Annex F Application for Planning Permission for the Proposed Development ACP Case Ref. ABP-319864-24, NIS Volume II – Stage 2 AA; Natura Impact Statement (Revised March 2026)



Arklow Bank Wind Park 2

Natura Impact Statement: Stage 2 Appraisal to Inform an Appropriate Assessment of Implications on European Sites (Revised March 2026)

sse Renewables

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Glossary

Term	Meaning
ABWP2 (the Project)	Arklow Bank Wind Park 2 (ABWP2) (The Project) is the onshore and offshore infrastructure. This NIS is being prepared for the Offshore Infrastructure. Consents for the Onshore Grid Infrastructure (Planning Reference 310090) and Operations Maintenance Facility (Planning Reference 211316) has been granted on 26th May 2022 and 20th July 2022, respectively. • Arklow Bank Wind Park 2 Offshore Infrastructure: This includes all elements to be consented in accordance with the Maritime Area Consent. This is the subject of this NIS and will be referred to as 'the Proposed Development' in the NIS. • Arklow Bank Wind Park 2 Onshore Grid Infrastructure (OGI): This relates to the onshore grid infrastructure for which planning approval has been granted. • Arklow Bank Wind Park 2 Operations and Maintenance Facility (OMF): This includes the onshore and nearshore infrastructure at the OMF, for which planning permission has been granted. • Arklow Bank Wind Park 2 EirGrid Upgrade Works: any non-contestable grid upgrade works, consent to be sought and works to be completed by EirGrid.
Arklow Bank Wind Park 1 (ABWP1)	Arklow Bank Wind Park 1 consists of seven wind turbines, offshore export cable and inter-array cables. Arklow Bank Wind Park 1 has a capacity of 25.2 MW. Arklow Bank Wind Park 1 was constructed in 2003/04 and is owned and operated by Arklow Energy Limited. It remains the first and only operational offshore windfarm in Ireland.
Arklow Bank Wind Park 2 (ABWP2)– Offshore Infrastructure	"The Proposed Development", Arklow Bank Wind Park 2 Offshore Infrastructure: This includes all elements under the existing Maritime Area Consent.
Array Area	The Array Area is the area within which the Wind Turbine Generators (WTGs), the Offshore Substation Platforms (OSPs), and associated cables (export, inter- array and interconnector cabling) and foundations will be installed.
Bathymetry	The measurement of water depth in oceans, seas and lakes.
Benthic ecology	Benthic ecology encompasses the study of the organisms living in and on the sea floor, the interactions between them and impacts on the surrounding environment.
Biotope	The combination of physical environment (habitat) and its distinctive assemblage of conspicuous species.
Cable Corridor and Working Area	The Cable Corridor and Working Area is the area within which export, inter-array and interconnector cabling will be installed. This area will also facilitate vessel jacking operations associated with installation of WTG structures and associated foundations within the Array Area.
Cable protection	External armouring applied to exposed cables or used at cable crossings, typically comprised of rock (berms or bags), ducting (polyurethane, steel, High Density Polyethylene (HDPE), cast iron or plastic) or concrete mattresses.
Competent Authority (CA)	The authority designated as responsible for performing the duties arising from the EIA Directive as amended. For this application, the Competent Authority is An Coimisiún Pleanála (ACP)
Concrete mattressing	A solution for providing protection to cables from dropped objects, fishing trawl boards and scour (Subsea Protection Systems, 2020). Typically, several metres wide and long, cast of articulated concrete blocks which are linked by a polypropylene rope lattice which are placed on and/or around structures to stabilise the seabed and inhibit erosion.

Term	Meaning
Construction phase	The period during which project infrastructure is being installed.
Decommissioning phase	The period during which Proposed Development infrastructure is being removed at the end of the operational lifetime of Proposed Development.
EirGrid	State-owned electric power transmission system operator (TSO) in Ireland and Transmission Asset Owner (TAO) for the Project's transmission assets.
Environmental Impact Assessment (EIA)	An Environmental Impact Assessment (EIA) is 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 Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU of the European Parliament and of the Council (EIA Directive).
Foreshore	The bed and shore, below the line of high water of ordinary or medium tides, of the sea and of every tidal river and tidal estuary and of every channel, creek, and bay of the sea or of any such river or estuary including the subsoil below, and the water column above the bed and shore and extending to the 12 nautical mile limit.
Foundation	The load carrying support structure for the wind turbine generator tower or offshore substation platform topside. The foundation is the part of the structure from the interfacing flange with the turbine tower or topside-foundation interface, down to below seabed. This includes any secondary steel items associated with the structure. For the purposes of the NIS the term 'foundation' includes the structure from the WTG tower or topside interface down to the lower end of the monopile commonly known as the 'substructure' and encompasses monopiles and transition pieces.
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive).
Indirect Impact	'Impacts on the environment, which are not a direct result of the Project, often produced away from (the site) or as a result of a complex pathway' (EPA, 2022).
Infauna	The animals living in the sediments of the seabed.
Intertidal area	The area between the high water mark (HWM) and the low water mark (LWM).
Landfall	The area in which the offshore export cables make landfall and is the transitional area between the offshore cabling and the onshore cabling.
Magnitude	Size, extent and duration of an impact.
Management Unit (MU)	A defined geographical area where a particular species can be found, and the management of human activities is applied.
Maritime Area Consent (MAC)	A consent to occupy a specific part of the maritime area on a non-exclusive basis for the purpose of carrying out a Permitted Maritime Usage strictly in accordance with the conditions attached to the MAC granted on 22nd December 2022 with reference number 2022-MAC-002.
Mitigation Measure	Measure which would avoid, reduce, or offset an impact.
Natura Impact Statement (NIS)	A statement, for the purpose of Article 6 of the Habitats Directive, of the implications of a Proposed Development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites.

Term	Meaning
Permitted Maritime Usage	The construction and operation of an offshore windfarm and associated infrastructure (including decommissioning and other works required on foot of any permission for such offshore windfarm).
Polychaete	A class of segmented worms often known as bristle worms.
Scour protection	A solution for preventing scour around subsea structures, typically comprised of rock or concrete mattresses.
Sensitive Receptor	Physical or natural resource, special interest or viewer group that may experience an impact.
Sensitivity	Vulnerability of a sensitive receptor to change.
Sound Exposure Level (SEL)	A measure of the total sound energy of an event normalised to one second. This allows the total acoustic energy contained in events lasting a different amount of time to be compared on a like-for-like basis.
Sound Pressure Level (SPL)	The measurement of sound pressure in decibels (dB).
Study Area (upper case)	The area which is characterised dependant on the survey and receptor type of the focus of the study.
Subtidal area	The area below Mean Low Water Springs (MLWS).
The Application	The full set of documents that will be submitted to An Bord Pleanála in support of the consent application.
The Developer	Sure Partners Ltd.
Trenchless techniques	Trenchless techniques include steerable direct pipe thrusting (“Direct Pipe”) and Horizontal Directional Drilling (HDD) which allow cable ducts to be installed underground without the need to excavate trenches.
Transition Piece (TP)	Structural interface between monopile foundation and WTG tower that contains ancillary infrastructure such as boat landings, working platform and j tubes.
Water Body	A surface water body as defined under Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, as amended, the Water Framework Directive i.e., a river/stream, lake, transitional, coastal or groundwater body.
Zone of Influence	Areas within which environmental impact may occur – to be defined for each receptor by technical specialists

Acronyms

Term	Meaning
AA	Appropriate Assessment
ABP	An Bord Pleanála
ABWP1	Arklow Bank Wind Park 1
ABWP2	Arklow Bank Wind Park 2
AC	Alternating Current
ADCP	Acoustic Doppler Current Profiler
AEoI	Adverse Effects on Integrity
AL	Action Level
AOB	Apparently occupied burrow
AON	Apparently occupied nests
ASL	Above sea level
ASU	Aquatic Services Unit
BDMPS	Biologically defined minimum population scale
BEIS	Department of Business, Energy, and Industrial Strategy
CAP	Climate Action Plan
CL	Conservation Limit
CO	Conservation Objectives
CJEU	Court of Justice of the European Union
CPGR	Counterfactual of population growth rate
CPS	Counterfactual of population size
CPT	Cone penetration test
CRM	Collision risk model
CSA	Continental Shelf Associates
cSACs	Candidate Special Areas of Conservation
CSIP	Cetacean Stranding Investigation Programme
cSPAs	Candidate Special Protected Areas
DAS	Digital Arial Survey

Term	Meaning
DCCAE	Department of Communications, Climate Action and Environment
DEHLG	Department of the Environment, Heritage and Local Government
DMAP	Designated Maritime Area Plan
DP	Decommissioning Plan
EC	European Commission
EDR	Effective deterrence range
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMF	Electro Magnetic Field
EMP	Environmental Management Plan
EPA	Environmental Protection Agency
EU	European Union
EUNIS	The European Nature Information System
FCS	Favourable Conservation Status
GCA	Grid connection assessment
GPS	Global positioning system
GSD	Ground sample distance
HDD	Horizontal Directional Drilling
HF	High frequency
HRA	Habitat Regulations Assessment
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
HWM	High Water Mark
IRCG	Irish Coast Guard
IMO	International Maritime Organisation
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
LiDAR	Light Detection and Ranging
LSE	Likely Significant Effects

Term	Meaning
MAC	Maritime Area Consent
MBES	MultiBeam Echosounder
MMMP	Marine Mammal Mitigation Plan
MMO	Marine Mammal Observer
MPCP	Marine Pollution Contingency Plan
MPDM	Marine Planning and Development Management
MU	Management Unit
NDP	Network Delivery Portfolio
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
OGI	Onshore Grid Infrastructure
OHL	Overhead line
O&M	Operational and Maintenance
OMF	Operations and Maintenance Facility
OPR	Office of the Planning Regulator
OPW	Office of Public Works
ORE	Offshore Renewable Energy
OSP	Offshore Substation Platforms
OWF	Offshore Windfarm
PDA	Planning and Development Act
PTS	Permanent threshold shift
PVA	Population viability assessment
QI	Qualifying Interests
RMS	Root mean square
RPM	Revolutions per minute
RSPB	Royal Society for the Protection of Birds
SAC	Special Areas of Conservation
SBP	Sub-bottom profiler
SCI	Sites of Community Importance

Term	Meaning
SEL	Sound Exposure Level
SID	Strategic Infrastructure Development
SISAA	Supporting Information for Screening for AA
SNCBs	Statutory Nature Conservation Bodies
SOEF	Shaping Our Electricity Future
SPA	Special Protected Areas
SPL	Sound Pressure level
SSC	Suspended sediment concentrations
SSCO	Site specific conservation objectives
SSD	Suspended sediment deposition
SSS	Side scan sonar
SW	South-west
TAO	Transmission Asset Owner
TSHD	Trailing Suction Hopper Dredger
TTS	Temporary threshold shift
UK	United Kingdom
USA	United States of America
UWN	Underwater Noise
UXO	Un-exploded ordinance
VHF	Very High Frequency
VP	Vantage point
WTG	Wind Turbine Generator

Units

Unit	Description
%	Percent
<	Less than
>	More than
°	degrees
A	Amperes
CO_{2eq}	Carbon dioxide equivalent
dB	Decibel (unit used to measure the intensity of sound)
hrs	Hours
Hz	Hertz
kHz	kiloHertz
kJ	Kilojoules
km	Kilometre
km^2	Kilometres square
kn	Knots
kV	Kilovolt (electrical potential)
m	Metre
m/s	Metres per second
mG	milligauss
mg/l	Milligrams per litre
mV/m	millivolts per metre
MW	Megawatt (power; equal to one million watts)
nm	Nautical Mile (distance; equal to 1.852 km)
Pa	Pascal
V/m	Volts per metre
µT	Microtesla
µPa	Micropascal
µV/m	Microvolts per metre

Summary of Changes

This document has been updated to reflect changes and updates since submission of the original Natura Impact Statement: Stage 2 Appraisal to Inform an Appropriate Assessment of Implications on European Sites to An Bord Pleanála (ABP) (now An Coimisiún Pleanála (ACP)) in June 2024. All references to ABP, should be considered ACP throughout the document.

This document has been updated to align with revisions to NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026) made in response to the Requests for Further Information (RFI). The reader should refer to NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026) in the first instance, as it provides the context and screening updates that underpin many of the RFIs addressed within this document. All relevant RFI-related changes specific to this document are summarised below. Notably, updates to the NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026) have resulted in one additional SPA (The Murrough SPA) being screened in for Stage 2 Appropriate Assessment within this document.

In relation to RFI (1a, 1b and 1c):

- The Applicant confirms that this document has been updated to reflect the latest legislation, data sources, and site-specific information, providing an up-to-date assessment, as follows:
  - Section 2.2 *Legislative and the Appropriate Assessment procedure* in Ireland has been reviewed to ensure that all references are current and accurate within the context of the Habitats Directive in Ireland;
  - Table 5.1 and Table 5.2 now include all updates to the Conservation Objectives for the screened-in Qualifying Interests (QIs) at the relevant Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) that have been published since the original submission, using the most up-to-date information available as of January 2026.
  - Section 6.1 *Baseline Information to Inform Stage 2 Annex I Coastal and Marine Habitat QIs* has been revised to incorporate updated desk-based data sources and reference new site-specific geophysical and benthic surveys;
  - Section below 6.3 *Baseline Information to Inform Stage 2 for Annex II Marine Mammal Species QIs* has been revised to incorporate updated desk-based data sources and reference new site-specific Digital Aerial Surveys (DAS) and Seal Vantage Point (VP) surveys;
  - Section 6.5 *Baseline Information to Inform Stage 2 AA for Migratory fish Species QIs* has been reviewed with the consideration of updated desk-based data sources; and
  - Section 6.7 *Baseline Information to Inform Stage 2 for AA for Intertidal and Offshore Ornithology QIs* has been revised to incorporate updated desk-based data sources, additional site characterisation DAS, site-specific seabird flight height surveys and monitoring of the kittiwake breeding colony at Wicklow Head.

In relation to RFI (7q):

- The Applicant confirms that this document has taken into account the revisions and comments made to the Coastal Processes assessment, together with any associated updates to the Benthic Ecology, Fish and Shellfish, Marine Mammals and Offshore Ornithology assessments, all of which have been incorporated into this Natura Impact Statement, as follows:

- Section 6.2.1 *Overview and Supporting Information for the Assessment* has been revised to clearly direct the reader to the full numerical modelling reports appended to this NIS, setting out what each report contains. The section also guides the reader to EIAR Volume II, Chapter 6: Coastal Processes (Revised March 2026), which presents and interprets the modelling outputs in the context of impact pathways arising from physical processes, including those queries raised through RFI (7a–o).
- Section 6.2 now provides a robust summary of the updated sediment plume and morphodynamic modelling used to inform the assessment of impacts, particularly on Annex I Coastal and Marine Habitats (see paragraph 6.2.1.7 for references to and descriptions of the relevant documents). Figures have been selected to illustrate the modelling outputs representing the largest predicted magnitudes and spatial extents of sediment plumes and associated deposition relative to the SACs considered for Annex I Coastal and Marine Habitats.

In relation to RFI (8k):

- The Applicant confirms that, in addition to the consideration provided in the EIAR, this document has been reviewed and updated to provide further clarification on potential impacts on Annex I Coastal and Marine Habitats at Wicklow Reef SAC, Blackwater Bank SAC, Magherabeg Dunes SAC and Buckroney–Brittas Dunes SAC, specifically in relation to their Conservation Objectives. These updates are reflected as follows:
  - Table 5.1 lists the sites that have been screened in and shows the addition of a new impact pathway considering changes to physical processes from the presence of infrastructure during operation and potential effects on Annex I Coastal and Marine Habitats.
  - Section 6.2 *Assessment of the Proposed Development Alone for Coastal and Marine Habitat* has been updated to include additional information gathered since the original submission, including a site-specific benthic survey and the results of updated numerical sediment plume and morphodynamic modelling. These updates have further informed the assessment of relevant impact pathways on Annex I Coastal and Marine Habitats.

In relation to RFI (9c and 9d):

- The Applicant confirms that this document has been updated to incorporate additional site-specific surveys completed since the submission of the Application, and that resulting data have been incorporated into the updated baseline description and impact assessments, as appropriate, with relevance to marine mammals:
  - Section 6.3.2 *Annex II Marine Mammal Species Baseline Environment* now includes results from additional DAS, undertaken using an expanded 10 km buffer around the Array Area;
  - Section 6.3.2 *Annex II Marine Mammal Species Baseline Environment* also provides details and results from targeted monthly Seal VP surveys, in order to address limitations in aerial survey coverage of seal haul-out sites; and
  - Section 6.3.2 *Annex II Marine Mammal Species Baseline Environment* also integrates additional literature sources (e.g. Gilles *et al.*, 2025) to further support and contextualise the marine mammal baseline environment and subsequent assessments.

In relation to RFI (9q):

- The Applicant confirms that this document has been updated to address the request for a more detailed examination of the impacts from the Proposed Development for harbour porpoise within

European sites. The following European sites that are screened into the NIS are as follows: Lambay Island SAC, Carnsore Point SAC, Kenmare River SAC, and Belgica Mound SAC. These updates are reflected as follows:

- Section 6.4.6 provides an updated assessment of the harbour porpoise QI within Lambay Island SAC;
- Section 6.4.5 provides an updated assessment of the harbour porpoise QI within the Carnsore Point SAC;
- Section 6.4.10 provides an updated assessment of the harbour porpoise QI within Kenmare River SAC; and
- Section 6.4.12 provides an updated assessment of the harbour porpoise QI within the Belgica Mound SAC.

In relation to RFI (10k):

- The Applicant confirms that appropriate consideration has been given to the potential impacts on the QIs of designated sites that may be affected by changes to fish and shellfish ecology. This includes consideration of indirect effects on marine mammals and ornithological features that rely on fish and shellfish as key prey resources. Focusing on QIs within the relevant ZoIs, the assessment of changes in prey availability (i.e. changes in fish and shellfish ecology) has been undertaken comprehensively, drawing on the evidence and conclusions presented in the updated EIAR, to ensure that potential impacts on Natura 2000 sites designated for prey-dependent QIs can be confidently discounted. The relevant updates are set out as follows:
  - Section 6.4 *Assessment of Proposed Development alone for Annex II Marine Mammal* presents an updated assessment of changes in prey availability arising from the Proposed Development alone, with in-combination effects considered (where applicable) in Section 7.4.2.
  - Section 6.7.4 *Impacts and Parameters Assessed* presents consideration of indirect displacement due to effects on seabird prey species.

In relation to RFI (12p):

- The Applicant notes that EIAR Chapter 12: Offshore Ornithology has given consideration to the potential for ABWP1 to contribute to collision risk for kittiwake (a key species for this potential effect) and that very few collisions were attributed to these 7 turbines (<11 per year in total), but it was also noted that the owner and operator of the ABWP1, Arklow Energy Limited, has commenced pre-application consultation (Case Reference OC27.321635) with ACP and the appropriate local authorities to decommission ABWP1, which has reached the end of its operating life. Based on the fact that the ABWP1 team has commenced the pre-application process for decommissioning we expect ABWP1 to be fully decommissioned before commencement of operation of ABWP2. Therefore, given the very small number of estimates collisions at ABWP1 and the high probability of imminent decommissioning, no further consideration is considered necessary in the NIS.

In addition to the amendments made in response to RFI regarding various environmental receptor topics, this document has been updated to reflect the following design changes to the Proposed Development in response to RFI, as follows:

In relation to RFI 1b and 1c:

- Survey reports comprising an additional geophysical survey dataset conducted in 2024 has furthered understanding of bedrock elevation and has allowed the Applicant to reduce the maximum hammer piling energy required from 6,600kJ to 3,500kJ and associated adjustment of piling scenarios.

In relation to RFI 1b and 12o:

- Additional data received from recent supply chain engagement has enabled the Applicant to refine the blade chord width for both Project Design Options reducing the effects of the Proposed Development on birds.

In relation to RFI 2:

- In response to a submission received from the Department of Transport, in which the Irish Coast Guard (IRCG) made observations on the site layout, and as subsequently noted by ACP in their RFI in respect of search and rescue access, consideration has also been given to the Maritime Navigation Safety and Emergency Response Guidance Documents for Offshore Renewable Energy Installations (OREI), published in June 2025.
- This resulted in adjustments to the layout to ensure search and rescue access to the satisfaction of the IRCG as follows:
  - Reduction in the number of WTGs from 56 to 53 for Project Design Option 1;
  - Adjustments to the specific location of OSPs and WTGs for both Project Design Options to optimise the search and rescue access and coverage;
  - Associated requisite adjustments across both Project Design Options to the infrastructure and associated aspects of the Proposed Development which are a function of the location of the OSPs and WTGs such as the location of cables and the location of excavation and/or disposal required for construction activities.
- In order to maintain project delivery timelines, the commissioning and completions period has been optimised, therefore reducing the overall outline construction programme to 4 years.

Where relevant, these updates have been reflected in the corresponding assessment sections throughout this document, as follows:

- Table 6.3 lists the relevant impacts and updated design parameters used to inform the Annex I Coastal and Marine Habitats assessments;
- Table 6.8 lists the relevant impacts and updated design parameters used to inform the Annex II Marine Mammal assessments
- Table 6.37 lists the relevant impacts and updated design parameters used to inform the Annex II Migratory Species assessments; and
- Table 6.43 lists the relevant impacts and updated design parameters used to inform the Intertidal and Offshore Ornithology assessment.

Aside from the updates made in response to the RFI listed above, further consistency checks have been undertaken throughout the document, and minor amendments made where necessary to ensure the conclusions remain aligned with the evidence presented and with the updated NIS Volume I: Supporting Information to Inform Screening for Appropriate Assessment (Revised March 2026). Of note, this review has not resulted in any changes to the overall conclusions regarding AEoI for any European sites.

1 Executive Summary

1.1.1.1 Sure Partners Limited (hereafter referred to as “the Developer”) intends to build a new offshore windfarm, Arklow Bank Wind Park 2 (ABWP2) (the Project), situated on and around Arklow Bank in the Irish Sea, approximately 6 to 15 km to the east of Arklow in County Wicklow.

1.1.1.2 ABWP2 is made up of both onshore and offshore components. The subject of this Natura Impact Statement (NIS) is the offshore infrastructure only (the Proposed Development).

1.1.1.3 Article 6(3) of the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as amended) (the Habitats Directive) requires that the relevant competent authority (in this case An Bord Pleanála (ABP)) must undertake an Appropriate Assessment (AA) of the implications of a proposed plan or project, on its own or in combination with other plans or projects, on one or more than one European Site, in view of the Conservation Objectives of the site or sites. There are three stages to the Habitats Directive Assessment process. This report provides information to support the Stage 2 AA.

1.1.1.4 A Stage 1 Supporting Information for Screening for Appropriate Assessment (SISAA) Report was completed for the Proposed Development to determine whether the Proposed Development alone or in-combination with other plans and project would result in Likely Significant Effects (LSEs) on European sites in view of the sites’ Conservation Objectives (COs) (see NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026)).

1.1.1.5 This NIS Volume II: Stage 2 Appraisal to Inform an Appropriate Assessment of Implications on European Sites (Revised March 2026) builds upon the conclusions of NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026), with further information presented to better understand the risks presented by LSEs identified at Screening. It constitutes a Stage 2 Appropriate Assessment by presenting a study of the potential implications of the Proposed Development alone or in-combination with other plans and projects to adversely affect the integrity of 57 European sites in view of the COs of these sites.

1.1.1.6 These sites are designated to protect qualifying features from four receptor groupings relevant for this Proposed Development: Annex I coastal and marine habitats, Annex II marine species: including marine mammals and migratory fish species, and intertidal and offshore ornithology.

1.1.1.7 An analysis of LSEs identified at Stage 1 was undertaken for the 57 European sites advanced to Stage 2 (AA). This includes ‘transboundary’ sites in the UK and France. Consideration was given to the potential for the Proposed Development alone and in-combination with other plans and projects to result in an Adverse Effect on Integrity (AEoI) of the sites against the respective sites’ CO.

1.1.1.8 After detailed consideration of the potential for AEoI and in light of embedded commitments (avoidance of effects by standard project environmental protection measures and procedural controls based on industry best practice), and additional mitigation measures which are included as part of the Proposed Development and factored into the assessment, a conclusion was determined that no AEoI will result from the Proposed Development alone or in-combination with other plans and projects for all sites.

2 Introduction

2.1 Overview

2.1.1.1 Having regard to Part XAB of the Planning and Development Act 2000 (as amended), this report presents information to support the competent authority ABP, to undertake an AA. The report aims to inform and assist the competent authority in carrying out the AA for European sites. This NIS has been prepared, taking into account the COs of the European sites (Special Areas of Conservation (SACs), Special Protected Areas (SPAs), Candidate SACs (cSACs) and SPAs (cSPAs) and their QIs that were identified within NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026). It should be noted that while cSACs and cSPAs were fully assessed in this NIS, the screening concluded that there would be no LSE on identified candidate sites (see NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026).

2.1.1.2 This Stage 2 NIS (NIS Volume II: Stage 2 Appraisal to Inform an Appropriate Assessment of Implications on European Sites (Revised March 2026)) is to assist the competent authority in undertaking its AA for the Proposed Development. There are two Project Design Options this NIS considers through the process.

2.1.2 Statement of Authority

Table 2.1: List of authors and relevant experience

Author	Qualification and experience of authors
Jennifer Gibson Original Submission Author	Jennifer Gibson is a Senior HRA Consultant at GoBe Consultants with 5 years' environmental consultancy experience. She gained a Masters in Ecological Management and Conservation Biology from Queens University Belfast. Jennifer had been lead author on a large number of Irish NISs for OWF construction and associated surveys.
Charles Stamp Original Submission Author	Charles Stamp is a Senior HRA Consultant at GoBe Consultants with six years of ecological consultancy experience. Charles worked at Natural England for three years where he worked on and managed interaction with a variety of projects including NSIPs, residential housing developments, scientific research and the use of strategic approaches to carrying out Habitat Regulation Assessments. He has a BSc in Zoology from Bangor University, Wales.
Glen Gillespie Original Submission Lead	Glen is an Associate Director and Head of HRA at GoBe Consultants. Glen was at Natural England for a total of thirteen years where he worked across a range of projects which included windfarms, residential housing developments, nuclear new builds, grid infrastructure and tidal lagoons. Following his departure from Natural England in 2016, Glen has worked in environmental consultancy at Senior, Principal and Associate Director levels, across a range of terrestrial and marine projects - including more than ten offshore windfarm projects across the UK and Ireland.
Emily Muir Post-Submission Updates Author	Emily is a Marine Water and Sediment Quality (MW&SQ) and HRA specialist with two years of professional experience in marine environmental consultancy. She has contributed to a wide range of projects, including HRAs, Natura Impact Statements, EIAs, MULAs, WFD Compliance Assessments, and Dumping at Sea Permit Applications, primarily in the offshore renewable energy sector, with an expanding portfolio across marine and coastal developments. Emily holds a Certificate in Marine Pollution Prevention and Management from Lloyd's Maritime Academy and has detailed knowledge of international marine pollution conventions and EU/Irish environmental legislation, particularly the Habitats

Author	Qualification and experience of authors
	and Birds Directives. She earned a First-Class Honours BSc in Applied Bioscience and Zoology with distinction from the University of the West of Scotland and focused her post-graduate research on ecotoxicological assessments of microplastics in lentic ecosystems across Scotland.
Lauren Kirkland Post-Submission Updates Reviewer	Associate Director with a doctorate in shellfish ecology and commercial fisheries. She has 14 years' experience in the offshore wind sector and during this time, she has served as project manager and project director for offshore wind projects throughout the UK and Ireland, managing environmental and consents requirements. Experience managing the pre-application, examination and post-application phases of both the offshore and onshore elements of large offshore wind farm projects.

2.1.2.1 Please refer to the topic specific chapters of the EIAR for additional Statements of Authority, as follows:

- Chris Nikitik, Post-Submission Updates Benthic Ecology Technical Lead (see EIAR Volume II, Chapter 9: Benthic Subtidal and Intertidal Ecology (Revised March 2026));
- Edward Rickard, Post-Submission Updates Migratory Fish Technical Lead (see EIAR Volume II, Chapter 10: Fish, Shellfish and Sea Turtle Ecology (Revised March 2026));
- Ophelie Humphrey-Walsh, Post-Submission Updates Marine Mammal Technical Lead (see EIAR Volume II, Chapter 11: Marine Mammals (Revised March 2026)); and
- Mark Trinder, Post-Submission Updates Ornithology Technical Lead (see EIAR Volume II, Chapter 12: Offshore Ornithology (Revised March 2026)).

2.2 Legislative and the AA procedure

2.2.1 The Habitats Directive

2.2.1.1 Article 6(3) of the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as amended) (the Habitats Directive) requires that–

> *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon either individually or in combination with other plans or projects, shall be subject to AA of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and if appropriate, after having obtained the opinion of the general public."*

2.2.1.2 Thus, Article 6(3) provides a two-stage process:

- The first stage involves a screening for AA; and
- The second stage therefore only arises where the conclusion of the screening is that an AA is required. Where it is concluded that an AA is not required, Stage 2 is not applicable.

2.2.1.3 Article 6(4) introduces a third stage should the conclusion of Stage 2 be negative but the need of the project warrants further consideration and derogation which would allow the project to be approved in limited circumstances where the Stage 2 AA has concluded that it would or may have AEoI on European sites, with Article 6(4) allowing for derogations from Article 6(3).

2.2.1.4 This report is concerned with the second stage of the AA procedure.

2.2.2 Irish Legislation

2.2.2.1 For the purposes of applications for planning permission, Part XAB of the Planning and Development Act 2000, as amended ("the PDA") transposes the obligations under Article 6(3) into Irish law and sets out the duties of the relevant Competent Authority. In relation to other consent regimes, the provisions of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended ("the 2011 Regulations"), transpose those obligations.

2.2.2.2 The Planning and Development Act 2024 has been enacted; however, as of March 2026, Chapter 3 of Part 6 (which is intended to replace Part XAB in respect of Appropriate Assessment) has not yet been commenced. Accordingly, Part XAB of the Planning and Development Act 2000, as amended, remains in force.

2.3 Appropriate Assessment

2.3.1.1 Section 177V of the PDA determines than an AA shall include a determination by the competent authority under Article 6.3 of the Habitats Directive as to whether or not a draft land use plan or proposed development would adversely affect the integrity of a European site. Section 177V (2) states:

"In carrying out an appropriate assessment under subsection (1) the competent authority shall take into account each of the following matters:

(a) the Natura impact report or Natura impact statement, as appropriate;

(b) any supplemental information furnished in relation to any such report or statement;

(c) if appropriate, any additional information sought by the authority and furnished by the applicant in relation to a Natura impact statement;

(d) any additional information furnished to the competent authority at its request in relation to a Natura impact report;

(e) any information or advice obtained by the competent authority;

(f) if appropriate, any written submissions or observations made to the competent authority in relation to the application for consent for proposed development;

(g) any other relevant information."

2.3.1.2 Section 177V (4) states:

"Subject to the other provisions of this Act, consent for proposed development may be given in relation to a proposed development where a competent authority has made modifications or attached conditions to the consent where the authority is satisfied to do so having determined that the proposed development would not adversely affect the integrity of the European site if it is carried out in accordance with the consent and the modifications or conditions attaching thereto."

2.4 Procedure

2.4.1.1 According to European Commission (EC) guidance documents 'Assessment of plans and projects significantly affecting Natura 2000 sites' (EC, 2001); 'Managing Natura 2000 sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' (EC, 2019); and the EC 'Guidance document on

wind energy developments and EU nature legislation' (EC, 2020), the obligations arising under Article 6 establish a step-wise procedure for AA as follows, and as illustrated in Figure 2.1.

2.4.1.2 The first part of this procedure consists of a pre-assessment (or screening) stage to determine whether, firstly, a project is directly connected with or necessary to the management of the site, and secondly, whether it is likely to have a significant effect on the site. This part is governed by the first sentence of Article 6(3).

2.4.1.3 The second part of the procedure, governed by the second sentence of Article 6(3), relates to the AA and the decision of the competent authority as to whether the plan or project, alone or in combination with other projects or plans, will have Adverse Effects on Integrity (AEoI) of a European site.

2.4.1.4 A third part of the procedure (governed by Article 6(4)) comes into play if, despite a negative assessment it is proposed not to reject a project but to give it further consideration. In this case Article 6(4) allows for derogations from Article 6(3) under certain conditions.

2.4.1.5 The extent to which the sequential steps of Article 6(3) apply to a project depends on several factors, and in the sequence of steps, each step is influenced by the previous step. The order in which the steps are followed is therefore essential for the correct application of Article 6(3).

2.4.1.6 Each step determines whether a further step in the process is required. If, for example, the conclusion at the end of a Stage 1 screening appraisal is that significant effects on European sites can be excluded in the absence of any mitigation measures intended to avoid or reduce the harmful effects of the project on European sites (i.e. factored-in measures and further mitigation), there is no requirement to proceed to the next step.

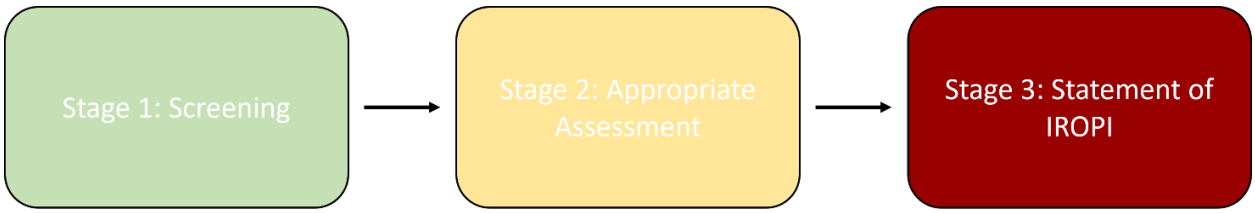


Figure 2.1 Stages of the AA process (Source: DEHLG, 2009)

2.5 Document Structure

2.5.1.1 This report is structured as follows:

- Section 1: Executive Summary;
- Section 2: Introduction – This section sets out the background of the Proposed Development along with the relevant legislation, guidance and approach that has been followed within this document;
- Section 3: Methodology – This section sets out the methodology followed, and guidance documents adhered to in conducting a Stage 2 Appraisal of the implications of the Proposed Development, alone or in-combination with any other plans or projects on European sites;
- Section 4: The Proposed Development – This section describes the Proposed Development, and is the basis of the Stage 2 Appraisal at Section 6 and 7;
- Section 5: Conclusion of Stage 1 SISAA – This section sets out the findings of the Stage 1 SISAA;
- Section 6 and 7: Stage 2 Appraisal for the Proposed Development Alone and In-combination with other Plans/Projects – These sections contain a more detailed examination and analysis of the implications of the Proposed Development on the COs of the European Sites identified in NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026) and taken forward for a Stage 2 Appraisal. The Stage 2 appraisal has been undertaken in

view of best scientific knowledge, in light of the COs of the sites concerned and considers the Proposed Development individually and in combination with other plans and projects;

- Section 8: Conclusion of Stage 2 Appraisal – This section sets out the findings of the Stage 2 AA.

3 Methodology

3.1 Guidance

3.1.1.1 AA Guidelines for Competent Authorities have been published by the Department of the Environment, Heritage and Local Government (DEHLG) (DEHLG, 2010a). In addition to the advice available from the DEHLG, the European Commission has published a number of documents which provide a significant body of guidance on the requirements of AA, most notably including 'Assessment of Plans and Projects Significantly Affecting Natura 2000 sites - Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (EC, 2001), which sets out the principles of how to approach decision making during the process.

3.1.1.2 The principal national and European guidelines have been followed in the preparation of this report. The following list identifies these and other pertinent guidance that has been adhered to:

- Office of the Planning Regulator (OPR) Practice Note: Appropriate Assessment Screening for Development Management (OPR, 2021);
- Communication from the Commission on the Precautionary Principle, Office for Official Publications of the European Communities, Luxembourg (EC, 2000);
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels (EC, 2021);
- Estuaries and Coastal Zones within the Context of the Birds and Habitats Directives - Technical Supporting Document on their Dual Roles as Natura 2000 Sites and as Waterways and Locations for Ports. European Commission (EC, 2009);
- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, Dublin (DEHLG, 2010a);
- Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive - Guidance for Planning Authorities (DEHLG, 2010b);
- Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging. European Commission (EC, 2012);
- Guidance document: Wind Energy Developments and Natura 2000. European Commission (EC, 2010);
- Marine Natura Impact Statements in Irish Special Areas of Conservation: A working document, National Parks and Wildlife Service, Dublin (NPWS, 2012);
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission (EC, 2013a);
- Guidelines on Climate Change and Natura 2000. European Commission (EC, 2013b);
- Guidance on EIS and NIS Preparation for Offshore Renewable Energy Projects. Department of Communications, Climate Action and Environment (DCCAE, 2017);
- European Commission Notice C (2018) 7621 'Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC', Office for Official Publications of the European Communities, Luxembourg (EC, 2019);
- Institute of Air Quality Management 'A guide to the assessment of air quality impacts on designated nature conservation sites (Version 1.1)' (IAQM, 2020); and
- European Commission Notice C (2020) 7730 'Guidance document on wind energy developments and EU nature legislation', Office for Official Publications of the European Communities, Luxembourg (EC, 2020).

3.2 Adverse Effects on Integrity of European Sites (AEoI)

3.2.1.1 The European Commission's 2018 Notice (EC, 2019) advises that the purpose of the AA is to assess the implications of the plan or project in respect of the European site's COs, either individually or in combination with other plans or projects. The conclusions should enable the competent authorities to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus of the AA is therefore specifically on the species and/or the habitats for which the European site is designated.

3.2.1.2 EC (2019) also emphasises the importance of using the best scientific knowledge when carrying out the AA in order to enable the competent authorities to conclude with certainty that there will be no AEoI of the site. This guidance notes that it is at the time of adoption of the decision authorising implementation of the project that there must be no reasonable scientific doubt remaining as to the absence of AEoI of the site in question.

3.2.1.3 The judgement of the Court of Justice of the European Union (CJEU) confirmed in its ruling in Case C-258/11 that 'Article 6(3) of the Habitats Directive must be interpreted as meaning that a plan or project not directly connected with or necessary to the management of a site will adversely affect the integrity of that site if it is liable to prevent the lasting preservation of the constitutive characteristics of the site that are connected to the presence of a priority natural habitat whose conservation was the objective justifying the designation of the site in the list of Sites of Community Importance (SCIs), in accordance with the directive. The precautionary principle should be applied for the purposes of that appraisal'. EC (2019) advises that the logic of such an interpretation would also be relevant to non-priority habitat types and to habitats of species.

3.2.1.4 ‘As regards the meaning of 'integrity', this clearly relates to ecological integrity. This can be considered as a quality or condition of being whole or complete. In a dynamic ecological context, it can also be considered as having the sense of resilience and ability to evolve in ways that are favourable to conservation’.

3.2.1.5 ‘The 'integrity of the site' can be usefully defined as the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated’ (EC, 2019).

3.2.1.6 EC (2019) notes that ‘if the competent authority considers the mitigation measures are sufficient to avoid the AEoI identified in the AA, they will become an integral part of the specification of the final plan or project or may be listed as a condition for project approval’.

3.2.1.7 EC (2020) advises that ‘it is for the competent authorities, in the light of the conclusions made in the AA on the implications of a plan or project for the European site concerned, to approve the plan or project. This decision can only be taken after they have made certain that the plan or project will not adversely affect the integrity of the site. That is the case where no reasonable scientific doubt remains as to the absence of such effects’.

3.2.1.8 EC (2020) also reaffirms that ‘the authorisation criterion laid down in the second sentence of Article 6(3) of the Habitats Directive integrates the precautionary principle and makes it possible effectively to prevent the protected sites from suffering AEoI as the result of the plans or projects. A less stringent authorisation criterion could not as effectively ensure the fulfilment of the objective of site protection intended under that provision. The onus is therefore on demonstrating the absence of AEoI rather than their presence, reflecting the precautionary principle. It follows that the AA must be sufficiently detailed and reasoned to demonstrate the absence of AEoI, in light of the best scientific knowledge in the field’.

3.3 Consideration of Ex-situ Effects

3.3.1.1 EC (2019) advises that 'Member States, both in their legislation and in their practice, allow for the Article 6(3) safeguards to be applied to any development pressures, including those which are external to European sites, but which are likely to have significant effects on any of them'.

3.3.1.2 The CJEU developed this point when it issued a ruling in case C-461/17 ("Brian Holohan and Others v An Bord Pleanála") that determined inter alia that Article 6(3) of Directive 92/43/EEC must be interpreted as meaning that an AA must on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the COs of the site.

3.3.1.3 In that regard, consideration has been given in this Stage 2 appraisal to inform AA.

3.4 Conservation Objectives (COs)

3.4.1.1 The COs for each European site are to maintain or restore the favourable conservation condition of the habitats and/or species for which the European site has been selected.

3.4.1.2 The favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing;
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- the conservation status of its typical species is favourable.

3.4.1.3 The favourable conservation status (FCS) (or condition, at a site level) of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.4.1.4 The most up-to-date site-specific COs for the European sites being considered have been used in this appraisal. Details in relation to the QIs of SACs and SPAs is based on publicly available data sourced from the relevant Statutory Nature Conservation Bodies (SNCBs) in Ireland and other relevant states in December 2023.

3.4.1.5 In response to RFI (1b), whilst the data sourced in December 2023 remains relevant and appropriate, these COs have been reviewed against the most recent information available as of January 2026. The assessments have been carried out using all recent site-specific conservation objectives where these are available.

3.5 In-Combination Effects

3.5.1.1 Article 6(3) of the Habitats Directive requires that in-combination effects with other plans or projects are also considered. As set out in the Commission's 2018 Notice (EC, 2019), significance will vary depending on factors such as magnitude of impact, type, extent, duration, intensity, timing, probability, in-combination effects and the vulnerability of the habitats and species concerned.

3.5.1.2 In that context, all elements of the Proposed Development are considered in combination. This includes the other components of the ABWP2 Project:

- ABWP2 Onshore Grid Infrastructure (OGI);
- ABWP2 Operations and Maintenance Facility (OMF); and
- EirGrid Upgrade Works.

3.5.1.3 The owner and operator of the ABWP1, Arklow Energy Limited has commenced pre-application consultation (Case Reference OC27.321635) with the appropriate local authorities to decommission ABWP1, which has reached the end of its operating life.

3.5.1.4 The ABWP1 team has begun engaging with the Maritime Area Regulatory Authority (MARA) and is working closely with An Coimisiún Pleanála to agree on the details of the decommissioning and removal works. Based on the fact that the ABWP1 team has commenced the pre-application process for decommissioning we expect ABWP1 to be fully decommissioned before commencement of operation of ABWP2.

3.5.1.5 In addition, other plans or projects which are completed, approved but uncompleted, or proposed are considered. EC (2019) specifically advises that "as regards other proposed plans or projects (i.e. other projects not proposed by the Applicant), on grounds of legal certainty it would seem appropriate to restrict the in-combination provision to those which have been actually proposed, i.e. for which an application for approval or consent has been introduced". However, on a precautionary basis this has been amended for this NIS to include projects for which reasonable steps have been taken as to not limit the assessment to other projects where an application for approval or consent has been introduced.

3.5.1.6 The Developer submitted a Foreshore Licence Application for Site Surveys (associated with the Proposed Development) to the Minister for Housing, Local Government and Heritage in April 2023 (FS007555). This application was determined and granted on 04 July 2024 and is valid until 04 June 2029. The Developer confirms and commits that they will not conduct any activities the subject of the Foreshore Licence Application for Site Surveys at the same time as any development is being carried out under this permission (if granted). As such, there is no temporal overlap between the activities proposed in the Foreshore Licence Application and the Proposed Development. For this reason, FS007555 is not considered within the in-combination assessment of this NIS.

3.5.1.7 All of the projects to be considered in combination with the Proposed Development are described more comprehensively in Section 7 of the NIS.

3.5.1.8 The ability for impacts arising from the Proposed Development to overlap with those from other projects, plans and activities to result in AEoI has been assessed on a receptor basis for each group of QIs. This means that, in most examples, with the impacts arising from the two (or more) projects, both (or multiple) projects must have some form of impact arising from project related activities on the same QI and CO at the same time for an in-combination effect to arise. For example, for an in-combination sedimentation effect to be established between the Proposed Development and another project, it must be established that the extent of sediment release from both projects has the potential to overlap and may affect a receptor at the same protected site. This also applies to mobile species and as an example there are certain mobile receptors that may move between, and be subject to, two or more separate physical extents of impact from two or more projects. Marine mammals and Birds are the primary species this applies to. With Marine Mammals they may be affected by noise impacts from the Proposed Development, as well as those from other projects where the extent of another defined works area does not directly overlap with that of the Proposed Development but that is within that species range. Furthermore, individual receptors from the same population may be exposed to separate impacts from different projects occurring at the same time while the population is separated, leading to an effect upon the population as a whole. Where relevant, these potential eventualities have been taken into

consideration in the in-combination assessment and mitigation proposed as necessary to prevent adverse in-combination effects occurring.

3.6 Assessment Approach

3.6.1.1 Two Project Design Options are being considered for the Proposed Development. It is therefore necessary that the NIS assesses both Project Design Options.

3.6.1.2 To assess both Project Design Options along with all permutations of the Proposed Development, the NIS assessment makes clear where parameters between the two Project Design Options are the same or one is representative of the other (and therefore the effect on COs for each European Site which has been scoped in, is the same). The NIS also makes clear where parameters between the two Project Design Options differ (and therefore where the effect on the COs for each European Site which has been scoped in may differ).

4 The Proposed Development

4.1 Location

4.1.1.1 The Proposed Development is a proposed offshore windfarm situated on and around Arklow Bank in the Irish Sea, approximately 6 km to 15 km to the east of Arklow in County Wicklow. Arklow Bank is a shallow offshore sandbank, measuring approximately 27 km by 2.5 km. On the bank, water depths vary between 0.6 m and 25 m relative to Lowest Astronomical Tide (LAT), with shallower areas particularly occurring in the vicinity of the existing seven wind turbines of Arklow Bank Wind Park 1 (ABWP1). The general morphology of this feature is oriented roughly in a north-south direction. There is a large variation in depth within the area, with water depths in excess of 50 m LAT beyond the bank towards the east. Arklow Bank is subject to very strong tidal currents with the general direction of flow in the offshore regions of the bank towards the north-north-east during flood and towards south-south-west during ebb. The Arklow Bank is sand and gravel dominated with mobile surface sediments. Medium sand is mainly located at upper levels. ABWP1 which is adjacent has a capacity of 25.2 MW and was constructed on Arklow Bank in 2003/04. It is owned and operated by Arklow Energy Limited (ABWP1) and remains the first and only operational offshore windfarm in Ireland.

4.1.1.2 The area in which the Wind Turbine Generators (WTGs), Offshore Substation Platforms (OSP(s)) and associated cables (export, inter- array and interconnector cabling) and foundations will be located is referred to as the Array Area. The Array Area covers an area of seabed 63.4 km^2. The area in which the export, inter-array and interconnector cabling will be referred to as the Cable Corridor and Working Area, and will extend from the Array Area to a landfall approximately 4.5 km to the north of Arklow at Johnstown North. This area will also facilitate vessel jacking operations associated with installation of WTG structures and associated foundations within the Array Area.

4.1.1.3 Figures showing the site location and proposed site layouts can be found in Figure 4.1 and Figure 4.2.

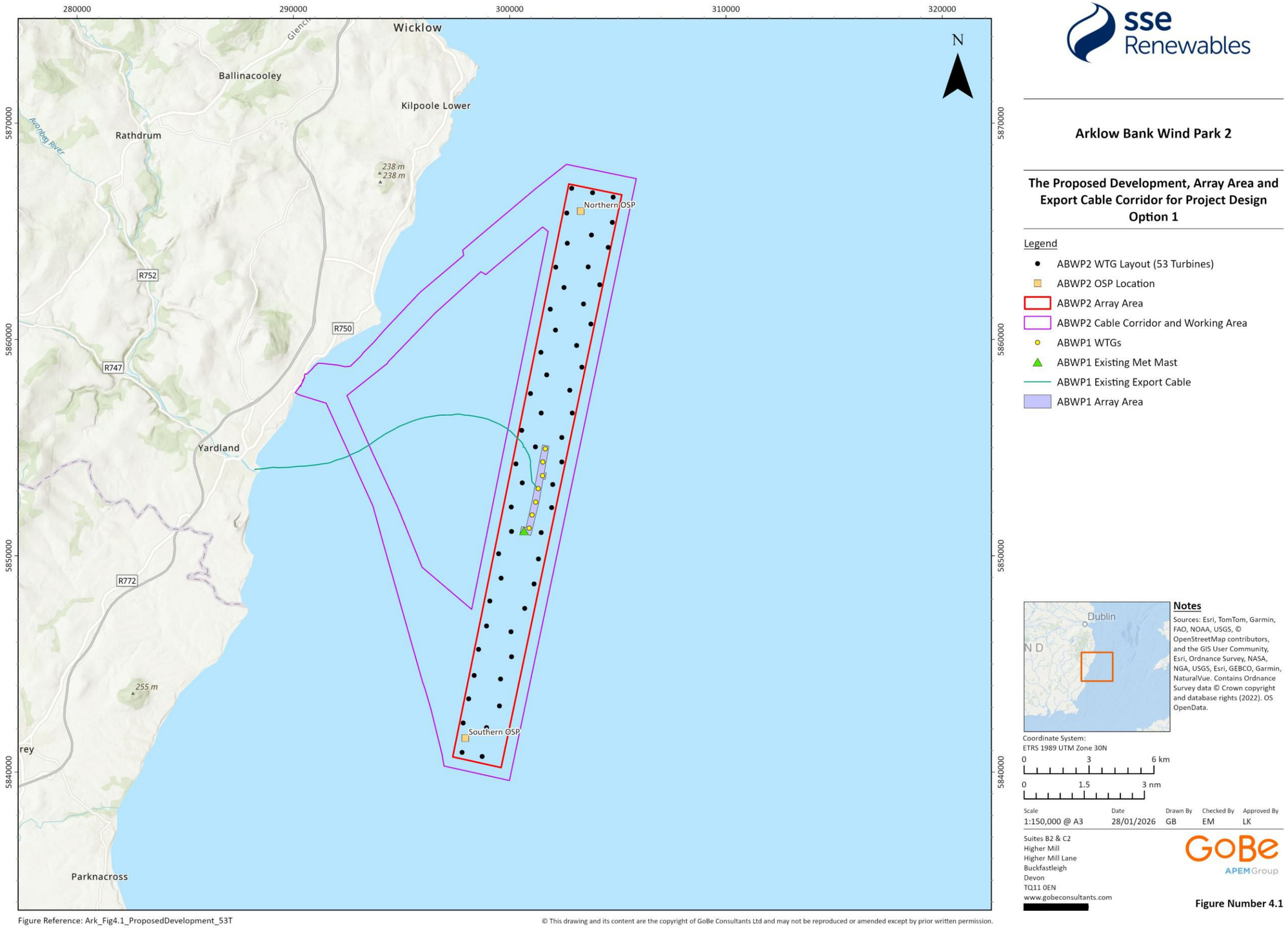
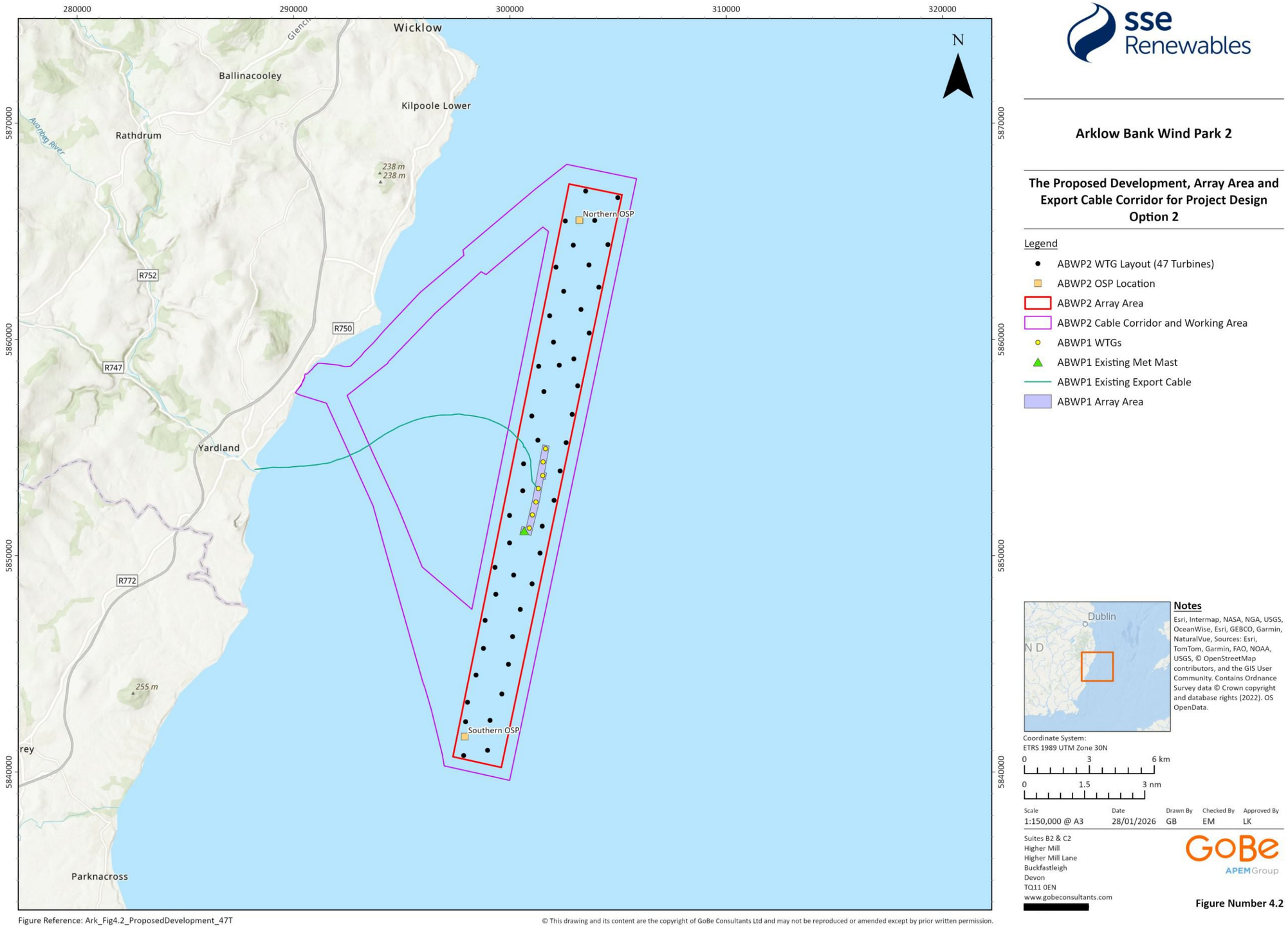


Figure 4.1: The Proposed Development Array Area and Export Cable Corridor for Project Design Option 1



sse Renewables

Arklow Bank Wind Park 2

The Proposed Development, Array Area and Export Cable Corridor for Project Design Option 2

Legend

- ABWP2 WTG Layout (47 Turbines)
- ABWP2 OSP Location
- ABWP2 Array Area
- ABWP2 Cable Corridor and Working Area
- ABWP1 WTGs
- ABWP1 Existing Met Mast
- ABWP1 Existing Export Cable
- ABWP1 Array Area

Notes

Esri, Intermap, NASA, NGA, USGS, OceanWise, Esri, GEBCO, Garmin, NaturalVue, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. Contains Ordnance Survey data © Crown copyright and database rights (2022). OS OpenData.

Coordinate System:
ETRS 1989 UTM Zone 30N

0 3 6 km

0 1.5 3 nm

Scale	Date	Drawn By	Checked By	Approved By
1:150,000 @ A3	28/01/2026	GB	EM	LK

Suites B2 & C2
Higher Mill
Higher Mill Lane
Buckfastleigh
Devon
TQ11 0EN
www.gobeconsultants.com

GoBe APEM Group

Figure Number 4.2

Figure Reference: Ark_Fig4.2_ProposedDevelopment_47T

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Figure 4.2: The Proposed Development Array Area and Export Cable Corridor for Project Design Option 2

4.2 Overview of the Proposed Development

4.2.1.1 The full description of the Proposed Development, including both design options, and associated cabling is contained within Section 4 of the NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026).

5 Conclusion of the Stage 1 Screening Assessment

5.1 Summary of Stage 1 Screening Assessment for SACs

5.1.1.1 From the findings of the screening stage appraisal presented (NIS Volume I: Supporting Information for Screening for Appropriate Assessment Report (Revised March 2026)), the possibility of LSE could not be excluded for the following SACs and QIs at the screening stage (Table 5.1), in the absence of further evaluation and analysis and/or mitigation measures. The result of the screening applies to both Project Design Options and all other permutations summarised in Section 4 of this document and described in detail in Section 4 of NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026).

5.1.1.2 It is noted that some SACs in Table 5.1 support additional QIs that are not listed in the table. These have not been listed where they fall outside the screening range of the Proposed Development and therefore based on the outcomes of the NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026) were not screened in for further assessment within this NIS (NIS Volume II: Stage 2 Appraisal to Inform an Appropriate Assessment of Implications on European Sites (Revised March 2026)).

Table 5.1: SACs and their Qualifying Interests (QIs) considered in this NIS where Likely Significant Effect (LSE) could not be excluded at the screening stage

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Wicklow Reef SAC	3.61	To maintain the favourable conservation condition of reefs in Wicklow Reef SAC, which defined by the following list of attributes and targets: • **Habitat area** – permanent habitat area in stable or increasing, subject to natural processes; • **Distribution** – the distribution of reefs in stable or increasing, subject to natural processes; and • **Community structure** – conserve the following community type in a natural condition: Current-swept subtidal reef community complex.	NPWS (2013a)	Reefs [1170]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to tidal currents, sediment transport processes, and seabed morphology resulting from the presence of infrastructure (hereafter referred to as “Changes to physical processes”).
Magherabeg Dunes SAC	3.44	To maintain the favourable conservation condition of Annual vegetation of drift lines in Magherabeg Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional	NPWS (2017a)	Annual vegetation of drift lines [1210]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		zones, subject to natural processes including erosion and succession; • **Vegetation composition: typical species and sub-communities -** Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			
		To maintain the favourable conservation condition of Embryonic shifting dunes in Magherabeg Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat Area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of foredune grasses** - More than 95% of sand		Embryonic shifting dunes [2110]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and sub-communities -** Maintain the presence of species-poor communities with typical species: sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			
		To maintain the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) in Magherabeg Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat Area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession;		Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation composition: plant health of foredune grasses** - More than 95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and sub-communities -** Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			
		To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation (grey dunes) in Magherabeg Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat Area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional		Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		zones, subject to natural processes including erosion and succession; • **Vegetation structure: Sward height** – maintain structural variation within sward; • **Vegetation composition: typical species and sub-communities** - Maintain the presence of typical species; • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/ trees** – No more than 5% cover of under control.			
		To maintain the favourable conservation condition of Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) in Magherabeg Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat Area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession;		Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) [2150]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation structure**: bare ground – maintain structural variation within swards; • **Vegetation structure: Sward height** – maintain structural variation within sward; • **Vegetation composition: typical species and sub-communities** - Maintain the presence of typical species; • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/ trees** – No more than 5% cover of under control.			
Buckroney-Brittas Dunes and Fen SAC	0.05	To maintain the favourable conservation condition of Annual vegetation of drift lines in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession;	NPWS (2017b)	Annual vegetation of drift lines [1210]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation composition: typical species and sub-communities** - Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.); and • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover.			
		To restore the favourable conservation condition of Perennial vegetation of stony banks in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat Area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: typical species and sub-communities** - Maintain the presence of species-poor communities with typical vegetated		Perennial vegetation of stony banks [1220]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		shingle flora including the range of subcommunities within the different zones; and • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover.			
		To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat Area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Physical structure**: creeks and pans - Maintain creek and pan structure, subject to natural processes including erosion and succession; • **Physical structure**: **flooding regime** – maintain natural tidal regime; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation structure: vegetation height** – maintain structural variation in the sward;		Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation structure: vegetation cover** - Maintain range of subcommunities with typical species; and • **Vegetation composition: negative indicator species – *Spartina anglica*** - There is no record of common cordgrass (*Spartina anglica*) in the SAC and its establishment should be prevented.			
		To restore the favourable conservation condition of Embryonic shifting dunes in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of foredune grasses** – More than 95% of sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present);		Embryonic shifting dunes [2110]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation composition: typical species and subcommunities** - Maintain the presence of species-poor communities with typical species: sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*); and • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover.			
		To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of foredune grasses** – More than 95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (Leymus arenarius) should be healthy (i.e., green		Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		plant parts above ground and flowering heads present); • **Vegetation composition: typical species and subcommunities** - Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lyme-grass (Leymus arenarius); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			
		To maintain the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation (grey dunes)* in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession;		Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation structure: bare ground** - Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes; • **Vegetation structure: sward heigh** - Maintain structural variation within sward; • **Vegetation composition: typical species and subcommunities** - Maintain range of subcommunities with typical species; • **Vegetation composition: negative indicator species (including *Hippophae rhamnoides*)** - Negative indicator species (including non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/trees** – No more than 5% cover under control.			
		To restore the favourable conservation condition of Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation **of** sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional		Atlantic decalcified fixed dunes *(Calluno-Ulicetea*) [2150]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		zones, subject to natural processes including erosion and succession; • **Vegetation structure: bare ground** - Bare ground should not exceed 10% of dune habitat, subject to natural processes; • **Vegetation structure: sward heigh** - Maintain structural variation within sward; • **Vegetation composition: typical species and subcommunities** - Maintain range of subcommunities with typical species; • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/trees** – No more than 5% cover under control.			
		To maintain the favourable conservation condition of Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*) in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions;		Dunes with Salix repens ssp. argentea (*Salicion arenariae*) [2170]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation structure: bare ground** - Bare ground should not exceed 10% cover, subject to natural processes; • **Vegetation structure: sward heigh** - Maintain structural variation within sward; • **Vegetation composition: typical species and subcommunities** - Maintain range of subcommunities with typical species; • **Vegetation composition**: **cover and height of *Salix repens*** - Maintain more than 10% cover of creeping willow (*Salix repens*); vegetation height should be in the average range of 5-20 cm; • **Vegetation composition: negative indicator species (including *Hippophae rhamnoides*)** - Negative indicator species (including non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/trees** - For trees and scrub other than creeping willow (*Salix repens*), there should be no more than 5% cover or their presence should be under control.			
		To restore the favourable conservation condition of Humid dune slacks in Buckroney-Brittas Dunes and Fen SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession;		Humid dune slacks [2190]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Physical structure: hydrological and flooding regime** - Maintain natural hydrological regime; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession. • **Vegetation structure: bare ground** - Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground; • **Vegetation structure: sward height** - Maintain structural variation within sward; • **Vegetation composition: typical species and subcommunities** - Maintain range of subcommunities with typical species; • **Vegetation composition: cover of *Salix repens*** – Maintain less than 40% cover of creeping willow (*Salix repens*); • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/trees** – No more than 5% cover under control.			

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Kilpatrick Sandhills SAC	6.80	To maintain the favourable conservation condition of Annual vegetation of drift lines in Kilpatrick Sandhills SAC, which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution -** No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: typical species and subcommunities -** Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.	NPWS (2017c)	Annual vegetation of drift lines [1210]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes
		To maintain the favourable conservation condition of Embryonic shifting dunes in Kilpatrick Sandhills SAC, which is defined by the following list of attributes and targets:		Embryonic shifting dunes [2110]	Elevated levels of SSCs and associated deposition,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution -** No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of foredune grasses** - More than 95% of sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and subcommunities -** Maintain the presence of species-poor communities with typical species: sand couch grass (Elytrigia juncea) and/or lyme-grass (Leymus arenarius); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			Accidental pollution, Changes to physical processes
		To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) in Kilpatrick Sandhills SAC,		Shifting dunes along the shoreline with	Elevated levels of SSCs and associated deposition,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution -** No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of dune grasses -** More than 95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and subcommunities -** Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*); and • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover.		*Ammophila arenaria* (white dunes) [2120]	Accidental pollution, Changes to physical processes
		To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation		Fixed coastal dunes with	Elevated levels of SSCs and associated deposition,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		(grey dunes)* in Kilpatrick Sandhills SAC, which is defined by the following list of attributes and targets: • **Habitat area** – Area stable or increasing, subject to natural processes including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Physical structure: hydrological and flooding regime** - Maintain natural hydrological regime; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation structure: bare ground** - Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground; • **Vegetation structure: sward height** - Maintain structural variation within sward; • **Vegetation composition: typical species and subcommunities** - Maintain range of subcommunities with typical species; • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover; and		herbaceous vegetation (grey dunes) [2130]	Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation composition: scrub/trees** - No more than 5% cover or under control.			
		To restore the favourable conservation condition of Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)* in Kilpatrick Sandhills SAC, which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution -** No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of dune grasses** - More than 95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and subcommunities -** Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*); • **Vegetation composition: negative indicator species** - Negative indicator species (including		Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) [2150	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		non-native species) to represent less than 5% cover; and • **Vegetation composition: scrub/trees** - No more than 5% cover or under control.			
The Murrough Wetlands SAC	10.25	To restore the favourable conservation condition of Annual vegetation of drift lines in The Murrough Wetlands SAC, which is defined by the following list of attributes and targets: • **Habitat area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: typical species and sub-communities -** Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.); • **Vegetation composition: native negative indicator species -** Native negative indicator species cover in any individual monitoring stop should not be more than 25%; no negative	NPWS (2021a)	Annual vegetation of drift lines [1210]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		indicator species should be present in more than 60% of monitoring stops; cover of negative indicator species across the whole site should not be more than 5%; and • **Vegetation composition: nonnative species -** Non-native species should not be present in more than 20% of monitoring stops.			
		To restore the favourable conservation condition of Perennial vegetation of stony banks in The Murrough Wetlands SAC, which is defined by the following list of attributes and targets: • **Habitat area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: communities and typical species -** Maintain the typical species within the range of vegetated shingle communities; • **Vegetation composition: native negative indicator species -** Native negative indicator species cover in any individual monitoring stop		Perennial vegetation of stony banks [1220]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		should not be more than 25%; no negative indicator species should be present in more than 60% of monitoring stops; and • **Vegetation composition: nonnative species -** Non-native species cover in any individual monitoring stop should not be more than 1%; non-native species should not be present in more than 20% of monitoring stops; cover of non-native species across the whole site should not be more than 1%.			
		To restore the favourable conservation condition of Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) in The Murrough Wetlands SAC, which is defined by the following list of attributes and targets: • **Habitat area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • Physical structure: hydrology - No human disturbance; • **Vegetation structure: plant height -** Standard deviation of median plant height more than 5; • **Vegetation structure: disturbed ground -** Percentage cover at a representative number of 2 m x 2 m monitoring stops; • **Vegetation structure: zonation -** Adequate number of zones present, depending on geographical type of saltmarsh; • **Vegetation structure**: transitions - No loss of natural transitions;		Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation composition**: typical species - Minimum of twelve typical • species recorded across all plots; • **Vegetation composition: negative species -** Spartina spp. have not been recorded in the habitat in this SAC and establishment should be prevented; • **Other negative indicators -** No signs of infilling, reclamation, turf-cutting or pollution or other negative indicators; and • **Indicators of local distinctiveness -** No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.			
		To restore the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in The Murrough Wetlands SAC, which is defined by the following list of attributes and targets: • **Habitat area** - Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure**: hydrology - No human disturbance; • **Vegetation structure: disturbed ground** - Cover of disturbed ground less than 5%; • **Vegetation structure: transitions** - No loss of natural transitions;		Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation composition: typical species -** Minimum of six typical species recorded across all plots; minimum two typical species in more than 25% of plots (excluding *Juncus maritimus*); • **Vegetation composition: negative species -** Spartina spp. have not been recorded in the habitat in this SAC and establishment should be prevented; • **Other negative indicators -** No signs of infilling, reclamation, turf-cutting or pollution or other negative indicators; and • **Indicators of local distinctiveness -** No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.			
Slaney River Valley SAC	47.55	The status of the freshwater pearl mussel (*Margaritifera margaritifera*) as a qualifying Annex II species for the Slaney River Valley SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this species.	NPWS (2011a)	Freshwater peal mussel *Margaritifera margaritifera* [1029]	Risk of disturbance or displacement to host species (Atlantic salmon)
		To restore the favourable conservation condition of Sea lamprey in the Slaney River Valley SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy** - Greater than 75% of main stem length of rivers accessible from estuary; • **Population structure of juveniles** - At least three age/size groups present;		Sea lamprey *Petromyzon marinus* [1095]	Underwater noise; Electro-magnetic fields (EMF); and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Juvenile density in fine sediment** - Juvenile density at least 1/m²; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning beds; and • **Availability of juvenile habitat** - More than 50% of sample sites positive.			
		To restore the favourable conservation condition of River lamprey in the Slaney River Valley SAC, which is defined by the following list of attributes and targets: • **Distribution -** Access to all water courses down to first order streams; • **Population structure of juveniles -** At least three age/size groups of river/brook lamprey present; • **Juvenile density in fine sediment** - Mean catchment juvenile density of brook/river lamprey at least 2/m²; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning beds; and • **Availability of juvenile habitat** - More than 50% of sample sites positive		River lamprey *Lampetra fluviatilis* [1099]	Underwater noise; EMF; and Accidental pollution
		To restore the favourable conservation condition of Twaite shad in the Slaney River Valley SAC, which is defined by the following list of attributes and targets:		Twaite shad *Alosa fallax* [1103]	Underwater noise; EMF; and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Distribution: extent of anadromy** - Greater than 75% of main stem length of rivers accessible from estuary; • **Population structure: age classes** - More than one age class present; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning habitats; • **Water quality: oxygen levels** - No lower than 5 mg/l; and • **Spawning habitat quality: Filamentous algae; macrophytes; sediment** - Maintain stable gravel substrate with very little fine material, free of filamentous algal (macroalgae) growth and macrophyte (rooted higher plants) growth.			
		To restore the favourable conservation condition of Salmon in the Slaney River Valley SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy -** 100% of river channels down to second order accessible from estuary; • **Adult spawning fish -** Conservation limit (CL) for each system consistently exceeded; • **Salmon fry abundance -** Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling; • **Out-migrating smolt abundance** - No significant decline;		Salmon *Salmo salar* [1106]	Underwater noise; EMF; and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Number and distribution of redds -** No decline in number and distribution of spawning redds due to anthropogenic causes; and • **Water quality -** At least Q4 at all sites sampled by Environmental Protection Agency (EPA).			
		To restore the favourable conservation condition of harbour seal in the Slaney River Valley SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat -** Species range within the site should not be restricted by artificial barriers to site use; • **Breeding behaviour -** The breeding sites should be maintained in a natural condition; • **Moulting behaviour -** The moult haul-out sites should be maintained in a natural condition; • **Resting behaviour -** The resting haul-out sites should be maintained in a natural condition; and • **Disturbance -** Human activities should occur at levels that do not adversely affect the harbour seal population at the site.		Harbour seal (*Phoca vitulina*) [1365]	Underwater noise, Injury risk from vessel activities , Accidental pollution, and Changes in prey
Cahore Polders and Dunes SAC	18.19	To restore the favourable conservation condition of Annual vegetation of drift lines in Cahore Polders and Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes;	NPWS (2016)	Annual vegetation drift lines [1210]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: typical species and sub-communities** - Maintain the presence of species-poor communities with typical species: sea rocket (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.); • **Vegetation composition: negative indicator species** - Negative indicator species (including non-native species) to represent less than 5% cover.			
		To restore the favourable conservation condition of Embryonic shifting dunes in Cahore Polders and Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions;		Embryonic shifting dunes [2110]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of foredune grasses -** More than 95% of sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and subcommunities** - Maintain the presence of species-poor communities with typical species: sand couch grass (Elytrigia juncea) and/or lyme-grass (Leymus arenarius); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			
		To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) in Cahore Polders and Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes; • **Physical structure: functionality and sediment supply** - Maintain the natural circulation of		Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation composition: plant health of foredune grasses** - More than 95% of sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e., green plant parts above ground and flowering heads present); • **Vegetation composition: typical species and subcommunities -** Maintain the presence of species-poor communities with typical species: sand couch grass (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*); and • **Vegetation composition: negative indicator species -** Negative indicator species (including non-native species) to represent less than 5% cover.			
		To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation (grey dunes)* in Cahore Polders and Dunes SAC, which is defined by the following list of attributes and targets: • **Habitat area -** Area stable or increasing, subject to natural processes, including erosion and succession; • **Habitat distribution** - No decline or change in habitat distribution, subject to natural processes;		Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Physical structure: functionality and sediment supply -** Maintain the natural circulation of sediment and organic matter, without any physical obstructions; • **Vegetation structure: zonation** - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; • **Vegetation structure: bare ground -** Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes; • **Vegetation structure: sward height -** Maintain structural variation within sward; • **Vegetation composition**: typical species and subcommunities - Maintain range of subcommunities with typical Species; and • **Vegetation composition: negative indicator species –** Negative indicator species (including non-native species) to represent less than 5% cover.			
		No conservation objectives available.		Humid dune slacks [2190]	Elevated levels of SSCs and associated deposition, Accidental pollution, Changes to physical processes
Blackwater Bank SAC	19.13	To maintain the favourable conservation condition of Sandbanks which are slightly covered by sea water	NPWS (2024a)	Sandbanks which are slightly covered by sea	Elevated levels of SSCs and associated deposition,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		all the time in Blackwater Bank SAC, which is defined by the following list of attributes and targets: • **Habitat area –** The permanent habitat area is stable or increasing, subject to natural processes; • **Habitat distribution –** The distribution of sandbanks is stable or increasing, subject to natural processes; and • **Community distribution –** Conserve the following community type in a natural condition: Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex.		water all the time [1110]	Accidental pollution, Changes to physical processes
		To maintain the favourable conservation condition of harbour porpoise in Blackwater Bank SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** – Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** – Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.		Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Rockabill to Dalkey Island SAC	35.66	To maintain the favourable conservation condition of harbour porpoise in Rockabill to Dalkey Island SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat -** Species range within the site should not be restricted by artificial barriers to site use; and	NPWS (2013c)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Collision risk, Accidental pollution, EMF, and

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Disturbance -** Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.			Changes in prey.
Codling Fault Zone SAC	43.90	To maintain the favourable conservation condition of harbour porpoise in Codling Fault Zone SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2025a)	Harbour porpoise (*Phocoena phocoena*) [1351	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
West Wales Marine / Gorllewin Cymru Forol SAC (UK)	49.75	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for harbour porpoise in UK waters. In the context of natural change, this will be achieved by ensuring that: • **harbour porpoise is a viable component of the site** - The intent of this objective is to minimise the risk of injury and killing or other factors that could restrict the survivability and reproductive potential of harbour porpoise using the site; • **There is no significant disturbance of the species** - Operations within or affecting the site should be managed to ensure that the animals' potential usage of the site is maintained; and • **The condition of supporting habitats and processes, and the availability of prey is**	NRW (2019a)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		maintained - The maintenance of supporting habitats and processes contributes to ensuring that prey is maintained within the site and is available to harbour porpoises using the site.			
River Barrow and River Nore SAC	125.42	To restore the Favourable conservation condition of the Freshwater pearl mussel (*Margaritifera margaritifera*) in River Barrow and River Nore SAC, which is defined by the following list of attributes and targets: • **Distribution: Ballymurphy** - Restore distribution at 3.91km; • **Distribution: Mountain** - Restore distribution at 9.45km; • **Distribution: Nore** - Restore distribution at 21.13km; • **Population size: Ballymurphy** - Restore Ballymurphy population to at least 1,000 adult mussels; • **Population size: Mountain** - Restore Mountain population to at least 4,000 adult mussels **Population size: Nore** - Restore Nore population to at least 5,000 adult mussels; • **Population structure: recruitment** - Restore to at least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length; • **Population structure: adult mortality. Ballymurphy** - No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution;	NPWS (2025b)	Freshwater peal mussel *Margaritifera margaritifera* [1029]	Risk of disturbance or displacement to host species (Atlantic salmon)

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Population structure: adult mortality. Mountain** - No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution; • **Population structure: adult mortality. Nore** - No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution; • **Suitable habitat: extent** - Restore suitable habitat in more than 3.91km in the Ballymurphy, 5.3km in the Mountain and 16.72km in the Nore system and any additional stretches necessary for salmonid spawning; • **Suitable habitat: condition** - Restore condition of suitable habitat; • **Water quality: macroinvertebrates and phytobenthos (diatoms)** - Restore water quality- macroinvertebrates: EQR greater than 0.90 (Q4-5 or Q5); phytobenthos: EQR greater than 0.93; • **Substratum quality: filamentous algae (macroalgae); macrophytes (rooted higher plants**) - Restore substratum quality- filamentous algae: absent or trace (less than 5%); macrophytes: absent or trace (less than 5%); • **Substratum quality: sediment** - Restore substratum quality- stable cobble and gravel substrate with very little fine material; no artificially elevated levels of fine sediment; • **Substratum quality: oxygen availability** - Restore to no more than 20% decline from water column to 5cm depth in substrate;			

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Hydrological regime: flow variability** - Restore appropriate hydrological regime; **Host fish** - Maintain sufficient juvenile salmonids to host glochidial larvae; • **Fringing habitat: area and condition** - Restore the area and condition of fringing habitats necessary to support the population.			
		To restore the favourable conservation condition of Sea lamprey in the River Barrow and River Nore SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy** - Greater than 75% of main stem length of rivers accessible from estuary; • **Population structure of juveniles** - At least three age/size groups present; • **Juvenile density in fine sediment** - Juvenile density at least 1/m²; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning beds; and • **Availability of juvenile habitat** - More than 50% of sample sites positive.		Sea lamprey *Petromyzon marinus* [1095]	Underwater noise; EMF; and Accidental pollution
		To restore the favourable conservation condition of River lamprey in the River Barrow and River Nore SAC, which is defined by the following list of attributes and targets: • **Distribution -** Access to all water courses down to first order streams;		River lamprey *Lampetra fluviatilis* [1099]	Underwater noise; EMF; and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Population structure of juveniles -** At least three age/size groups of river/brook lamprey present; • **Juvenile density in fine sediment** - Mean catchment juvenile density of brook/river lamprey at least 2/m²; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning beds; and • **Availability of juvenile habitat** - More than 50% of sample sites positive.			
		To restore the favourable conservation condition of Twaite shad in the River Barrow and River Nore SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy** - Greater than 75% of main stem length of rivers accessible from estuary; • **Population structure: age classes** - More than one age class present; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning habitats; • **Water quality: oxygen levels** - No lower than 5 mg/l; and • **Spawning habitat quality: Filamentous algae; macrophytes; sediment** - Maintain stable gravel substrate with very little fine material, free of filamentous algal (macroalgae) growth and macrophyte (rooted higher plants) growth.		Twaite shad *Alosa fallax* [1103]	Underwater noise; EMF; and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		To restore the favourable conservation condition of Salmon in the River Barrow and River Nore SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy -** 100% of river channels down to second order accessible from estuary; • **Adult spawning fish -** Conservation limit (CL) for each system consistently exceeded; • **Salmon fry abundance -** Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling; • **Out-migrating smolt abundance** - No significant decline; • **Number and distribution of redds -** No decline in number and distribution of spawning redds due to anthropogenic causes; and • **Water quality -** At least Q4 at all sites sampled by EPA.		Salmon *Salmo salar* [1106]	Underwater noise; EMF; and Accidental pollution
North Anglesey Marine / Gogledd Môn Forol SAC (UK)	61.61	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining Favourable Conservation Status (FCS) for harbour porpoise in UK waters. In the context of natural change, this will be achieved by ensuring that: • **harbour porpoise is a viable component of the site** - The intent of this objective is to minimise the risk of injury and killing or other factors that	NRW (2019b)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		could restrict the survivability and reproductive potential of harbour porpoise using the site; • **There is no significant disturbance of the species** - Operations within or affecting the site should be managed to ensure that the animals' potential usage of the site is maintained; and • **The condition of supporting habitats and processes, and the availability of prey is maintained** - The maintenance of supporting habitats and processes contributes to ensuring that prey is maintained within the site and is available to harbour porpoises using the site.			
Lambay Island SAC	61.89	To maintain the favourable conservation condition of grey seal in Lambay Island SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; • **Breeding behaviour** - The breeding sites should be maintained in a natural condition; • **Moulting behaviour** - The moult haul-out sites should be maintained in natural condition; • **Resting behaviour** - The resting haul-out sites should be maintained in a natural condition; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the grey seal population at the site.	NPWS (2024b; 2013b)	Grey seal (*Halichoerus grypus*) [1364]	Underwater noise, Injury risk from vessel activities, Accidental pollution, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		To maintain the favourable conservation condition of harbour porpoise in Lambay Island SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat -** Species range within the site should not be restricted by artificial barriers to site use; • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.		Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Saltee Islands SAC	93.38	To maintain the favourable conservation condition of grey seal in the Saltee Islands SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; • **Breeding behaviour** - The breeding sites should be maintained in a natural condition; • **Moulting behaviour** - The moult haul-out sites should be maintained in natural condition; • **Resting behaviour** - The resting haul-out sites should be maintained in a natural condition; • **Population composition** - The grey seal population occurring within this site should contain adult, juvenile and pup cohorts annually; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the grey seal population.	NPWS (2011c)	Grey seal (*Halichoerus grypus*) [1364]	Underwater noise, Injury risk from vessel activities, Accidental pollution, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Pen Llyn a`r Sarnau / Lleyn Peninsula and the Sarnau SAC (UK)	71.35	The grey seal *Halichoerus grypus* QI within Pen Llŷn a'r Sarnau SAC are currently in favourable condition (medium confidence). Below are the attributes and targets for each conservation objective. **Objective 1:** The grey seal population that use the SAC is maintained in favourable condition and stable or increasing over the medium and long term: • **Population using the SAC -** Maintain the grey seal population that use the SAC in favourable condition, and stable or increasing in the medium and long term; and • **SAC pup production -** Maintain a stable or increasing grey seal pup production within the SAC in the medium and long term, including at important pupping sites. **Objective 2:** The grey seal population that use the SAC continue to have access to, and be able to utilise habitats necessary to maintain the population in favourable condition: • **Distribution of grey seal pupping sites within the SAC** - Maintain a stable or increasing grey seal pupping distribution across the SAC. Allowing for natural change and variation; • **Accessibility to habitat used by seals** – Grey seal that use the SAC should not be significantly constrained from accessing necessary habitats within or outside of the site; and • **Anthropogenic disturbance** – Grey seal that use the SAC should not be subject to significant anthropogenic disturbance within or outside of the site.	NRW (2025a)	Grey seal (*Halichoerus grypus*) [1364]	Underwater noise, Injury risk from vessel activities, Accidental pollution, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		Objective 3: The grey seal population that use the SAC have high quality habitat and sufficient food supply to support and maintain the population in favourable condition: • **Habitat quality and function** - Maintain the quality and functionality of habitat to support the grey seal population that use the SAC in favourable condition; • **Prey availability** – Maintain the quality, abundance and diversity of prey needed for the grey seal population that use the SAC to remain in favourable condition; and • **Water, sediment and prey contaminants** – Contaminants are at levels not detrimental to grey seal populations that use the SAC.			
		The bottlenose dolphin *Tursiops truncatus* QI within Pen Llŷn a'r Sarnau SAC is currently in favourable condition (low confidence). Below are the attributes and targets for each conservation objective. **Objective 1:** The bottlenose dolphin population that use the SAC is maintained in favourable condition and stable or increasing over the medium and long term: • **Population using the SAC** – Maintain the bottlenose dolphin population that use the SAC in favourable condition, and stable or increasing in the medium and long term. Population demographics such as reproductive success and survival rates are at levels needed for the population to be maintained in favourable condition; and		Bottlenose dolphin (*Tursiops truncatus*) [1349]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **SAC residency** - Maintain bottlenose dolphin residency in the SAC over the medium and long term. **Objective 2:** The bottlenose dolphin population that use the SAC continue to have access to and be able to utilise habitats necessary to maintain the population in favourable condition: • **Accessibility to habitat used by bottlenose dolphin** - Bottlenose dolphins that use the SAC should not be significantly constrained from accessing necessary habitats within or outside of the site; and • **Anthropogenic disturbance** - Bottlenose dolphins that use the SAC should not be subject to significant anthropogenic disturbance within or outside of the site. **Objective 3**: The bottlenose dolphin population that use the SAC have high quality habitat and sufficient food supply to support and maintain the population in favourable condition: • **Habitat quality and function** – Maintain the quality and functionality of habitat to support the bottlenose dolphin population that use the SAC in favourable condition; • **Prey availability** – Maintain the quality, abundance and diversity of prey needed for the bottlenose dolphin population that use the SAC to remain in favourable condition; and • **Water, sediment and prey contaminants** – Contaminants are at levels not detrimental to the bottlenose dolphin population that use the SAC.			

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Carnsore Point SAC	50.08	To maintain favourable conservation condition of harbour porpoise in Carnsore Point SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitats** – Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** – Human activities should not occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2024c)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Lower River Suir SAC	192.63	To restore the favourable conservation condition of Freshwater Pearl Mussel in Lower River Suir SAC, which is defined by the following list of attributes and targets: • **Distribution** - Restore distribution to 10.4 km; • **Population size** - Restore population to at least 10,000 adult mussels; • **Population structure: recruitment** - Restore to at least 20% of each population no more than 65 mm in length; and at least 5% of each population no more than 30 mm in length; • **Population structure: adult mortality** - No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution; • **Suitable habitat: extent** - Restore suitable habitat in more than 8.8 km in the Clodiagh system and any additional stretches necessary for salmonid spawning;	NPWS (2017d)	Freshwater peal mussel *Margaritifera margaritifera* [1029]	Risk of disturbance or displacement to host species (Atlantic salmon)

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Suitable habitat: condition** - Restore condition of suitable habitat; • **Water quality: macroinvertebrate and phytobenthos (diatoms)** - Restore water quality - macroinvertebrates: EQR greater than 0.90 (Q4-5 or Q5); phytobenthos: EQR greater than 0.93; • **Substratum quality: filamentous algae (macroalgae); macrophytes (rooted higher plants)** - Restore substratum quality - filamentous algae: absent or trace (less than 5%); macrophytes: absent or trace (less than 5%); • **Substratum quality: sediment** - Restore substratum quality - stable cobble and gravel substrate with very little fine material; no artificially elevated levels of fine sediment; • **Substratum quality: oxygen availability** - Restore to no more than 20% decline from water column to 5 cm depth in substrate; • **Hydrological regime: flow variability** - Maintain appropriate hydrological regime; • **Host fish** - Maintain sufficient juvenile salmonids to host glochidial larvae; and • **Fringing habitat: area and condition** - Restore the area and condition of fringing habitats necessary to support the population.			
		To restore the favourable conservation condition of Sea Lamprey in Lower River Suir SAC, which is defined by the following list of attributes and targets:		Sea lamprey *Petromyzon marinus* [1095]	Underwater noise, EMF, and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Distribution: extent of anadromy** - Greater than 75% of main stem length of rivers accessible from estuary; • **Population structure of juveniles** - At least three age/size groups present; • **Juvenile density in fine sediment** - Juvenile density at least 1/m²; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning beds; and • **Availability of juvenile habitat** - More than 50% of sample sites positive.			
		To restore the favourable conservation condition of River Lamprey in Lower River Suir SAC, which is defined by the following list of attributes and targets: • **Distribution -** Access to all water courses down to first order streams; • **Population structure of juveniles -** At least three age/size groups of river/brook lamprey present; • **Juvenile density in fine sediment** - Mean catchment juvenile density of brook/river lamprey at least 2/m²; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning beds; and • **Availability of juvenile habitat** - More than 50% of sample sites positive.		River lamprey *Lampetra fluviatilis* [1099]	Underwater noise, EMF, and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		To restore the favourable conservation condition of Twaite Shad in Lower River Suir SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy** - Greater than 75% of main stem length of rivers accessible from estuary; • **Population structure: age classes** - More than one age class present; • **Extent and distribution of spawning habitat** - No decline in extent and distribution of spawning habitats; • **Water quality: oxygen levels** - No lower than 5 mg/l; and • **Spawning habitat quality: Filamentous algae; macrophytes; sediment** - Maintain stable gravel substrate with very little fine material, free of filamentous algal (macroalgae) growth and macrophyte (rooted higher plants) growth.		Twaite shad *Alosa fallax* [1103]	Underwater noise, EMF, and Accidental pollution
		To restore the favourable conservation condition of Atlantic Salmon in Lower River Suir SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy** - 100% of river channels down to second order accessible from estuary; • **Adult spawning fish -** Conservation limit (CL) for each system consistently exceeded; • **Salmon fry abundance -** Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling;		Salmon *Salmo salar* [1106]	Underwater noise, EMF, and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Out-migrating smolt abundance** - No significant decline; • **Number and distribution of redds -** No decline in number and distribution of spawning redds due to anthropogenic causes; and • **Water quality -** At least Q4 at all sites sampled by EPA.			
Cardigan Bay / Bae Ceredigion SAC (UK)	82.05	The bottlenose dolphin QI within Cardigan Bay SAC is currently in favourable condition (medium confidence). Below are the attributes and targets for each conservation objective. **Objective 1:** The bottlenose dolphin population that use the SAC is maintained in favourable condition and stable or increasing over the medium and long term: • **Population using the SAC** – Maintain a stable or increasing population of bottlenose dolphins that use the SAC over the medium and long term. Population demographics, such as reproductive success and survival rates, are at levels needed for the population to be maintained in favourable condition; and • **SAC residency** – Maintained bottlenose dolphin residency in the SAC over the medium and long term. **Objective 2:** The bottlenose dolphin population that use the SAC continue to have access to, and be able to utilise habitats necessary to maintain the population in favourable condition: • **Accessibility to habitat used by bottlenose dolphin** - Bottlenose dolphins that use the SAC	NRW (2025b)	Bottlenose dolphin (*Tursiops truncatus*) [1349]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF (only bottlenose dolphin), and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		should not be significantly constrained from accessing necessary habitats within or outside of the site; and • **Anthropogenic disturbance** – Bottlenose dolphins that use the SAC should not be subject to significant anthropogenic disturbance within or outside of the site. **Objective 3:** The bottlenose dolphin population that use the SAC have high quality habitat and sufficient food supply to support and maintain the population in favourable condition: • **Habitat quality and function –** Maintain the quality and functionality of habitat to support the bottlenose dolphin population that use the SAC in favourable condition; • **Prey availability –** Maintain the quality, abundance and diversity of prey needed for the bottlenose dolphin population that use the SAC to remain in favourable condition; and • **Water, sediment and prey contaminants –** Contaminants are at levels not detrimental to the bottlenose dolphin that use the SAC.			
		The grey seal QI within Cardigan Bay SAC is currently in favourable condition (low confidence). Below are the attributes and targets for each conservation objective. **Objective 1**: The grey seal population that use the SAC is maintained in favourable condition and stable or increasing over the medium and long term: • **Population using the SAC** - Maintain the grey seal population that use the SAC in favourable		Grey seal (*Halichoerus grypus*) [1364]	Underwater noise; Injury risk from vessel activities, Accidental pollution, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		condition, and stable or increasing in the medium and long term; and • **SAC pup production** – Maintain a stable or increasing grey seal pup production within the SAC in the medium and long term, including at important pupping sites. **Objective 2**: The grey seal population that use the SAC continue to have access to, and be able to utilise habitats necessary to maintain the population in favourable condition: • **Distribution of grey seal pupping sites within the SAC** - Maintain a stable or increasing grey seal pupping distribution across the SAC. Allowing for natural change and variation; • **Accessibility to habitat used by seals** - Grey seal that use the SAC should not be significantly constrained from accessing necessary habitats within or outside of the site; and • **Anthropogenic disturbance** - Grey seal that use the SAC should not be subject to significant anthropogenic disturbance within or outside of the site. **Objective 3**: The grey seal population that use the SAC have high quality habitat and sufficient food supply to support and maintain the population in favourable condition: • **Habitat quality and function** - Maintain the quality and functionality of habitat to support the grey seal population that use the SAC in favourable condition; • **Prey availability** - Maintain the quality, abundance and diversity of prey needed for the			

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		grey seal population that use the SAC to remain in favourable condition; and • **Water, sediment and prey contaminants** - Contaminants are at levels not detrimental to the grey seal population using the SAC.			
Pembrokeshire Marine/ Sir Benfro Forol SAC (UK)	86.45	The grey seal QI within Pembrokeshire Marine SAC is currently in favourable condition (medium confidence). Below are the attributes and targets for each conservation objective. **Objective 1**: The grey seal population that use the SAC is maintained in favourable condition and stable or increasing over the medium and long term: • **Population using the SAC** - Maintain the grey seal population that use the SAC in favourable condition, and stable or increasing in the medium and long term; and • **SAC pup production** – Maintain a stable or increasing grey seal pup production within the SAC in the medium and long term, including at important pupping sites. **Objective 2**: The grey seal population that use the SAC continue to have access to, and be able to utilise habitats necessary to maintain the population in favourable condition: • **Distribution of grey seal pupping sites within the SAC** - Maintain a stable or increasing grey seal pupping distribution across the SAC. Allowing for natural change and variation; • **Accessibility to habitat used by seals** - Grey seal that use the SAC should not be significantly	NRW (2025c)	Grey seal (*Halichoerus grypus*) [1364]	Underwater noise; Injury risk from vessel activities, Accidental pollution, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		constrained from accessing necessary habitats within or outside of the site; and • **Anthropogenic disturbance** - Grey seal that use the SAC should not be subject to significant anthropogenic disturbance within or outside of the site. **Objective 3**: The grey seal population that use the SAC have high quality habitat and sufficient food supply to support and maintain the population in favourable condition: • **Habitat quality and function** - Maintain the quality and functionality of habitat to support the grey seal population that use the SAC in favourable condition; • **Prey availability** - Maintain the quality, abundance and diversity of prey needed for the grey seal population that use the SAC to remain in favourable condition; and • **Water, sediment and prey contaminants** - Contaminants are at levels not detrimental to the grey seal population using the SAC.			
River Boyne and River Blackwater SAC	123.20	To restore the favourable conservation condition of River Lamprey (*Lampetra fluviatilis*) in River Boyne and River Blackwater SAC, which is defined by the following list of attributes and targets: • **Distribution -** Restore access to all water courses down to first order streams; • **Distribution of larvae -** Not less than 50% of sample sites with suitable habitat positive for larval brook/river lamprey;	NPWS (2021b)	River Lamprey *Lampetra fluviatilis* [1099]	Underwater noise, EMF, and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Population structure of larvae -** At least three age/size classes of larval brook/river lamprey present; • **Larval lamprey density in fine sediment -** Mean density of brook/river larval lamprey in sites with suitable habitat more than 5/m²; and • **Extent and distribution of spawning nursery habitat -** No decline in extent and distribution of spawning and nursery beds.			
		To restore the favourable conservation condition of Atlantic Salmon (*Salmo salar*) in River Boyne and River Blackwater SAC, which is defined by the following list of attributes and targets: • **Distribution: extent of anadromy -** 100% of river channels down to second order accessible from estuary; • **Adult spawning fish -** Conservation limit (CL) for each system consistently exceeded; • **Salmon fry abundance -** Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling; • **Out-migrating smolt abundance** - No significant decline; • **Number and distribution of redds -** No decline in number and distribution of spawning redds due to anthropogenic causes; and • **Water quality -** At least Q4 at all sites sampled by Environmental Protection Agency (EPA).		Salmon *Salmo salar* [1106]	Underwater noise, EMF, and Accidental pollution

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Hook Head SAC	112.61	To maintain the favourable conservation condition of harbour porpoise in Hook Head SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2025c)	Harbour porpoise (*Phocoena phocoena*)	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
		To maintain the favourable conservation condition of bottlenose dolphin in Hook Head SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; • **Disturbance** - Human activities should occur at levels that do not adversely affect the bottlenose dolphin population at the site).		Bottlenose dolphin (*Tursiops truncatus*) [1349]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
North Channel SAC (UK)	142.32	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining FCS for harbour porpoise in UK waters: • **harbour porpoise is a viable component of the site -** The intent of this objective is to minimise the risk of injury and killing or other factors that could restrict the survivability and reproductive potential of harbour porpoise using the site; • **There is no significant disturbance of the species** - Operations within or affecting the site	JNCC (2019b)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise Injury risk from vessel activities, Accidental pollution, EMF, and

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		should be managed to ensure that the animals' potential usage of the site is maintained; and • **The condition of supporting habitats and processes, and the availability of prey is maintained -** The maintenance of supporting habitats and processes contributes to ensuring that prey is maintained within the site and is available to harbour porpoises using the site.			Changes in prey.
Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC (UK)	214.68	To ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining FCS for harbour porpoise in UK waters: • harbour porpoise is a viable component of the site - The intent of this objective is to minimise the risk of injury and killing or other factors that could restrict the survivability and reproductive potential of harbour porpoise using the site; • There is no significant disturbance of the species - Operations within or affecting the site should be managed to ensure that the animals' potential usage of the site is maintained; and • The condition of supporting habitats and processes, and the availability of prey is maintained - The maintenance of supporting habitats and processes contributes to ensuring that prey is maintained within the site and is available to harbour porpoises using the site.	JNCC (2019a)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Roaringwater Bay and Islands SAC	317.71	To maintain the favourable conservation condition of harbour porpoise in Roaringwater Bay and Islands SAC, which is defined by the following list of attributes and targets:	NPWS (2011d)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		• **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.			Accidental pollution, EMF, and Changes in prey.
Kenmare River SAC	374.43	To maintain the favourable conservation condition of harbour porpoise in Kenmare River SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2026a)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Blasket Islands SAC	428.43	To maintain the favourable conservation condition of harbour porpoise in Blasket Islands SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** – Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** – Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2014)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Belgica Mound Province SAC	468.39	To maintain the favourable conservation condition of harbour porpoise in Belgica Mound Province SAC,	NPWS, (2025d)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.			Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Abers - Côtes des legends (FR)	486.66	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	European Environment Agency (EEA; 2025a)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Nord Bretagne DH (FR)	491.28	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025b)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Baie de Morlaix (FR)	505.46	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025c)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Ouessant-Molène (FR)	505.71	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025d)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Côte de Granit rose-Sept Iles (FR)	509.43	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition.	EEA (2025e)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.			Changes in prey.
Côtes de Crozon (FR)	530.88	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025f)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Bunduff Lough and Machair / Trawalua / Mullaghmore SAC	537.75	In the absence of published site-specific COs for harbour porpoise, the integrity of this site in respect of this QI is considered to be maintained where access to suitable habitat within the site is not restricted and where human activities do not adversely affect harbour porpoise using the site, including through effects on the conditions supporting use of the site. Further detail on the rationale for this approach is provided within the site-specific assessment in Section 6.4.13.	NPWS (2015)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Chaussée de Sein (FR)	543.15	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant	EEA (2025g)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.			Accidental pollution, EMF, and Changes in prey.
Inishmore Island SAC	552.21	To maintain the favourable conservation condition of harbour porpoise in Inishmore Island SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** – Species range should not be restricted by artificial barriers to site use; and • **Disturbance** – Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2024d)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Tregor Goëlo (FR)	556.23	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025h)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Kilkieran Bay and Islands SAC	565.64	To maintain the favourable conservation condition of harbour porpoise in Kilkieran Bay and Islands SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; and • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2026b)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Mers Celtiques - Talus du golfe de Gascogne (FR)	573.29	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025j)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Récifs et landes de la Hague (FR)	588.51	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition.	EEA (2025i)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.			Changes in prey.
Baie de Saint-Brieuc – Est (FR)	589.45	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025k)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Anse de Vauville (FR)	591.13	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025l)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Cap d'Erquy-Cap Fréhel (FR)	594.12	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant	EEA (2025m)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities,

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.			Accidental pollution, EMF, and Changes in prey.
Banc et récifs de Surtainville (FR)	596.94	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025n)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
West Connacht Coast SAC	608.16	To maintain the favourable conservation condition of harbour porpoise in West Connacht Coast SAC, which is defined by the following list of attributes and targets: • **Access to suitable habitat** - Species range within the site should not be restricted by artificial barriers to site use; • **Disturbance** - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.	NPWS (2025e)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard (FR)	612.40	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025o)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Chausey (FR)	622.13	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025p)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.
Estuaire de la Rance (FR)	626.34	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition.	EEA (2025q)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and

Site Name	Distance of European site from closest point of the Proposed Development (km)	Conservation Objectives	Reference	Qualifying Interests (QIs)	Potential Impacts Screened In
		Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.			Changes in prey.
Baie du Mont Saint-Michel (FR)	640.84	In the absence of published site-specific COs for harbour porpoise, the integrity of this transboundary site in respect of this QI is considered to be maintained where harbour porpoise can continue to use the site as suitable habitat, without significant disturbance, and where the conditions supporting site use, including prey availability and supporting processes, remain in an appropriate condition. Further detail on the rationale for this approach is provided within the transboundary sites assessment in Section 6.4.24.	EEA (2025r)	Harbour porpoise (*Phocoena phocoena*) [1351]	Underwater noise, Injury risk from vessel activities, Accidental pollution, EMF, and Changes in prey.

5.2 Summary of Stage 1 Screening Assessment for SPAs

5.2.1.1 From the findings of the screening stage appraisal (see NIS Volume I: Supporting Information for Screening for Appropriate Assessment Report (Revised March 2026)), the possibility of LSEs could not be excluded for the following SPAs and their QIs at the screening stage (Table 5.2), in the absence of further evaluation and analysis and/or mitigation measures.

Table 5.2: SPAs and their Special Conservation Interest considered in this NIS where Likely Significant Effect could not be excluded at the screening stage.

Site Name	Distance of European site from the Proposed Development (km)	Conservation Objectives	Qualifying Interest (QI)	Why?	Reference
Wicklow Head SPA	5.3	**To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:** **The favourable conservation status of a species is achieved when:** • Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; • The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.	Kittiwake	Risk of collision	NPWS (2024e) 10/09/2024
The Murrough SPA	7.8	**To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:** **The favourable conservation status of a species is achieved when:** • Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; • The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.	Red-throated diver	Potential re-distribution within the overlapping area of the Array Area's 10 km buffer and the SPA	NPWS (2024f) 08/10/2024
Howth Head Coast SPA	48.6	**To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:**	Kittiwake	Risk of collision	NPWS (2024g) 29/10/2024

Site Name	Distance of European site from the Proposed Development (km)	Conservation Objectives	Qualifying Interest (QI)	Why?	Reference
		The favourable conservation status of a species is achieved when: • Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; • The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.			
Ireland's Eye SPA	52.8	**To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:** **The favourable conservation status of a species is achieved when:** • Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; • The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.	Guillemot	Risk of displacement	NPWS (2024h) 12/11/2024
			Herring gull	Risk of collision	
			Kittiwake	Risk of collision	
			Razorbill	Risk of displacement	
Lambay Island SPA	61.6	**To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:** **The favourable conservation status of a species is achieved when:** • Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;	Guillemot	Risk of displacement	NPWS (2024i) 19/11/2024
			Herring gull	Risk of collision	
			Kittiwake	Risk of collision	
			Lesser black-backed gull	Risk of collision	

Site Name	Distance of European site from the Proposed Development (km)	Conservation Objectives	Qualifying Interest (QI)	Why?	Reference
		• The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.	Razorbill	Risk of displacement	
Saltee Island SPA	70.4	To maintain the favourable conservation condition of Gannet in the Saltee Islands SPA, which is defined by the following list of attributes and targets: **No significant decline:** • Breeding population abundance: apparently occupied nests (AONs); • Productivity rate; • Distribution: breeding colonies; • Prey biomass available; **No significant increase:** • Barriers to connectivity; • Disturbance at the breeding site; and • Disturbance at marine areas immediately adjacent to the colony.	Gannet	Risk of collision	NPWS (2011b) 21/10/2011
		To maintain the favourable conservation condition of Guillemot in the Saltee Islands SPA, which is defined by the following list of attributes and targets: **No significant decline:** • Breeding population abundance: individual adult; • Productivity rate; • Distribution: breeding colonies; • Prey biomass available; **No significant increase:** • Barriers to connectivity; • Disturbance at the breeding site; and • Disturbance at marine areas immediately adjacent to the colony.”	Guillemot	Risk of displacement	

Site Name	Distance of European site from the Proposed Development (km)	Conservation Objectives	Qualifying Interest (QI)	Why?	Reference
		To maintain the favourable conservation condition of Herring Gull in the Saltee Islands SPA, which is defined by the following list of attributes and targets: **No significant decline:** • Productivity rate; • Distribution: breeding colonies; • Prey biomass available; **No significant increase:** • Productivity rate; and • Distribution: breeding colonies.	Herring gull	Risk of collision	
		To maintain the favourable conservation condition of Kittiwake in the Saltee Islands SPA, which is defined by the following list of attributes and targets: **No significant decline:** • Breeding population abundance: apparently occupied nests (AONs); • Productivity rate; • Distribution: breeding colonies; and • Prey biomass available. **No significant increase:** • Barriers to connectivity; and • Disturbance at the breeding site.	Kittiwake	Risk of collision	

Site Name	Distance of European site from the Proposed Development (km)	Conservation Objectives	Qualifying Interest (QI)	Why?	Reference
		To maintain the favourable conservation condition of Lesser Black-backed Gull in the Saltee Islands SPA, which is defined by the following list of attributes and targets: **No significant decline:** • Breeding population abundance: apparently occupied nests (AONs); • Productivity rate; • Distribution: breeding colonies; and • Prey biomass available. **No significant increase:** • Barriers to connectivity; and • Disturbance at the breeding site.	Lesser black-backed gull	Risk of collision	
		To maintain the favourable conservation condition of Razorbill in the Saltee Islands SPA, which is defined by the following list of attributes and targets: **No Significant decline:** • Breeding population abundance: individual adult; • Productivity rate; and • Distribution: breeding colonies. **No significant increase:** • Barriers to connectivity; • Disturbance at the breeding site; and • Disturbance at marine areas immediately adjacent to the colony.	Razorbill	Risk of displacement	
Skerries Island SPA	72	**To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:** **The favourable conservation status of a species is achieved when:**	Herring gull	Risk of collision	NPWS (2024j) 19/11/2024

Site Name	Distance of European site from the Proposed Development (km)	Conservation Objectives	Qualifying Interest (QI)	Why?	Reference
		• Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; • The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and • There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.			

6 Stage 2 Information to Inform the Assessment Alone

6.1 Baseline information to inform Stage 2 AA for Annex I Coastal and Marine Habitat QIs

6.1.1.1 As outlined in Section 5.1, the following designated sites in Ireland have continued through the Stage 1 Screening Assessment to be assessed in Stage 2, as a LSE could not be ruled out. These are presented in Figure 6.1.

- Wicklow Reef SAC – Reef;
- Magherabeg Dunes SAC – Sand dune habitats;
- Buckroney-Brittas Dunes and Fen SAC – Sand dune habitats;
- Kilpatrick Sandhills SAC – Sand dune habitats;
- The Murrough Wetlands SAC – Mediterranean salt meadows, Atlantic salt meadows;
- Cahore Polders and Dunes SAC – Sand dune habitats; and
- Blackwater Bank SAC – Sandbanks which are slightly covered by sea water all the time.

6.1.1.2 The Array Area and Cable Corridor and Working Area do not overlap with any of these designated sites, with the closest site being Buckroney-Brittas Dunes and Fen SAC at 0.05 km from the Proposed Development. NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026) concluded that there was potential for LSE via habitat deterioration and habitat alteration for sand dune habitats, Mediterranean salt meadows, Atlantic salt meadows, reefs and sandbanks which are slightly covered by sea water all the time.

6.1.1.3 Habitat deterioration can result from elevated concentrations of suspended sediment and elevated concentrations of contaminants both arising as a result of construction, operational and maintenance and decommissioning activities.

6.1.1.4 Habitat alteration can result from longer term changes to coastal and physical processes during the operational and maintenance phase, due to the presence of windfarm infrastructure on the seabed, resulting in altered hydromorphological conditions, including potential changes to tidal currents, the local wave climate, sediment transport processes and resulting seabed morphology, for example via interruption of tidal flows, longshore or cross-shore drift patterns or the local wave regime; could potentially affect the COs of any qualifying Annex I marine or coastal habitats (such as reefs or sand dune habitats).

6.1.1.5 Overall, the following impacts are therefore considered, with consideration of the COs of the QIs of these SACs:

- Elevated SSCs and associated deposition during construction, operational and maintenance and decommissioning phases;
- Accidental pollution during construction, operational and maintenance and decommissioning phases; and
- Changes to physical processes due to the presence of infrastructure during operational and maintenance phase.

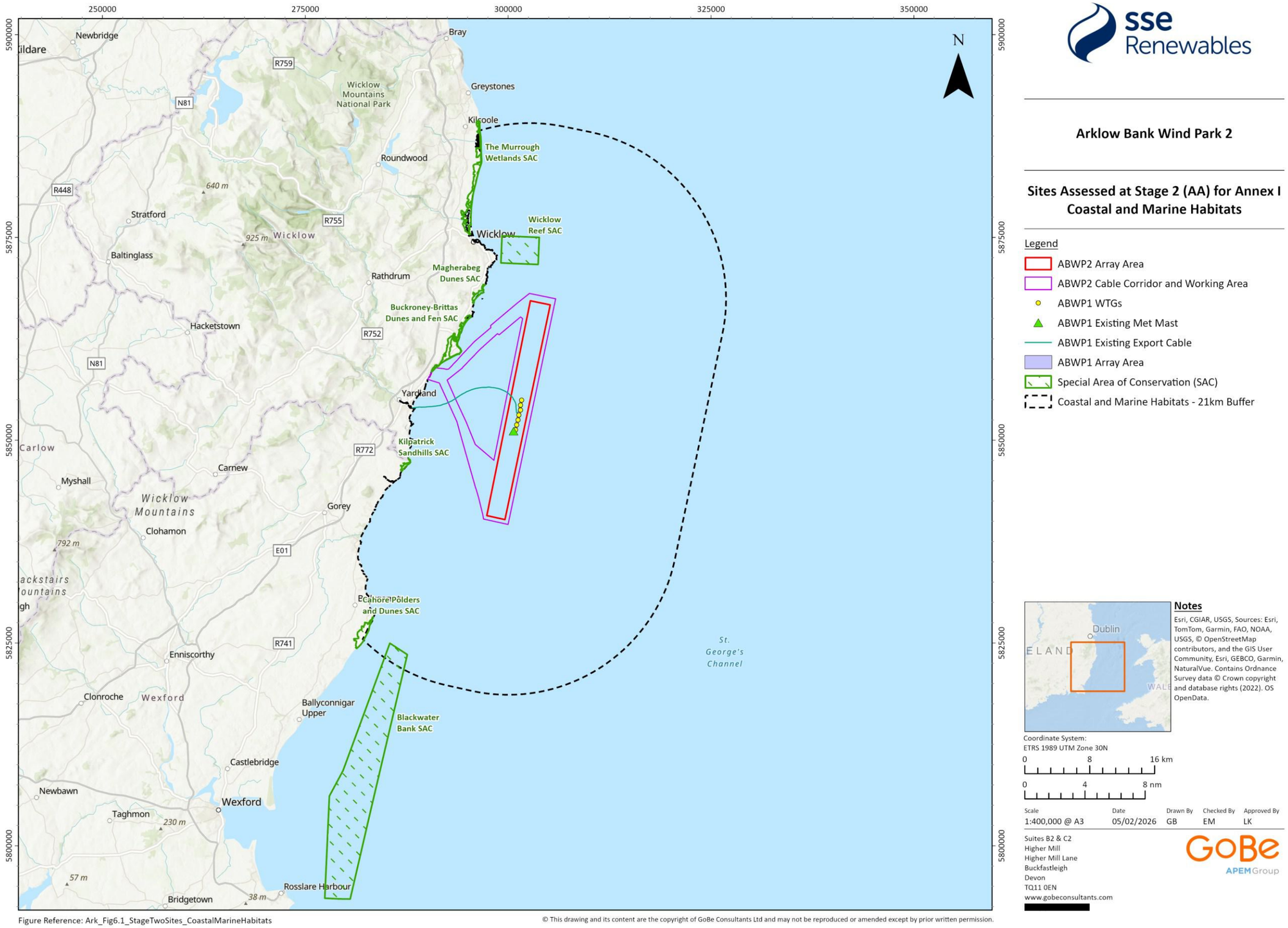

Figure Reference: Ark_Fig6.1_StageTwoSites_CoastalMarineHabitats

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Arklow Bank Wind Park 2

Sites Assessed at Stage 2 (AA) for Annex I Coastal and Marine Habitats

Legend

- ABWP2 Array Area
- ABWP2 Cable Corridor and Working Area
- ABWP1 WTGs
- ABWP1 Existing Met Mast
- ABWP1 Existing Export Cable
- ABWP1 Array Area
- Special Area of Conservation (SAC)
- Coastal and Marine Habitats - 21km Buffer

Notes

Esri, CGIAR, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, GEBCO, Garmin, NaturalVue. Contains Ordnance Survey data © Crown copyright and database rights (2022). OS OpenData.

Coordinate System:
ETRS 1989 UTM Zone 30N

0 8 16 km

0 4 8 nm

Scale	Date	Drawn By	Checked By	Approved By
1:400,000 @ A3	05/02/2026	GB	EM	LK

Suites B2 & C2
Higher Mill
Higher Mill Lane
Buckfastleigh
Devon
TQ11 0EN
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Figure 6.1: Sites assessed at Stage 2 AA for Annex I Coastal and Marine Habitats

6.1.2 Baseline Environment

Site-specific survey summary

6.1.2.1 Several benthic subtidal surveys have been conducted across the Benthic Subtidal and Intertidal Ecology Study Area between 2000 and 2021. These included pre-construction baseline surveys (prior to construction for the ABWP1 WTGs) undertaken in 2000 and 2001, a series of post-construction monitoring surveys undertaken over a period of eight years (2004 to 2011, inclusive) and a subtidal benthic ecology survey, conducted as part of the post-construction monitoring programme for ABWP1 in 2021. These site-specific monitoring surveys were focussed primarily on Arklow Bank and the area inshore, although some sampling was also undertaken to the east of Arklow Bank. In addition, site-specific geophysical surveys for ABWP2 were also undertaken across the Array Area and offshore export cable routes in 2019 and 2022. A further survey was undertaken in 2024 to further characterise benthic communities, sediment characteristics and quality. These data provide further characterisation information, including seabed feature and sediment types, which were considered alongside the ecological datasets.

6.1.2.2 An intertidal Phase I walkover survey and on-site dig-over sediment sampling of the landfall site, located to the south of Ennereilly Beach, was conducted in June 2019. The survey was conducted following guidance outlined in Davies *et al.* (2001) and Wyn *et al.* (2006), while habitats/biotopes were classified in accordance with Connor *et al.* (2004). For the purposes of this report, EUNIS codes have also been provided (EEA, 2019). The results of this survey have provided a robust and up-to date baseline characterisation of the benthic intertidal ecology study area to inform this assessment.

6.1.2.3 A summary of site-specific surveys undertaken to inform the Stage 2 appraisal on coastal and marine habitats is provided in Table 6.1.

Table 6.1: Summary of site-specific surveys undertaken for Annex I Coastal and Marine Habitats.

Data Source	Date(s) of survey	Survey Methodology
EcoServe (2001b) ABWP1 baseline survey	June 2000	Anchor dredge with large net mesh (infauna and PSA) – 21 stations.
	September 2000	Anchor dredge with large net mesh (infauna and PSA) – 19 stations; and Otter trawl (fish and epifauna) – 6 stations.
	April 2001	Anchor dredge with large net mesh (infauna and PSA) – 15 stations; and Agassiz trawl (fish and epifauna) – 3 stations.
HydroServ Projects Ltd. (2004). ABWP1 post-construction survey.	June/July 2004	Day grabs (infauna and PSA); and Beam trawls (epifauna).
HydroServ Projects Ltd (2005). ABWP1 post-construction survey.	October 2004	Anchor dredge with closed metal base (infauna and PSA); and Beam trawl (epifauna).
HydroServ Projects Ltd (2006a). ABWP1 post-construction survey.	June 2005	
HydroServ Projects Ltd (2006b). ABWP1 post-construction survey.	November 2005	
HydroServ Projects Ltd (2007a). ABWP1 post-construction survey.	June 2006	

Data Source	Date(s) of survey	Survey Methodology
HydroServ Projects Ltd (2007b). ABWP1 post-construction survey.	May 2007	
HydroServ Projects Ltd (2009). ABWP1 post-construction survey.	May 2008	
HydroServ Projects Ltd (2010). ABWP1 post-construction survey.	June 2009	
GE Wind Energy (2011). ABWP1 post-construction survey.	June 2010	
GE Wind Energy (2012). ABWP1 post-construction survey.	June 2011	
GE Wind Energy (2021). ABWP1 post-construction survey.	September 2021	
Aquafact International Services Ltd (2008) Proposed Dredge Disposal Sites for Arklow Harbour Commissioner.	June 2007	Divers using corers for benthic infauna, particle size analysis and organic carbon
Atalah *et al.* 2013. Diversity of demersal and megafaunal assemblages inhabiting sandbanks of the Irish Sea.	August 2007	Beam trawls (demersal fish and megafaunal invertebrates).
Aquatic Services Unit (2016). Sediment chemistry sampling to support dredge dumping as sea permit application for ABWP1	May 2016	Van Veen grabs for sediment chemistry.
RPS (2019). ABWP2 Intertidal Phase I walkover survey and on-site dig-over sediment sampling of the Landfall site.	June 2019	Phase I walkover survey and on-site digging
Ultrabeam Ltd. (2019) Site-specific geophysical surveys of the ABWP2 Array Area and offshore export cable routes.	July/August 2019	Multibeam echo sounder, sidescan sonar, sub-bottom profiler and magnetometer sampling
Green Rebel (2022) Site-specific geophysical and hydrographic surveys of the ABWP2 Array Area and offshore export cable routes.	August to November 2022	Sub-bottom profiler, Ultra High Resolution Survey (UHRS), sidescan sonar and magnetometer, multi-beam bathymetry and backscatter
AQUAFACT (2025). Arklow Environmental Survey	October 2024	Drop-down video (DDV) surveys and benthic grab sampling to characterise benthic communities, alongside sediment sampling for physicochemical analysis to assess sediment characteristics and quality.

Seabed Sediment

6.1.2.4 Arklow Bank, within the Array Area, consists of a highly mobile upper layer of sandy sediment which ranges from medium to coarse sand (Creane *et al.* 2023). Project specific surveys indicate that sediments are heterogenous, composed of mobile sands, slightly gravelly sands and gravelly sands present on Arklow Bank (Sure Partners Ltd., 2000; Aquatic Services Unit, 2012; 2021). Medium sand is mainly located at upper levels (less than 15 m water depth) with a gravel-sand

with gravel fractions located at greater depths. The substratum ranges from sandy shell to gravel to the west, north and south of the bank to coarse shell and gravel and some rock to the east of the bank. The bank itself consists of mainly sand, cobbles with shells and pebbles at the northern end of the bank and fine sand at the southern end. Keegan *et al.,* (1987) describes the seabed around Arklow Bank as having varying proportions of current-swept coarse sediments, consisting of compact sand, gravel, shell and/or cobbles.

6.1.2.5 The surficial seabed sediments within the regional area are characterised by sand and gravel material.

6.1.2.6 Site-specific geophysical surveys of the Array Area in 2019 identified boulder fields to the northeast of Arklow Bank, sandwaves to the south, and mobile sandy sediment across the bank itself (Ultrabeam Ltd., 2019). Patches of coarse sediment were also observed along the western flank of the central section of Arklow Bank. This observation is in line with site-specific benthic surveys conducted between 2004 and 2011, and in 2021 which found varying proportions of sand, gravelly sand and gravel in the north of Arklow Bank; predominately sand sediment with areas of gravel and mud in to the south; and slightly gravelly sand, with coarser gravelly sands characterising the eastern and western parts of the bank (HydroServ, 2004 to 2009; Aquatic Services Unit, 2010; GE Wind Energy, 2011 to 2012; GE Wind Energy, 2021).

6.1.2.7 The 2022 site-specific geophysical survey of the Cable Corridor and Working Area found that the distribution of sediment across the cable routes show predominant facies of medium to coarse sands which coincide with the large presence of sandwaves, megaripples and sediment waves on the approach to Arklow Bank. Conversely, finer grained facies types such as sandy mud to clay are visible in troughs between sand wave crests. The water depths gradually increased offshore to a maximum depth of 35 m below Lowest Astronomical Tide (LAT) before decreasing at Arklow Bank.

6.1.2.8 The results of 2021 and 2024 surveys were in line with the findings from previous studies, indicating that the seabed was predominately sedimentary with little or no fixed hard substrata (GEW Wind Energy, 2021; AQUAFACT, 2025). Minor variations were observed in terms of sediment particle size at select locations between the latest surveys and previous surveys, which is related to the heterogenous nature of sediments across the site. The 2021 and 2024 surveys indicated that the seabed on Arklow Bank consisted primarily of sand with variable proportions of coarser material with sand, slightly gravelly sand, gravelly sand and sandy gravel recorded. The eastern and western parts of the bank were characterised by relatively coarse material such as gravelly sands, while sand, gravelly sand and gravel were evident to the north of Arklow bank with predominately sandy sediment recorded to the south.

Subtidal Benthic Ecology

6.1.2.9 Benthic subtidal ecology surveys conducted across the study area between 2007 and 2024 recorded over 230 taxa with little temporal variation. However, while communities at individual sites where generally characterised by relatively low diversity the highest number of taxa were recorded in areas of coarser heterogenous sediments.

6.1.2.10 Atalah *et al.* (2013) conducted beam trawls at three locations on Arklow Bank in 2007 (after the construction of ABWP1) and found that benthic communities were typical of those found across the east coast of Ireland. The most abundant taxa recorded included the hermit crab *Pagurus bernhardus*, the common starfish Asterias rubens, the elliptical surf clam *Spisula elliptica*, and the flying crab *Liocarcinus holsatus*.

6.1.2.11 The benthos of the southern Irish Sea was described by Robinson *et al.* (2012) who reported the occurrence of species-rich gravelly plains throughout St George's Channel typically characterised by the biotope '*Mediomastus fragilis, Lumbrineris* spp., and venerid bivalves in circalittoral coarse sand or gravel' (MC3212). Within Blackwater Bank, located to the south of the Proposed Development, the authors recorded communities resembling the biotope 'Infralittoral mobile clean

sand with sparse fauna' (MB5231) or '*Nephtys cirrosa* and *Bathyporeia* spp. in infralittoral sand' B5233) biotopes.

6.1.2.12 The most abundant species recorded during the 2021 survey were found to be broadly similar to the most abundant species in previous surveys. The species typically recorded were the reef-building worms *Sabellaria alveolata* and *Sabellaria spinulosa*; the polychaetes *Spirobranchus lamarcki, Dipolydora coeca,* Serpulidae spp. and *Scoloplos armiger*; the molluscs shiny button clam *Nucula nucleus*, wrinkled rock borer *Hiatella arctica* and white furrow shell *Abra alba*; the crustaceans wart barnacle *Verruca stroemia* and long clawed porcelain crab *Pisidia longicornis*; and the ascidians *Dendrodoa grossularia* and *Polycarpa fibrosa. Spirobranchus* sp. and Serpulidae were also two of the most commonly recorded taxa in 2024, while polychates *Lumbrineris* sp., *Notomatus* sp., *Mediomastus fragilis* and *Glycera sp.*, the mysid shrimp *Gastrosacchus* sp. and the bivalve *Mytilus edulis* were also relatively common.

6.1.2.13 Across the subtidal benthic surveys the most commonly recorded biotopes included:

- '*Moerella* spp. with venerid bivalves in infralittoral gravelly sand' (JNNC Code: SS.SCS.ICS.MoeVen: EUNIS Code: MB3233);
- 'Infralittoral mobile clean sand with sparse fauna' (JNCC code: SS.SSa.IFiSa.IMoSa; EUNIS code: MB5231);
- '*Sertularia cupressina* and *Hydrallmania falcata* on tide-swept sublittoral sand with cobbles or pebbles' (JNCC code: SS.SSa.IFiSa.ScupHyd; EUNIS code: MB5232);
- '*Nephtys cirrosa* and *Bathyporeia* spp. in Atlantic infralittoral sand' (JNCC code: SS.SSA.IFiSa.NcirBat; EUNIS code: MB5233);
- 'Sparse sponges, *Nemertesia* spp. and *Alcyonidium diaphanum* on circalittoral mixed substrata' (JNCC Code: CR.HCR.XFa.SpNemAdia; EUNIS Code: MC1217);
- '*Flustra foliacea* on slightly scoured silty circalittoral rock' (JNCC code: CR.MCR.EcCr.FaAlCr.Flu; EUNIS code MC12241);
- '*Sabellaria spinulosa* on stable circalittoral mixed sediment' (JNCC code: SS.SBR.PoR.SspiMx; EUNIS code: MC2211);
- '*Mediomastus fragilis, Lumbrineris* spp. and venerid bivalves in Atlantic circalittoral coarse sand or gravel' (JNCC code: SS.SCS.CCS.MedLumVen; EUNIS code: MC3212);
- '*Hesionura elongata* and *Microphthalmus similis* with other interstitial polychaetes in Atlantic infralittoral mobile coarse sand' (JNCC code: SS.SCS.ICS.HeloMsim; EUNIS code: MB3234); and
- *Flustra foliacea* and *Hydrallmania falcata* on tide-swept circalittoral mixed sediment' (JNCC code: SS.SMx.CMx.FluHyd; EUNIS code: MC4214).

6.1.2.14 Locations where *Sabellaria* spp. were recorded in 2024 were assessed for their reef potential using best practice guidelines as described by Limpenny *et al.* (2010) and Gubbay (2007). However, abundances were low and the DDV samples indicated no evidence of any *Sabellaria* reef structures that would qualify as Annex I habitat under the Habitats Directive (EC, 2019). Consequently, it can be considered that while *Sabellaria* is locally present with the potential to form reefs, any such structures are likely to be temporary and limited in the face of the inherently dynamic nature of the local environment.

Subtidal Sediment Contaminants

6.1.2.15 In May 2016, the Aquatic Services Unit (ASU) was commissioned to undertake sediment sampling and chemical analysis of sediments from three locations on Arklow Bank to support a permit application to undertake seabed levelling works along Arklow Bank. The seabed levelling was required to facilitate access for maintenance vessels for the existing ABWP1 WTGs, and the associated disposal of material. Levels of contaminants which included a suite of metals, organochlorines, polychlorinated biphenyls (PCBs), tributylin (TBT), dibutylin (DBT) and

polycyclic aromatic hydrocarbons (PAHs) were typically low and below the respective lower Irish Action Levels (AL) (Cronin *et al.*, 2006). The exception being arsenic which was marginally elevated and exceeded the lower Irish Action Level at a single station, although consultation with the Marine Institute confirmed that this was acceptable for the material to be disposed of at sea (Ramboll Environ, 2016).

6.1.2.16 Results from the 2024 site-specific survey reported generally low concentrations of sediment-bound contaminants across the Cable Corridor and Working Area, with no occurrences of contaminants exceeding the lower Irish AL, with the exception of arsenic. Arsenic concentrations at inshore sites were marginally higher than the lower Irish AL, while remaining well below the upper Irish AL. These concentrations are classified as Class 2 (i.e. marginally contaminated) and, taking into account the limited magnitude of exceedance and the observed spatial distribution, are not considered to constitute an environmental risk.

6.1.3 Avoidance through Design and Standard Project Environmental Protection Measures of the Proposed Development

6.1.3.1 The design of the Proposed Development is such that some potential impact can be avoided as seen by applying the design features and management measures relevant to Annex I Coastal and Marine Habitats which are presented in Table 6.2.

Table 6.2: Project design and environmental protection measures relevant to Annex I Coastal and Marine Habitats.

Measure	Justification
Scour protection	In the absence of scour protection, there is potential for scour pits to develop around foundations. This may result in the release of sediment into the water column and a change to seabed habitat in the vicinity of the foundation. Scour protection will be installed as described in EIAR Volume II, Chapter 4: Description of Development (Revised March 2026).
The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning permission (if granted) at the same time as any activities the subject of the Foreshore Licence for Site Investigations (FS007339)	The Developer was granted a Foreshore Licence (FS007339) for Site Investigations (associated with the Proposed Development) from the Minister for Housing, Local Government and Heritage in May 2022. The Foreshore Licence expires in 2027. The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning permission (if granted) at the same time as any activities the subject of the Foreshore Licence for Site Investigations (FS007339) being carried out. As such there is no temporal overlap between the activities consented in this Foreshore Licence and the Proposed Development and there will be no potential for cumulative effects.
The Developer confirms and commits that it will not carry out any works in respect of the Proposed Development under the planning Permission (if granted) at the same time as any activities the subject of the Foreshore Licence Application for Site Surveys (FS007555) are being carried out.	The Developer submitted a Foreshore Licence Application for Site Surveys to the Minister for Housing, Local Government and Heritage in April 2023 (FS007555) and this application This application was determined and granted on 04 July 2024 and is valid until 04 June 2029. The Developer confirms and commits that it will not carry out any works in respect

Measure	Justification
	of the Proposed Development under the planning permission (if granted) at the same time as any activities the subject of the Foreshore Licence Application for Site Surveys FS007555 are being carried out. As such there is no temporal overlap between the activities proposed in the Foreshore Licence Application and the Proposed Development.
Impact avoidance/ reduction through design and engineering for Construction and Operational and Maintenance activities as detailed in NIS Volume I: Supporting Information for Screening for Appropriate Assessment Report (Revised March 2026)	The construction activities including cable plans, techniques and burial depths are further detailed in EIAR Volume II, Chapter 4: Description of Development (Revised March 2026). Operational and maintenance activities are also set out in EIAR Volume II, Chapter 4: Description of Development (Revised March 2026).
Impact avoidance/ reduction through Development of and adherence to a Rehabilitation Schedule (NIS Volume III, Appendix 4.1: Rehabilitation Schedule).	The Rehabilitation Schedule outlines the measures associated with the decommissioning of the Proposed Development and Rehabilitation of the area which includes measures to reduce the risk of impact on coastal and marine habitats (NIS Volume III, Appendix 4.1: Rehabilitation Schedule).
Impact avoidance/ reduction through Development of and implementation of an Environmental Management Plan (EMP) (NIS Volume III, Appendix 25.1: Environmental Management Plan (Revised March 2026)) and Marine Pollution Contingency Plan (MPCP) (NIS Volume III, Appendix 25.1: Environmental Management Plan (Revised March 2026), Annex 2).	Ensures plans are in place to manage any marine pollution spills and including key emergency contact details.
Impact avoidance/ reduction through a Confirmatory Survey to be undertaken within the Array Area, Cable Corridor and Working Area to verify the presence/ absence of any areas of reef habitat and seed mussel beds.	Confirmatory surveys will include a geophysical survey carried out prior to construction which will confirm the location and extent of any potential areas of Annex I *Sabellaria* reef habitat which will then be ground truthed via underwater video (i.e. ROV). Any areas of Annex I *Sabellaria* reef habitat identified will be avoided via micro-routing and micro-siting of infrastructure. In addition, the presence of Annex I bedrock or stony reef and blue mussel beds will be identified and avoided via micro-routing and micro-siting.
Impact avoidance/ reduction through an Invasive Non-Indigenous Species Management Plan being implemented. (NIS Volume III, Appendix 25.4: Invasive Non-Indigenous Species Management Plan, Annex IV).	The plan outlines measures to ensure vessels comply with the International Maritime Organisation (IMO) ballast water management guidelines, it will consider the origin of vessels and contain standard housekeeping measures for such vessels as well as measures to be adopted in the event that a high alert species is recorded.
Impact avoidance/ reduction through Environmental Monitoring Measures which are set out in NIS Volume I: Supporting Information for Screening for Appropriate Assessment (Revised March 2026), Section:4 Tables 4.27 to 4.33.	EIAR Volume II, Chapter 25: Summary of Factored in Measures, Mitigation and Monitoring (Revised March 2026) sets out commitments to environmental monitoring in pre-, during and post-construction phases.

Measure	Justification
Impact avoidance/ reduction through post-installation cable burial surveys and periodic monitoring of cables.	Post-construction surveys to monitor the impacts of cable burial and cable protection on benthic ecology receptors to ensure that the cables do not move or require maintenance. If surveys determine that there is a fault or issue with the cables, maintenance will be carried out to ensure that the cables do not have an adverse impact on benthic ecology. Operational and maintenance asset monitoring commitments include survey of seabed and assets every six months for the first two years and annually thereafter (EIAR Volume II, Chapter 4: Description of Development (Revised March 2026)).

6.1.4 Impacts and Parameters Assessed

6.1.4.1 The Proposed Development has the potential to result in AEoI on Annex I Coastal and Marine Habitats that are QIs for screened in European Sites and seen in Table 6.3.

Table 6.3: Project Design Options 1 and 2 considered for the assessment of potential impacts on Annex I Coastal and Marine Habitats.

Potential impact	Phase			Project Design Option Assessed (1 and 2)	Parameter Differences Between Project Design Option 1 and 2 (if any)
	C	O	D		
Elevated levels of SSCs and associated sediment deposition	✓	✓	✓	Project Design Option 1 **Construction phase:** Confirmatory surveys: • A suite of site (Array Area, Cable Corridor and Working Area) investigations will be undertaken to confirm the seabed and geological conditions prior to the installation of the infrastructure. Complete details of the full suite of surveys proposed are provided in Section 4 of Volume I, Supporting Information for Screening for Appropriate Assessment Report (Revised March 2026). Those which are relevant to Increased SSCs and associated deposition are: Geotechnical survey: • Boreholes (131 samples); • Cone Penetration Test (CPT) (431 samples); • Vibrocore/ gravity core (300 samples); and • Grab samples (240 samples). Metocean survey: • Floating Light Detection and Ranging (LiDAR) (includes seabed anchor points); • Acoustic Doppler Current Profiler (ADCP) (deployed on a seabed frame and includes mooring structure); and • Wave buoy (includes seabed mooring). Sediment dynamics survey: • Benthic flume; and • Benthic lander (ballasted structure which requires no mooring/ anchor). Site preparation:	Sediment disturbance arising from construction activities (e.g. site preparation, foundation installation (WTG and OSP) and cable installation (including trenchless techniques such as HDD)) may result in indirect impacts on benthic subtidal and intertidal communities as a result of temporary increases in SSCs and associated sediment deposition (i.e. smothering effects). Despite a larger number of WTGs required for Project Design Option 1 there is only anticipated to be a minimal difference in SSCs, therefore Project Design Option 1 is considered representative of Project Design Option 2 in respect of the potential for elevated levels of SSCs and associated sediment deposition. Within the operational and maintenance phase, both Project Design Option 1 and 2 have the same level of potential impact. Therefore, Project Design Option 1 is considered representative of Project Design Option 2 in respect of the potential for elevated SSCs and associated deposition. Sediment disturbance arising from decommissioning activities (e.g., removal of structures above the seabed) may result in indirect impacts on benthic subtidal and intertidal communities as a result of temporary increases in SSCs and associated sediment deposition (i.e. smothering effects). However, decommissioning would have a lesser degree of sediment disturbance in comparison to construction, and operational and maintenance phases as scour

Potential impact	Phase C O D	Project Design Option Assessed (1 and 2)	Parameter Differences Between Project Design Option 1 and 2 (if any)
		Site preparation activities prior to inter-array, interconnector, and offshore export cable installation to include sandwave clearance: • For inter-array cables, sandwave clearance along a width of 70 m, to a depth of 10 m, along 30% of the inter-array cables length, a total volume of 1,000,000 m^3. • For export cables, sandwave clearance along a width of 70 m, to a depth of 10 m, along 30% of the export cables length, a total volume of 500,000 m^3. • For OSP interconnector, sandwaves clearance along a width of 70 m, to a depth of 10 m, along 30% of the OSP interconnector length, a total volume of 500,000 m^3. • For scour protection, sandwave clearance along a diametre of 99 m, to a depth of 10 m, along 50%, a total volume of 1,000,000 m^3. • For OSP/WTG installation, sandwave clearance along a diameter of 100 m, to a depth of 5 m, at 20% of locations, a total volume of 139,200 m^3. Sandwave clearance has been modelled at representative locations across the Array Area and Cable Corridor and Working Area. Site preparation activities also include boulder clearance ploughing and picking of 100% of inter-array, export and interconnector cables at a width of 15 m and depth of 0.5 mm with a total seabed area of 2,850,000 m^2. <u>Foundation installation:</u> WTGs and OSPs installed on monopile foundations: • Drilled installation of 25 WTG piles 7-11 m in diameter at 0.2 – 1.0 m/h to full depth of 37 m. 1 concurrent drilling event with a drilling duration per pile of 88 hours and a total volume of approximately 132,000 m^3 of drill arisings. • Drilled installation of 2 OSP piles 7-14 m in diameter at 0.2 – 1.0 m/h to full depth of 45 m. 1 concurrent drilling event with a drilling duration per pile of 88 hours and a total volume of approximately 27,720 m^3 of drill arisings. Modelled at representative locations across the Array Area.	protection, cables and cable protection will be left *in situ*. Project Design Option 1 is considered representative of Project Design Option in respect of the potential for elevated SSCs and associated deposition.

Potential impact	Phase C O D	Project Design Option Assessed (1 and 2)	Parameter Differences Between Project Design Option 1 and 2 (if any)
		Potential refusal of monopiles during construction (where required). Volume of 4.474 m^3 per refusal and a total volume of 22,370 m^3 for a maximum of five refusals. 1,100 m^2 of habitat loss/disturbance during Unexploded Ordnance (UXO) clearance. <u>Cable installation:</u> • For inter-array cables, total length of 110 – 122 km with a seabed disturbance width of 15 m, with a total of 1,830,000 m^2 of seabed disturbance. • For export cable, total length of 35 - 40 km with a seabed disturbance width of 15 m with a total of 600,000 m^2 of seabed disturbance. • For interconnector, total length of 25-28 km with a seabed disturbance width of 15 m with a total of 420,000 m^2 of seabed disturbance. Modelled at representative locations across Array Area and Cable Corridor and Working Area. <u>Landfall works:</u> HDD drilling fluid release. Rate of release: 20 tonnes (per 24 hours)); and Period of release: 4.5 days (initial punch out followed by reaming phase). **Operational and maintenance phase** Cable repair and maintenance: Operational dredging of inter-array, export and interconnector cables: • For inter-array cables, operational dredging of 300,000 m^3 every five years;	

Potential impact	Phase C O D	Project Design Option Assessed (1 and 2)	Parameter Differences Between Project Design Option 1 and 2 (if any)
		• For export cable and interconnector cables, operational dredging of 100,000 m^3 every five years; • These activities are anticipated to result in approximately 275,000 m^2 of temporary subtidal habitat loss or disturbance per maintenance campaign. Inter-array, export and interconnector cable repair/reburial activities: • For inter-array cables, repair and reburial of cables between 110 km and 122 km in length over the lifetime of the Proposed Development with disturbance of seabed material from 15 m wide and 1.5 m deep trench (cable repair once every three years and cable re-burial once every three years). • For export cables, repair and reburial of cables between 30 km and 40 km in length over the lifetime of the Proposed Development with disturbance of seabed material from 15 m wide and 2.5 m deep trench (cable repair once every five years and cable re-burial once every five years). • Interconnector cables: repair and reburial of cables of between 25 km and 28 km in length over the lifetime of the Proposed Development with disturbance of seabed material from 15 m wide and 10 m deep trench (cable repair once every three years and cable re-burial once every three years). Jack-up Vessels: Presence of jack-up vessels during operational and maintenance activities: • Disturbance of 613,200 m^2 of seabed from jack-up barge across operational and maintenance period. **Decommissioning phase** Piles will be cut 2 m below the seabed and lifted. Scour protection, cables and cable protection would be left *in situ*.	
		Project Design Option 2 **Construction Phase:** Confirmatory surveys: • A suite of site (Array Area, Cable Corridor and Working Area) investigations will be undertaken to confirm on the seabed and geological conditions prior to the installation of the infrastructure. Complete details of the full suite of	