

Chapter 5 Addendum: Project Description





ORIEL WIND FARM PROJECT

Environmental Impact Assessment Report - Addendum Chapter 5 Addendum: Project Description

MDR1520C
EIAR – Chapter 5 Addendum
A1 C01
December 2025

Oriel Wind Farm Project – Project Description - Addendum

Contents

| | | |
|----------|--|----------|
| 5 | CHAPTER 5 ADDENDUM - PROJECT DESCRIPTION | 1 |
| 5.1 | Introduction | 1 |
| 5.2 | Project boundary | 5 |
| 5.2.1 | Offshore wind farm area | 5 |
| 5.2.2 | Offshore cable corridor | 5 |
| 5.2.3 | Onshore cable route | 5 |
| 5.2.4 | Onshore substation site | 5 |
| 5.3 | Project infrastructure overview | 5 |
| 5.3.1 | Offshore infrastructure | 5 |
| 5.3.2 | Onshore infrastructure | 5 |
| 5.4 | Project design and flexibility | 5 |
| 5.4.1 | Surveys to inform the project design | 5 |
| 5.4.2 | Design flexibility | 5 |
| 5.5 | Description of offshore infrastructure | 5 |
| 5.5.1 | Construction port | 5 |
| 5.5.2 | Site preparation activities | 5 |
| 5.5.3 | Wind turbines | 6 |
| 5.5.4 | Wind farm area layout | 6 |
| 5.5.5 | Foundations | 6 |
| 5.5.6 | Inter-array cables | 9 |
| 5.5.7 | Offshore substation (OSS) | 9 |
| 5.5.8 | Offshore export cable | 9 |
| 5.5.9 | Landfall and Transition Joint Bay (TJB) | 9 |
| 5.5.10 | Construction vessel activities | 10 |
| 5.5.11 | Aids to navigation, colour, marking and lighting | 10 |
| 5.5.12 | Safety zones and advisory clearance distances | 10 |
| 5.6 | Description of onshore infrastructure | 10 |
| 5.6.1 | Onshore cable | 10 |
| 5.6.2 | Onshore cable installation | 11 |
| 5.6.3 | Onshore substation | 12 |
| 5.6.4 | Onshore substation construction | 12 |
| 5.6.5 | Commissioning of onshore infrastructure | 12 |
| 5.7 | Construction programme | 13 |
| 5.7.1 | Construction working hours | 17 |
| 5.7.2 | Construction employment | 17 |
| 5.8 | Operational and maintenance phase | 17 |
| 5.8.1 | Offshore activities | 17 |
| 5.8.2 | Onshore activities | 17 |
| 5.9 | Decommissioning phase | 17 |
| 5.9.1 | Offshore infrastructure decommissioning | 17 |
| 5.9.2 | Onshore decommissioning | 17 |
| 5.10 | Environmental management | 18 |
| 5.10.1 | Measures included in the Project | 18 |
| 5.10.2 | Management plans | 18 |
| 5.10.3 | Residues, emissions and waste | 21 |
| 5.10.4 | Natural resources | 21 |
| 5.10.5 | Health and Safety | 21 |
| | References | 22 |

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

Tables

| | |
|---|----|
| Table 5A-1: Further information requested and details on the Applicant's response. | 2 |
| Table 5A-2: Project Design parameters for monopile foundations (Replaces Table 5-4). | 6 |
| Table 5A-3: Management plans. | 19 |

Figures

| | |
|--|----|
| Figure 5A-1: Installation of foundations (steps 1-3): 1. Placement of MODIGA and piling of sacrificial casing; 2. Drilling of rock to embedment depth; 3. Removal of drill. | 8 |
| Figure 5A-2: Installation of foundations (steps 4-6): 4. Insertion of monopile; 5. Grouting of monopile, 6. Removal of MODIGA. | 8 |
| Figure 5A-16 Onshore Cable Route Map 1-3, 12 of 12. | 10 |

5 CHAPTER 5 ADDENDUM - PROJECT DESCRIPTION

5.1 Introduction

This Addendum provides information to supplement the project description presented in chapter 5: Project Description of the Environmental Impact Assessment Report (EIAR volume 2A). It has been prepared in response to a Request for Further Information (RFI) from An Coimisiún Pleanála (ACP) (formerly An Bord Pleanála) regarding the planning application (case reference ABP-319799-24) for the Oriel Wind Farm Project (hereafter referred to as “the Project”).

The ‘Schedule-Further Information Request’ provided by ACP listed 19 items of further information. Table 5A-1 lists the items that responses to the RFI resulted in adjustments to the onshore cable route and associated infrastructure. Table 5A-1 also outlines where details on the adjustments can be found in this Addendum to chapter 5: Project Description. A response to these items has also been provided in the relevant Addenda and these are also referenced in Table 5A-1.

Further information is also provided on the proposed foundation installation. The additional information is to provide some further clarity on the proposed installation method which was selected to minimise the time spent piling and thereby reduce potential noise impacts on the marine receptors (see section 5.5.5).

The section and subsection headings in this Addendum correspond to those used in chapter 5: Project Description (EIAR volume 2A). The reader is directed to review the information presented in this Addendum alongside the project description presented in the EIAR chapter.

Two errata were identified during the preparation of the response and are documented in section 5.5.5 and section 5.7.1.

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

Table 5A-1: Further information requested and details on the Applicant's response.

| Reference | Request for Further Information | Response / Reference where further information is presented | Concluding statement |
|--|--|--|--|
| Marine Processes | | | |
| Coastal Erosion | | | |
| 6.K | <p>It is noted that the landfall site lies within an actively eroding coastline, and that the installation of the Transition Joint Bay (TJB) at either of the 2 option locations, will require works within the footprint of the southern area of the Dunany Point County Geological Site (CGS LH017). The Board notes that the Project Description (and Appendix 5-12: Construction Methodology – Onshore Cable) indicates that a geotechnical investigation of the landfall above the high-water mark was conducted in 2021, including the drilling of boreholes and a geophysical survey of seismic refraction and electrical tomography. It is further noted that the installation of the TJB will require a permanent access track to remain insitu.</p> <p>In the context of coastal processes and having regard to the location of the planned landfall of cables, the desktop study presented in the Coastal Erosion Assessment Report appears to be inadequate. In addition, and while the Board notes Section 4.11.3 of Chapter 4: Consideration of Alternatives of the EIAR, the Board is concerned with the proposal for landing the offshore cable via open trench rather than HDD at this sensitive location. The applicant is requested to submit both coastal processes modelling assessment and shoreline regression/cliff stability modelling to justify the finding of negligible magnitude of impact with the implementation of mitigation measures in the EIAR.</p> | <p>Section 5.5.9 presents details on the realigned export cable route (within the planning application boundary) and adjusted transition joint bay location (options 1 and 2) at the proposed landfall to avoid works in the cliff and remove the potential for coastal erosion.</p> <p>(see chapter 7 Addendum: Marine Processes, chapter and chapter 21 Addendum: Soils, Geology and Hydrogeology for further details)</p> | <p>The export cable and transition joint bay location (options 1 and 2) at the proposed landfall have been adjusted to avoid works in proximity to the cliff and remove the potential for coastal erosion. The adjusted design of the cable route and location of TJB options have been examined for potential impacts on biodiversity (chapter 19 Addendum), soils & geology (chapter 21 Addendum), noise (chapter 25 Addendum) and cultural heritage (chapter 26 Addendum). The updated assessments conclude there will be no significant effects as a result of the adjusted onshore cable route or changes in TJB locations.</p> |
| Benthic Subtidal and Intertidal Ecology | | | |
| Landfall Construction Methodologies | | | |
| 8.G | <p>In terms of minimising the impacts on intertidal sediment communities, the Board notes that the use of dredge/cut construction methods with regard to the onshoring of the cable is not consistent with best practice, and that horizontal directional drilling (HDD) is considered to be more appropriate. The applicant is requested to submit a justification for the proposal to use dredging in this instance while ensuring the protection of existing eroding cliffs or alternatively update application documentation to provide for HDD at the point of landfall.</p> | <p>Section 5.5.9 provides further details on the justification for why HDD is not the preferred method of installation for the export cable and why an open trench option through the inter-tidal zone is the selected and preferred option and will not result in significant effects on intertidal sediment.</p> | <p>There is no change to the design of the export cable in the intertidal area. The export cable is proposed to be constructed in the intertidal area using open trench. Further mitigation has been proposed in chapter 8 Addendum: Benthic and Intertidal Ecology regarding reinstatement.</p> |

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

| Reference | Request for Further Information | Response / Reference where further information is presented | Concluding statement |
|-----------------------------|---|---|--|
| Roads & Traffic | | | |
| 18.A | The applicant is requested to address the submission made by Transport Infrastructure Ireland (TII), which raises concerns with regard to the proposed onshore elements of the project, and in particular, the impacts, both directly and indirectly, on the N33 and the M1 routes. The applicant is requested to assess the project in terms of the provisions of national policy and the Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012), which seeks to avoid the creation of new accesses or the generation of increased traffic from existing accesses to national roads with a speed limit greater than 50kph. | <p>Section 5.6.1 presented details on the realigned onshore cable route along the N33. The route has been adjusted within the planning application boundary to minimise impacts on the N33 infrastructure.</p> <p>Section 5.6.2 Onshore Cable Installation provides additional detail on the HDD Crossing under the M1 motorway and Dublin-Belfast Rail line.</p> <p>Section 5.6.3 presented details of the proposed existing access at the onshore substation, which will be reconfigured to TII standards to ensure Left In-Left Out operation.</p> <p>(see chapter 18 Addendum: Traffic and Transport for further details)</p> | The minor adjustments to the onshore cable route along the N33 have been examined for potential impacts on biodiversity (chapter 19 Addendum) and cultural heritage (chapter 26: Cultural Heritage). The updated assessments concludes there will be no significant effects as a result of the adjusted onshore cable route. |
| Onshore Biodiversity | | | |
| 19.A | <p>The proposed landfall for the offshore cable is located within the Dunany Point pNHA (Site Code: 001856), and within a Sedimentary Sea cliff habitat as detailed in the EIAR (Appendix 19-01). The EIAR also identifies that the offshore cable corridor comes on shore 'at a shingle bank extending from the scrub (WS1) and dry calcareous and neutral grassland (GS1) habitats to below the High-Water Mark (HWM). Vegetation was restricted to the upper section of shingle and contained a single species of rare occurrence, curled dock <i>Rumex crispus</i>. Below the shingle bank a tidal mudflat and sandflat was present.' The Board notes that the occurrence of shingle beach adds to the scientific importance of Dunany Point pNHA, and that this habitat is as an Annex I habitat in the Habitats Directive.</p> <p>i. The DAU considers that the description of onshore habitats is limited in the EIAR, and that sections of the cliff habitat at and in the vicinity of the Dunany Point landfall might correspond to annexed habitat <i>Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]</i>. The applicant is</p> | <p>See response to RFI 6.K and 8.G above.</p> <p>(see chapter 19 Addendum: Onshore Biodiversity for further details)</p> | See concluding statement to RFI 6.K and 8.G above. |

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

| Reference | Request for Further Information | Response / Reference where further information is presented | Concluding statement |
|-----------|---|---|----------------------|
| | <p>requested to submit further information in this regard, including additional survey/data, to determine if the habitats show characteristics of Annex 1 habitats, at and in the vicinity of the Dunany Point landfall.</p> <p>ii. The impacts to the identified habitats, within this eroding coastline are noted to arise due to the proposed use of dredge/open cut construction technique to allow on-shoring of the cable. This is not considered to be consistent with best practice in terms of management of impacts on intertidal sediment communities. Notwithstanding the inclusion of Section 4.11.3 of the EIAR (Consideration of Alternatives – Offshore cable construction at the landfall) the applicant is advised that the Board is not satisfied that the promotion of this construction technique within these coastal habitats is justified, given that HDD drilling is likely to be less impactful. The applicant is requested to submit a justification for the proposal to use dredge/open cut construction technique to facilitate the on-shoring of the cable in this instance or alternatively update application documentation to provide for HDD to facilitate the on-shoring of the cable and incorporate an assessment of any alternative impact arising throughout the application documentation where relevant.</p> <p>The responses to the above should be incorporated into the assessment of the landfall of the offshore cable in terms of the significance of the impact on this coastal environment and in terms of the appraisal of Options for the location of the TJB.</p> | | |

5.2 Project boundary

There are no changes to EIAR chapter 5: Project Description.

5.2.1 Offshore wind farm area

There are no changes to EIAR chapter 5: Project Description.

5.2.2 Offshore cable corridor

There are no changes to EIAR chapter 5: Project Description.

5.2.3 Onshore cable route

There are no changes to EIAR chapter 5: Project Description.

5.2.4 Onshore substation site

There are no changes to EIAR chapter 5: Project Description.

5.3 Project infrastructure overview

5.3.1 Offshore infrastructure

There are no changes to EIAR chapter 5: Project Description.

5.3.2 Onshore infrastructure

There are no changes to EIAR chapter 5: Project Description.

5.4 Project design and flexibility

5.4.1 Surveys to inform the project design

There are no changes to EIAR chapter 5: Project Description.

5.4.2 Design flexibility

There are no changes to EIAR chapter 5: Project Description.

5.5 Description of offshore infrastructure

5.5.1 Construction port

There are no changes to EIAR chapter 5: Project Description.

5.5.2 Site preparation activities

There are no changes to EIAR chapter 5: Project Description.

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

5.5.3 Wind turbines

There are no changes to EIAR chapter 5: Project Description.

5.5.4 Wind farm area layout

There are no changes to EIAR chapter 5: Project Description.

5.5.5 Foundations

The Applicant notes the absence of two units of measurement to describe ‘Drill characteristics’ in Table 5.4 in EIAR chapter 5: Project Description. Please see Table 5A-2 below, which shows the amendments in blue. This replaces Table 5-4 in chapter 5: Project Description.

Table 5A-2: Project Design parameters for monopile foundations (Replaces Table 5-4).

| Element | Design parameter (WTGs + OSS) |
|---|-------------------------------|
| Monopile | |
| Total number of structures | 26 (25 WTGs + 1 OSS) |
| Maximum diameter of monopile (m) | 9.6 |
| Pile penetration depth (below seabed) (m) | 35.0 |
| Seabed footprint per pile (m ²) | 72.4 |
| Scour protection | |
| Scour protection material type | Rock |
| Scour protection material height (m) | 1.0 |
| Scour protection footprint per pile (m ²) | 1,810 |
| Scour protection volume per pile (m ³) | 1,810 |
| Total Project scour protection volume (m ³) | 47,060 |
| Total seabed footprint | |
| Total Project seabed footprint including scour protection (m ²) | 47,060 |
| Grout | |
| Grout volume per pile (m ³) | 320 |
| Drill characteristics | |
| Maximum drilling duration (days per pile) | 6 |
| Maximum drill depth (m) | 35.0 |
| Volume of drill arisings per pile (m ³) | 3,200 |
| Total Project volume of drill arisings (m ³) | 83,200 |

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

The Applicant provides the following additional information to clarify the details on the proposed drive, drill and grout method for the foundation installation. This technique was chosen to minimise the time spent piling and thereby minimising potential noise impacts on marine receptors.

The drive, drill and grout method will use a system known as a MODIGA (Monopile Offshore Drilling Installation and Grouting Aid) or similar which will allow foundations to be installed through a combination of piling followed by drilling. The MODIGA installation:

- Creates an environment sheltered from the main wave action, within which the drilling tool, the monopile and grouting equipment can be inserted and operated in a safe and controlled manner;
- Controls verticality of the monopile and the drilling tool so they adhere to the required installation tolerances;
- Transfers vertical loads and torque generated by the drilling tool towards the soil; and
- Reduces noise generation through casing design.

The MODIGA is lowered to the seabed from the installation vessel and initially a sacrificial casing is inserted. The hammer piling tool is then inserted into the tool and the sacrificial casing is hammered through the unconsolidated sediments to its resistance limit which is expected to be at or close to the rockhead.

A short duration (up to a maximum of 8 hours per foundation) is required for stabilisation of a sacrificial casing within less competent seabed material (sands, gravels, boulder clays) prior to commencement of drilling within the sacrificial casing.

The drill is inserted inside the sacrificial casing, the rock is drilled out to the required embedment depth. On completion of drilling, the drilling tool is removed and the monopile is inserted into the drilled hole. The annulus between the drilled hole and the monopile is then sealed with a grout.

A sequence of graphics detailing the foundation installation sequence is provided in Figure 5A-1 and Figure 5A-2.

Further detail on Projects in which the MODIGA system has been used is provided in the EIAR (2024) Appendix 5-11: Supporting Information Demonstrating the Applicants Experience on other Offshore Wind Farm Projects.

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

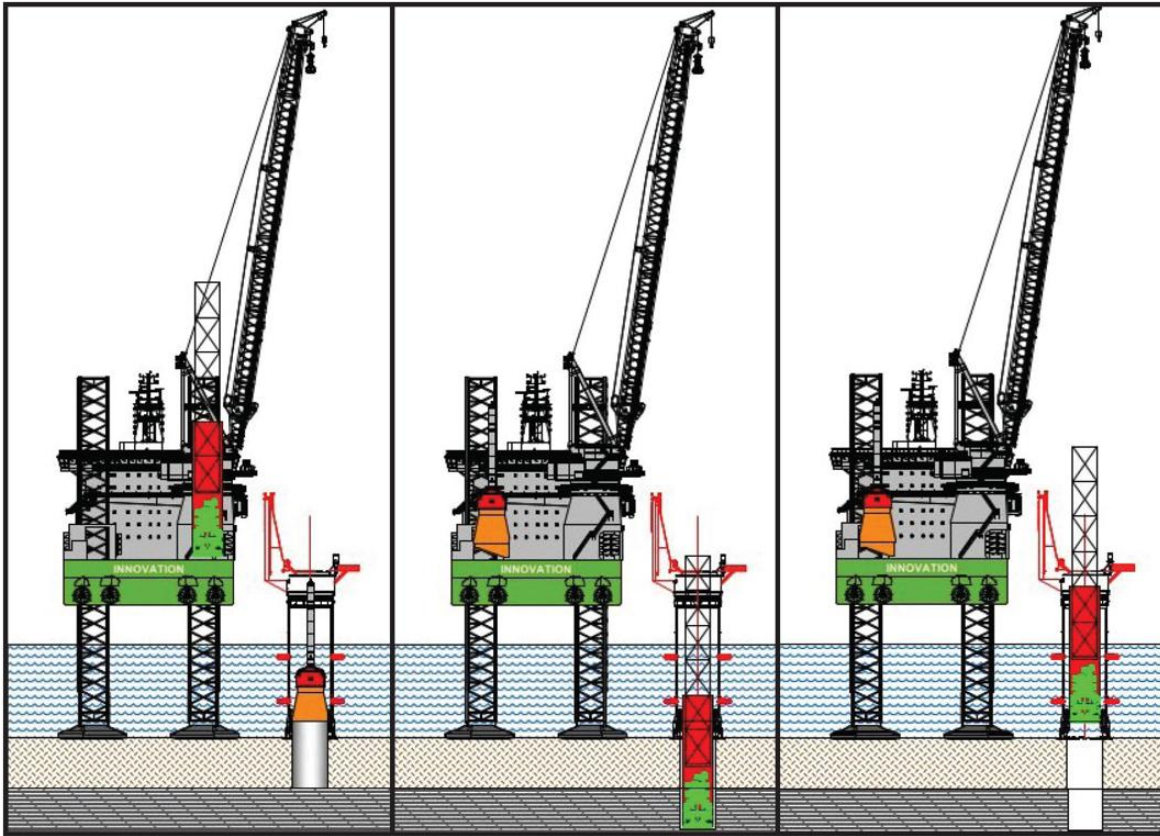


Figure 5A-1: Installation of foundations (steps 1-3): 1. Placement of MODIGA and piling of sacrificial casing; 2. Drilling of rock to embedment depth; 3. Removal of drill.

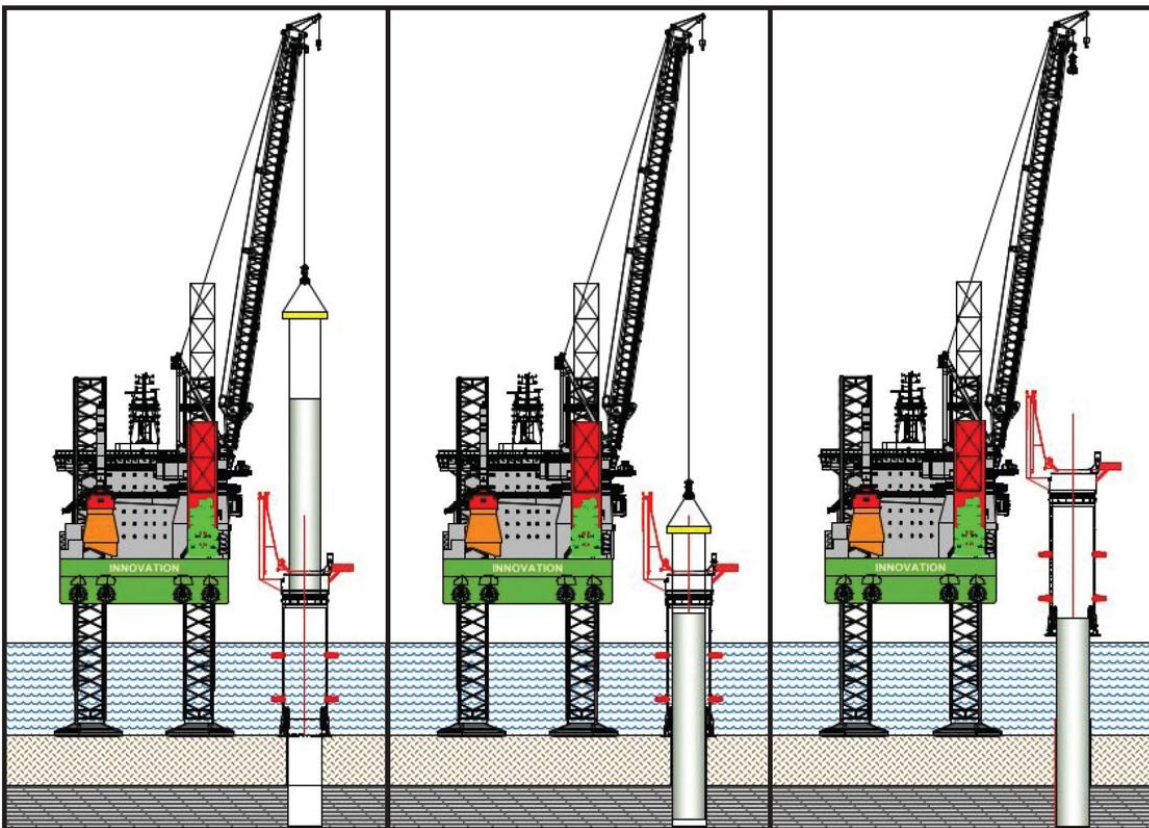


Figure 5A-2: Installation of foundations (steps 4-6): 4. Insertion of monopile; 5. Grouting of monopile, 6. Removal of MODIGA.

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

5.5.6 Inter-array cables

There are no changes to EIAR chapter 5: Project Description.

5.5.7 Offshore substation (OSS)

There are no changes to EIAR chapter 5: Project Description.

5.5.8 Offshore export cable

There are no changes to EIAR chapter 5: Project Description.

5.5.9 Landfall and Transition Joint Bay (TJB)

Intertidal area - export cable installation

In response to the RFI 8.G and 19.A, the Applicant has provided below further details on the reasons HDD is not the preferred option for installation of the export cable at the landfall.

A single offshore export cable is proposed for the Project (as outlined in section 5.5.8 of chapter 5: Project Description (EIAR volume 2A)). This cable is rated specifically for the proposed maximum export capacity (MEC) of the wind farm (375 MW). The offshore cable export capacity would be reduced by the cable being installed in an HDD duct in comparison to an open trench. This is due to the thermal rating of the cable. HDD installation would result in the requirement for a second offshore cable to achieve the MEC with a resulting increase of environmental impacts to the subtidal and intertidal environments.

In addition, the shallow gradient of the near-shore intertidal and sub-tidal seabed on the approach to the landfall would result in a significant drilled distance for a HDD to achieve the required subtidal depth for the break-out of the cable from the seabed (5-10 m below Chart Datum). Calculations indicate an HDD distance of up to 2,300 m could be required. This is beyond the feasible drilling distance for an HDD at the diameter required for the marine offshore cable (375 mm diameter).

Transition Joint Bay (TJB)

In response to the concerns raised by ACP in RFI 6.K, 8.G and 19.A, the Applicant has adjusted the proposed location of the TJB (options 1 and 2) and realigned the route of the export cable leading to the TJB (within the planning application boundary). A description of the adjustments is provided below and replaces the description provided in this section in chapter 5: Project Description (EIAR volume 2A).

In response to concerns raised in RFI 6.K, the two options for the location of the TJB have been adjusted and are presented on Map 12 of 12 in Figure 5A-16. The two adjusted options are described below.

- **Option 1** - As shown on Figure 5A-16 (map 12 of 12) the TJB option 1 is located approximately 300 m west of Dunany beach at an existing layby at the top of the laneway leading to the beach. This option requires a realignment of the offshore export cable route along the laneway. The adjustment of the TJB location and realignment of the export cable route for option 1 is within the planning application boundary and ensures works will avoid impacts on the sedimentary cliff.
- **Option 2** - As shown on Figure 5A-16 (map 12 of 12) the TJB option 2 is located in the field adjacent to Dunany beach at the southern boundary of Dunany Demesne. The offshore cable will be installed in a trench along approximately 120 m length of the laneway, before crossing the boundary wall of Dunany Demesne into the field. An approximate 10 m section of the boundary wall will be removed to facilitate the installation of the cable, but this will be reinstated after construction (see chapter 26 Addendum: Cultural Heritage (EIAR volume 2C Addendum)). The adjustment of the TJB location and realignment of the export cable route for option 2 is within the planning application boundary and ensures works will avoid impacts on the sedimentary cliff.

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

Transition Joint Bay (TJB) access track

The EirGrid functional specifications require permanent vehicular access to the TJB. For this a single vehicle width access track along the southern boundary of the field will be constructed (if option 2 is used). The permanent access track is shortened in length as a result of the repositioned TJB (see Figure 5A-16, map 12 of 12). The existing public access lane will be used if TJB option 1 is constructed.

5.5.10 Construction vessel activities

There are no changes to EIAR chapter 5: Project Description.

5.5.11 Aids to navigation, colour, marking and lighting

There are no changes to EIAR chapter 5: Project Description.

5.5.12 Safety zones and advisory clearance distances

There are no changes to EIAR chapter 5: Project Description.

5.6 Description of onshore infrastructure

In response to RFI 18.A and the submission made by TII regarding the potential impacts of the onshore infrastructure on the N33 and M1 routes, the Applicant has realigned the position of onshore cable route along the N33 (within the planning application boundary) further away from the N33 infrastructure to ensure works will have minimal impact on N33 (see Figure 5A-16 Maps 1 – 3).

Additional information to supplement the description provided in chapter 5: Project Description is provided in section 5.6.1 of this Addendum. Further information on consultation with TII is provided in chapter 28 Addendum: Traffic and Transport.

5.6.1 Onshore cable

Onshore cable route

Between the M1 motorway and the proposed onshore substation site the cable will be installed along the northern side of the N33. Following engagement with TII, between the onshore substation and Joint Bay 4 (a distance of approximately 2.5 km) the onshore cable trench (and Joint Bays 1-4) will be relocated away from the N33 pavement to the northern boundary of the easement for the N33.

The construction of the N33 resulted in an access track along the northern boundary which was subsequently planted and overgrown with vegetation. This vegetation is required to be removed to facilitate the installation of the realigned cable between the onshore substation and Joint bay 4. Following the installation of the cable, the access track will be allowed to naturally revegetate. An assessment of the removal of the vegetation is included in chapter 19 Addendum: Onshore Biodiversity.

The N33, along this section, is located on a shallow embankment (approximately 1-2 m in elevation). The location of the cable trench along the northern boundary avoids interaction with the embankment and minimises impacts on the N33 infrastructure.

Figure 5A-16 (maps 1-3) show the proposed amended onshore cable route as described above along with the proposed onshore cable route which was considered in the EIAR (2024).

Cable route wayleave

There are no changes to EIAR chapter 5: Project Description.

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

Cable design

There are no changes to EIAR chapter 5: Project Description.

Joint bays, link boxes and communication chambers

There are no changes to EIAR chapter 5: Project Description.

5.6.2 Onshore cable installation

Site investigations

There are no changes to EIAR chapter 5: Project Description.

Preconstruction surveys

There are no changes to EIAR chapter 5: Project Description.

Construction corridor

There are no changes to EIAR chapter 5: Project Description.

Site preparation / enabling activities

There are no changes to EIAR chapter 5: Project Description.

Onshore cable trenching and ducting

There are no changes to EIAR chapter 5: Project Description.

Construction of joint bays and cable pulling

There are no changes to EIAR chapter 5: Project Description.

Cable pulling and jointing

There are no changes to EIAR chapter 5: Project Description.

Passing bays

There are no changes to EIAR chapter 5: Project Description.

Crossings

There are no changes to EIAR chapter 5: Project Description.

Temporary Construction Compounds

In response to RFI 18.A (and the submission made by TII) regarding the potential for indirect impacts on the M1, a Horizontal Directional Drill (HDD) Preliminary Design Report was prepared by an experienced contractor Geo Drilling Solutions (October, 2025) (see appendix 28-4: Technical Note on Cable Construction at M1). This report set out a general arrangement for the temporary works area and equipment required for HDD which proposes that drilling would take place in the compound located west of the M1 with a reception area and pipe stringing in the field to the east of the Dublin-Belfast rail line. As a result, the layout of the proposed temporary compound 3, the M1/Railway, on the west has been adjusted to ensure all infrastructure for temporary works can be facilitated. The change in layout is within the planning application boundary (see

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

Figure 5A-16 map 3 of 12). Further details on the HDD crossing and response to TII concerns on slope stability and settlement are included in chapter 28 Addendum: Traffic and Transport (EIAR volume 2C Addendum). The access to this temporary compound has also been adjusted so that an existing farm access is used (see Figure 5A-16 map 3 of 12). This adjustment was made following consultation with TII.

Similarly, the access to the proposed temporary compound 2. River Dee at Richardstown, on the west has been adjusted so that an existing farm access is used (see Figure 5A-16 map 3 of 12). This adjustment was made following consultation with TII.

A Road Safety Audit (RSA) (see appendix 28-2: Road Safety Audit in EIAR volume 2C Addendum) has been completed for the Project to examine the interaction of the onshore cable route and temporary accesses onto the N33. The findings of the RSA have been accepted by the Applicant and have been incorporated into the Project design.

5.6.3 Onshore substation

Location

There are no changes to EIAR chapter 5: Project Description.

Design

There are no changes to EIAR chapter 5: Project Description.

Demolition

There are no changes to EIAR chapter 5: Project Description.

Services and utilities

In response to RFI 18.A and the submission made by TII regarding concerns around the existing access onto the N33 from the onshore substation, additional information is provided under 'Access and Parking' regarding the proposed reconfiguration of the existing access to TII standards to ensure Left In-Left Out operation. Further detail is provided in appendix 28-3: Design Report.

Access and Parking

This reconfigured direct access layout at the onshore substation will be designed in accordance with the geometric standards for an altered access as set out in DN-GEO-03060 Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions) (see section 6.7 in appendix 28-3: Design Report (EIAR volume 2C Addendum). This left-in and left-out arrangement is considered appropriate following consultation with TII and given that there are two roundabouts, one at either end of the N33 which can accommodate the turning of vehicles without crossing the N33 traffic lanes and given the low number of vehicles anticipated.

5.6.4 Onshore substation construction

There are no changes to EIAR chapter 5: Project Description.

5.6.5 Commissioning of onshore infrastructure

There are no changes to EIAR chapter 5: Project Description.

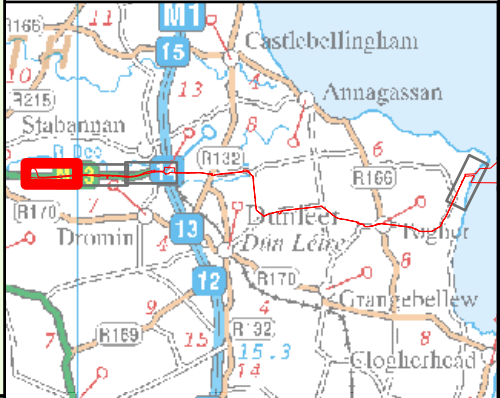


Legend


- Planning Application Boundary
- Proposed Amended Onshore Cable Route
- Proposed Onshore Cable Route
- Proposed Joint Bay Locations
- Proposed Transition Joint Bay Option One
- Proposed Transition Joint Bay Option Two
- Line Cable Interface Mast (LCIM)
- Compound 1 - GIS
- Compound 2 - AIS
- Cable Pulling Temporary Hardstand
- Temporary Construction Compound (substation)
- Temporary Construction Compound (underground cable installation)
- Temporary Storage Area
- Temporary Construction Area
- Amended Temporary Accesses
- Proposed Temporary Accesses

Note: The Applicant has proposed an amended onshore cable route (between the onshore substation and joint bay 4; and the section between L2226 and the M1 (at joint bay 8)) and also amended two temporary accesses (onto the N33) in response to a further info

Data Sources: OWL; OSI.



Client



ORIEL WINDFARM
OFFSHORE RENEWABLE ENERGY


Project

Oriel Wind Farm Project

Title

Figure 5A-16:
Onshore Cable Route

Map 1 of 12



A TETRA TECH COMPANY

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

| Issue Details | | |
|---------------|--------------|------------------------------------|
| Drawn By: | NR | Project No. |
| Checked By: | CC | MDR1520c |
| Approved By: | CC | File Ref: |
| Scale: | 1:6,000 @ A3 | MDR1520c-RPS-AP-XX-D-Z-0037.A1.C01 |
| Date: | 11/12/2025 | Projection: |
| | | ITM (IRENET95) |

NOTE: 1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. ©Táille Éireann. All rights reserved. Licence number CYAL50455061

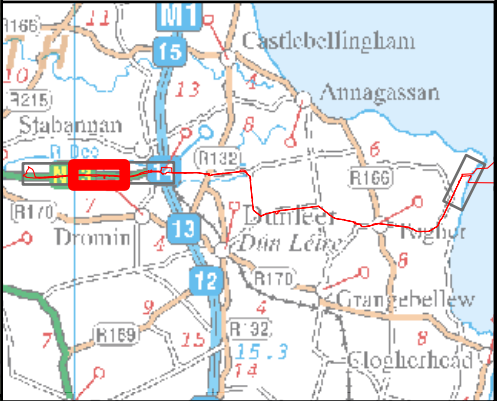


Legend


- Planning Application Boundary
- Proposed Amended Onshore Cable Route
- Proposed Onshore Cable Route
- Proposed Joint Bay Locations
- Proposed Transition Joint Bay Option One
- Proposed Transition Joint Bay Option Two

Note: The Applicant has proposed an amended onshore cable route (between the onshore substation and joint bay 4; and the section between L2226 and the M1 (at joint bay 8)) and also amended two temporary accesses (onto the N33) in response to a further info

Data Sources: OWL; OSi.



Client

**ORIEL WINDFARM**
OFFSHORE RENEWABLE ENERGY


Project

Oriel Wind Farm Project

Title

Figure 5A-16:
Onshore Cable Route

Map 2 of 12

**A TETRA TECH COMPANY**

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

| Issue Details | | |
|---------------|--------------|---|
| Drawn By: | NR | Project No. MDR1520c |
| Checked By: | CC | File Ref: MDR1520c-RPS-AP-XX-D-Z-0037.A1.C01 |
| Approved By: | CC | |
| Scale: | 1:6,000 @ A3 | Projection: |
| Date: | 11/12/2025 | ITM (IRENET95) |

NOTE: 1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. ©Táille Éireann. All rights reserved. Licence number CYAL50455061

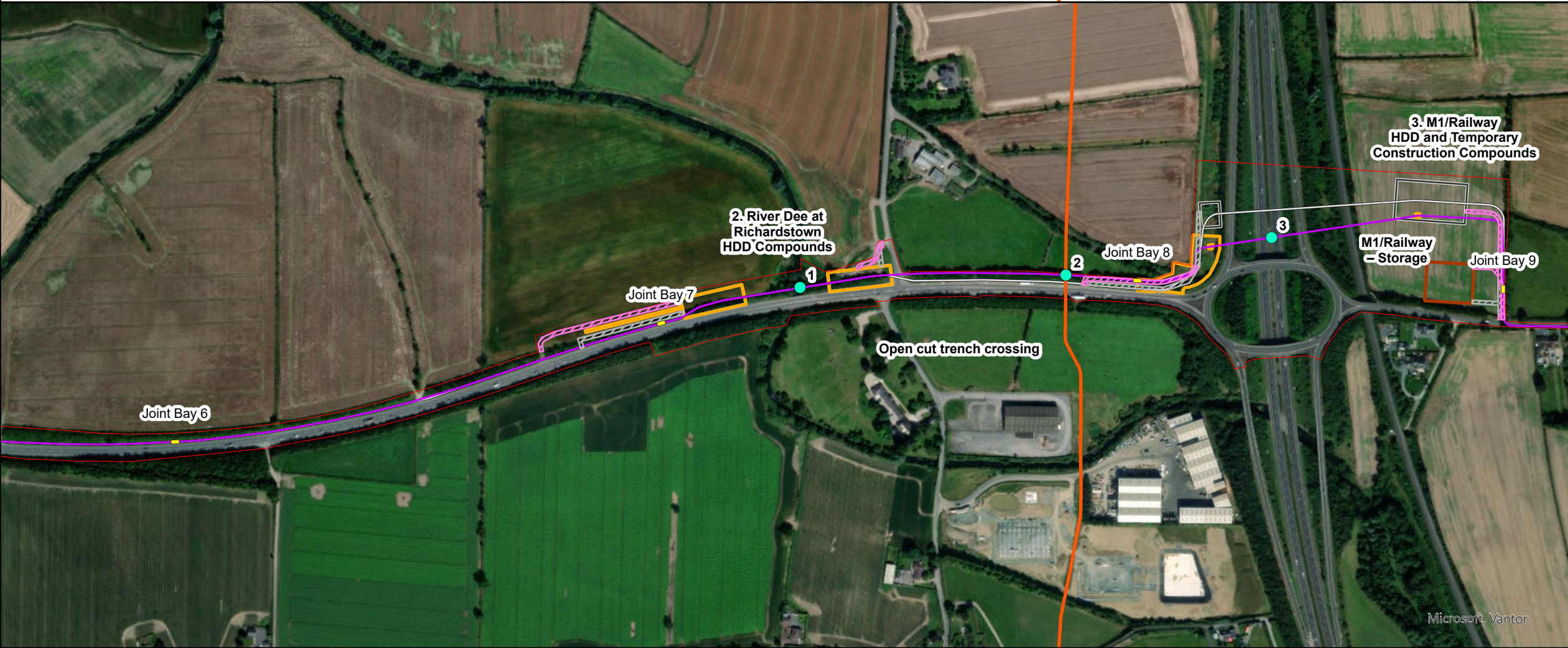
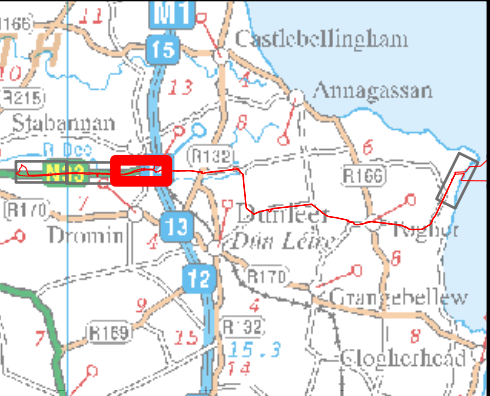


Legend

- Planning Application Boundary
- Proposed Amended Onshore Cable Route
- Proposed Onshore Cable Route
- Proposed Joint Bay Locations
- Proposed Transition Joint Bay Option One
- Proposed Transition Joint Bay Option Two
- Temporary Construction Compounds
- Amended Proposed HDD Compounds
- Proposed HDD Compounds
- Amended Temporary Accesses
- Proposed Temporary Accesses
- High Pressure Transmission Gas Main
- Onshore Cable Crossing 1-8

Note: The Applicant has proposed an amended onshore cable route (between the onshore substation and joint bay 4; and the section between L2226 and the M1 (at joint bay 8)) and also amended two temporary accesses (onto the N33) in response to a further info

Data Sources: OWL; OSI.



Client

ORIEL WINDFARM
OFFSHORE RENEWABLE ENERGY

Project

Oriel Wind Farm Project

Title

**Figure 5A-16:
Onshore Cable Route**

Map 3 of 12

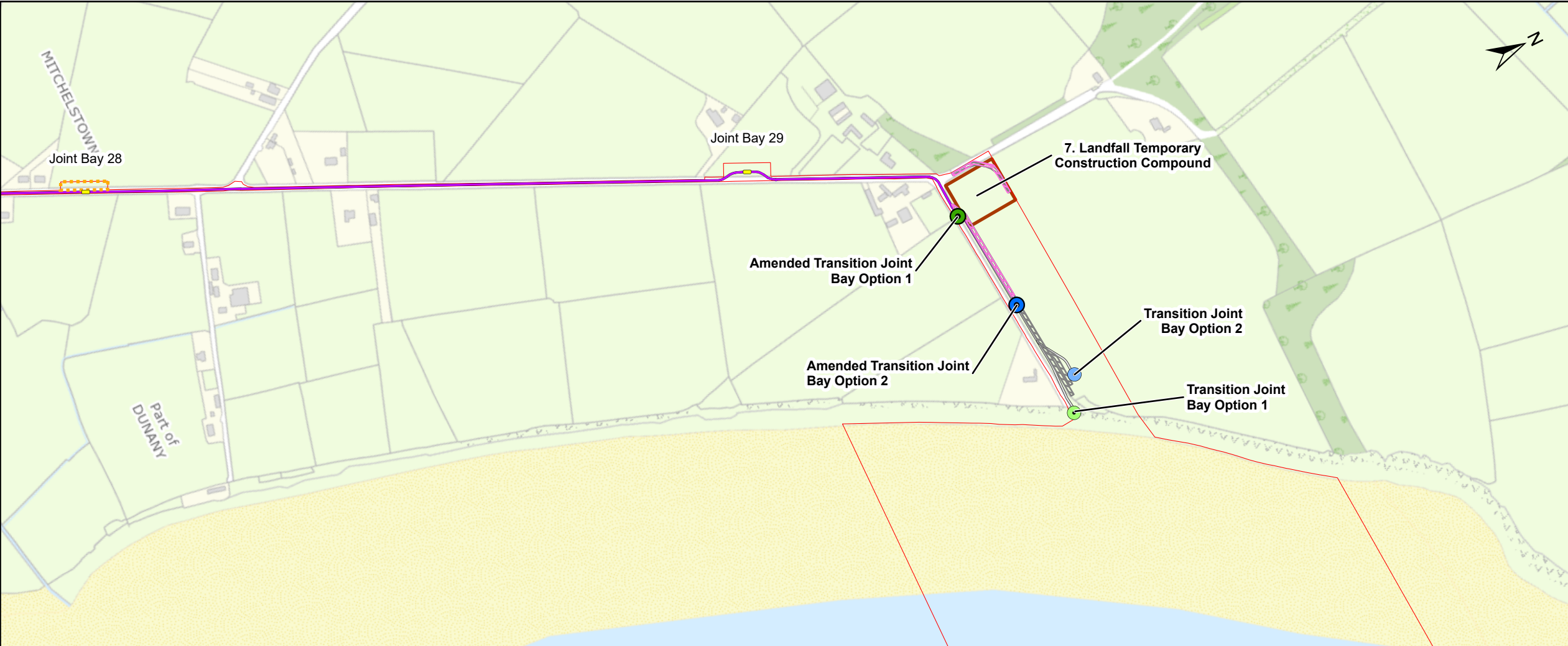
rps
A TETRA TECH COMPANY

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

| Issue Details | | |
|---------------|--------------|------------------------------------|
| Drawn By: | NR | Project No. MDR1520c |
| Checked By: | CC | File Ref: |
| Approved By: | CC | MDR1520c-RPS-AP-XX-D-Z-0037.A1.C01 |
| Scale: | 1:6,000 @ A3 | Projection: |
| Date: | 11/12/2025 | ITM (IRENET95) |

NOTE: 1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. ©Táille Éireann. All rights reserved. Licence number CYAL50455061

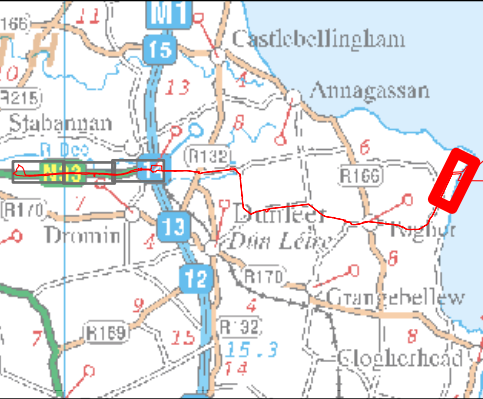


Legend

- Planning Application Boundary
- Proposed Amended Onshore Cable Route
- Proposed Onshore Cable Route
- Proposed Joint Bay Locations
- Proposed Passing Bay
- Amended Proposed Transition Joint Bay Option 1
- Amended Proposed Transition Joint Bay Option 2
- Proposed Transition Joint Bay Option One
- Proposed Transition Joint Bay Option Two
- Temporary Construction Compounds
- Amended Temporary Accesses
- Proposed Temporary Accesses

Note: The Applicant has proposed amended locations for the Transition Joint Bays (options 1 and 2) in response to a further information request from An Coimisiún Pleanála

Data Sources: OWL; OSI.



Client

ORIEL WINDFARM
OFFSHORE RENEWABLE ENERGY

Project

Oriel Wind Farm Project

Title

**Figure 5A-16:
Onshore Cable Route**

Map 12 of 12

rps
A TETRA TECH COMPANY

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

| Issue Details | | |
|---------------|--------------|---|
| Drawn By: | NR | Project No. MDR1520c |
| Checked By: | CC | File Ref: MDR1520c-RPS-AP-XX-D-Z-0037.A1.C01 |
| Approved By: | CC | |
| Scale: | 1:6,000 @ A3 | Projection: |
| Date: | 11/12/2025 | ITM (IRENET95) |

NOTE: 1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. ©Táille Éireann. All rights reserved. Licence number CYAL50455061

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

5.7 Construction programme

A high level indicative programme is presented in Figure 5-30 in chapter 5: Project Description (EIAR volume 2A). The timelines for commencement are now expected to occur two to three years later than shown. Offshore construction is expected to commence in Q4 2028/Q1 2029 and onshore construction commencement in Q2 2028 subject to consent.

5.7.1 Construction working hours

The Applicant would like to clarify that the construction hours outlined in chapter 5: Project Description (EIAR volume 2B) relate to the onshore construction activities only and so should read:

The proposed hours of onshore construction are as follows:

- Monday to Saturday (inclusive) – 8:00am to 6:00pm; and
- Sunday and Bank Holidays – no operations and no associated lighting other than that required for security or safety.

Specific activities such as large concrete pours or delivery of large equipment (e.g. transformers) which require specific road control may occur outside these hours. The local authority and affected local stakeholders will be informed prior to these activities.

Offshore construction will not be limited to working hours and may take place over 24-hours, seven days a week.

5.7.2 Construction employment

There are no changes to EIAR chapter 5: Project Description.

5.8 Operational and maintenance phase

5.8.1 Offshore activities

There are no changes to EIAR chapter 5: Project Description.

5.8.2 Onshore activities

There are no changes to EIAR chapter 5: Project Description.

5.9 Decommissioning phase

5.9.1 Offshore infrastructure decommissioning

There are no changes to EIAR chapter 5: Project Description.

5.9.2 Onshore decommissioning

There are no changes to EIAR chapter 5: Project Description.

5.10 Environmental management

5.10.1 Measures included in the Project

There are no changes to EIAR chapter 5: Project Description.

5.10.2 Management plans

A number of the management plans listed in Table 5.34 of chapter 5: Project Description (EIAR volume 2A) required updates to respond to the further information requested. Table 5A-3 listed those plans for which an Addendum has been prepared. One additional plan has been prepared in response to RFI 1.D regarding environmental monitoring and this is also listed in Table 5A-3 as appendix 5.16: Monitoring Programme.

Oriel Wind Farm Project – Project Description - Addendum

Table 5A-3: Management plans.

| ElAR Reference | Management Plan | Submission stage | Purpose | Addendum to Management plan prepared in response to RFI? |
|----------------|---|--|--|---|
| Appendix 5-1 | Construction Environmental Management Plan (CEMP) | At least six months prior to construction. | The CEMP provides information relating to the environmental management during the construction of the onshore infrastructure of the Project. | Yes, appendix 5-1 Addendum: CEMP |
| Appendix 5-2 | Environmental Management Plan (EMP) (including Marine Pollution Contingency Plan) | At least six months prior to construction. | The EMP provides the overarching framework for environmental management during the construction and operational phases of the Project. | Yes, appendix 5-2 Addendum: EMP and Annex 2 in appendix 5-2. |
| Appendix 5-3 | Marine Invasive Non-Native Species Management Plan (MINNSMP) | At least six months prior to construction. | The MINNSMP sets out the approach to invasive species management and mitigation in respect of the Project, providing an outline of the measures proposed to be implemented to facilitate biosecurity control and to minimise potential impacts on the local and wider environment. | No |
| Appendix 5-4 | Marine Mammal Mitigation Plan (MMMP) | At least six months prior to construction. | The MMMP includes details of the refined piling methodology and anticipated duration of pile-driving, details of soft-start piling procedures and anticipated maximum piling energy required, and details of any mitigation and monitoring to be employed during pile-driving. | Yes, appendix 5-4 Addendum: Marine Mammal Mitigation Plan (in response to RFI 9). |
| Appendix 5-5 | Marine Megafauna: Vessel Code of Conduct | At least six months prior to construction. | The Vessel Code of Conduct provides best practice guidelines to be followed in cases of any interaction between vessels and marine megafauna within Irish waters. | No |
| Appendix 5-6 | Fisheries Management and Mitigation Strategy (FMMS) | At least six months prior to construction. | The FMMS provides an overview of the Applicant's approach to fisheries liaison, including an outline of the measures proposed to be implemented to facilitate co-existence with commercial fishing and to minimise potential impacts. | No |
| Appendix 5-7 | Emergency Response Co-operation Plan (ERCoP) | At least six months prior to construction. | The ERCoP addresses emergency response and coordination arrangements for the construction, operational and maintenance and decommissioning phases of the Project. | No |

ORIEL WIND FARM PROJECT – PROJECT DESCRIPTION - ADDENDUM

| EIAR Reference | Management Plan | Submission stage | Purpose | Addendum to Management plan prepared in response to RFI? |
|-----------------------|--|--|---|---|
| Appendix 5-8 | Lighting and Marking Plan (LMP) | At least six months prior to construction. | The LMP provides the aviation and navigational lighting and marking arrangements for the Project. | Yes, appendix 5-8 Addendum: Updated Lighting and Marking Plan (in response to RFI 15.B). |
| Appendix 5-9 | Construction Traffic Management Plan (CTMP) | At least six months prior to construction. | The CTMP focuses on ensuring adequate localised traffic management during the construction phase of the Project and ensuring that safe access to all dwellings, businesses and schools is retained. | Yes, appendix 5-9 Addendum: Updated Construction Traffic Management Plan (in response to RFI 18) |
| Appendix 5-10 | Marine Archaeological Management Plan (Marine AMP) | At least six months prior to construction. | The Marine AMP sets out the procedure for the recording and reporting of any archaeological material discovered during the construction phase. | No |
| Appendix 5-16 | Monitoring Programme | At least six months prior to construction. | The plan sets out the proposed monitoring for the Project | n/a |

5.10.3 Residues, emissions and waste

There are no changes to EIAR chapter 5: Project Description.

5.10.4 Natural resources

There are no changes to EIAR chapter 5: Project Description.

5.10.5 Health and Safety

There are no changes to EIAR chapter 5: Project Description.

References

There are no changes to EIAR chapter 5: Project Description.