RWE Renewables UK Dogger Bank South (West) Limited
RWE Renewables UK Dogger Bank South (East) Limited

Dogger Bank South Offshore Wind Farms

Safety Zone Statement (Revision 2) (Clean)
Volume 8

February 2025

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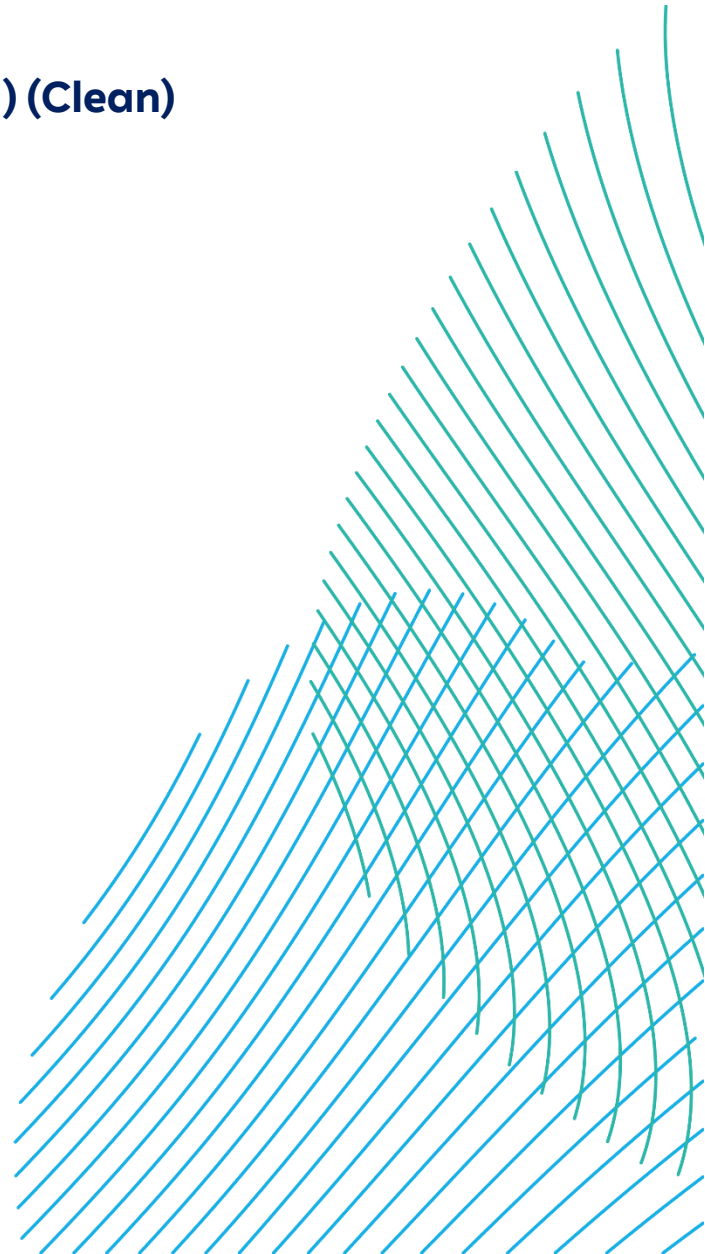

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Company:	**RWE Renewables UK Dogger Bank South (West) Limited and RWE Renewables UK Dogger Bank South (East) Limited**	Asset:	**Development**
Project:	**Dogger Bank South Offshore Wind Farms**	Sub Project/Package:	**Consents**
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01	June 2024	Final for DCO Submission	RWE	RWE	RWE
02	February 2025	Submission for Deadline 2	RWE	RWE	RWE

Revision Change Log			
Rev No.	**Page**	**Section**	**Description**
01	N/A	N/A	Submitted for DCO Application
02	N/A	N/A	Updates have been made following acceptance of Change Request 1
02	8	Acronyms	Removal of ESP and OCS references
02	10	1.3	Removal of ESP and OCS references
02	11-13	2.1 and 2.2	Update of the works descriptions to align with **Draft Development Consent Order (Revision 05)** [REP1-004]
02	N/A	Figure 8-19-1	The search area has been removed to reflect the changes in **Project Change Request 1 - Offshore and Intertidal Works** [AS-141]
02	N/A	Figure 8-19-2	Updates have been made to reflect the change to the Onshore Substation Zone Order Limits as a result of **Project Change Request 2** [AS-152].

Contents

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Glossary

Term	Definition
Array Areas	The DBS East and DBS West offshore Array Areas, where the wind turbines, offshore platforms and array cables would be located. The Array Areas do not include the Offshore Export Cable Corridor or the Inter-Platform Cable Corridor within which no wind turbines are proposed. Each area is referred to separately as an Array Area.
Array cables	Offshore cables which link the wind turbines to the Offshore Converter Platform(s).
Concurrent Scenario	A potential construction scenario for the Projects where DBS East and DBS West are both constructed at the same time.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Development Scenario	Description of how the DBS East and/or DBS West Projects would be constructed either in isolation, sequentially or concurrently.
Dogger Bank South (DBS) Offshore Wind Farms	The collective name for the two Projects, DBS East and DBS West.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Directive as transposed into UK law by the EIA Regulations.
In Isolation Scenario	A potential construction scenario for one Project which includes either the DBS East or DBS West array, associated offshore and onshore cabling and only the eastern Onshore Converter Station within the Onshore Substation Zone and only the northern route of the onward cable route to the proposed Birkhill Wood National Grid Substation.

Term	Definition
Landfall	The point on the coastline at which the Offshore Export Cables are brought onshore, connecting to the onshore cables at the Transition Joint Bay (TJB) above mean high water.
Offshore Converter Platforms (OCPs)	The OCPs are fixed structures located within the Array Areas that collect the AC power generated by the wind turbines and convert the power to DC, before transmission through the Offshore Export Cables to the Project's Onshore Grid Connection Points.
Offshore Export Cable Corridor	This is the area which will contain the offshore export cables between the Offshore Converter Platforms and Transition Joint Bays at the landfall.
Onshore Converter Stations	A compound containing electrical equipment required to transform HVDC and stabilise electricity generated by the Projects so that it can be connected to the electricity transmission network as HVAC. There will be one Onshore Converter Station for each Project.
Onshore Development Area	The Onshore Development Area for ES is the boundary within which all onshore infrastructure required for the Projects would be located including Landfall Zone, Onshore Export Cable Corridor, accesses, Temporary Construction Compounds and Onshore Converter Stations.
Onshore Export Cable Corridor	This is the area which includes cable trenches, haul roads, spoil storage areas, and limits of deviation for micro-siting. For assessment purposes, the cable corridor does not include the Onshore Converter Stations, Transition Joint Bays or temporary access routes; but includes Temporary Construction Compounds (purely for the cable route).
Onshore Substation Zone	Parcel of land within the Onshore Development Area where the Onshore Converter Station infrastructure (including the haul roads, Temporary Construction Compounds and associated cable routeing) would be located.
Sequential Scenario	A potential construction scenario for the Projects where DBS East and DBS West are constructed with a lag between the commencement of construction activities. Either Project could be built first.

Term	Definition
Temporary Construction Compound	An area set aside to facilitate construction of the Projects. These will be located adjacent to the Onshore Export Cable Corridor and within the Onshore Substation Zone, with access to the highway.
The Applicants	The Applicants for the Projects are RWE Renewables UK Dogger Bank South (East) Limited and RWE Renewables UK Dogger Bank South (West) Limited. The Applicants are themselves jointly owned by the RWE Group of companies (51% stake) and Masdar (49% stake).
The Projects	DBS East and DBS West (collectively referred to as the Dogger Bank South Offshore Wind Farms).
Transition Joint Bay (TJB)	The Transition Joint Bay (TJB) is an underground structure at the landfall that houses the joints between the Offshore Export Cables and the Onshore Export Cables.

Acronyms

Term	Definition
DBS	Dogger Bank South
DESNZ	Department of Energy Security and Net Zero
DCO	Development Consent Order
km	kilometres
MW	Megawatt
NSIP	Nationally Significant Infrastructure Project
OCP	Offshore Converter Platform(s)
OREI	Offshore Renewable Energy Installations
PINS	Planning Inspectorate

1 Introduction

1.1 Legislative Context

1. This Safety Zone Statement has been prepared in accordance with Regulation 6(1)(b)(ii) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the 'APFP Regulations') which requires the Applicants for a Development Consent Order (DCO), for the construction of offshore generating stations, to provide a statement as to whether an application will be made for safety zones. This statement outlines the legislative requirements relating to an application for safety zones for Offshore Renewable Energy Installations (OREI), under Section 95 of the Energy Act 2004 (the '2004 Act'), the Applicants' approach and the scope of the works for which the DCO is being sought.

1.2 Purpose of the Document

2. The safety zone application will provide all of the information required by paragraph 3 of Schedule 16 to the 2004 Act and Regulation 3 of the Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007 (the '2007 Regulations'). In accordance with Section 95 of the 2004 Act, the application will be made to the Secretary of State for Energy Security and Net Zero ('DESNZ') (the 'Secretary of State').

3. The safety zone application will be made once the final number and precise location the OREI have been determined, including the wind turbines and Offshore Platforms). One or more applications for safety zones may be made prior to offshore construction commencing in the array area, depending on the final Development Scenario for the Projects.

1.3 Project Overview

4. The Dogger Bank South (DBS) Offshore Wind Farms (herein 'the Projects') are proposed offshore wind farms to be located in the southern North Sea.

5. Whilst the Projects are the subject of a single DCO application, each Project is assessed individually so that mitigation is Project specific (where appropriate). As such, the assessments cover the following three Development Scenarios:

   - DBS East or DBS West are developed In Isolation (the In Isolation Scenario);
   - Both DBS East and DBS West are developed Concurrently (the Concurrent Scenario); or
   - Both DBS East and DBS West are developed Sequentially (the Sequential Scenario).

6. The following principles set out the framework for how the Projects may be developed:

- DBS West and DBS East may be constructed at the same time, or at different times;
- If built in isolation, either Project could be constructed in five years;
- If built concurrent, both Projects could be constructed in five years;
- If built sequentially, construction on either Project could commence first, but with staggered / overlapping construction; and
- If built sequentially, construction of the first Project would be completed within 5 years, with construction of the second Project being completed within 7 years.

7. The Projects would consist of two offshore generating stations with a capacity of greater than 100 megawatts (MW) and therefore are Nationally Significant Infrastructure Projects (NSIPs), as defined by Section 15(3) of the Planning Act 2008, as amended. As such, there is a requirement to submit an application for a DCO to the Planning Inspectorate (PINS) to be decided by DESNZ.

8. The DBS East and DBS West Array Areas would have a combined area of approximately 600km^2 squared and would be located approximately 100km and 122km from shore respectively.

9. The offshore DCO boundary includes the Projects' Array Areas and the Offshore Export Cable Corridors that connect the Array Areas to the landfall at Skipsea (**Figure 8-19-1**).

10. The key offshore components comprise:

- Wind turbines;
- Offshore platforms (OCPs);
- Foundation structures for wind turbines and Offshore platforms;
- Array cables;
- Inter-platform cables; and
- Export cables from the wind farm site/s to the landfall.

11. An Onshore Export Cable Corridor would link the landfall with the newly constructed Onshore Converter Station(s) before onward onshore cable routeing to the proposed Birkhill Wood National Grid Substation (**Figure 8-19-2**).

2 Scope of Consent Application

12. The Projects' DCO seeks, among other things, consent for the following offshore works, as set out in Part 1 of Schedule 1 to the **Draft DCO (Volume 3, application ref: 3.1)** and as included below.

2.1 Offshore Works at DBS East

Work No. 1A:

An offshore wind turbine generating station with a gross electrical output of over 100 megawatts comprising up to 100 wind turbine generators each fixed to the seabed by monopile or jacket foundations;

(a) a network of HVAC subsea cables connecting the wind turbine generators and Work No.2A within the area shown on the works plans, including cable crossings and cable protection;

and associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising –

Work No. 2A:

(a) Up to one offshore converter platform fixed to the seabed by jacket or monopile foundations within the area shown on the works plans;

(b) a network of subsea inter-platform cabling within the area shown on the works plans, including cable crossings and cable protection;

Work No. 3A:

(a) up to two HVDC subsea export cables between Work Nos. 2A and 8A along routes within the area shown on the works plans including cable crossings and cable protection;

(b) up to one cable for the transmission of fibre optic communications laid between Works Nos. 2A and 8A consisting of cables along routes within the area shown on the works plans including cable crossings and cable protection;

(c) up to three temporary pits for trenchless cable installation at landfall seaward of MLWS and up to three additional temporary pits for trenchless cable installation at landfall seaward of MLWS for the DBS West Project within the area shown on the works plans;

(d) installation of up to three landfall cable ducts (if required) and up to three additional landfall cable ducts (if required) for the DBS West Project within the area shown on the works plans;

(e) installation of up to three cable duct extensions from below MLWS to any temporary pits created for trenchless installation situated between

MHWS and MLWS, up to three additional cable duct extension (if required) for the DBS West Project from MLWS to any temporary pits created for trenchless cable installation situated between MHWS and MLWS;

Work No. 4A:

Up to one accommodation platform fixed to the seabed by jacket or monopile foundations within the area shown on the works plans;

Work No. 5A:

Up to three HVAC subsea export cables linking Work Nos. 2A and 2B providing an electrical connection between Work Nos. 1A and 1B, including cable crossings and cable protection;

Work No. 6A:

Not used;

Works No. 7A:

A temporary work area associated with Work Nos. 1A to 5A for vessels to carry out intrusive activities and non-intrusive activities alongside Work Nos. 1A to 5A.

2.2 Offshore Works at DBS West

Work No. 1B:

(1) *An offshore wind turbine generating station with a gross electrical output of over 100 megawatts comprising up to 100 wind turbine generators each fixed to the seabed by monopile or jacket foundations;*

(a) a network of HVAC subsea cables connecting the wind turbine generators and Work No.2B within the area shown on the works plans, including cable crossings and cable protection;

and associated development within the meaning of section 115(2) (development for which development consent may be granted) of the 2008 Act comprising –

Work No. 2B:

(a) Up to one offshore converter platform fixed to the seabed by jacket or monopile foundations within the area shown on the works plans;

(b) a network of subsea inter-platform cabling within the area shown on the works plans, including cable crossings and cable protection;

Work No. 3B:

(a) up to two HVDC subsea export cables between Work Nos. 2B and 8B along routes within the area shown on the works plans including cable crossings and cable protection;

(b) up to one cable for the transmission of fibre optic communications laid between Work Nos. 2B and 8B consisting of cables along routes within the area shown on the works plans including cable crossings and cable protection;

(c) up to three temporary pits for trenchless cable installation at landfall seaward of MLWS and up to three additional temporary pits for trenchless cable installation at landfall seaward of MWLS for the DBS East Project within the area shown on the works plans;

(d) installation of up to three landfall cable ducts (if required) and up to three additional landfall cable ducts (if required) for the DBS East Project within the area shown on the works plans;

(e) installation of up to three cable duct extensions from below MLWS to any temporary pits created for trenchless installation situated between MHWS and MLWS, up to three additional cable duct extension (if required) for the DBS West Project from MLWS to any temporary pits created for trenchless cable installation situated between MHWS and MLWS;

Work No. 4B:

Up to one accommodation platform fixed to the seabed by jacket or monopile foundations within the area shown on the works plans;

Work No. 5B:

Up to three HVAC subsea export cables linking Work Nos. 2A and 2B providing an electrical connection between Work Nos. 1A and 1B, including cable crossings and cable protection;

Work No.6B:

Not used;

Works No. 7B:

A temporary work area associated with Work Nos. 1B to 5B for vessels to carry out intrusive activities and non-intrusive activities alongside Work Nos. 1B to 5B.

3 Scope of Safety Zone Application

13. In accordance with section 95 of the 2004 Act, the safety zone application will be made to the Secretary of State. Pursuant to section 95(2) of the 2004 Act, the purposes for which the Secretary of State may consider it appropriate to issue a safety zone notice are for the purposes of securing the safety of: -

a) the OREI or its construction, extension or decommissioning,

b) other installations in the vicinity of the installation or the place where it is to be constructed or extended

c) individuals in or on the installation or other installations in that vicinity; or

d) vessels in that vicinity or individuals on such vessels.

14. Regulation 3 of the 2007 Regulations and paragraph 3 of Schedule 16 to the 2004 Act require that the following information should be included within a written application for safety zones in respect of an offshore generating station:

- A map showing:
  - The place where the relevant OREI is to be, or is being, constructed, extended, operated or decommissioned; and
  - The waters in relation to which any declaration applied for will establish a safety zone;
- A description of the installation and its proposed or existing location and dimensions (including an explanation of how much of it is (or is expected to be) visible above the water line and how much below it), supported by drawings;
- A description of how the installation operates (or is to operate);
- A description of the location (or proposed location) of:
  - Any electric line used (or proposed to be used) for the conveyance of electricity to or from the installation;
  - Any connection to such an electric line;
  - A description of the location (or proposed location) of any offshore sub-station housing connection equipment;
  - Where the safety zone is sought in respect of more than one relevant OREI, the proposed or existing distances between such installations; and

- Details of any navigational marking that has been specified for use with an installation of the description in question by a general lighthouse authority.

- Whether the safety zone relates to the construction, extension, operation or decommissioning of the relevant renewable energy installation;
- Whether the applicant seeks the declaration of a standard safety zone, or if not, what dimensions are sought for the zone;
- A description of those works or operations in respect of which the safety zone is being applied for and their estimated date and duration;
- Whether the applicant proposes that the area of the safety zone will vary and any factors or determinations by reference to which the applicant proposes that such variation may take place;
- Whether the safety zone relates to major maintenance works in respect of a relevant renewable energy installation which has become operational;
- A statement setting out what steps, if any, the applicant proposes to take to monitor vessels and activities within the safety zone;
- Except where the Secretary of State has notified the applicant that it is not required, an up-to-date shipping traffic survey for the waters comprising the safety zone; and
- An assessment of the extent to which navigation might be possible or should be restricted, and whether restrictions would cause navigational problems, within or near waters where the relevant renewable energy installation is to be, or is being constructed, extended, operated or decommissioned, as the case may be.

15. The Applicants' safety zone application will contain the information required by Regulation 3 of the 2007 Regulations and paragraph 3 of Schedule 16 to the 2004 Act. The Applicants intend to apply for the following safety zones given in **Table 3-1**.

Table 3-1 Safety Zones Application Summary

Potential Safety Zone	Details
Construction	Up to 500m around each wind turbine generator foundation or offshore substation platform whilst under construction.
Commissioning	Up to 50m around each wind turbine generator foundation or offshore substation platform where construction has finished but where some work may be ongoing prior to commercial operations commencing, e.g. pre-commissioning testing.
Major maintenance works* during operations	Up to 500m when major maintenance is in progress (e.g. involving the use of a jack-up vessel or similar)

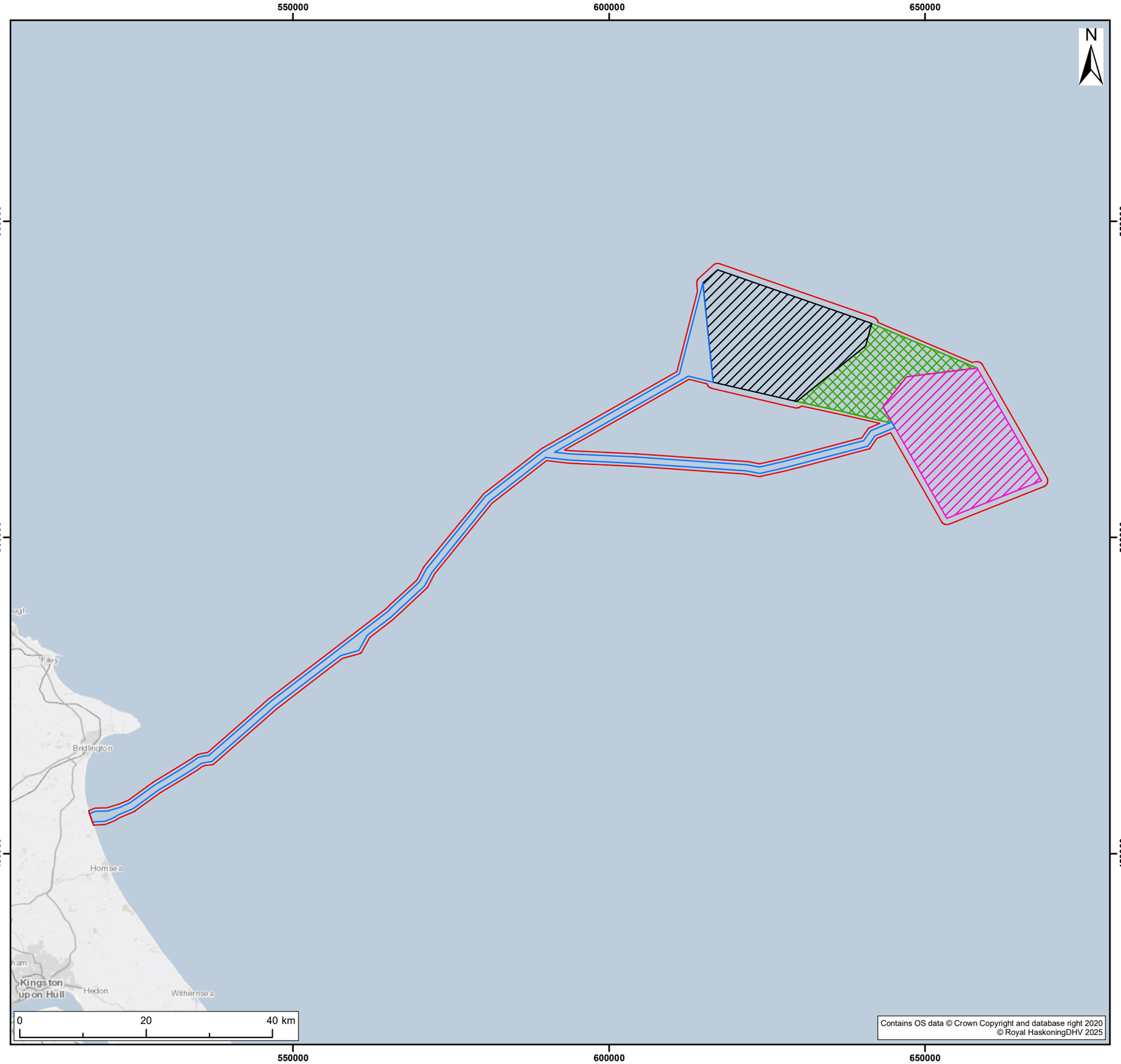
16. "Major maintenance works" is defined by Regulation 2 of the 2007 Regulations as works relating to any renewable energy installation which has become operational, requiring the attachment to, or anchoring next to, such an installation of a self-elevating platform, jack-up barge, crane barge or other maintenance vessel.

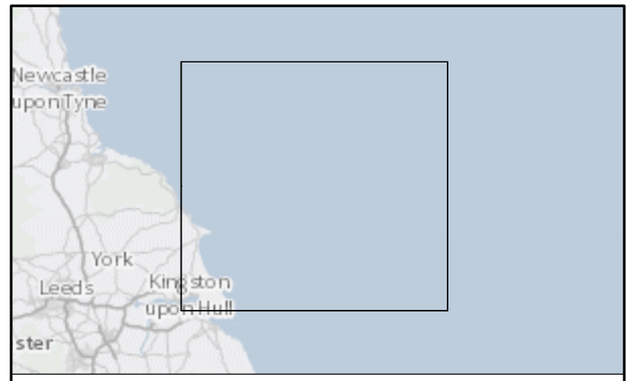
17. Further information on the need for safety zones for the Project is set out in **Volume 7, Chapter 14 Shipping and Navigation (application ref: 7.14)** and the **Navigational Risk Assessment** (**Volume 7, Appendix 14-2 (application ref: 7.14.14.2)**).

18. During construction, safety zones will be sought for the protection of the Project as an OREI and during both construction, commissioning and major maintenance works, safety zones will be sought for the protection of individuals working on the OREI and vessels related to the works and operating within the vicinity of the works.

19. In relation to decommissioning, it is not anticipated that an application for safety zones would include specific provision for the decommissioning of the Project. The need for any safety zones at the decommissioning stage would be subject to appropriate risk assessment and consultation with the statutory authorities at that stage, and (if required) a further safety zone application would be submitted for the decommissioning works at the relevant time.

20. The Applicant considers that the purposes for which a safety zone will be sought are within the purposes set out in section 95(2) of the 2004 Act and that there is a robust case a safety zone notice to be issued by the Secretary of State in respect of the Project.





Legend:

- Offshore Development Area
- Offshore Export Cable Corridor
- DBS East Array Area
- DBS West Array Area
- Inter-Platform Cable Corridor

S2	P01	06/02/2025	Suitable for Information	SM	CC	RF
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Offshore Development Area

Figure: 8-19-1 | Drawing No: PC2340-RHD-OF-ZZ-DR-Z-1010

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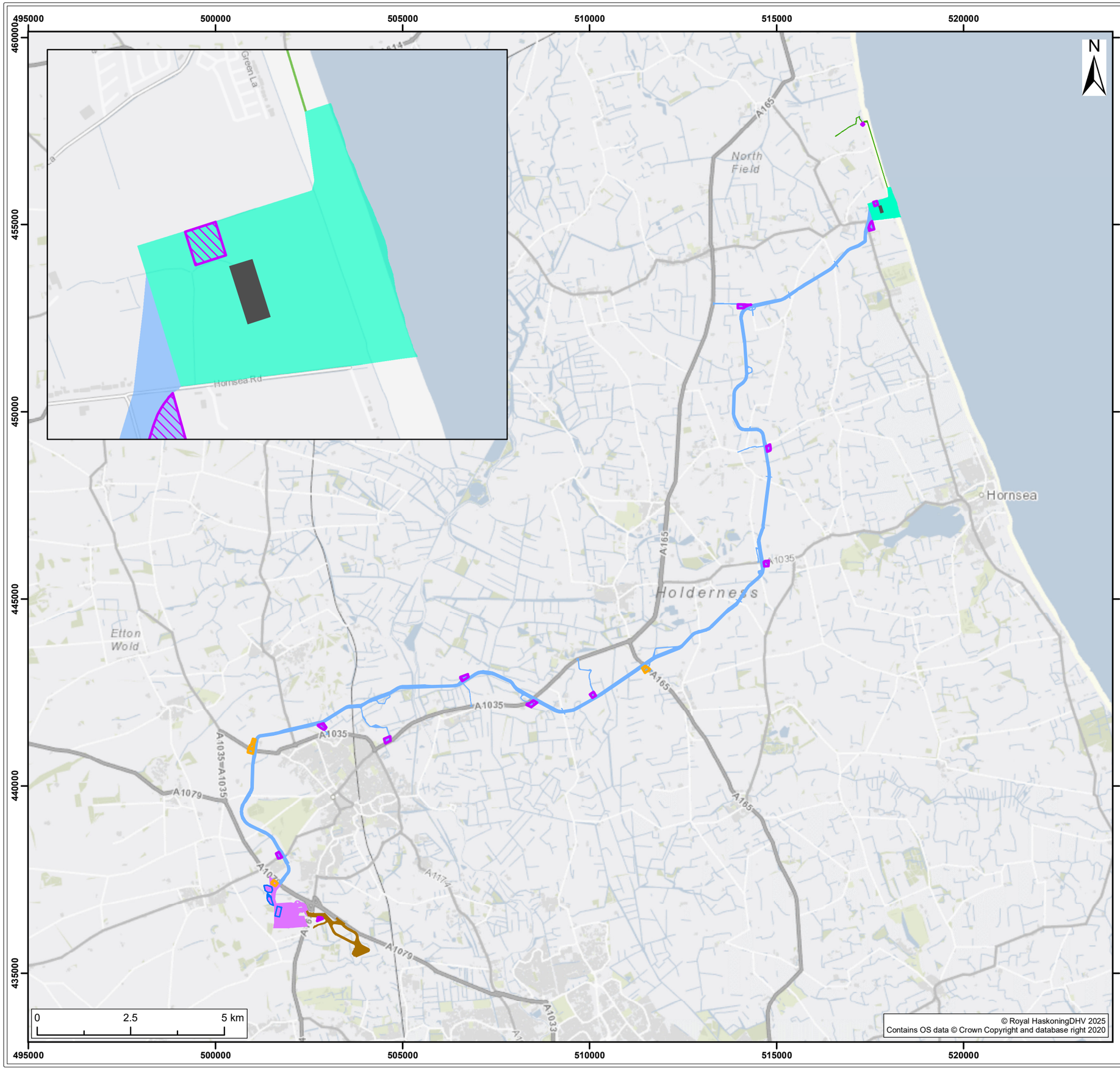
Project:	Report:
Dogger Bank South Offshore Wind Farms	Environmental Statement

Royal HaskoningDHV
Enhancing Society Together

RWE



Legend:

- Landfall Zone
- Onshore Export Cable Corridor
- Emergency Beach Access
- Onshore Substation Zone Temporary Construction Compounds
- Onshore Substation Zone
- Onward Cable Connection to the proposed Birkhill Wood National Grid Substation
- Transition Joint Bay (TJB) Compound
- Main Temporary Construction Compound
- Satellite Temporary Construction Compound

S3	P02	06/02/2025	Suitable for Information	SM	ND	RH
SUI	REV	DATE	DESCRIPTION	DRW	CHK	APR

Title:

Onshore Development Area

Figure: 8-19-2 | Drawing No: PC2340-RHD-ON-ZZ-DR-Z-1011

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Project:

Dogger Bank South Offshore Wind Farms

Report:

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Royal HaskoningDHV
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