



MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Environmental Statement

Volume 1, Figures - Part 2 of 2



September 2024
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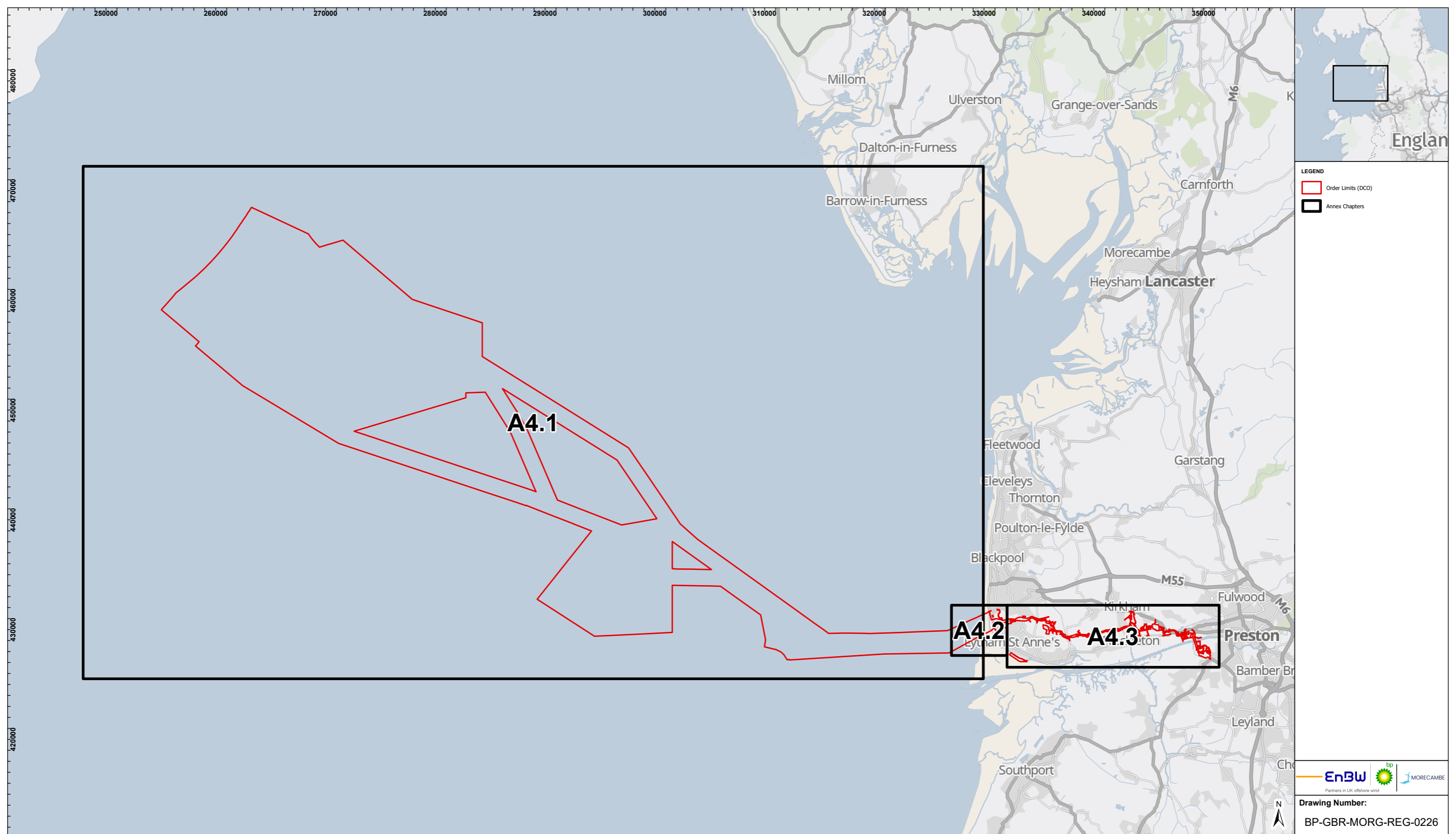
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Prepared by:

RPS

Prepared for:

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



LEGEND

- Order Limits (DCO)
- Annex Chapters

A4.1

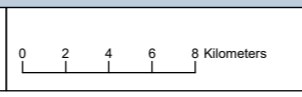
A4.2

A4.3

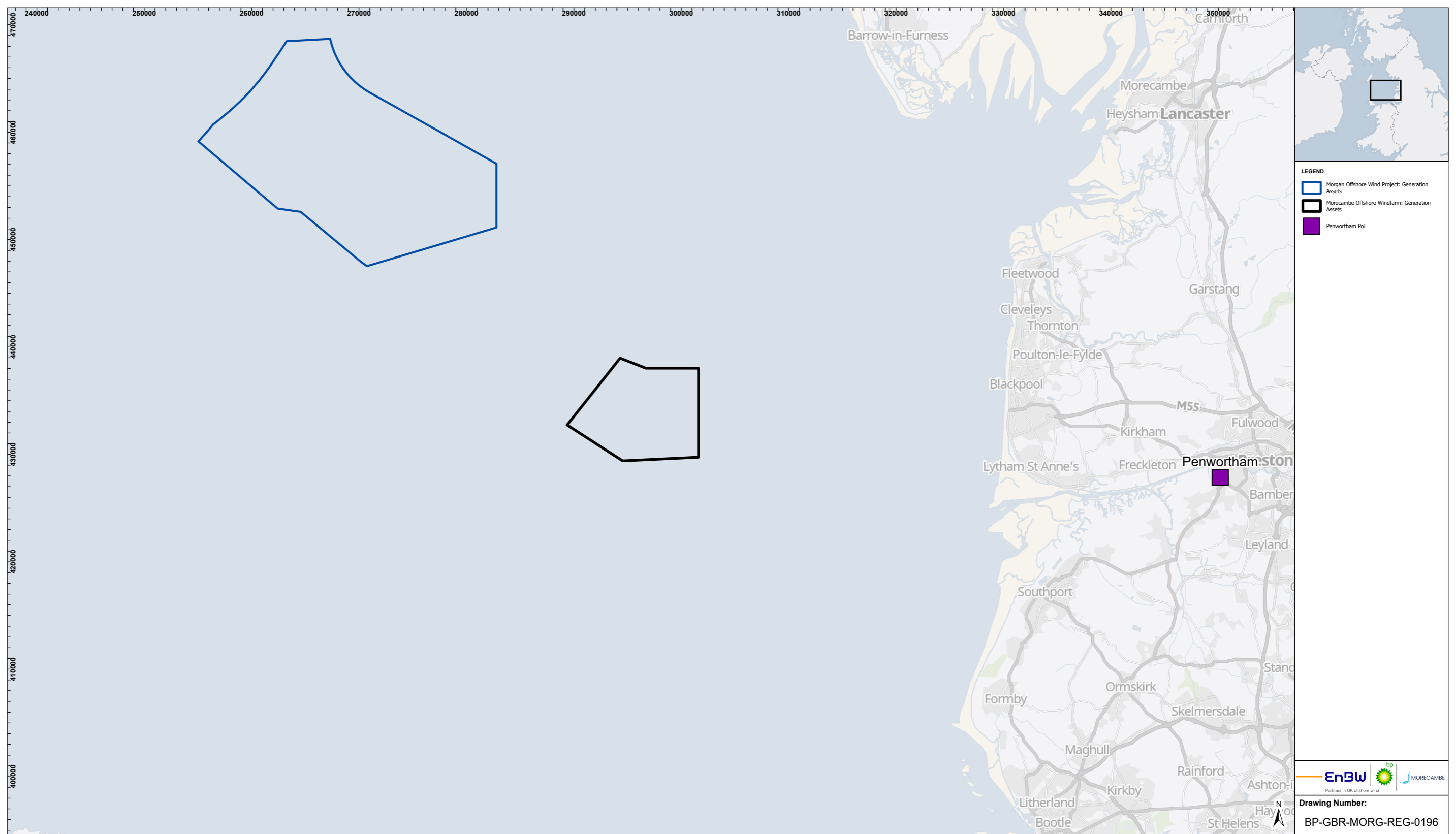
Partners in UK offshore wind

Drawing Number:
BP-GBR-MORG-REG-0226

VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	LM



VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	LM



LEGEND

- Morgan Offshore Wind Project: Generation Assets
- Morecambe Offshore Windfarm: Generation Assets
- Penwortham PoI

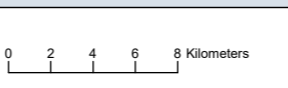


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BP-GBR-MORG-REG-0196

VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK

MORGAN AND MORECAMBE
OFFSHORE WINDFARMS:
TRANSMISSION SITE SELECTION

POINT OF INTERCONNECTION AT PENWORTHAM
NATIONAL GRID SUBSTATION



Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:357,663

Figure 4.2

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

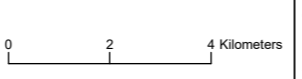


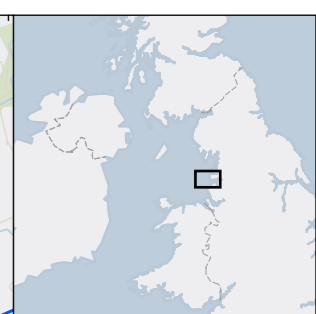
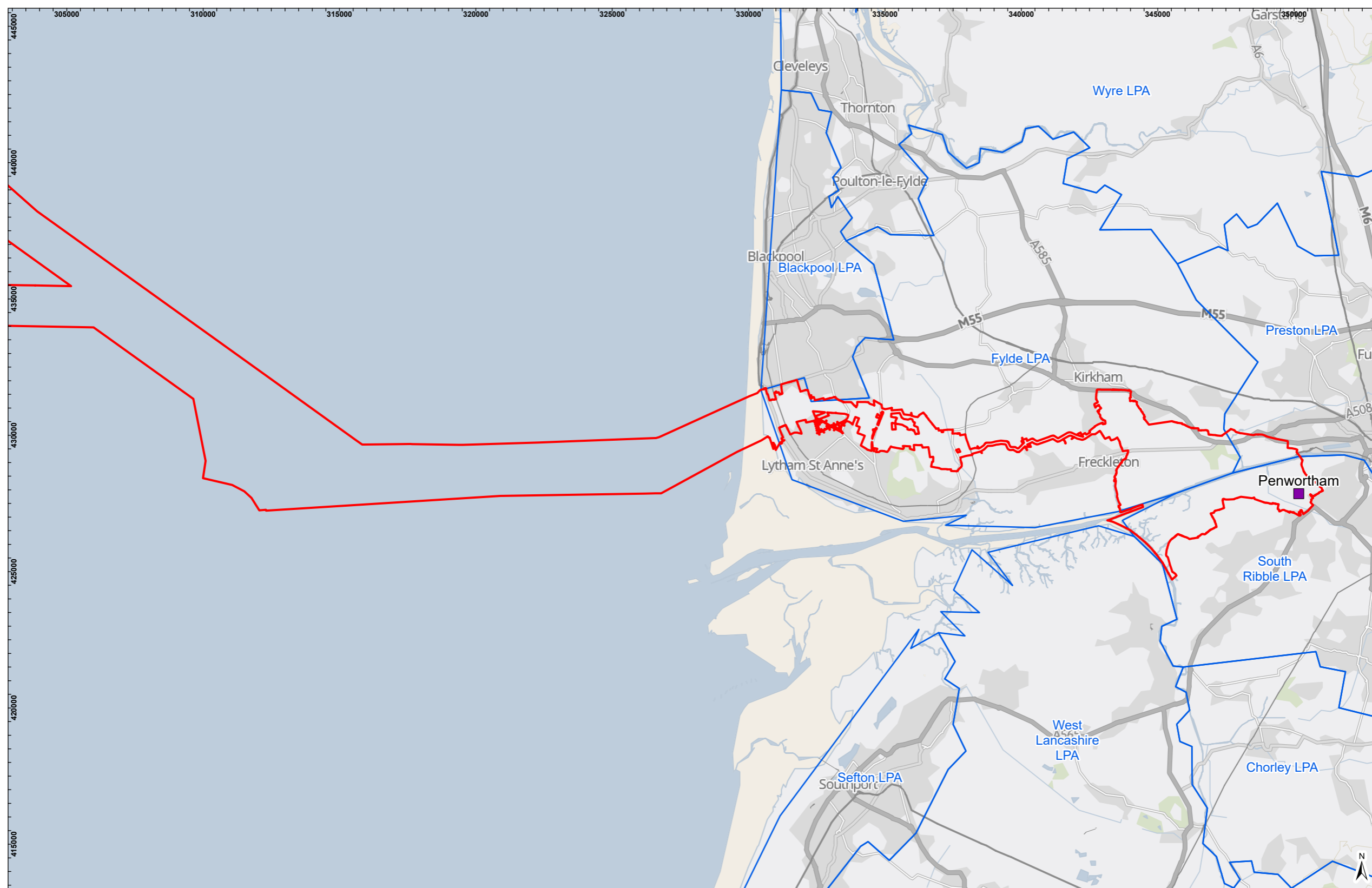
- LEGEND**
- Penwortham Poi
 - Transmission Assets Landfall Zones
 - Transmission Assets Landfall Area of Search



Drawing Number:
BP-GBR-MORG-REG-0197

VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK



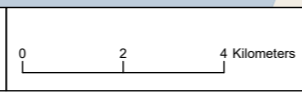


LEGEND

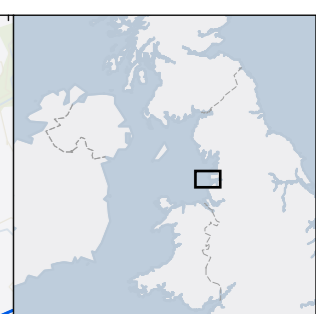
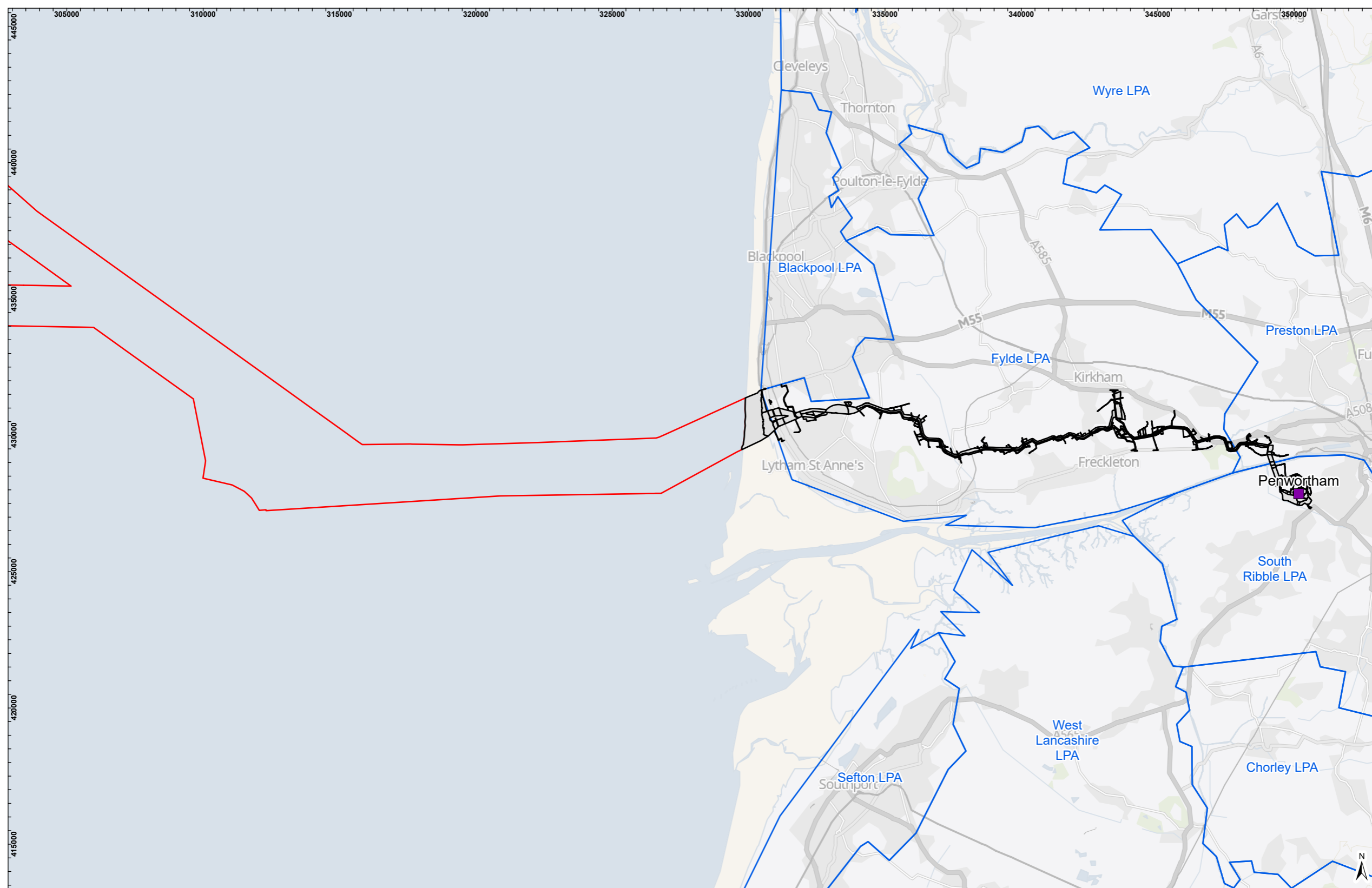
- ▭ Transmission Assets PEIR Redline Boundary
- Penwortham POI
- ▭ Local Planning Areas



Drawing Number:
BP-GBR-MORG-REG-0198



VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK

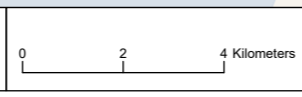


LEGEND

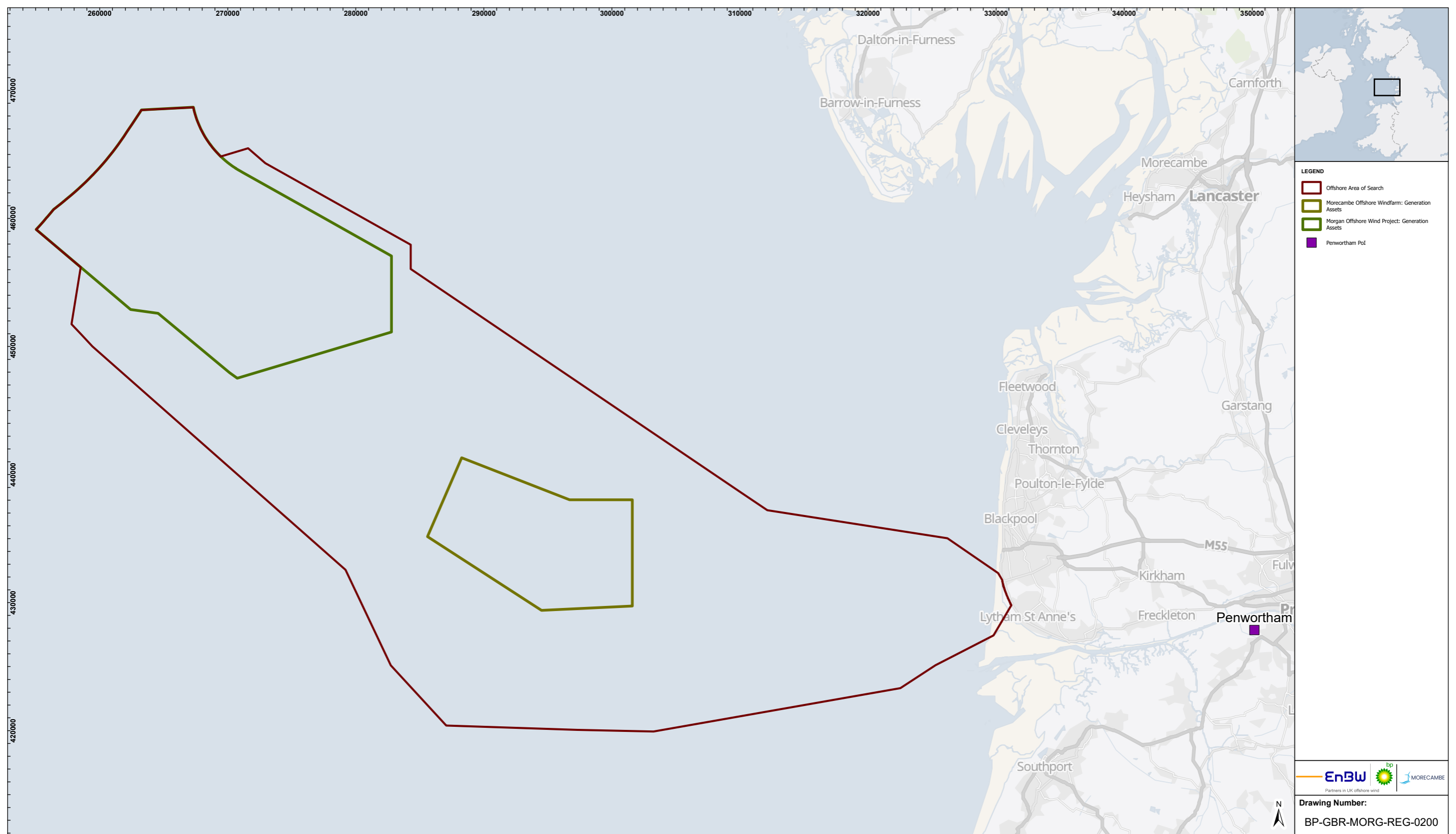
- Transmission Intertidal and Onshore Infrastructure Area
- Transmission Order Limits Offshore Only
- Penwortham POI
- Local Planning Areas



Drawing Number:
BP-GBR-MORG-REG-0199



VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK



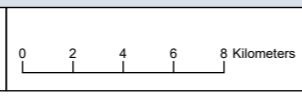
LEGEND

- Offshore Area of Search
- Morecambe Offshore Windfarm: Generation Assets
- Morgan Offshore Wind Project: Generation Assets
- Penwortham PoI

Drawing Number:
BP-GBR-MORG-REG-0200

MORGAN AND MORECAMBE
OFFSHORE WINDFARMS:
TRANSMISSION SITE SELECTION

OFFSHORE INFRASTRUCTURE AREA OF SEARCH

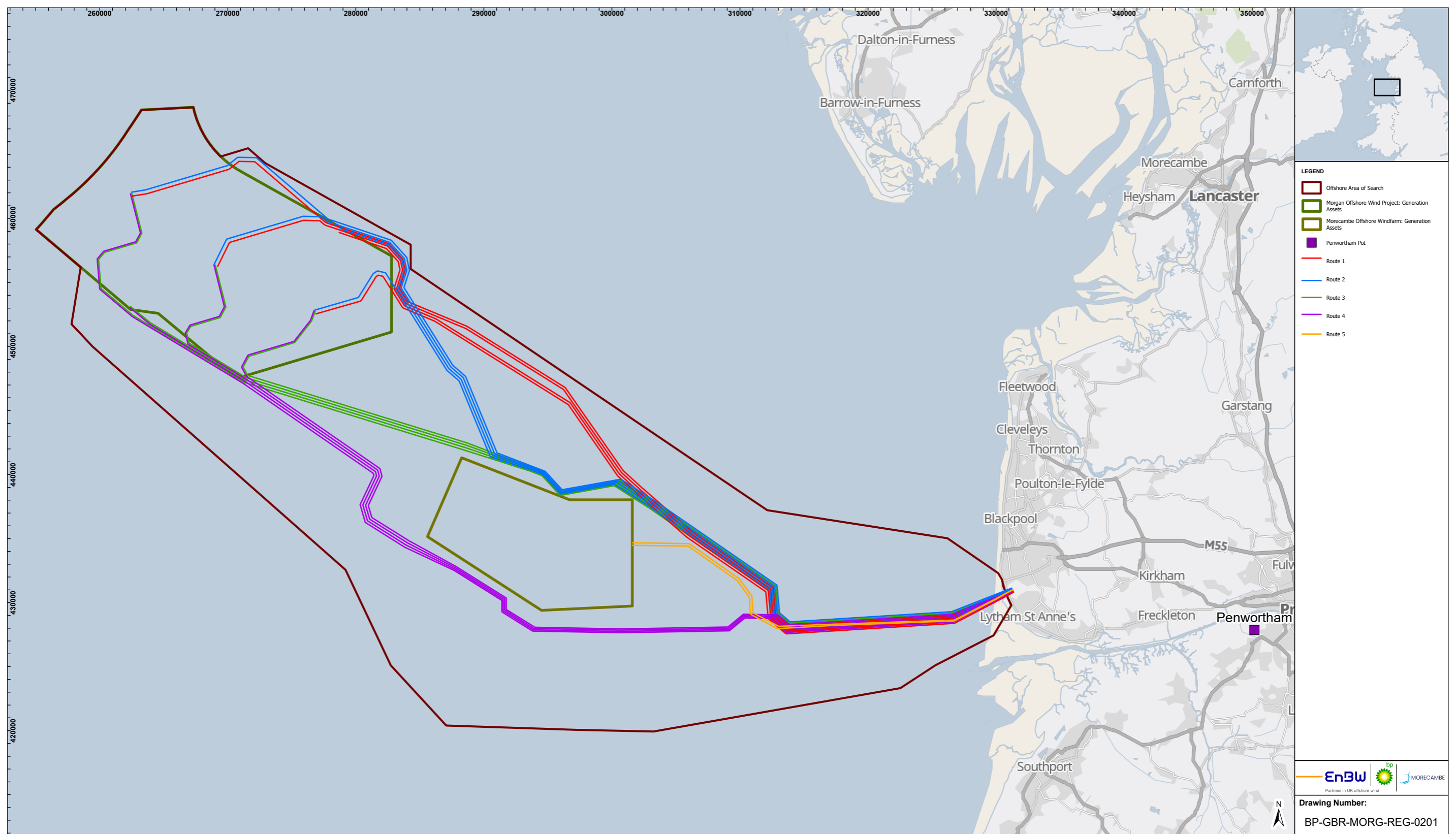


Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:300,000

Figure 4.6

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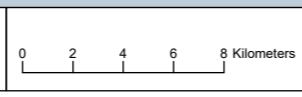
VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK



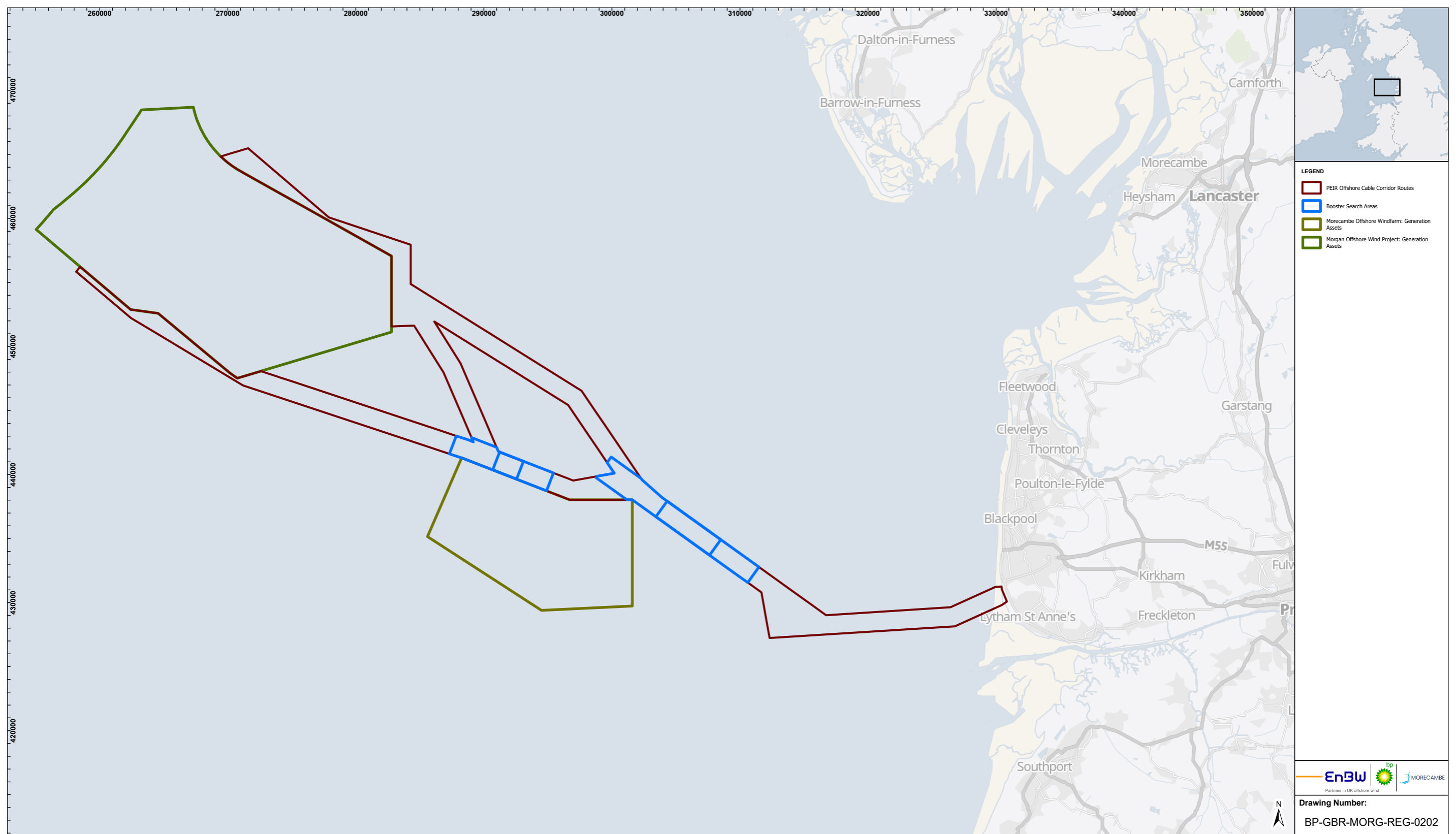
- LEGEND**
- Offshore Area of Search
 - Morgan Offshore Wind Project: Generation Assets
 - Morecambe Offshore Windfarm: Generation Assets
 - Penwortham PoI
 - Route 1
 - Route 2
 - Route 3
 - Route 4
 - Route 5



Drawing Number:
BP-GBR-MORG-REG-0201



VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK

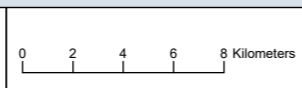


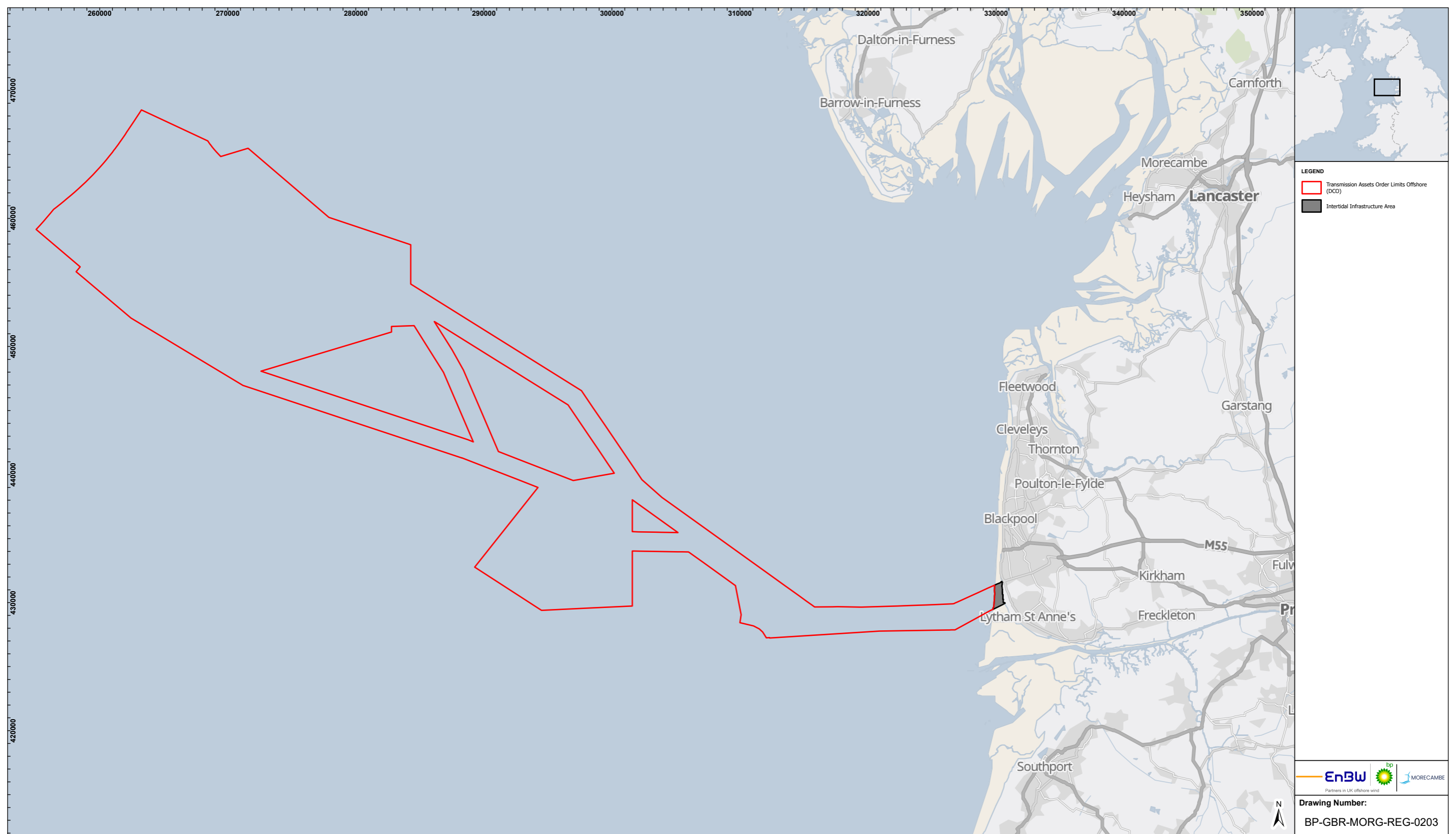
LEGEND

- PEIR Offshore Cable Corridor Routes
- Booster Search Areas
- Morecambe Offshore Windfarm: Generation Assets
- Morgan Offshore Wind Project: Generation Assets

Drawing Number:
BP-GBR-MORG-REG-0202

VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK



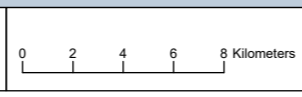


LEGEND

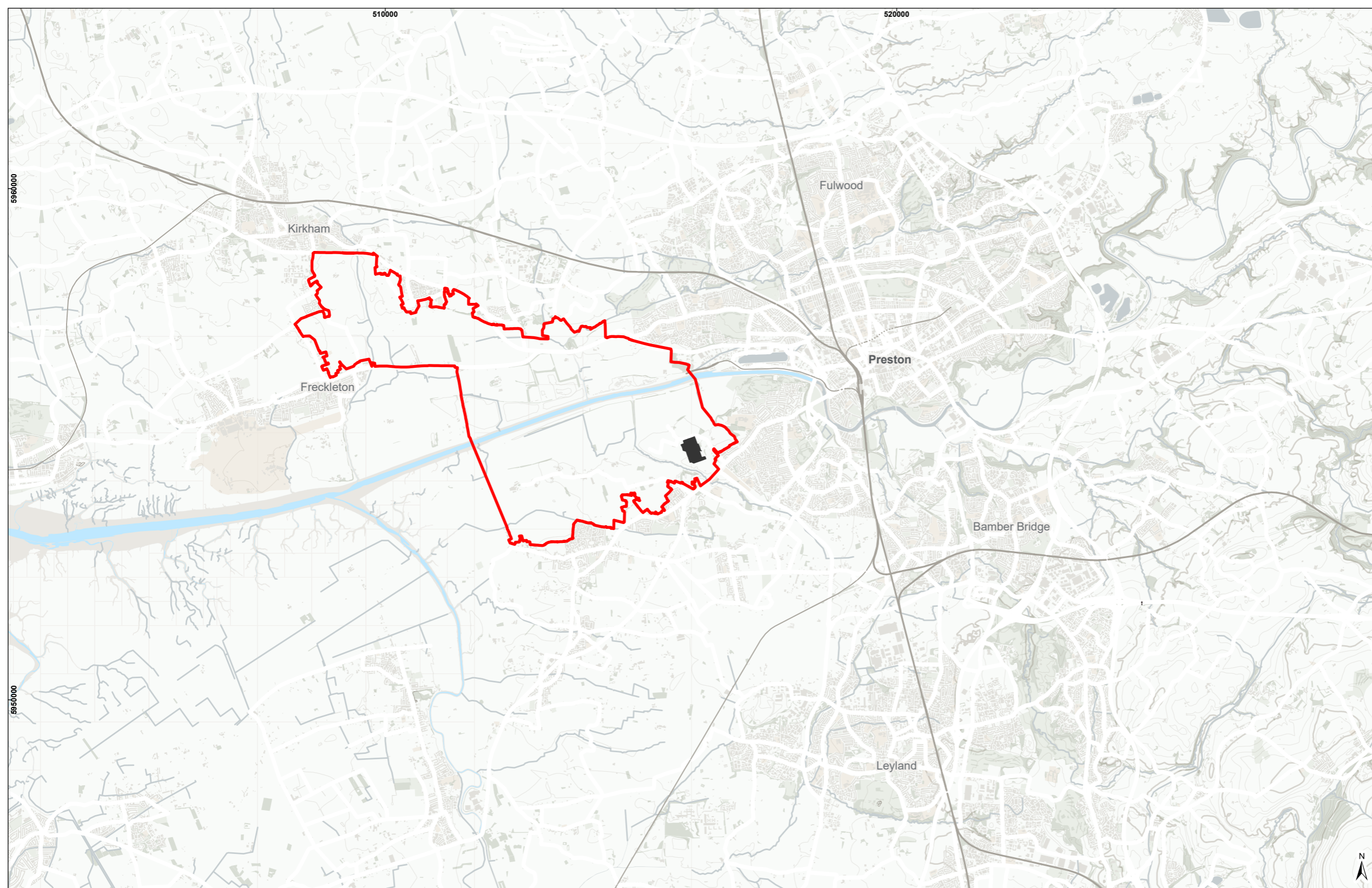
- Transmission Assets Order Limits Offshore (DCO)
- Intertidal Infrastructure Area



Drawing Number:
BP-GBR-MORG-REG-0203



VER	DATE	DETAILS	BY	CHECK
00	24/09/24	Initial Issue	GM	HK



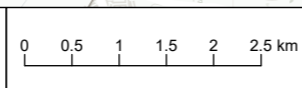
LEGEND

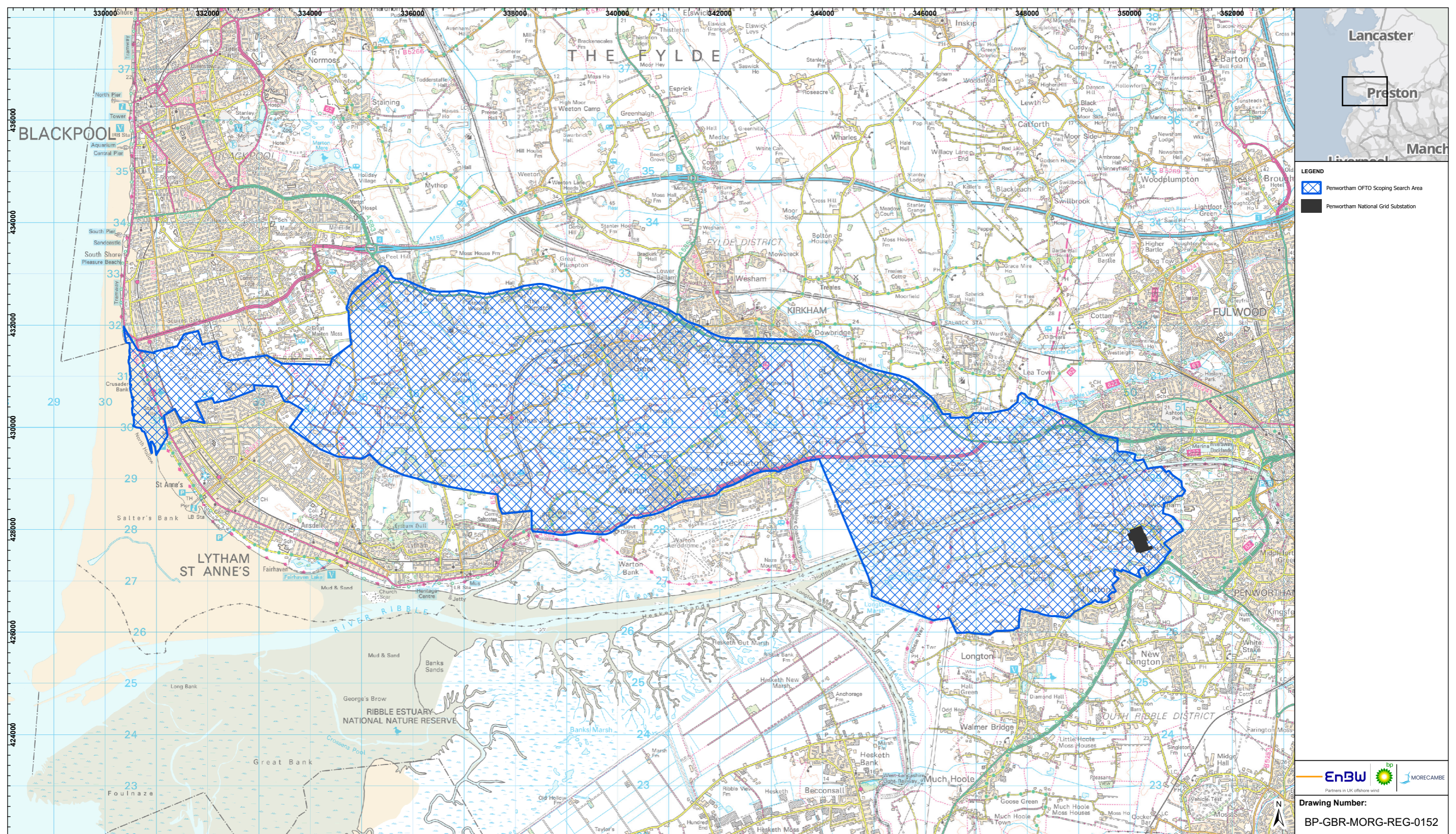
	Substation Search Area
	Penwortham National Grid Substation





Drawing Number:
BP-GBR-MORG-REG-0187

VER	DATE	DETAILS	BY	CHECK
00	12/09/24	Initial Issue	GM	AT





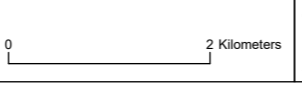
- LEGEND**
-  Penwortham OFTO Scoping Search Area
 -  Penwortham National Grid Substation

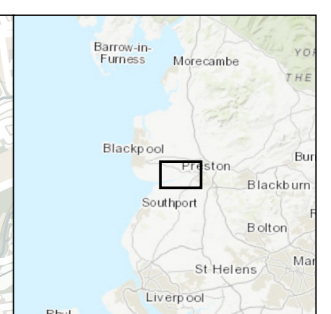
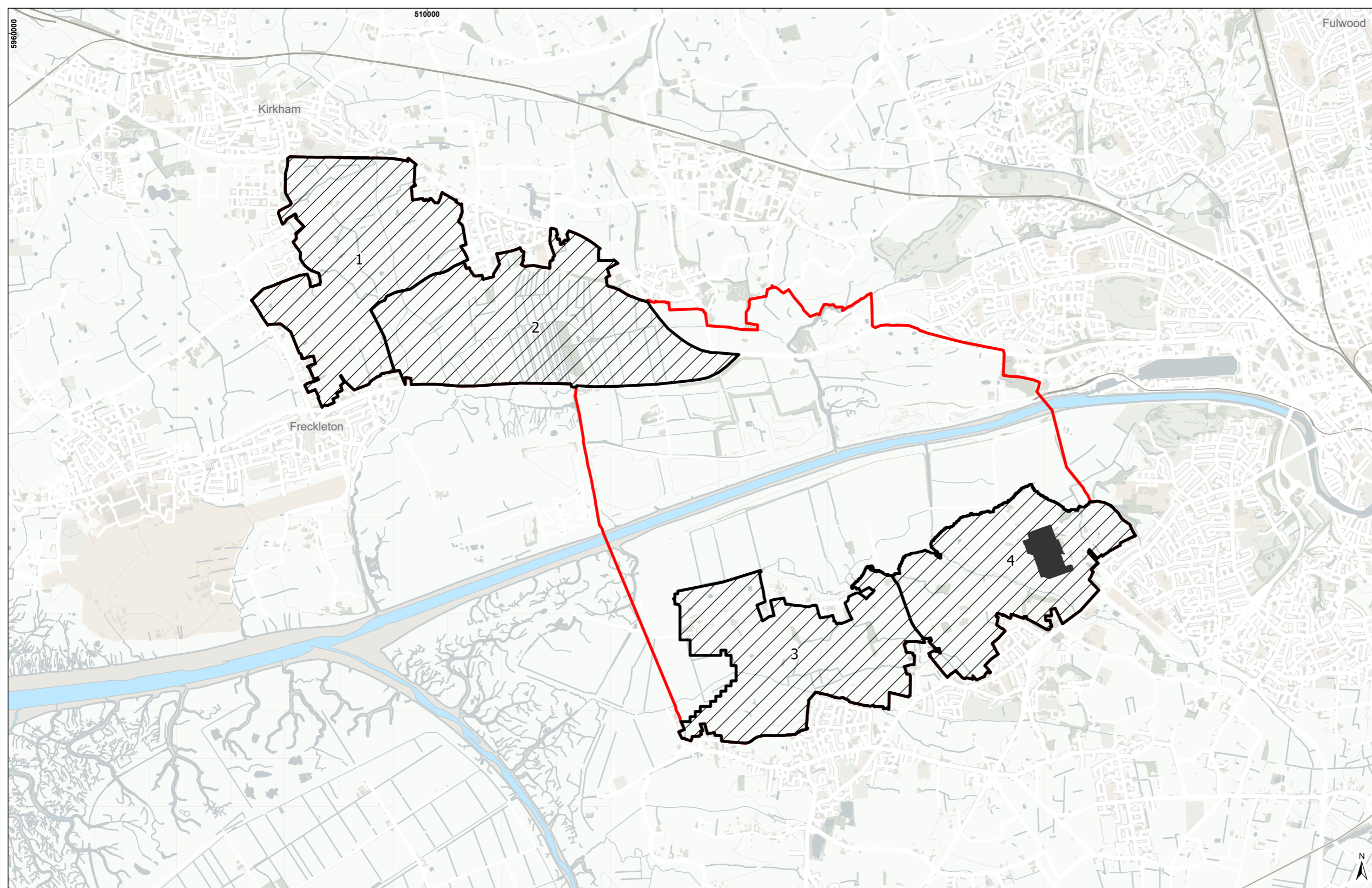


Drawing Number:

BP-GBR-MORG-REG-0152

VER	DATE	DETAILS	BY	CHECK
00	13/09/24	Initial Issue	GM	LM



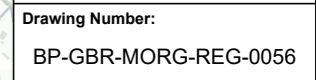
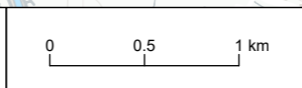


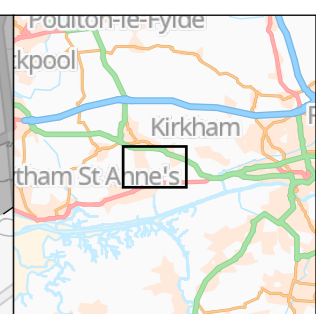
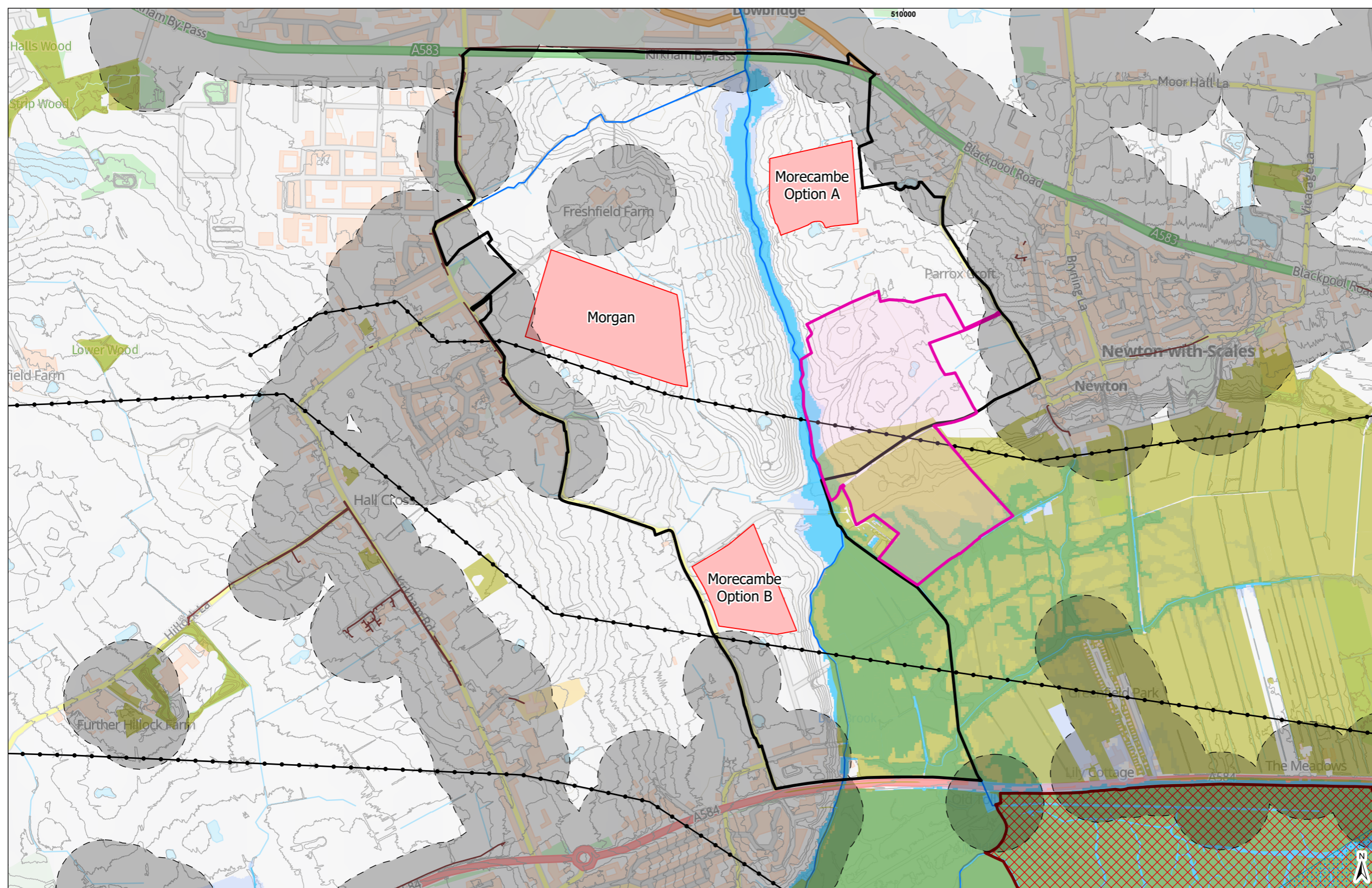
- LEGEND**
- Substation Search Area
 - Penwortham National Grid Substation
 - Potential Substation Location Zones



Drawing Number:
BP-GBR-MORG-REG-0056

VER	DATE	DETAILS	BY	CHECK
00	09/29/23	Initial Issue	HAH	LS



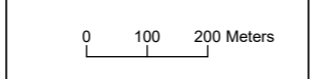


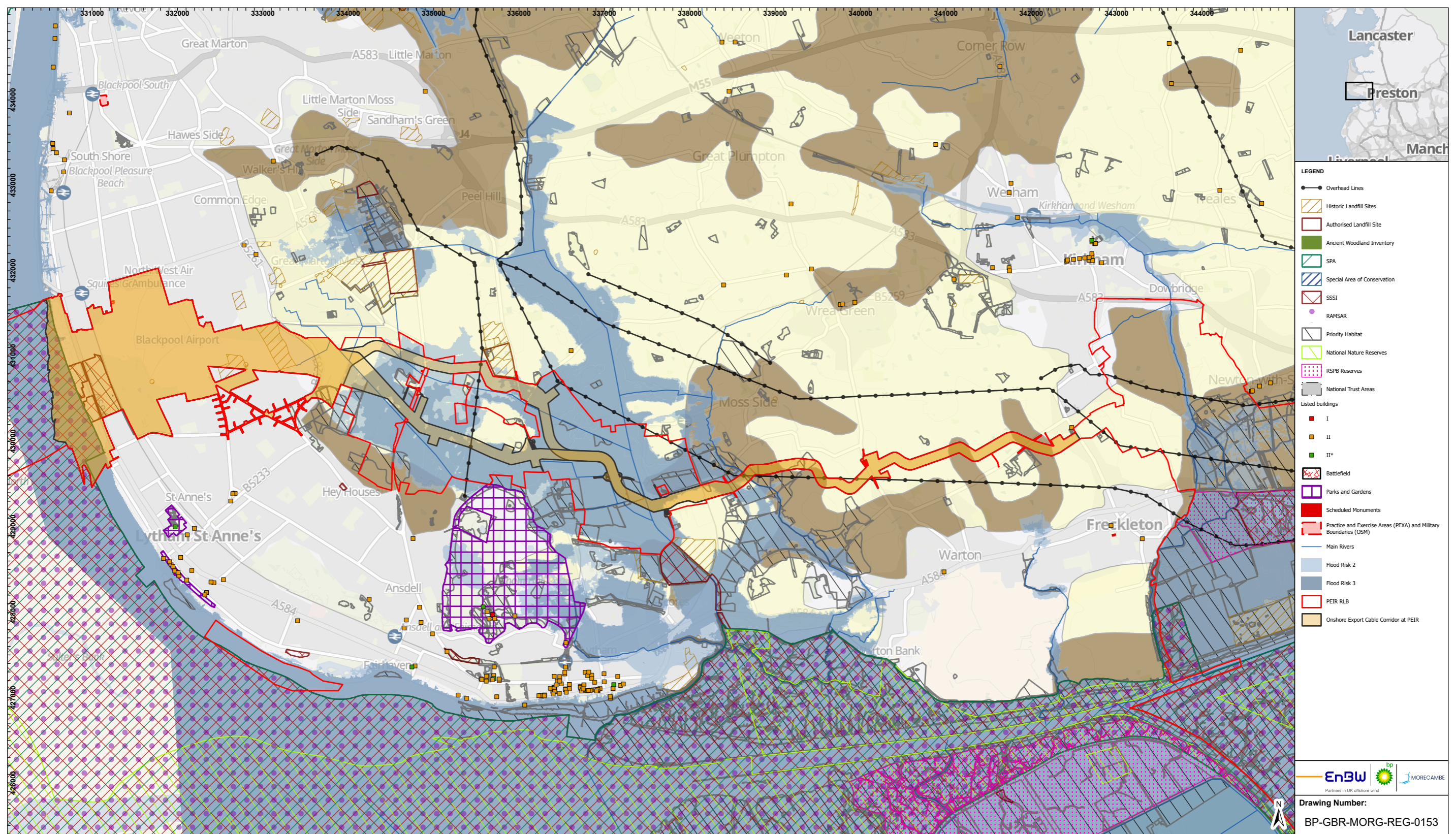
- LEGEND**
- Preferred Onshore Substation Permanent Area
 - Substation Statutory Consultation Area
 - Bluefield Development Solar Farm
 - Source Protection Zones
 - Sites of Special Scientific Interest
 - Priority Habitat
 - Flood Risk 3
 - Flood Risk 2
 - Main Rivers
 - Overhead Lines
 - Gas Main
 - 150m Residential Buffers



Drawing Number:
BP-GBR-MORG-REG-0058

VER	DATE	DETAILS	BY	CHECK
00	15/04/24	Initial Issue	GM	HK

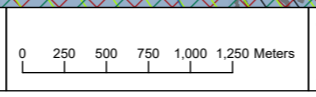




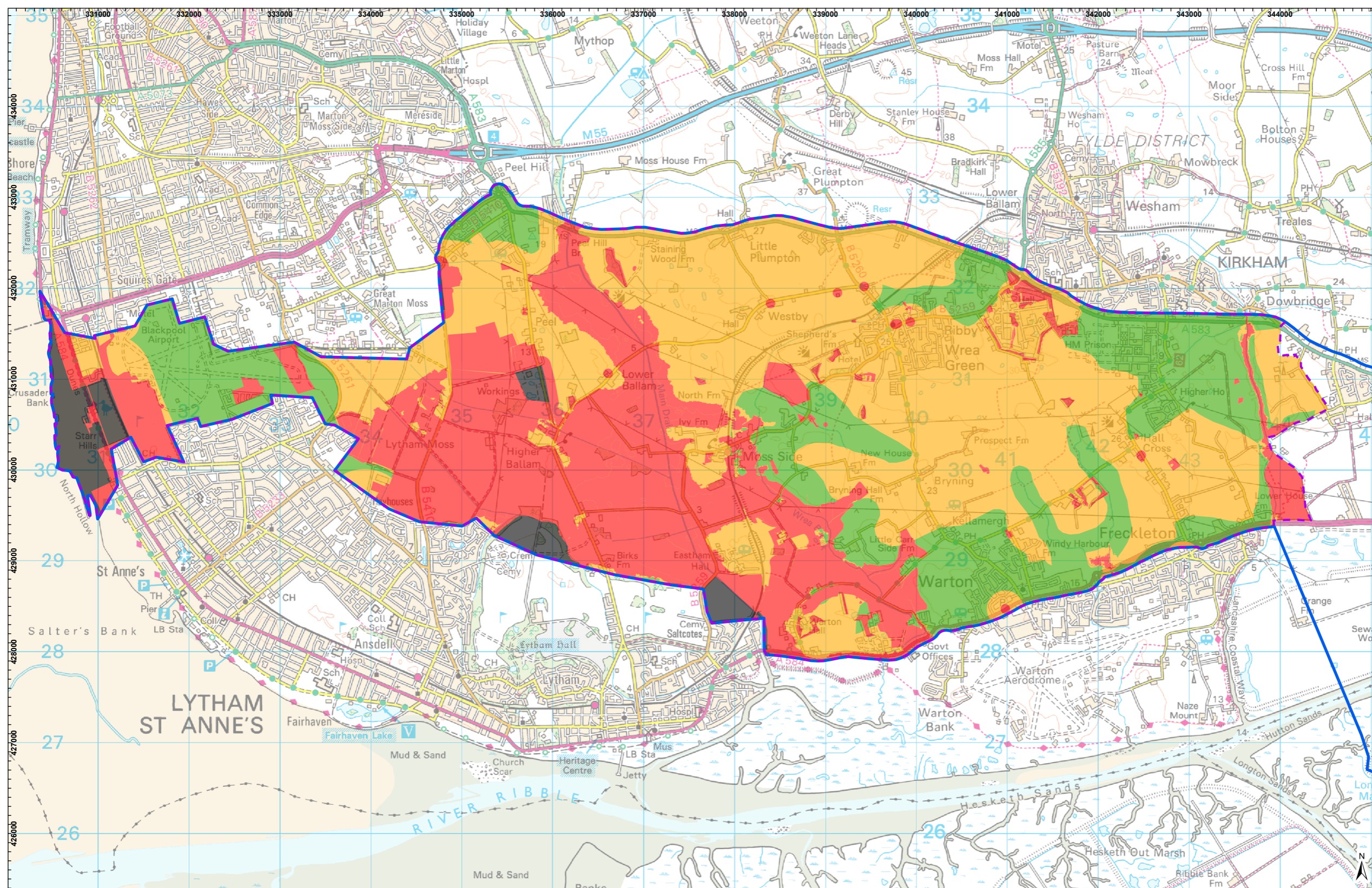
- LEGEND**
- Overhead Lines
 - ▨ Historic Landfill Sites
 - ▭ Authorised Landfill Site
 - Ancient Woodland Inventory
 - ▭ SPA
 - ▨ Special Area of Conservation
 - ▨ SSSI
 - RAMSAR
 - ▭ Priority Habitat
 - ▨ National Nature Reserves
 - ▨ RSPB Reserves
 - ▨ National Trust Areas
 - Listed buildings:
 - I
 - II
 - II*
 - ▨ Battlefield
 - ▨ Parks and Gardens
 - ▨ Scheduled Monuments
 - ▨ Practice and Exercise Areas (PEXA) and Military Boundaries (OSM)
 - Main Rivers
 - Flood Risk 2
 - Flood Risk 3
 - ▨ PEIR RLB
 - ▨ Onshore Export Cable Corridor at PEIR



Drawing Number:
BP-GBR-MORG-REG-0153



VER	DATE	DETAILS	BY	CHECK
00	13/09/24	Initial Issue	GM	LM



LEGEND

- Penwortham OFTO Scoping Search Area
- Onshore Export Cable Corridor Search Area

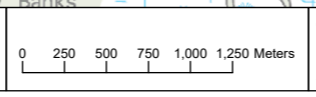
BRAG Assessment

- Amber BRAG Constraint
- Black BRAG Constraint
- Unconstrained for Routing
- Red BRAG Constraint

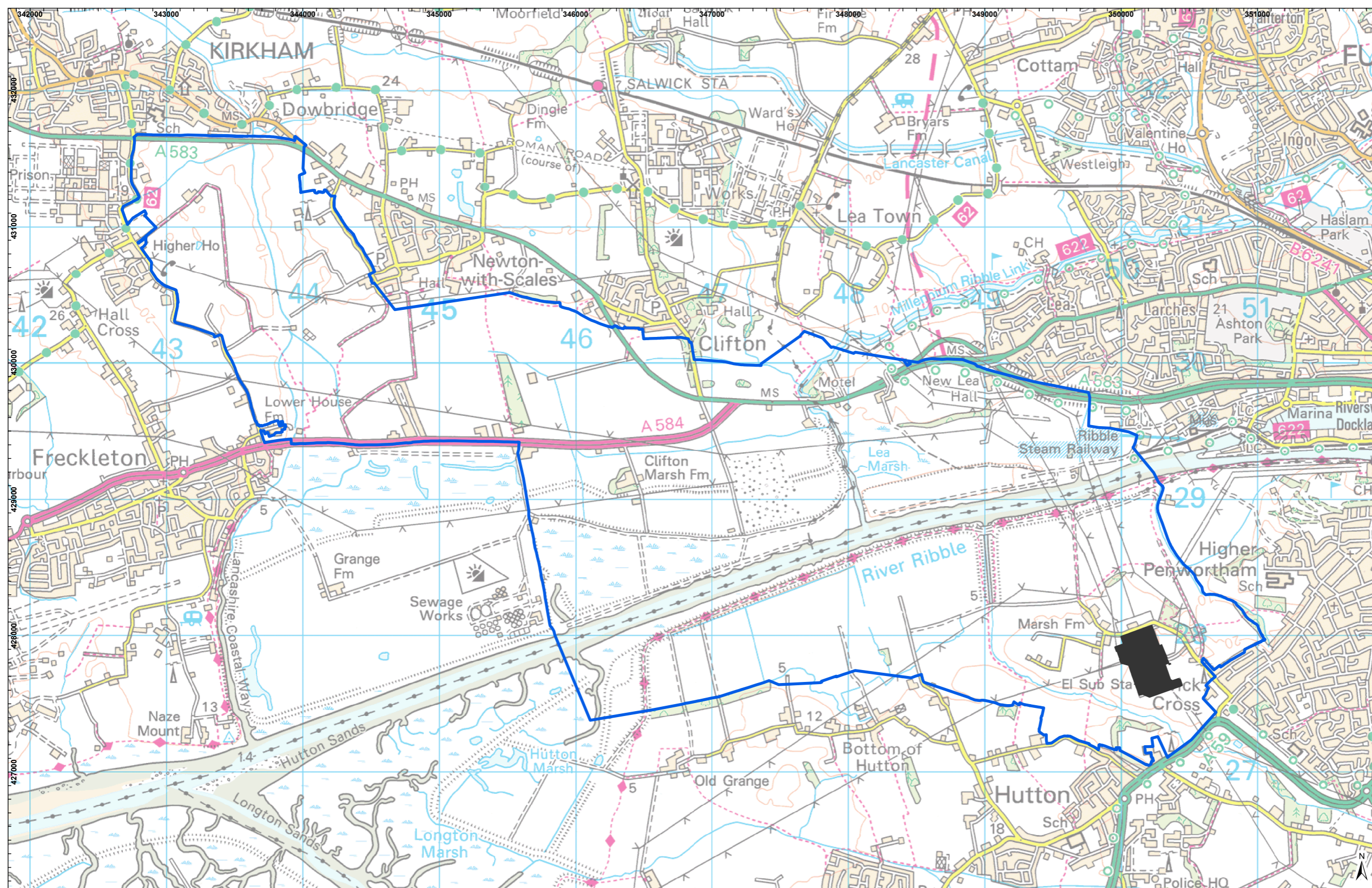
EnBW

Partners in UK offshore wind

Drawing Number:
BP-GBR-MORG-REG-0154



VER	DATE	DETAILS	BY	CHECK
00	13/09/24	Initial Issue	GM	LM



LEGEND

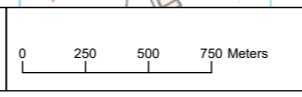
- Onshore Infrastructure Boundary
- Penwortham National Grid Substation



Drawing Number:
BP-GBR-MORG-REG-0155

MORGAN AND MORECAMBE
OFFSHORE WINDFARMS:
TRANSMISSION SITE SELECTION

400KV GRID CONNECTION CABLE CORRIDORS
SEARCH AREA AT STAGE 3D

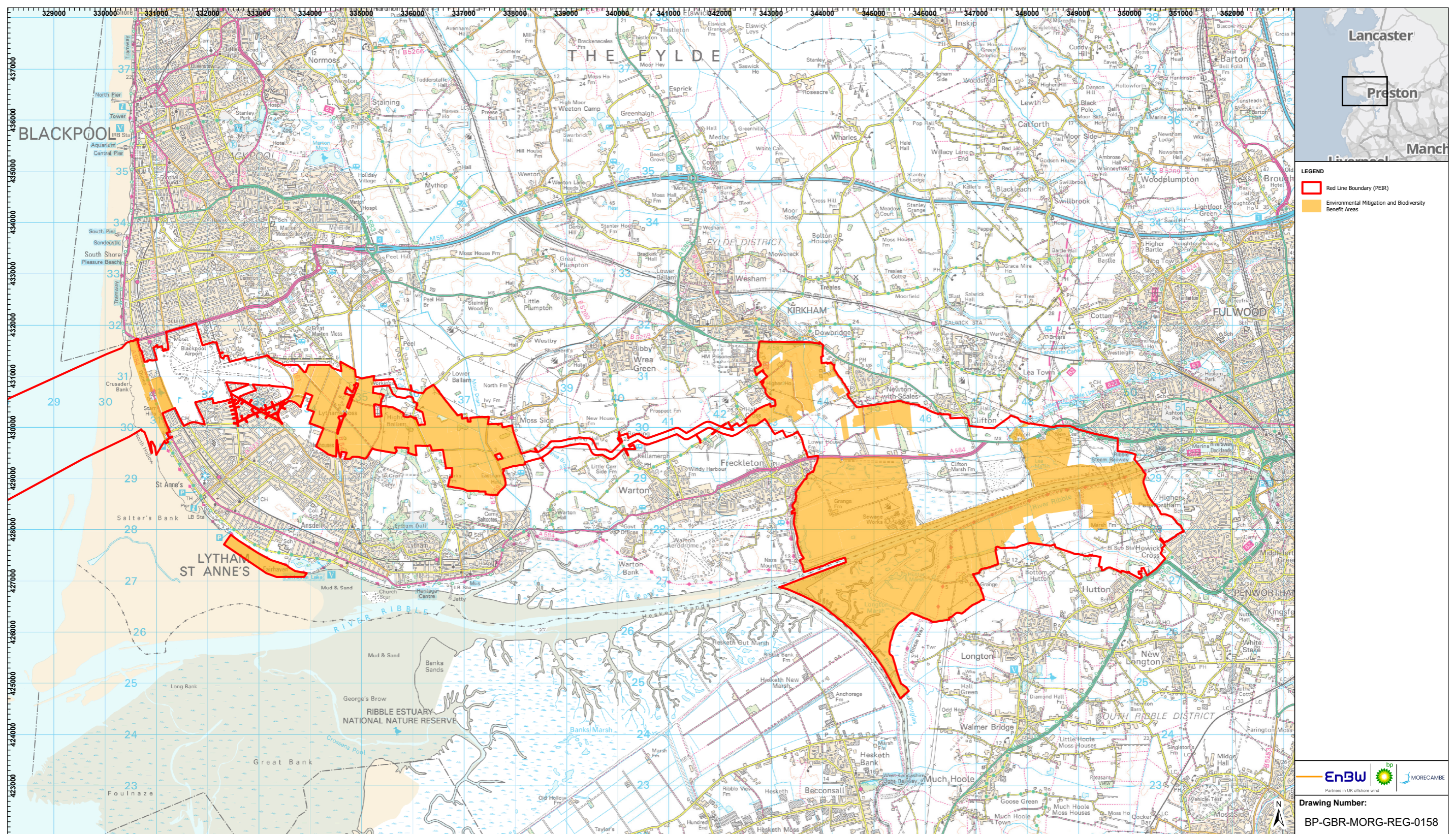


Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:30,000

Figure 4.16

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

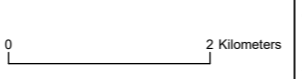
- Red Line Boundary (PEIR)
- Environmental Mitigation and Biodiversity Benefit Areas

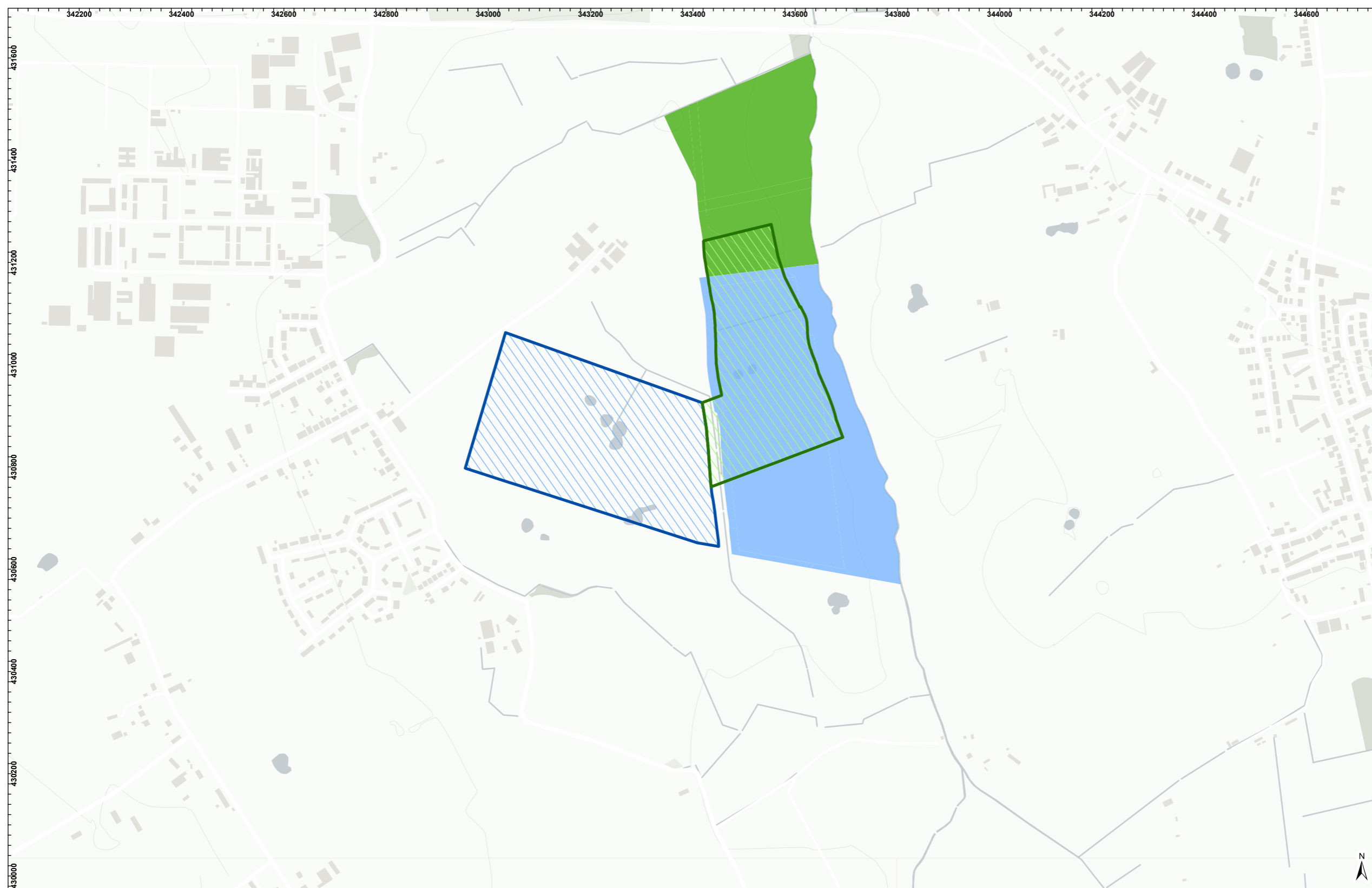






Drawing Number:

BP-GBR-MORG-REG-0158

VER	DATE	DETAILS	BY	CHECK
00	13/09/24	Initial Issue	GM	LM





- LEGEND**
- Label
-  Morgan Onshore Substation at PEIR
 -  Morgan Compound Works at PEIR
- Morgan Onshore Substation and Compound Works at DCO
- Label
-  Morgan Onshore Substation at DCO
 -  Morgan Compound Works at DCO

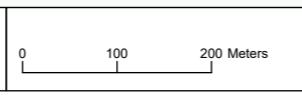


Drawing Number:
BP-GBR-MORG-REG-0193



MORGAN AND MORECAMBE
OFFSHORE WINDFARMS:
TRANSMISSION SITE SELECTION

MORGAN PEIR SUBSTATION SITE AND DCO
SUBSTATION SITE

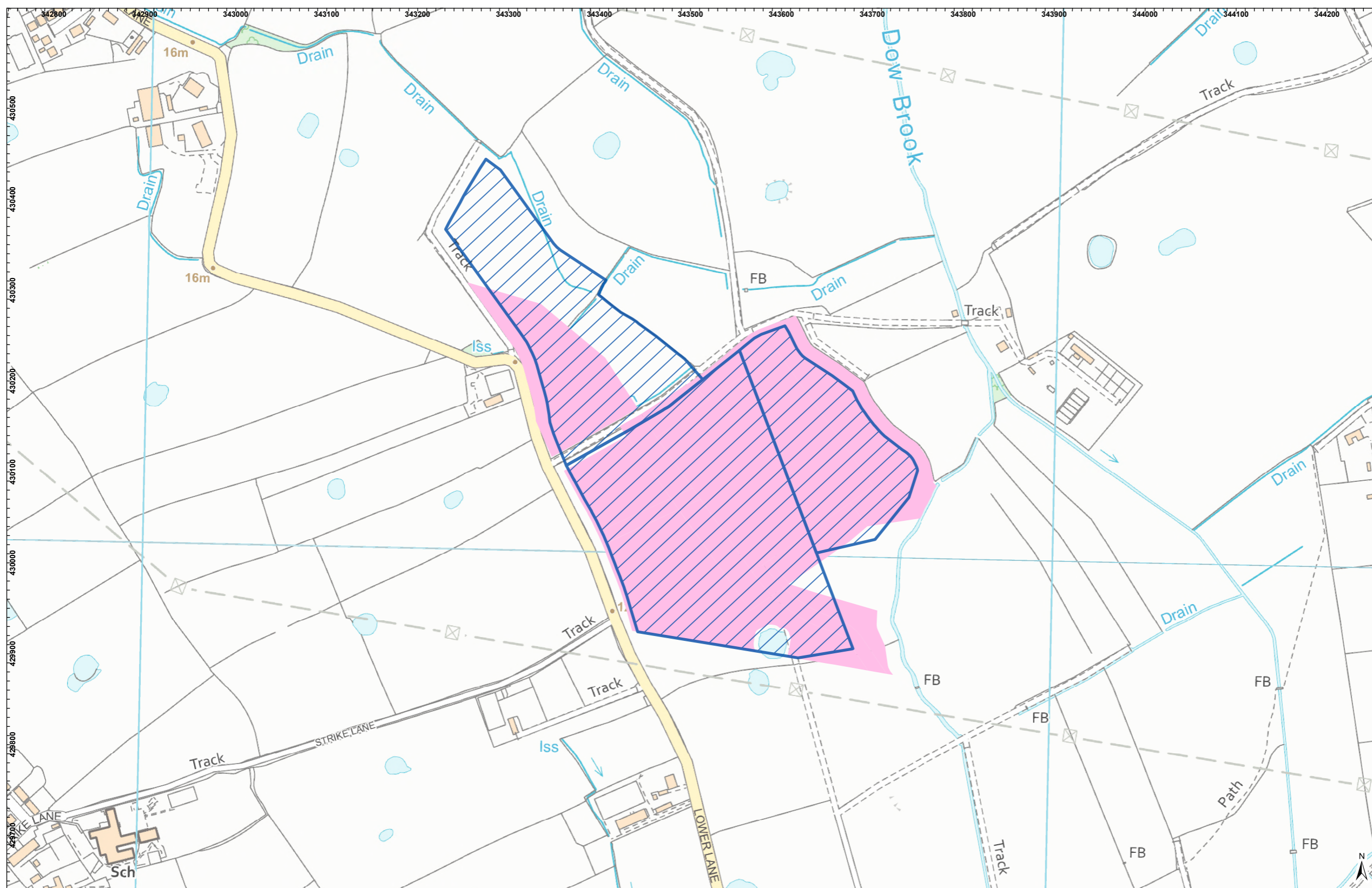


Geodetic Information:
Datum: OSGB 1936
Projection: British National Grid
Scale@379mmx231mm: 1:8,000

Figure 4.18

Service Layer Credits: GB Background: Contains OS data © Crown Copyright and database right 2022
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00	26/09/24	Initial Issue	GM	AT



LEGEND

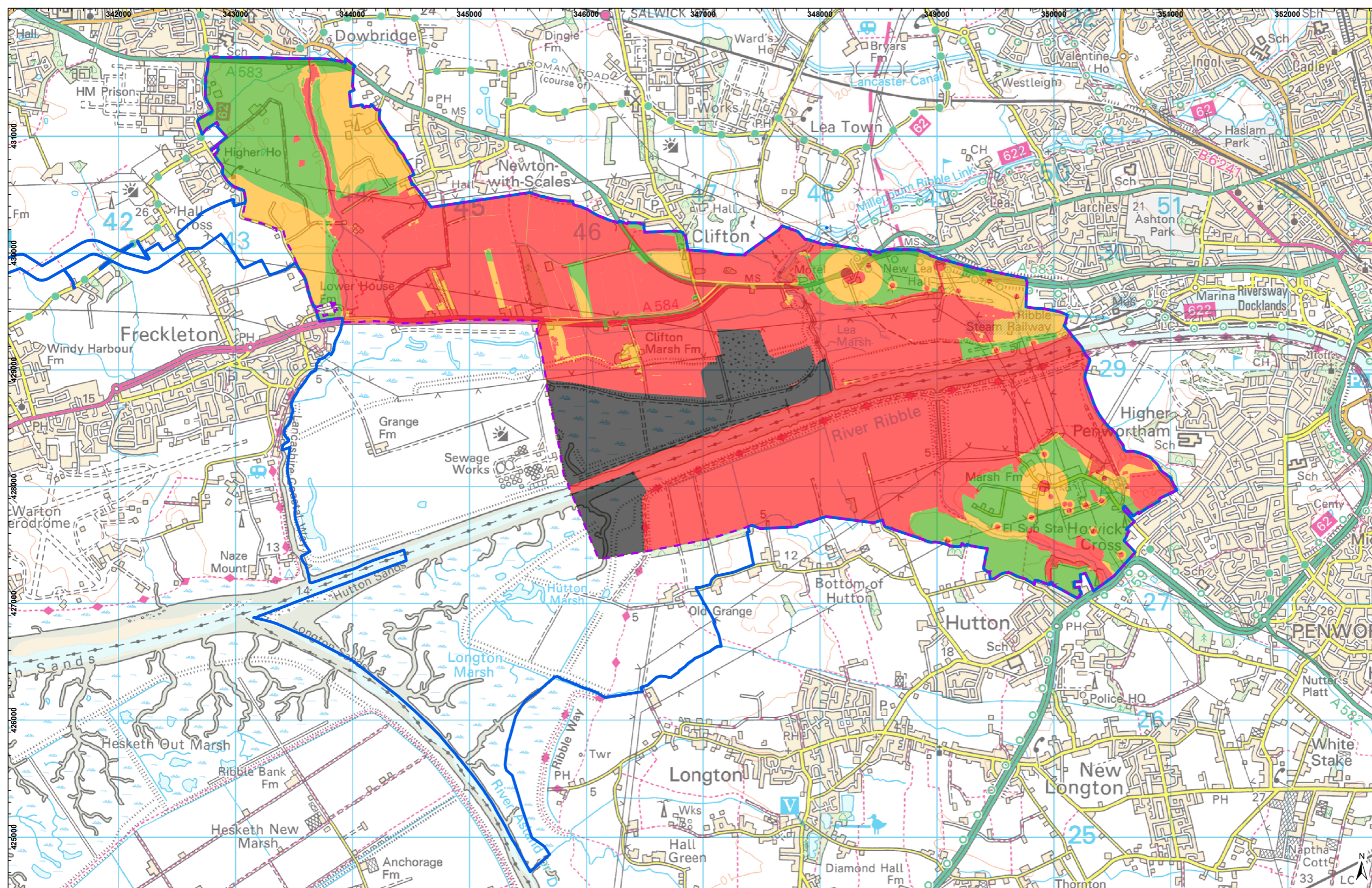
- Morecambe Substation Areas at PEIR
- Morecambe Substation Areas at DCO

Partners in UK offshore wind

Drawing Number:
N/A



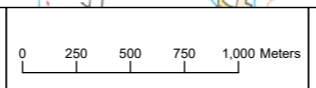
VER	DATE	DETAILS	BY	CHECK
01	26/09/24	Initial Issue	SWM	IM



- LEGEND**
- Transmission Assets Redline Boundary (PEIR)
 - 400kV Grid Connection Cable Corridor Search Area
- BRAG Assessment**
- Amber BRAG Constraint
 - Black BRAG Constraint
 - Unconstrained for Routing
 - Red BRAG Constraint



Drawing Number:
BP-GBR-MORG-REG-0161



VER	DATE	DETAILS	BY	CHECK
00	13/09/24	Initial Issue	GM	LM