THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007 (AS AMENDED) MARINE LICENCE APPLICATION CML2365 – HYNET CARBON DIOXIDE TRANSPORTATION AND STORAGE PROJECT – OFFSHORE

Applicant response to Request for Further Clarification dated 11 October 2024.

General Comments:

1. Mitigation of impacts to Port of Mostyn activities:

please provide confirmation of cable burial depth and duration of the cable burial activities across the Outer Welsh Channel.

Eni Response: The applicant confirms that the cable shall be buried 3m below seabed. This is below the 9m LAT C.D., as requested by PoM.

Along the route of Welsh channel, it is expected that the cable burial depth between will be 10 - 12.5m LAT C.D. We therefore confirm that PoM requirements shall be met regarding burial depth.

2. List of mitigation plans:

A number of mitigation are proposed to be secured through the provision of specific plans. It is our understanding that the Environmental Management Plan will include the following subplans: Marine Pollution Contingency Plan (MPCP); Invasive Non-Native Species Management Plan (INNSMP); Marine Mammal Mitigation Plan (MMMP), the Written Scheme of Archaeological Investigation (WSI) and Protocol for Archaeological Discoveries (PAD). There will also be a Construction Method Statement (CMS); a Cable Specification and Installation Plan (CSIP, which includes the Cable Burial Risk Assessment (CBRA)); a Vessel Management Plan (VMP, or VTMP), and a Navigational Safety Plan (NSP). For completeness please provide us with a list of all plans which are proposed to be submitted for approval post consent and a brief description of their content. Please also ensure that the Pipeline Specification and Installation Plan (PSIP) is included in the list as we understand this will also be a plan that requires approval post-consent through the marine licensing process.

Eni Response: The works that will be carried out between mean high water springs (MHWS), and mean low water springs (MLWS), fall under the jurisdiction of both the Marine Licencing, and Town and Country Planning regimes. There are several plans that are required through the conditions of both respective regimes. The Applicant can confirm that the plans set out in **Table 2.1** will be prepared and submitted for approval, prior to the commencement of construction. **Table 2.1** therefore presents the name of the plan, the regime under which it is required, and an overview of the content of each plan.

References to the TCPA planning application in Table 2.1 are referring to the planning permission granted by Flintshire County Council (FCC) in **FUL/000246/23**, 10 January 2024, accessible here: Decision -

FUL/000246/23 - A - Full application - Retention and use of existing structures, plant and ancillary development (including access roadway and landscaping) forming the Point of Ayr gas terminal for the transport of CO2 and the demolition/removal of r.

Table 2.1: Plans to be submitted for prior approval

Plan name	Permit/Consent	Main contents
Construction Environmental Management Plan (CEMP)	Town and Country Planning permission	The Applicant can confirm that it is fully committed to the effective management of environmental impacts during construction. The CEMP will demonstrate how the commitments in the ES will be implemented during the construction stage and describes any wider monitoring and auditing activities needed to ensure that mitigation measures proposed are undertaken and prove effective. Please see Outline CEMP submitted with the TCPA Planning Application. The detailed Construction Environmental Management Plan (CEMP) will be produced for the Proposed Development following the appointment of the Construction Contractor(s). It is considered likely that there will be more than one detailed CEMP prepared for the Proposed Development, for example separate CEMPs to cover different sites or phases of the development. This will be determined by the appointed Construction Contractor(s) once the detailed design and construction programme have been progressed. Under the terms of **Condition 8 of the TCPA**, no phase of the authorised development must commence until a CEMP relating to that phase and location has been submitted to, and approved by, Flintshire County Council.
Environmental Management Plan (EMP)	Marine Licence, and Storage Permit	The Applicant can confirm that it is fully committed to the effective management of environmental impacts during construction. The EMP is a key construction document and will ensure all monitoring and mitigation commitments included as part of the Offshore ES, including those that are considered necessary to reduce potential impacts, are implemented. The EMP does not apply to the onshore infrastructure for the Proposed Development landward of MHWS. Those activities are covered by the CEMP described above. Please see **Environmental Management Plan in the Offshore ES at Volume 4, Appendix R**. The EMP provides a tool to ensure all the mitigation measures and monitoring commitments made in the Offshore ES are implemented. The EMP provides information on the Proposed Development, detailing the appropriate measures for the avoidance, minimisation, and control of any environmental impacts associated with the Proposed Development identified as part of the Offshore EIA. It also provides a framework for monitoring the environment. The EMP will be finalised and adopted prior to the construction phase of the Proposed Development and will also be reviewed and updated prior to being adopted for the operation and maintenance phase and similarly for the decommissioning phase.
Marine Mammal Mitigation Plan (MMMP)	Marine Licence, and Storage Permit	Please see detailed response to **Question 29**. The Applicant can confirm that it is fully committed to the preparation of and adherence to a MMMP. The Applicant has anticipated that a MMMP is likely to be required through the Storage Permit, and Marine Licence, as consent conditions.
Vessel Management Plan (VMP)	Marine Licence, and Storage Permit	Please see detailed response to **Question 26**. The Applicant can confirm that it is fully committed to the preparation of and adherence to a VMP. The Applicant has anticipated that a VMP is likely to be required through the Storage Permit, and Marine Licence, as consent conditions.
Navigational Safety Plan (NSP)	Marine Licence, and Storage Permit	The Applicant can confirm that it is fully committed to navigational safety during implementation of the Proposed Development. Navigational safety measures will be included in the VMP. Offshore platforms will be fitted with navigational markings and equipment as per the Standard Marking Schedule for Offshore Installations, and as required by the Offshore Installations and Pipeline Works (Management and Administration) Regulations 1995.

Plan name	Permit/Consent	Main contents
Invasive Non-Native Species Management Plan (INNSMP)	Marine Licence, and Storage Permit	Please see **INNS Management Plan in the Offshore ES at Volume 4, Appendix T**. The Applicant is committed to the prevention of INNS through its own procedures and the requirements if international conventions. The purpose of the INNSMP is to set out the approach to INNS management and mitigation in respect of the Proposed Development. The management plan will provide an outline of the measures proposed to be implemented to facilitate biosecurity control and to minimise potential impacts on the local and wider environment. The INNSMP will ensure all procedures pertaining to marine works (including construction, operation and maintenance and decommissioning of subsea structures) and vessel operations follow best practice guidance,
Biosecurity Risk Assessment (BRA)	Marine Licence	The Applicant is committed to the prevention of INNS through its own procedures and the requirements if international conventions. Once Contractors are appointed and vessel names are known, prior to the commencement of development, the Applicant will complete the NRW Biosecurity Plan Template. The Biosecurity Plan will be used by the Applicant and its Contractors to minimise the risks posed by marine invasive non-native species (INNS), particularly related to minimising spread to new areas. It is difficult to directly manage INNS in the marine environment once they are present, therefore, prevention is key which is recognised in the GB Invasive Non-native Species Strategy (2015)
Cable Specification ad Installation Plan (CSIP)	Marine Licence	The Applicant is committed to the development and adherence to a Cable Specification and Installation Plan (CSIP), post consent, which will include cable burial where possible (in accordance with the specific policies set out in the North West Inshore and North West Offshore Coast Marine Plans (HM Government, 2021)) and cable protection, as necessary. The CSIP will include a detailed CBRA to enable informed judgements regarding burial depth to maximise the chance of cables remaining buried whilst limiting the amount of sediment disturbance to that which is necessary. Measures will seek to reduce the amount of EMF which benthic and fish and shellfish receptors are exposed to during the operations and maintenance phase by increasing the distance between the seabed surface and the surface of the cables.
Cable Burial Risk Assessment (CBRA)	Marine Licence	The Applicant is committed to carrying out a CBRA, which will form part of the CSIP described above.
Written Scheme of Archaeological Investigation (WSI)	Town and Country Planning permission, and Marine Licence	The Applicant has prepared a WSI, which was included in the **Offshore ES, Volume 4, Appendix U**. The Applicant is committed to the implementation of the WSI, which sets out details demonstrating the mitigation for the Proposed Development, and how this mitigation will be enacted. The WSI has been produced in line with best practice guidance, in particular, Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects by The Crown Estate (2021). While this guidance was prepared for renewable energy projects, it has wider relevance to other projects in the marine environment, hence its utilisation.
Protocol for Archaeological Discoveries (PAD)	Town and Country Planning permission, and Marine Licence	The Applicant is committed to the implementation of the PAD. The responsibility for ensuring the implementation of the PAD; (**WSI, Appendix U1**) rests with the Applicant, and the Contractors are contractually bound to implement the PAD. The WSI has been produced in line with best practice guidance, particularly the Protocol for Archaeological Discoveries (PAD) for Offshore Renewables Projects introduced by The Crown Estate (The Crown Estate, 2014).
Landscape and Ecological Management Plan (LEMP)	Town and Country Planning permission	The Applicant is committed to the implementation of the LEMP as required by **Condition 9 of the TCPA**. Prior to the commencement of the Operational Phase a LEMP will be submitted to and approved in writing by Flintshire County Council. The LEMP will include all ecological and landscaping recommendations set out in the submitted ES.

Plan name	Permit/Consent	Main contents
Intertidal INNS Management Plan (I-INNSMP)	Town and Country Planning permission	The Applicant is committed to the implementation of the I-INNSMP as required by **Condition 8 of the TCPA**. Prior to the commencement of the Proposed Development an I-INNSMP will be included within the CEMP, and no phase of the authorised development will commence until thr CEMP, incorporating the I-INNSMP, relating to that phase and location has been submitted to, and approved by, Flintshire County Council.
Noise and Vibration Management Plan (NVMP)	Town and Country Planning permission	The Applicant is committed to the implementation of the NVMP as required by **Condition 8 of the TCPA**. Prior to the commencement of the Proposed Development a NVMP will be included within the CEMP, and no phase of the authorised development will commence until the CEMP, incorporating the NVMP, relating to that phase and location has been submitted to, and approved by, Flintshire County Council.
Stakeholder Communications Plan (SCP)	Town and Country Planning permission, and Storage Permit	The Applicant is committed to the implementation of the SCP as required by **Condition 8 of the TCPA**. Prior to the commencement of the Proposed Development a SCP will be included within the CEMP, and no phase of the authorised development will commence until the CEMP, incorporating the SCP, relating to that phase and location has been submitted to, and approved by, Flintshire County Council.

3. Timing restrictions commitments:

A number of comments from the ANCB refer to required timing restrictions. Please provide a table to clarify timing restrictions commitments at the different stages and locations of the project, as ANCBs consider these necessary to rule out adverse effect on site integrity. Please also consider timing restrictions to mitigate impact to fish features, as requested by NRW A.

Eni Response: The Applicant can confirm that every effort is being made to plan the timing and duration of the works to avoid the sensitive periods for both fish and bird species. The Applicant considers that it would be unnecessary to place timing restrictions on the Proposed Works. Further explanation to support this position is provided in the following Sections.

The Applicant has included five mini programmes (**Figure 3.1 to Figure 3.5c**) to provide an overview of the timetable of activities for the Offshore works. These programmes show that the main vessel movements will take place from **April to October** each year, thereby avoiding the overwintering period, and the bad weather window. Also shown is which jack up rig, heavy lift vessel, and drill rig are in use. While the programmes show some 'Well' related activities, these will be carried out by a drilling rig that will have moved into location, alongside the platform, prior to the start of the over-wintering period.

Regarding fish features that could be affected by piling activities during winter period, specifically the cod spawning period of February and March, the installation of the New Douglas platform, including the piling, is scheduled for **July 2026** (currently **21-28 July 2026**).

Figure 3.1 shows that the "platform removal & new installation works" for the Hamilton Main platform are currently scheduled to take place during **29th July 2028 to 2nd August 2026**. This period of works includes around one day for the lifting of the existing topsides off its jacket and onto the transportation barge. Another day will be required to prepare the new risers and J-tubes to receive the new topsides, which will then take another day to be lifted into place from the transportation barge. This means that the existing jacket will be without a topside for a very short period through carrying out seamless, sequential removal and installation operations.

Figure 3.2, and **Figure 3.4**, show a similar period, and will involve similar activities, for Hamilton North (**mid to late May 2027**), and New Douglas platforms (**mid to late July 2027**). Albeit, for the New Douglas platform, instead of removing and replacing an existing topside, a new jacket will be lifted into place and piles installed, and then new topsides added.

At Lennox, **Figure 3.3** shows removal of the existing, and installation of the new topside will take a little longer through **late May to mid-June 2027**, as it will involve a different lifting vessel.

Figure 3.5a to 3.5c include the offshore geophysical and geotechnical surveys from **May to June 2025**. The cable installation operation with a Cable Lay Vessel (CLV) is planned to mobilise from **June to August 2026** from POA to new Douglas, and from new Douglas to the satellite platforms, including all the preparatory works (e.g. rollers installation), mobilisation of the CLV and pulling out the cable. All cable protection and mattress installations are scheduled in **summer 2026 and 2027** avoiding the winter bad weather.

Tug/Anchor Handlers and Cargo Barges will be active when Installation Vessels (HLV or SLV) are at the individual locations. Crew transfer vessels (CTV) and Helicopters will be required for transiting personnel when the construction support vessels (JUR and/or ISP) are alongside of the respective platforms. It should be noted that the ISP (Irish Sea Pioneer) is used during current operations and has permanent residence in Liverpool Bay.

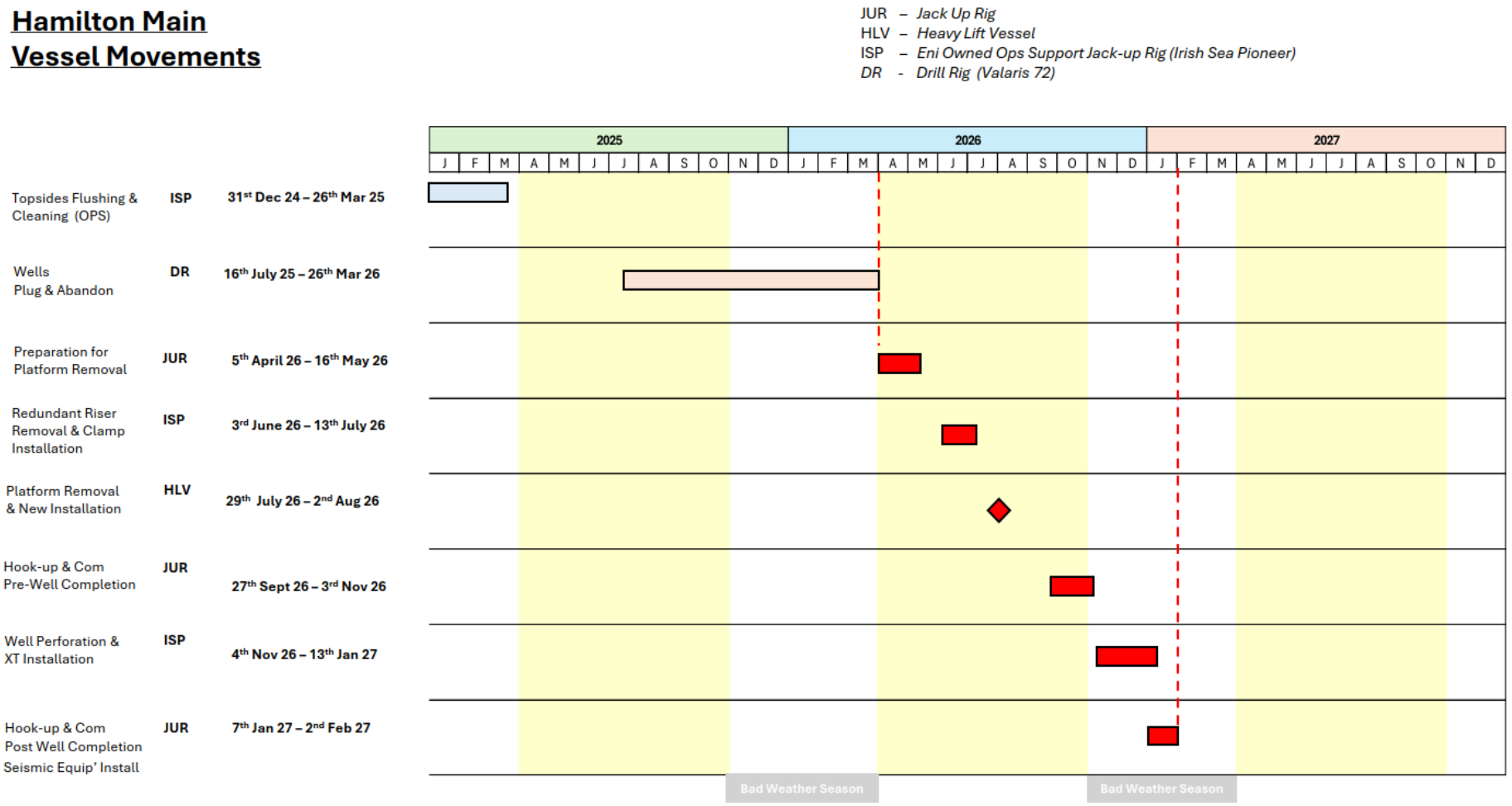

Figure 3.1: Currently anticipated programme for vessel movements and platform works at Hamilton Main

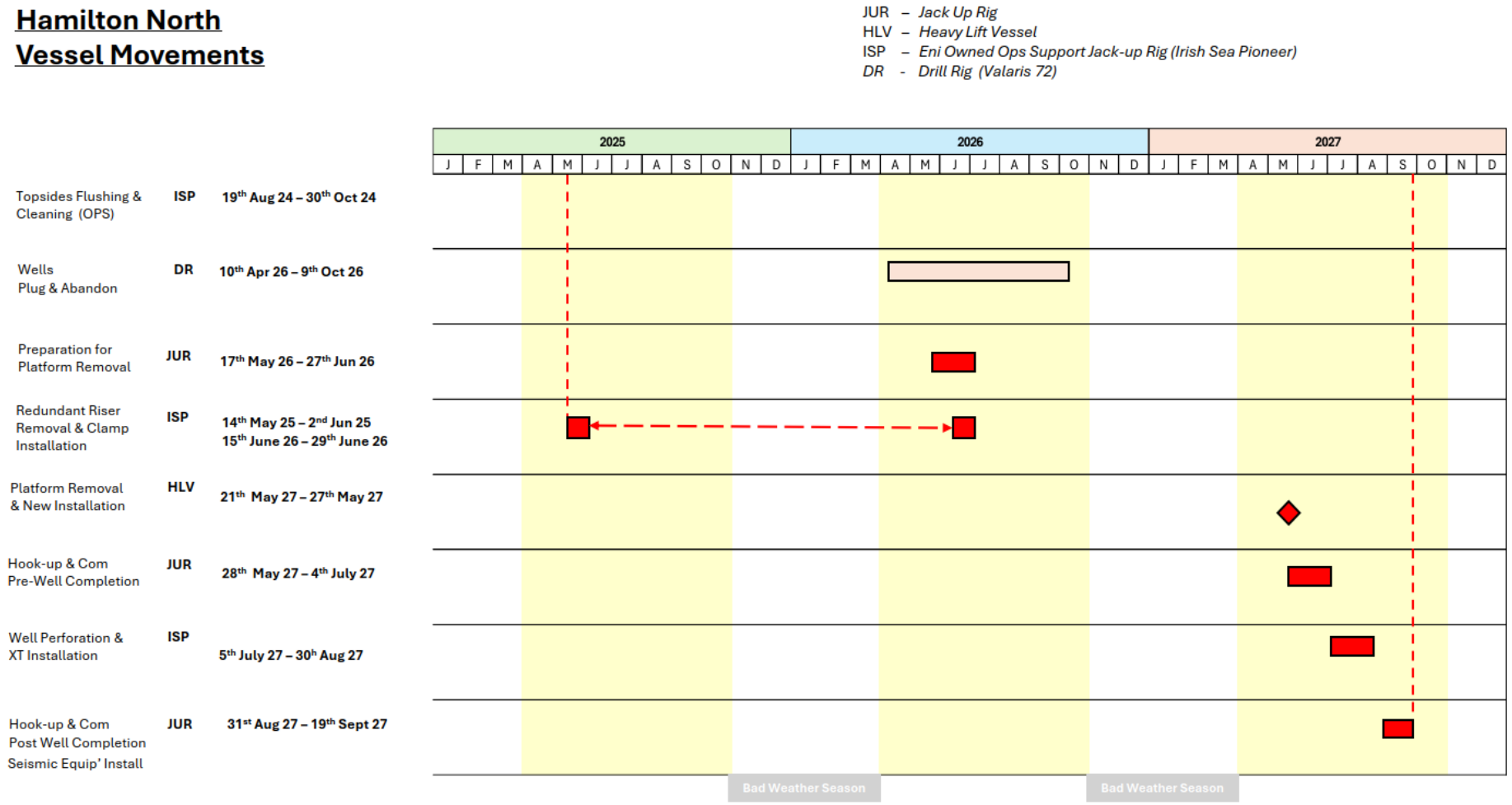

Figure 3.2: Currently anticipated programme for vessel movements and platform works at Hamilton North

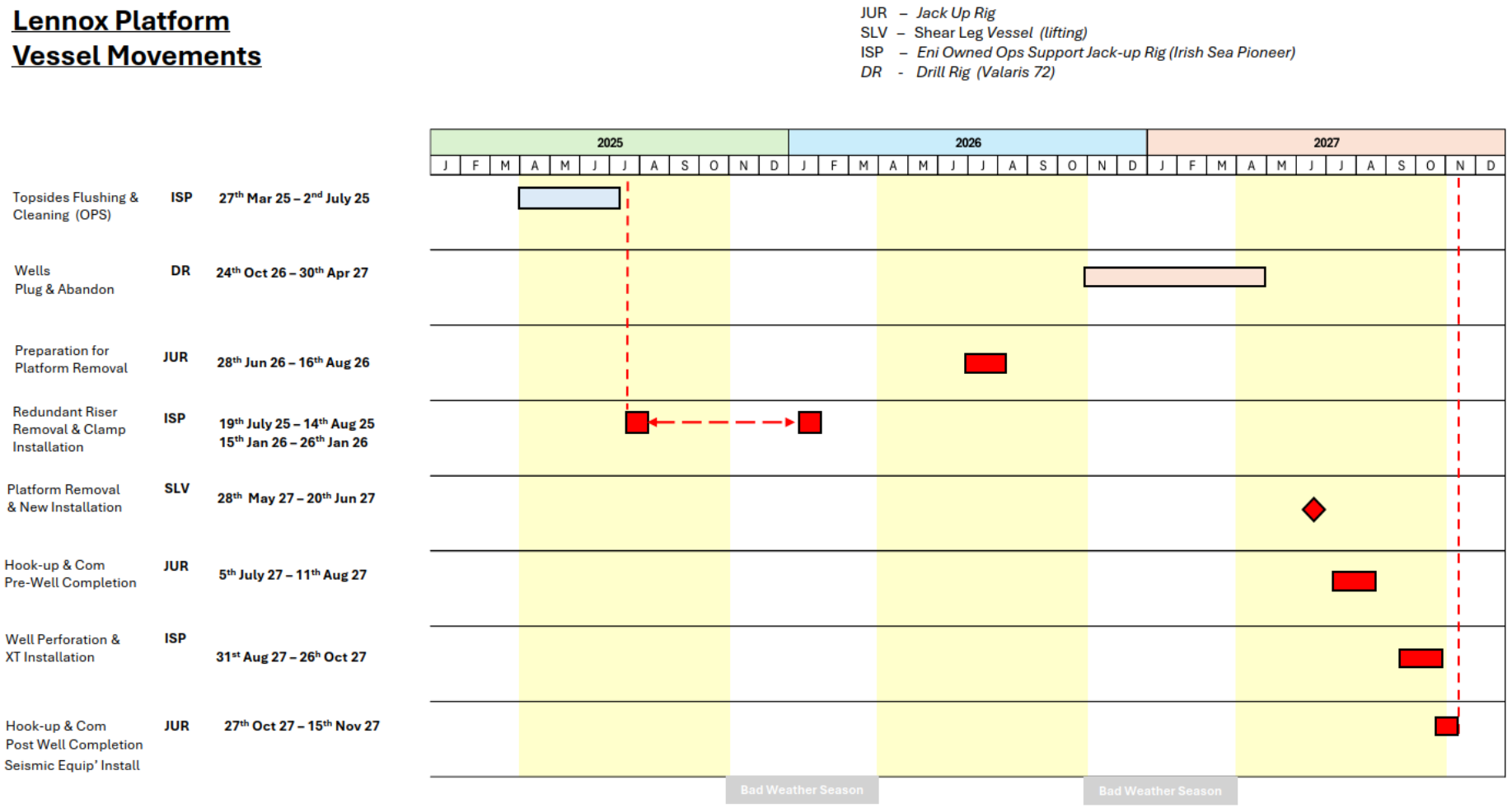

Figure 3.3: Currently anticipated programme for vessel movements and platform works at Lennox

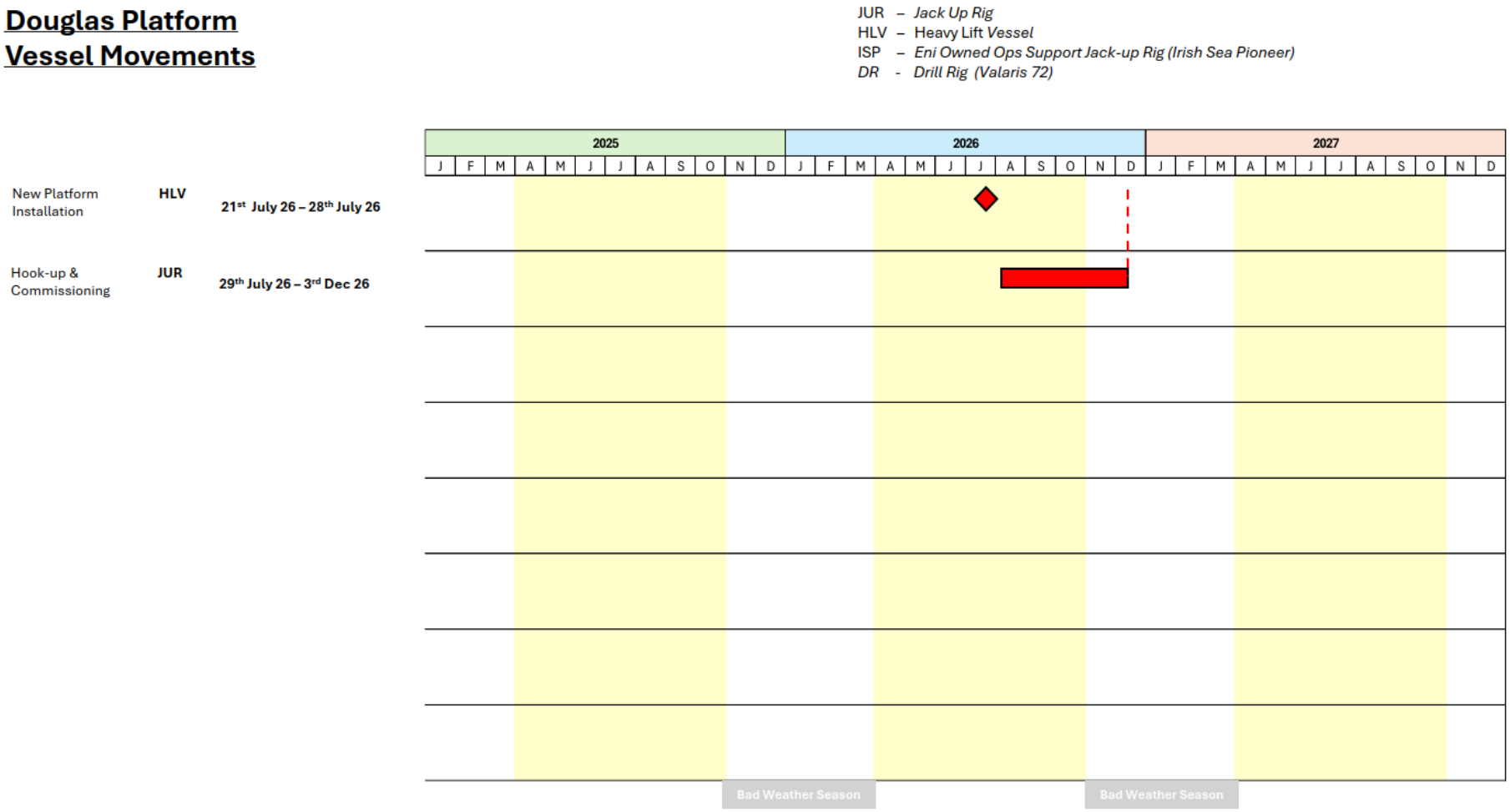

Figure 3.4: Currently anticipated programme for vessel movements and platform works at New Douglas

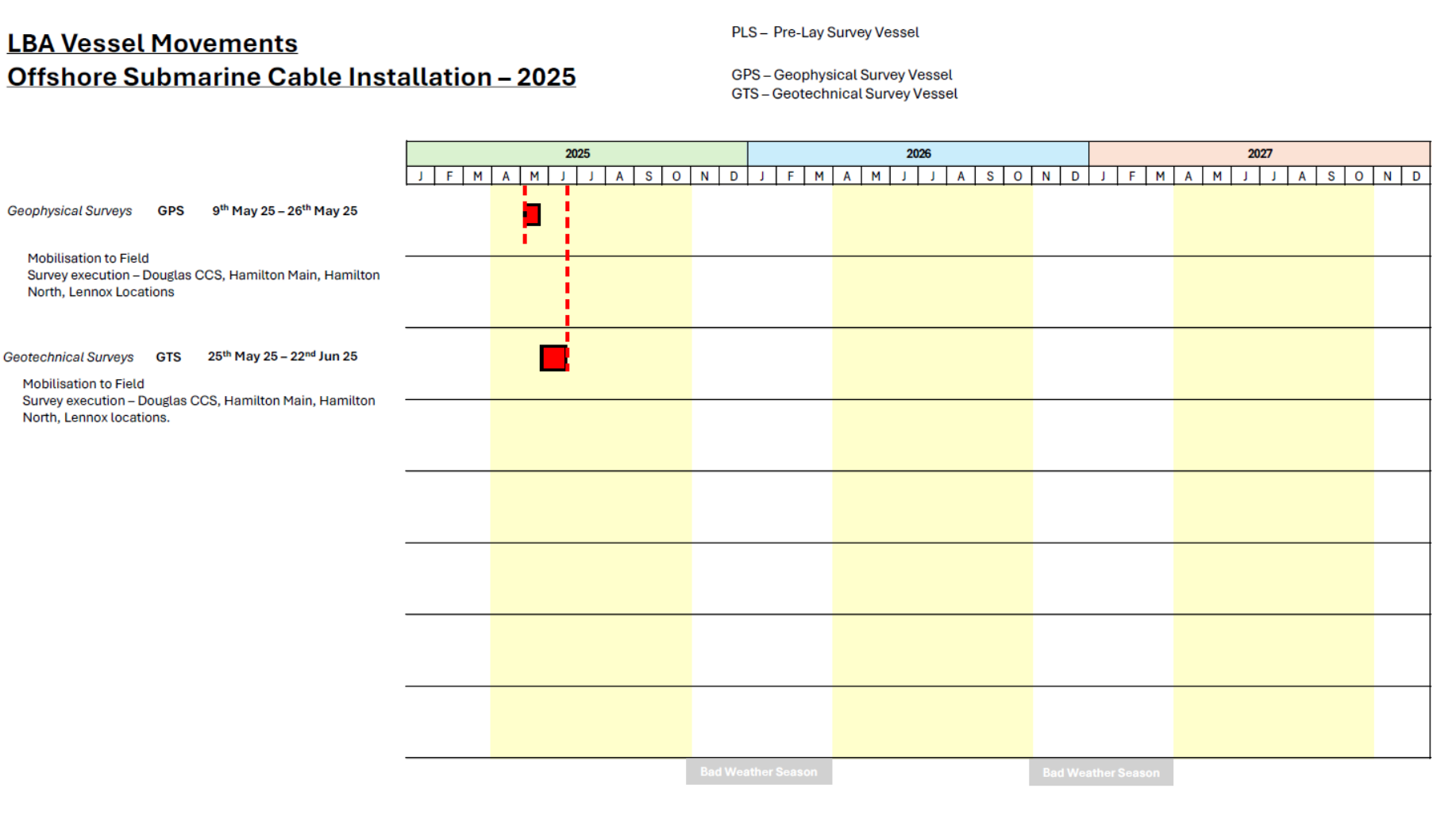

Figure 3.5a: Currently anticipated programme for vessel movements and cable Installation 2025

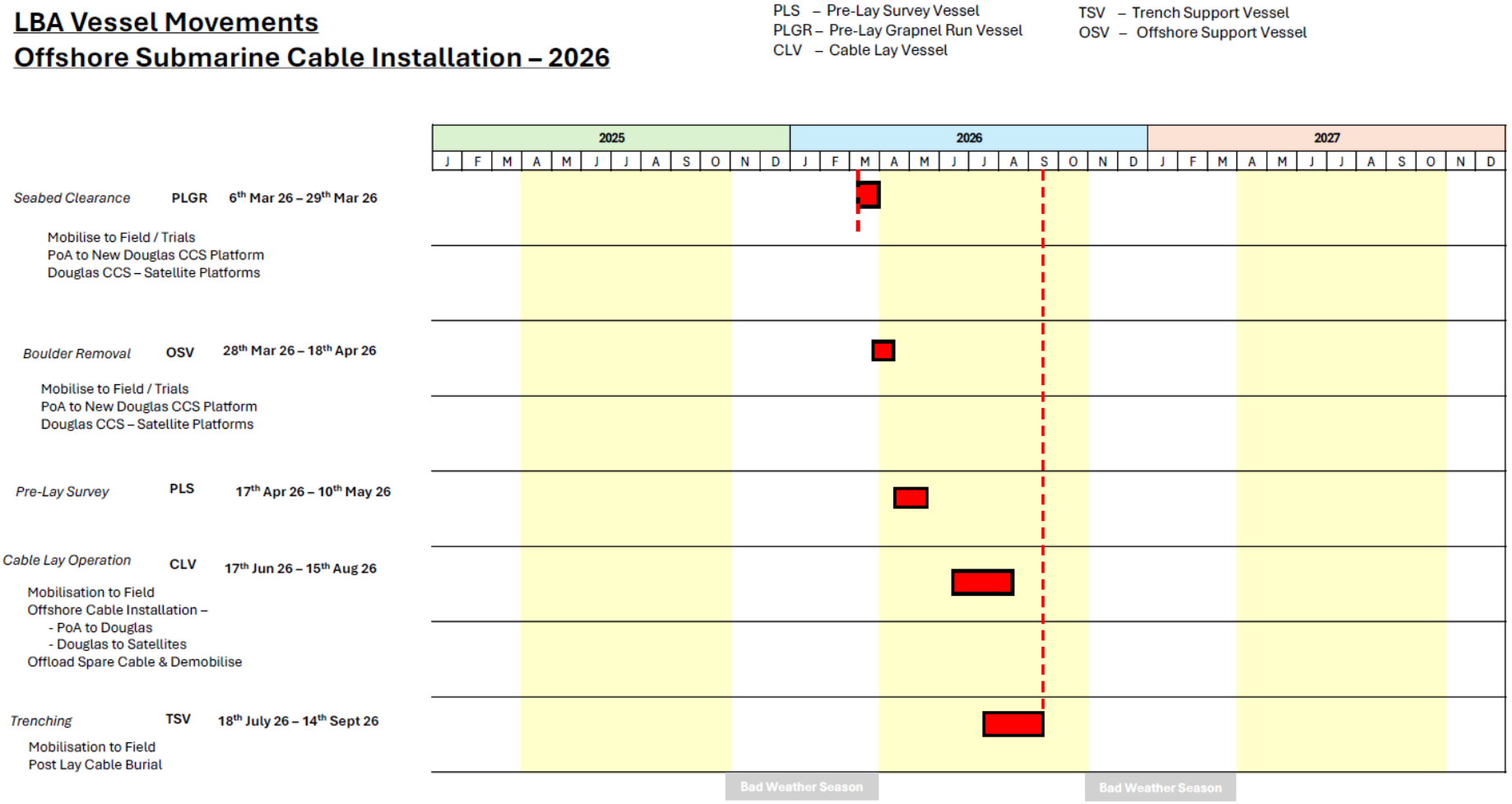

Figure 3.5b: Currently anticipated programme for vessel movements and cable Installation 2026

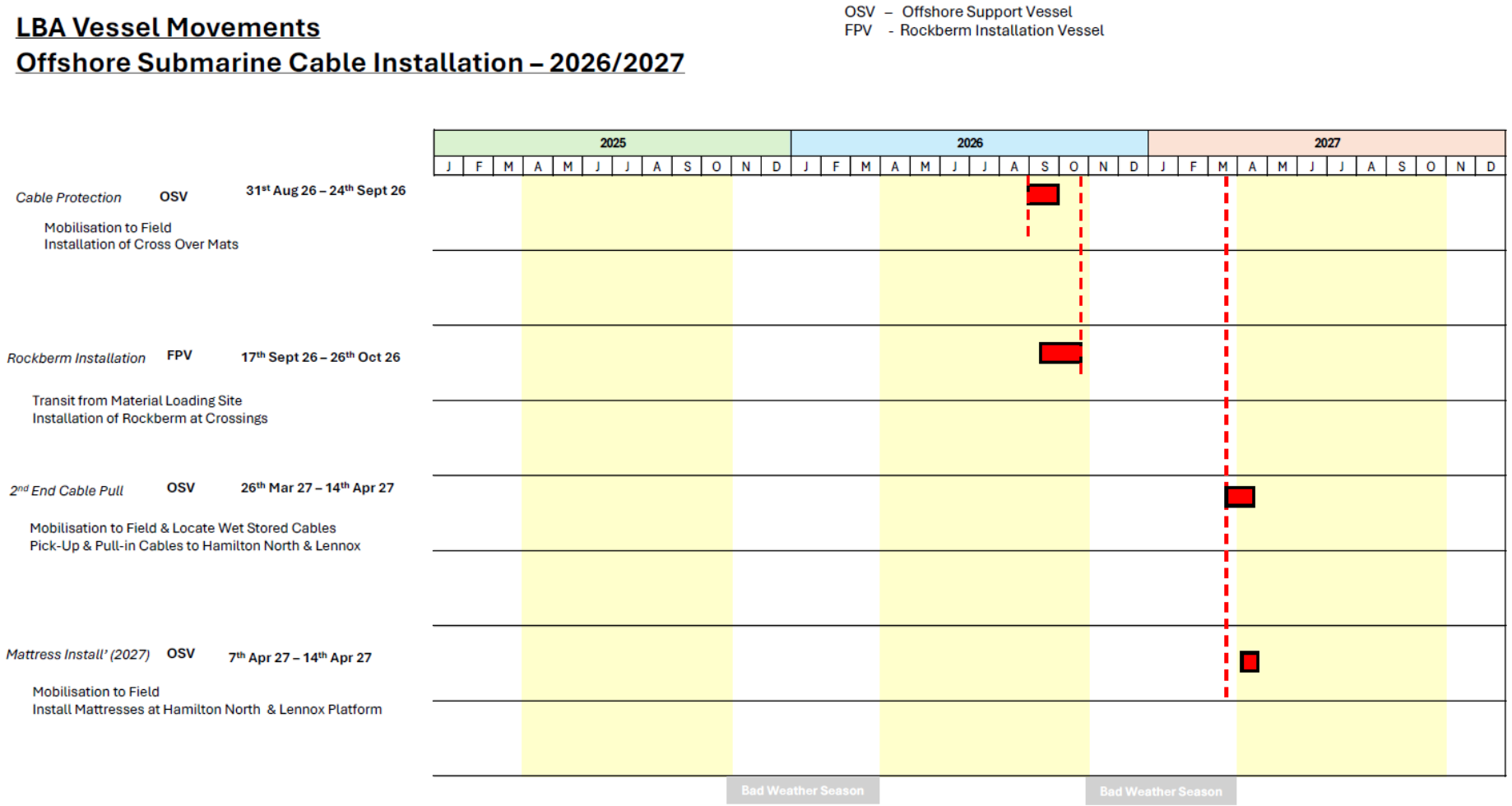

Figure 3.5c: Currently anticipated programme for vessel movements and cable Installation 2026/2027

4. UXO clearance:

Please clarify whether the applicant is proposing to work in line with the UXO Clearance Joint Interim Position Statement as ANCBs request a stronger commitment to low order detonations as part of UXO clearance activities.

Eni Response: The Applicant can confirm that it is fully committed to work in line with the UXO Clearance Joint Interim Position Statement and will prioritise low order detonations as the first approach for UXO clearance activities. References to high order detonations were purely to define a reasonable worst-case scenario for underwater noise modelling and the corresponding environmental assessment.

5. Inter-tidal works mitigation:

ANCBs request the use of matting and reduced tyre pressure when working on the intertidal. Please confirm if you are satisfied to adhere to these measures.

Eni Response: The Applicant can confirm that it will adopt these measures during construction and will include them in the construction management plan submitted to both NRW, and Flintshire County Council (FCC) for approval, prior to the commencement of construction.

Additionally, these measures will be included in the Construction Environmental Management Plan (CEMP), and Soil Management Plan that will be submitted to FCC for prior approval, as per **Condition 8** of TCPA planning permission **FUL/000246/23**, granted 10 January 2024, accessible here: Decision - FUL/000246/23 - A - Full application - Retention and use of existing structures, plant and ancillary development (including access roadway and landscaping) forming the Point of Ayr gas terminal for the transport of CO2 and the demolition/removal of r.

6. Marine Mammal data:

As detailed in NRW A representation, please provide clarification of the marine mammal densities used in the assessment.

Eni Response: Table 1.8, section 1.3.12: Updated Marine Mammal Densities in the Technical Note: Marine Biodiversity – Marine Mammals and Marine Turtles MBTN03, provides an update of the marine mammals' densities. This table is reproduced below as **Table 6.1**.

At the time of writing **Offshore ES Volume 2, Chapter 7: Marine Biodiversity**, the SCANS-IV (Gilles et al., 2023) and the Welsh Marine Mammal Atlas (Evans and Waggitt, 2023) were not available. In early 2024, the cetacean densities applied were updated to include those from SCANS-IV. For a precautionary approach, the highest densities were used. While grey seal and harbour seal were not included in Evans and Waggitt (2023), densities for the cetacean species were available. Maximum densities have been calculated over the Proposed Development marine mammal and marine turtle study area and are presented in **Table 6.1** alongside the densities originally used in the Offshore ES. As the maximum densities for all cetaceans used in the Offshore ES are higher than that of Evans and Waggitt (2023), no updates to use the latter have been undertaken, as the densities used in the ES are more precautionary and represent a reasonable worst-case for assessment purposes.

Table6.1 Summary of Marine Mammal Densities used in the ES and those from the Welsh Marine Mammal Atlas (Evans and Waggitt, 2023) recommended by NRW

Species	Density used in the ES (animals per km$^{2)}$	Density from Evans and Waggitt (2023) (animals per km^2)	Management Unit (MU)[7]	Population Estimate in MU
Harbour porpoise	0.086[1] to 0.515[2]	0.194[9]	Celtic and Irish Sea	62,517
Bottlenose dolphin	0.0104[2] to 0.035[3]	0.001[9]	Irish Sea	293
Common dolphin	0.027[4]	0.0002[9]	Celtic and Greater North Seas	102,656
Risso's dolphin	0.0313[5]	0.00008[9]	Celtic and Greater North Seas	12,262
Minke whale	0.009[2]	0.0007[9]	Celtic and Greater North Seas	20,118
Grey seal	0.467 to 4.06[6]	-	Wales	3,766
			NW England	1,046
			Northern Ireland	2,113
			SW Scotland	2,163
			Isle of Man estimate	400
			East of Ireland Southeast of Ireland	1,749[8] 2,326[8]
			OSPAR Region III	60,780
Harbour seal	0.0049 to 0.593[6]	-	Wales	14
			NW England	7
			Northern Ireland	1,406
			Isle of Man	No estimate available

[1] SCANS-III (Hammond *et al*., 2021) Block F.

[2] SCANS-IV (Gilles at al., 2023) Block CS-E.

[3] High-density coastal area density in outer Cardigan Bay from Lohrengel *et al*. (2018).

[4] SCANS-IV for adjacent Block CS-D as none observed for Block CS-E.

[5] SCANS-II (Hammond *et al*., 2013) Block O, as no values for SCANS-III for this species.

[6] Carter *et al.* (2022) – average and maximum densities calculated to per km^2 using absolute mean values for cells overlapping with the Proposed Development marine mammal and marine turtle study area.

[7] All population estimates include the Isle of Man unless population estimate is given separately.

[8] Population estimates based upon counts from Duck and Morris (2019), using scalars from Lonergan *et al.* (2013) for harbour seal and Russell *et al.* (2016) for grey seal.

[9] Evan and Waggitt (2023) Modelled Distributions and Abundance of Cetaceans and Seabirds of Wales and Surrounding Waters – Applied to the proposed development marine mammal and marine turtle study area.

Annex I Responses

Port of Mostyn

7. POM 3 (Item 89):

Consultees' view: The update to the NRA to reflect PoM's previous comments on the omission of vessel types and movements of vessels using the Welsh channel is noted. We can advise ENI that the latest seabed survey of the channel (Nov 2023) in the proposed cable crossing area was recorded at –7m C.D. and note that the top of the buried cable will therefore be 10m below C.D. We attach a copy of the survey of the cable crossing area for ease of reference.

Action required: Please confirm receipt of the survey data. Please confirm whether the cable can be buried to the depth of the existing pipeline and allow for the planned maintenance dredging of the outer Welsh Channel?

Eni Response: The Applicant confirms the receipt of survey data and its incorporation into our vessel management planning. **Figure 24.1 to Figure 24.6** show the incorporation of the data into our initial drawings to show the passage and manoeuvring of our CLV during our proposed nearshore cable marine operations. These drawings will inform our ongoing conversations with the Port of Mostyn (PoM). The drawings show that it should be possible to provide a 'safe passage for traffic' to both the north and south of our CLV where it crosses the Welsh Channel.

The Applicant can confirm that PoM requirements will be met regarding burial depth as presented in the table below. The cable will be buried 3m below seabed along the route across the Welsh channel. This corresponds to a cable burial depth between 10-12.5m LAT C.D, as per the survey data helpfully provided by PoM. This is below the 9m LAT C.D. as requested by Port of Mostyn.

Parameter	Location		Unit	Value
Minimum Target Cable Burial Depth (Top of Cable)	Main cable route		m	2.0 Note 2
Minimum Target Cable Burial Depth (Top of Cable)	**Landfall area**	**West Hoyle Spit**	**m**	**3.0** Note 1,2,
		Welsh Channel		**3.0** Note 1,2
		Inter-tidal Beach Crossing		**3.0** Note 1,2

Note 1: Increase burial depth to account for changing seabed morphology at this location Reference is made to Pipelines Annual Report .

Note 2: In additon 3m burrial depth represents deeper burrial than -9m LAT C.D. It's expected that on Welsh Channel to achieve between -10m to -12m LAT C.D. Requirment for Contractor is to achieve 3m burrial TOC and that requirment is confirmed during tender stage.

8. POM 9 (Item 95):

Consultees' view: The response is noted however it is also noted that the revised NRA shows that the time required for the cable pull across the Welsh Channel has been increased from "2-3 hours" to "12 – 24 hours". Further, it is not clear if these times include periods for CLV anchor repositioning and related activities; an assessment of the total length of time when the Welsh Channel will effectively be closed to navigation for Mostyn vessel traffic should be provided.

9. POM 17 (Item 103):

Consultees' view: Thank you for confirming that ENI has updated the NRA on safety risks, however, the PoM remains concerned that the potential for significant commercial impact on its operations has been significantly underestimated by them. These concerns are heightened by the newly increased time the Welsh Channel will be closed to shipping.

10. POM 20 (Item 106):

Consultees' view: It is noted that ENI acknowledges the reasons why Port of Mostyn's position has been reserved by a Holding Objection, however, this position will be maintained until the issues noted in Item 95 above have been resolved.

Action required: Please provide clarity on the effective timings for closure of the Welsh Channel. Please let us know if any agreements have been reached with the Port of Mostyn.

Eni Response: The Applicant can confirm that a meeting was held between representatives from PoM and the LBCCS project team on 21 October 2024. Discussed was the strategy for installing the new electrical cable from Talacre Beach across the Welsh Channel, and its implications for PoM operations. The meeting concluded with the intention of a "Statement of Understanding" that both parties could sign and is intended to provide both parties with clarity on the key issues that need to be covered prior to, during, and after completion of the cable laying activity.

Preliminary information on the cable lay vessel anchor pattern across Welsh channel was presented during the meeting. This was acknowledged by the PoM Harbour Master, and he suggested that the route would not impact the regular windfarm CTV operations. However, the timings of anchor movements and the transit time of vessel would need to be worked on and shared with PoM. It was suggested that this could be presented as a method statement that could form part of the "Statement of Understanding". The Applicant is currently preparing the Method Statement to include burial method, depth, deviations, transit time over the channel, impact to the vessel traffic as well mitigation measures.

The Applicant confirms the receipt of survey data and its incorporation into our vessel management planning. **Figure 24.1 to Figure 24.6** show the passage and manoeuvring of our CLV during our proposed nearshore cable marine operations. These drawings will inform our ongoing conversations with the Port of Mostyn (PoM). The drawings show that it should be possible to provide a 'safe passage for traffic' to both the north and south of our CLV where it crosses the Welsh Channel.

Table 7.1 and **Table 7.2** are illustrating the provisional, illustrative vessel timing assessment for transit across Welsh channel, which considers three zones of impact and is presented for lowest astronomical tide (LAT) conditions (as worst case). The Amber Zone represents the Steps when the CLV will be in transit, and that the 'safe passage for transit' would need to be utilised after detailed analysis and risk assessment carried out between the Port of Mostyn and the cable installation Contractor. The following assumptions have been considered in developing the vessel management planning presented in **Figure 24.1 to Figure 24.6**:

- 2 x Multicat performing anchor repositioning operation.
- Anchor repositioning time 2h
- TDP for LAT 216m and for HAT 382 m (from fairlead to TDP)
- Maximum anchor tension fto F1 = 50tons (axial tension)

Table 7.1: Vessel Traffic Impact Zones

ZONE RED (No access)
216m from vessel to TDP LAT and 382m HAT
ZONE AMBER (Conditional Access)
TDP Anchor Wire to Anchor (Anchor wire on seabed for maximum tension)
ZONE GREEN (Free access)
Zone with reduced/minimum impact to traffic

Table 7.2 Transit Time through Zines

STEP/ Figure	Vessel Movement	Anchor Pattern Movement	Time for operation [h]	Impact on Channel Traffic	Notes
1/24.1	CLV beached on shorepull location outside of marine channel	Positioned for Step 1	48	**GREEN ZONE**	Total duration of vessel beaching, anchor pattern deployment and cable shore pull (completion).
2/24.2	CLV pays out cable to location #2	Positioned for Step 1	2	**GREEN ZONE**	No changes in anchor pattern, only CLV movement
3/24.3	CLV in slow lay - anchors repositioning	F1, SB1, PS1	6	**AMBER ZONE/RED ZONE**	3 front anchor repositioned. Time from first anchor pick up to last anchor drop on seabed
4/24.4	CLV in slow lay - anchors repositioning	F1, PS2, PS3, SB3, SB2	10	**AMBER ZONE/RED ZONE**	FS1 aligned for cable burial, stern anchors repositioned
5/24.5	CLV in normal lay	Anchor pattern for Step 4	2	**GREEN ZONE/AMBER ZONE**	By end of pull, CLV is out of marine channel boundary. Anchors still remain on channel.
6/24.6	CLV in slow lay - anchors repositioning	F1, SB1, PS2, PS3, SB3, SB2	14	**GREEN ZONE**	CLV and anchor spread are out of channel boundary.

Physical Processes

11. NRW 1, 9 , 21, 29 (Items 150, 158, 170, 178):

Consultees' view: NRW (A) welcome the additional explanation relating to the Maximum Design Scenario (MDS). We are content that the worst-case scenario with respect to cable installation activities has been assessed. We do still see inconsistencies between distances reported between Douglas OP and satellite platforms between the values given in 'CML2365 Consultation log to applicant' and Table 1.2 in Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01). See Benthic ecology specialist comments for further details (Item 178, response to NRW 29).

Action required: Please provide clarity on the highlighted inconsistencies.

Eni Response: The Applicant recognises the mistake in our response to **NRW 29 (Item 178)** as we have missed the line new Douglas to Lennox and we confirm the statement:" From Douglas OP to each of the satellite platforms, 32.34km, 14.89km, and 10.87km respectively to Lennox, Hamilton North and Hamilton Main. We, also acknowledge the numbers have been rounded in some assessment as it is shown in Table 1.2 in Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01). The rounding up of lengths was to ensure that a reasonable worst-case scenario was assessed to account for minor re-routing around seabed obstructions that could require more cable to be laid during installation.

Table 11.1 presents the details for the cable lengths based on the current FEED design drawings.

Table 11.1: Design details for combined new electrical and fibre-optic cables

Cable	Cable length (m)	Cable Start	Cable End	Median line crossed
PoA to new Douglas	34,359	E:477493.43 N:5911991.50	E:461477.79 N:5932596.10	Cable entirely in Welsh waters. No median line crossed by cable
New Douglas to Hamilton Main	11,033	E:469999.75 N:5935548.30	E:461477.79 N:5932596.10	Cable starts at New Douglas in Welsh waters and terminates at Hamilton Main in English Waters. Crosses median line at **E:462168.43, N:5934528.81**
New Douglas to Hamilton North	14,864	E:468497.20 N:5944503.30	E:461477.79 N:5932596.10	Cable starts at New Douglas in Welsh waters and terminates at Hamilton Main in English Waters. Crosses median line at **E:461513.71, N:5935114.23**
New Douglas to Lennox	32,312	E:488424.64 N:5942739.60	E:461477.79 N:5932596.10	Cable starts at New Douglas in Welsh waters and terminates at Hamilton Main in English Waters. Crosses median line at **E:461539.65, N:5935090.97**

Benthic Ecology

12. NE 3.12 (item 43):

Consultees' view: NE acknowledge the applicant's response to this comment. However, Natural England maintain our original position on this matter and advise that quantitative assessment is provided to support the justification for scoping out indirect impacts to benthic habitats from cable protection.

Action required: Please provide further clarification on secondary impacts of benthic habitats due to scour protection and changes to physical processes.

Eni Response: The Applicant can confirm that It is provided for in the Proposed Development that cable protection be implemented where necessary, namely on the final approaches between cable routes and the new Douglas CCS Platform, and at the crossings of existing pipelines and cables. The material quantities for the cable protection are given in **Table 12.1** below.

Table 12.1: Design Envelope: material quantities for protection of electrical cables

Cable/Crossing ID	Protection Type	Number	Dimensions (m)	Weight (kg)	Total Weight (kg)
POA to New Douglas Cable 1	Concrete Mattress	35	6 x 3 x 0.3	9,800	343,000
POA to New Douglas Cable 2	Concrete Mattress	35	6 x 3 x 0.3	9,800	343,000
	Concrete Mattress	50	6 x 3 x 0.3	9,800	490,000

Cable/Crossing ID	Protection Type	Number	Dimensions (m)	Weight (kg)	Total Weight (kg)
New Douglas to Hamilton North	Rock	-	1,000	12,000 – 16,000 per linear metre	12,000,000 – 16,000,000
New Douglas to Hamilton Main	Concrete Mattress	100	6 x 3 x 0.3	9,800	980,000
New Douglas to Lennox	Concrete Mattress	60	6 x 3 x 0.3	9,800	588,000
	Rock	-		12,000 – 16,000 per linear metre	12,000,000 – 16,000,000
POA to New Douglas Cable 1, 10x crossings	Concrete Mattress	64	6 x 3 x 0.3	9,800	686,000
	Rock	-	1,000	12,000 – 16,000 per linear metre	12,000,000 – 16,000,000
POA to New Douglas Cable 2, 10x crossings	Concrete Mattress	64	6 x 3 x 0.3	9,800	686,000
	Rock	-	1,000	12,000 – 16,000 per linear metre	12,000,000 – 16,000,000

In the case of cable crossings, **Table 12.2** outlines all the cable crossings that are along the Point of Ayr to Douglas platform cable. The cable crossings for the inter-platform cables to the three satellite platforms are either within the 500 m clearance zone of the New Douglas platform, and/or cross Eni infrastructure. All are in water depth in excess of 25 m. **Table 12.2** gives the water depths, and water depths above berm height. This shows that for crossings PoAX 1 (Burbo Bank OWF), PoAX 2 & 3 (North Hoyle OWF), and PoAX 4 & 5 (Gwynt y Môr OWF) there will be a reduction in clearance above the berm 0.8 m in height, as the water in these locations is very shallow; 5 m, 7 m, and 12 m respectively. The revised project description has determined that only one cable will now be installed, so only three export cable crossings (PoAX 1, 2, & 4) will be required within limited water depths where the restriction of 5% water depth reduction to cable protection height cannot be met throughout the tidal cycle.

Table 12.2: Design Envelope: Third party cable crossings

Crossing ID	Third-party owner	UTM Easting (m)	UTM Northing (m)	Water depth (m)	Water above berm (m)	Berm height (m
PoAX-1	Ørsted Burbo Bank wind farm	470974.84	5916002.39	**5**	4.2	0.8
PoAX-2	Greencoat UK Wind North Hoyle wind farm	468795.03	5916535.10	**7**	6.2	0.8
PoAX-3		*468776.17*	*5916536.68*	*7*	*6.2*	*0.8*
PoAX-4	Gwynt y Môr OFTO, Gwynt y Môr wind farm	461904.20	5917763.30	**12**	11.2	0.8
PoAX-5		*461875.07*	*5917817.57*	*12*	*11.2*	*0.8*
PoAX-6		461713.35	5924702.50	20	19.2	0.8
PoAX-7	National Grid/Scottish Power, Western Link HVDC cable	461713.35	5930787.10	30	29.2	0.8
PoAX-8		461713.35	5930818.38	30	29.2	0.8

In such cases the design of the cable crossing reduces the potential impacts of physical processes using layered protection, which gradually changes in height, as illustrated in **Figure 12.1**.and **Figure 12.2**. Each layer of the modular post lay concrete mattress is 0.3 m in height. At the approach to the crossing, there will be a single layer of mattressing which then overlays the cable as it emerges from the bed and is surface laid. The cable will then be laid over a single layer of mattressing placed on the bed at the crossing point. This is then covered with either a single layer of mattressing, or rock.

For crossings PoAX-1, and PoAX-2 the concrete mattress protection as shown in **Figure 12.1**, the distance of the touchdown points either side of the crossing is circa 5 m. Therefore the 0.8 m berm height occurs for a limited distance <10 m and for most of the crossing the obstruction on the bed is between 0.3 m and

0.5 m in height (i.e. a small proportion of each shallow water crossing exceeds 5% of the water depth). The rock protection for PoAX-4 shown in **Figure 12.2** the 0.8 m berm height will occur over its full length of up to 200 m. Therefore, only crossings PoAX-1, PoAX-2, and PoAX-4 will be within very shallow water and will form a gradual reduction in water depth, lowering the potential impacts of physical processes.

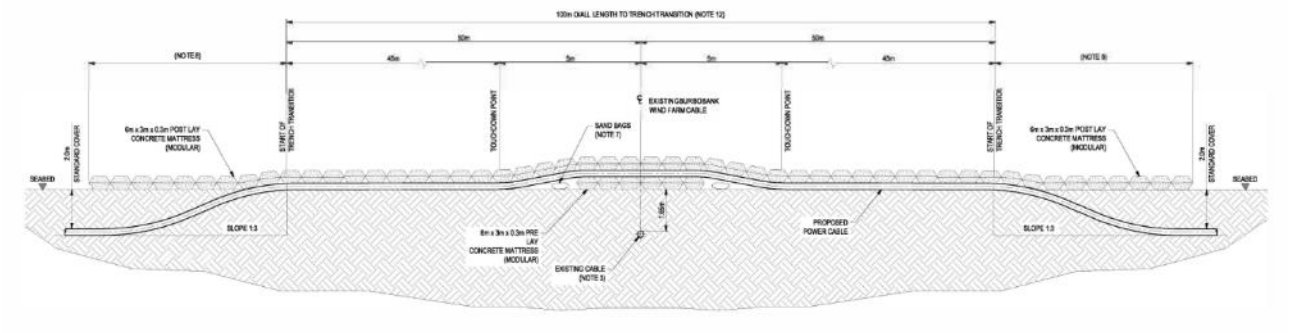

Figure 12.1: Typical Schematic Layout of Concrete Mattress Protection at Cable Crossing

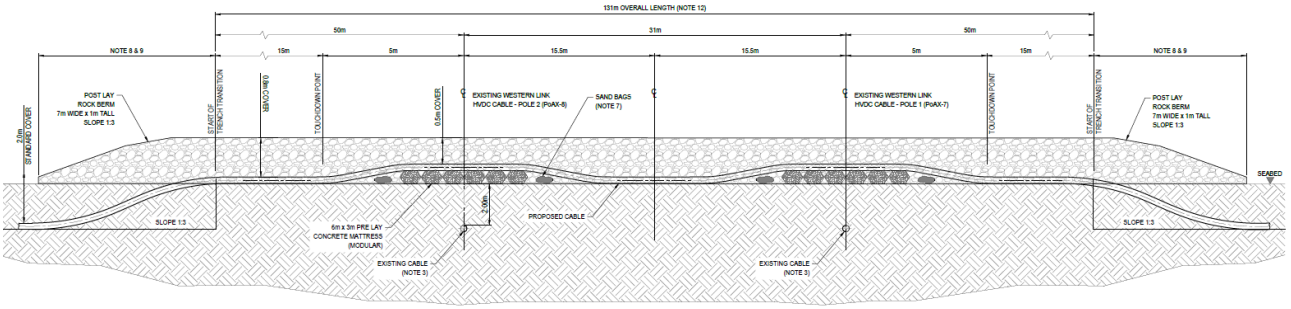

Figure 12.2: Typical Schematic Layout of Rock Berm Protection at Cable Crossing

Where practicable, the cable crossing protection requirements will be compliant with the Maritime and Coastguard Agency (MCA) navigation guidance which includes that there will be no more than a 5% reduction in water depth (referenced to CD) at any point along the cable route (MCA, 2021). Depending on the heights of such cable crossing protection, and the water depth, there can be potential for changes to tide, wave and sediment transport processes due to a changed seabed morphology through altered bed levels. In this case however cable protection and cable crossing protection will be up to a maximum height of up to 0.8 m, with widths of 7 m and tapered profiles to reduce the impacts to sediment transport and seabed morphology. The cable protection and crossing protection will be required in a range of depths from approximately 5.8 to 30.3 m Chart Datum (CD).

It should also be noted that where an impact does arise from the presence of cable protection it will be highly localised, as can be supported through the modelling undertaken by Mona Offshore Wind Project, (Mona Offshore Wind Limited, 2024). The results of which showed that where cable protection was employed, impacts to the wave climate were only observed where the protection height equated to 15% or more of the water depth, when this criterion was exceeded, then changes to wave climate were still limited to 0.5 to 1%. Impacts to tidal currents were shown to occur when cable protection was perpendicular to the orientation of tidal flow, however, changes were highly localised, with increases in current speed of 1% around the structure itself, these impacts were only present within 500 m of the structures.

In the case of the Proposed Development, some small change may be observed in wave climate due to the presence of the cable crossing with PoAX-1 with the Burbo Bank OWF, located at a depth of 5 m (16% of the water depth) however it should be understood that as a majority of the cable protection itself is generally below the 0.8 m berm height, instead between 0.3 m and 0.5 m, the impact is likely to be further minimised. Furthermore, this crossing is located at too great a distance from any designated receptors to

impact upon the physical processes within them. No other crossings will impact designated sites, as evidenced by the fact they are both in deeper water and situated further away from the receptors.

In compliance with the MCA navigation guidelines discussed above, the maximum height of the shallowest cable crossing would be restricted to 5% of the water depth and therefore is likely to exhibit no change in wave climate, however, given the majority of cable protection and cable crossing protection fall within waters deeper than 25 m (CD), water depths will be changed by less than 5%. With most of the cable crossing protection installed in waters of over 25 m (CD), which equates to 28 m mid tide, the introduction of 0.8 m height cable crossings represents less than a 3% change in water depth and therefore likely < 3% change to tidal currents. This change is 25% of that exhibited in the natural variation between peak spring and peak neap tidal flows.

Therefore, due to the small scale of the cable protection and cable crossing protection, the distance of cable crossings from sensitive features and designated sites, designed in mitigation measures such as tapered profiles, and compliance with the MCA navigational guidance, it is not expected that impacts from this would be sufficient to disrupt sediment transport, seabed morphology, or cause secondary scour to develop. As such, no further assessment is required with regards to impacts of secondary scour resulting from cable protection and cable crossing protection on benthic ecology receptors.

References

- Mona Offshore Wind Limited (2024) Mona Offshore Wind Project. Environmental Statement Volume 6, Annex 1.1: Physical processes technical report. Available at: https://www.morganandmona.com/en/.

13. NRW 32, and 62 (item 181, and 211):

Consultees' view: NRW (A) welcomes the clarification provided by the applicant but reiterates our proposal for mitigation should a cable trencher be used in the intertidal area. We do not agree with the applicant's conclusion that there would be little benefit in the use of matting as mitigation and, in addition, continue to recommend reduced tyre pressures should tyred vehicles be used.

(This comment is also related to mitigation requested by Natural England) NE and NRW A consider mitigation necessary to reduce impact from compaction on Annex I mudflat and sandflat not covered by seawater at low tide.

Action required: Please confirm whether you are satisfied to adhere to these measures, including matting and reduced tyre pressure should a cable trencher be required. If so, please confirm these will be included in the EMP.

Eni Response: The Applicant can confirm that it will adopt these measures during construction and will include them in the Environmental Management Plan (EMP) submitted to both NRW for approval, prior to the commencement of construction.

Fish

14. NRW 120 (item 269):

Consultees' view: NRW (A) thanks the applicant for providing the full impact ranges of Unexploded Ordinance (UXO) clearance activities as requested. We advise the applicant uses low order techniques where possible, which will limit the impact on fish species

Action required: ANCBs request a stronger commitment to low order detonations, in line with the UXO Clearance Joint Interim Position Statement.

Eni Response: The Applicant can confirm that it is fully committed to work in line with the UXO Clearance Joint Interim Position Statement and will prioritise low order detonations as the first approach for UXO clearance activities.

15. NRW 123 (item 272):

Consultees' view: NRW (A) acknowledge the provision of additional text. NRW(A) do note the relatively short piling duration and the limited amount of suitable herring spawning substrates within the vicinity of the proposed development, as such we agree with the applicant's assessment of minor adverse in relation to underwater noise effects on herring.

NRW(A) advise that consideration is made of the timing of piling activities to avoid key cod spawning periods (key months being February and March) where possible. 135. We also note that there are a number of instances where 800 hours rather than minutes of piling is mentioned across the fish sections of the ES. These should be corrected to reflect the actual piling duration within the ES.

Action required: Please confirm the duration of piling and clarify how it is proposed to mitigate piling impacts on cod spawning

Eni Response: The Applicant apologises for the editorial errors that were made in the preparation of the Offshore ES. The Applicant can confirm that the incorrect references to 800 hours in a few paragraphs in **Offshore ES Chapter 7 Marine Biodiversity Section 7.12.11: Underwater Noise Impacting Fish and Shellfish Receptors**. We confirm that the entire piling period will last up to 800 minutes, or about 13.5 hours.

The installation of the New Douglas platform, including the piling, is scheduled for **July 2026** (currently **21-28 July 2026**)

Considering that the higher sensitivity of the spawning occurs during the January to April period, specifically the cod spawning period peaking in February and March, as previously confirmed in response to **NRW 23 item 272**. It is therefore a minor adverse effect at worst for the spawning during the installation of the new Douglas platform, as we will completely avoid the spawning sensitive period.

Marine Mammals

16. NE 5.2 (item 55):

Consultees' view: Natural England notes the inclusion of NGO/Citizen Science as a summary of sources within "Marine Biodiversity Technical Note MBTN03" but notes that quantitative data from these sources has not been included. Natural England maintain our original position on this matter and advise these data sets should be considered and provided to support assessment judgement.

Action required: Please provide the NGO, citizen science data

Eni Response: The Applicant can confirm that **Section 1.3.1** in the **Technical Note: Marine Biodiversity – Marine Mammals and Marine Turtles MBTN03** displays the NGO and Citizen Observer Data within the Region.

The baseline characterisation presented within **Offshore ES Volume 2, Chapter 7: Marine Biodiversity** and **the Marine Biodiversity Technical Report (Volume 3, Appendix I)** is considered to incorporate sufficient information to provide a robust characterisation of the baseline environment to inform the

assessment of impacts and is considered proportionate to the impacts associated with the proposed Eni Development Area.

If required, the Applicant can provide a technical note summarising NGO/citizen observer data, however it is anticipated that adding this data would not result in any material change to the established baseline characterisation, nor to the assessment of significant effects. **Table 16.1** presents a summary of additional highlighted NGO and citizen observer data sources.

Table 16.1 Extended Summary of NGO and Citizen Observer Data Sources

Title	Source	Year	Author
Manx Whale and Dolphin Watch (MWDW) surveys: Opportunistic and effort-based sighting data	MWDW	2006 – 2022	Data from MWDW Manley (2021, 2020, 2019); Clark *et al*. (2019, 2017); Felce and Adams (2016); Felce, (2015); Adams (2017)
Manx Wildlife Trust (MWT) surveys: • Seal pup surveys on Calf of Man • Opportunistic land sightings • Seal haul-out survey data • Calf of Man Seal Survey Reports 2017 to 2021	MWT	2017 – 2021 2016 – 2022 2017 2017 – 2021	MWT
Walney Nature Reserve survey data	Cumbria Wildlife Trust	1981 – 2023	Data from Cumbria Wildlife Trust

17. NRW 75 (item 224):

Consultees' view: 56. NRW (A) acknowledges and welcomes the statement that the intention is for low order clearance of all Unexploded Ordnance Clearance (UXO). We would appreciate if the applicant could clarify what is meant by "*unintended consequences*."

In line with the UXO Clearance Joint Interim Position Statement, NRW (A) would generally consider high order clearance only in circumstances where low noise alternatives are not feasible (e.g. factors of the UXO or of its location such as depth, level of degradation, thickness exceed the demonstrated capabilities of that method), or where urgent clearance is required because of immediate safety concerns.

Currently, Table 1.3 of Technical Note: Marine Biodiversity – Marine Mammals and Marine Turtles MBTN03 states that the applicant includes low order techniques as a UXO clearance option noting that it is not possible to fully commit to this measure at this stage. NRW (A) believe that this is not as strong a level of commitment as required by the unexploded ordnance clearance joint interim position statement, and we recommend updating the table to match the required level of commitment.

Action required: Please clarify the meaning of "*unintended consequences*" as requested by NRW A.

ANCBs would like a stronger commitment to low order detonations, in line with the UXO Clearance Joint Interim Position Statement. This mitigation is expected to be included in the MMMP.

Please confirm whether the applicant is seeking to adhere to the UXO Clearance Joint Position Statement.

Eni Response: The Applicant can confirm that it is fully committed to work in line with the UXO Clearance Joint Interim Position Statement and will prioritise low order detonations as the first approach for UXO clearance activities.

The Applicant can also confirm that high order clearance would only be considered in circumstances where low noise alternatives are not feasible (e.g. factors of the UXO or of its location such as depth, level of degradation, thickness exceed the demonstrated capabilities of that method), or where urgent clearance is required because of immediate safety concerns.

Regarding "*unintended consequences*", this is referring to the potential situation where the low order charge does not trigger the planned detonation. Therefore, the "*unintended consequences*" would arise from the need to use higher order charges.

18. NRW 82 (item 231):

Consultees' view: See NRW 75

Action required: See NRW 75

Eni Response: Please see above the Applicant's response to **NRW 75 (Item 224)**. The Applicant can confirm that it is fully committed to work in line with the UXO Clearance Joint Interim Position Statement and will prioritise low order detonations as the first approach for UXO clearance activities.

19. NRW 110 (item 259):

Consultees' view: See NRW 75

Action required: See NRW 75

Eni Response: Please see above the Applicant's response to **NRW 75 (Item 224)**. The Applicant can confirm that it is fully committed to work in line with the UXO Clearance Joint Interim Position Statement and will prioritise low order detonations as the first approach for UXO clearance activities.

20. NRW 78, 84, 98, 103 (items 227, 233, 247, 252):

Consultees' view: NRW (A) acknowledge the inclusion of the Marine Mammal Atlas (Evans & Waggit, 2023) and SCANS-IV data in the list of desktop literature. However, we consider that the proposal to use a harbour porpoise density of 0.086 per km2 to be considerably lower than the more up to date densities supplied from the latest edition of the Marine Mammal Atlas (Evans & Waggit, 2023). In line with NRW (A)'s recommendations for previous projects, either the most precautionary or the most scientifically robust values should be taken forward to the assessment. For harbour porpoise we recommend the use of densities taken from the Marine Mammal Atlas (Evans & Waggit, 2023) given their greater robustness, and subsequently we advise that results within the ES are revised.

NRW (A) can agree that for harbour porpoise and bottlenose dolphin the SCANS IV (for harbour porpoise), and SCANS III densities (for bottlenose dolphin) are higher than the respective densities from Evans and Waggitt (2023). As mentioned in previous comments, we recommend either of two approaches: either (1) use the more

precautionary or (2) use the most scientifically robust values (which may not necessarily be the higher value). Thus we confirm that basing an assessment on the results which use a more precautionary value is an approach we support, albeit noting that we would have a preference for the more robust data present in Evans and Waggitt as this is based on 30 years of high resolution sightings data, vs the more snapshot approaches from surveys such as SCANS.

We note however that the approach taken in the ES and the RIAA was that where two density estimates were used, these were considered as the lower and upper limits, with actual density assumed to likely be within this range. In effect, this approach slightly differs from the stated "use of the more precautionary density value". Could the applicant therefore confirm that while results for both densities were presented, the final overall assessment conclusions were based on the upper limit, using it as a worst case scenario?

Finally, we recommend that Table 7.17 in the Environment Statement, Volume 2, Chapter 7: Marine Biodiversity, is revised and updated to match the information presented in the RIAA and the supplementary documentation provided. Currently, Table 7.17 indicates that only the lower density for harbour porpoise will be taken forward into the assessment.

Action required: Please consider this comment and respond accordingly providing clarity surrounding the densities used for the overall conclusion of the assessment

Eni Response: The Applicant can confirm that **Table 1.8, section 1.3.12: Updated Marine Mammal Densities in the Technical Note: Marine Biodiversity – Marine Mammals and Marine Turtles MBTN03**, provides an update of the marine mammals' densities. This table is reproduced below as **Table 20.1.**

At the time of writing **Offshore ES Volume 2, Chapter 7: Marine Biodiversity**, the SCANS-IV (Gilles et al., 2023) and the Welsh Marine Mammal Atlas (Evans and Waggitt, 2023) were not available. In early 2024, the cetacean densities applied were updated to include those from SCANS-IV. For a precautionary approach, the highest densities were used. While grey seal and harbour seal were not included in Evans and Waggitt (2023), densities for the cetacean species were available. Maximum densities have been calculated over the Proposed Development marine mammal and marine turtle study area and are presented in **Table 20.1** alongside the densities originally used in the Offshore ES. As the maximum densities for all cetaceans used in the Offshore ES are higher than that of Evans and Waggitt (2023), no updates to use the latter have been undertaken, as the densities used in the ES are more precautionary and represent a reasonable worst-case for assessment purposes.

Table 20.1 Summary of Marine Mammal Densities used in the ES and those from the Welsh Marine Mammal Atlas (Evans and Waggitt, 2023) recommended by NRW

Species	Density used in the ES (animals per km^2)	Density from Evans and Waggitt (2023) (animals per km^2)	Management Unit (MU)[7]	Population Estimate in MU
Harbour porpoise	0.086[1] to 0.515[2]	0.194[9]	Celtic and Irish Sea	62,517
Bottlenose dolphin	0.0104[2] to 0.035[3]	0.001[9]	Irish Sea	293
Common dolphin	0.027[4]	0.0002[9]	Celtic and Greater North Seas	102,656
Risso's dolphin	0.0313[5]	0.00008[9]	Celtic and Greater North Seas	12,262
Minke whale	0.009[2]	0.0007[9]	Celtic and Greater North Seas	20,118
Grey seal	0.467 to 4.06[6]	-	Wales	3,766
			NW England	1,046
			Northern Ireland	2,113
			SW Scotland	2,163
			Isle of Man estimate	400

Species	Density used in the ES (animals per km$^{2)}$	Density from Evans and Waggitt (2023) (animals per km^2)	Management Unit (MU)[7]	Population Estimate in MU
			East of Ireland	1,749[8]
			Southeast of Ireland	2,326[8]
			OSPAR Region III	60,780
Harbour seal	0.0049 to 0.593[6]	-	Wales	14
			NW England	7
			Northern Ireland	1,406
			Isle of Man	No estimate available

[1] SCANS-III (Hammond *et al*., 2021) Block F.

[2] SCANS-IV (Gilles at al., 2023) Block CS-E.

[3] High-density coastal area density in outer Cardigan Bay from Lohrengel *et al*. (2018).

[4] SCANS-IV for adjacent Block CS-D as none observed for Block CS-E.

[5] SCANS-II (Hammond *et al*., 2013) Block O, as no values for SCANS-III for this species.

[6] Carter *et al.* (2022) – average and maximum densities calculated to per km^2 using absolute mean values for cells overlapping with the Proposed Development marine mammal and marine turtle study area.

[7] All population estimates include the Isle of Man unless population estimate is given separately.

[8] Population estimates based upon counts from Duck and Morris (2019), using scalars from Lonergan *et al.* (2013) for harbour seal and Russell *et al.* (2016) for grey seal.

[9] Evan and Waggitt (2023) Modelled Distributions and Abundance of Cetaceans and Seabirds of Wales and Surrounding Waters – Applied to the proposed development marine mammal and marine turtle study area.

21. NRW 102 (item 251):

Consultees' view: See NRW 78

Action required: See NRW 78

Eni Response: Please see above the Applicant's response to **Question 6**, and **Question 20**.

Ornithology

22. JNCC 4 (Item 135):

Consultees' view: Works should avoid disturbance to red-throated diver and common scoter between 1st November and 31st March, with some mitigation (such as using established shipping routes to transit through the SPA, slow vessel speeds, and avoiding over- revving of engines) during October and April.

Without such conditions secured, we cannot agree with the conclusion of no Adverse Effect on Site Integrity for the Liverpool Bay SPA alone or in-combination and a full assessment of disturbance impacts will be required

Action required: Please clarify timing restrictions and confirm the plans in which these timing restrictions are proposed to be secured

Eni Response: Please see the Applicant's detailed response to **Question 3**.

The Applicant can confirm that every effort is being made to plan the timing and duration of the works to avoid the sensitive periods for both fish and bird species. The Applicant considers that it would be

unnecessary to place timing restrictions on the Proposed Works. A brief explanation to support this position is provided below, with more detail provided in the response to **Question 3**.

The Applicant can also confirm that mitigation measures, including the use of established shipping routes to transit through the SPA, slow vessel speeds, and avoiding the over-revving of engines, will be incorporated into the Vessel Management Plan (VMP). Further details of the VMP are presented below in response to **Question 26 (NRW 68 Item 217)**.

The Applicant has included five mini programmes (**Figure 3.1 to Figure 3.5c**) to provide an overview of the timetable of activities for the Offshore works. These programmes show that the main vessel movements will take place from **April to October** each year, thereby avoiding the overwintering period, and the bad weather window. Also shown is which jack up rig, heavy lift vessel, and drill rig are in use. While the programmes show some 'Well' related activities, these will be carried out by a drilling rig that will have moved into location, alongside the platform, prior to the start of the over-wintering period.

23. NRW 4 (item 153):

Consultees' view: The applicant's response here appears to be incomplete, could the intended wording be confirmed

Action required: Response is incomplete

Eni Response: The Applicant apologises for this editorial error. The full text of our response should read:

"The applicant will be happy to engage with NRW on the timings of seasonal working practices for little tern and will prepare a method statement with detail on construction methods and timings. An outline vessel management plan will also be produced, although the applicant notes that the highly precautionary assessment found excess mortality to be below the 1% threshold and that therefore the impacts on red-throated diver would be negligible. The applicant also notes that this assumed that works were taking place during the wintering period, and that 100% of birds would be displaced from a 4km buffer. Much of the work will take place outside of the wintering period and birds are only likely to be displaced from less than 2km."

24. NRW 63, 69, 72, 73 (item 212, 218, 221, 222):

Consultees' view: NRW advises that any marine licence issued should be conditional on securing a written agreement with NRW (A) on the timing of the works to avoid impacts to Little Terns and their prey.

NRW (A) welcomes the applicant's commitment to timing the proposed works to avoid impacts to Little Terns. For example, during the installation of the power cable in the foreshore area which goes through the very limited foraging range of Little Terns associated with Gronant Dunes and Talacre Warren SSSI (and therefore the Dee Estuary SPA). We note that the applicant agrees with NRW that the timing of these works is crucial and welcome the applicant's commitment to engage with NRW advisory to define the period that works can take place.

The applicant has stated that the cable-laying operations will now be reduced and that these are likely to be carried out in July or August. Cabling is currently proposed to be carried out in July/August over a period of 4-5 days in the area close to the shore, and a further 24-48 hours in the area further away from the shore. It should be noted that recent Gronant Little Tern colony reports suggest there is still significant breeding activity during this period, particularly in July (e.g. Andrews, Case & Lewis, 2022; Smith et al 2023). Therefore, we advise these works should be carried out as far into August and September

as possible. This highlights the importance of agreeing the timing of the works with NRW advisory.

Action required: Please clarify timing restrictions and confirm the plans in which these timing restrictions are proposed to be secured.

Eni Response: The Applicant can confirm that every effort is being made to plan the timing and duration of the works to avoid the sensitive periods for both little terns and their prey species. The Applicant considers that it would be unnecessary to place timing restrictions on the Proposed Works. Further explanation to support this position is provided in the following Sections.

The Applicant has created mini programmes for the cable laying and inter-tidal works, which are presented above, in response to **Question 3** in **Figures 3.5a to 3.5c**. The mini-programmes show this work is planned to mobilise from **June to August 2026**. The cable lay activities will start with the preparatory works (e.g. rollers installation), mobilisation of the CLV and pulling out the cable.

Once the cable is pulled ashore and up through the HDD conduit, the CLV will carry out a simultaneous plough and lay from Talacre Beach to New Douglas. The CLV will be supported by two Multicats as support for anchor handling and contingency operations, and two ribs for the laying of the pull-in rope and to manage the horizontal movement and landing operation for the cable. This will be followed by laying and burying the cables from the New Douglas to the satellite platforms. All cable protection and mattress installations are located north of the West Hoyle Spit and scheduled in **summer 2026 and 2027**, avoiding the winter bad weather.

Figures 24.1 to 24.6 show the cable installation operation and anchor pattern for the Cable Lay Vessel (CLV) during lowest astronomical tide (LAT). Above each drawing is a table giving the approximate duration of that step of the simultaneous cable lay and burial operation. The figures and tables show that once the CLV leaves its beached location it will take approximately 20 hours to transit the Welsh Channel. The figures show that there will always be a safe passage for traffic to either the bow or the stern of the CLV.

STEP	Vessel Movement	Anchor Pattern Movement	Time for operation [hours]	Impact on Channel Traffic	Notes
1	CLV beached on shorepull location outside of marine channel	Positioned for Step 1	48	GREEN ZONE	Total duration of vessel beaching, anchor pattern deployment and cable shore pull (completion).

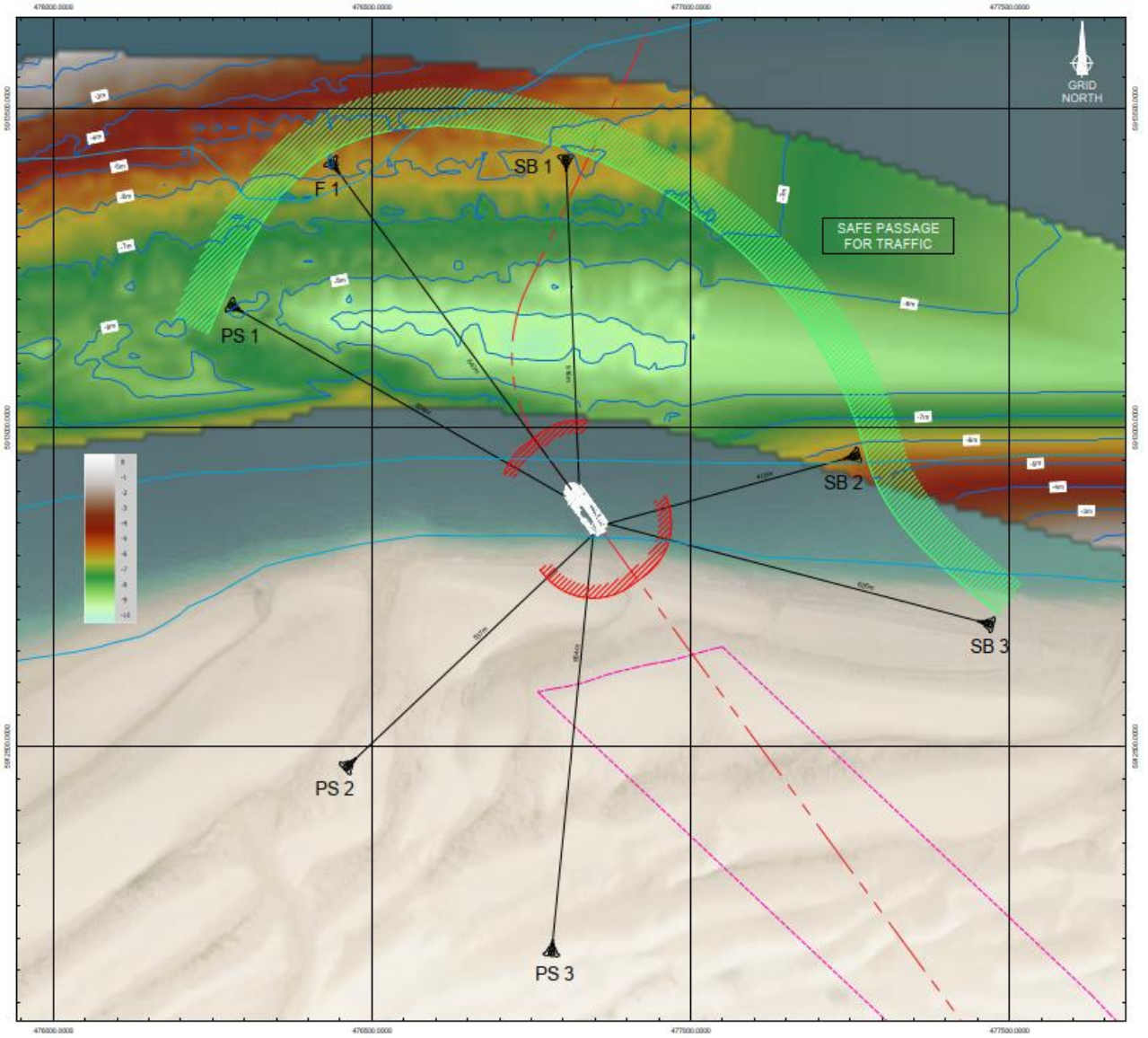

Figure 24.1: Nearshore marine operations cable lay vessel in Welsh Channel (Step 1 of 6)

STEP	Vessel Movement	Anchor Pattern Movement	Time for operation [hours]	Impact on Channel Traffic	Notes
2	CLV pays out cable to location #2	Positioned for Step #1	2	GREEN ZONE	No changes in anchor pattern, only CLV movement

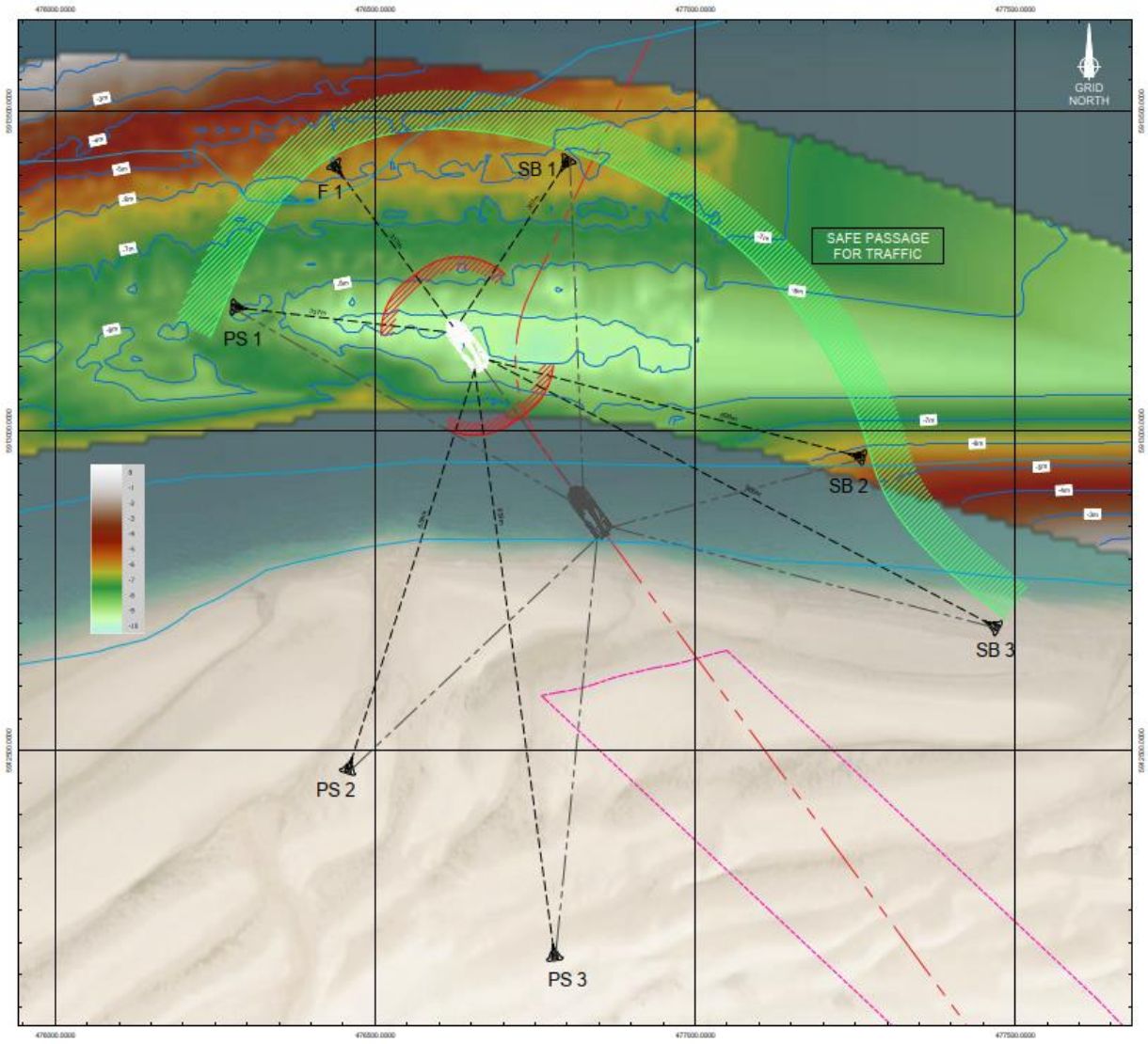

Figure 24.2: Nearshore marine operations cable lay vessel in Welsh Channel (Step 2 of 6)

STEP	Vessel Movement	Anchor Pattern Movement	Time for operation [hours]	Impact on Channel Traffic	Notes
3	CLV in slow lay - anchors repositioning	F1, SB1, PS1	6	AMBER ZONE/RED ZONE	3 front anchor repositioned. Time from first anchor pick up to last anchor drop on seabed

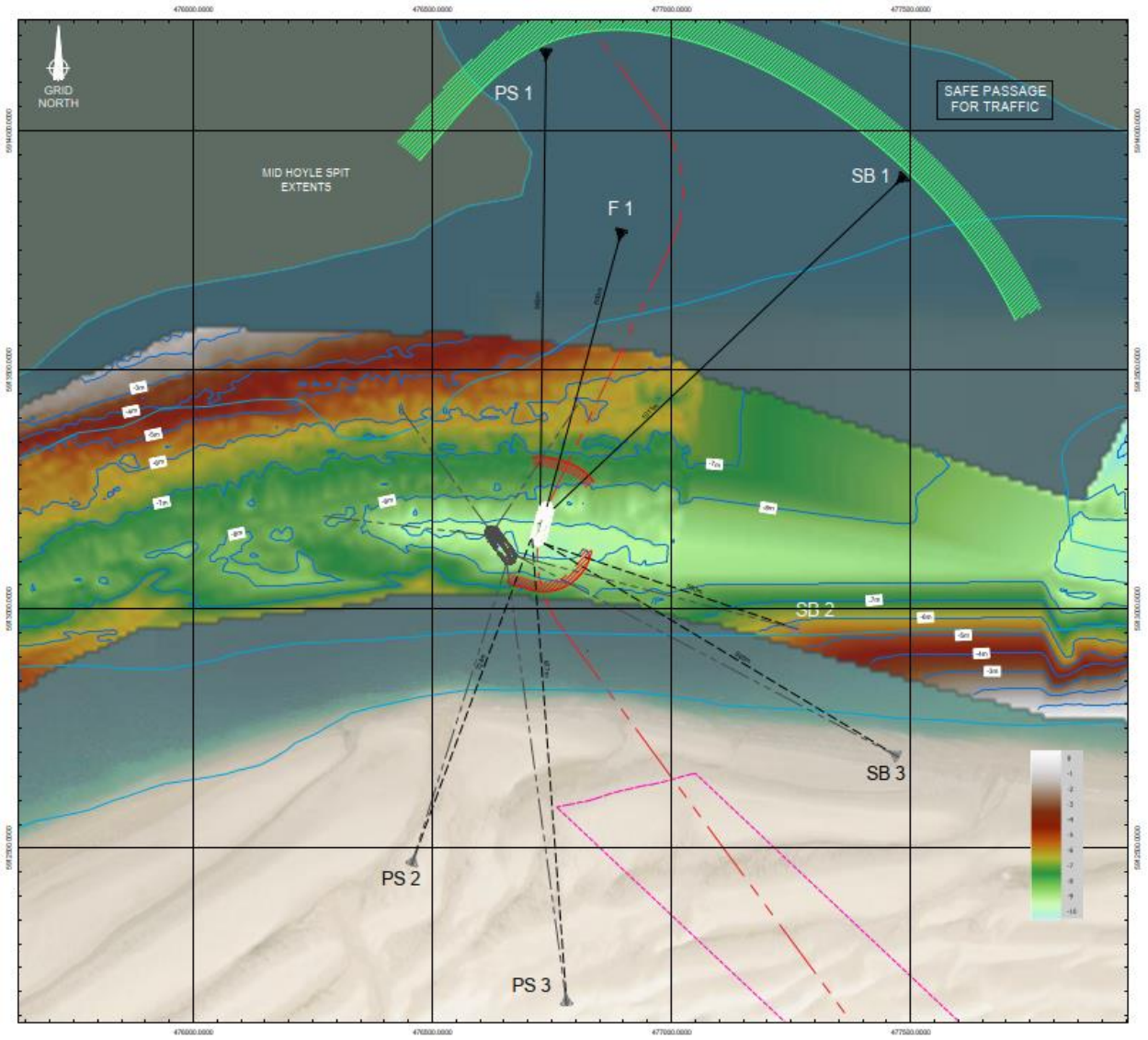

Figure 24.3: Nearshore marine operations cable lay vessel in Welsh Channel (Step 3 of 6)

STEP	Vessel Movement	Anchor Pattern Movement	Time for operation [hours]	Impact on Channel Traffic	Notes
4	CLV in slow lay - anchors repositioning	F1, PS2, PS3, SB3, SB2	10	AMBER ZONE/RED ZONE	FS1 aligned for cable burial, stern anchors repositioned

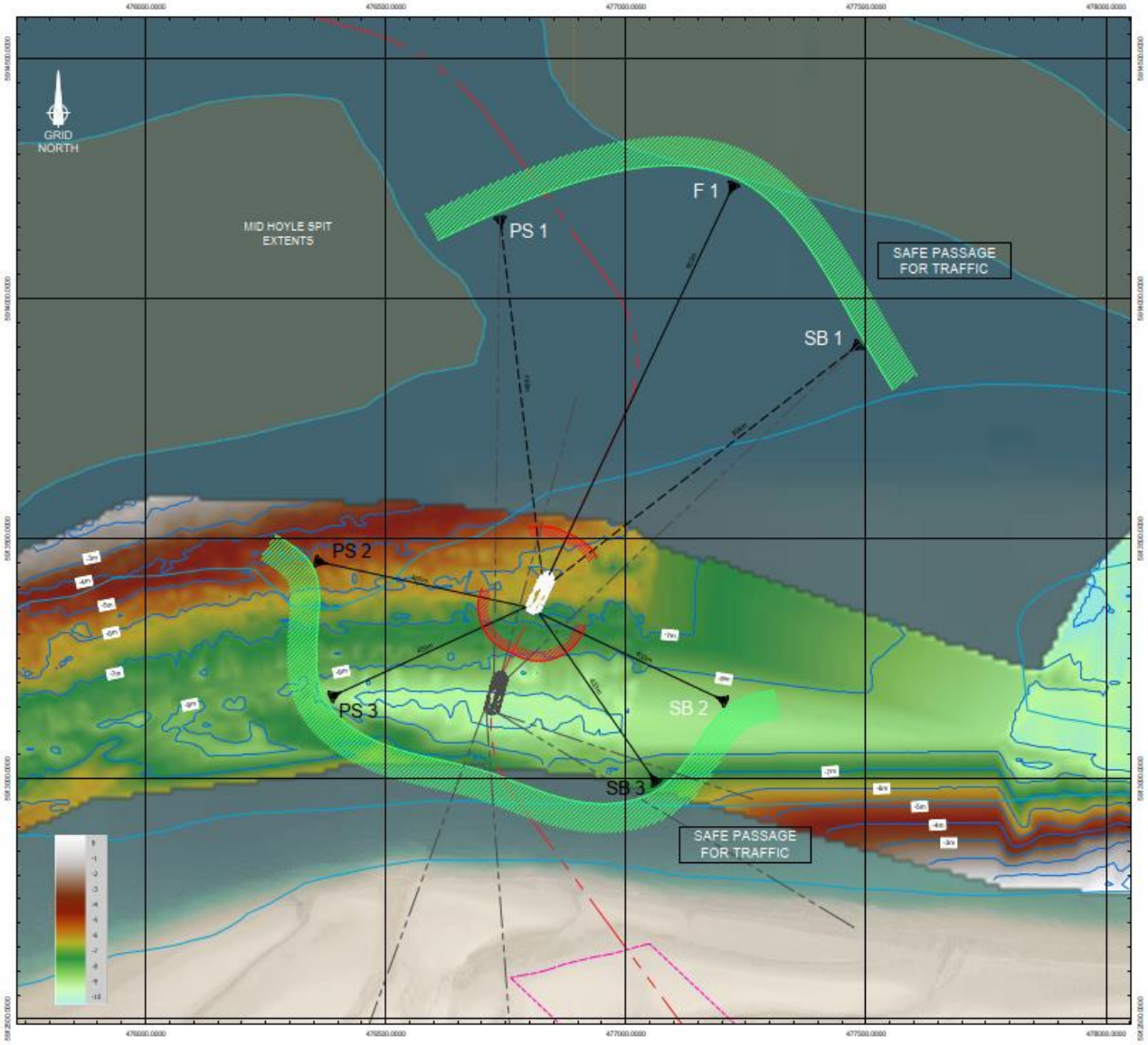

Figure 24.4: Nearshore marine operations cable lay vessel mooring in Welsh Channel (4 of 6)

STEP	Vessel Movement	Anchor Pattern Movement	Time for operation [hours]	Impact on Channel Traffic	Notes
5	CLV in normal lay	Anchor pattern for Step 4	2	GREEN ZONE/AMBER ZONE	By end of pull, CLV is out of marine channel boundary. Anchors still remain on channel.

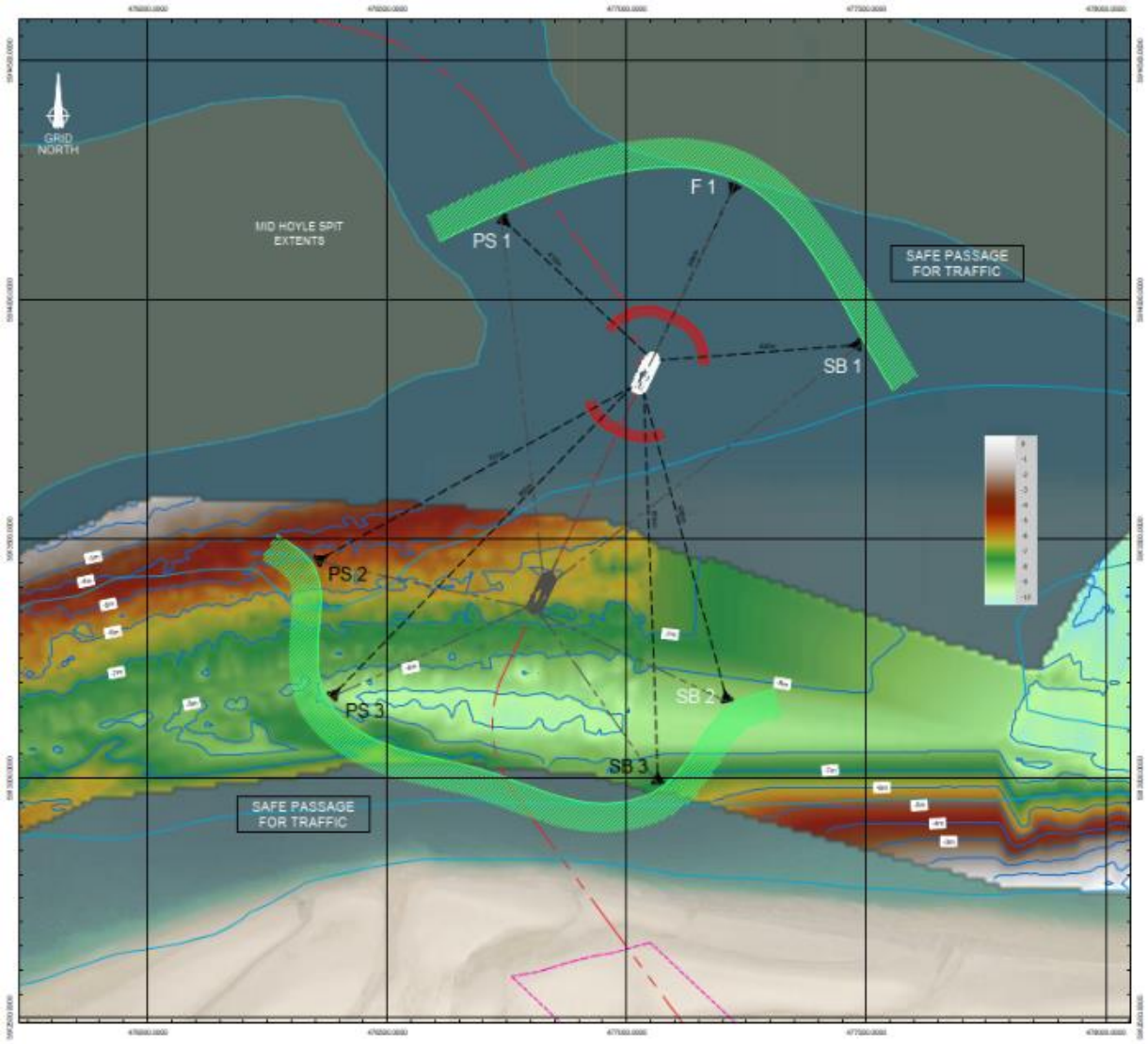

Figure 24.5: Nearshore marine operations cable lay vessel mooring in Welsh Channel (5 of 6)

STEP	Vessel Movement	Anchor Pattern Movement	Time for operation [hours]	Impact on Channel Traffic	Notes
6	CLV in slow lay - anchors repositioning	F1, SB1, PS2, PS3, SB3, SB2	14	GREEN ZONE	CLV and anchor spread are out of channel boundary.

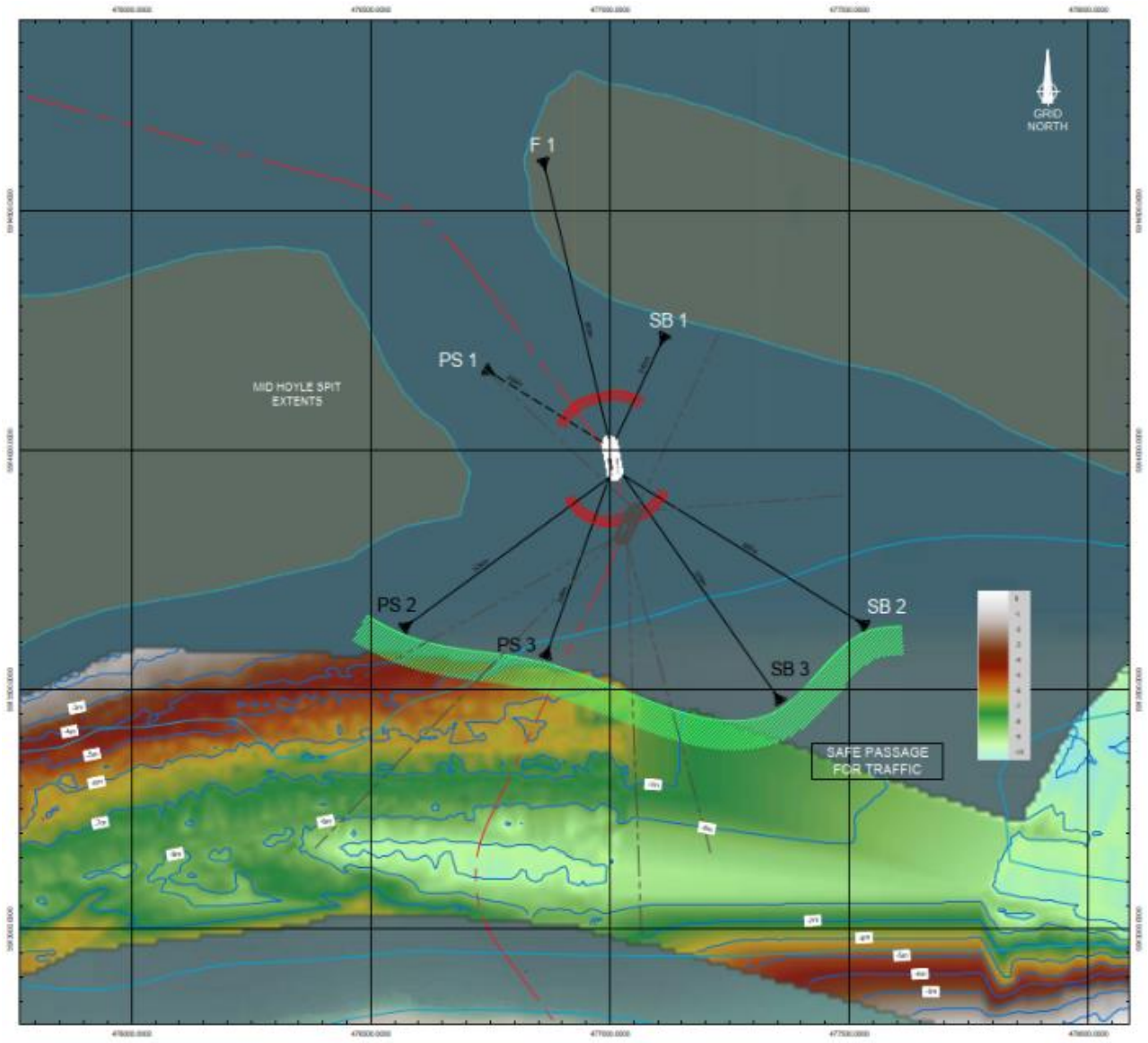

Figure 24.6: Nearshore marine operations cable lay vessel mooring in Welsh Channel (6 of 6)

Temporary habitat loss leading to displacement/disturbance of birds

A total of 37.02 km^2 of the physical works area for the whole Proposed Development sits within the Liverpool Bay SPA, which covers an area of 2,521.77 km^2. Assuming all of the SPA represents foraging for its various features, as a worst-case this equates to 1.47% of the Liverpool Bay SPA that will be temporarily affected by proposed works. It can be presumed that the area of the physical works would be lost to all qualifying species. However, once construction has finalised the habitat will be returned to its previous state.

Confidence in the recovery of the inter-tidal and subtidal areas following cable installation is gained from our understanding of the patterns and volume of sediment movement at Talacre Beach and more widely within Liverpool Bay.

Sediment transport is west to east, which is partially interrupted by the presence of groynes and other sea defences along the north Wales coast. The historical feed of sediment from offshore, and alongshore from west to east has helped maintain the beaches along the frontage with the continual growth of Point of Ayr spit only limited by strong tidal flows associated with the Dee Estuary. The Dee estuary is a major sink for sediment, with predominately sands and fines being both moved into the estuary and stored in the banks at the mouth.

There is evidence that beach volumes are reducing and intervention through beach nourishment sought to manage the associated flood risk as the dune system protects the low lying area behind. These changes potentially relate to the construction of the fishtail groynes at Prestatyn, along with a beach recharge of circa 210,000 m³ of material between 1990 and 1993. The overall result was a widening of the beach along the coastline.

Furthermore, the presence of the groynes has moved the west-to-east pathway of sand further offshore, towards the outer intertidal, which forces material to take a wider route towards the Point of Ayr. This widening of the coastal frontage has caused a slight constriction of the Welsh Channel and a re-orientation of flows in the area. Comparison of the available bathymetry datasets does show erosion on the North Hoyle Spit and the development of a channel up to 3.5 m deep in the 2019 bathymetry data compared to the 1993 bathymetry profile. This channel has subsequently been infilled and is not observable in data collected in 2022.

Little tern has a restricted foraging range during the breeding season at approximately 5 km (mean max from Woodward *et. al*., 2019). Assuming that prey is affected within the whole area of physical works this equates to a temporary loss of 8.6% of foraging for little tern from the north Wales coast colonies (Point of Ayr and Gronant Dunes). There is a lack of recent empirical data on the usage and foraging range of little tern from the north Wales coast colonies and therefore a survey was commissioned in 2023 to better understand usage of this area. The findings from this survey are summarises in **Figure 24.7**.

Disturbance and displacement from airborne sound and presence of vessels and infrastructure

Displacement modelling has been undertaken for all species where data was available (see **Offshore ES Volume 3, Appendix K2: Offshore Ornithology Displacement Technical Report**) utilising a mixture of the HiDef Aerial Surveying Limited (2023); Waggit, *et. al*. (2020) and Bradbury, *et. al*. (2016) data, the results of this are summarised below in **Table 24.1**. The number presented within the table represent a 100% displacement around the 12 construction vessels and a 1% mortality rate. This is deemed the worst case scenario. For the woks at Talacre beach the maximum number of vessels is likely to be six. Density data was not available for little tern within Liverpool Bay SPA so instead the amount of available foraging habitat that will be subject to disturbance from visual and audial sources at any one time has been calculated. A precautionary disturbance distance of 50 m is used for little tern

Table 24.1: Showing The Maximum Excess Mortality Caused Through Displacement As Calculated For The Liverpool Bay Features

Feature	Season	Excess mortality caused by displacement (%)	Amount of foraging habitat subject to disturbance (%)
Red-throated diver	Non-breeding	0.89	N/A
Little gull	Non-breeding	0.04	N/A
Common scoter	Non-breeding	0.98	N/A
Little tern	Breeding	0.04	0.8

Displacement will be highest during the construction phase, but this can be considered a temporary impact, and as all excess mortality is below 1% displacement does not significantly impact the long-term viability of the populations. As the increase in excess mortality (or reduction in available habitat) is short term and

reversible and is not sufficient to significantly impact population viability there would be no adverse effects to the integrity of the Liverpool Bay SPA.

Research has shown that disturbance to birds from vessel movements generally occurs within 50 to 100 m, with vessels approaching at faster speeds eliciting higher disturbance (Rodgers and Schwikert, 2002; Burger, 1998; Schwemmer et al., 2011). The CLV is a slow moving vessel that will manoeuvre on anchors within the nearshore area. **Figures 24.7 to 24.9** and their supporting tables show that the CLV will be beached for approximately 48 hours to enable to cable shore pull into the HDD conduit. Once this activity is completed then the CLV will take approximately 20 hours to transit the Welsh Channel. Once beyond the foraging range of little tern to the north of the West Hoyle Spit, the CLV will manoeuvre via its own propulsion and dynamic positioning system.

There is limited data available regarding noise and vibration during dredging (i.e. cable burial), although underwater noise levels are generally comparable to other types of commercial marine traffic. Research suggests that gulls can be highly tolerant to disturbance stimuli with generally only very intensive, prolonged disturbance causing avoidance of foraging or breeding areas (Calladine et al., 2006). When foraging at sea, tern species are also reported to be relatively insensitive to disturbance by shipping activities (Natural England and JNCC, 2019).

Rather than dispersing the area completely, birds would be expected to temporarily redistribute within the local area. In addition, it should be noted that there are high levels of existing vessel and maintenance dredging activities within the area. Daily there over a dozen return trips by offshore wind farm maintenance vessels from Port of Mostyn via the Welsh Channel. Seabirds and other diving birds foraging in the footprint of the proposed works would therefore be expected to be reasonably habituated to vessels, with more sensitive species already likely to be avoiding this area.

Overall, utilisation of the Proposed Development footprint by these bird interest features for foraging is considered limited, particularly given that it is a busy shipping area. The Proposed Development and cable laying will not cause a change to the overall extent of habitat available for seabirds and other diving birds with the foraging ranges of these species encompassing an extensive, area which will not be spatially restricted to the Proposed Development or cable laying footprints. Any changes in foraging habitat and prey resources will, therefore, represent only a small proportion of habitat available for these species. Furthermore, the potential for disturbance from this potential foraging area during the Proposed Development and cable lay activities is short-term and comparable to existing vessel movements via, and maintenance dredging of, the Welsh Channel. Figure 24.2 shows that vessel transits to and from the Port of Mostyn

In terms of the key prey items for bird interest features of the SPAs. Terns mainly feed on fish, but also shrimps and other crustaceans, small squid and marine worms. The ability of these species to catch prey items is not considered to be impaired given the scale of their foraging ranges, as shown in **Figure 1.3** in the Offshore ES Volume 3, Appendix K4: Little Tern Foraging Technical Report, reproduced below as **Figure 24.7**.

Baseline vessel transits in relation to Little Tern foraging areas

Figure 24.8 presents the tracks of vessels recorded on AIS in proximity to the Port of Mostyn, colour-coded by vessel type. During 2022, there were 4,089 vessel tracks recorded on AIS entering or exiting the Port of Mostyn, noting that this excludes temporary vessel activities such as survey and buoy work in the approaches to the Port of Mostyn and in Liverpool Bay. Wind farm support vessels made up the vast majority (99%) of vessels visiting Mostyn, with the remainder made up of tugs, workboats, cargo vessels and RNLI lifeboats.

It was noted by the Port of Mostyn in 2024 that wind farm support vessels, primarily CTVs make several trips per day from the port to nearby wind farms, with an estimated 8,400 transits per year, which is higher than the number of trips recorded on AIS. An additional 200 transits per year were estimated from jack-ups and general cargo vessels, giving a total of 8,600 transits per year associated with the Port of Mostyn. During consultation with the Port of Mostyn, it was noted that during 2022 there were approximately 10 CTV movements per day, with one cargo vessel per month, and occasional jack-up vessels, associated with the local wind farms, visiting the Port of Mostyn.

Figure 24.8 shows that vessels recorded on AIS used two main routes to access Mostyn. Vessels either follow the Welsh Channel extending to the west out of the River Dee, or the Mid Hoyle Channel, which passes north, through the gap between the West Hoyle Spit and the West Hoyle Bank. The Welsh Channel is crossed by the Proposed Development, partly alongside the existing PL1030 natural gas pipeline, crosses the Welsh Channel and then through the Mid Hoyle Channel. Both channels are buoyed, with the pilot boarding location lying where both channels converge, before entry to the Dee estuary. Of the annual vessel transits recorded on AIS, 6,700 (78%) were transiting the Mid Hoyle Channel, with 1,900 (22%) recorded on AIS using the Welsh Channel. **Figure 24.9** presents a composite of **Figure 24.7** and **Figure 24.8**. In **Figure 24.9** the observations from the 2023 little tern foraging survey have been overlaid on the AS transits shown in **Figure 24.8**. This shows that all the vessels transiting from Port of Mostyn pass through the foraging area for the little tern colony at Talacre Beach, and approximately 1,900 pass through the Welsh Channel, and hence the foraging area of the Gronant Dunes colony.

Indirect impacts from changes in prey availability

Indirect effects to prey availability are predicted to be short term and reversible (**Offshore ES Volume 2 Chapter 7: Marine Biodiversity**) lasting only for the duration of construction. Any impacts can therefore be assumed to apply only to the construction and decommissioning phases. Within the assessment of fish within the ES Chapter 7 and the diadromous fish section of the RIAA, it was concluded that there would be no significant impact on fish. Therefore, the fish are likely to move away from construction and operational areas in a similar manner as the birds and therefore the impacts from changes in prey availability will be of the same, if not of less significance that the temporary habitat loss and bird displacement.

Conclusion

In the context of the site's conservation objectives, the population size and habitat extent will be maintained. In other words, there is no potential for a discernible change to occur to the overall populations of these bird interest features or supporting habitat and availability of prey. Overall, there is considered no potential for an AEOI on the interest features of the Dee Estuary SPA/Ramsar site and Liverpool Bay / Bae Lerpwl SPA in advance of any mitigation. However, the applicant would like to note that a precautionary approach has been taken to the potential effects upon site integrity for little tern, which is based upon the assumption that works are to take place over the breeding season. On this basis:

- The impacts of works during the breeding season would likely be moderate, primarily due to effects on prey availability and associated habitat loss.
- Conversely, it was determined that conducting works during the non-breeding season would result in negligible to no change in impacts.

The Applicant is committed to working with its cable installation contractors, and the relevant stakeholders and regulators to develop a method of working to enable works within the area sensitive to breeding little tern, to result in as little disturbance as practicable.

Additionally, the Applicant will continue to work with NRW and the local wildlife groups to design and deliver the nature conservation and management activities it currently undertakes around Gronant, and Talacre Dunes.

The Applicant anticipates that any Marine Licence would require the prior approval of method statements for the cable installation activities, and for the ongoing nature conservation and management activities, which would include measures for little tern.

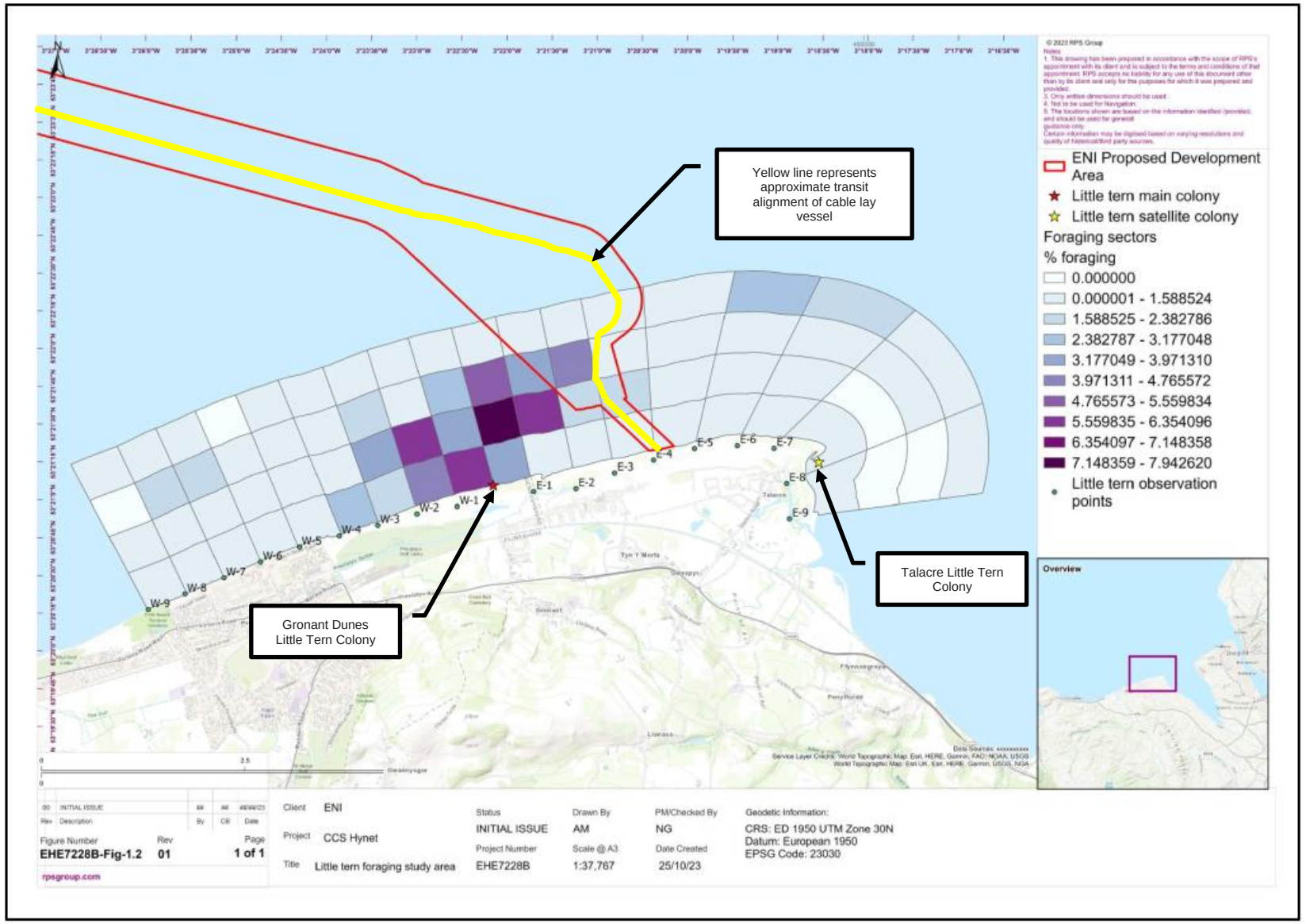

Figure 24.7: Observed foraging range of Little Terns associated with Gronant Dunes and Talacre Warren SSSI

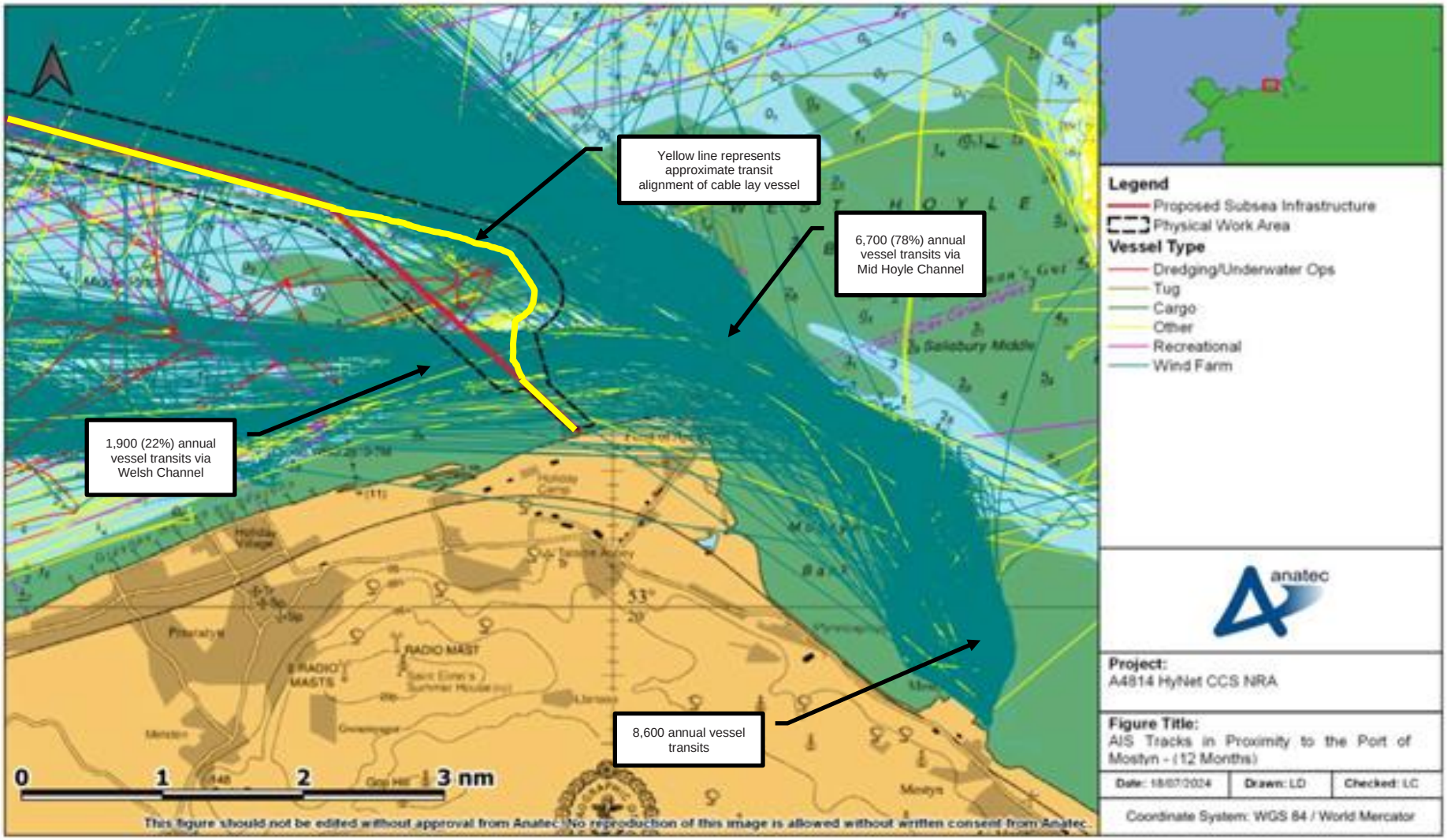

Figure 24.8: AIS Tracks in Proximity to the Port of Mostyn – (12 Months)

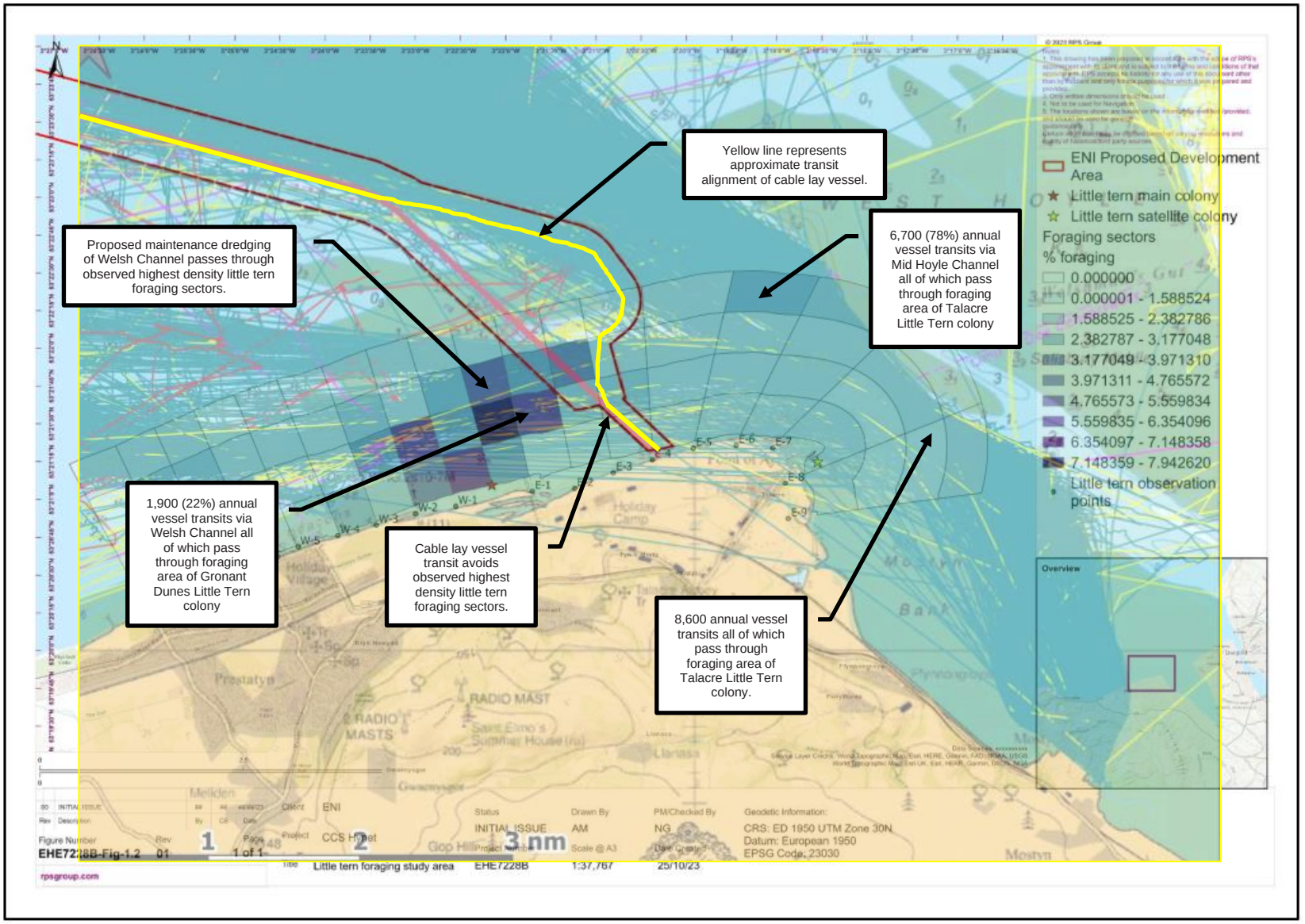

Figure 24.9: Overlay of Little Tern foraging areas on AIS Tracks (12 Months) in Proximity to the Port of Mostyn

25. NRW 64 (item 213):

Action required: See NRW 63. Please also consider commitments to restrictions on other bird features and fish

Eni Response: Please see the Applicant's responses to **Question 3**, and **Question 24**.

26. NRW 68 (item 217):

Consultees' view: NRW (A) welcome the applicant's commitment to producing a Vessel Traffic Management Plan (VTMP). The VTMP should be agreed in writing with NRW (A) and secured as a condition of the marine licence. We advise that this should cover both construction and operational phases.

The applicant has stated that most of the offshore construction works will take place from the 20th March to the 20th October due to imposing a 'weather window'. Previously we advised that, to avoid disturbance and displacement of Red- Throated Diver and Common Scoter, the applicant should consider seasonal restrictions on offshore construction activity within Liverpool Bay SPA within the winter period (1st November - 31st March inclusive, noting that there can also be large numbers of birds present in October and April). Further clarification is required here on the rationale for this discrepancy.

Action required: Please clarify timing restrictions. Please note that the Vessel Traffic Management Plan is expected to and operation and include these timing restrictions.

Eni Response: The Applicant can confirm that it is fully committed to the preparation of and adherence to a **Vessel Management Plan (VMP)**. The Applicant has anticipated that a **VMP** is likely to be required through the Storage Permit, and Marine Licence, as consent conditions. Therefore, the Applicant has made it a requirement of the EPC contractors that will implement the Proposed Development to prepare a **VMP** for the works. The **VMP** will be prepared following consent, and submitted to the relevant regulatory bodies for approval, prior to the commencement of development.

The **VMP** will provide details of the vessel management and navigational safety measures that will be implemented, in accordance with relevant guidance, during the construction, and operation and maintenance phases of the Proposed Development.

The end-of-life decommissioning of the Proposed Development will be subject to a separate Decommissioning Plan. The **VMP** detailing the navigational safety and vessel management arrangements for those decommissioning works, will be developed at the appropriate time in advance of those activities commencing. The **VMP** will contain details of the following:

- Navigational safety measures during construction.
- Navigational safety measures during operation and maintenance.
- Promulgation of information e.g., local notices to mariners, Admiralty notices to mariners, hydrographic charts, Kingfisher Bulletins, radio navigational warnings.
- Location of working ports.
- Types and specification of vessels.
- Numbers and movements of vessels.
- Indicative transit route corridors.
- Anchoring.
- Environmental sensitivities and, if required, timing restrictions relevant to vessel management.

- Compliance with Marine Guidance Notes.
- Compliance with Storage Permit, and Marine Licence conditions.

The Applicant can confirm that mitigation measures, including the use of established shipping routes to transit through the SPA, slow vessel speeds, and avoiding the over-revving of engines, will be incorporated into the **VMP**. Further details of the **VMP** are presented below in response to **Question 29 (NRW 68 Item 217)**.

Please see the Applicant's detailed response to **Question 3**.

The Applicant can confirm that every effort is being made to plan the timing and duration of the works to avoid the sensitive periods for both fish and bird species. The Applicant considers that it would be unnecessary to place timing restrictions on the Proposed Works. A brief explanation to support this position is provided below, with more detail provided in the response to **Question 3**.

The Applicant has included five mini programmes (**Figure 3.1 to Figure 3.5c**) to provide an overview of the timetable of activities for the Offshore works. These programmes show that the main vessel movements will take place from **April to October each year**, thereby avoiding the overwintering period, and the bad weather window. Also shown is which jack up rig, heavy lift vessel, and drill rig are in use. While the programmes show some 'Well' related activities, these will be carried out by a drilling rig that will have moved into location, alongside the platform, prior to the start of the over-wintering period.

Regarding fish features that could be affected by piling activities during winter period, specifically the cod spawning period of February and March, the installation of the New Douglas platform, including the piling, is scheduled for **July** (currently **21-28 July 2026**).

Drilling activity at Hamilton North is planned for **July and August 2027**, including perforation of the wells. The drilling works, including perforation, at Hamilton Main are scheduled to commence in November 2026 and take approximately 2.5 months. The drilling works, including perforation, at the Lennox platform are planned to take around 2 months during **September and October 2027**. Drilling activities are shown in the mini programs presented in response to **Question 3** at **Figures 3.1**, **3.2**, **and 3.3** respectively, for Hamilton, Hamilton North, and Lennox.

However, to minimise and mitigate for the potential disturbance resulting from these activities, all rig movement will occur during the summer season. This will prevent displacement from the presence of associated vessels occurring during the winter months. Although both common scoter and red-throated diver are highly susceptible to disturbance, often flushing from large distances and relocating even further away from the source of disturbance (Goodship & Furness, 2022), the impact of displacement from disturbance has been fully assessed as presenting less than the 1% threshold for excess mortality and is therefore deemed negligible. The overall significance of the impact of disturbance from airborne sound (and the presence of vessels and infrastructure) is minor for this species group.

27. NRW 70:

Consultees' view: The applicant's Environmental Statement described the new Douglas Platform as providing a positive effect on birds by providing nesting opportunities for Kittiwake. NRW (A) welcomes this opportunity but would like to see nesting opportunities being provided for Kittiwake on the new structure that are of the same (or better) quality and quantity compared to what is currently available on the old structure.

NRW requires further information on how the applicant intends to re-attract Kittiwake to the new Douglas Platform, and any differences between the quality and quantity of nesting opportunities provided for Kittiwake on this new platform, compared to what may be lost when the old structure is decommissioned. We advise the applicant that a written

strategy to manage this process would be beneficial. NRW (A) is happy to work with the applicant to provide advice on this issue.

Action required: Could you please provide clarification regarding kittiwake nesting opportunities

Eni Response: A survey was undertaken in accordance with the Ornithological Monitoring Plan issued to OPRED. Monitoring was undertaken by suitably qualified ornithologists following the methodology described in the JNCC Advice (Thompson, D (2021) Advice Note Seabird Survey Methods for Offshore Installations: Black-legged Kittiwake. JNCC, Peterborough).

The advice note sets out 19 principals for surveys to ensure they are systematic and repeatable. Boat-based methods from the Grampian Talisman were used as per the standard approach to seabird monitoring and set out in the JNCC Advice Note. This approach provides good visibility of potential nest locations from sea level.

The survey comprised a visual assessment of the platforms from the Grampian Talisman vessel, maintaining a minimum distance of 100 m from the installations. This is the first ornithological baseline survey undertaken at the six Liverpool Bay Assets.

Kittiwakes were recorded on four of the six platforms and therefore detailed mitigation plans will be required in advance of decommissioning at these platforms.

Updated surveys should be completed annually to provide accurate counts and to confirm mitigation proposals. The purpose of the survey and assessment was to assess the status of any nesting kittiwake colonies (if present) or any other nesting species and provide advice on further surveys (if required) and mitigation plans for the decommissioning of the platforms.

The following table presents the number of kittiwakes found present in Liverpool Bay Assets during surveys in 2022, 2023, and 2024 (Douglas, OSI, Conwy, Hamilton, Hamilton North and Lennox).

Platform	July 2022	June 2023	June 2024
Douglas DW	281	275	339
Douglas DP	212	191	288
Douglas DA	0	0	0
Hamilton	70	56	74
Hamilton North	54	70	65
Lennox	15	30	40
Conwy	0	0	0
OSI	0	0	0

Up to and including 2024, Eni has implemented bird strategy: testing deterrents (sonic net, Bird Alert, falconry, plastic decoys) and collection of 2 years of data on existing colony (phenology, breeding success, feeding areas and distances travelled, site fidelity) which will be used to tailor 2025 strategy.

For the upcoming years up to decommissioning: focus is on deterring kittiwakes to significantly lower the number of nests and eggs with all possible deterrent methods including falconry use, Bird Alert acoustic deterrent, plastic decoys, cleaning nests in winter season. Eni will keep tailoring the strategy by monitoring numbers (either via boat-based surveys, or in person counts on the platform).

The Applicant recognises that there will be an overall reduction in nesting opportunities for kittiwake, it is assumed that there will be sufficient space throughout the refurbed and new topsides to support the same, or greater numbers of nesting kittiwake (not all platforms were at full capacity). In addition, the applicant has followed OPRED guidance and as part of the decommissioning Environmental Appraisal is already excluding nesting kittiwake from platforms as per the nesting bird strategy. As this plan has been approved this is therefore the existing baseline. There is no guarantee that the same birds will survive/return following

years of deterrence, and it is therefore assumed that there will be a positive effect in supplying new nesting structures and ceasing deterrence.

Considering that not all platforms are used by nesting kittiwake, currently 632 pairs (RSK Biocensus, 2022) utilise 5,829.8m^2, this is an average of 0.11 nests per m^2. During the operational phase there will be a reduction in available platform area of 990m^2 leading to an operational available platform area of 4,839.8m^2. For kittiwake to colonise the refurbed and new platforms in similar numbers they will need to be present at a density of 0.13 nests per m^2. Whilst it is acknowledged that the full area of the platform will not be available it is clear from the 2022 report that the platforms are currently not at full nesting capacity and that therefore there will be room for additional nesting kittiwake.

It should be noted that analysis of the population data, and whether the deterrents will result in decreased numbers in the future, is in preparation and will be issued in February 2025. Data is still being gathered. However, at this stage we cannot predict with certainty the number of kittiwakes that will occupy the New Douglas platform.