

Morecambe Offshore Windfarm: Generation Assets Environmental Statement

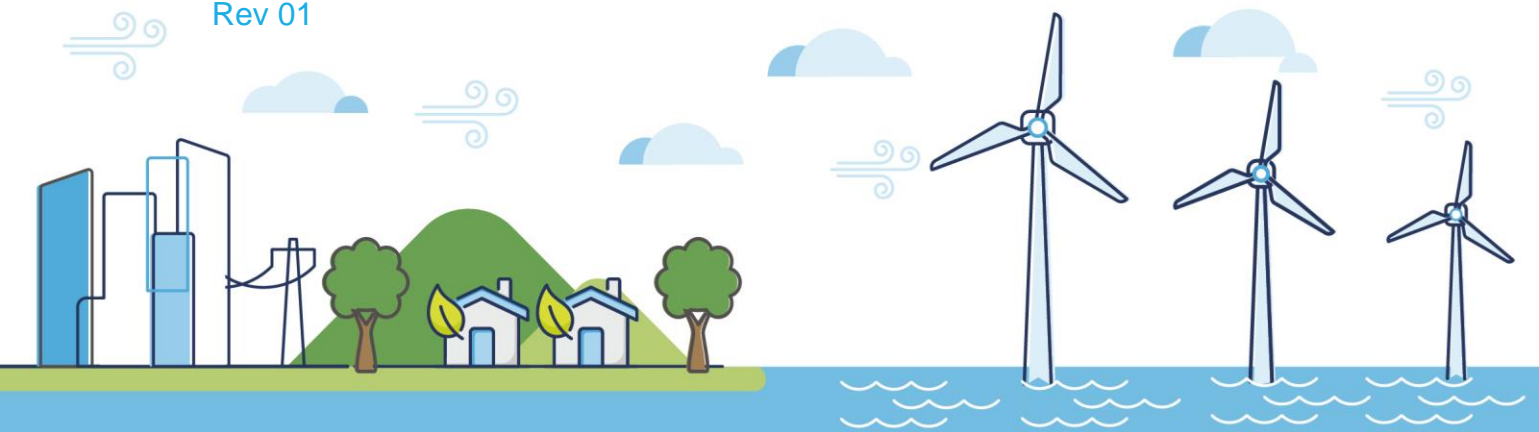
Volume 5

Chapter 8 Marine Sediment and Water Quality

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APFP Regulation: 5(2)(a)

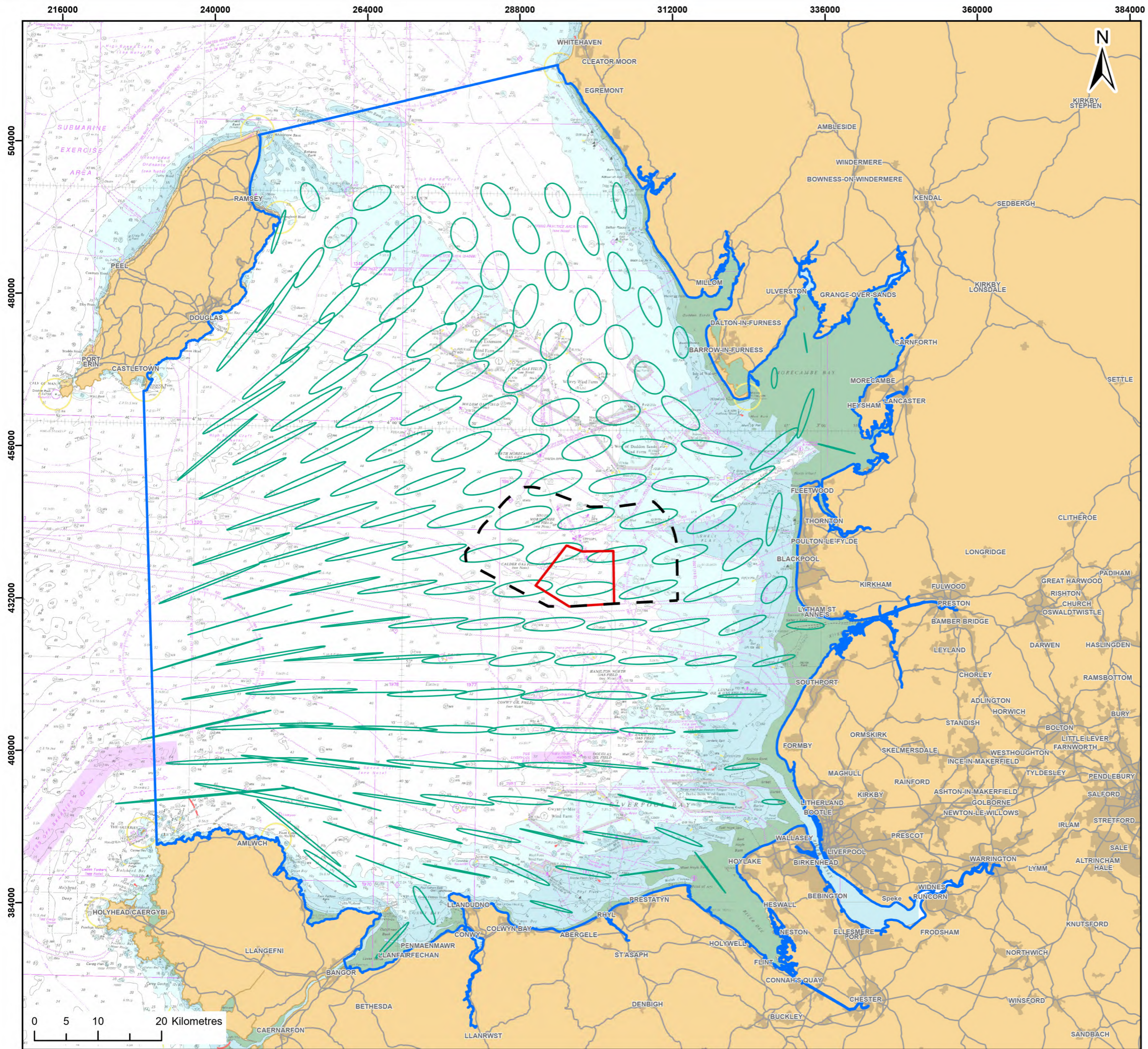
Rev 01



Document History

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01	May 2024	Approved for Use	Royal HaskoningDHV	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a



Legend:

- Morecambe Offshore Windfarm Site
- Zone of Influence (Zoi) on the tidal regime
- Spring tidal ellipses
- Study Area

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Report:
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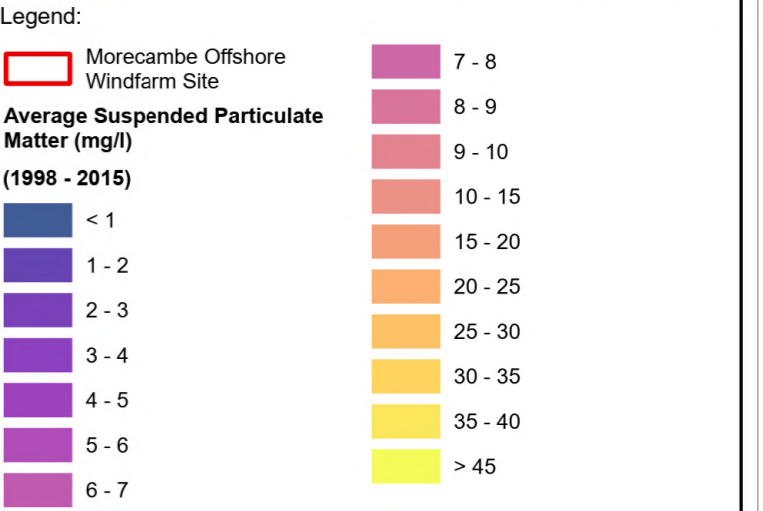
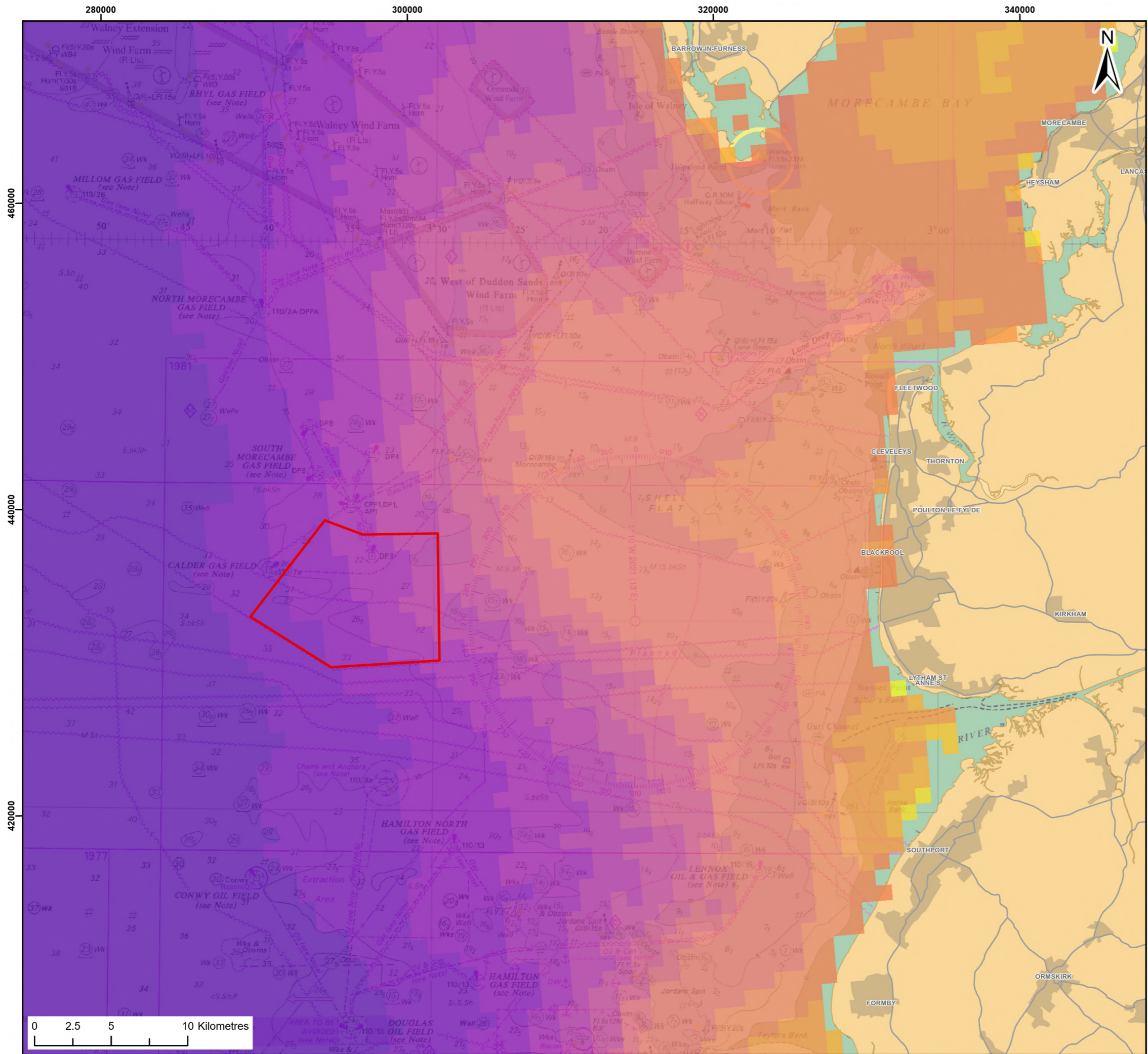
Title:
Study Area for Marine Sediment and Water Quality

Figure: 8.1 **Drawing No:** PC1165-RHD-ES-OF-DR-Z-0016

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	20/03/2024	JH	SB	A3	1:600,000

Co-ordinate system: WGS 1984 UTM Zone 30N





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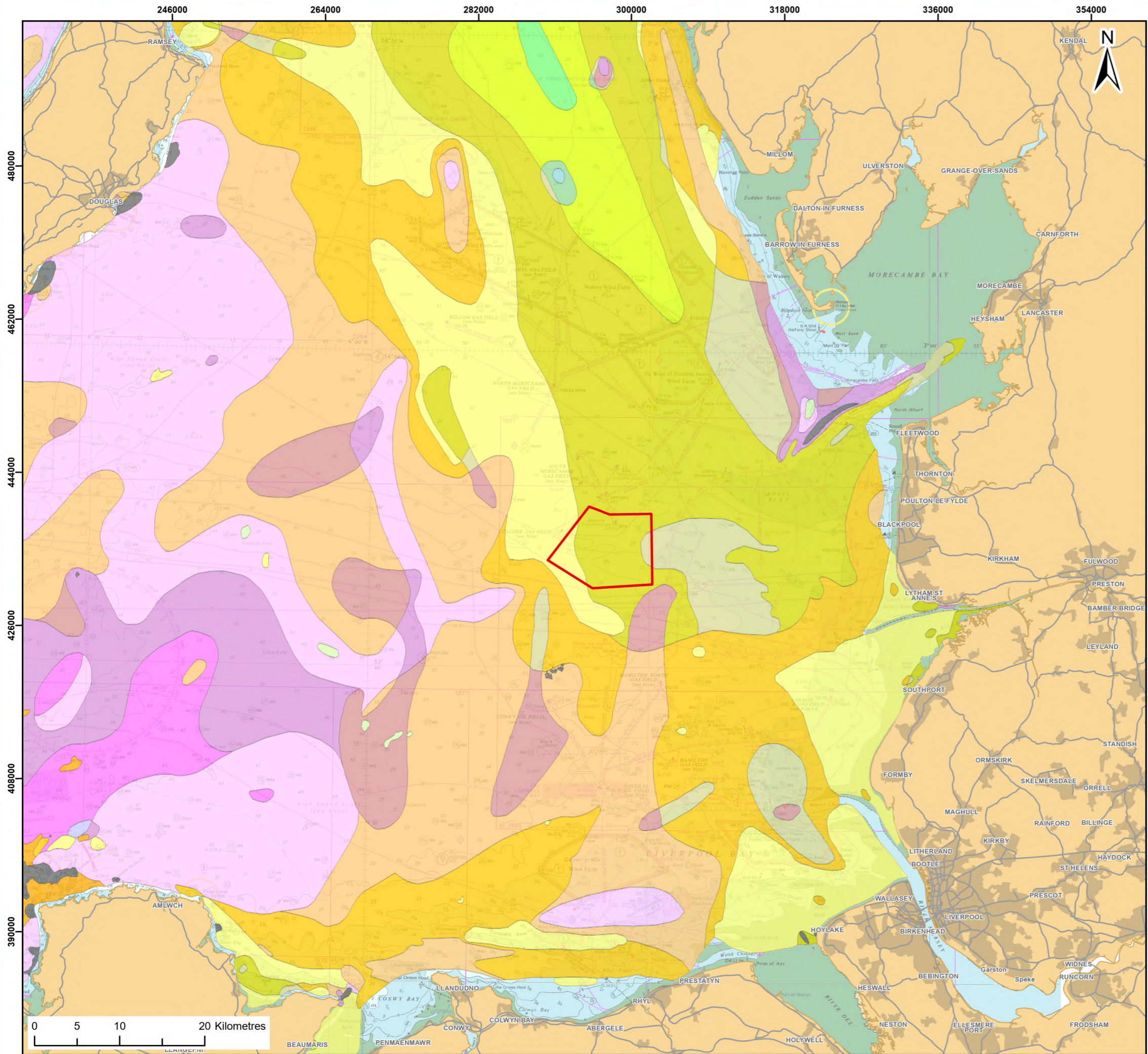
Title:
Suspended sediment concentrations (Cefas, 2016)

Figure: 8.2 Drawing No: PC1165-RHD-ES-OF-DR-Z-0017

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	20/03/2024	JT	GC	A3	1:250,000

Co-ordinate system: WGS 1984 UTM Zone 30N





Legend:

Morecambe Offshore Windfarm Site	MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), SAND, MARINE
Seabed Sediments	MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), SAND, MARINE, GRAVELLY
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), GRAVEL, MARINE, MUDDY, SANDY	MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), SAND, MARINE, GRAVELLY, MUDDY
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), GRAVEL, MARINE	MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), SAND, MARINE, MUDDY
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), GRAVEL, SANDY, MARINE	MARINE SEDIMENTS, PLEISTOCENE (UNDIFFERENTIATED), MUD
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), MUD	PALAEOZOIC OR QUATERNARY ROCK AND SEDIMENT (UNDIFFERENTIATED) [OFFSHORE ONLY], ROCK (UNDIFFERENTIATED) and SEDIMENTS (UNDIFFERENTIATED)
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), MUD, MARINE, SANDY	PRE-QUATERNARY ROCKS (UNDIFFERENTIATED), ROCK (UNDIFFERENTIATED)
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), MUD, MARINE, GRAVELLY	
MARINE SEDIMENTS, HOLOCENE (UNDIFFERENTIATED), SAND, GRAVELLY, MUDDY	

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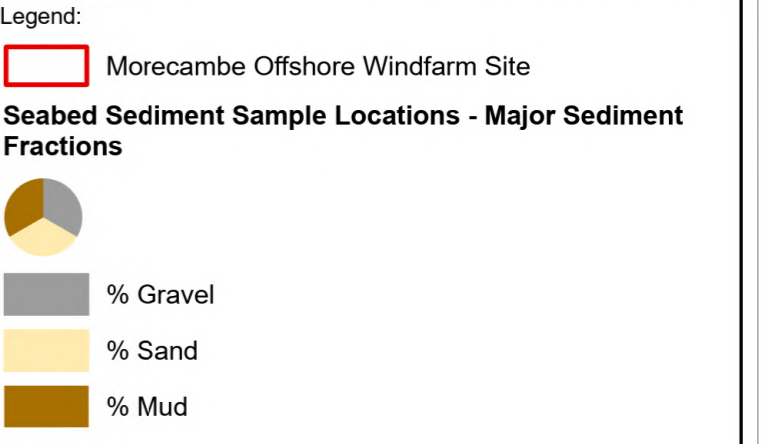
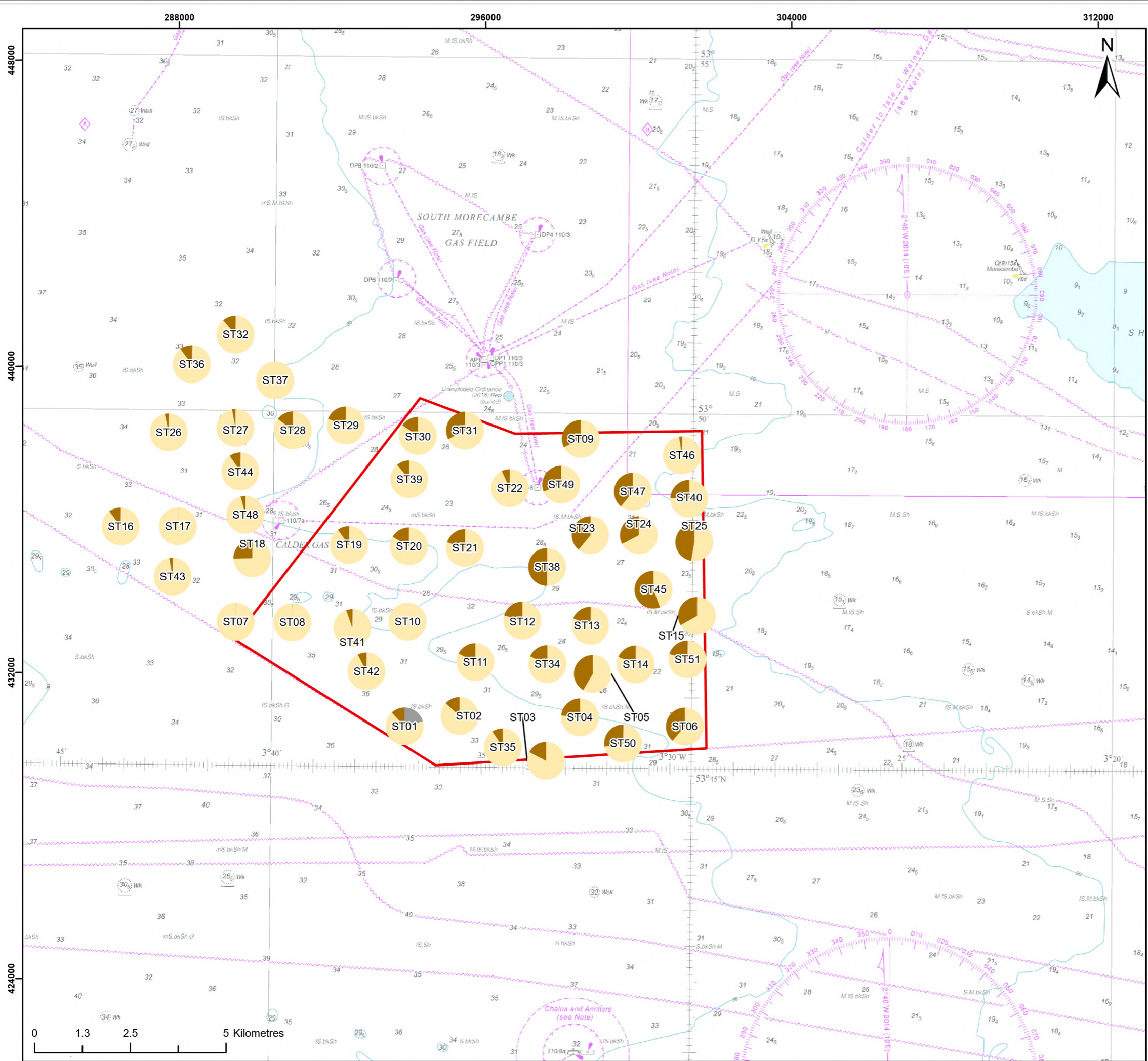
Title:
Seabed sediment types (British Geological Survey, 2015)

Figure: 8.3 Drawing No: PC1165-RHD-ES-OF-DR-Z-0018

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	03/11/2023	JT	GC	A3	1:450,000
P02	16/04/2024	JH	SB	A3	1:450,000

Co-ordinate system: WGS 1984 UTM Zone 30N





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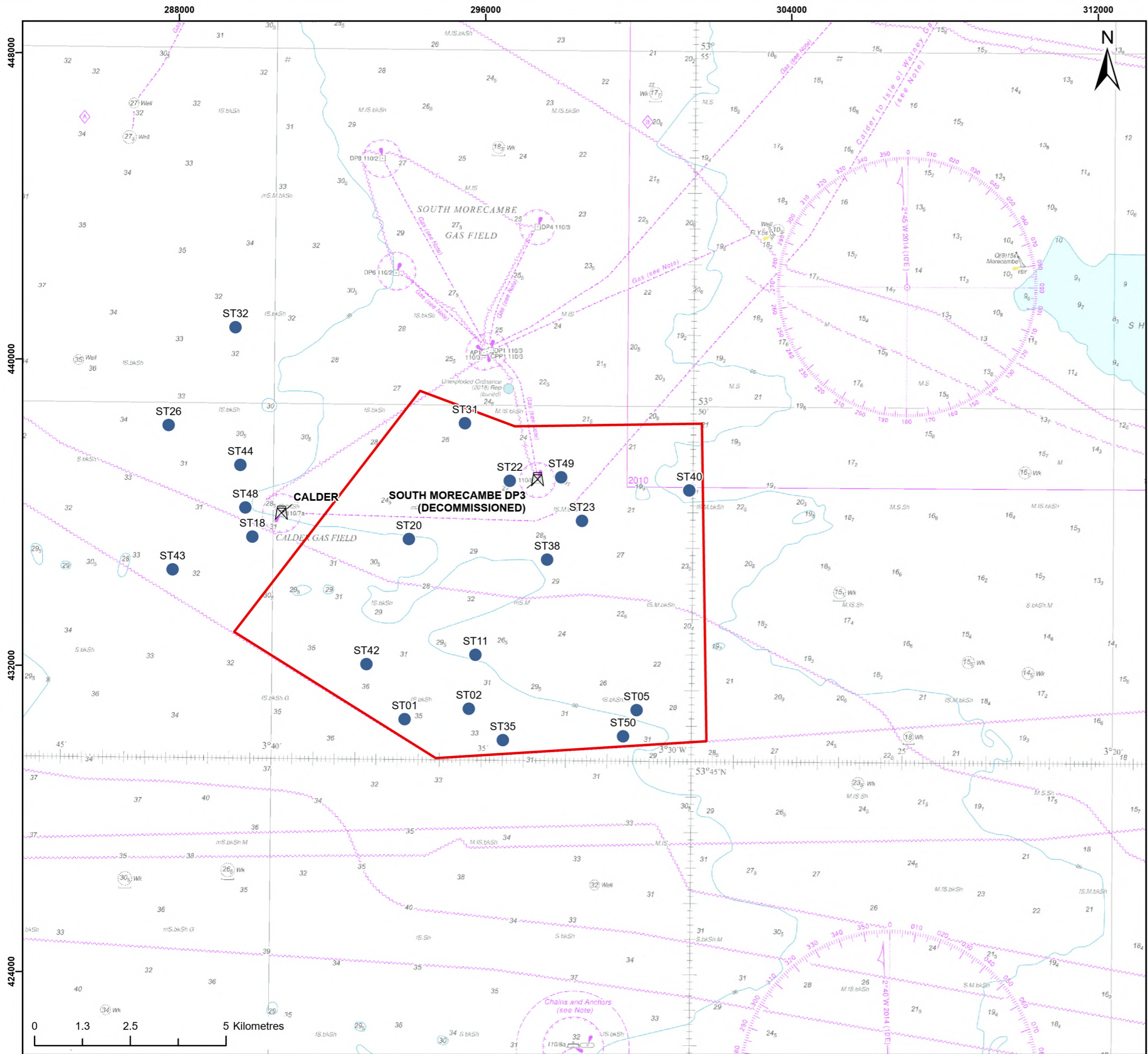
Title:
Site-specific sediment sampling locations (MMT, 2022)

Figure: 8.4 Drawing No: PC1165-RHD-ES-OF-DR-Z-0019

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	20/03/2024	JH	SB	A3	1:100,000

Co-ordinate system: WGS 1984 UTM Zone 30N





- Legend:**
- Morecambe Offshore Windfarm Site
 - Survey sampling locations for contaminants
- Oil & Gas Infrastructure**
- ⊠ Offshore platform

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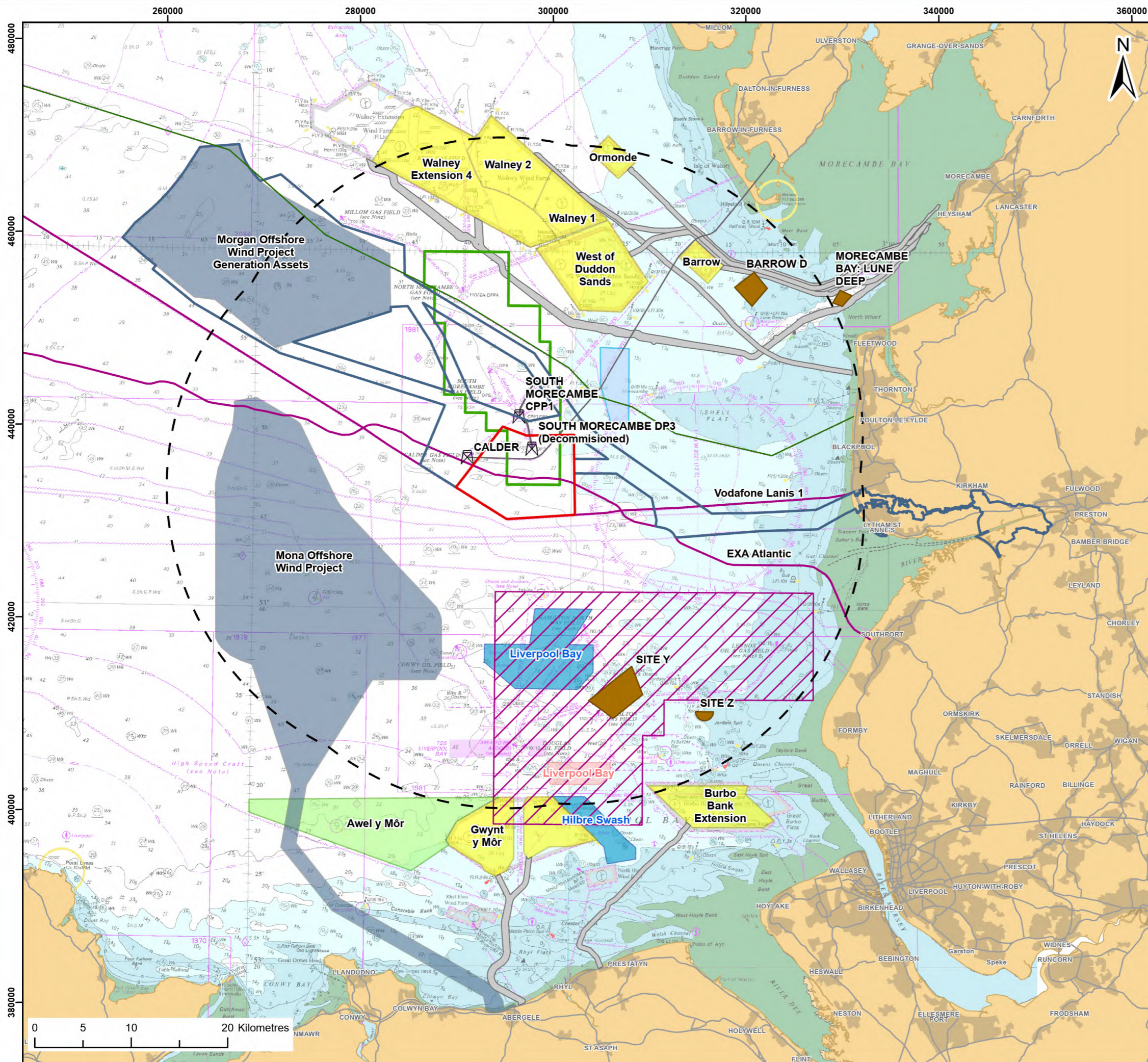
Title:
Site-specific survey sampling locations for contaminants (Ocean Ecology Limited, 2022)

Figure: 8.5 Drawing No: PC1165-RHD-ZZ-OF-DR-Z-0020

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	24/04/2024	JT	GC	A3	1:100,000

Co-ordinate system: WGS 1984 UTM Zone 30N





Legend:

- Morecambe Offshore Windfarm Site
- Morgan and Morecambe Offshore Wind Farms: Transmission Assets (In Planning)
- 30km CEA screening buffer
- Disposal Sites
- Gateway Gas Storage Project
- Carbon Capture Storage License (CS004)
- Carbon Capture Storage Area (EIS Area 1)
- Offshore Wind Cable Agreements
- Telecom cables
- Isle of Man Interconnector

Oil & Gas Infrastructure

- Offshore platform
- Oil & Gas Pipeline

Windfarm status

- Fully commissioned
- Consented
- In Planning

Minerals & Aggregates Site Agreements

- Exploration and Option Area
- Production Agreement Area

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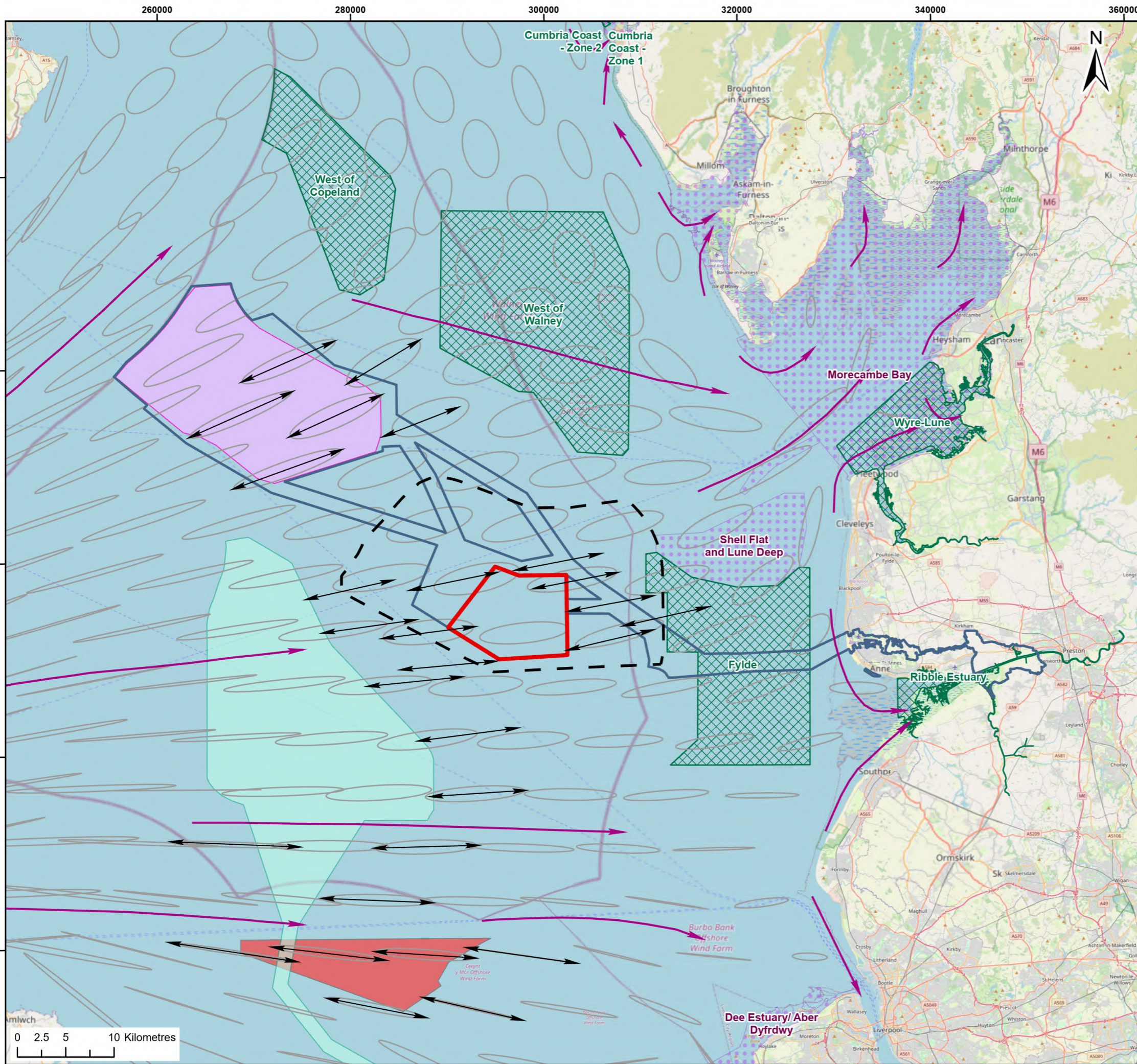
Title:
Other plans, projects and activities included in the Cumulative Effects Assessment for marine sediment and water quality

Figure: 8.6 Drawing No: PC1165-RHD-ES-OF-DG-Z-0093

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	05/03/2024	JH	SB	A3	1:400,000
P02	02/04/2024	JH	SB	A3	1:400,000

Co-ordinate system: WGS 1984 UTM Zone 30N





- Legend:**
- Morecambe Offshore Windfarm Site
 - Morgan and Morecambe Offshore Wind Farms: Transmission Assets (In Planning)
 - Mona Offshore Wind Project
 - Morgan Offshore Wind Project Generation Assets
 - Awel y Môr Offshore Wind Farm
 - Spring tidal ellipse
 - Suspended sediment transport directions
 - Sediment transport pathways
 - Marine Conservation Zone
 - Special Areas of Conservation
 - Zone of Influence (ZOI) on the tidal regime

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Title:
Conceptual map of sediment transport directions from disturbance activities

Figure: 8.7 **Drawing No:** PC1165-RHD-ES-OF-DG-Z-0094

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P01	20/03/2024	JH	SB	A3	1:400,000

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