



**Orsted Onshore Ireland Midco Limited**

# **Environmental Impact Assessment Report**

## **Volume II – Main Report**

Proposed Oatfield Wind Farm, Co. Clare

604569

**DECEMBER 2023**



RSK Ireland Ltd (RSK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and RSK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by RSK for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of RSK and the party for whom it was prepared.

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

This work has been undertaken in accordance with the quality management system of RSK Ireland Ltd.

**DECEMBER 2023**



# CONTENTS

---

<b>1 INTRODUCTION AND BACKGROUND.....</b>	<b>1-1</b>
1.1 Introduction.....	1-1
1.2 Background to the Proposed Development .....	1-2
1.3 The Proposed Development.....	1-2
1.4 Description of the site and surrounding area .....	1-6
1.5 The proposed development.....	1-6
1.6 The planning application .....	1-11
1.7 The applicant .....	1-11
1.8 Landowners .....	1-12
1.9 The EIAR .....	1-12
1.10 The EIAR team .....	1-12
1.11 Availability of the EIAR .....	1-13

## TABLES

Table 1.1: Townlands and Electoral Districts in which the Proposed Development planning consent area is located.....	1-5
Table 1.2 EIAR chapters and competent experts .....	1-12

## FIGURES

Figure 1.1: Proposed development location map .....	1-4
Figure 1.2: Initial turbine delivery route options .....	1-8
Figure 1.3: Initial grid connection route options .....	1-9
Figure 1.4: Site layout plan .....	1-10

# 1 INTRODUCTION AND BACKGROUND

---

## 1.1 Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared by RSK Ireland and other companies within the RSK Group (along with associated specialist consultants, including Ai Bridges, Hoare Lea, Macroworks and Pinnacle Consulting), on behalf of Orsted Onshore Ireland Midco Limited. This EIAR is submitted as part of a planning application to construct, operate, and decommission the proposed Oatfield Wind Farm in County Clare (hereafter referred to as the 'Proposed Development'). The applicant for planning permission is Orsted Onshore Ireland Midco Limited.

The Proposed Development comprises an 11-turbine wind farm on a site located within forested and agricultural lands. It also comprises a Grid Connection Route (GCR) for connection to the national grid, and temporary accommodating works along a Turbine Delivery Route (TDR) to the wind farm, to facilitate the delivery of large components from the port of delivery. The GCR and TDR are both assessed in this EIAR and form part of the planning application.

The key components that are described throughout the EIAR are listed below:

- The wind farm which consists of 11 wind turbines (4 turbines across the Eastern Development Area (Eastern DA) and 7 turbines across the Western Development Area (Western DA));
- The grid connection route and underground cables (also referred to as GCR and UGC); and,
- The turbine delivery route (TDR).

The term 'Proposed Development' collectively describes the above three components.

A pre-planning meeting was held on the 23<sup>rd</sup> of February 2023 with An Bord Pleanála as part of the Strategic Infrastructure Development (SID) screening process to determine if the Development would be categorised as a SID.

A pre-planning meeting was also held with the Planning Department of Clare County Council in relation to the Proposed Development. This meeting was held over Microsoft Teams on 5<sup>th</sup> October 2023 and was attended by representatives of Orsted as well as the Client's planning and environmental consultants.

At this meeting, the location of the proposed development was discussed, as were the provisions and objectives of the extant Wind Energy Strategy (WES) for County Clare, as per the Clare County Development Plan 2023-2029. The discussion also included reference to the comprehensive site selection process, which was undertaken and the key facilitators and constraints of the preferred/selected site.

On 10<sup>th</sup> October 2023, An Bord Pleanála confirmed that the Proposed Development is classified as a SID, in accordance with section 37A of the Planning and Development Act 2000, as amended (case reference number ABP-315239-22). The planning application

for the Proposed Development will therefore be made to An Bord Pleanála under Section 37E of the Planning and Development Act 2000 (as amended). The application is for a 10-year duration planning permission and a 35-year operational life from the date of commissioning of the entire wind farm.

## 1.2 Background to the Proposed Development

The Proposed Development is being planned in response to international, European, and national policy on climate change and reduction in carbon emissions. Ireland's participation in international action on climate change, which seeks to limit global temperature rise to 1.5 degrees Celsius above pre-industrial levels, was confirmed in the country's ratification of the United Nations Framework Convention on Climate Change (UNFCCC) in April 1994 and the Kyoto Protocol in principle in 1997 (and formally in May 2002).

Ireland's national energy and climate policy is derived from overarching European policy aimed at unifying the European Union in energy and climate goals. The National Planning Framework has a main objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. The Climate Action and Low Carbon Development (Amendment) Act 2021 commits Ireland to 2030 and 2050 targets for reducing greenhouse gas (GHG) emissions. The country is now on a legally binding path to net-zero emissions by 2050, and to a 51% reduction in emissions by 2030. The route to achieve these targets is set out in the government's Climate Action Plan (2023) which seeks to achieve 50% of electricity demand met by renewables by 2025. That target will be met with 5 GW of onshore wind, increasing to 9 GW by 2030.

The Clare County Council Wind Energy Strategy (2023), as contained in the Clare County Development Plan 2023 – 2029, has designated areas for wind energy development outside urban areas as either 'Strategic Areas', 'Open to Consideration', 'Acceptable in Principle' or 'Not Normally Permissible'. The turbines associated with the Proposed Development are located entirely within areas designated in the Clare County Development Plan 2023 – 2029 as 'Strategic Areas' or 'Acceptable in Principle' for wind energy development.

## 1.3 The Proposed Development

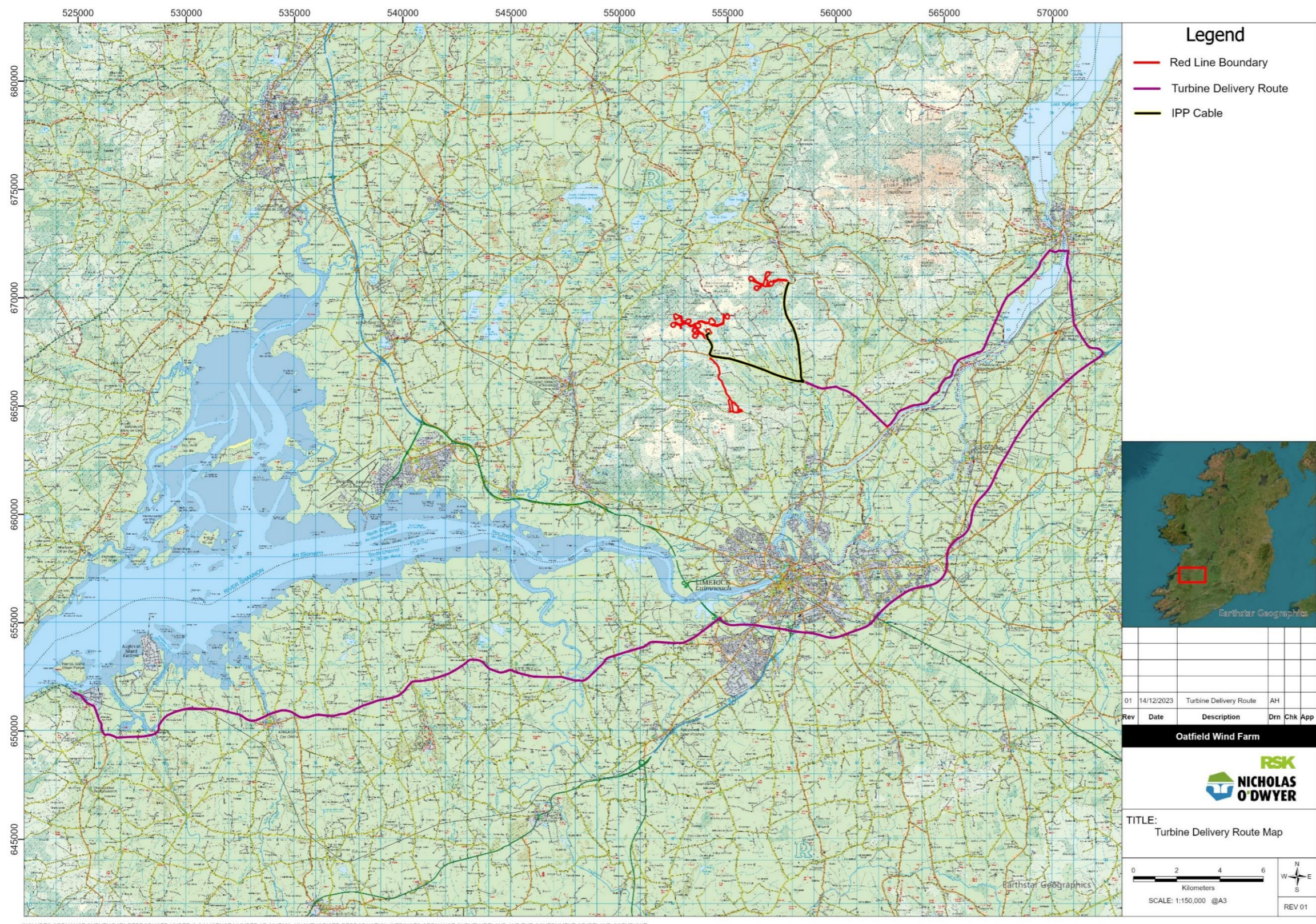
The Proposed Development is located in the Oatfield and Gortacullin areas, approximately 1.3 km to the South of Broadford, 4.7 km to the East of Sixmilebridge in East Clare, 7.6 km North of Ardnacrusha, 9.2 km North of Limerick, and 19.7 km South of Ennis. The wind farm is split into two distinct areas, referred to as the (Western DA and the Eastern DA throughout this EIAR).

An Independent Power Producer (IPP) connection route of 33kV will be required to connect the Eastern DA to the 110kV substation located in the Western DA. The IPP cables will be installed within the body of the local public road network for 10.6km.

The proposed GCR which connects the wind farm's 110kV substation (located in the Western DA) to the national electricity grid comprises works in public roads to install cabling for 3.83 km (Option A) or 4.16km (Option B). The connection to the national grid

will be made via underground 110kV double circuit grid connection cables to a proposed loop in connection to the existing overhead 110 kV line located south of the site at Ballycar North. The Proposed Development will entail temporary accommodating works along the TDR from Foynes port to the Proposed Development site, to facilitate the delivery of large components.

**Figure 1.1** shows the location of the proposed wind farm and the routes of the proposed GCR and TDR. The townlands in which the Proposed Development (for which planning permission is sought) is located are listed in **Table 1.1**.



**Figure 1.1: Proposed development location map**

**Table 1.1: Townlands and Electoral Districts in which the Proposed Development planning consent area is located**

Proposed development area	Townlands	
IPP Cabling connecting Eastern DA to Western DA	<ul style="list-style-type: none"> <li>• Drumsillagh Or Sallybank (Parker)</li> <li>• Mountrice</li> <li>• Cloontra West</li> <li>• Kyle</li> <li>• Derryvinnaan</li> <li>• Cloontra East</li> </ul>	<ul style="list-style-type: none"> <li>• Drumsillagh Or Sallybank (Merritt)</li> <li>• Cloonsheerea</li> <li>• Cloontra</li> <li>• Cloghera</li> <li>• Oatfield</li> </ul>
Western DA inclusive of turbines, site access tracks, substation, and construction compound	<ul style="list-style-type: none"> <li>• Cloghoolia</li> <li>• Belvoir</li> <li>• Cloontra West</li> <li>• Crag</li> </ul>	<ul style="list-style-type: none"> <li>• Snaty (Massy)</li> <li>• Snaty (Wilson)</li> <li>• Cloontra</li> <li>• Oatfield</li> </ul>
Eastern DA inclusive of turbines, site access tracks, substation, and construction compound	<ul style="list-style-type: none"> <li>• Gortacullin</li> <li>• Kyle</li> <li>• Hurdleston</li> <li>• Knockshanvo</li> </ul>	
GCR from wind farm to Loop-in location at Ballycar North	<ul style="list-style-type: none"> <li>• Ballycar North</li> <li>• Derrynaveagh</li> <li>• Oatfield</li> </ul>	
TDR from Foyes port to Western and Eastern DA	<ul style="list-style-type: none"> <li>• Cloonlare</li> <li>• Knockbrack Lower</li> </ul>	



## 1.4 Description of the site and surrounding area

The proposed windfarm in an upland setting dominated by commercial coniferous plantation forestry, blanket bog, wet heath, and rough/wet grassland. There is also agricultural land bounded by hedgerows, and conifer plantations. An area of broadleaf forestry is located at the North-West of the site.

The predominant habitat on site is conifer forestry. Agricultural land is present throughout the site. Marginal grazing land is predominant in large areas to the North-east of the site. There are sections of shrubby, broadleaf woodland to the North-west of the site.

The settlement pattern in the vicinity of the Proposed Development (approximately 2 km of each turbine position) is characterised by dwellings and farm buildings located mainly along the public roads, with some dwellings located down private lanes.

The works for installation of the IPP and GCR underground cabling are within the public road corridor of local roads, and a crossing of the R471 regional road.

The temporary works required for transporting turbine components to the Proposed Development site via Foynes port will be within and adjacent to the public road corridors of national primary roads and motorways (N69, M7), regional roads (R494, R463, R471) and local roads requiring temporary removal of street furniture, temporary surfaces through roundabouts and in road verges, and clearance and trimming back of vegetation, where required. The temporary works will be minimised, wherever possible.

## 1.5 The proposed development

The Proposed Development includes the construction, operation and decommissioning of a wind energy development consisting of 11 wind turbine generators with foundations and crane pad hardstanding areas; a permanent meteorological mast; an on-site 110 kV substation, underground IPP cabling connecting the Eastern DA to the Western DA; a GCR to the national grid and temporary works required for transporting turbine components to the wind farm. Additionally, it includes all associated site works -site clearance, temporary compounds, and storage areas; a new temporary entrance and upgrade of an existing entrance; upgrade of existing site tracks and construction of new site tracks; site drainage; ancillary developments including security gates and fencing, lighting, and signage; and a species and habitat management plan.

The total Maximum Export Capacity (MEC) of the wind farm is between 52.8MW and 66MW. The exact MEC will be dependent on the output power of the models available at procurement stage but will fall within this range.

The proposed turbines will have a tip height range from 176.5m to 180m, a hub height range from 105m to 110m and a rotor diameter range from 133m to 150m.

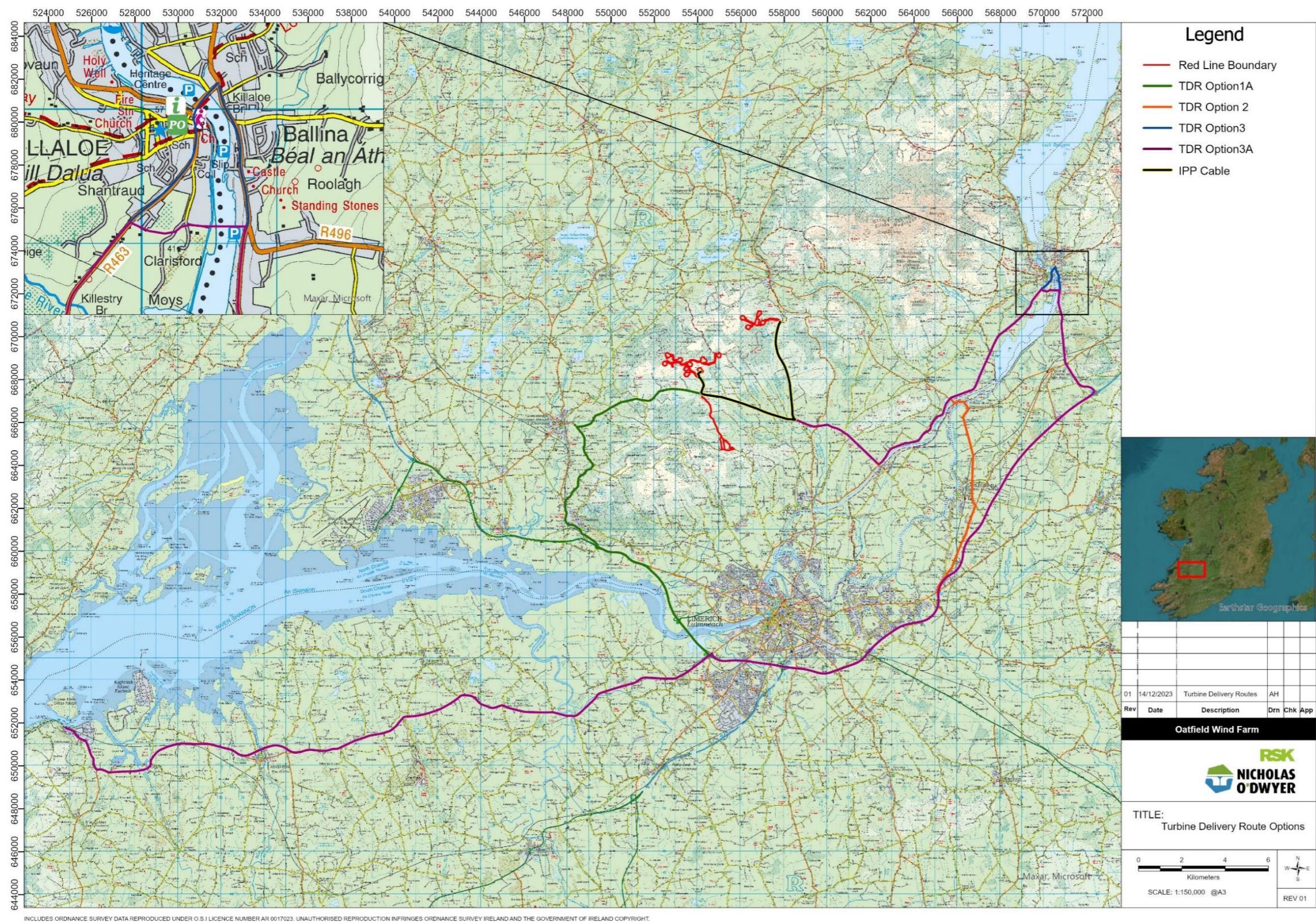
The exact make and model of the turbine will be dictated by a competitive tender process, but it will be within the range shown on the plans and particulars and as described and assessed in this EIAR.

Of the four turbine delivery route options originally examined for feasibility, (as shown in, **Figure 1.2**) only one route from Foynes port to site is included in the application for planning permission (Option 3A).

Of the three grid connection route options examined (as shown in **Figure 1.3**), only one route is included in the application for planning permission (GCR Option 1 Loop-in).

The layout plan of the proposed development is shown in **Figure 1.4**. The red line boundary shows the areas of the proposed development for which planning permission is sought. The blue line boundary illustrates the landholding boundaries for which the applicant has obtained landowner consents.

Further details of the Proposed Development, including the construction programme and sequencing of works, as assessed in this EIAR, are provided in **Chapter 5 Project Description**.



**Figure 1.2: Initial turbine delivery route options**



Figure 1.3: Initial grid connection route options

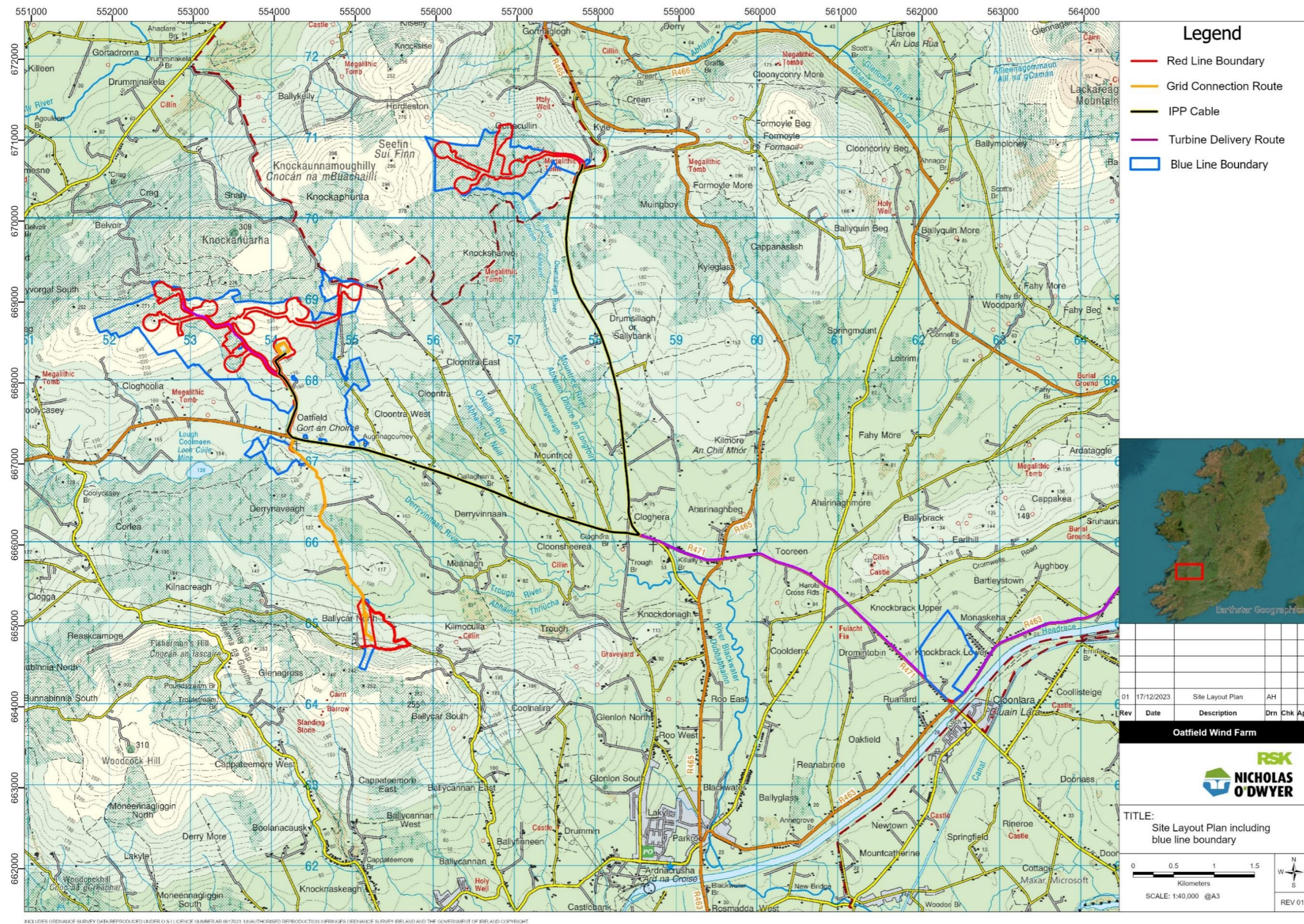


Figure 1.4: Site layout plan

## 1.6 The planning application

The planning application documentation is presented in four parts and contains the requisite forms, statutory notices, and the supporting documentation and planning drawings. A breakdown of each part is provided below.

- Part 1 includes the Planning Application Form and Supporting Documents as follows:
  - Section 1 Planning Application Form
  - Section 2 Landowner Consents
  - Section 3 EIA Portal Confirmation of Notification
  - Section 4 Class of Development
  - Section 5 Planning Fee Calculation
  - Section 6 Newspaper Notice
  - Section 7 Site Notice
  - Section 8 Planning Report
- Part 2 includes all Planning Drawings (A3 Planning Booklet and A1 drawings)
- Part 3 is the EIAR which is presented in five Volumes:
  - Volume I Non-Technical Summary
  - Volume II Main Report
  - Volume III Appendices
  - Volume IV Drawings and Figures (A3)
  - Volume V Photomontages
- Part 4 Appropriate Assessment Reporting

## 1.7 The applicant

The applicant is Orsted Onshore Ireland Midco (hereafter referred to as 'Orsted'). Orsted owns and operates a 360 MW portfolio of onshore wind farms in local communities across the island of Ireland.

Orsted specialises in the development of renewable energy projects, working with communities from pre-planning stage to operational stage, and creating long lasting local partnerships. The Orsted Irish team are based in Cork and are led by one of Europe's most experienced renewables management teams, which also benefits from Orsted's position as a global leader in the field. Orsted is committed to developing projects with successful outcomes for all stakeholders. Working with integrity and care for the local environment, Orsted's wind farms have been contributing to Ireland's energy market since 1997.

## 1.8 Landowners

Letters of consent from the landowners within the red and blue line boundaries are provided in **Section 2** of the planning application documentation.

## 1.9 The EIAR

The methodology for assessment of the effects of certain public and private projects on the environment are set out in the EU EIA Directive 2011/92/EU (codification) (transposed to Irish law through the Planning and Development Regulations 2001, as amended), as amended by EIA Directive 2014/52/EU (transposed to Irish law through the European Union (Planning and Development) (Environmental Impact Assessment) Regulations S.I. 296 of 2018. Collectively, these are referred to as the amended EIA Directive.

This EIAR has been prepared in accordance with the provisions of the amended EIA Directive and the Environmental Protection Agency’s “Guidelines on the information to be contained in Environmental Impact Assessment Reports (published by the Environmental Protection Agency, May 2022).

## 1.10 The EIAR team

RSK Ireland have been appointed by Orsted to coordinate and prepare the EIAR for the Proposed Development. RSK Ireland is one of the longest established and most reputable multi-disciplinary engineering consultancies in Ireland. RSK Ireland has been an established presence in the renewable energy wind farm and sustainable development sector for over 10 years.

lists the specialist companies involved in conducting baseline surveys and authoring the environmental factor chapters of the EIAR. Biopics on the competent experts, including their qualifications and experience, can be found under the ‘statement of authority’ section in the front end of each environmental factor EIAR chapter.

**Table 1.2 EIAR chapters and competent experts**

EIAR Chapter	Specialist Company
Chapter 6. Population and Human Health	RSK Environment Ltd.
Chapter 7. Biodiversity	INIS Environmental Consultants Ltd. (Part of the RSK Group)
- Appropriate Assessment	INIS Environmental Consultants Ltd. (Part of the RSK Group)
Chapter 8. Ornithology	INIS Environmental Consultants Ltd. (Part of the RSK Group)
Chapter 9. Hydrology and Hydrogeology	RSK Ireland
Chapter 10. Land, Soils, and Geology	
Chapter 11. Material Assets (utilities, waste, and telecommunications and aviation)	RSK Ireland

EIAR Chapter	Specialist Company
Chapter 12. Shadow Flicker	ADAS Ltd.
Chapter 13. Noise and Vibration	Hoare Lea
Chapter 14. Landscape and Visual	Macroworks
Chapter 15. Archaeology and Cultural Heritage	ADAS
Chapter 16. Traffic and Transport	Nicholas O'Dwyer Ltd.
Chapter 17. Air Quality	RSK Environment Ltd.
Chapter 18. Climate	Nature Positive
Chapter 19. Major Accidents and Disasters	Nicholas O'Dwyer Ltd.

## 1.11 Availability of the EIAR

The EIAR can be accessed through the below options:

1. Via the Department of Housing, Local Government and Heritage's EIA Portal, which will provide a link to the planning application on the planning authority's website. The EIA Portal can be accessed at:
  - <https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>.
2. Via in person viewing at Clare County Council's planning or at An Bord Pleanála's offices.
3. Via download of the EIAR documents at:
  - [www.oatfieldplanning.ie](http://www.oatfieldplanning.ie).

Information about the Proposed Development, including updates on the consenting process, will be provided at <https://orsted.ie/renewable-energy-solutions/oatfield>.

The EIAR may be inspected free of charge and copies of same purchased by any member of the public during normal opening hours at the following addresses:

- The Offices of An Bord Pleanála, 64 Marlborough Street, Dublin 1.
- Clare County Council Planning Department, New Road, Ennis, Co. Clare, V95DXP2