



# MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

## Environmental Statement

Volume 1, Figures - Part 1 of 2



September 2024  
Rev: ES Issue

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ES	For issue	AS	September 2024	IM	September 2024

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**Prepared by:**

**RPS**

**Prepared for:**

**Morgan Offshore Wind Limited,  
Morecambe Offshore Windfarm Ltd**

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13

24

49

33

25

32



Duddon Channel

Ulverston Channel

Barrow-in-Furness

Furness

Mort Bank

Lune Deep

Shell Flat

Blackpool

Salter's Bank

Gut Chann



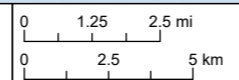
**LEGEND**

- Transmission Assets Order Limits
- Transmission Assets Intertidal Infrastructure Area

Path: L:\P:\eur-mpfs-02.eur.rpsgroup.com\Projects\12693\_Morgan Morecambe Transmission Assets\Tech\Drawings\12693-0024-11.aprx 12693-0024-11-offshore

**Project Name:**  
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

**Drawing Title:**  
TRANSMISSION ASSETS OFFSHORE AND INTERTIDAL ORDER LIMITS



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:224,100

**Data Sources:** Client, The Crown Estate, MMO, NRW, ScotGov, MarineRegions.org

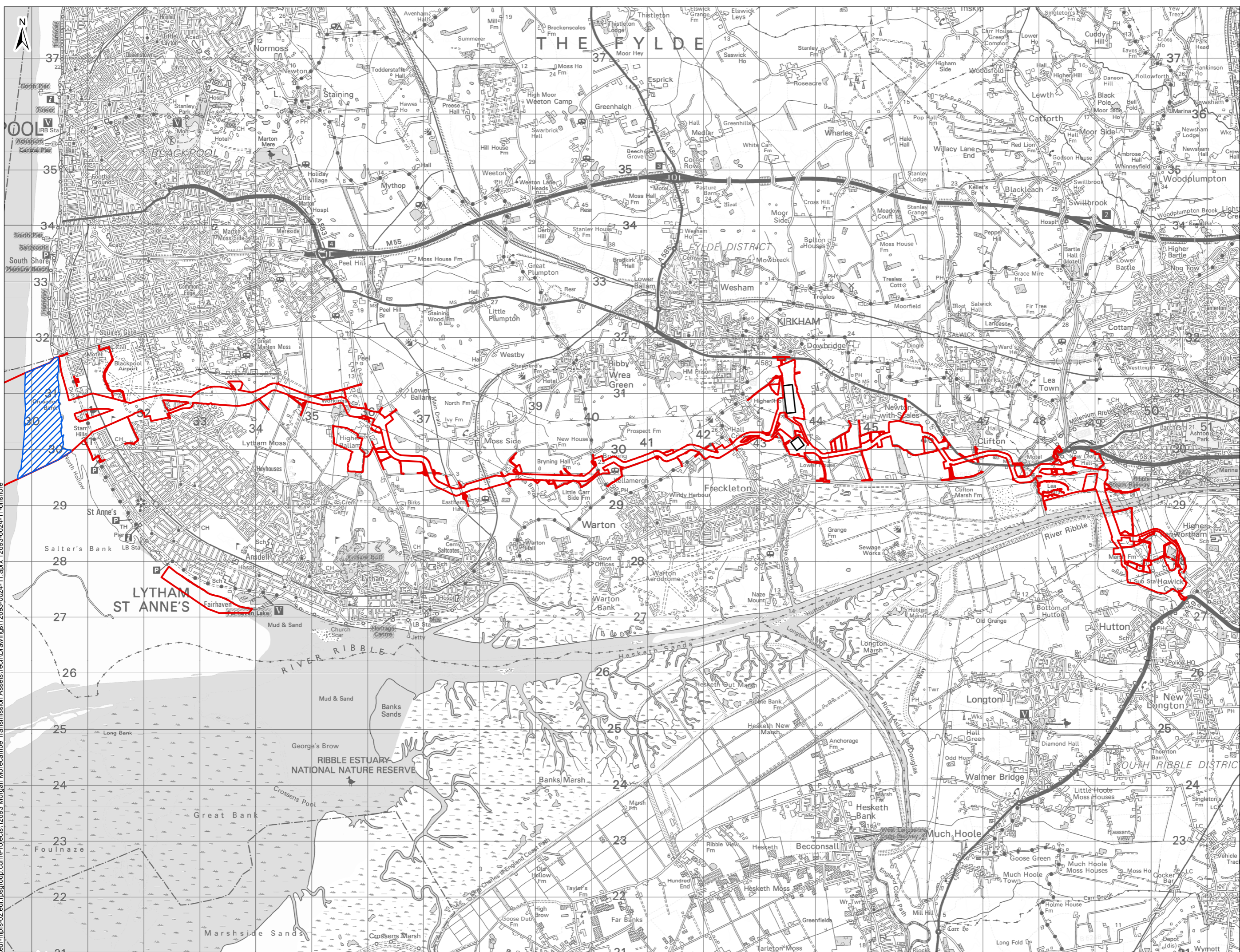
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Service layer credits: Esri, Garmin, NaturalVue, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METINASA, USGS, Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS, Esri UK, Esri, TomTom, Garmin, Foursquare, METINASA, USGS, OceanWise, Esri, Garmin, NaturalVue



Figure 1.1a

**Drawing Number:**  
12693-0024-11

VER	DATE	DETAILS	BY	CHECK
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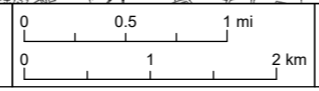


- LEGEND**
- Transmission Assets Order Limits
  - Onshore substation sites
  - Transmission Assets Intertidal Infrastructure Area

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**Project Name:**  
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

**Drawing Title:**  
TRANSMISSION ASSETS ONSHORE AND INTERTIDAL ORDER LIMITS



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
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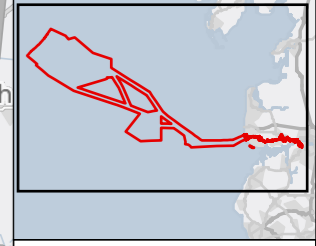
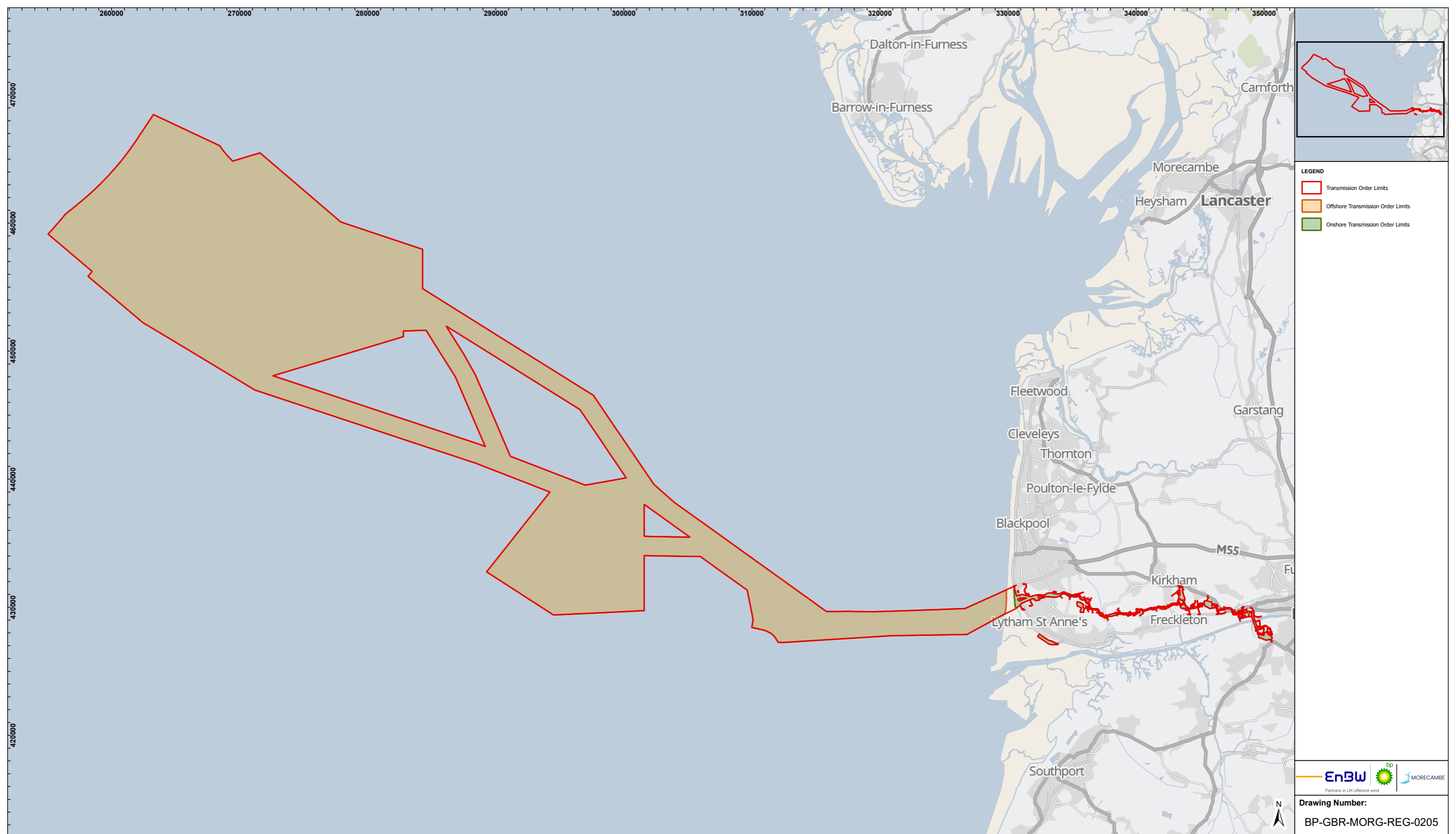
**Data Sources:** Client, The Crown Estate, MMO, NRW, ScotGov, MarineRegions.org

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Figure 1.1b  
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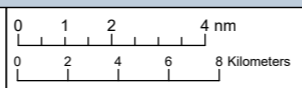
- LEGEND**
- Transmission Order Limits
  - Offshore Transmission Order Limits
  - Onshore Transmission Order Limits



**Drawing Number:**  
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MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

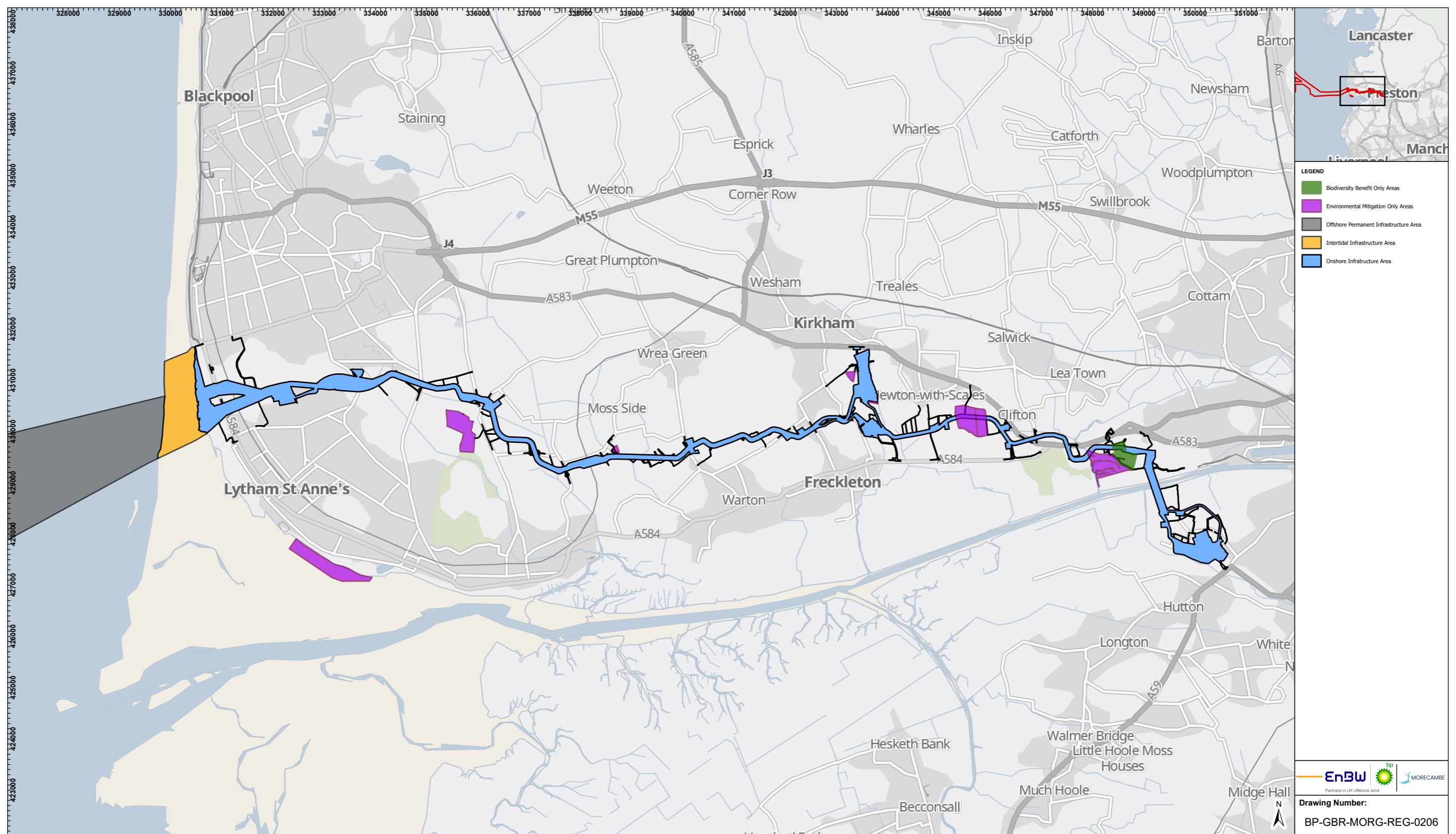
**FIGURE 3.1 TRANSMISSION ASSETS ORDER LIMITS, OFFSHORE ORDER LIMITS AND ONSHORE ORDER LIMITS**



**Geodetic Information:**  
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Projection: British National Grid  
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**LEGEND**

- Biodiversity Benefit Only Areas
- Environmental Mitigation Only Areas
- Offshore Permanent Infrastructure Area
- Intertidal Infrastructure Area
- Onshore Infrastructure Area

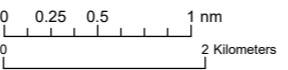
**EnBW**

Partners in UK offshore wind

**Drawing Number:**  
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MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

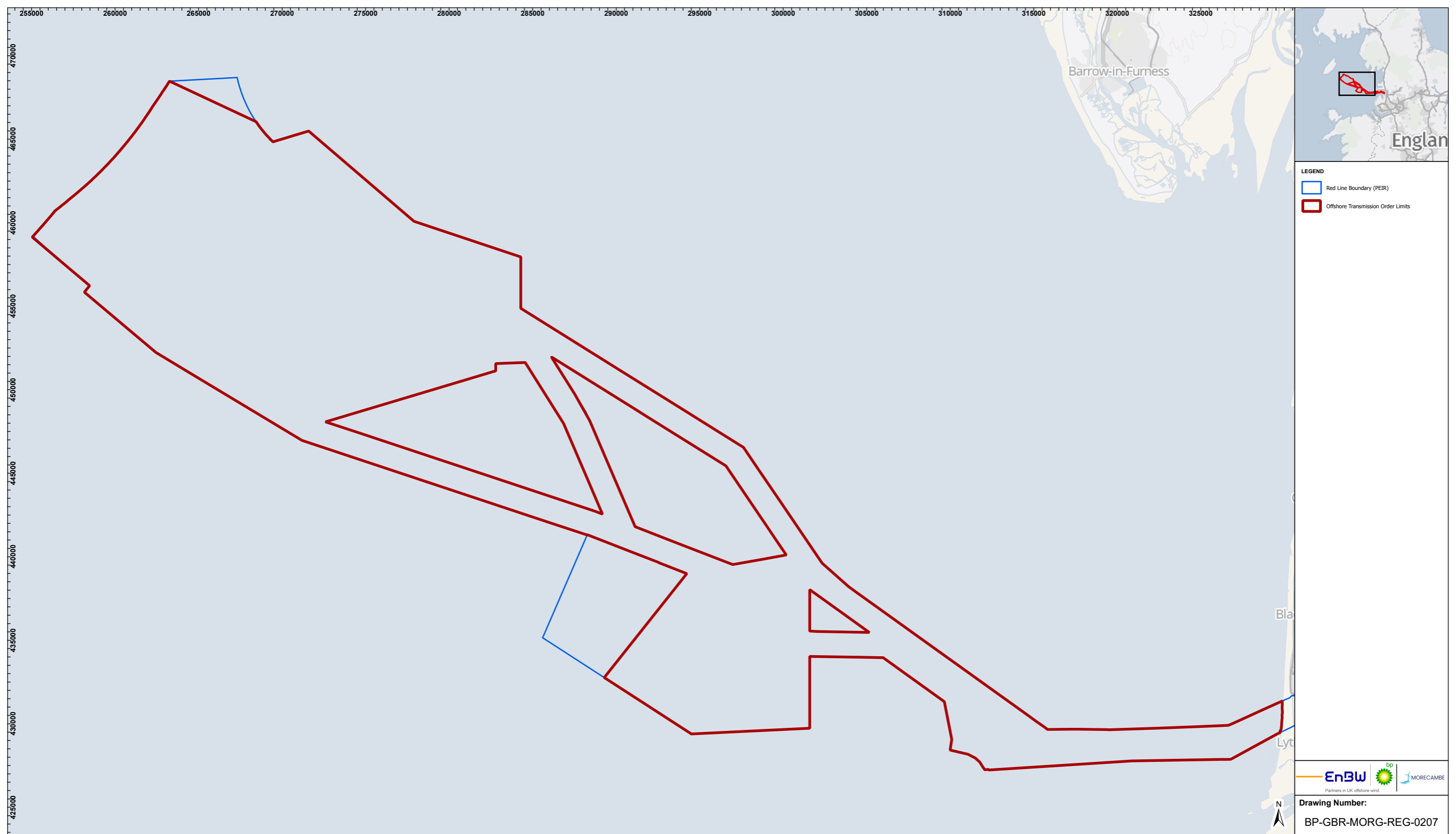
**FIGURE 3.2 TRANSMISSION ASSETS INTERTIDAL INFRASTRUCTURE AREA, ONSHORE INFRASTRUCTURE AREA, ENVIRONMENTAL MITIGATION AND BIODIVERSITY BENEFIT ONLY AREAS**



**Geodetic Information:**  
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Projection: British National Grid  
Scale@379mmx231mm: 1:75,000

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- LEGEND**
- ▭ Red Line Boundary (PEIR)
  - ▭ Offshore Transmission Order Limits

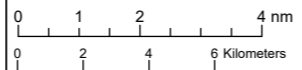


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VER	DATE	DETAILS	BY	CHECK
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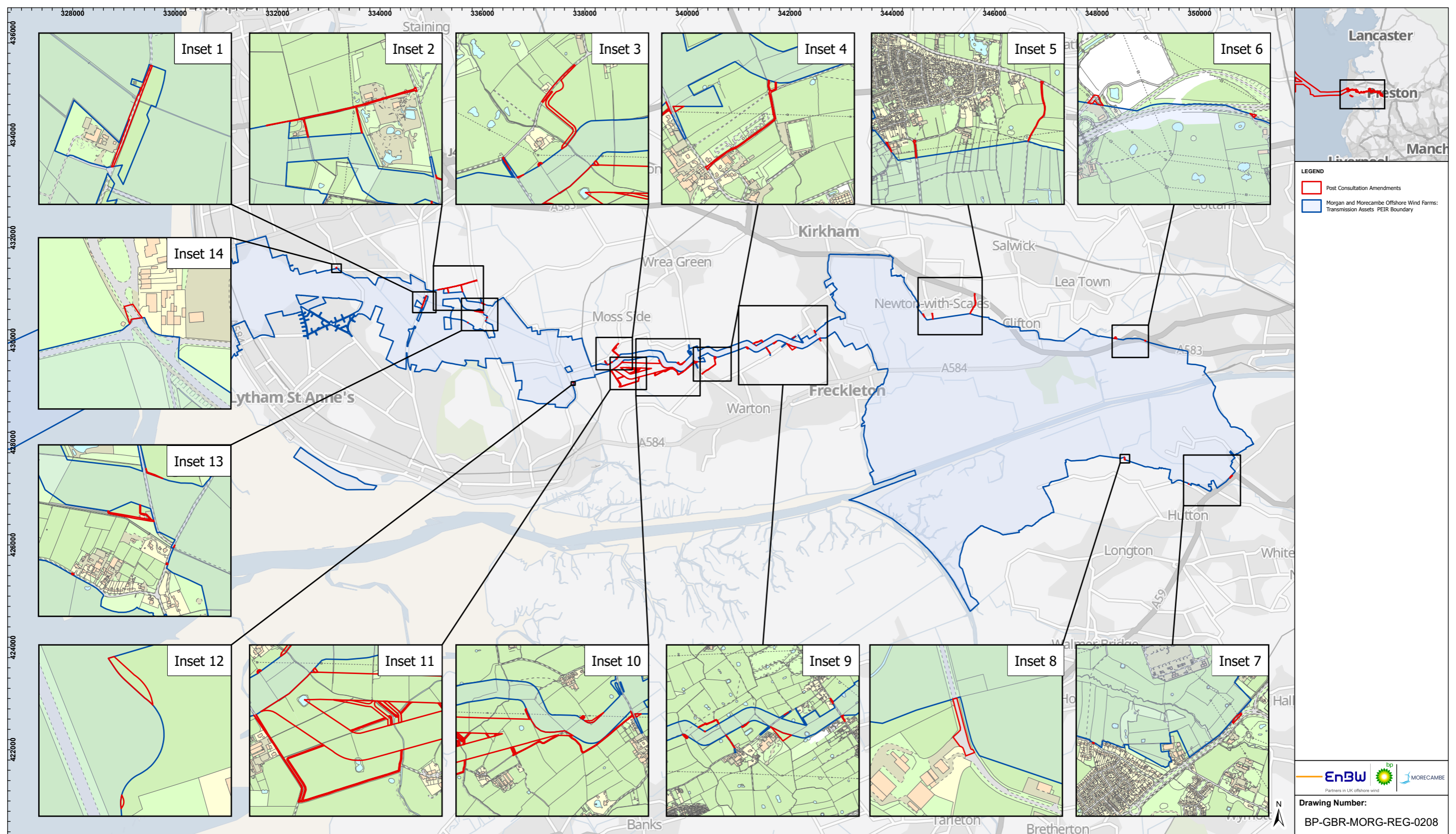
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

**FIGURE 3.3 KEY OFFSHORE RED LINE BOUNDARY TO ORDER LIMITS CHANGES - PEIR TO DCO**



**Geodetic Information:**  
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Projection: British National Grid  
Scale@379mmx231mm: 1:230,000

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**LEGEND**

- ▭ Post Consultation Amendments
- ▭ Morgan and Morecambe Offshore Wind Farms: Transmission Assets PEIR Boundary

**EnBW**

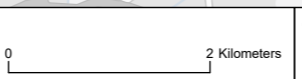
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**FIGURE 3.4 SUMMARY OF CHANGES SUBJECT TO THE 2024 TARGETED CONSULTATION**

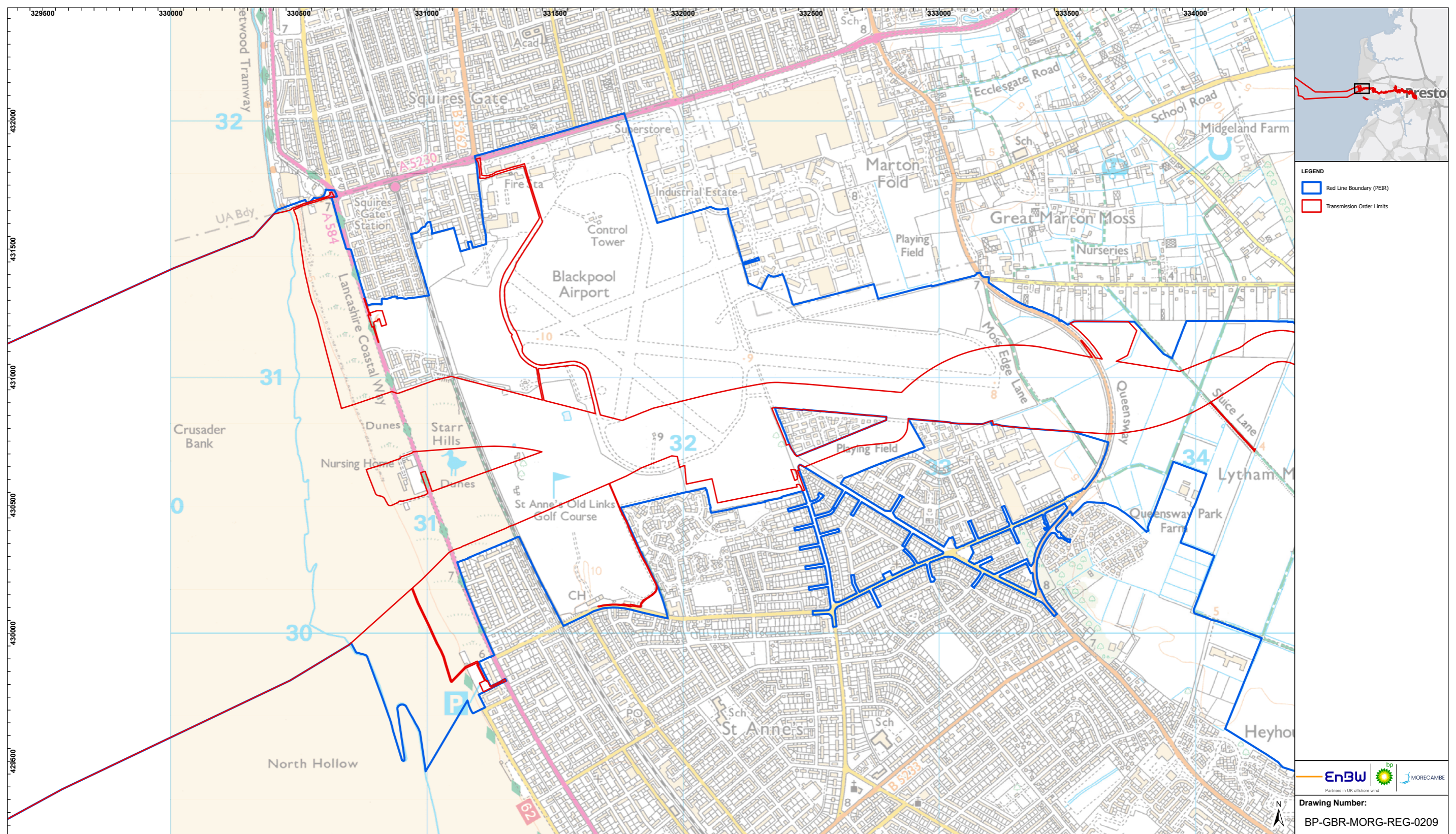


**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:75,000

**Figure 3.4**

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**LEGEND**

- Red Line Boundary (PEIR)
- Transmission Order Limits

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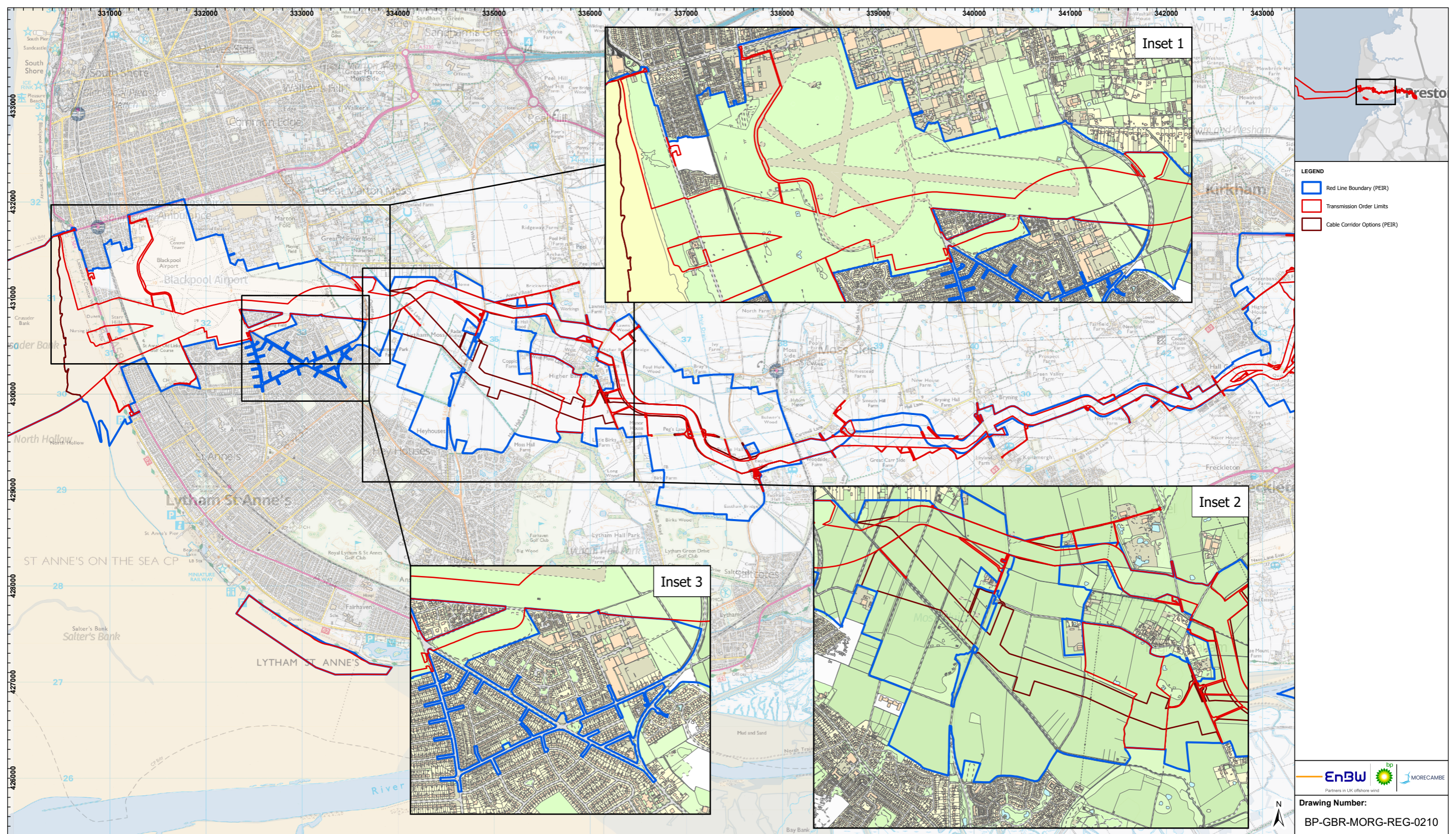
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

**FIGURE 3.5 KEY LANDFALL CHANGES SINCE PUBLICATION OF THE PRELIMINARY ENVIRONMENTAL INFORMATION REPORT (PEIR)**



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:15,000

**Service Layer Credits:** GB Background: Contains OS data © Crown Copyright and database right 2022  
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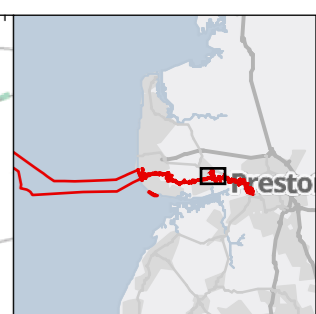
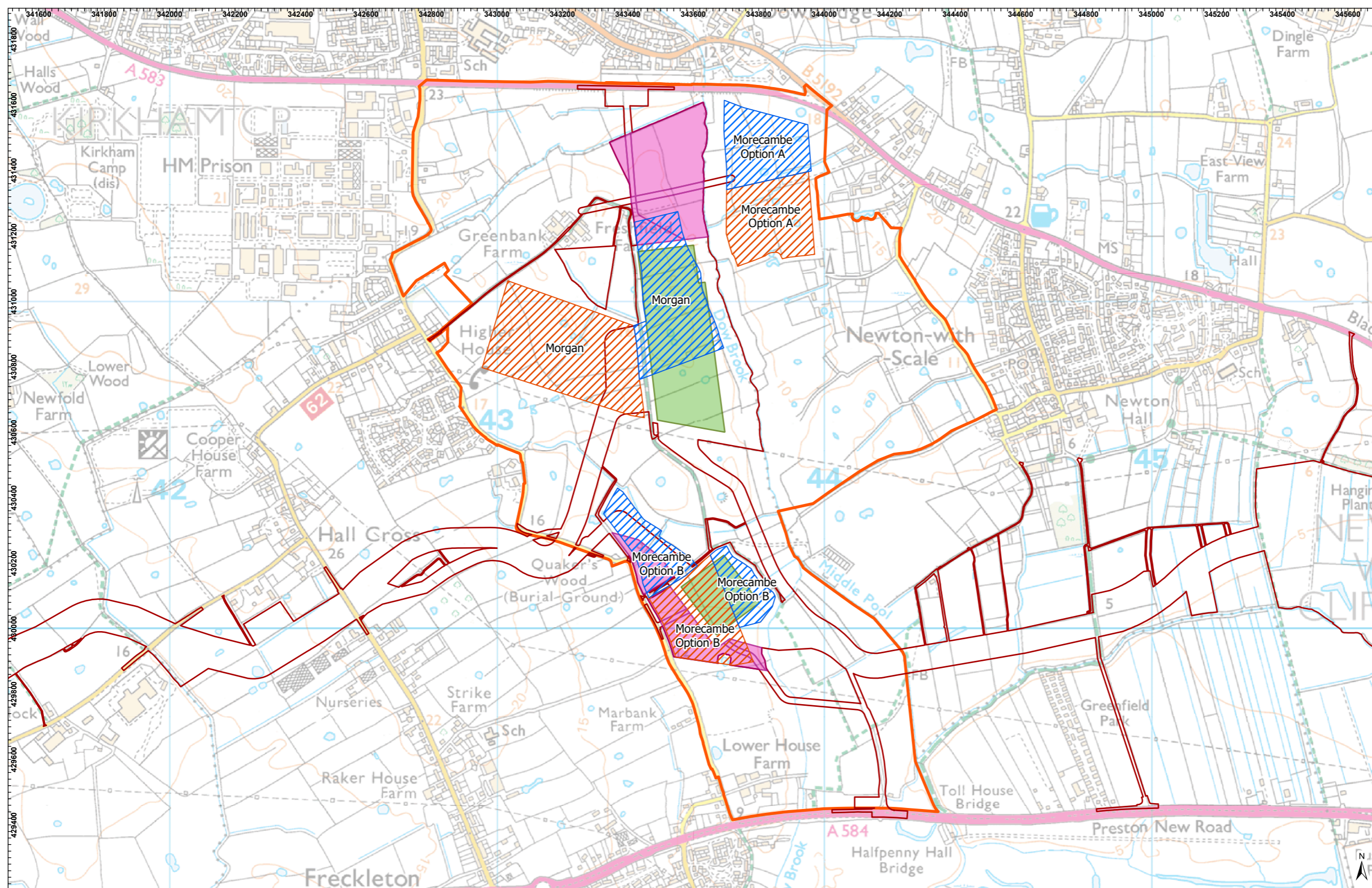
**LEGEND**

- ▭ Red Line Boundary (PEIR)
- ▭ Transmission Order Limits
- ▭ Cable Corridor Options (PEIR)

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- LEGEND**
- Transmission Order Limits
  - DCO Permanent Platform Area
  - DCO Temporary Substation Area
  - PEIR Permanent Compound
  - PEIR Temporary Compound
  - PEIR Substations Statutory Consultation Area

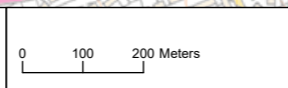


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01	26/09/24	DCO Final	HAH	AS

MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

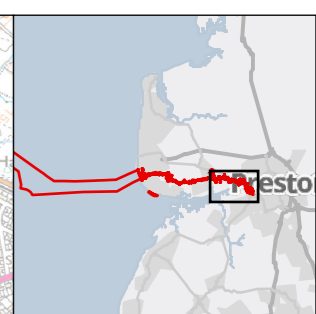
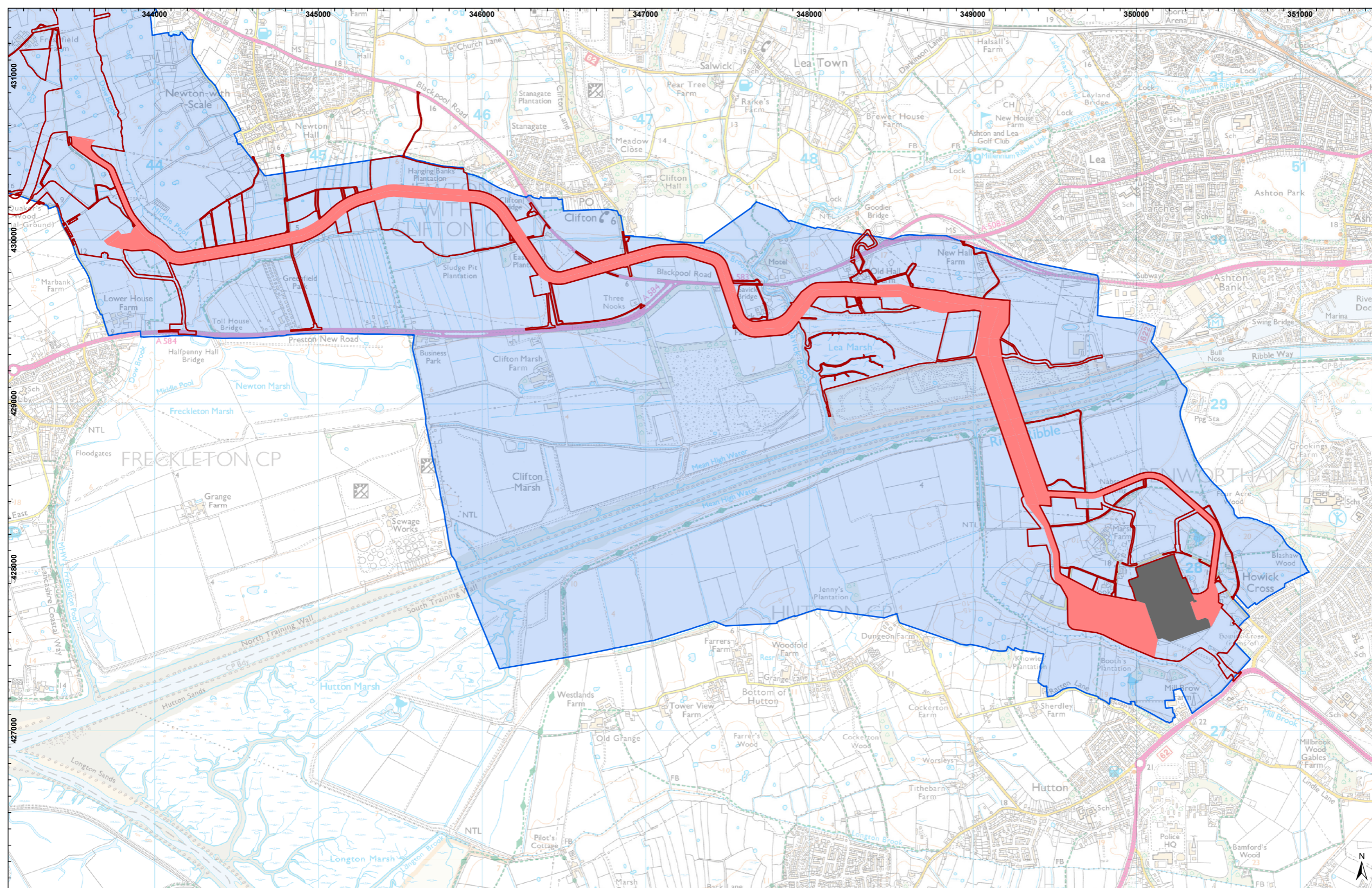
FIGURE 3.7 KEY CHANGES FOR THE ONSHORE SUBSTATIONS SINCE PUBLICATION OF THE PRELIMINARY ENVIRONMENTAL INFORMATION REPORT (PEIR)



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:12,500

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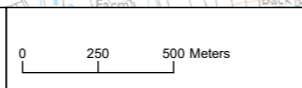
**North Arrow:**  
N  
J  
S  
P



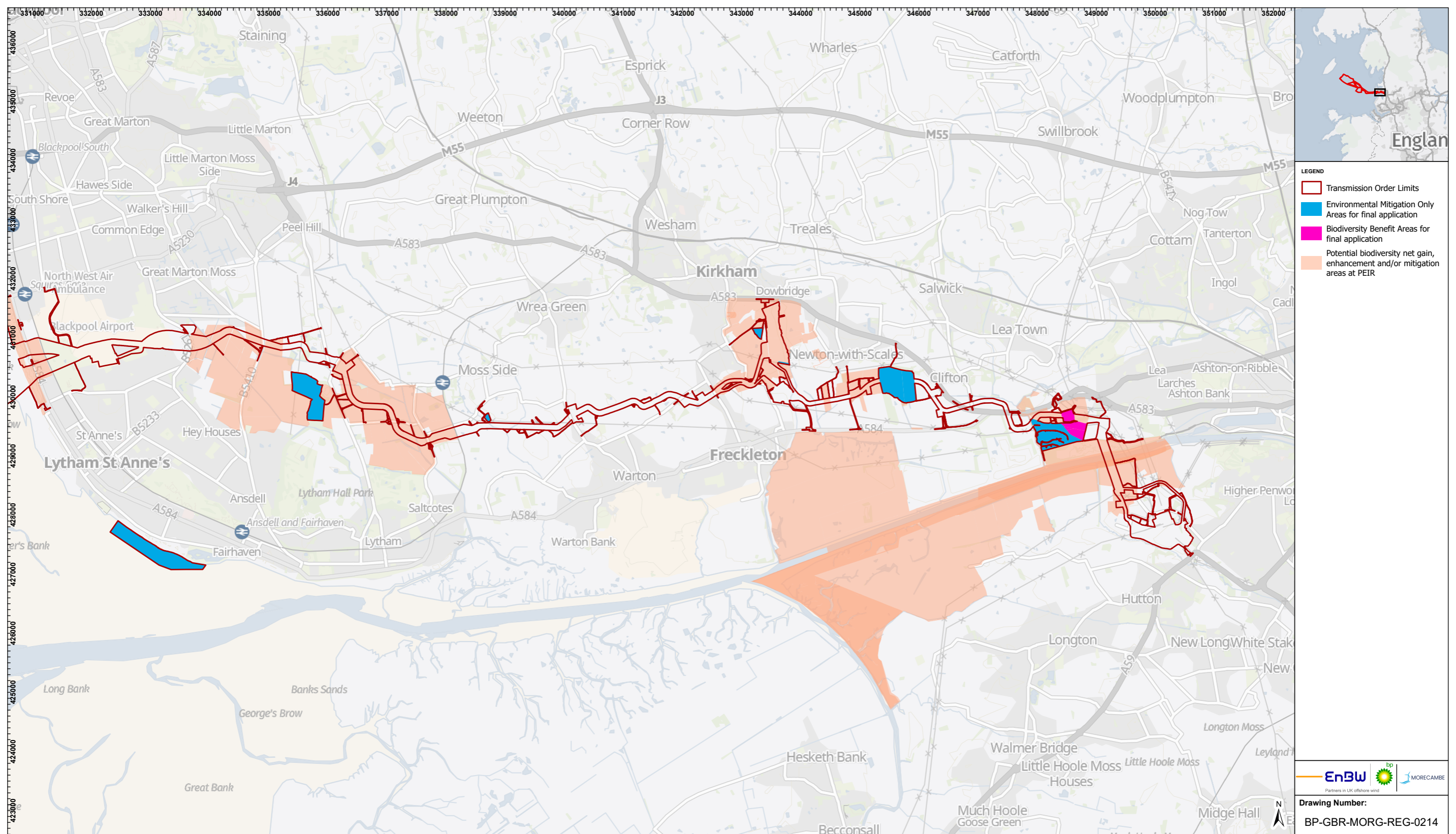
- LEGEND**
- Transmission Order Limits
  - 400kV Grid Connection Cable Corridor Search Area
  - 400kV Grid Connection corridor
  - Overlapping National Grid Penwortham Substation Connection Works



**Drawing Number:**  
**BP-GBR-MORG-REG-0213**



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**LEGEND**

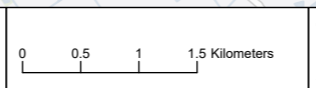
- Transmission Order Limits
- Environmental Mitigation Only Areas for final application
- Biodiversity Benefit Areas for final application
- Potential biodiversity net gain, enhancement and/or mitigation areas at PEIR



**Drawing Number:**  
BP-GBR-MORG-REG-0214

MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

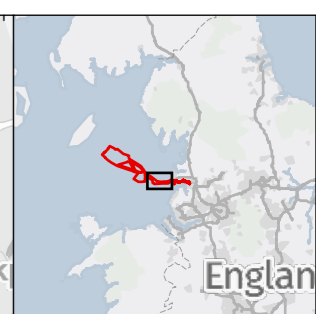
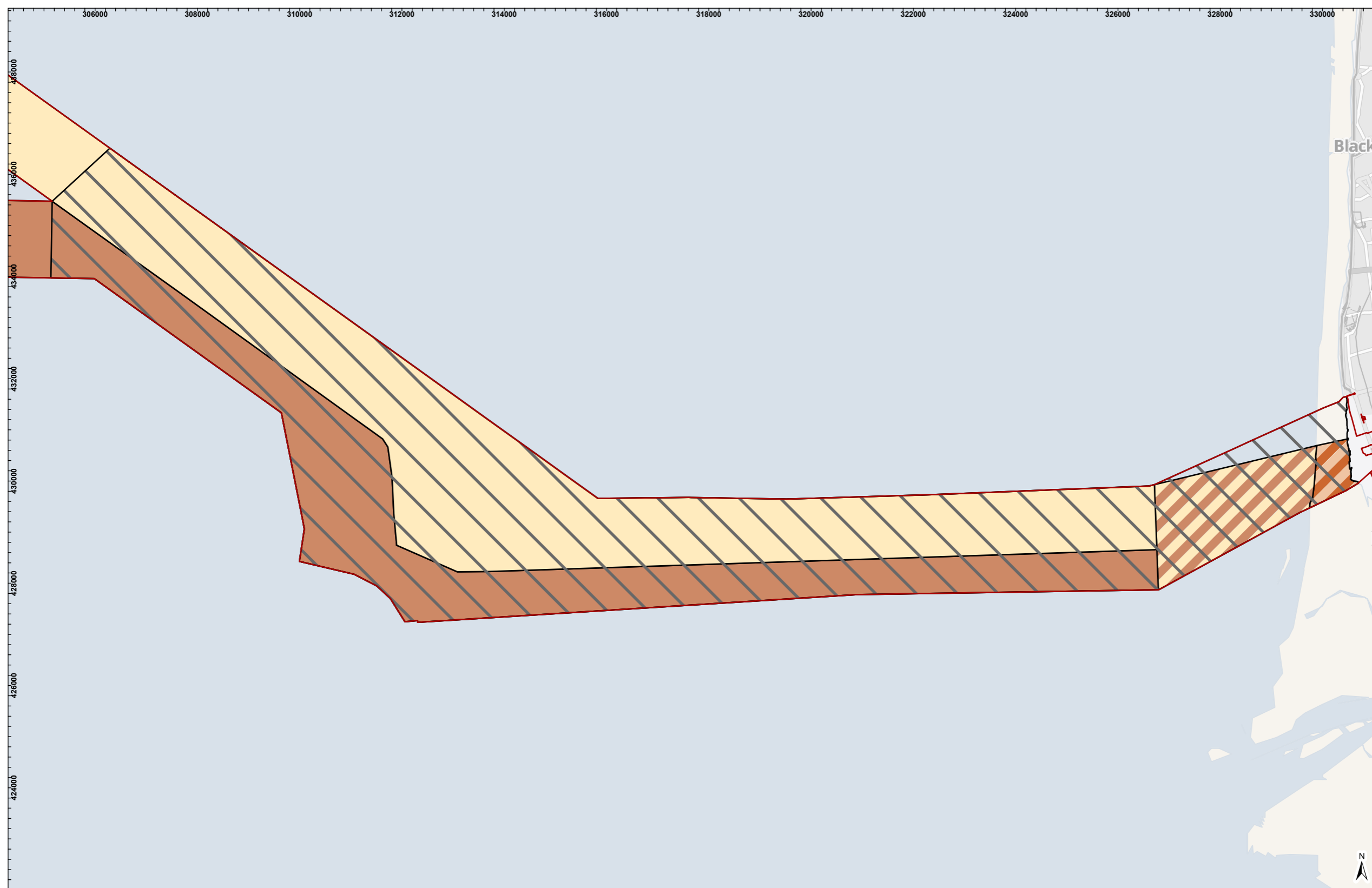
**FIGURE 3.9 KEY CHANGES TO THE POTENTIAL BIODIVERSITY NET GAIN, ENHANCEMENT AND/OR NET GAIN AREAS SINCE PUBLICATION OF THE PRELIMINARY ENVIRONMENTAL INFORMATION REPORT (PEIR)**



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:65,000

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**LEGEND**

- Transmission Order Limits
- Offshore Transmission Works Plan Areas
- 1A
- 1B
- 2A2B
- 3A3B
- 4A4B

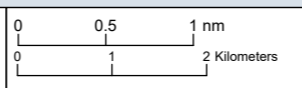
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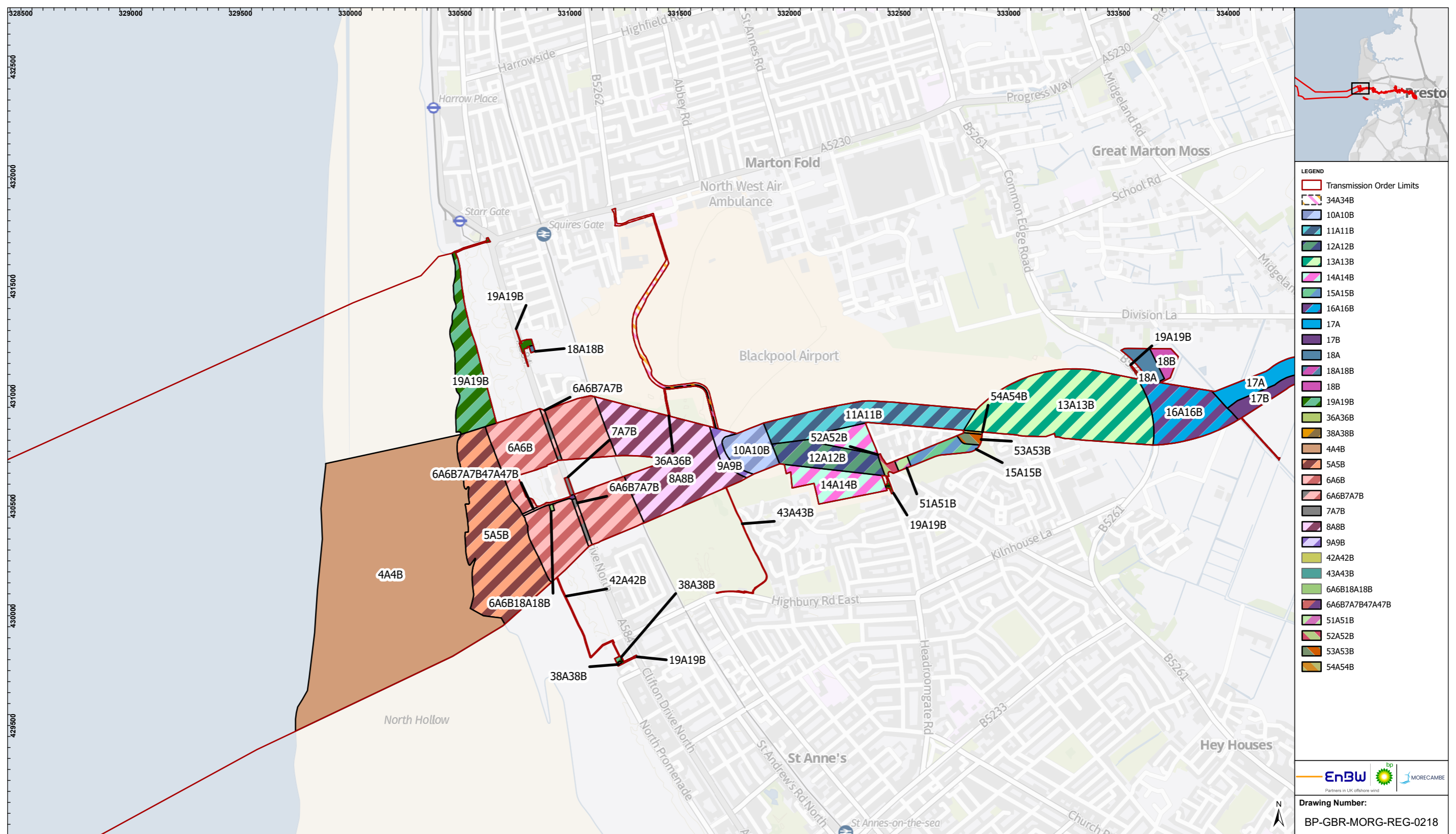
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

**FIGURE 3.10 OFFSHORE AND INTERTIDAL OVERLAPPING WORKS AREAS**



**Geodetic Information:**  
 Datum: OSGB 1936  
 Projection: British National Grid  
 Scale@379mmx231mm: 1:80,000

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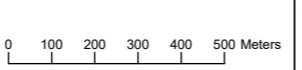
- LEGEND**
- Transmission Order Limits
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  - 10A10B
  - 11A11B
  - 12A12B
  - 13A13B
  - 14A14B
  - 15A15B
  - 16A16B
  - 17A
  - 17B
  - 18A
  - 18A18B
  - 18B
  - 19A19B
  - 36A36B
  - 38A38B
  - 4A4B
  - 5A5B
  - 6A6B
  - 6A6B7A7B
  - 7A7B
  - 8A8B
  - 9A9B
  - 42A42B
  - 43A43B
  - 6A6B18A18B
  - 6A6B7A7B47A47B
  - 51A51B
  - 52A52B
  - 53A53B
  - 54A54B

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**Drawing Number:**  
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MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

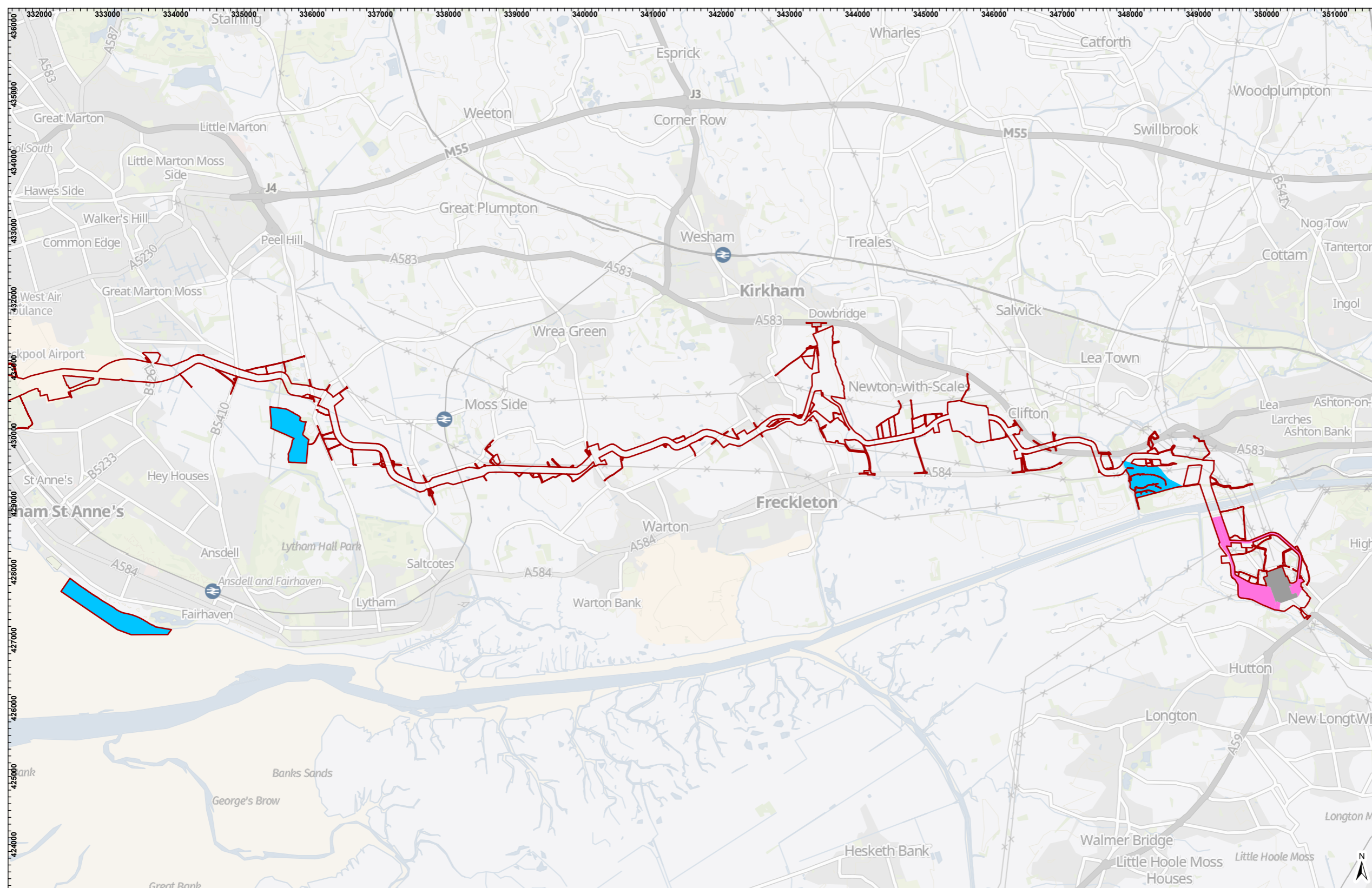
**FIGURE 3.11 'OVERLAPPING' WORKS AREAS FROM MEAN HIGH WATER SPRING (MHWS) TO QUEENSWAY (B5261)**



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:17,500

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- LEGEND**
- Transmission Order Limits
  - Overlapping 400kV Grid Connection Works
  - Overlapping National Grid Substation Connection Works
  - Overlapping Biodiversity, net gain and mitigation only Works

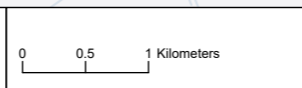


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MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

**FIGURE 3.12 'OVERLAPPING' ENVIRONMENTAL MITIGATION AREAS, AND 'OVERLAPPING' 400KV GRID CONNECTION CORRIDORS SOUTH OF RIVER RIBBLE**



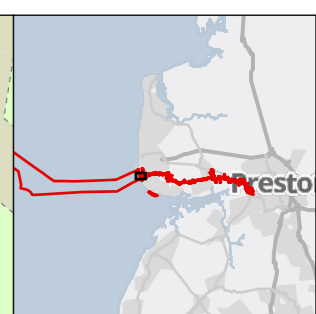
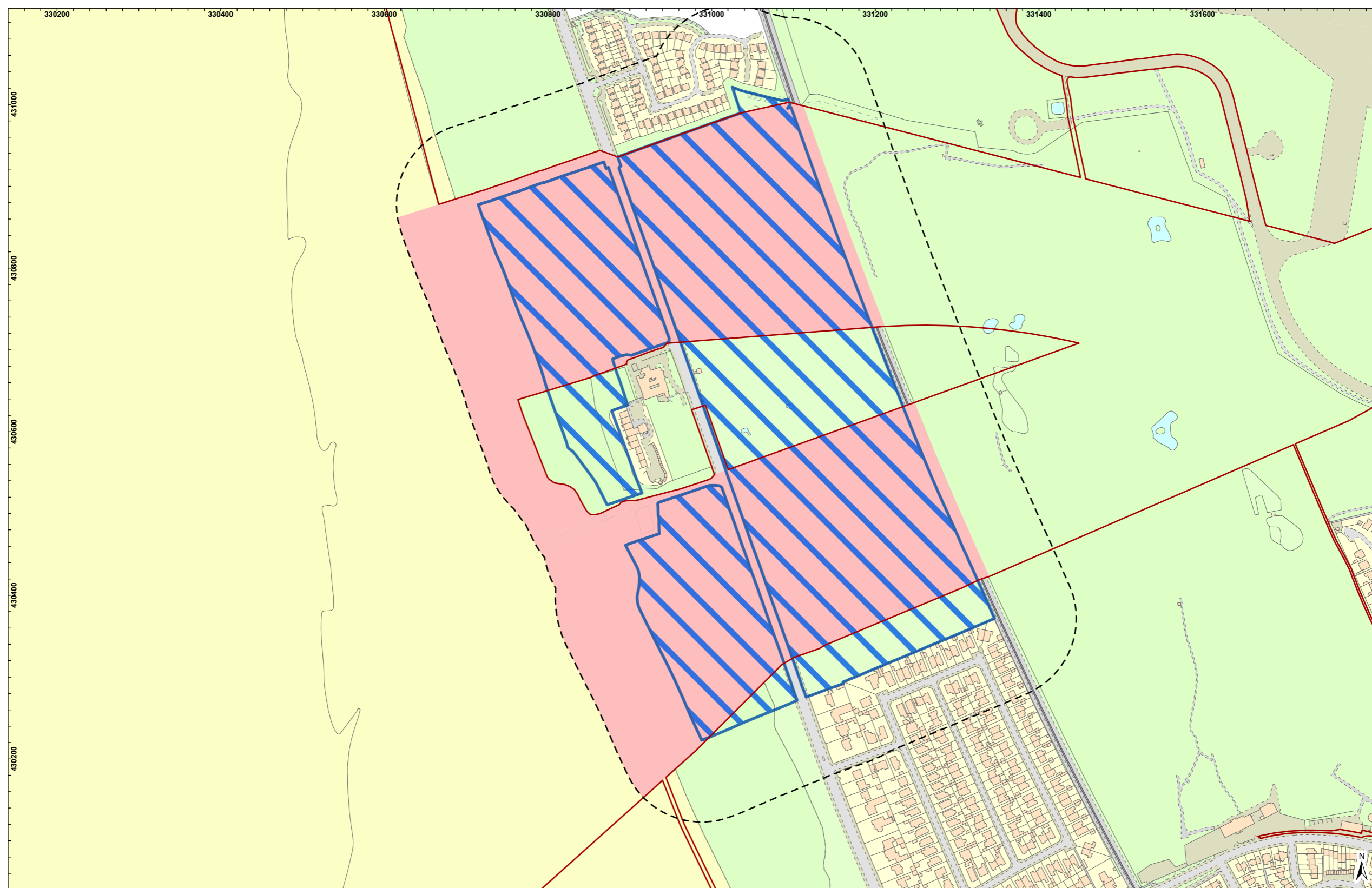
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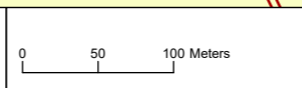
- LEGEND**
- Transmission Order Limits
  - Works Area 6A6B
  - Lytham St. Annes Dunes SSSI
  - 100m Buffer of Lytham St. Annes Dunes SSSI



**Drawing Number:**  
BP-GBR-MORG-REG-0219

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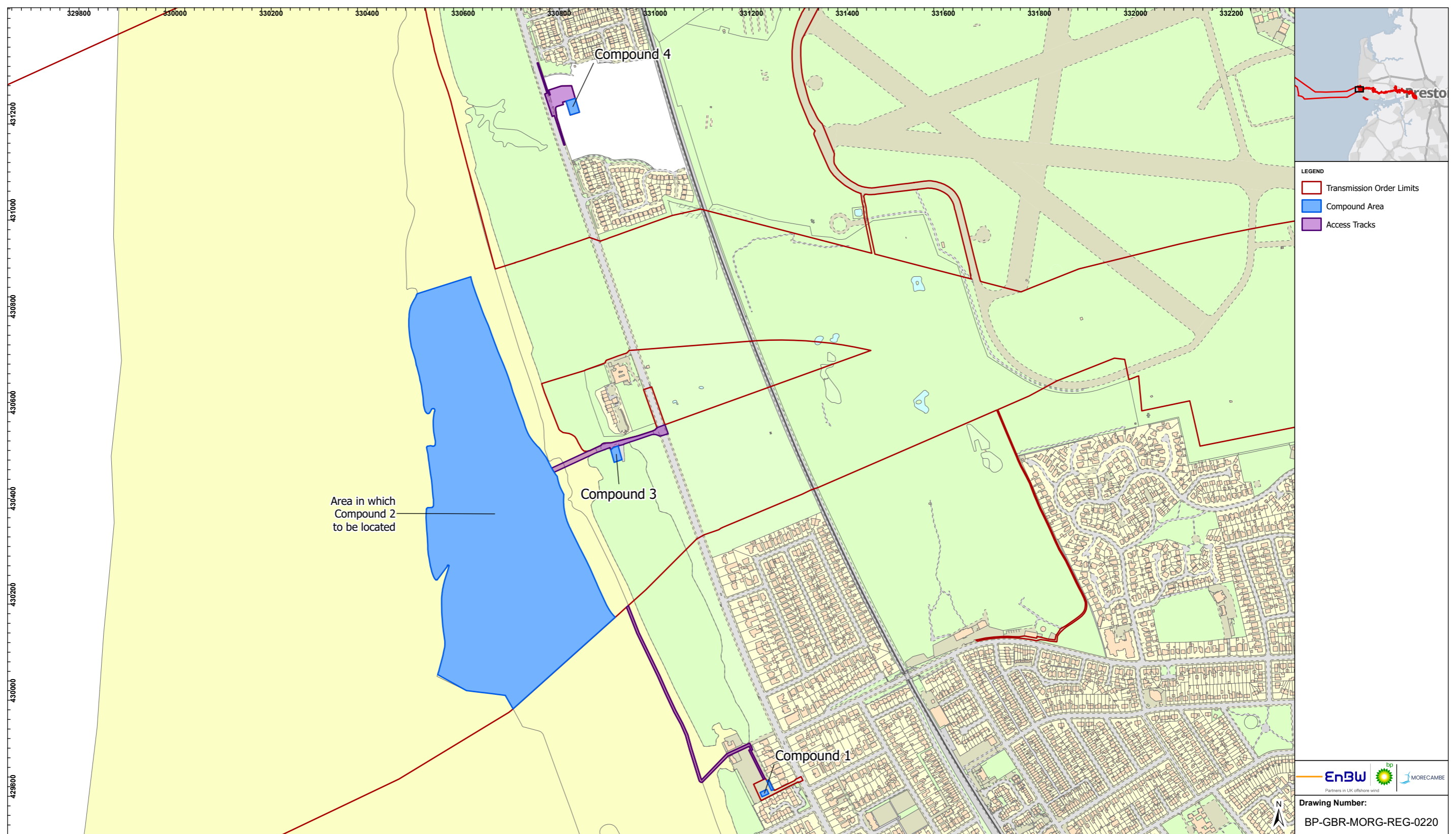
**FIGURE 3.14 - SHOWING 100M OFFSET FROM LYTHAM ST ANNES DUNES SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)**



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Projection: British National Grid  
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**LEGEND**

- Transmission Order Limits
- Compound Area
- Access Tracks

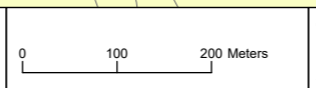
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**Drawing Number:**  
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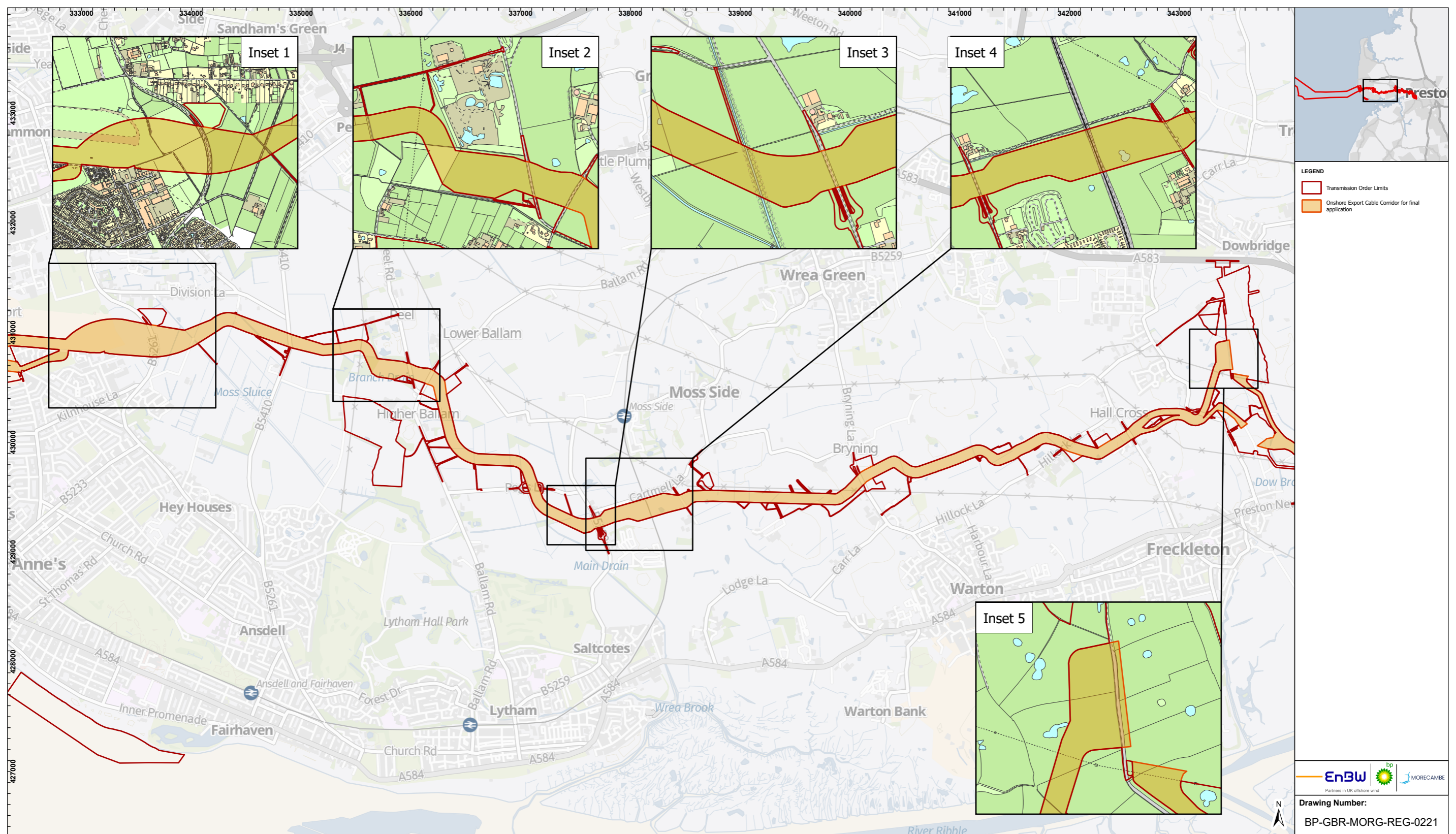
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

**FIGURE 3.15 LANDFALL COMPOUND AREAS**



**Geodetic Information:**  
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Projection: British National Grid  
Scale@379mmx231mm: 1:8,000

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**LEGEND**

- Transmission Order Limits
- Onshore Export Cable Corridor for final application

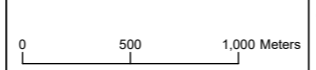
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**Drawing Number:**  
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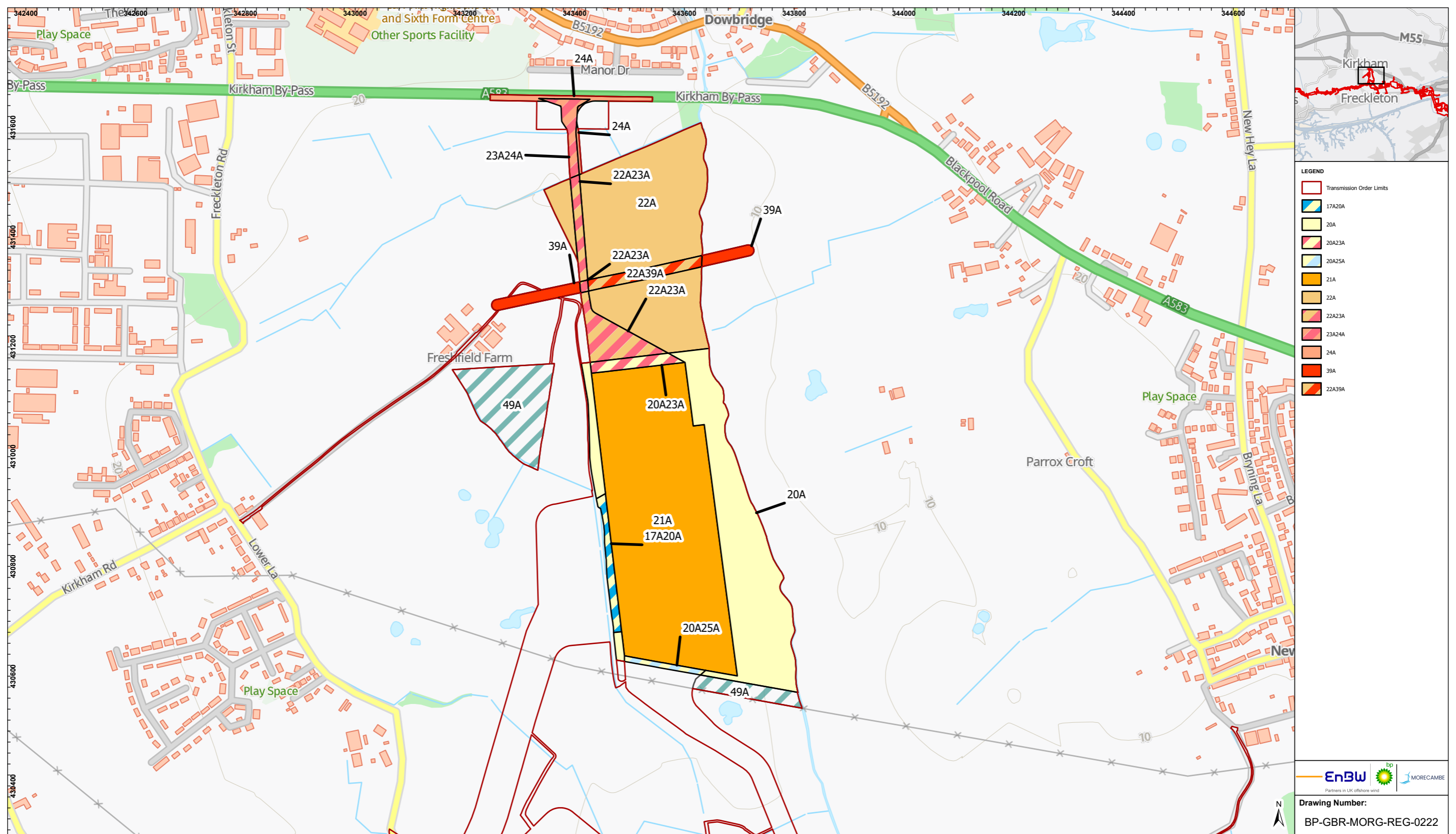
**FIGURE 3.16 AREAS ALONG THE ONSHORE EXPORT CABLE CORRIDOR WHICH DEVIATE FROM THE TYPICAL MAXIMUM WIDTH**



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:35,000

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**MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION**



**LEGEND**

- Transmission Order Limits
- 17A20A
- 20A
- 20A23A
- 20A25A
- 21A
- 22A
- 22A23A
- 23A24A
- 24A
- 39A
- 22A39A

**EnBW**

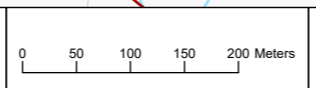
Partners in UK offshore wind

**Drawing Number:**  
BP-GBR-MORG-REG-0222

VER	DATE	DETAILS	BY	CHECK
01	26/09/24	DCO Final	HAH	AS

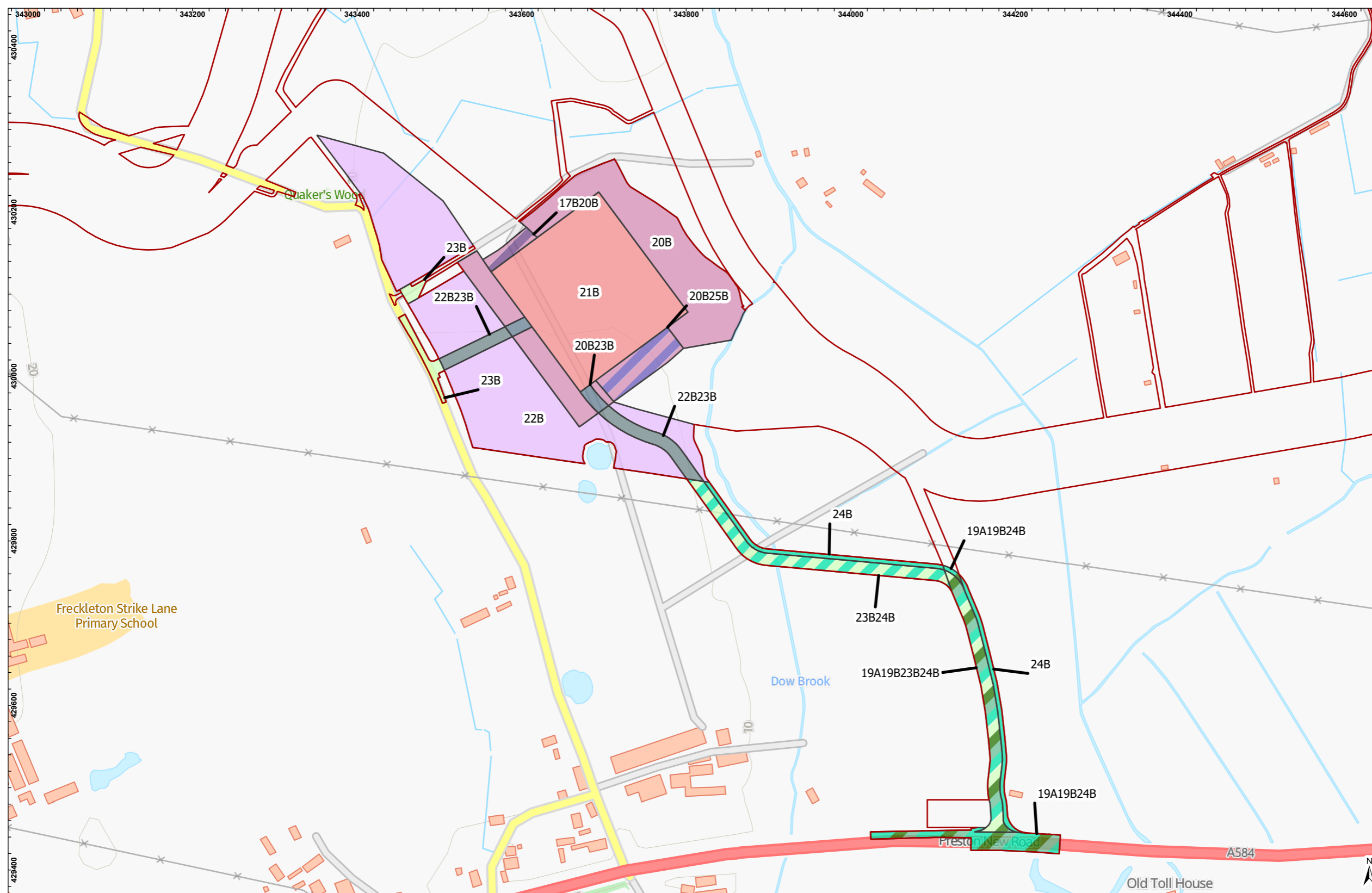
MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

**FIGURE 3.17 - MORGAN ONSHORE SUBSTATION AREAS**



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:7,000

Service Layer Credits: GB Cartographic Local Names: Contains OS data © Crown Copyright and database right 2022  
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GB Background: Contains OS data © Crown Copyright and database right 2022  
Contains data from OS Zoomstack

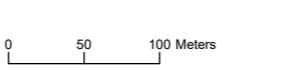


**LEGEND**

- Transmission Order Limits
- Work Plan Areas
  - 17B20B
  - 20B
  - 20B23B
  - 20B25B
  - 21B
  - 22B
  - 22B23B
  - 23B
  - 23B24B
  - 24B
  - 19A19B23B24B
  - 19A19B24B

MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

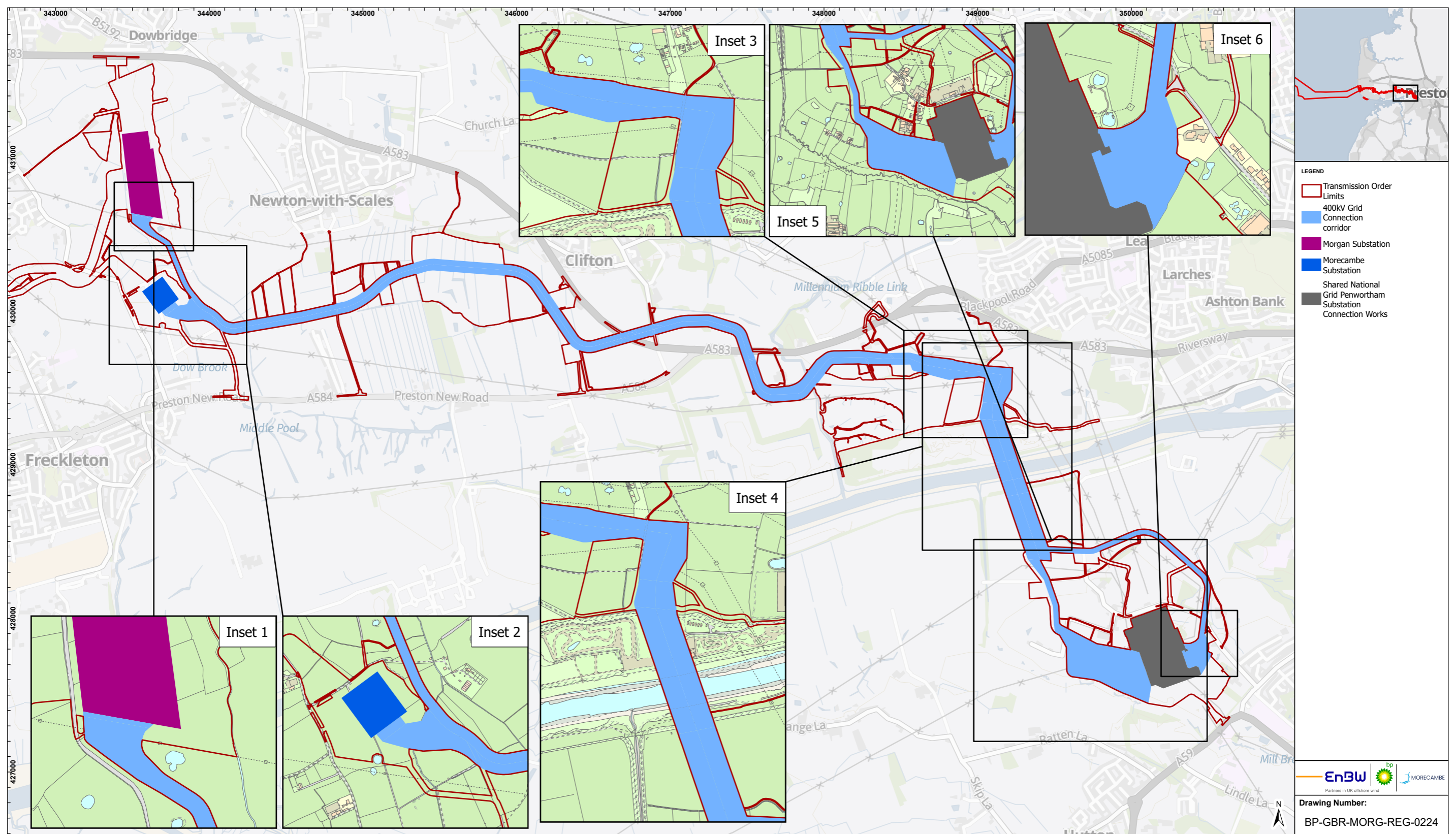
FIGURE 3.18 MORECAMBE ONSHORE SUBSTATION AREAS



**Geodetic Information:**  
 Datum: OSGB 1936  
 Projection: British National Grid  
 Scale@379mmx231mm: 1:5,000

**Service Layer Credits:** GB Cartographic Local Names: Contains OS data © Crown Copyright and database right 2022  
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Drawing Number: BP-GBR-MORG-REG-0223				
VER	DATE	DETAILS	BY	CHECK
01	26/09/24	DCO Final	HAH	AS



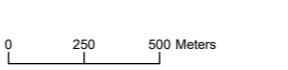
- LEGEND**
- Transmission Order Limits
  - 400kV Grid Connection corridor
  - Morgan Substation
  - Morecambe Substation
  - Shared National Grid Penwortham Substation
  - Connection Works



**Drawing Number:**  
BP-GBR-MORG-REG-0224

MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION

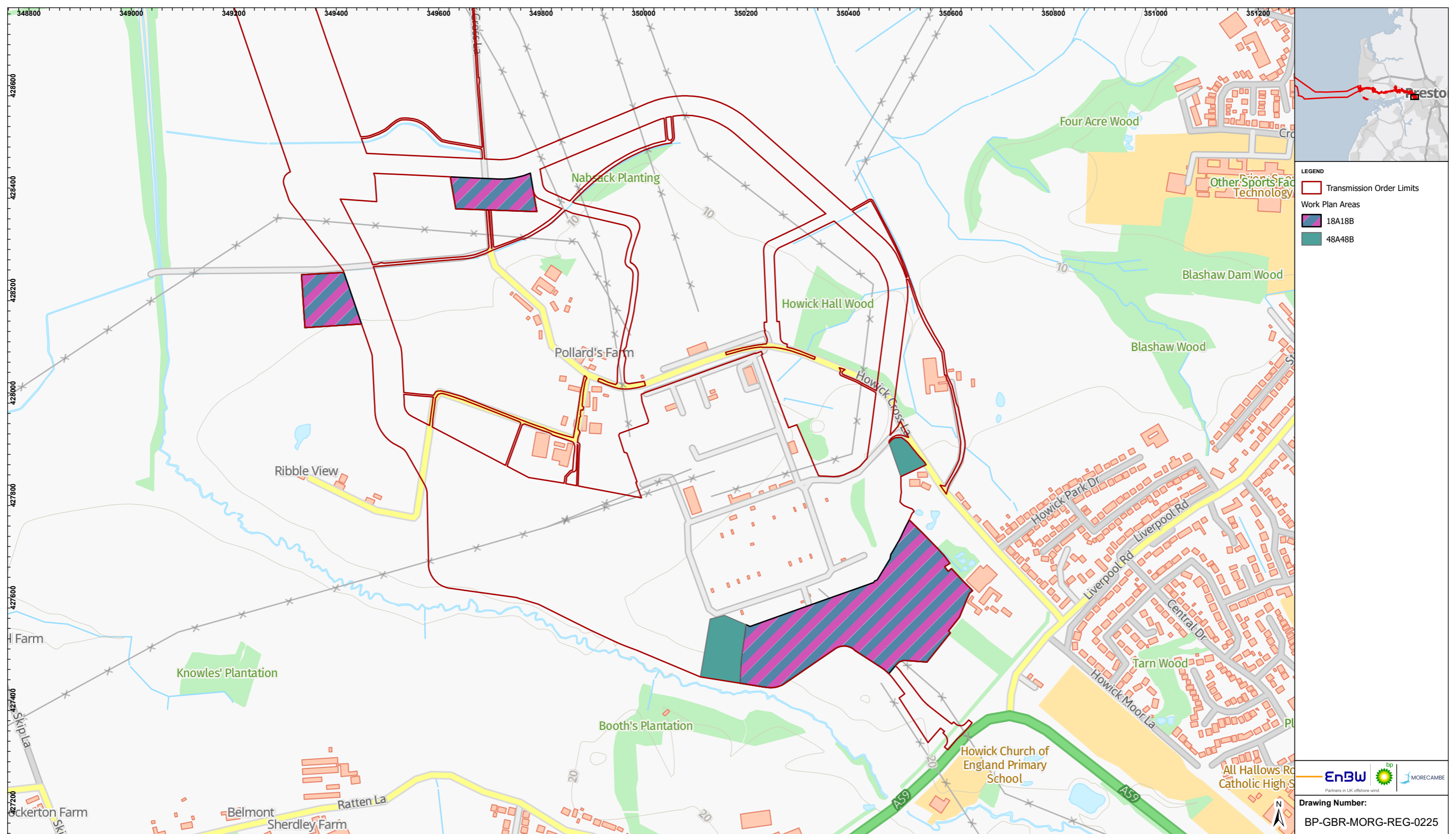
**FIGURE 3.19 AREAS ALONG THE 400KV GRID CONNECTION CABLE CORRIDOR WHICH DEVIATE FROM THE TYPICAL MAXIMUM WIDTH**



**Geodetic Information:**  
Datum: OSGB 1936  
Projection: British National Grid  
Scale@379mmx231mm: 1:25,000

Service Layer Credits: GB Background: Contains OS data © Crown Copyright and database right 2022  
Contains data from OS Zoomstack

VER	DATE	DETAILS	BY	CHECK
01	26/09/24	DCO Final	HAH	AS



**LEGEND**

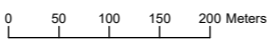
- Transmission Order Limits
- Work Plan Areas
  - 18A18B
  - 48A48B

**EnBW** **bp** **MORECAMBE**  
 Partners in UK offshore wind

**Drawing Number:**  
 BP-GBR-MORG-REG-0225

VER	DATE	DETAILS	BY	CHECK
01	26/09/24	DCO Final	HAH	AS

**FIGURE 3.20 TEMPORARY COMPOUND AREAS ADJACENT TO NATIONAL GRID ELECTRICITY TRANSMISSION SUBSTATION, PENWORTHAM**



**Geodetic Information:**  
 Datum: OSGB 1936  
 Projection: British National Grid  
 Scale@379mmx231mm: 1:7,500

**Service Layer Credits:** GB Cartographic Local Names: Contains OS data © Crown Copyright and database right 2022  
 Contains data from OS Zoomstack  
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 Contains data from OS Zoomstack

**MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS PROJECT DESCRIPTION**