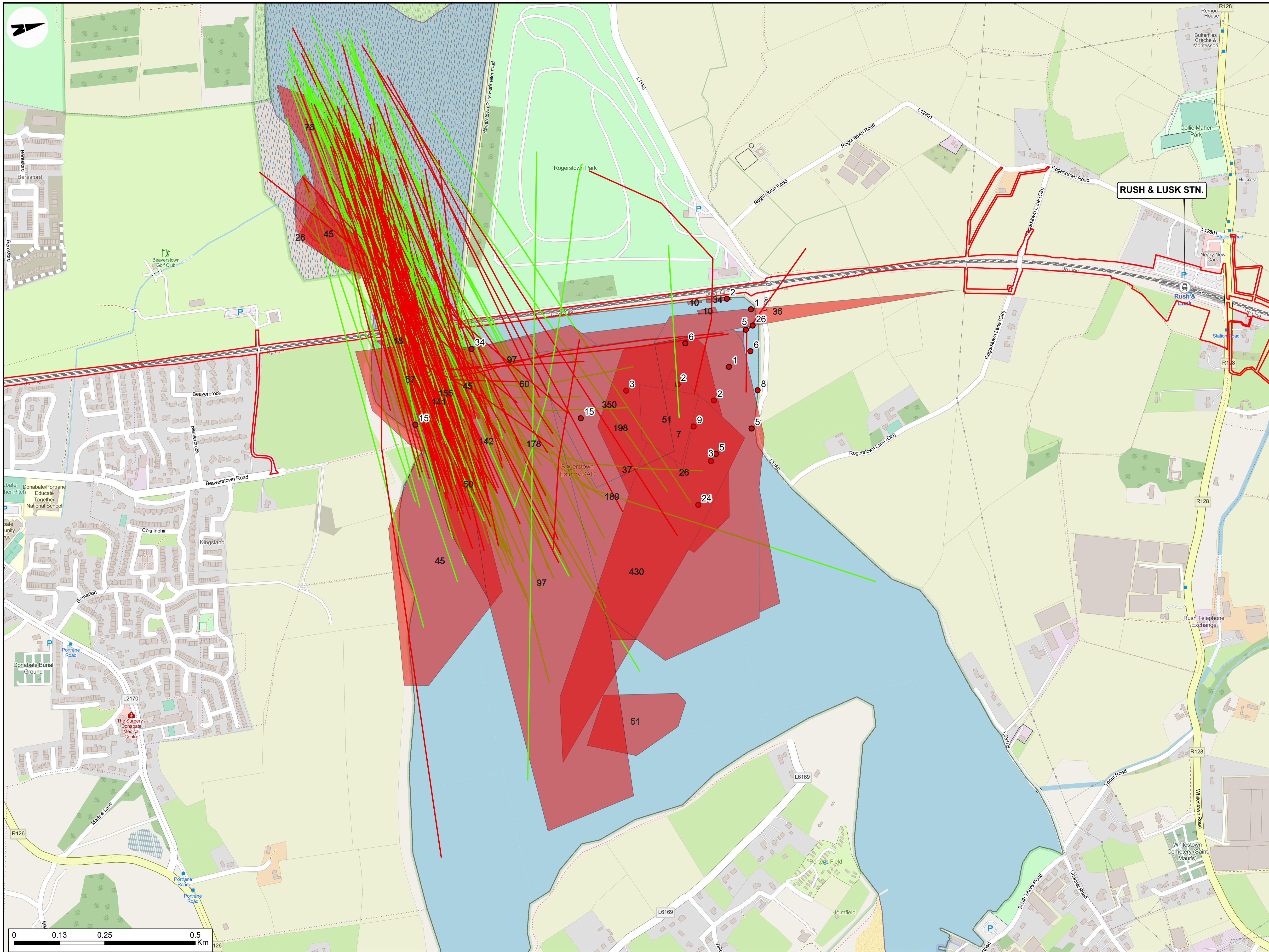
Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SQ, Approved: COD

Project Title	DART+ COASTAL NORTH		
Drawing Title	BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 1		
Drawing File Name	D+WP56-ARP-ZZ-NL-DR-EVBD-100174	Sheet Number	74 of 85
Status	S4	Rev	P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - REDSHANK
 - FLOCK COUNT AREAS**
 - REDSHANK
 - FLIGHT LINES (HEIGHT)**
 - REDSHANK: 0-10M
 - REDSHANK: >10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M

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Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

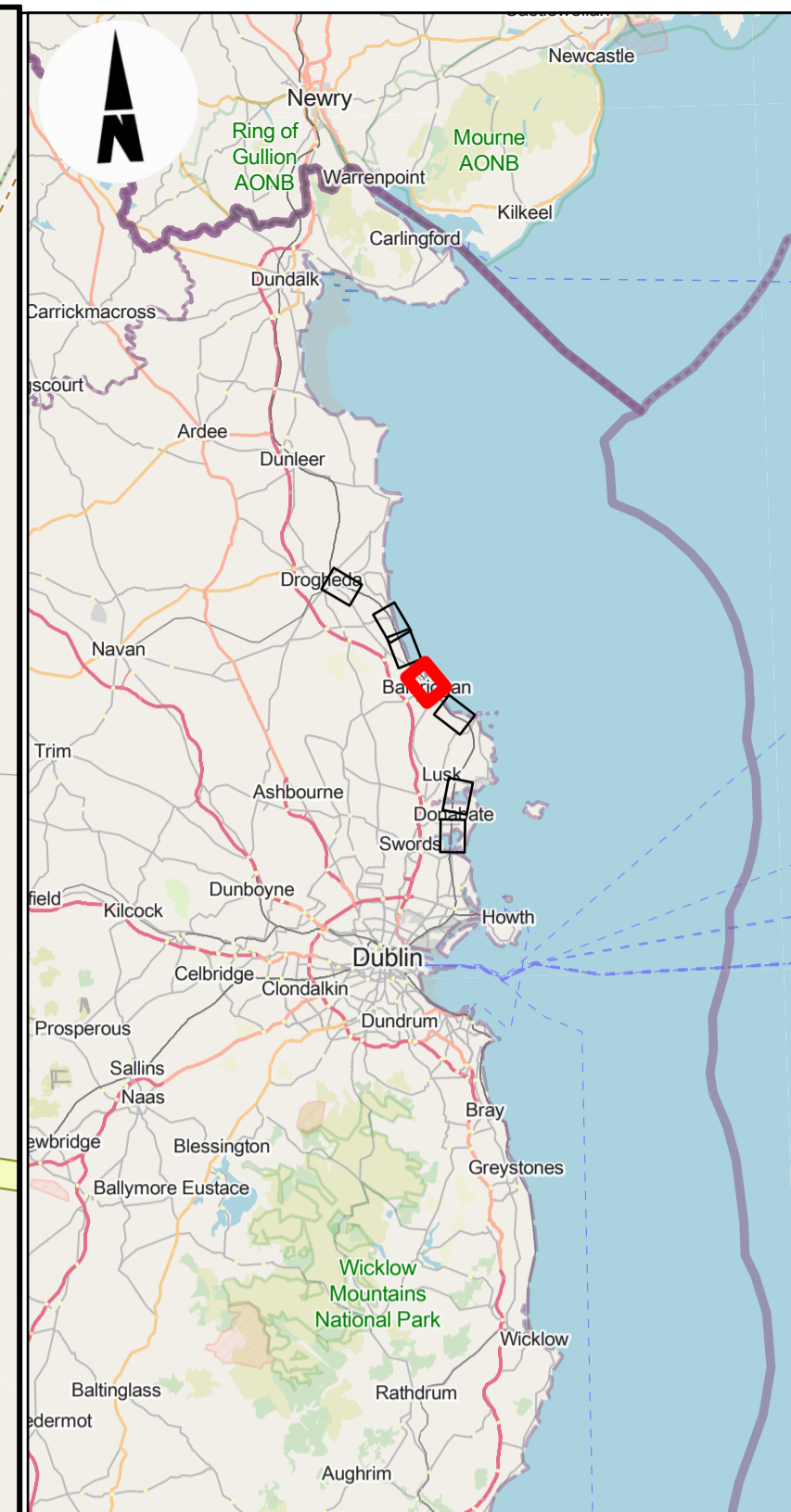
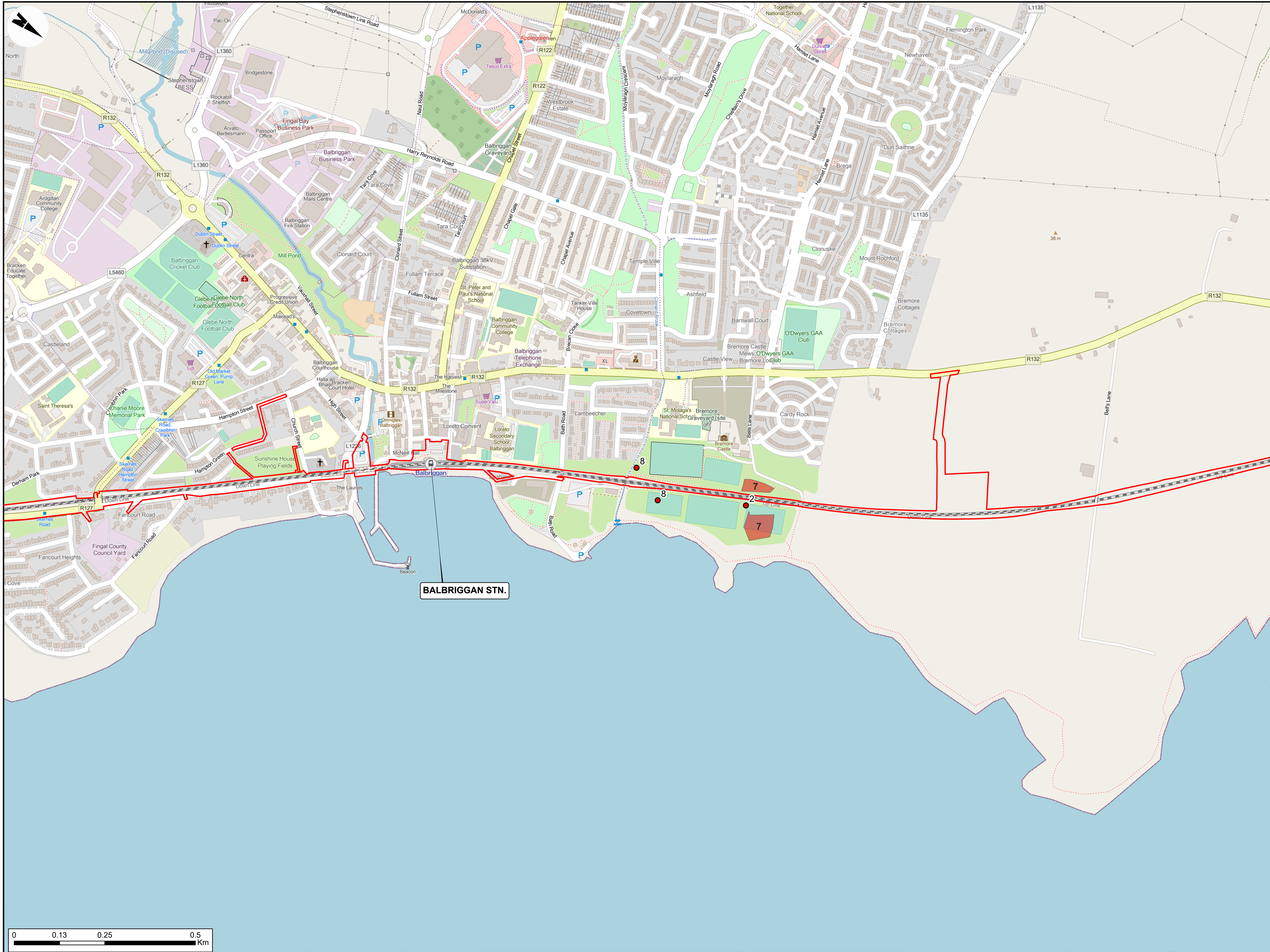
Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 1:10000 @ A3

Drawn	DM	Checked	SQ	Approved	COD
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Project Code: D+WP56 Originator Code: ARP QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH	
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2	
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100175	Sheet Number: 75 of 85
Status: S4	Rev: P02



LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT
- REDSHANK
- FLOCK COUNT AREAS
- REDSHANK

BALBRIGGAN STN.

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Rev	Date	Dn	Chkd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1 / 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

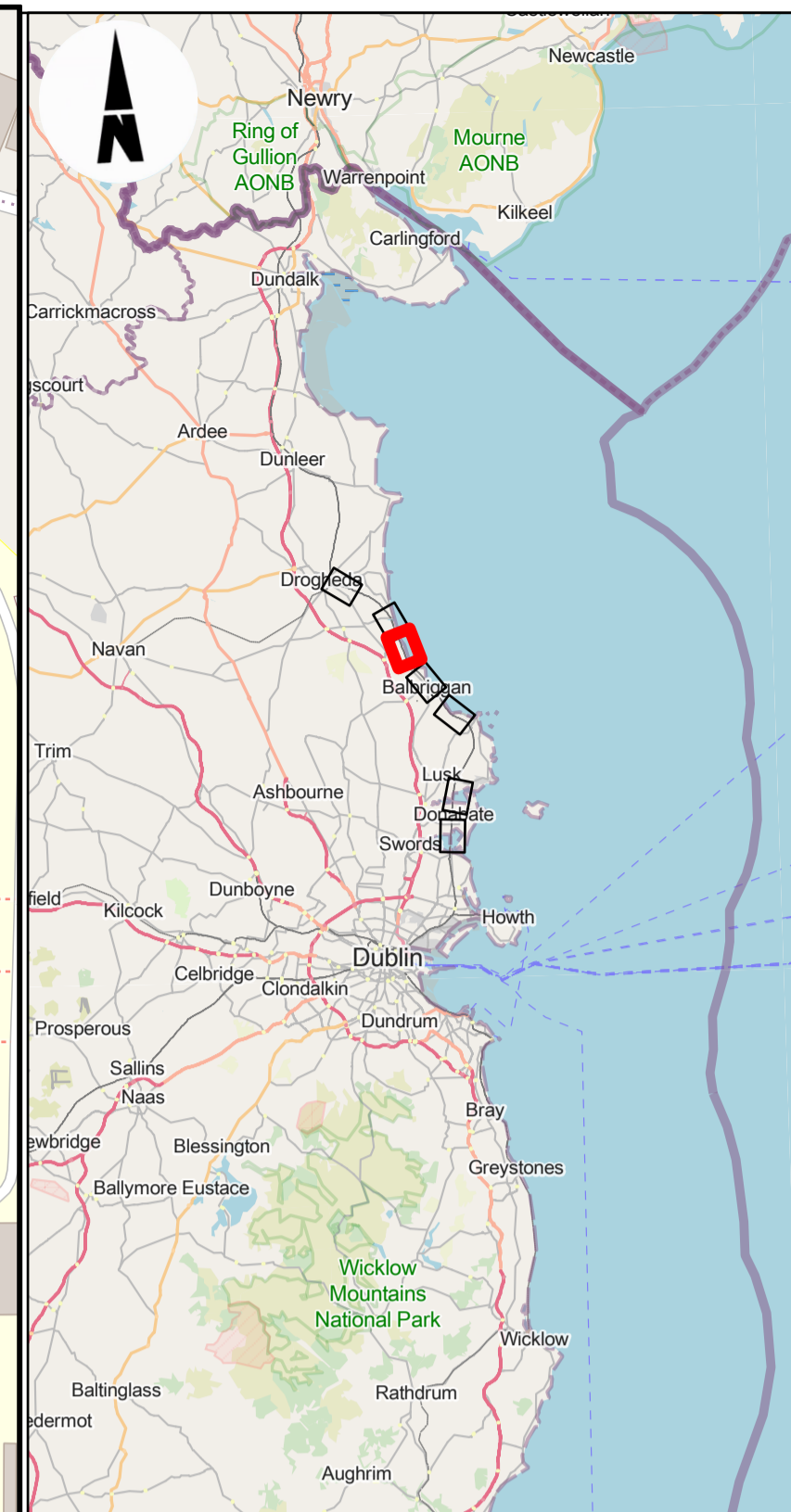
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Project Title: **DART+ COASTAL NORTH**

Drawing Title: **BIODIVERSITY
 FIGURE 8.8: WINTERING BIRD SURVEY
 SURVEY AREA 4**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100176

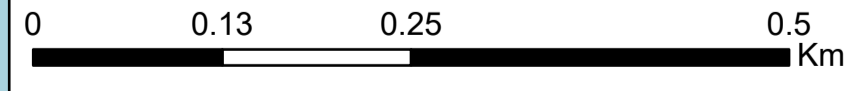
Sheet Number: 76 of 85 Status: S4 Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - REDSHANK

GORMANSTON STN.

MATCH LINE



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Rev	Date	Dn	Ch'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

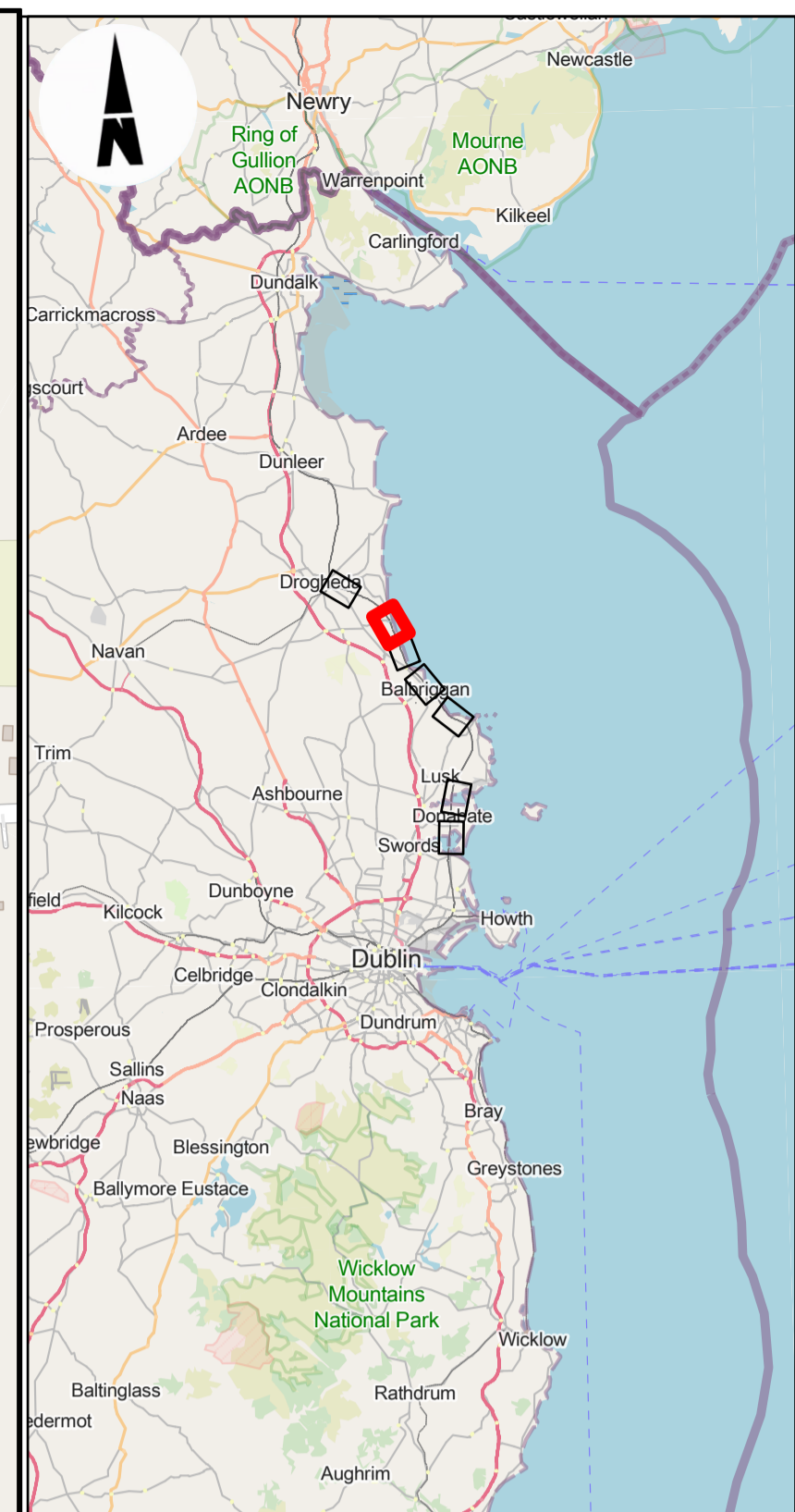
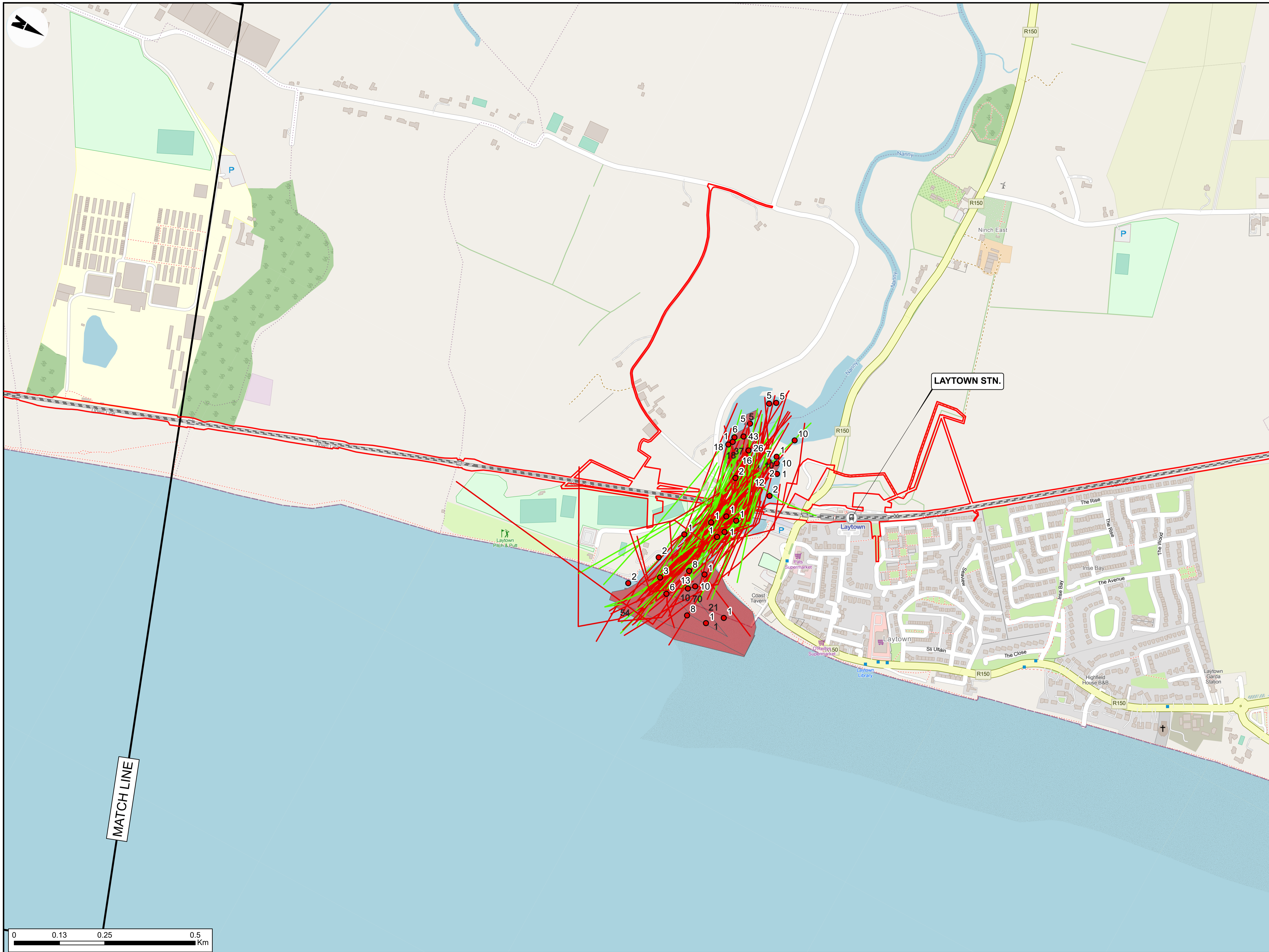
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Project Code: D+WP56 Originator Code: ARP

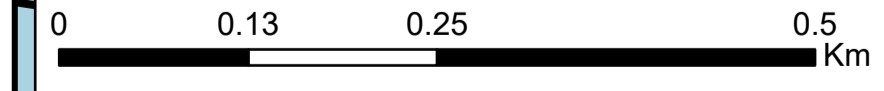
Drawn: DM Checked: SQ Approved: COD

QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100177	Sheet Number: 77 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - REDSHANK
 - FLOCK COUNT AREAS
 - REDSHANK
 - FLIGHT LINES (HEIGHT)
 - REDSHANK: 0-10M
 - REDSHANK: >10M
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON



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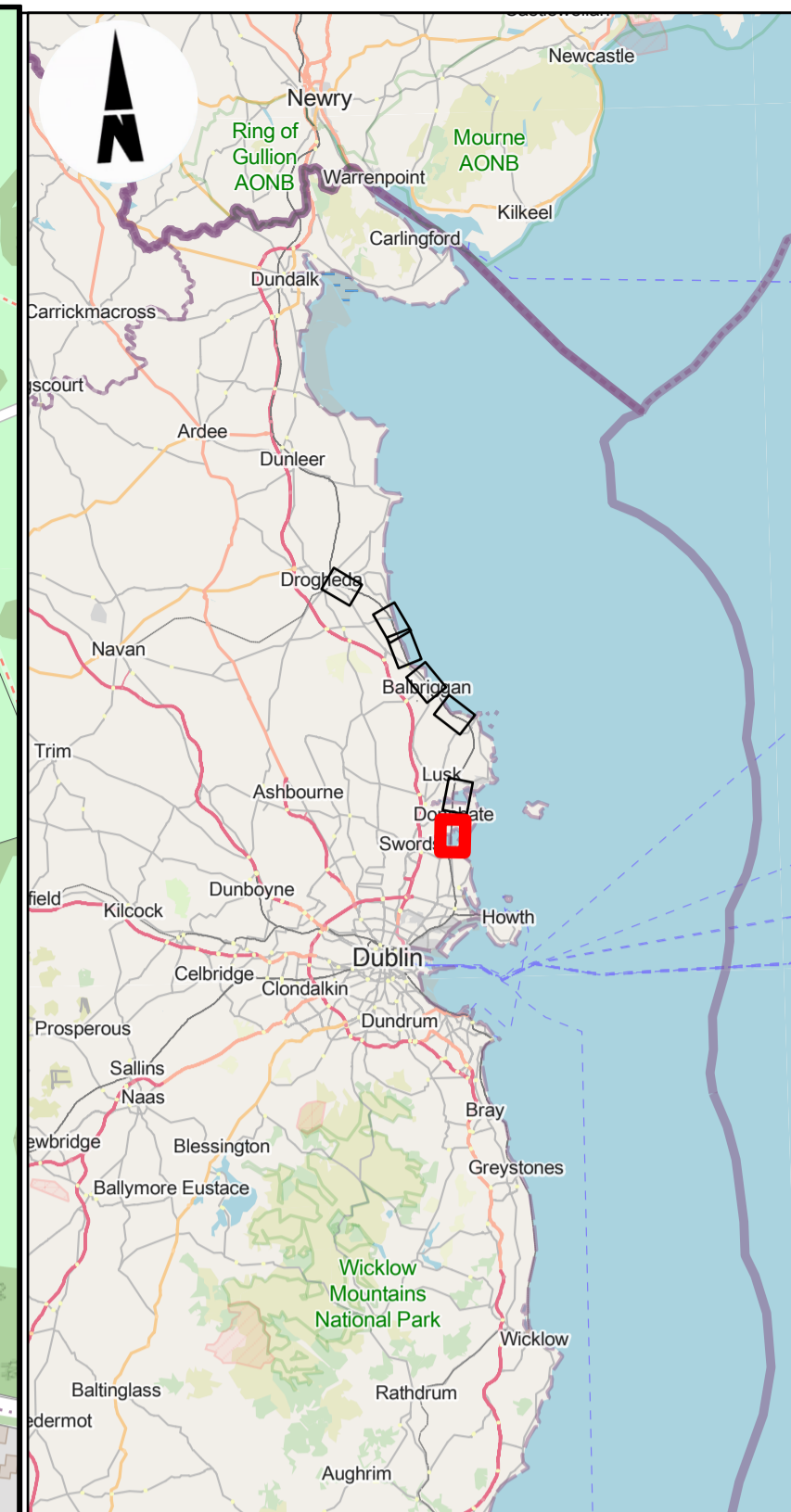
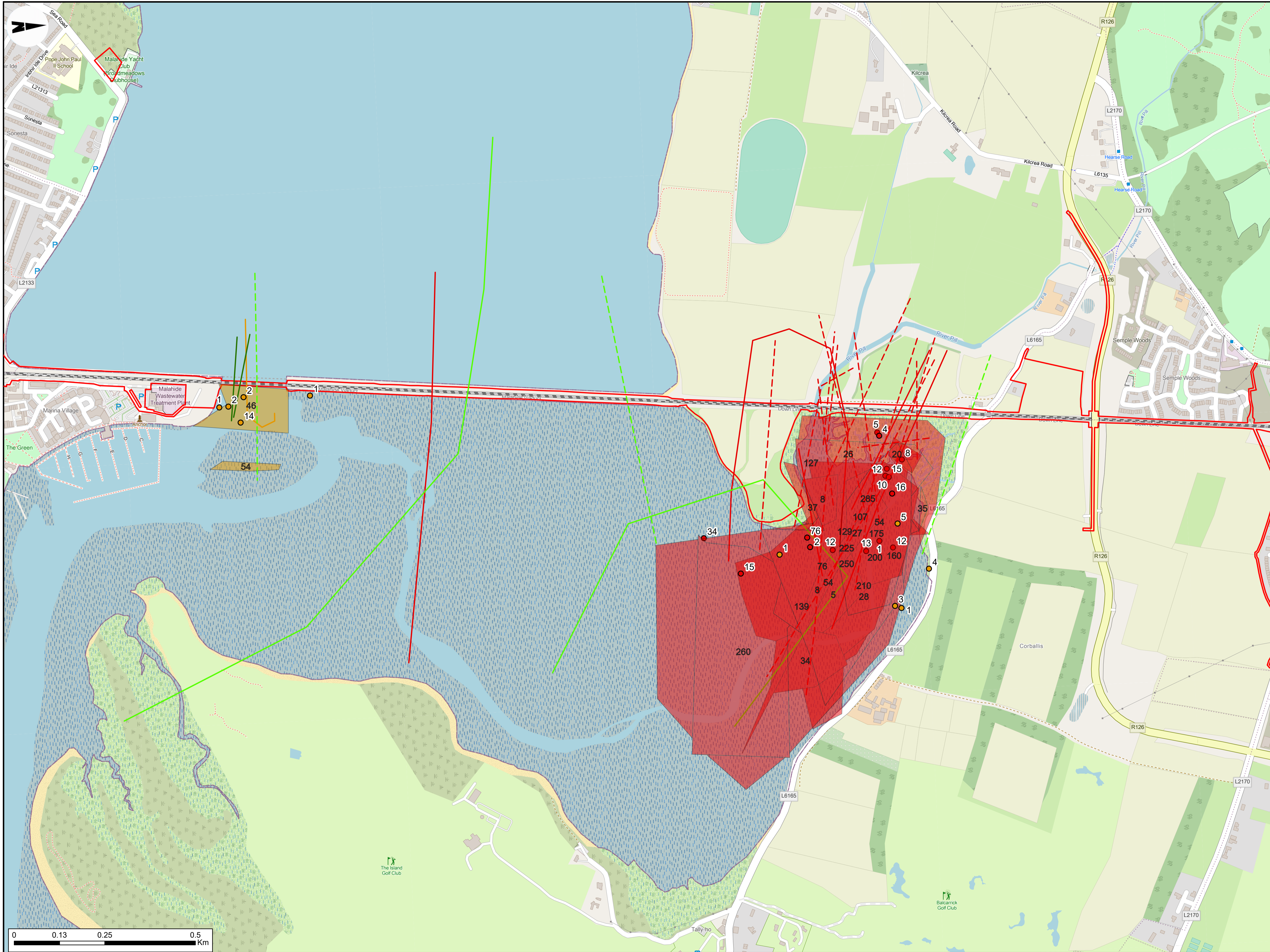
NOTES
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Rev	Date	Dn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client Irish Rail		Engineering Designer ARUP		
Date 07/09/2023	Scale 1:5000 @ A1 1:10000 @ A3	Drawn DM	Checked SQ	Approved COD
Project Code D+WP56	Originator Code ARP	QMS Code 279933-00		

Project Title DART+ COASTAL NORTH			
Drawing Title BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 6			
Drawing File Name D+WP56-ARP-ZZ-NL-DR-EVBD-100178	Sheet Number 78 of 85	Status S4	Rev P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - TEAL
 - TURNSTONE
 - FLOCK COUNT AREAS
 - TEAL
 - TURNSTONE
 - FLIGHT LINES (HEIGHT)
 - TEAL: 0-10M
 - TEAL: >10M
 - TURNSTONE: 0-10M
 - TURNSTONE: >10M
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M

0 0.13 0.25 0.5 Km

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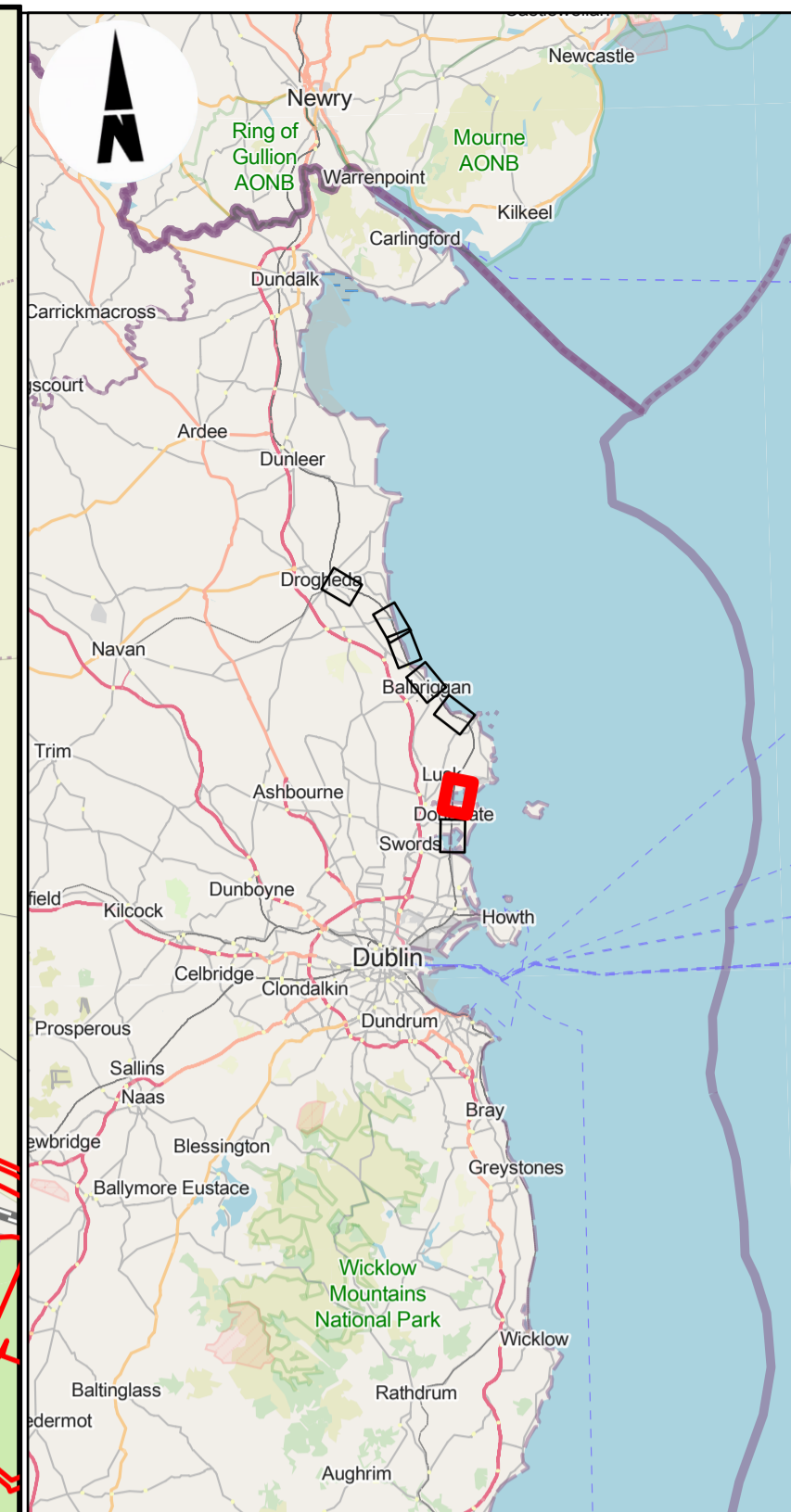
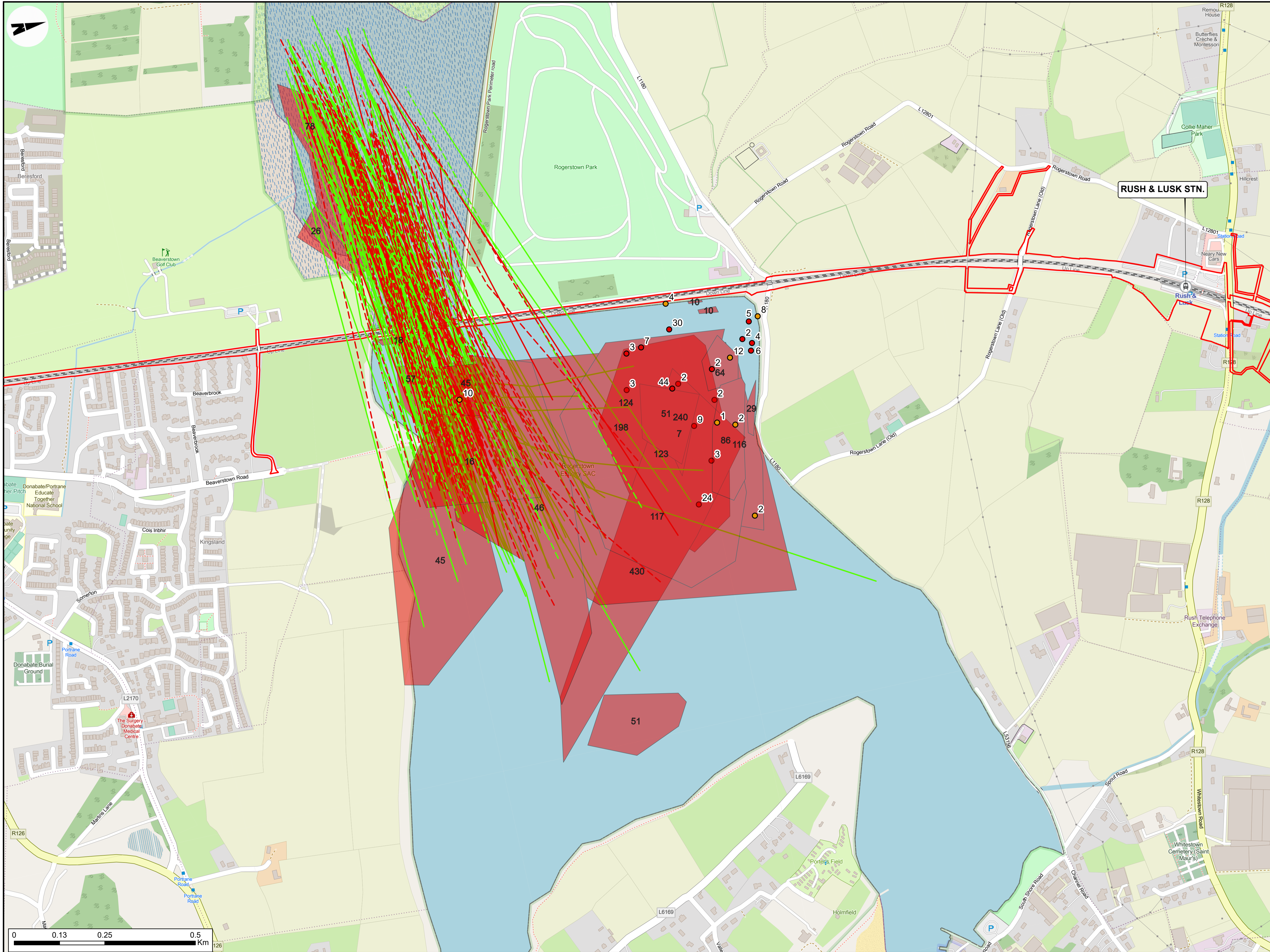
NOTES
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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client Irish Rail		Engineering Designer ARUP		
Date 07/09/2023	Scale 1:5000 @ A1 1:10000 @ A3	Drawn DM	Checked SQ	Approved COD
Project Code D+WP56	Originator Code ARP	QMS Code 279933-00		

Project Title DART+ COASTAL NORTH	
Drawing Title BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 1	
Drawing File Name D+WP56-ARP-ZZ-NL-DR-EVBD-100179	Sheet Number 79 of 85
Status S4	Rev P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - TEAL
 - TURNSTONE
 - FLOCK COUNT AREAS**
 - TEAL
 - FLIGHT LINES (HEIGHT)**
 - TEAL: 0-10M
 - TEAL: >10M
 - TURNSTONE: 0-10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON
 - FLIGHT LINES (HEIGHT)**
 - WIGEON: 0-10M
 - WIGEON: >10M

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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

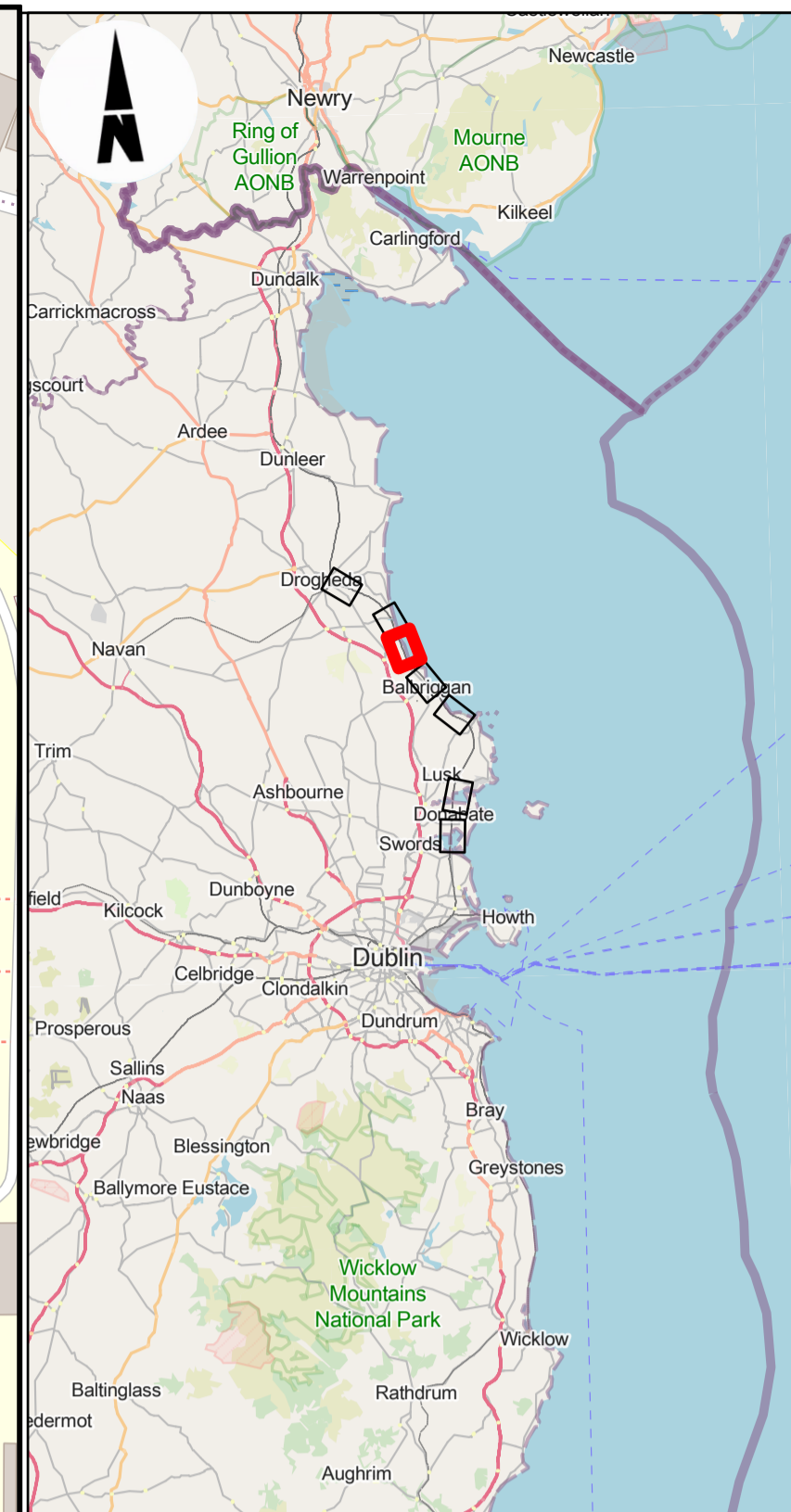
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Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM Checked: SQ Approved: COD

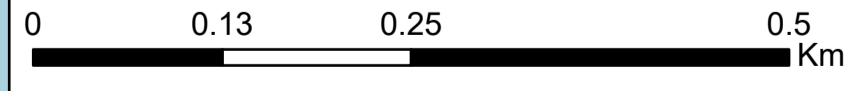
Project Title: DART+ COASTAL NORTH	
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2	
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100180	Sheet Number: 80 of 85
Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - TURNSTONE

GORMANSTON STN.

MATCH LINE



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

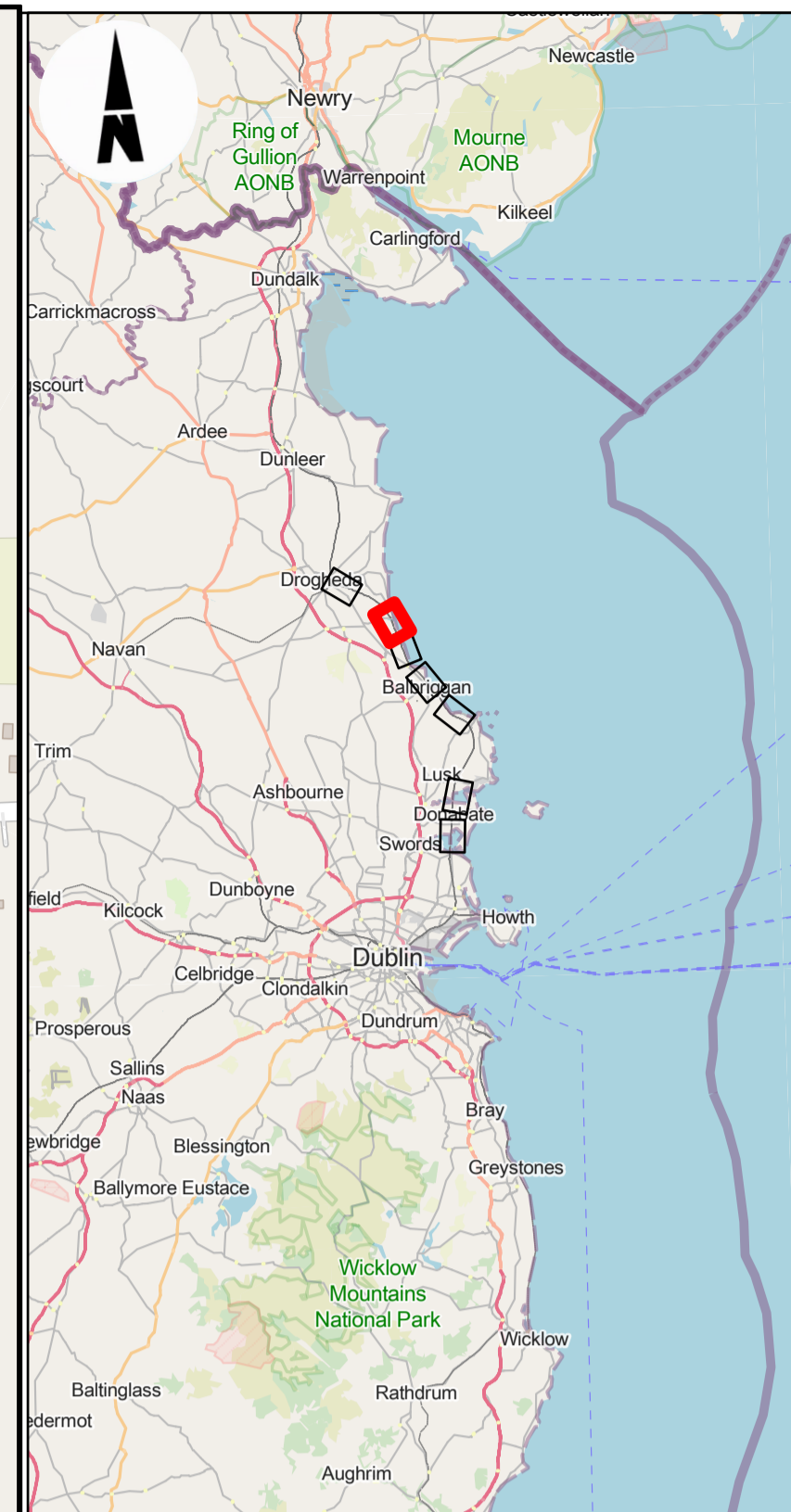
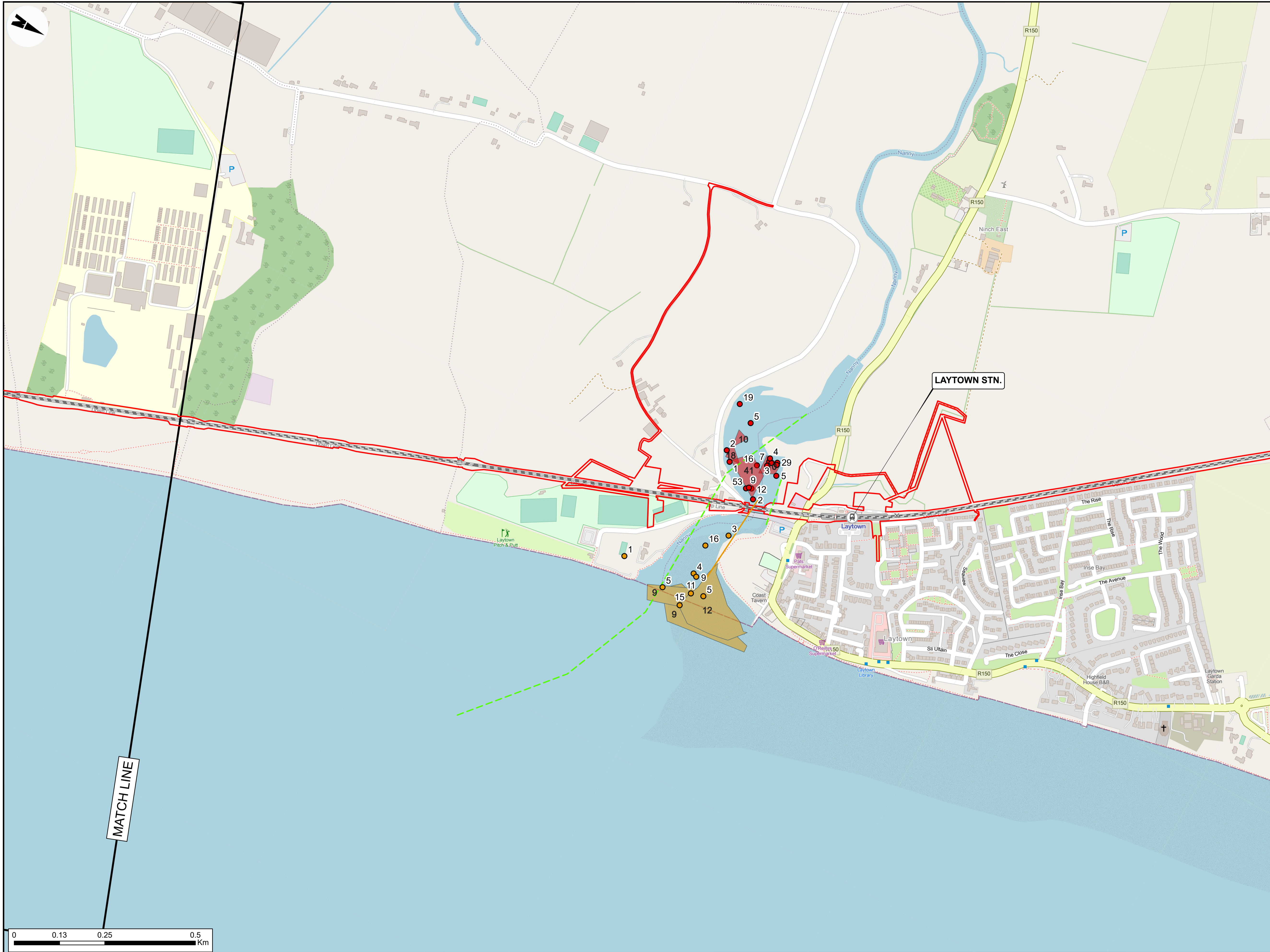
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Project Code: D+WP56 Originator Code: ARP

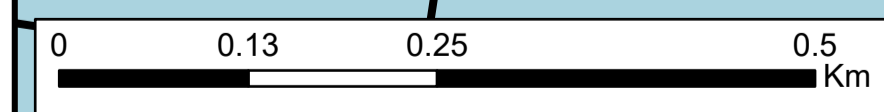
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QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 5			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100181	Sheet Number: 81 of 85	Status: S4	Rev: P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT**
 - TEAL
 - TURNSTONE
 - FLOCK COUNT AREAS**
 - TEAL
 - TURNSTONE
 - FLIGHT LINES (HEIGHT)**
 - TEAL: >10M
 - TURNSTONE: 0-10M
 - FLOCK COUNT**
 - WIGEON
 - FLOCK COUNT AREAS**
 - WIGEON



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

Drawn: DM | Checked: SQ | Approved: COD

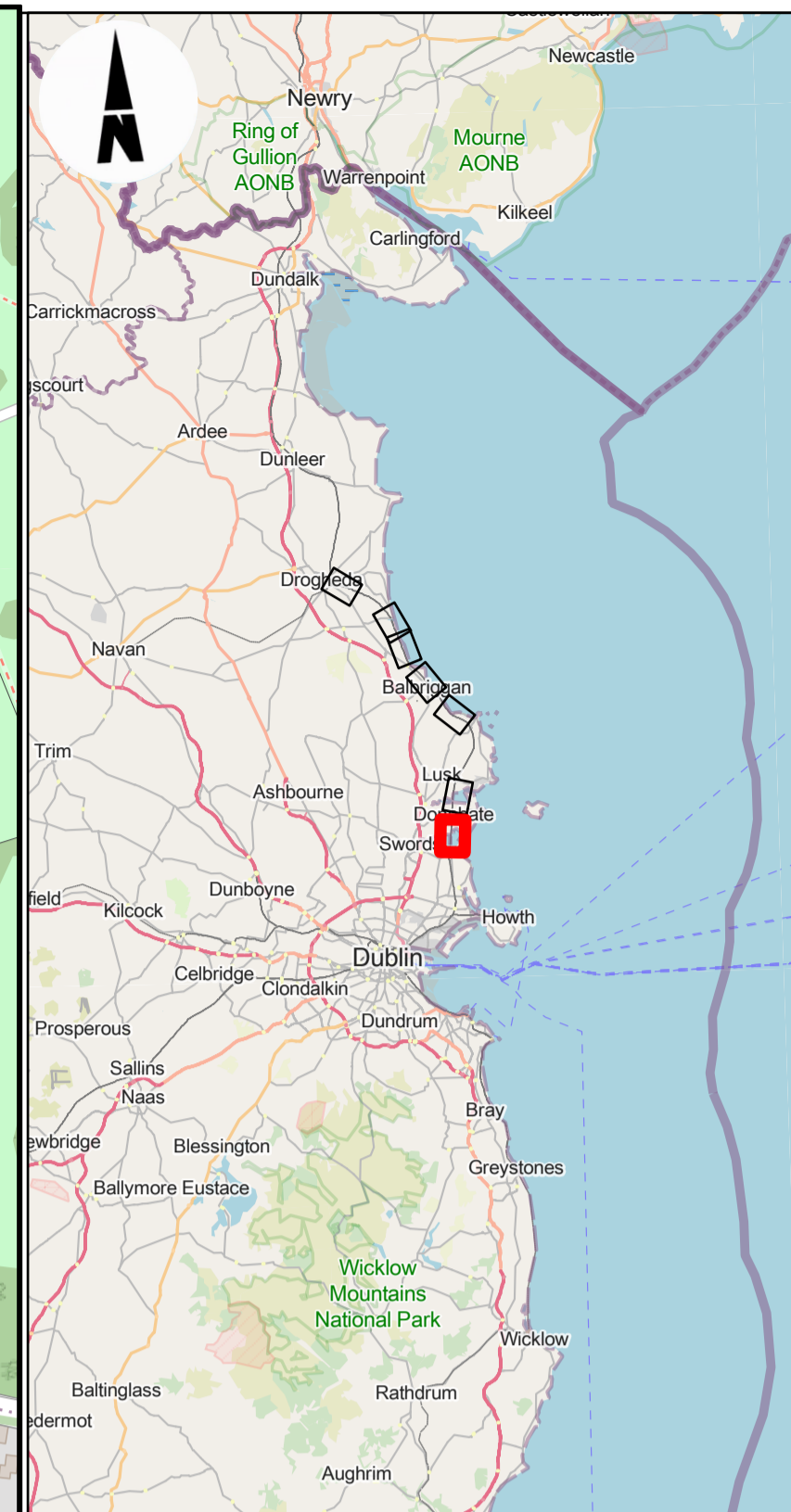
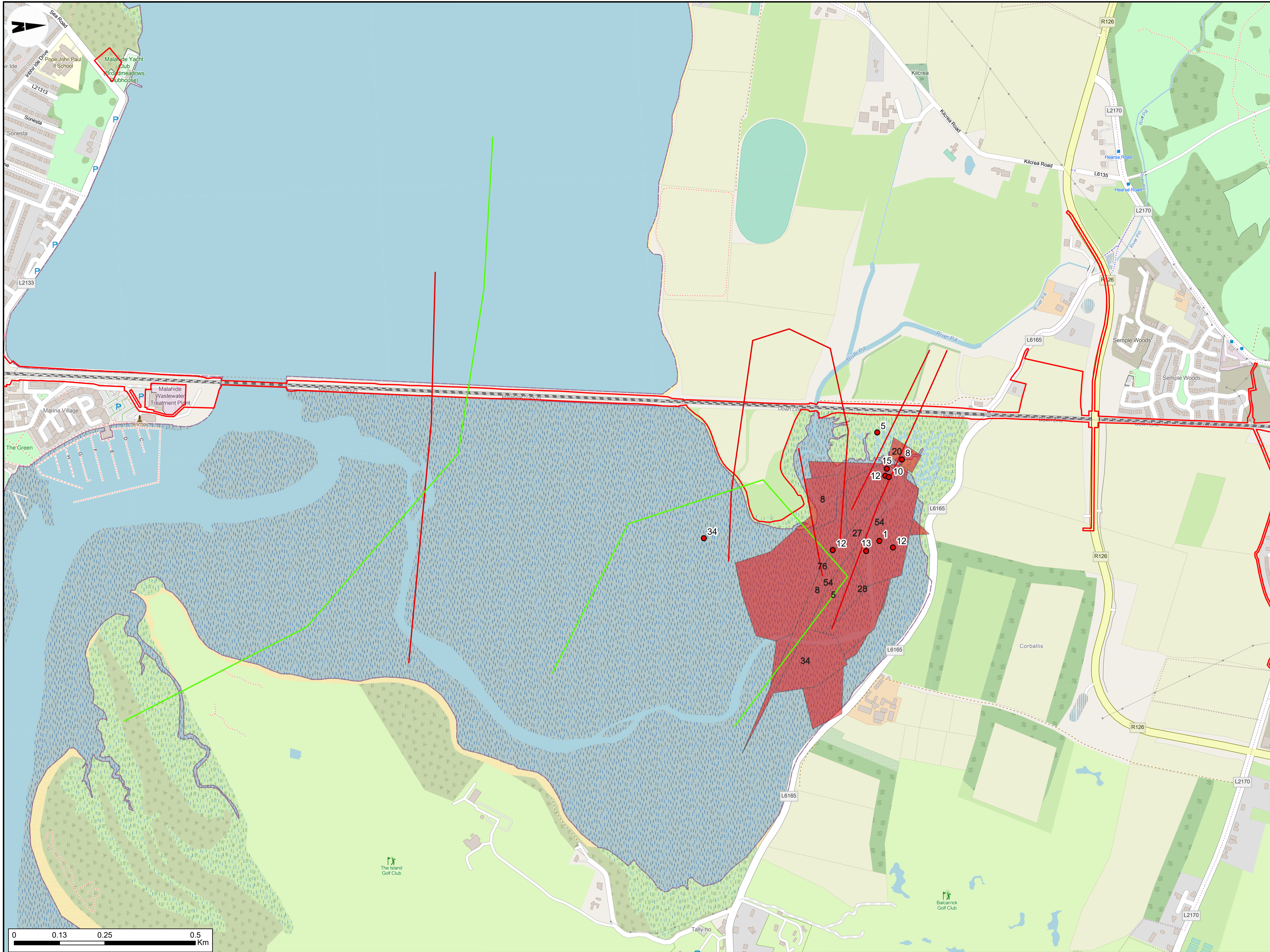
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Project Title: **DART+ COASTAL NORTH**

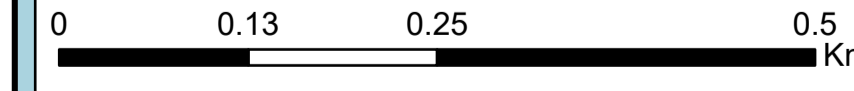
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Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100182

Sheet Number: 62 of 85 | Status: S4 | Rev: P02



- LEGEND**
- DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

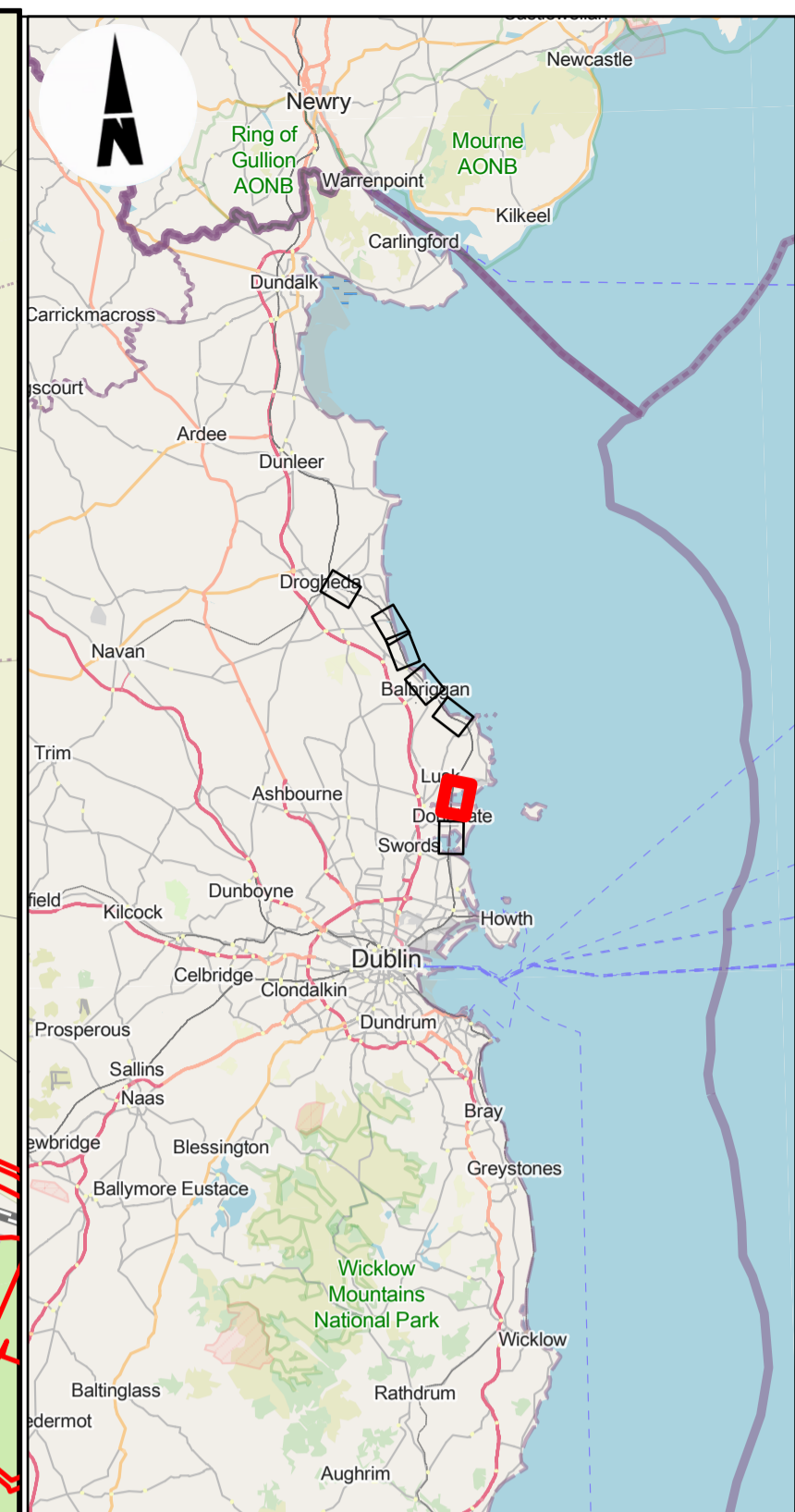
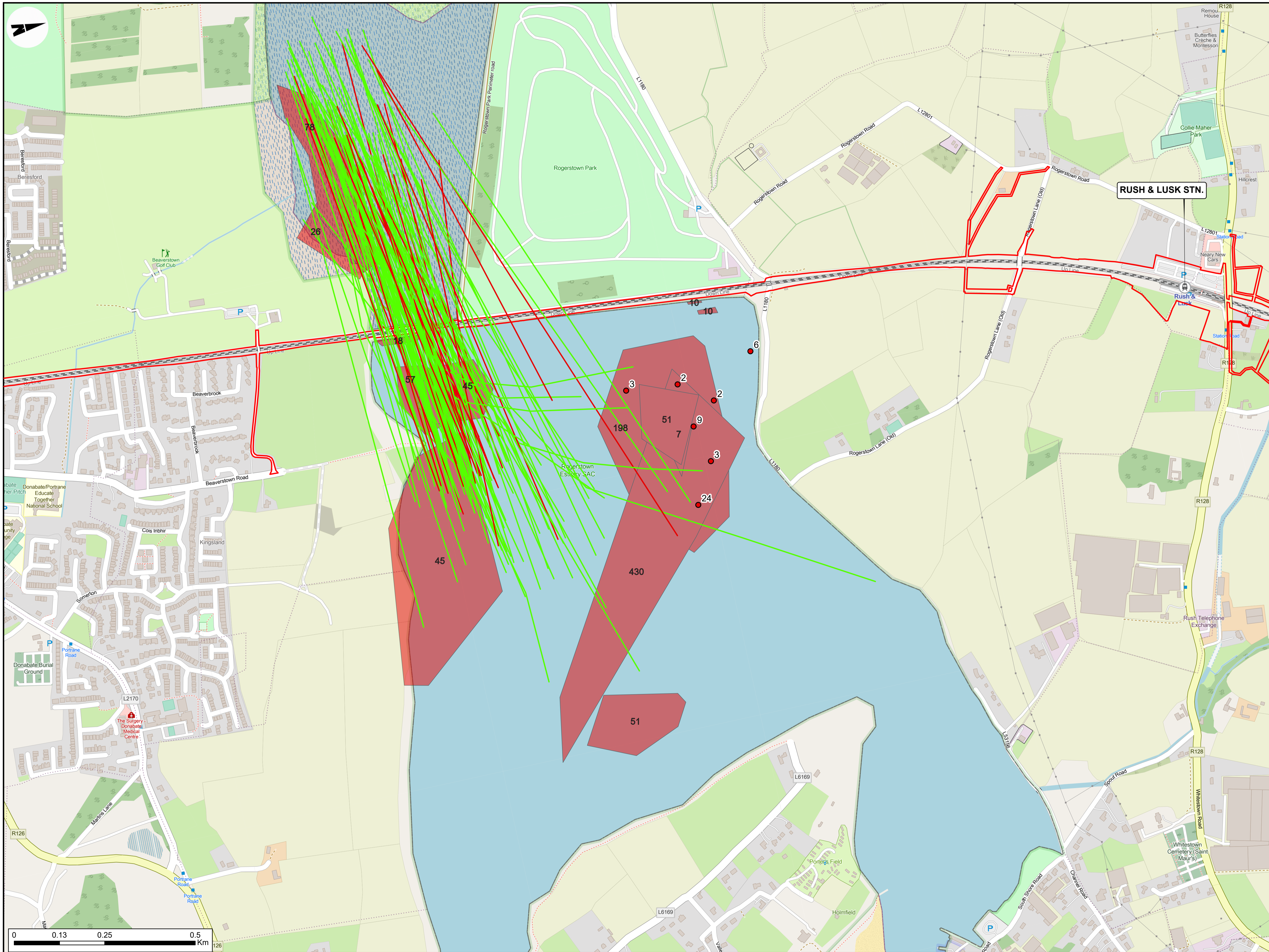
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Project Code: D+WP56 Originator Code: ARP

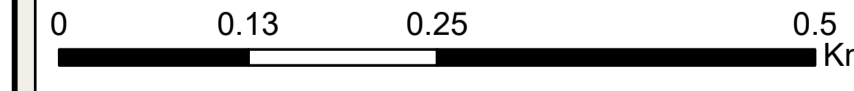
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QMS Code: 279933-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: BIODIVERSITY SURVEY AREA 1			
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100183			
Sheet Number: 83 of 85	Status: S4	Rev: P02	



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON
 - FLIGHT LINES (HEIGHT)
 - WIGEON: 0-10M
 - WIGEON: >10M



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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

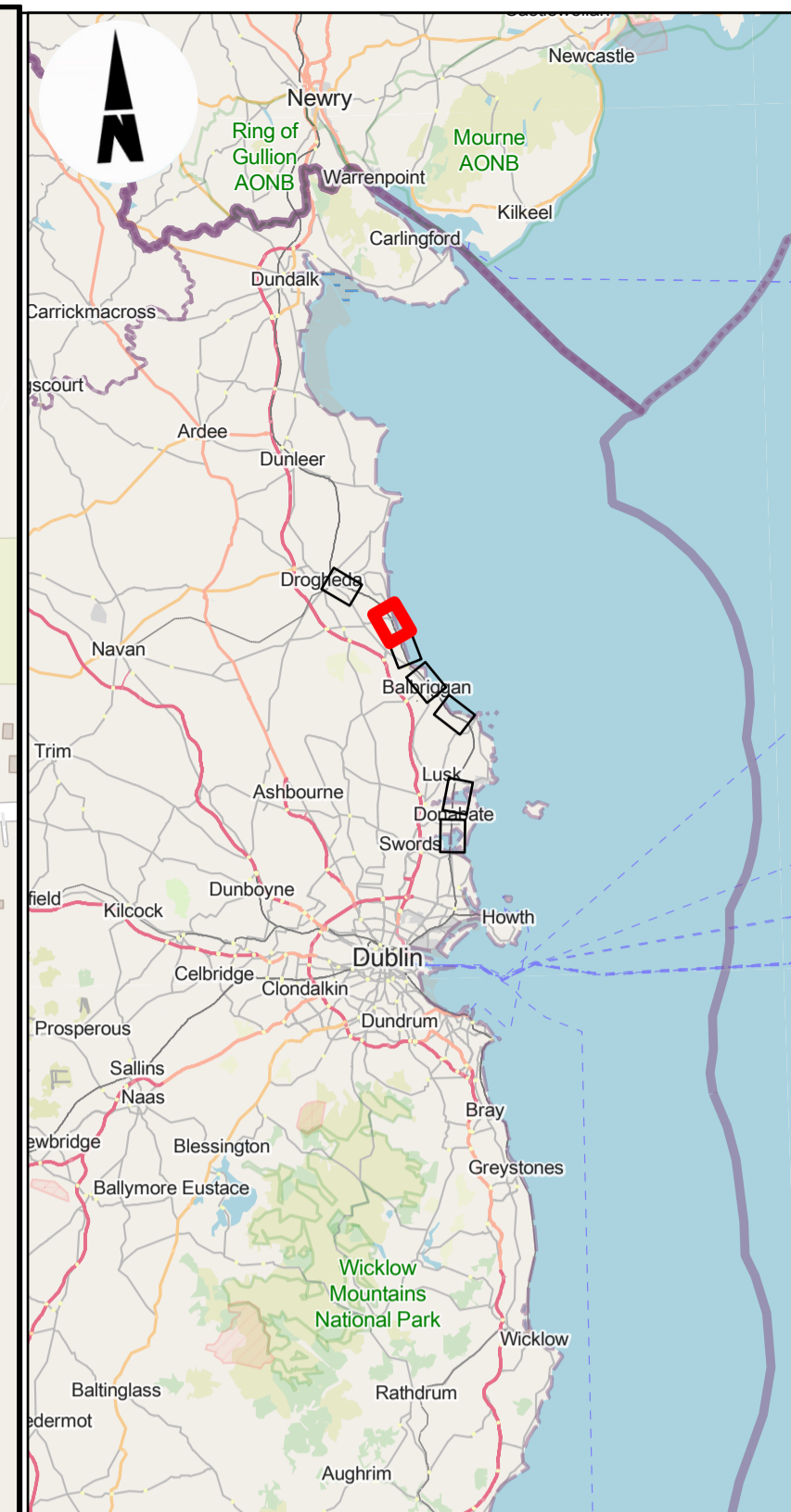
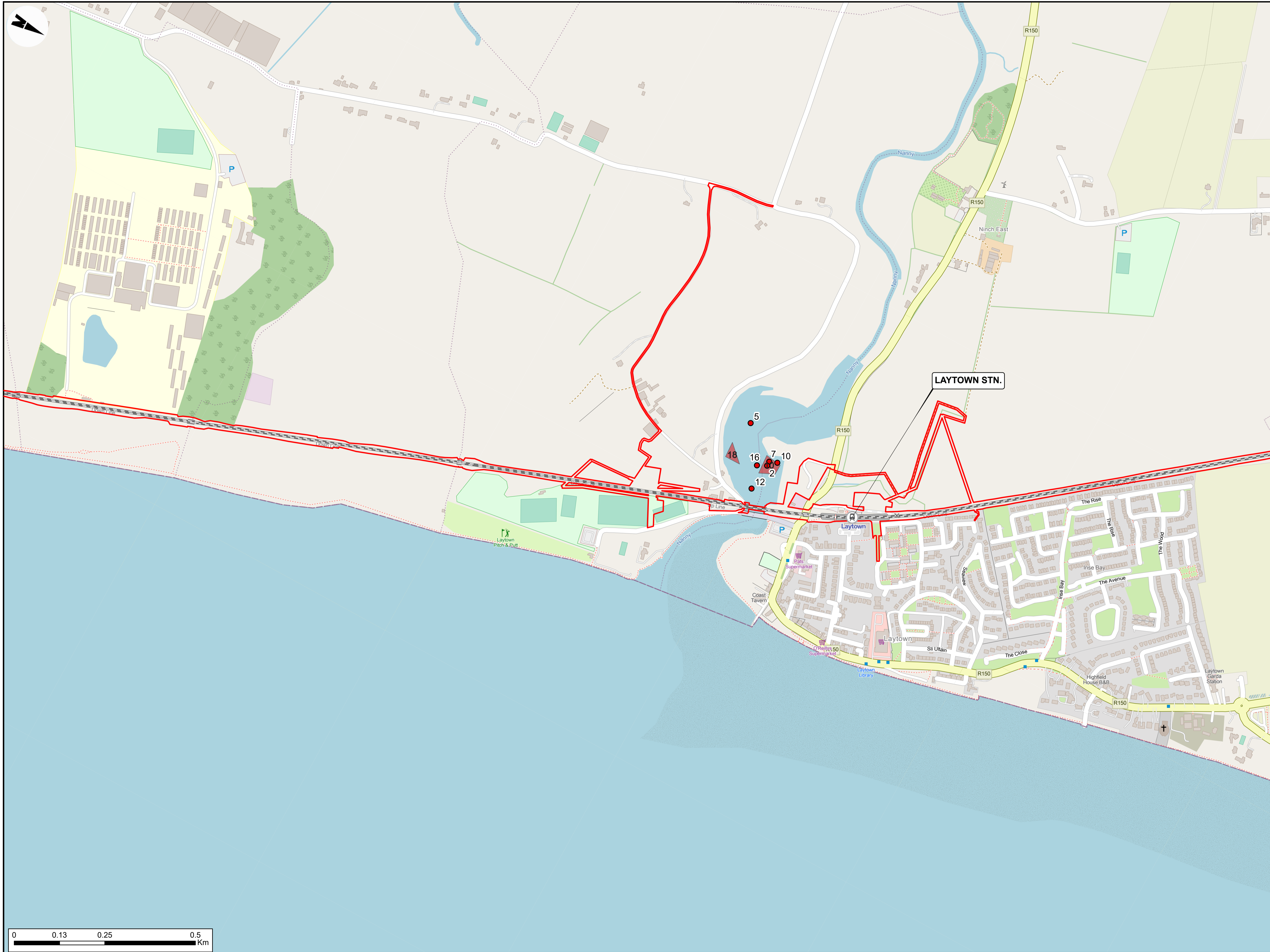
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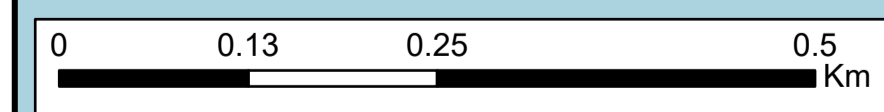
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QMS Code: 279933-00

Project Title	DART+ COASTAL NORTH		
Drawing Title	BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 2		
Drawing File Name	D+WP56-ARP-ZZ-NL-DR-EVBD-100184	Sheet Number	64 of 85
Status	S4	Rev	P02



- LEGEND**
- RAILWAY STATIONS
 - DEVELOPMENT BOUNDARY
 - FLOCK COUNT
 - WIGEON
 - FLOCK COUNT AREAS
 - WIGEON



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NOTES
 1. THE DATA SHOWN INCLUDE SURVEY RESULTS FOR THE WINTERS 2021/2022, 2022/2023 AND 2023/2024.
 2. BIRD COUNTS AT EACH POINT OR WITHIN EACH AREA DISPLAYED AS LABELS.
 3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.



Rev	Date	Dn	Ch'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 07/09/2023 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Engineering Designer: DM, SQ, COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **BIODIVERSITY SURVEY AREA 6**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100185

Sheet Number: 85 of 85

Status: S4

Rev: P02