APPENDIX 1

ONSHORE AA SCREENING

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APPENDICIES

1. INTRODUCTION

1.1 Background

MKO has been appointed by Fuinnemah Sceirde Teoranta ('the Applicant') to provide the information necessary to allow the competent authority to conduct a Screening for Appropriate Assessment in respect of the Onshore Site element of the proposed Sceirde Rocks Offshore Wind Farm, hereafter referred to as the 'the Project'.

This document firstly provides an Appropriate Assessment Screening for the Onshore Site of the Project only. However, it also considers the potential for likely significant effects on European Sites to occur as result of the Onshore Site, in cumulation with the Offshore Site, as well as in combination with other plans and projects. Please see details on the Project elements below in Section 1.2.

Screening for Appropriate Assessment is required under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Where it cannot be excluded that a project or plan, either alone or in combination with other projects or plans, would have a significant effect on a European Site then same shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives. The current project is not directly connected with, or necessary for, the management of any European Site consequently the project has been subject to the Appropriate Assessment Screening process.

The assessment in this report is based on field surveys undertaken in 2023 and 2024 and a desk study undertaken in 2023 and 2024. It specifically assesses the potential for the Onshore Site to result in significant effects on European sites in the absence of any best practice, mitigation or preventative measures.

This Appropriate Assessment Screening Report (AASR) has been prepared in accordance with the European Commission's Assessment of Plans and Projects in relation to Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010) and the Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin 7, Ireland OPR (2021).

In addition to the guidelines referenced above, the following relevant documents were also considered in the preparation of this report:

1. *Council of the European Commission (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Official Journal of the European Communities. Series L 20, pp. 7-49.*
2. *EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence. Opinion of the commission.*
3. *EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission.*

1.2 References to the Project

This AASR pertains to the onshore element (Onshore Site) of the overall project. It does however assess the potential for likely significant effects on European Sites to occur in cumulation with the offshore elements (Offshore Site) of the project. The followings paragraphs set out the terms used to describe each element of the project.

For the purposes of this AASR:

Where the 'Project' is referred to, this encompasses both the 'Offshore Site' and 'Onshore Site'.

Where the 'Offshore Site' is referred to, this includes the Offshore Array Area (OAA), Offshore Substation (OSS), as well as the Offshore Export Cable (OEC), the Offshore Export Cable Corridor (OECC), and the Landfall.

The 'Project' site is delineated in green in Figure 2-1 and where the Onshore Site is referred to, this relates to the onshore element of the Project only, the subject of this AASR. This includes the Onshore Landfall Location, Onshore Grid Connection, and Onshore Compensation Compound. Further details in relation to the Onshore Site elements are set out below:

- The 'Onshore Landfall Location' (OLL) - The location where the Offshore Export Cable will be brought ashore to meet the Transition Joint Bay (TJB);
- The 'Onshore Grid Connection' (OGC) – cabling that transports electricity from the Onshore Landfall Location to the Onshore Compensation Compound, and a second section of cabling connecting the Onshore Compensation Compound to the National Grid at the existing Moneypoint 220kV Substation; and
- The 'Onshore Compensation Compound' (OCC) - ESB 220kV Gas Insulated Switchgear (GIS) building, and Eirgrid 220kV Gas Insulated Switchgear (GIS) building and associated buildings and compounds.

Full details of the Project are provided in Appendix A of this AASR.

1.3 Background to Screening for Appropriate Assessment

Screening is the process of determining whether an Appropriate Assessment is required for a plan or project. Under Part XAB of the Planning and Development Act, 2000, as amended, screening must be carried out by the Competent Authority. As per Section 177U of the Planning and Development Act, 2000, as amended 'A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site'. The Competent Authority's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and should be recorded. The Competent Authority may request information to be supplied to enable it to carry out screening.

Where it cannot be excluded beyond reasonable scientific doubt at the Screening stage, that a proposed plan or project, individually or in combination with other plans and projects, would have a significant effect on a European site in light of its conservation objectives, an Appropriate Assessment is required.

Where an Appropriate Assessment is required, the applicant must prepare and submit a Natura Impact Statement.

The term Natura Impact Statement (NIS) is defined in legislation[1]. An NIS, where required, should present the data, information and analysis necessary to reach a definitive determination as to 1) the implications of the plan or project, alone or in combination with other plans and projects, for a European site in view of its conservation objectives, and 2) whether there will be adverse effects on the integrity of a European site. The NIS should be underpinned by best scientific knowledge, objective information and by the precautionary principle.

This Appropriate Assessment Screening Report has been prepared in compliance with the provision of section 177U of the Planning & Development Act 2010 as amended.

1.3.1 Statement of Authority

Baseline ecological surveys of the Onshore Site in Co. Clare were undertaken throughout 2023 and 2024, by Pádraig Desmond (BSc.) and Stephanie Corkery (BSc., M.Sc.) of MKO. All surveyors have the relevant academic qualifications and experience in undertaking habitat and ecological assessments.

This AASR has been prepared by Stephanie Corkery and Pádraig Desmond. Pádraig is an experienced ecologist with 4 years professional experience in ecological consultancy. This Report has been reviewed by Pat Roberts (BSc, MCIEEM).

Pat Roberts is Principal Ecologist with MKO with over 19 years post graduate experience of providing ecological services in relation to a wide range of developments at the planning, construction and monitoring stages. Pat holds B.Sc. (Hons) in Environmental Science. Pat has extensive experience of providing ecological consultancy on large scale industrial and civil engineering projects. He is highly experienced in the completion of ecological baseline surveys and impact assessment at the planning stage. He has worked closely with construction personnel at the set-up stage of numerous construction sites to implement and monitor any prescribed best practice measures. He has designed numerous Environmental Operating Plans and prepared many environmental method statements in close conjunction with project teams and contractors. He has worked extensively on the identification, control and management of invasive species on numerous construction sites. Prior to taking up his position with MKO in June 2005, Pat worked in Ireland, USA and UK as a Tree Surgeon and as a nature conservation warden with the National Trust (UK) and the US National Park Service. Pats key strengths include his depth of knowledge and experience of a wide range of ecological and biodiversity topics and also in his ability to understand the requirements of the client in a wide range of situations. He is currently responsible for staff development, training and ensuring that the outputs from the ecology team are of a very high standard and meet the requirements of the clients and relevant legislation and guidelines. He is a full member of the Chartered Institute of Ecologists and Environmental Managers (CIEEM)

Pádraig is a Project Ecologist with MKO with 5 years post graduate ecological experience, 4 years of which have been in ecological consultancy. Pádraig holds a BSc (Hons) in Ecology and Environmental Biology from University College Cork. Pádraig took up his position with MKO in December 2021, prior to which he worked as a Junior Ecologist with Envirico. Through these consultancy roles Pádraig has gained excellent experience in producing ecological reports such as Natura Impact Statements, Ecological Impact Assessments, Biodiversity chapters, Invasive Species Management Plans, and Constraints Reports for a wide range of projects including small private developments to housing developments and renewable energy projects such as solar and wind farms. Prior to the above roles, Pádraig worked as a field ecologist for the Department of Conservation in New Zealand, where he

[1] As defined in Section 177T of the Planning and Development Act, 2000 as amended, an NIS means a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own and in combination with other plans and projects, for a European site in view of its conservation objectives. It is required to include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for the European site in view of its conservation objectives.

developed a strong field-based skill set. Pádraig's key strengths and areas of expertise are in terrestrial ecology, including vegetation surveys, habitat identification, invasive species surveys, mammal surveys, Biodiversity Chapters of Environmental Impact Assessments, Appropriate Assessment and Ecological Impact Assessment. Pádraig is also skilled in GIS.

Stephanie is an Ecologist with MKO with over 2 years of experience in professional ecological consultancy. Stephanie holds a BSc. in Ecology and Environmental Biology, an MSc. in Marine Biology, and a HDip in Sustainability in Enterprise, all from University College Cork. Since joining MKO as a graduate in March 2022, Stephanie has worked on a wide variety of projects including wind farms, large scale residential developments, and County Council projects. Stephanie's key strengths include organising and carrying out both terrestrial and marine mammal surveys, as well as general ecological walkover surveys and bat surveys. She is also experienced in GIS, acoustic data analysis for bat species, and in preparing Appropriate Assessment Screening Reports (AASR), Natura Impact Statements (NIS), Ecological Impact Assessments (EcIA), Biodiversity Chapters, and Bat Reports. Stephanie is also a JNCC Certified Marine Mammal Observer and has completed the ACCOBAMS Course for Highly Qualified Marine Mammal Observers (MMO) and Passive Acoustic Monitoring operators (PAM).

2. DESCRIPTION OF THE ONSHORE SITE

2.1 Site Location

The northern most point of the Onshore Site comprises the Onshore Landfall Location (OLL) and associated infrastructure, located approximately 3.5 km northwest of Doonbeg, Co. Clare (IG Ref. Q 93902 67729). It is proposed that the Onshore Grid Connection (OGC) will run underground, mostly within existing public road network but also through some private lands which include agricultural fields and a golf course.

Once the OGC makes landfall, it will first be routed within agricultural fields before it travels east towards Kilrush within local roads, including the L20301, L2030 (Carrowmore South), and the L2034. North of Kilrush, the OGC will be lain within third party lands including agricultural fields and Kilrush Golf Club.

After Kilrush, the OGC continues east along the Monava local road and the L6150, before continuing to the Moneypoint Power Station in grassy verges adjacent to the N67.

The OGC will connect to an Onshore Compensation Compound (OCC) at Ballymacrinan near Moneypoint (IG Ref. R 02434 53153). The OGC will continue from the OCC to connect to the national grid at the existing 220kV substation at Moneypoint, Co. Clare (IG Ref. R 03877 51895). The townlands associated with the Onshore Site are listed in Table 2-1 below.

Current land use along the Onshore Site consists of the public road corridor, agricultural land, residential dwellings, recreation (golf course) and areas of public and private forestry.

The site location map of Sceirde Rocks Onshore Site is shown in Figure 2-1.

Table 2-1 Townlands associated with the Onshore Site

Townlands	
Killard	Durha
Doonmore	Ballykett
Carrowmore South	Parknamoney
Tullaher	Kilcarroll
Einagh	Feagarroge
Moanmore North	Dysert
Moanmore Upper	Clooneylissaun
Moanmore South	Ballymacrinan
Moanmore Lower	Carrowdotia North
Carnaun	Carrowdotia South

2.2 Characteristics of the Project

The proposed Sceirde Rocks Offshore Wind Farm comprises both the Offshore Site and Onshore Site, as described below. These are collectively referred to as 'the Project'.

The Project will consist of the provision of the following:

Offshore Development:

i. 30 no. offshore Wind Turbine Generators (WTGs) with gravity based fixed-bottom foundations with the following details:
   - Tip height of 324.9m above Lowest Astronomical Tide (LAT),
   - Rotor diameter of 292m;
   - Hub height of 178.9m above LAT;

ii. 1 no. 220kV offshore substation (OSS) of 55 m in height above LAT (including crane and communications mast) with a gravity based fixed bottom foundation. The OSS consists of an offshore electrical substation platform with multiple decks accommodating the electrical and communications plant and equipment, ancillary components and welfare facilities;

iii. A network of inter-array electrical and communication cables, of approximately 73 km in length, connecting the 30 WTGs to the OSS;

iv. A 220kV offshore export cable complete with communication lines, of approximately 63.5 km in length, laid in and on the seabed from the OSS to landfall in the townland of Killard, Co. Clare;

v. Seabed preparation for WTG, OSS and cable installation including rock placement, dredging and disposal;

vi. Cable protection including trenching and burial, rock berms, and concrete mattresses.

Onshore Development:

vii. An underground Transition Joint Bay (TJB) at the landfall point in the townland of Killard, Co. Clare connecting the offshore export cable to the onshore grid connection cable. The TJB consists of an underground concrete chamber (20m x 5m wide, with a depth of 2.5m), where the proposed offshore export cable will be connected to the onshore grid connection cable;

viii. 220kV onshore grid connection and communications cables laid underground, primarily in the public road corridor with small sections in third party lands, for approximately 19.3 km between the TJB in the townland of Killard, Co. Clare and the new 220kV Onshore Compensation Compound (OCC) in the townland of Ballymacrinan, Co. Clare;

ix. 220kV onshore grid connection and communication cables laid underground, primarily in the public road corridor with small sections in third party lands, for approximately 3 km between the new 220kV OCC in the townland of Ballymacrinan, Co. Clare and the existing Moneypoint 220kV substation in the townland of Carrowdotia South, Co. Clare;

x. 43 no. joint bays complete with communication chambers and link box chambers along the onshore grid connection route between the TJB in the townland of Killard, Co. Clare to the existing 220kV Moneypoint substation in the townland of Carrowdotia South, Co. Clare;

xi. A 220kV Onshore Compensation Compound located in the townland of Ballymacrinan, Co. Clare. The 220kV onshore compensation compound consists of:
   - Eirgrid 220kV GIS Building (49m x 18.5m, with a total height of 16.7m above Finished Floor Level (FFL);
   - ESB 220kV GIS Building (49m x 18.5m, with a total height of 16.7m above FFL);
   - Customer SCADA and MV power building (18.4m x 8.7m, with a total height of 6.15m above FFL);
   - Statcom building (30.5m x 22m, with a total height of 7.59m above FFL);
   - Upgrade of existing entrance onto the L-6150 including the removal of a small portion of existing stone wall and hedgerow;
   - All associated electrical and communications plant and equipment, welfare facilities, 3 no. foul water holding tanks, 3 no. bored wells, 3 no. attenuation tanks, access roads, car parking, security fencing and gates, rail and post fencing,

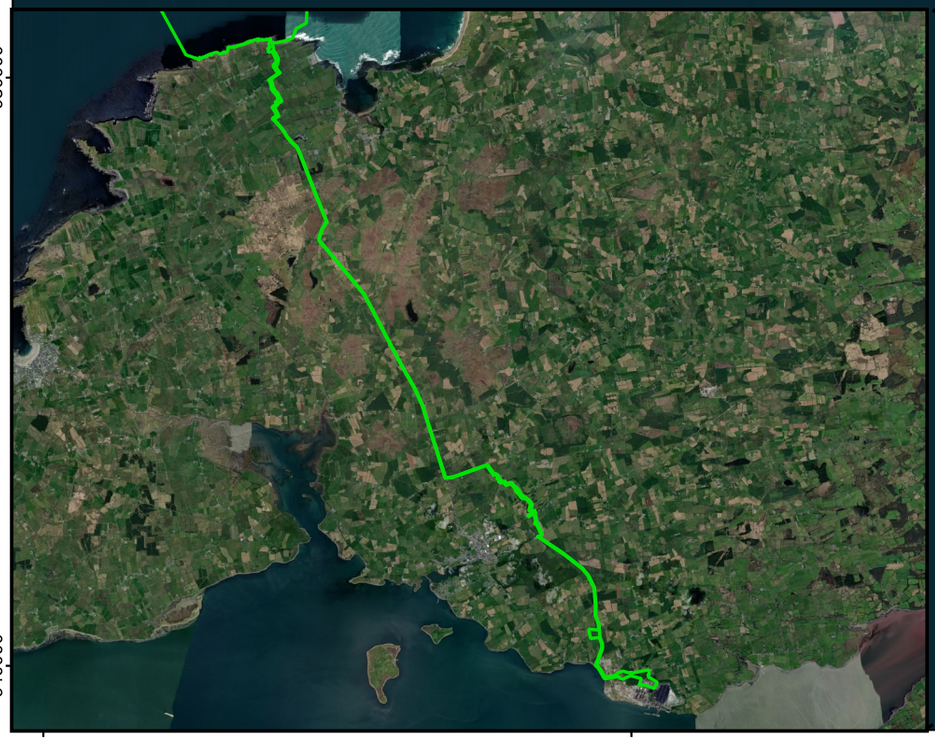
telecommunications pole, lightning masts, signage, safety bollards, landscaping, drainage infrastructure and all other ancillary works and associated site development works;

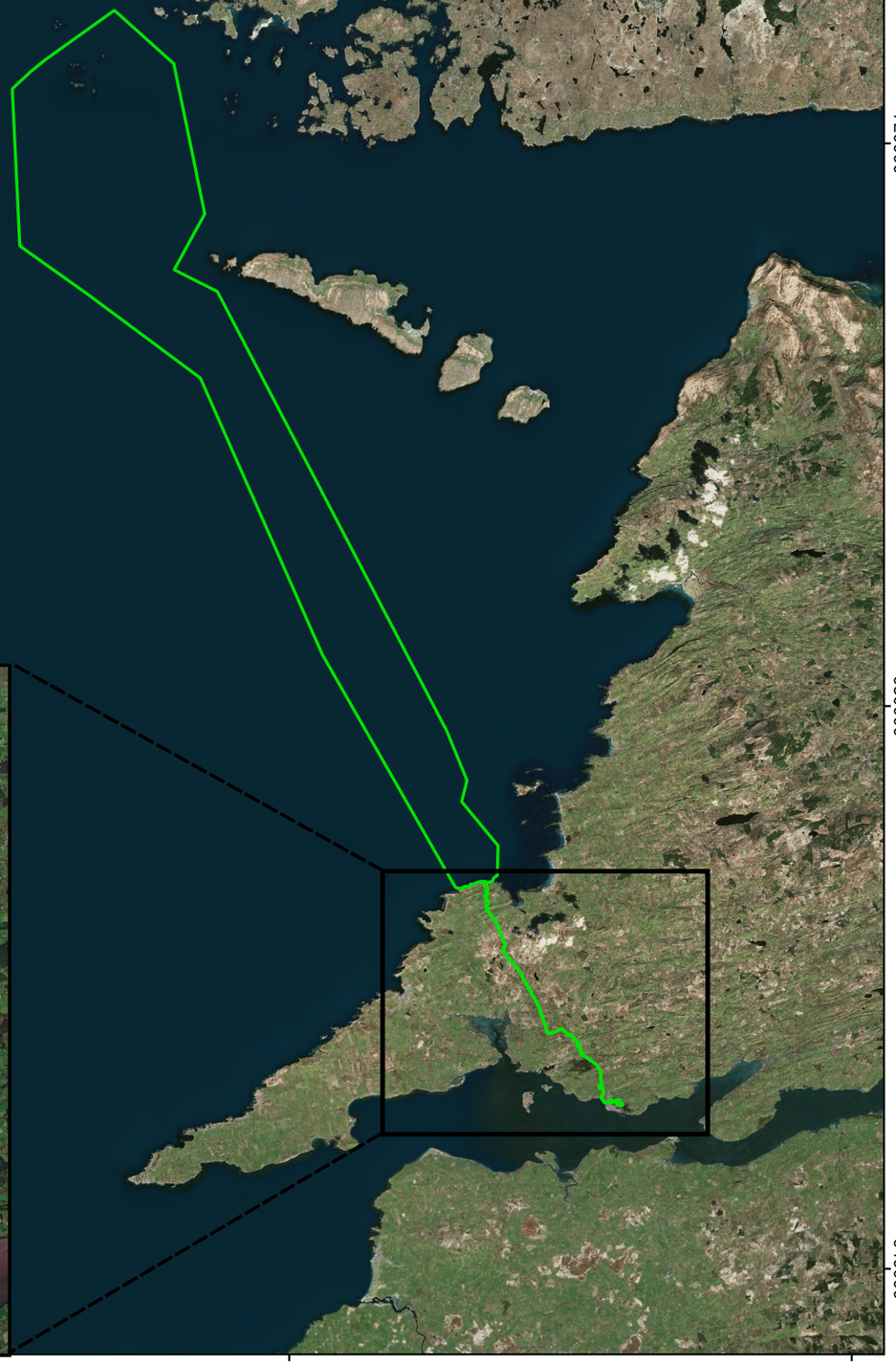
xii. 3 no. temporary construction compounds along the onshore grid connection cable route:
    - 1 no. temporary construction compound at the landfall point in the townland of Killard Co. Clare;
    - 1 no. temporary construction compound at the Kilrush Golf Club in the townland of Parknamoney, Co. Clare;
    - 1 no. temporary construction compound at the new 220kV OCC in the townland of Ballymacrinan, Co. Clare;
xiii. Reinstatement of the road or track surface above the proposed onshore grid connection cable trench along existing roads and tracks;
xiv. New and upgraded access tracks above the proposed onshore grid connection cable trench in third party lands;
xv. Temporary entrances from public roads to facilitate construction of the onshore grid connection for construction phase only;
xvi. Provision of 3 no. passing bays and the widening of the L-6150 road in the townland of Ballymacrinan to facilitate the delivery of abnormal loads for the construction of the proposed OCC;
xvii. All works associated with spoil management;
xviii. All associated site works and ancillary development above and below ground including hard and soft landscaping, habitat enhancement and drainage infrastructure.

This application seeks a ten-year development permission and a 38-year operational life from the date of commissioning of the Project.

Note, this AASR pertains only to the Onshore Site, but an overview of the Offshore Site is provided for context of the overall Project. Full details of the Project are included in Appendix A of this AASR. The layout of the Onshore Site is provided in Figure 2-2.

400000
440000
480000
520000
720000
680000
640000
N





SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

EIAR Site Boundary

0 10 20 km
Kilometres

Data Source
© Ordnance Survey Ireland. All rights reserved. Licence number CYAL50267517
© British Crown and OceanWise, 2024. All rights reserved. License No. EMS-EK001-958983. Not to be used for Navigation

PROJECT TITLE
Sceirde Rocks

MAP TITLE
Project and Onshore Site Location

VER	REMARKS	DATE	Drawn	Approved
		12/12/2024	PD	PR

DRAWING NO
Figure 2-1

SCALE	PAPER SIZE	DATUM	PROJECTION
1:480,000	A4	IRENET95	Transverse Mercator

488000
496000
504000
664000
656000
N
Doonbeg
An Dún Beag
KILRUSH
Cill Rois
Poulnasherry Bay
Poll na nOisrí
Scattery Island
Inis Cathaigh
Inishbig
or
Hog Island
Inis Bhig
Scattery Roads
Rod Inis Cathaigh
Ballard Bay
Bá an Bhalla Aird
Farrihy Bay

SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

- EIAR Site Boundary
- HDD Offshore Exit Location
- Onshore Grid Connection
- OGC Joint Bays
- Landfall TJB
- OCC Location
- Access Tracks
- Passing Bays & Road Widening

Temporary Construction Compounds

- Temporary Construction Compound 1
- Temporary Construction Compound 2
- Temporary Construction Compound 3

Kilometres
0 1 2 km

PROJECT TITLE
Sceirde Rocks

MAP TITLE
Sceride Rocks Onshore Infrastructure

VER	REMARKS	DATE	Drawn	Approved
V1		2025-01-08	CF	ÓM

DRAWING NO
Figure 2-2

SCALE	PAPER SIZE	DATUM	PROJECTION
1:81,000	A4	IRENET95	Transverse Mercator

3. CHARACTERISTICS OF THE RECEIVING ENVIRONMENT OF THE ONSHORE SITE

3.1 Data Collected to Carry Out Assessment

In preparation of the report, the following sources were used to gather information:

- Review of NPWS Site Synopses, Conservation Objectives for the European Sites;
- Review of 2019, 2013 and 2007 EU Habitats Directive (Article 17) Reports;
- Review of online web-mappers: National Parks and Wildlife Service (NPWS), Teagasc, EPA, Water Framework Directive (WFD), Geological Survey of Ireland (GSI), Irish Wetland Bird Survey I-WeBS, and Geohive online Environmental Sensitivity Mapping tool;
- Review of specially requested records from the NPWS Rare and Protected Species Database for the hectads which overlap with the Onshore Site;
- Review of Birds of Conservation Concern (BoCCI) in Ireland 2014-2019 (Colhoun & Cummins, 2013);
- Review of OS maps and aerial photographs of the site of the Onshore Site;
- Review of relevant databases including National Biodiversity Ireland Database and available literature of previous surveys conducted in the area;
- Review of other plans and projects within the area.

NPWS Protected Species Records

National Parks and Wildlife Service (NPWS) online records were searched to see if any rare or protected species of flora or fauna have been recorded from hectads Q95, Q96, and R05, within which the Onshore Site is located. An information request was also sent to the NPWS scientific data unit requesting records from the Rare and Protected Species Database on the 27th of September 2023. A response was received on the 2nd of October 2023. An updated request was sent on the 9th of August 2024, but no response has been received to date. Table 3-1 lists rare and protected species records obtained from NPWS.

Table 3-1 NPWS records for rare and protected species

Common name	Scientific name	Designation	Hectad
Red Threadwort	*Cephaloziella rubella*	VU	Q96
Blunt-fruited Pottia	*Tortula modica*	VU	Q96
Irish Hare	*Lepus timidus subsp. Hibernicus*	Annex V, WA	Q96, Q95
Eurasian Otter	*Lutra lutra*	HD Annex II, IV, WA	Q96, Q95, R05
Harbour Seal	*Phoca vitulina*	HD Annex II, V, WA	Q95
Greenland White-fronted Geese	*Anser albifrons flavirostris*	Annex 1	Q96, Q95, R05
Fiddle dock	*Rumex pulcher*	VU	Q95
Bog Orchid	*Hammarbya paludosa*	NT	Q96
Shepherd's-needle	*Scandix pecten-veneris*	RE	Q95
Pine Marten	*Martes martes*	HD Annex V, WA	Q95, R05
Eurasian Badger	*Meles meles*	WA	Q96, Q95, R05
Freshwater Pearl Mussel	*Margaritifera margaritifera*	HD Annex II, V, WA	Q96
Common frog	*Rana temporaria*	HD Annex V, WA	Q96, Q95, R05
Henbane	*Hyoscyamus niger*	NT	Q95
Smooth Brome	*Bromus racemosus*	NT	Q95
Mountain Pansy	*Viola lutea*	VU	Q96
West European Hedgehog	*Erinaceus europaeus*	WA	Q96, Q95
Brown Long-eared Bat	*Plecotus auritus*	HD Annex IV, WA	R05

Common name	Scientific name	Designation	Hectad
Irish Stoat	*Mustela erminea subsp. hibernica*	WA	Q95
Narrow-mouthed Whorl Snail	*Vertigo angustior*	HD Annex II, WA	Q96
Cladonia ciliata var. tenuis	*Cladonia ciliata var. tenuis*	HD Annex V	Q96
Cladonia portentosa	*Cladonia portentosa*	HD Annex V	Q96

VU = Vulnerable, NT=Near Threatened, WA = Wildlife Act. Annex II, Annex IV, Annex V – Of EU Habitats Directive.

3.2 Identification of Relevant European Sites

The following methodology was used to establish any European Sites upon which there is a potential for a likely significant effect to occur either individually or in combination with other plans and projects as a result of the Onshore Site:

- Initially the most up to date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) on the 11/12/2024.
- All European Sites that could potentially be affected were identified using a source-pathway - receptor model. To provide context for the assessment, European Sites in the vicinity/potentially within the Zone of Influence of the Onshore Site are shown on Figure 4-1. Information on these sites and the site-specific conservation objectives is provided in Table 4-1. Sites that were further away from the Onshore Site were also considered and no source-pathway-receptor chain for likely significant effect was identified for any additional European Site.
- The catchment mapping was used to determine any potential hydrological connectivity between the Onshore Site and any European Sites. The hydrological catchments are also shown in Figure 4-1.
- In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to such sites, the Scottish Natural Heritage (SNH) Guidance, '*Assessing Connectivity with Special Protection Areas* (SPA)' (2016) was consulted. This document provides guidance in relation to the identification of connectivity between the Onshore Site and Special Protection Areas. The guidance takes into consideration the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects.
- Table 4-1 provides details of all relevant European Sites as identified in the preceding steps and assesses the potential for likely significant effects on each.
- The assessment considers any likely direct or indirect impacts of the Onshore Site, both alone and in combination with other plans and projects, on European Sites by virtue of criteria including the following: size and scale, land-take, distance from the European Site or key features of the Onshore Site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and maintenance, and decommissioning were considered in this assessment.
- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report 11/12/2024.
- Where potential pathways for Likely Significant Effect are identified, the European Site is included within the Likely Zone of Influence and further assessment is provided in the accompanying NIS.

The potential for the Onshore Site to result in cumulative impacts of the Project on any European Sites in combination with other plans and projects was considered in the assessment that is presented in Table 4-1. Plans and projects considered include those that are highlighted in Section 5 and listed in Appendix B of this AASR.

3.3 Hydrological Context of the Onshore Site

In order to determine whether the onshore site has potential to result in likely significant effects via hydrological pathways, a desk study of available information regarding the hydrological catchments in which it is located was undertaken. This included a review of the EPA online web-mapper at https://gis.epa.ie/EPAMaps/ .

3.3.1 Catchments in which the Onshore Site is Located

3.3.1.1 Surface Water Catchments

3.3.1.1.1 *Onshore Landfall Location*

On a regional scale, the Onshore Landfall Location (OLL) is located within the Mal Bay surface water catchment and Hydrometric Area 28 of the Shannon River Basin District. More locally the OLL site is located in the Doonbeg River WFD sub-catchment (Doonbeg_SC_010) and the Doonbeg_050 WFD river sub-basin.

There are no EPA/WFD mapped watercourses in the immediate vicinity of the OLL. The closest SWB to the OLL is a small stream located ~150m to the southeast. This watercourse forms part of the Doonbeg_050 SWB and flows to the northeast for ~680m before entering into the Shannon Plume coastal waterbody.

The Transition Joint Bay (TJB) at the OLL is situated ~100m from the cliffs edge and the Shannon Plume coastal water body.

The OLL is mapped in the Doonbeg_050 WFD river sub-basin. This (surface waterbody) SWB achieved 'Good' status based on the latest WFD cycle (2016-2021). This was an improvement on the 'Moderate' status which achieved in the 2nd cycle (2013-2018). The risk status of the Doonbeg_050 SWB is currently under review. No significant pressures have been identified to be impacting on this SWB.

Further downstream the Shannon Plume coastal waterbody achieved 'High' status in the latest WFD cycle (2016-2021). This SWB is deemed to be 'not at risk' and no significant pressures have been identified.

3.3.1.1.2 *Onshore Grid Connection*

The Onshore Grid Connection (OGC) is located within 2 no. regional surface water catchments. The northern section is located within the May Bay surface water catchment and Hydrometric Area 28 whilst the southern section is located within the Shannon Estuary North surface water catchment and Hydrometric Area 27. Both of these regional surface water catchments are located in the Shannon River Basin District.

Within the Mal Bay surface water catchment, the OGC is predominantly located in the Doonbeg river sub-catchment (Doonbeg_SC_010). The OGC passes through the Doonbeg_050 and Ballard_010 WFD River sub-basins with 4 no. watercourse crossings over the Doonbeg_050 SWB.

Within the Shannon Estuary North surface water catchment, the OGC is predominantly mapped in the Wood River sub-catchment (Wood_SC_010). Meanwhile, ~1.7km in the south is located in the Cloon[Clare] River sub-catchment (Cloon[Clare]_SC_010). The OGC is mapped with a total of 4 no. WFD river sub-basins. There are a total of 2 no. crossings over the Moyasta_010 SWB, 2 no. crossings over the Wood_020 SWB, and 3 no. crossings over the Tonavoher_010 SWB.

The SWBs along the OGC predominantly achieved 'Moderate' status based on the latest WFD cycle (2016-2021). These SWBs include the Ballard_010, Moyasta_010, Wood_020 and Tonavoher_010 SWBs. This represented a deterioration in status for the Moyasta_010 SWB which achieved 'Good' status based on 2013-2018 data. The status of the Ballard_010, Wood_020 and Tonavoher_010 SWBS remains unchanged (based on data from 2013-2018 and data from 2016-2021). The Wood_010 SWB achieved 'Poor' status in all data periods (2010-2015, 2013-2018, and 2016-2021).

The risk status of the SWBs along the OGC are predominantly under review. The Wood_010 and Wood_020 SWBs are deemed to be 'at risk' of failing to meet their respective WFD objectives. Agriculture is listed as a significant pressure on both of these SWBs with forestry, urban runoff and other unknown pressures also impacting the Wood_020 SWB.

In terms of transitional and coastal waterbodies downstream of the OGC, the Lower Shannon Estuary SWB, Doonbeg Bay SWB and the Mouth of the Shannon SWB are of 'Good' status. The Shannon Estuary Plume is of 'High' status. These SWBs are deemed to be 'not at risk' and no significant pressures have been identified.

3.3.1.1.3 Onshore Compensation Compound

On a regional scale, the Onshore Compensation Compound (OCC) is located in the Shannon Estuary North surface water catchment and the Cloon[Clare]_SC_010 river sub-catchment.

On a more local scale, the OCC is located within the Tonahover_010 WFD river sub-basin. The closest mapped watercourse to the OCC is the Ballynote East stream, which runs along the northern border of the OCC. This stream forms part of the Tonavoher_010 SWB. This stream flows to the west before veering to the south for 1.8km and discharging into the Lower Shannon Estuary transitional water body.

The OCC is located within the Tonavoher_010 WFD river sub-basin. The status of this SWB and the downstream Lower Shannon Estuary transitional SWB are described above.

3.3.1.1.4 Surface Water Body Classification

A summary of the WFD status and risk result for SWBs downstream of the onshore components of the Project are shown in Table 3-2 below.

Table 3-2 EPA Water Quality Monitoring Q-Rating Values

Waterbody	Overall Status (2010-2015)	Overall Status (2013-2018)	Overall Status (2016-2021)	WFD Risk	Pressures
Doonbeg_050	Good	Moderate	Good	Under review	None
Ballard_010	Unassigned	Moderate	Moderate	Under review	None
Moyasta_010	Unassigned	Good	Moderate	Under Review	None
Wood_010	Poor	Poor	Poor	At risk	Agriculture
Wood_020	Poor	Moderate	Moderate	At risk	Agriculture, forestry, other & urban runoff
Tonavoher_010	Unassigned	Moderate	Moderate	Under Review	None
Doonbeg Estuary	Unassigned	Moderate	Moderate	Under Review	None
Lower Shannon Estuary	Moderate	Good	Good	Not at risk	None
Doonbeg Bay	Unassigned	High	Good	Not at risk	None
Mouth of the Shannon (HAs 23;27)	Moderate	Good	Good	Not at risk	None

Shannon Plume (HAs 27;28)	Unassigned	High	High	Not at risk	None

3.3.1.2 Ground Water Catchments

There are two groundwater bodies below the footprint of the Onshore Site. The area of these two GWBs define the extents of the GWB ZOI (zone of influence) for the Onshore Site.

The Miltown Malbay GWB underlies the north of the Onshore Site, including the OLL and the northern section of the OGC. According to GSI mapping (www.gsi.ie) this area of the Onshore Site is underlain by Namurian Sandstones which are classified as being a Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones.

The Kilrush GWB underlies the south of the Onshore Site, including the central and southern section of the OGC and the OCC. According to GSI mapping (www.gsi.ie) the area is underlain by Namurian Undifferentiated rocks which are classified as being a Locally Important Aquifer (LI) - Bedrock which is Moderately Productive only in Local Zones.

The Miltown Malbay GWB (IE_SH_G_167) and Kilrush GWB (IE_SH_G_123) which underlie the Onshore Site achieved 'Good' status in all 3 no. WFD cycles. This applies to both quantitative status and chemical status of the GWBs. Both GWBs have been deemed to be "not at risk" and no significant pressures have been identified.

3.3.1.3 Surface Ground Water Body Classification

A summary of the WFD status and risk result for GWBs beneath he Onshore Site are shown in Table 3-3 below.

Table 3-3 EPA Water Quality Monitoring Q-Rating Values

Waterbody	Overall Status (2010-2015)	Overall Status (2013-2018)	Overall Status (2016-2021)	WFD Risk	Pressures
Miltown Malbay	Good	Good	Good	Not at risk	None
Kilrush	Good	Good	Good	Not at risk	None

3.4 Ecological Survey Methodologies

Comprehensive surveys of the biodiversity of the Onshore Site were undertaken on the following dates outlined in Table 3-4 below. In addition to these surveys, dedicated bat surveys were undertaken but no European Sites designated for the protection of any bat species were recorded within the Zone of Influence of the site. Within Ireland, the Lesser horseshoe bat is the only bat species requiring the designation of Special Areas of Conservation (SACs). The Onshore Site is situated outside the current known range for this species and there are no SACs designated for its protection within 25km of the Onshore Site and thus, there are pathways for effects on bats.

Table 3-4 Ecology surveys informing the AASR.

Survey Type	Dates
Multi-disciplinary walkover, which included: • Habitat surveys • Bird surveys • Terrestrial fauna surveys	› 27th of July 2023; › 28th of July 2023; › 28th of March 2024 › 11th of April 2024

• Aquatic habitats and species	› 20th of June 2024
Intertidal bird surveys	› Surveys covered the period of May 2023 – March 2024, consisting of one breeding season (May – September) and one non-breeding season (October – March).

The following sections describe the ecological surveys that have been undertaken and provide details of the methodologies, survey dates, and guidance followed.

3.4.1 Ecological Multidisciplinary Walkover Survey

3.4.1.1 Multi-disciplinary Walkover Surveys (as per NRA Guidelines, 2009)

Multidisciplinary walkover surveys were undertaken within the Onshore Site. Surveys were undertaken within the recognised optimum period for vegetation surveys/habitat mapping, i.e. April to September (Smith *et al.*, 2011). A comprehensive walkover of the entire Project site was completed with incidental records also incorporated from other dedicated species/habitat specific surveys. During the multidisciplinary surveys, a search for Invasive Alien Species (IAS) listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) and the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No 374 of 2024) was conducted.

The walkover surveys were also designed to detect the presence, or likely presence, of a range of protected species. The survey included a search for mammal signs (bats, badger, red squirrel etc.) and areas of suitable habitat to support these species, potential features likely to be of significance to bats and additional habitat features for the full range of other protected species that are likely to occur in the vicinity of the Onshore Site (e.g. otter, marsh fritillary etc.). Bird species observed during the multi-disciplinary surveys were also recorded.

The multi-disciplinary walkover surveys comprehensively covered the entire Onshore Site and based on the survey findings, further detailed targeted surveys were carried out for features and locations of ecological significance. Other targeted surveys undertaken within the Onshore Site are described in the following subsections.

3.4.1.1.1 *Habitat Surveys*

Habitats within the Onshore Site were classified according to the guidelines set out in *'A Guide to Habitats in Ireland'* (Fossitt, 2000), which classifies habitats based on the vegetation present and management history. The extent of each habitat on site was mapped on site using aerial photography, handheld GPS and smartphone technology. A representative photograph was also taken for each of the habitats recorded on site. Plant nomenclature for vascular plants follows *'New Flora of the British Isles'* (Stace, 2019).

Habitats considered to be of ecological significance and in particular having the potential to correspond to those listed in Annex I of the EU Habitats Directive, where present, were also identified.

3.4.1.1.2 *Bird surveys*

During the multidisciplinary walkover surveys, all birds, including Annex I species of the EU Birds Directive, identified to be within or adjacent to the Onshore Site were recorded. Additionally, habitat assessments were undertaken to identify any significant supporting habitat within or adjacent to the

Onshore Site for Annex I species of the EU Birds Directive, or any other protected birds, was undertaken.

In addition, intertidal bird surveys were undertaken within the OLL site of the Onshore Site and covered the period of May 2023 – March 2024, consisting of one breeding season (May – September) and one non-breeding season (October – March). The survey methodology followed that of Lewis and Tierney (2014). Waterbirds were counted within two hours on either side of low/high tide (max. period four hours total) on the 'look-see' basis (Bibby et al., 2000) and the positions of major flocks were also recorded on field maps.

3.4.1.1.3 Watercourse assessments

As the Onshore Site crosses 11 EPA mapped watercourses, assessments of each watercourse was undertaken, as part of the multidisciplinary walkover surveys, to identify if they had potential to support protected species such as fisheries, otter, freshwater pearl mussel, and other aquatic receptors.

Otter surveys were conducted on watercourses which the Onshore Site crosses, adhering to best practice guidance (NRA, 2009b) and CIEEM best practice competencies for species surveys[2]. All watercourses within the Onshore Site were identified as providing potential habitat for otter and were subject to targeted surveys for this species. This involved a search for all otter signs (e.g. spraints, scat, prints, slides, trails, couches and holts) within 150m of each survey site. Where otter signs were observed these were mapped.

Whilst the Onshore Site is not within a catchment of SAC populations, assessments of the watercourses along the Onshore Site for suitability to support freshwater pearl mussel (*Margaritifera margaritifera*) were undertaken. These assessments were undertaken to determine whether there was any suitable habitat or potential for populations to be present in close proximity downstream of the Onshore Site.

3.4.1.1.4 Terrestrial Fauna Surveys

As part of the Multidisciplinary walkover surveys undertaken, surveys for terrestrial fauna were also undertaken within the Onshore Site, adhering to best practice guidance (NRA, 2009b). The results of the desk study, scoping replies, incidental records of protected species during ecological survey work and multidisciplinary walkover surveys were used to inform the scope of targeted ecological surveys required. Dedicated surveys for terrestrial fauna were undertaken on the dates set out in Table 3-4 above. During the multidisciplinary walkover surveys, where observed, incidental records of birds and invertebrates including butterflies, dragonflies, etc. were recorded.

[2] *CIEEM, 2013, Technical Guidance Series – Competencies for Species Survey: Otter, Online, Available at: https://cieem.net/wp-content/uploads/2019/02/CSS-EURASIAN-OTTER-April-2013.pdf*

3.1 Ecological Survey Results

3.1.1 Results of Baseline Ecological Surveys

A total of 19 habitats were recorded within or adjacent the Onshore Site (Table 3-5).

Table 3-5: Habitats recorded within and adjacent to the Onshore Site.

Habitat Name	Fossitt Code
Exposed Rocky Shores	LR1
Improved agricultural grassland	GA1
Wet grassland	GS4
Dry meadows and grassy verges	GS2
Amenity Grassland	GA2
Cutover bog	PB4
Active raised bog	PB1
Spoil and bare ground	ED2
Recolonising bare ground	ED3
Hedgerows	WL1
Treelines	WL2
Scrub	WS1
Conifer plantation	WD4
Mixed broad-leaved woodland	WD1
Buildings and artificial surfaces	BL3
Shingle and gravelly shores	LS1
Upland Eroding Rivers/Lowland depositing rivers	FW1/FW2
Drainage ditches	FW4

Habitats within the Onshore Site have been considered below and a full description of the habitats are being considered under the following headings;

- Habitats within and adjacent to the OCG
- Habitats within and adjacent to the OCC
- Habitats within and adjacent to OLL and Temporary Compound
- Habitats within and adjacent to proposed passing bays between the OCC and the N67

3.1.1.1 Habitats within and adjacent to the OCG

The OGC, which forms the main element of the Onshore Site, primarily consisted of existing road infrastructure for much of its length, but also enters green field habitats which are used for agriculture and often include scrub or woodland habitats. The sections below describe all habitats within which the OGC will be laid and those adjacent that could potentially be affected.

No habitats listed under Annex I of the EU Habitats Directive were recorded within or adjacent to the OGC and no significant supporting habitat for species listed under Annex II of the EU Habitats Directive was identified during the surveys. Shingle and gravelly shores, as discussed below, was identified as potentially providing foraging habitat for waterbirds and waders, including bird species that are among those listed as SCIs of any SPA.

Exposed Rocky Shores (LR1)

Where the Offshore Export Cable (OEC) of the Project makes landfall at the northern extent of the Onshore Site, small sections within the Onshore Site are comprised of exposed boulder beaches/shores (Plate 3-1), which are best classified as Exposed Rocky Shores (LR1). These are shores which are highly exposed to ocean swells and are influenced by sea sprays and dynamic topographies and are located

approximately 120m from the works area. The upper reaches of this habitat were characterized by large boulders and exposed bedrock, with some recordings of sea thrift (*Armeria maritima*) and sea campion (*Silene uniflorae*). This habitat was identified as providing potential foraging habitat for protected bird species and several bird species designated as SCIs of nearby SPAs were identified during surveys within this habitat. Further details on bird survey results are provided in Section 3.1.2.

This habitat was identified over 120m from any works associated with the Onshore Site.

Plate 3-1 Exposed rocky shores recorded at the OLL of the Onshore Site, recorded adjacent to Improved agricultural grassland.

Improved agricultural grassland (GA1)

Outside of the existing road infrastructure, the dominant land use within the Onshore Site is agriculture, generally best classified as Improved agricultural grassland (GA1). This habitat type is present in lands where the Project makes landfall, in the northern extent of the Onshore Site (Plate 3-2), and again where the OGC goes off road north and east of Kilrush (Plate 3-3). It was also recorded extensively adjacent to the Doonbeg (L2030) local road, within the Onshore Site. This habitat was typically dominated by perennial ryegrass, with rare to frequent occurrences of broadleaved species such as clovers (*Trifolium* spp.), sorrel and doc (*Rumex* spp.), chickweed (*Stellaria media*), Fumitory (*Fumaria sp.*), sheep's bit (*Jasione montana*), and creeping buttercup (*Ranunculus repens*).

Plate 3-2 GA1 habitat recorded in the northern extent of the Onshore Site.

Plate 3-3 GA1 habitat recorded in lands, north of Kilrush, which had been recently spread with slurry.

Active raised bog (PB1) and Cutover bog (PB4)

In lands adjacent to the northern section of the OGC, areas of peatland were identified and included areas of Active raised bog (PB1) and Cutover bog (PB4) (Plate 3-4 and Plate 3-5). Varying degrees of turbary were recorded and these peatlands often presented as bare beat. In areas less worked, categorised as Active raised bog, albeit degraded due to drainage, species identified were dominated by purple moor grass (*Molinia caerulea*), with frequent recordings of long heather (*Calluna vulgaris*), deer grass (*Trichophorum cespitosum*), common cottongrass (*Eriophorum angustifolium*), as well as frequent to occasional Yorkshire fog (*Holcus lanatus*) and soft rush (*Juncus effusus*) in the more degraded areas. These peatland habitats were buffered from the OGC and Onshore Site by other habitats, as indicated in Plate 3-5, such as grassy verges, bramble scrub, dense bracken, or hedgerows. No works will be undertaken within, or directly adjacent to, any peatland habitat.

Plate 3-4 Degraded blanket bog recorded in close proximity to the Onshore Site.

Plate 3-5 Grassy verge and scrub buffer between the Onshore Site and peatland habitats.

Wet grassland (GS4)

Areas of marginal or semi-improved wet agricultural grassland were recorded in lands adjacent to the Doonbeg (L2030) local road (Plate 3-6), within the Onshore Site, and were classified as Wet grassland (GS4). These were recorded sporadically along the length of the OGC, from the OLL to Moneypoint. These were generally dominated by a combination of wet ground species such as Yorkshire fog (*Holcus lanatus*) and soft rush (*Juncus effusus*).

Plate 3-6 Example of juncus dominated wet grassland recorded in lands adjacent to the Doonbeg (L2030) local road.

Dry meadows and grassy verges (GS2)

Often delineating sections of the Doonbeg (L2030) local road, along which much of the OGC will be laid, this habitat was recorded as small narrow strips between road infrastructure and other habitats such as treelines, hedgerows, stone walls, and woodlands. This habitat typically contained a mix of species which included false oat-grass (*Arthenatherum elatius*), Bent grasses (*Agrostis spp.*) sheep's bit (*Jasione montana*), creeping buttercup (*Ranunculus repens*), Yorkshire fog (*Holcus lanatus*), daisy (*Bellis perennis*), tormentil (*Potentilla erecta*) and rosebay willow herb (*Chamaenerion angustifolium*).

Amenity grassland (GA2)

This habitat was predominantly recorded in lands within Kilrush Golf Club (Plate 3-7), where the OGC travels north of Kilrush town. These are highly maintained grassland habitats and are typically species poor, usually dominated by one grass species. This habitat was also recorded delineating road infrastructure from private dwellings or farm yards.

Plate 3-7 Example of Amenity grassland within Kilrush gold course, also showing an example of Treeline habitat.

Hedgerow (WL1)

This habitat was recorded extensively along the OGC route as it delineated much of the existing public road infrastructure (Plate 3-8) and agricultural fields (Plate 3-9). These were often managed through hedge cutting, particularly along roads. The structure of these habitats was typically dominated by European gorse (*Ulex europaeus*) and bramble (*Rubus fruticosus* agg.), with occasional to frequent occurrences of hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*). Species recorded in the understory of this habitat were diverse, including ivy (*Hedera helix*), false oat grass (*Arrhenatherum elatius*), rosebay willow herb (*Chamaenerion angustifolium*), cleaver (*Galium aparine*), tufted vetch (*Vicia cracca*), cocksfoot (*Dactylis glomerata*), hedge woundwort (*Stachys sylvatica*) and ragwort (*Jacobaea vulgaris*).

Plate 3-8 Example of managed hedgerow habitat recorded along existing road infrastructure.

Plate 3-9 Example of hedgerow forming field boundaries along the OGC route.

Treeline (WL2)

Treeline habitat was recorded along the OGC route, typically delineating road infrastructure (Plate 3-10) and also forming boundaries to areas of woodland such as conifer plantations (Plate 3-11). This habitat was also recorded in Kilrush golf club, adjacent to the route of the OGC (Plate 3-7). Treelines comprised a mix of native and non-native trees, including hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), ash (*Fraxinus excelsior*), silver birch (*Betula pendula*), beech (*Fagus sylvatica*), sycamore (*Acer pseudoplatanus*), as well as conifer species such as Scots pine (*Pinus sylvestris*) and Douglas fir (*Pseudotsuga menziesii*).

Plate 3-10 Example of native treeline delineating road infrastructure.

Plate 3-11 Birch treeline delineating conifer plantation habitat, also showing bramble scrub in the foreground.

Scrub (WS1)

Sections of scrub habitat were recorded along the length of the OGC route, particularly in unmanaged agricultural lands adjacent to the road corridor (Plate 3-12). It also formed boundaries to other habitat such as woodland, as shown in Plate 3-9 above. Scrub habitat recorded was typically dominated by bramble (*Rubus frutiocosus* agg.), European gorse (*Ulex europeaus*), hawthorn (*Crataegus monogyna*), and blackthorn (*Prunus spinosa*). Other species recorded included field bindweed (*Convolvulus arvensis*), Yorkshire fog (*Holcus lanatus*), and rosebay willowherb (*Chamaenerion angustifolium*).

Where the OGC turns south into the grounds of Moneypoint Power Station, additional areas of scrub habitat were recorded (Plate 3-13). These were extremely dense sections of scrub, which was dominated by bramble with semi-matures recordings of willow (*Salix* spp.), European gorse (*Ulex europeaus*), hawthorn (*Crataegus monogyna*), birch (Betula pendula), and Douglas fir (*Pseudotsuga menziesii*), forming scrub woodland.

Plate 3-12 Example of scrub habitat which was allowed to establish in unmanaged agricultural lands.

Plate 3-13 Example of scrub habitat which was allowed to establish Moneypoint Power Station lands

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Conifer plantation (WD4)

Areas of forestry were recorded adjacent to the road infrastructure along the OGC route and were categorized as Conifer plantation (WD4). These were typically comprised of Sitka spruce (*Picea sitchensis*) and due to shading of the canopy, there was little biodiversity in the understories of these woodlands.

Mixed broad-leaved woodland (WD1)

The OGC will be lain in areas of existing road infrastructure and farm tracks which are delineated by Mixed broadleaved woodland. A section of the route along the Doonbeg (L2030) local road was delineated by mature broadleaved trees (Plate 3-14). Species here included a mix of native and non-native species including hazel (*Corylus avellana*), ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), and sycamore (*Acer pseudoplatanus*).

The OGC route also passes along an access track within Kilrush Golf Club (Plate 3-15) which is delineated by ash and alder (*Alnus glutinosa*). There is significant evidence of ash die back in this woodland, with multiple dead trees and many more of ill health. The understory of this woodland was dominated by bramble scrub.

Along the southern extreme of the OGC route, just north of Moneypoint, the OGC will pass through an area of woodland dominated by ash and Douglas fir (*Salix* spp.), with a very dense understory of gorse and bramble scrub (Plate 3-16). Additionally, in these lands, scrub habitat has matured into scrub woodland (Plate 3-17) which was dominated by large bramble thickets with semi-mature hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), birch (*Betula pendula*), and Douglas fir (*Pseudotsuga menziesii*) scattered throughout.

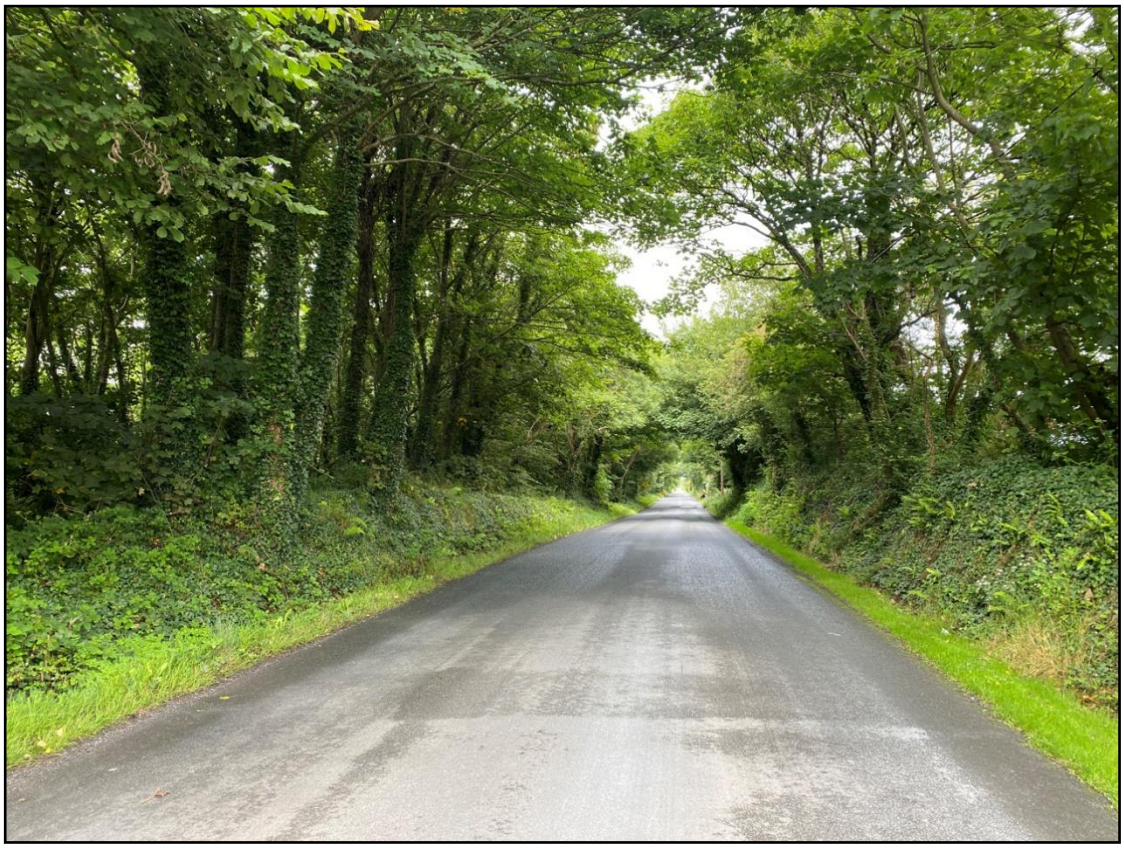


Plate 3-14 Mature mixed broadleaved woodland recorded along the OGC route.

Plate 3-15 Mixed broadleaved woodland recorded in Kilrush golf course, where ash die back is prevalent.

Plate 3-16 Mixed broadleaved woodland recorded in the southern extent of the OGC route, within Moneypoint Power Station.

Plate 3-17 Scrub woodland recorded within the grounds of Moneypoint power station.

Buildings and Artificial Surfaces (BL3)

The existing road infrastructure, as well as the buildings bordering the OGC route (Plate 3-18), were classified as Buildings and artificial surfaces (BL3). The route is primarily located along the Doonbeg (L2030) local road. Existing driveways, the Kilrush Golf Club, and hard surfaces within Moneypoint, as well as houses, farm shed/yards (Plate 3-19), and other buildings along the route are also classified BL3.

Plate 3-18 Existing road infrastructure classified as Buildings and Artificial Surfaces (BL3).

Plate 3-19 Dwellings classified as Buildings and artificial surfaces along the OGC cable route.

Eroding Upland Rivers (FW1)/Depositing lowland Rivers (FW2)

The OGC will cross 11 no. mapped EPA watercourses along its route. These are described in further detail in the Aquatic assessment in Section 3.1.3. Each watercourse was either categorized as Upland eroding rivers or Depositing lowland rivers, ranging from small highly vegetated streams (Plate 3-20), highly modified rivers (Plate 3-21) to more open rivers with typical pool riffle glide sequences (Plate 3-22). There are no proposed instream works as part of Onshore Site.

Plate 3-20 Highley vegetated mapped watercourses along the northern section of the OGC.

Plate 3-21 Heavily modified stream within Kilrush golf course, which the OGC will cross.

Plate 3-22 Section of an unmapped upland eroding stream within Moneypoint Power Station lands.

Shingle and gravelly shores (LS1)

At the southern extent of the Onshore Site, the OGC is located within grassy verges in close proximity to a Shingle and gravelly shore (LS1) (Plate 3-23). The OGC runs parallel to this habitat for approximately 370m, on the opposite site of the N67. The N67 itself provides a buffer between the works area and this habitat. This habitat was characterised by sediment that was larger than sands and smaller than that of boulder beaches. A narrow strip of grassy verge was identified between this coastal habitat and the N67.

This habitat was identified as potentially providing foraging habitat for waterbirds and waders, including bird species that are among those listed as SCIs of any SPA.

Plate 3-23 Shingle and gravelly shores habitat recorded adjacent to the southern section of the Onshore Site.

3.1.1.2 Habitats within and adjacent to the OCC

The OCC, which forms part of the Onshore Site, is located in an agricultural field best classified as Improved agricultural grassland (GA1) (Plate 3-24). This site was characterized by dominant perennial ryegrass and frequent Yorkshire fog (*Holcus lanatus*), as well as frequent to abundant recordings of common broadleaved species such as white clover (*Trifolium repens*), meadow thistle (*Cirsium arvense*), common fumitory (*Fumaria officinalis*), shepherd's purse (*Capsella bursa-pastoris*), common sorrel (*Rumex acetosa*), creeping buttercup (*Ranunculus repens*), and dandelion (*Taraxacum* spp.).

Hedgerow habitat formed the boundary of OCC site, and was also recorded throughout the site, forming smaller holdings (Plate 3-25). This habitat was characterised by dominant hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*), with an understory of bramble and gorse.

No habitats listed under Annex I of the EU Habitats Directive were recorded within or adjacent to the OCC and no significant supporting habitat for species listed under Annex II of the EU Habitats

Directive, or bird species that are among those listed as SCIs of any SPA, was identified during the surveys.

Plate 3-24 Improved agricultural grassland recorded at the OCC stie.

Plate 3-25 Hedgerow habitat delineating the OGC site.

3.1.1.3 Habitats within and adjacent to Onshore Landfall Location

The infrastructure associated with that of the Onshore Site at the OLL is located within agricultural lands (Plate 3-2) of Improved agricultural grasslands (GA1). These fields are delineated by low hedgerows and drainage ditches which were highly vegetated.

No habitats listed under Annex I of the EU Habitats Directive were recorded within or adjacent to the OLL and no significant supporting habitat for species listed under Annex II of the EU Habitats Directive was identified during the surveys. However, as discussed in Section 3.1.1.1, Exposed rocky shore habitat north of the OLL was identified as providing potential supporting habitat for SCIs of nearby SPAs.

3.1.1.4 Habitats within and adjacent to Passing Bays between OCC and N67

The proposed passing bays between the OCC and the N67, in the southern extent of the Onshore Site, are located adjacent to existing road infrastructure categorised as Buildings and artificial surfaces (BL3) and within road margins of Dry meadows and Grassy verges (GS2) and Hedgerows (WL1) (Plate 3-26).

No habitats listed under Annex I of the EU Habitats Directive were recorded within or adjacent to the passing bays and no significant supporting habitat for species listed under Annex II of the EU Habitats Directive, or bird species that are among those listed as SCIs of any SPA, was identified during the surveys.

Plate 3-26 Existing road, grassy verge, and hedgerow habitats recorded at the proposed passing bays.

3.1.2 Bird surveys

Bird species recorded during the multidisciplinary walkover surveys were typically an assemblage of common species typical of agricultural and rural environments. No Special Conservation Interest (SCI) species for any European Site were recorded during these surveys.

Whilst habitats within the Onshore Site, which typically comprised existing public roads and agricultural fields, did not provide significant supporting habitat for protected birds, intertidal habitats adjacent to the Onshore Site were identified as providing potential suitable foraging habitat for waterbirds and waders. These were identified north of the landfall site at the northern extreme of the Onshore Site and adjacent to the N67, west of Moneypoint Power Station. No works associated with the Onshore Site are proposed within any intertidal habitat.

Bird species recorded during the intertidal surveys included the following species listed under the annexes of the EU Birds Directive:

- Chough (*Pyrrhocorax pyrrhocorax*) [A346]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Great Northern Diver (Gavia immer) [A003]
- Hen Harrier (*Circus cyaneus*) [A082]
- Kingfisher (*Alcedo atthis*) [A229]
- Little Egret (*Egretta garzetta*)[A026]
- Peregrine (*Falco peregrinus*) [A103]
- Cormorant (*Phalacrocorax carbo*) [A017]
- Dunlin (*Calidris alpina*) [A149]
- Redshank (*Tringa totanus*) [A162]
- Greenshank (*Tringa nebularia*) [A164]
- Sandwich Tern (*Sterna sandvicensis*) [A191]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Curlew (*Numenius arquata*) [A160]
- Oystercatcher (*Haematopus ostralegus)* [A130]
- Kittiwake (*Rissa tridactyla*) [A188]
- Razorbill (*Alca torda*) [A200]
- Shelduck (*Tadorna tadorna*) [A048]
- Ringed Plover (*Charadrius hiaticula*) [A137]

3.1.3 Watercourse assessment

All watercourses which the Onshore Site crosses were assessed as part of multidisciplinary walkover surveys. In total, 11 EPA mapped watercourses were assessed. Figures 3-1a and 3-1b indicate all mapped watercourses which cross the Onshore Site. Most of them were categorized as small Lowland Depositing Streams (FW2) and were highly vegetated, presented little flow, had fine silt substrates, and were heavily modified, offering low fisheries and ecological value. Examples of this type of watercourse are provided in Plates 3-27, 3-28, and 3-29. These were typically found in the northern and southern extents of the Onshore Site, either forming field boundaries or culverted under existing public roads.

Additional lowland depositing streams, such as those indicated in Plates 3-30 and 3-31, were also recorded crossing the Onshore Site. Whilst these watercourses were larger than the above, and were less vegetated, the substrates of these comprised fine silt and sand and presented high turbidity and slow flows. Surrounding land uses of these watercourses comprised agriculture (direct cattle access), turbary, and forestry.

Of the 11 mapped watercourses, three were categorized as Upland Eroding streams (FW1) and displayed typically riffle-pool-glide features up and down stream of the Onshore Site (Plates 3-32 and 3-33). Land uses adjacent to these watercourses included agriculture (direct cattle access) and forestry. Whilst these watercourses presented gravel beds, water flow was slow and there was varying degrees of siltation recorded. Whilst the watercourses presented in Plate 3-34 was categorized as an upland eroding stream, this was a highly vegetated first order watercourse and presented low fisheries and ecological value.

There will be no instream works associated with the Onshore Site.

Plate 3-27 Example of heavily vegetated lowland depositing stream, in the northern extent of the Onshore site.

Plate 3-28 Example of heavily vegetated lowland depositing stream, in the southern extent of the Onshore site

Plate 3-29 Second example of heavily vegetated lowland depositing stream, adjacent to the OCC.

Plate 3-30 Larger lowland depositing stream with high degree of siltation and very slow flow.

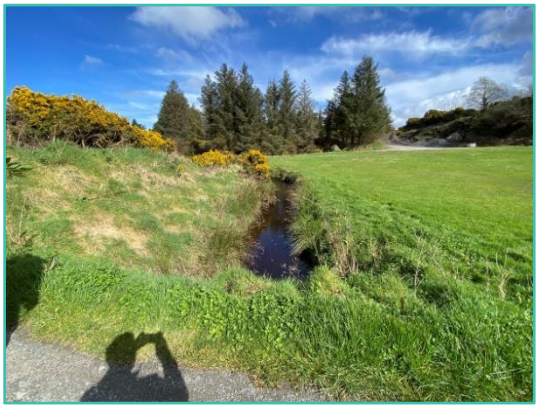


Plate 3-31 Highly modified lowland depositing stream within Kilrush Golf Club

Plate 3-32 Example of upland eroding stream, east of Kilrush

Plate 3-33 Example of upland eroding stream with high shading and adjacent to agricultural fields.

Plate 3-34 highly vegetated first order upland eroding stream

No evidence of otter, including otter resting or breeding sites were recorded up or downstream of any water crossing associated with the Onshore Site. Additionally, no evidence of otter was recorded along the coastal shore in the northern extent of the Onshore Site. For that reason, no requirement for a derogation licence has been identified, at this stage. However, watercourses and coastal shores provide potential foraging, commuting and breeding habitat for this species and are likely to be used on occasion by otter. Therefore, should the position change such that a derogation licence is required in the future, one will be sought and obtained.

No significant potential supporting habitat for freshwater pearl water was recorded within or adjacent to the Onshore Site. Watercourses associated with the Onshore Site were assessed as providing low suitability for supporting FWPM as they were typically small first order streams, highly vegetated, heavily shaded, or comprised fine sediment substrates.

3.1.4 Terrestrial Faunal Species Surveys

No indication of any protected terrestrial faunal species was recorded within or adjacent to the Onshore Site, nor was any significant supporting habitat for any protected species recorded. However, woodlands, hedgerows, and treelines provide potential foraging, commuting, and breeding habitat for a range of the protected fauna.

SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

Mal Bay

Shannon Estuary North

LEGEND

- EIAR Site Boundary
- WFD Waterbodies
- WFD Catchments
- WFD Sub-Catchments

1 0 1 2 3 4 5
Kilometres

PROJECT TITLE

Sceirde Rocks

MAP TITLE

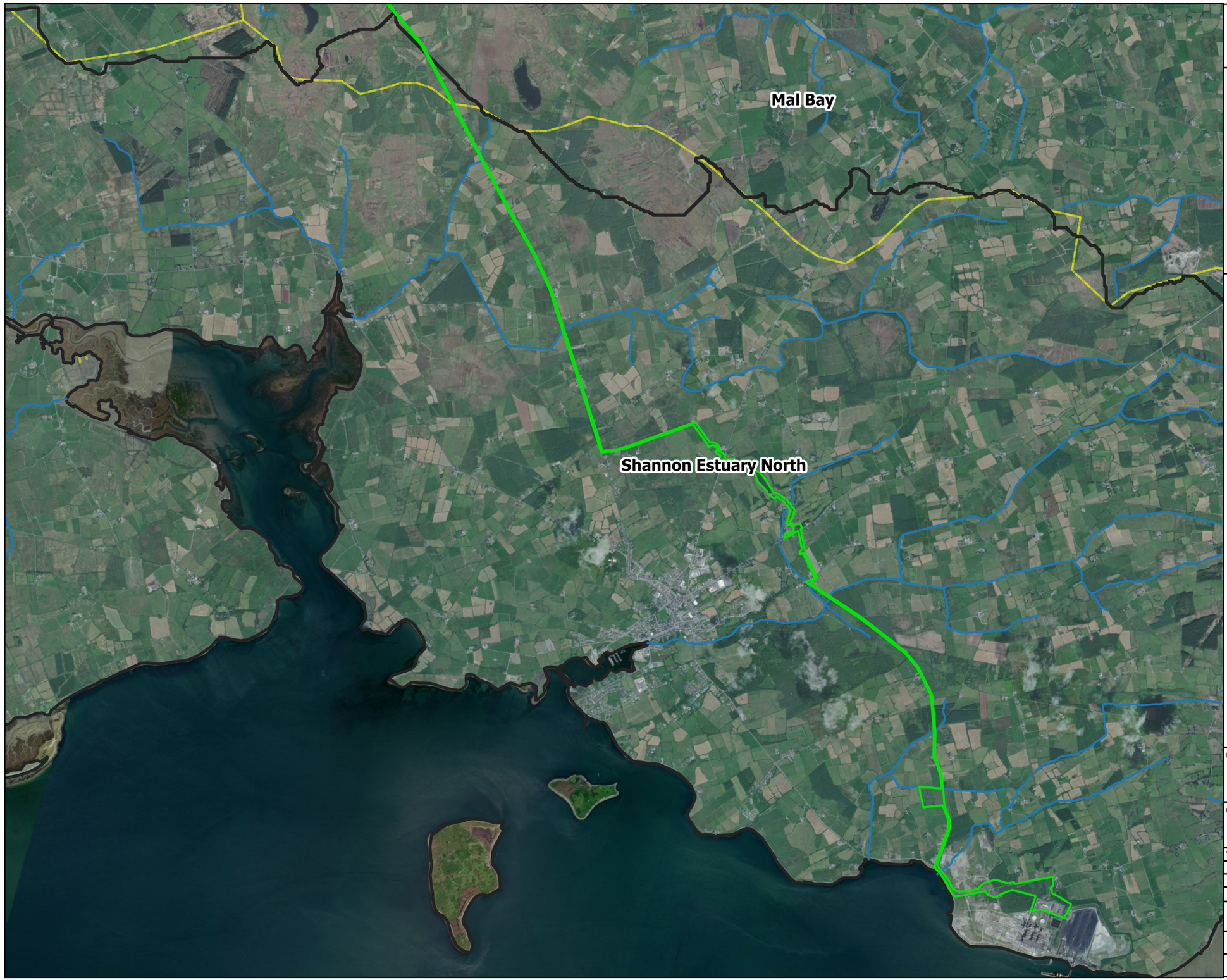
EPA Mapped Watercourses in Relation to the Onshore Site (Mal Bay WFD Catchment)

VER	REMARKS	DATE	Drawn	Approved
		12/12/2024	PD	PR

DRAWING NO

Figure 3-1a

SCALE	PAPER SIZE	DATUM	PROJECTION
1:50,000	A4	IRENET95	Transverse Mercator



SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

- EIAR Site Boundary
- WFD Waterbodies
- WFD Catchments
- WFD Sub-Catchments

1 0 1 2 3 4 5
Kilometres

PROJECT TITLE

Sceirde Rocks

MAP TITLE

EPA Mapped Watercourses in Relation to the Onshore Site (Shannon Estuary North WFD Catchment)

VER	REMARKS	DATE	Drawn	Approved
		12/12/2024	PD	PR

DRAWING NO

Figure 3-1b

SCALE	PAPER SIZE	DATUM	PROJECTION
1:50,000	A4	IRENET95	Transverse Mercator

3.1.5 Invasive species

Japanese knotweed (*Fallopia japonica*) was recorded along the OGC route in several locations (Plates 3-35 to 3-37). Additionally, rhododendron was recorded within Kilrush Golf Club, adjacent to the OGC route (Plate 3-38). These species are listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) and the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No 374 of 2024). Locations where Japanese Knotweed and Rhododendron were recorded are provide in Figures 3-2a, 3-3b, 3-4c and 3-5d.

Plate 3-35 Japanese knotweed recorded along the northern section of the OGC route.

Plate 3-36 Japanese knotweed recorded along the OGC route within Kilrush Golf Club.

Plate 3-37 Japanese knotweed recorded along the southern section of the OGC route.

Plate 3-38 Stand on rhododendron recorded within Kilrush Golf Club.

494400
495000
495600
664800
664200
N
0
100
200 m

SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

EIAR Site Boundary

Japanese Knotweed

PROJECT TITLE

Sceirde Rocks

MAP TITLE

Invasive Species Map 1

VER	REMARKS	DATE	Drawn	Approved
V1		05/12/2024	PD	PR

DRAWING NO

Figure 3-2a

SCALE	PAPER SIZE	DATUM	PROJECTION
1:6,000	A4	IRENET95	Transverse Mercator

499600
500000
500400
N
657200
656800

SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

- EIAR Site Boundary
- Japanese Knotweed
- Rhododendron

0 100 200 m

PROJECT TITLE
Sceirde Rocks

MAP TITLE
Invasive Species Map 2

VER	REMARKS	DATE	Drawn	Approved
V1		05/12/2024	PD	XX

DRAWING NO
Figure 3-3b

SCALE	PAPER SIZE	DATUM	PROJECTION
1:4,000	A4	IRENET95	Transverse Mercator

500000
500400
500800
656400
656000
N

SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

- EIAR Site Boundary
- Japanese Knotweed
- Rhododendron

0 100 200 m

PROJECT TITLE

Sceirde Rocks

MAP TITLE

Invasive Species Map 3

VER	REMARKS	DATE	Drawn	Approved
V1		05/12/24	PD	PR

DRAWING NO

Figure 3-4c

SCALE	PAPER SIZE	DATUM	PROJECTION
1:4,000	A4	IRENET95	Transverse Mercator

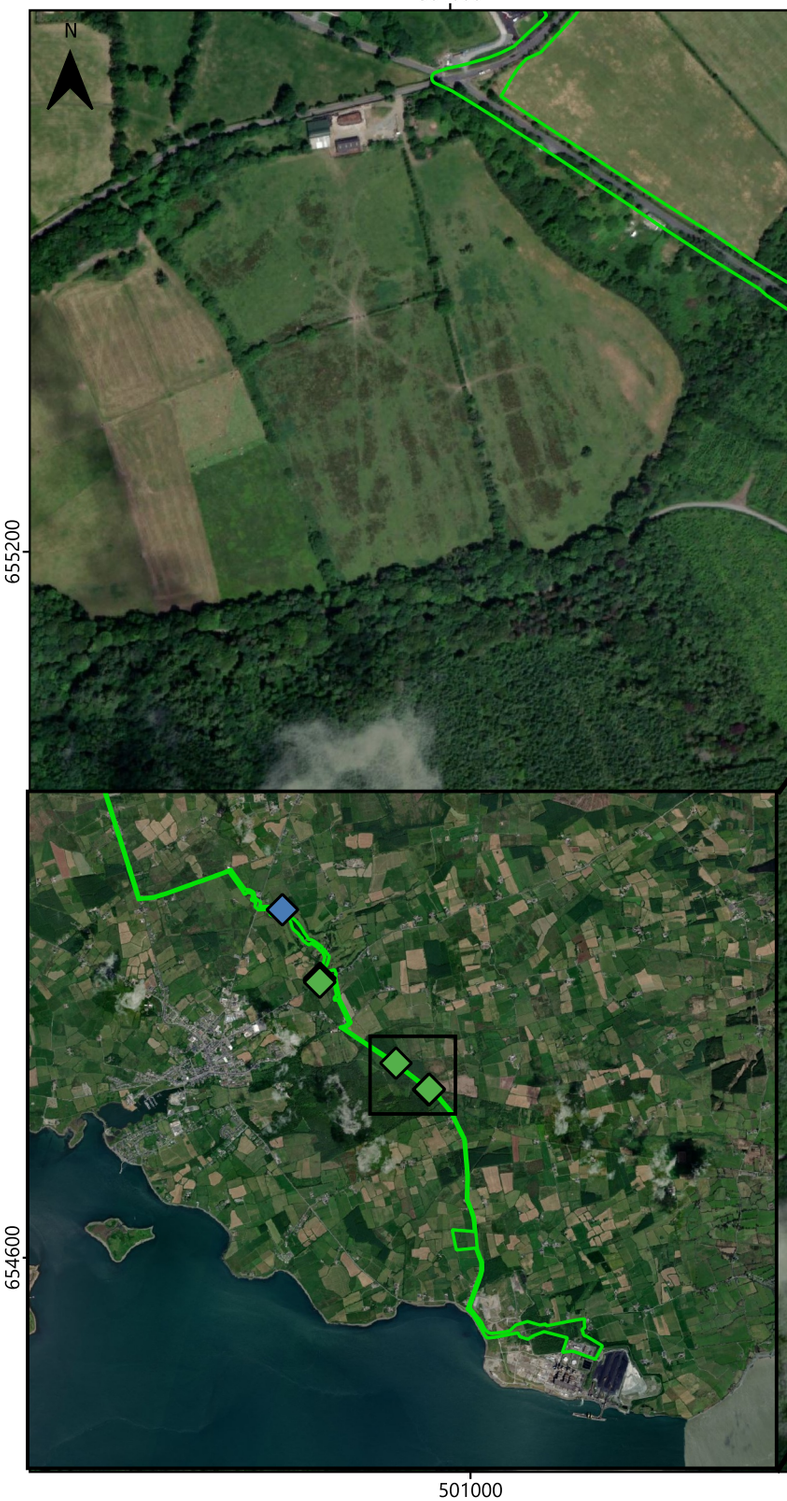
501000

501600

655200

654600

N



SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

- EIAR Site Boundary
- Japanese Knotweed
- Rhododendron

0 100 200 m

PROJECT TITLE

Sceirde Rocks

MAP TITLE

Invasive Species Map 4

VER	REMARKS	DATE	Drawn	Approved
V1		05/12/24	PD	PR

DRAWING NO

Figure 3-5d

SCALE	PAPER SIZE	DATUM	PROJECTION
1:6,000	A4	IRENET95	Transverse Mercator

4. IDENTIFICATION OF RELEVANT EUROPEAN SITES

4.1 Identification of Relevant European Sites

The methodology detailed in Section 3.2 above was used to establish any European Sites upon which there is a potential for a Likely Significant Effect to occur either individually or in combination with other plans and projects as a result of the Onshore Site.

European Sites in the vicinity/potentially within the Zone of Influence of the Onshore Site and hydrological catchments are shown on Figure 4-1.

Information on these sites and the site-specific conservation objectives is provided in Table 4-1.

The Conservation Objectives, Site synopsis, and Natura 2000 Data Forms for each considered European Sites can be found at the following links:

Tullaher Lough and Bog SAC (002343)

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002343.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0002343
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002343.pdf

Lower River Shannon SAC (002165)

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protectedsites/conservation_objectives/CO002165.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0002165
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002165.pdf

Carrowmore Dunes SAC (0022500)

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002250.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0002250
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002250.pdf

Kilkee Reefs SAC (002264)

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002264.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0002264
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY002264.pdf

Carrowmore Point to Spanish Point and Islands SAC (001021)

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001021.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0001021
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY001021.pdf

River Shannon and River Fergus Estuaries SPA 004077

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004077.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0004077
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004077.pdf

Mid-Clare Coast SPA (004182):

- Site Specific Conservation Objectives: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004182.pdf
- Natura 2000 Data Form: https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IE0004182
- Site synopsis: https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004182.pdf

480000
490000
500000
510000
670000
660000
650000
N
Carrowmore Point to Spanish Point and Islands SAC
Mid-Clare Coast SPA
Carrowmore Dunes SAC
Mal Bay
Tullaher Lough and Bog SAC
Kilkee Reefs SAC
Illaunonearaun SPA
Shannon Estuary North
River Shannon and River Fergus Estuaries SPA
Lower River Shannon SAC
Shannon Estuary South
Tralee Bay-Feale

SCEIRDE ROCKS WINDFARM
Feirm Ghaoithe Charraigeacha Sceirde

LEGEND

- EIAR Site Boundary
- Special Areas of Conservation (SACs)
- Special Protected Areas (SPAs)
- WFD Watercourses
- WFD Catchments

1 0 1 2 3 4 5
Kilometres

PROJECT TITLE
Sceirde Rocks

MAP TITLE
European Sites surrounding the Onshore Site

VER	REMARKS	DATE	Drawn	Approved
		12/12/2024	PD	PR

DRAWING NO
Figure 4-1

SCALE	PAPER SIZE	DATUM	PROJECTION
1:150,000	A4	IRENET95	Transverse Mercator

Table 4-1 Identification of Designated sites within the Likely Zone of Influence

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
Special Areas of Conservation (SAC)			
Tullaher Lough and Bog SAC (002343) **Approx. Distance:** 0m – adjacent to Onshore Site.	› Active raised bogs* [7110] › Degraded raised bogs still capable of natural regeneration [7120] › Transition mires and quaking bogs [7140] › Depressions on peat substrates of the Rhynchosporion [7150]	Detailed conservation objectives for this site (Version 1, December 2016), were reviewed as part of the assessment and are available at: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002998.pdf	The Onshore Site is located adjacent to this SAC where a short section of the OGC is within exiting public road infrastructure which delineates this SAC. Whilst the Onshore Site is adjacent to this SAC, the works area and peatland habitats recorded within the SAC are separated by existing buffers of grassy verges, hedgerows, and scrub, and therefore, there is no potential for likely significant effects as a result of direct habitat loss. No potential pathway for significant direct effects on this European Site was identified, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects. The potential for significant indirect effects on this SAC was also considered. Whilst there is direct hydrological connectivity between the Onshore Site and this SAC via the Carrowmore-South stream, the SAC is located upstream of the works area. However, taking a highly precautionary approach and in the absence of mitigation, considering the proximity of the SAC to the works area, there is potential for significant indirect effects on this SAC, as a result of spillages of pollutants entering the SAC during the construction phase of the Onshore Site. **A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Onshore Site works to result in Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.**

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
Lower River Shannon SAC (002165) **Approx. Distance:** 5m **Hydrological Distance:** 5m	› Sandbanks which are slightly covered by sea water all the time [1110] › Estuaries [1130] › Mudflats and sandflats not covered by seawater at low tide [1140] › Coastal lagoons [1150] › Large shallow inlets and bays [1160] › Reefs [1170] › Perennial vegetation of stony banks [1220] › Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] › *Salicornia* and other annuals colonising mud and sand [1310] › Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] › Mediterranean salt meadows (*Juncetalia maritimi*) [1410] › Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] › Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410] › Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Detailed conservation objectives for this site (Version 1, August 2012), were reviewed as part of the assessment and are available at: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002074.pdf	The Onshore Site is located adjacent to this SAC where a short section of the OGC is within grassy verges parallel to the N67 and this SAC, west of Moneypoint Power Station. Whilst the Onshore Site is adjacent to this SAC, the works area and the SAC are separated by existing buffers of grassy verges and the existing N67 national road, and therefore, there is no potential for likely significant effects as a result of direct habitat loss. As per the SSCOs of the SAC, habitats adjacent to the Onshore Site provide suitable commuting and foraging habitat for aquatic and marine QI species, and therefore, taking a precautionary approach and in the absence of mitigation, there is potential for likely significant direct effects on QI species via disturbance during construction. The potential for significant indirect effects on this SAC was also considered. In addition to the proximity of the SAC to the Onshore Site, the OGC route associated with the Onshore Site crosses seven mapped watercourses which discharge into this SAC. Therefore, taking a precautionary approach and in the absence of mitigation, there is potential for significant indirect effects on this SAC via deterioration of water quality arising from the runoff of pollutants into these watercourses during construction. Considering the nature and scale, as well as the design of the Onshore Site, no potential pathway for likely significant effects on this European Site was identified during the operation and maintenance phase of the Onshore Site, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects.

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
	› *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029] › *Petromyzon marinus* (Sea Lamprey) [1095] › *Lampetra planeri* (Brook Lamprey) [1096] › *Lampetra fluviatilis* (River Lamprey) [1099] › *Salmo salar* (Salmon) [1106] › *Tursiops truncatus* (Common Bottlenose Dolphin) [1349] › *Lutra lutra* (Otter) [1355]		**A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Onshore Site works to result in Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.**
Carrowmore Dunes SAC (002250) **Approx Distance:** 1.5km **Hydrological Distance:** 1.8 km	› Reefs [1170] › Embryonic shifting dunes [2110] › Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] › Fixed coastal dunes with herbaceous vegetation (grey dunes)* [2130] › Narrow-mouthed Whorl Snail (*Vertigo angustior*) [1014]	Detailed conservation objectives for this site (Version 1, March 2014), were reviewed as part of the assessment and are available at: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002034.pdf	There will be no direct effects as the Onshore Site is located entirely outside of this designated site. No QI habitats or significant supporting habitat for any QI species associated with the SAC were recorded within or adjacent to the Onshore Site and therefore, there is no potential for direct *ex-situ* effects on this European Site. The potential for significant indirect effects on this SAC was also considered. The OGC route associated with the Onshore Site crosses five mapped watercourses which discharge into Doonbeg Bay and into this SAC approx. 1km downstream. These include the Caherlean Order 1 stream [EPA Code: 28C83] and the Doon Beg Order 1 stream [EPA Code: 28D25] within the Mal Bay WFD Catchment. Therefore, taking a precautionary approach and in the absence of mitigation, there is potential for significant indirect effects on this SAC via deterioration of water quality arising from the runoff of pollutants into these watercourses during construction.

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
			Considering the nature and scale, as well as the design of the Onshore Site, no potential pathway for likely significant effects on this European Site was identified during the operation and maintenance phase of the Onshore Site, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects. **A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Onshore Site works to result in Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.**
Kilkee Reefs SAC (002264) **Approx. Distance:** 2.8 km **Hydrological Distance:** No direct connectivity	› Large shallow inlets and bays [1160] › Reefs [1170] › Submerged or partially submerged sea caves [8330]	Detailed conservation objectives for this site (Version 1, August 2014), were reviewed as part of the assessment and are available at: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002265.pdf	There will be no direct effects as the Onshore Site is located entirely outside of this designated site. No QI habitats associated with the SAC were recorded within or adjacent to the Onshore Site and therefore, there is no potential for direct *ex-situ* effects on this European Site. The potential for significant indirect effects on this SAC was also considered. Whilst the majority of the Onshore Site is located within hydrological sub-basins which do not drain into this SAC, very small sections of the OGC route are within the Ballard 010 sub-basin, which does drain into this SAC. However, there are no mapped watercourses within or in close proximity to these overlaps and there is no direct hydrological connectivity between the Onshore Site and this SAC. Given the nature and scale of the works, the terrestrial distance between the development and the SAC, and absence of direct

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
			hydrological connectivity, no potential for significant indirect effects on the SAC was identified. **No source-pathway-receptor chain for likely significant effect exists and therefore, this SAC is not within the Likely Zone of Influence and no further assessment is required.**
Carrowmore Point to Spanish Point and Islands SAC (001021) **Approx. Distance**: 3.4 km **Hydrological Distance:** No direct connectivity	› Coastal lagoons* [1150] › Reefs [1170] › Perennial vegetation of stony banks [1220] › Petrifying springs with tufa formation (Cratoneurion) [7220]	Detailed conservation objectives for this site (Version 1, April 2014), were reviewed as part of the assessment and are available at: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002031.pdf	There will be no direct effects as the Onshore Site is located entirely outside of this designated site. No QI habitats associated with the SAC were recorded within or adjacent to the Onshore Site and therefore, there is no potential for direct *ex-situ* effects on this European Site. The potential for significant indirect effects on this SAC was also considered. No direct hydrological connectivity via surface water exists between the Onshore Site and this SAC as they are located in separate hydrological sub-catchments. Given the nature and scale of the works, the distance between the development and the SAC, and absence of direct hydrological connectivity, no potential for significant indirect effects on the SAC was identified. **No source-pathway-receptor chain for likely significant effect exists and therefore, this SAC is not within the Likely Zone of Influence and no further assessment is required.**
Special Protection Area (SPA)			

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
River Shannon and River Fergus Estuaries SPA (004077) **Approx. Distance:** 5m **Hydrological Distance:** 5m	› Cormorant (*Phalacrocorax carbo*) [A017] › Whooper Swan (*Cygnus cygnus*) [A038] › Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] › Shelduck (*Tadorna tadorna*) [A048] › Wigeon (*Anas penelope*) [A050] › Teal (*Anas crecca*) [A052] › Pintail (*Anas acuta*) [A054] › Shoveler (*Anas clypeata*) [A056] › Scaup (*Aythya marila*) [A062] › Ringed Plover (*Charadrius hiaticula*) [A137] › Golden Plover (*Pluvialis apricaria*) [A140] › Grey Plover (*Pluvialis squatarola*) [A141] › Lapwing (*Vanellus vanellus*) [A142] › Knot (*Calidris canutus*) [A143] › Dunlin (*Calidris alpina*) [A149] › Black-tailed Godwit (*Limosa limosa*) [A156] › Bar-tailed Godwit (*Limosa lapponica*) [A157] › Curlew (*Numenius arquata*) [A160] › Redshank (*Tringa totanus*) [A162] › Greenshank (*Tringa nebularia*) [A164]	Detailed conservation objectives for this site (Version 1, September 2012) were reviewed as part of the assessment and are available at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004077.pdf	As potential suitable foraging habitat for SCIs of the SPA was recorded adjacent to the Onshore Site, within an intertidal bay adjacent to the N67, taking a precautionary approach and in the absence of mitigation, there is potential for significant direct effects on SCI species via disturbance during construction. No significant supporting habitat was recorded within the Onshore Site and therefore, there is no potential for direct effects as a result of habitat loss. The potential for significant indirect effects on this SPA was also considered. The OGC route associated with the Onshore Site crosses seven mapped watercourses which discharge into this SPA. Additionally, the southern extent of the Onshore Site is located adjacent to this SPA. Therefore, taking a precautionary approach and in the absence of mitigation, and due to the proximity of the SPA to the proposed works and direct hydrological connectivity, a potential pathway for significant indirect effects on supporting wetland habitat for the SCIs of this SPA was identified via deterioration of water quality arising from the runoff or spillage of pollutants during construction of the Onshore Site. Considering the nature and scale, as well as the design of the Onshore Site, no potential pathway for likely significant effects on this European Site was identified during the operation and maintenance phase of the Onshore Site, when considered in the absence of any mitigation, individually or cumulatively with other plans or projects. **A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Onshore Site**

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
	› Black-headed Gull (*Chroicocephalus ridibundus*) [A179] › Wetland [A999]		**works to result in Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.**
Mid-Clare Coast SPA (004182) **Approx. Distance:** 760m **Hydrological Distance:** 900m	› Cormorant (*Phalacrocorax carbo*) [A017] › Barnacle Goose (*Branta leucopsis*) [A045] › Ringed Plover (*Charadrius hiaticula*) [A137] › Sanderling (*Calidris alba*) [A144] › Purple Sandpiper (*Calidris maritima*) [A148] › Dunlin (*Calidris alpina alpina*) [A149] › Turnstone (*Arenaria interpres*) [A169] › Wetlands and waterbirds [A999]	Detailed conservation objectives for this site (Version 1, September 2014) were reviewed as part of the assessment and are available at https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004182.pdf	There will be no direct effects as the Onshore Site is located entirely outside of this designated site. No significant supporting habitat for any SCI of this SPA was recorded within the Onshore Site. Whilst potential suitable foraging habitat for SCIs of the SPA was recorded within an intertidal shore adjacent to the Onshore Site, approximately 120m north of the HDD compound at the OLL, considering the short-term nature of the works at this location and the 120m buffer of agricultural fields, no potential pathway for likely significant effects on this SPA, as a result of disturbance or habitat loss, was identified. The potential for significant indirect effects on this SAC was also considered. The OGC route associated with the Onshore Site crosses five mapped watercourses which discharge into this SPA approx. 1km downstream. Therefore, taking a precautionary approach and in the absence of mitigation, a potential pathway for indirect effects on supporting wetland habitat for the SCIs of this SPA was identified via the deterioration of water quality within the SPA, arising from the runoff of pollutants into these watercourses during construction. Considering the nature and scale, as well as the design of the Onshore Site, no potential pathway for likely significant effects on this European Site was identified during the operational phase of the Onshore Site, when considered in the absence of any

European Sites and distance from Onshore Site	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 21/11/2024	Conservation Objectives	Identification of Source-Pathway-Receptor chain and determination of Likely Significant Effects (LSEs)
			mitigation, individually or cumulatively with other plans or projects. **A source pathway receptor chain was identified and in the absence of mitigation, there is potential for the Onshore Site works result in Likely Significant Effects on this European Site. Therefore, the European Site is located within the Likely Zone of Influence and is considered further in this assessment.**

4.2 European Sites with the Potential to be Significantly Affected by the Onshore Site

Taking the precautionary approach and in the absence of mitigation, a potential pathway for likely significant effects on the following European site was identified as a result of surface water deterioration, habitat loss, and disturbance/ displacement arising from the construction phase of the Onshore Site:

- Tullaher Lough and Bog SAC (002343),
- Lower River Shannon SAC (002165),
- Carrowmore Dunes SAC (002250),
- River Shannon and River Fergus Estuaries SPA (004077), and
- Mid-Clare Coast SPA (004182).

4.3 Assessment of Likely Significant Effects when considered in-cumulation with the Offshore Site

4.3.1 Impacts of the Onshore Site in cumulation with the Offshore Site

Whilst this Appropriate Assessment Screening Report provides an assessment of the potential for LSE on European Sites arising from the Onshore Site, this section considers the potential for LSE on European Sites as a result of the cumulation of both the Onshore Site and Offshore Sites i.e. the Project.

Having regard to this document, as well as the AASR for the Offshore Site, included as Appendix 1 of Volume 1, the following European Sites have been identified to be within the ZoI for both the Offshore and Onshore Sites, based on consideration of the site-specific conservation objectives of the European Sites and the Project's ZoI in respect of the specific QIs of the European Sites as set out in Section 3.2 of this document and Section 1.3.1.1 of Appendix 1 of Volume 1 – Offshore Site NIS:

- Lower River Shannon SAC (002165),
- Carrowmore Dunes SAC (002250),
- River Shannon and River Fergus Estuaries SPA (004077), and
- Mid-Clare Coast SPA (004182).

Considering the screening assessments in both Appropriate Assessment Screening Reports, no additional European Sites have been identified to be within the ZoI as a result of combined effects from the Onshore and Offshore Sites. The potential for the Onshore Site to result in LSE on the aforementioned European Sites when considered in cumulation with the Offshore Site cannot be excluded and is considered further in the NIS.

The potential LSE of the Project in combination with other plans and projects identified in this AASR for the Onshore Site is considered in further detail below.

4.4 Assessment of the Onshore Site In Combination Effects with other Plans and Projects

This section assesses the potential LSE of the Onshore Site in combination with other plans and projects on the relevant European Sites.

A search and review was conducted across various platforms, databases and portals to compile a list of other plans and projects that may have the potential to result in in combination impacts on European Sites was conducted. This included a review of online Planning Registers, development plans and other available information and served to identify past and future plans and projects, their activities and their predicted environmental effects. Resources used are provided in Table 4-2. Particular focus has been placed on those projects that are in closest proximity to the Onshore Site and those that could potentially result in impacts on European Sites in light of the sites' conservation objectives, through the pathways identified in Section 4.1 of this Report.

Table 4-2 Data sources used to compile list of plans and projects for in-combination assessment

Planning Registers/plans	Online link
An Bord Pleanála's (ABP) online planning portal	https://www.pleanala.ie/en-ie/Map-search
Clare County Council's online planning portal	https://www.myplan.ie/national-planning-application-map-viewer/
EIA Portal	https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1
Regional Spatial and Economic Strategy for the Southern Region (RSES) (2020-2032)	https://www.southernassembly.ie/regional-planning/rses
Clare County Development Plan 2023-2029	https://clarecdp2023-2029.clarecoco.ie/
Ireland 4th National Biodiversity Action plan 2023-2030.	https://www.npws.ie/sites/default/files/files/4th_National_Biodiversity_Action_Plan.pdf
Clare Biodiversity Action Plan 2017 – 2023	https://actionforbiodiversity.ie/app/uploads/2023/08/Clare-Biodiversity-Action-Plan-2017-2023.pdf
Water Action Plan 2024	https://lawaters.ie/app/uploads/2024/09/Water-Action-Plan-Exec-Summary-2024_ENG_v2.pdf

4.4.1 Review of Plans

The following plans have been reviewed and taken into consideration as part of this assessment:

- Regional Spatial and Economic Strategy for the Southern Region (RSES) (2020-2032)
- Clare County Development Plan 2023-2029
- Ireland 4th National Biodiversity Action plan 2023-2030.
- Clare Biodiversity Action Plan 2017 – 2023
- Water Action Plan 2024

The review focused on policies and objectives that relate to European Sites of the Natura 2000 Network and are fully detailed in Appendix B of this AASR. Following a review and assessment of plans, which is detailed in Appendix B, there is no potential for the Onshore Site to result in significant effects on any additional European Site.

4.4.2 Review of Other projects

Assessment material for this in-combination impact assessment was compiled on the relevant developments within the vicinity of the Onshore Site. The material was gathered through a search of relevant online Planning Registers (Table 4-3), reviews of relevant documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts. All relevant projects were considered in relation to the potential for in-combination effects. All relevant data was reviewed (e.g. individual AASRs, NISs, layouts, drawings etc.) for all relevant projects where available. This included:

- Plan / project timeframe
- Physical footprint
- Distance to the Onshore Site
- Associated activities
- Intensity of associated activities

The projects considered are those listed in Table 4-3 and in Appendix B. Particular focus has been placed on those projects that are in closest proximity to the Onshore Site and those that could potentially result in impacts on SCI bird species, surface water, groundwater and QI habitats and species.

All projects within the vicinity of the Onshore Site were considered as part of this assessment and predominantly included developments pertaining to the following:

- Private developments
- Commercial
- Agriculture
- Forestry
- Other renewable energy developments/infrastructure

Table 4-3 List of Projects considered in the in-combination impact assessment for the Onshore Site

Case number	Project description	Status
ABP Case ID: 319080	Proposed transition and conversion of the existing 900MW electricity generating station from coal to heavy fuel oil and associated ancillary development at Moneypoint Generating Station, Moneypoint, Co. Clare.	Approved with conditions on 25/09/2024

ABP Case ID: 307798	Proposed 400kV electricity transmission cables, extension to the existing Kilpaddoge Electrical Substation and associated works, between the existing Moneypoint 400kV Electrical Substation in the townland of Carrowdoita South County Clare and existing Kilpaddoge 220/110kV Electrical Substation in the townland of Kilpaddoge County Kerry. The development includes work in the foreshore.	Approved with conditions on 04/06/2021
CCC Planning Ref: 22255	Change of design of a dwelling house and garage previously granted under C/603 granted by Kilrush Urban District council, along with all associated works.	Granted with conditions on 15/06/2022
CCC Planning Ref: 19890)	To RETAIN attic conversion, fenestration and materials changes together with all ancillary site development works and services.	Granted with conditions on 10/06/2020
CCC Planning Ref: 21638	To demolish existing substandard derelict cottage and sheds and to construct a replacement dwelling house, site entrance, private garage and on-site waste water treatment system along with all associated site works.	Granted with conditions on 16/02/2022
CCC Planning Ref: 23265	For development which will consist of the completion of the construction of partially constructed domestic dwelling and all ancillary site work. The site is within an area of Special Control, designated as a Rural Area under Strong Urban Pressure in the Clare County Development Plan 2017-2023.	Granted with conditions on 21/09/2023
CCC Planning Ref: 20672	To RETAIN a private garage and conversion of attic space to habitable accommodation along with all associated works.	Granted with conditions on 18/12/2020
CCC Planning Ref: 211174	To construct new dwelling including garage, proposed site entrance, proposed treatment unit and percolation area, including all ancillary site works.	Granted with conditions on 25/05/2022
CCC Planning Ref: 20661	For development comprising (a) demolition of (i) single storey porch to front, (ii) single storey extension to rear, (iii) 2 no. gables to front, (iv) existing roof structure and 2 no. chimneys, (b) lowering of existing window head and cill to front elevation , creation of new sliding door open to side (north-east) elevation and creation of new window open to rear elevation, (c) construction of (i) new first floor extension over entire existing ground floor, (ii) storey and a half extension to front and (iii) storey and a half extension to rear, (d) construction of new pitched roof structure over entire comprising new gables to all (front, side and rear) elevations, raising of existing ridge height, 5 no. velux to front and 3 no. velux to side (north-east), (e) new on-site waste water treatment system	Granted with conditions on 14/12/2020

	with soil polishing filter and (f) all ancillary site works.	
CCC Planning Ref: 20551	The development will consist of construction of an agricultural shed, with underground slatted slurry storage tanks in place of existing open slurry tank and all associated site works.	Granted with conditions on 19/12/2020
CCC Planning Ref: 22956	Of existing extension and alterations to P07/173.	Granted with conditions on 24/01/2023
CCC Planning Ref: 20275	For the Construction of a single storey extension to existing dwelling to include front porch, Living area, Dining area, T.V Room, Play room and for internal and elevational changes to existing dwelling. Also PERMISSION is sought for the demolition of existing conservatory to side of dwelling and demolition of detached garage, including ancillary site works.	Granted with conditions on 08/08/2020
CCC Planning Ref: 211095	To demolish existing derelict former dwelling and to construct a single dwelling house, waste-water treatment system along with ancillary site works.	Granted with conditions on 15/11/2022
CCC Planning Ref: 19523	To erect dwelling house, septic tank - foul sewer treatment plant, percolation area and new site entrance.	Granted with conditions on 25/11/2019
CCC Planning Ref: 19380	To develop a 9-hole pitch and putt course, reception hut and car parking facilities along with all associated works.	Granted with conditions on 12/10/2019
CCC Planning Ref: 19816	To construct a single story extension and to RETAIN conservatory to existing dwelling house with all necessary ancillary works.	Granted with conditions on 11/01/2020
CCC Planning Ref: 19746	For development on a c. 1.8 ha site located within Moneypoint Generating Station, Carrowdotia North and Carrowdotia South, Kilimer, County Clare (Eircode V15 R963) which is licenced by the Environmental Protection Agency (EPA) under an Industrial Emissions (IE) Licence (Ref.P0605-04) and Upper Tier COMAH site and therefore falls under the requirements of the Control of Major Accident Hazard Regulations (COMAH) Regulations, 2015. The development, which will be located within a fenced compound c. 0.94 ha. will consist of a 300 to 400 MVA (electrical rating) synchronous condenser, including the following elements: a) a Generator and Flywheel building (c. 962 sq.m., c. 15m high) to house equipment including the generator, flywheel, lube oil skid, air compressor and pumps; b) supporting items of plant located within the compound including *cooling equipment (c. 690 sq.m., c. 3m high); *c. 7m high modular containers to house electrical and control equipment (total area of c. 384sq.m); *a generator step-up transformer (c.150 sq.m c. 8m high), auxilary transformer (c. 48 sq.m., 7m high)	Granted with conditions on 21/12/2019

	and electrical plant including an external circuit breaker (c 66 sq.m., c. 9m high); *fire fighting water tank (c. 7m dia., c. 8m high, pump house (c. 21 sq.m., c. 3m high); and * an above-ground oil separator and collection pit (c. 72sq.m.) connections to existing site services networks including electrical, water and wastewater and an underground surface water attenuation tank connecting to existing surface water drains; c) all other ancillary and miscellaneous site works including site clearance; site access, internal roads and development of areas of hard standing including a maintenance lay-down area; and d) the development will be bounded by a c. 3m high chainlink fence. Site access will be by means of a new c. 2.7 m high palisade gate accessed from existing roads within the station site. Planning Permission is being sought for a duration of 10 years.	
CCC Planning Ref: 19817	The development will consist of the addition of a porch to the main entrance at the front of existing dwelling and the addition of a stand-alone garage to the side of existing dwelling and associated ancillary site works.	Granted with conditions on 16/01/2020
CCC Planning Ref: 23502	To construct new club house and facilities, with effluent treatment system, all associated site and ancillary works, and change of use of the existing club house into a club training room and gym.	Granted with conditions on 20/12/2023
CCC Planning Ref: 211241	Of the development at a c.0.012 ha site in the car park of Tesco, Ennis Road, Kilrush, Co. Clare. The development consists of RETENTION permission for "Click and Collect" signage in the existing Tesco car park.	Granted with conditions on 01/03/2022
CCC Planning Ref: 21947	For development at a c.0.015ha site in the car park of Tesco, Ennis Road, Kilrush, Co Clare. The development will consist of; (i) the construction of a sheltered canopy (c. 50 sq.m) in the existing car park for the purpose of providing 2 no. dedicated "Click and Collect" spaces for the existing Tesco store; and (ii) ancillary signage, a pedestrian crossing and all associated site development works.	Granted with conditions on 30/11/2021
CCC Planning Ref: 21595	To RETAIN the as constructed foundation for a machinery shed and planning PERMISSION to complete the construction of the machinery shed along with all associated site works and services.	Granted with conditions on 18/01/2022
CCC Planning Ref: 2360574	For (a) to construct extensions to the front, side and rear of the existing dwelling house; (b) to make elevational alterations to the existing house; (c) to construct a standalone storage outbuilding ancillary to the dwelling house; (d) to construct a garden room ancillary to the dwelling house; (e) to make alterations to the existing private shed; and (f) all associated site works and services.	Granted with conditions on 19/03/2024

CCC Planning Ref: 2332	For development within the Moneypoint Generating Station, Carrowdotia North and Carrowdotia South, Kilimer, County Clare (Eircode V15 R963) which is licenced by the Environmental Protection Agency (EPA) under an Industrial Emissions (IE) Licence (Ref P0605-04) and and Upper tier COMAH site and therefore falls under the requirements of the Control of Major Accident Hazard Regulations (COMAH) Regulations, 2015. The development, which will be located at various locations within the station complex, will consist of land based site Investigation (SI) works comprising of boreholes and trial pits across the site.	Granted with conditions on 18/04/2023
CCC Planning Ref: 22553	To construct new bay window and porch to front elevation.	Granted with conditions on 20/09/2022
CCC Planning Ref: 168002	For the following proposed development; (a) Three metre long two metre high wall and associated works to divide the existing laneway, (b) New vehicular access and three metre wide paved road to facilitate vehicular access from Sycamore Drive to the eastern section of the existing laneway, (c) Relocation of the existing pedestrian crossing point within Sycamore Drive, (d) Site clearance of all waste material from the existing laneway and (e) ancillary site works.	Granted with conditions on 09/05/2016.
CCC Planning Ref: 22435	Of as-constructed ground floor bay window and PERMISSION for alterations to first floor windows on front elevation.	Granted with conditions on 05/08/2022
CCC Planning Ref: 23253	To demolish existing shed at rear of house and construct new single storey extension to rear of dwelling.	Granted with conditions on 26/07/2023
CCC Planning Ref: 20318	For development on a c. 2.7 ha site located within Moneypoint Generating Station, Carrowdotia North and Carrowdotia South, Kilimer, County Clare (Eircode V15 R963) which is licenced by the Environmental Protection Agency (EPA) under an Industrial Emissions (IE) Licence (Ref. P0605-04) and an Upper Tier COMAH site and therefore falls under the requirements of the Control of Major Accident Hazard Regulations(COMAH) Regulations, 2015. The development, which will be located within a fenced compound c. 0.4 ha, will consist of a up to 400 MVA (electrical rating) synchronous condenser which shares the existing 400 KV/17 kV transformer and 400kV underground cable belonging to the existing coal fired unit 2. The following plant will be included within the compound: (a) main building (c. 420sq.m., c. 15m high) to house equipment including the synchronous condenser, flywheel, lube oil skid, air compressor and pumps. (b) supporting items of plant including; cooling equipment (c. 690sq.m., c. 3m high); c. 7m high modular containers to house electrical and control equipment (total area of c.	Granted with conditions on 24/06/2021

	384sq.m.); auxiliary transformer (c. 48sq.m., 7m high) and electrical plant including an external circuit breaker (c. 66sq.m., c. 9m high); connections to existing site services networks including electrical, water and wastewater and an underground surface water attenuation tank connecting to existing surface water drains. (c) all other ancillary and miscellaneous site works including site clearance, site access, internal roads and development of areas of hard standing including a maintenance laydown area. (d) the development will be bounded by a c. 3m high chainlink fence. Site access will be by means of a new c. 2.7 m high palisade gate accessed from a new internal road within the station site. PERMISSION is also sought to continue the use of the existing underground cable grid connection, including the 400kV/17kV transformer and 400 kV underground cable belonging to the existing coal fired Unit 2 for use by the synchronous condenser into the future. Planning PERMISSION is being sought for a duration of 10 years. This application represents a relocation within Moneypoint of a similar application permitted by Clare County Council under Reg. Ref. P19/746. A Natura Impact Statement (NIS) has been prepared and accompanies this planning application. Granted with conditions on 16/07/2020.	
	To construct bay window to the front of existing dwellinghouse plus all ancillary site works. Planning Ref: 21259.	
CCC Planning Ref: 19654	To demolish existing front porch and rear extension and garden shed, and planning permission for proposed extension consisting of new front porch and extended sitting room, and also extension to rear consisting of new kitchen area.	Granted with conditions on 24/11/2019
CCC Planning Ref: 20261	For the following development at Glebe House Building: to (a) provide new disabled access ramp and steps to replace existing ramp and (b) to provide 18 number PV Panels on existing roof as per associated drawings, all within existing site boundaries.	Granted with conditions on 08/08/2020
CCC Planning Ref: 19219	For the following: 1) To construct a single storey extension to entrance area of existing Cairde Beag Building; 2) Permission to construct a Lift Shaft to rear of existing Glebe House Building; 3)Permission to construct a storage shed adjacent to Cairde Beag Building; 4) Permission for additional parking spaces, all within existing site boundaries at Glebe House.	Granted with conditions on 20/06/2019
CCC Planning Ref: 2332	For development within the Moneypoint Generating Station, Carrowdotia North and Carrowdotia South, Kilimer, County Clare (Eircode V15 R963) which is licenced by the Environmental	Granted with conditions on 18/04/2023

	Protection Agency (EPA) under an Industrial Emissions (IE) Licence (Ref P0605-04) and and Upper tier COMAH site and therefore falls under the requirements of the Control of Major Accident Hazard Regulations (COMAH) Regulations, 2015. The development, which will be located at various locations within the station complex, will consist of land based site Investigation (SI) works comprising of boreholes and trial pits across the site.	
CCC Planning Ref: 211391	To make the following alterations to the existing dwelling house. a) demolish existing front porch and rear kitchen/utility extension; c) construct link extension to connect house to existing outbuildings; d) convert section of existing outbuildings to residential use ancillary to the main dwelling; e) make elevational changes to the existing house and outbuilding; f) upgrade existing sewerage treatment system and g) all associated site works and services.	Granted with conditions on 04/04/2022
CCC Planning Ref: 211391	To construct a dwelling house, garage with a waste water treatment system and percolation area.	Granted with conditions on 03/11/2021
CCC Planning ref: 20668	To erect extension to dwelling house include first floor living area.	Grante with conditions on 18/12/2020
CCC Planning Ref: 2360308	To restore, refurbish & extend an existing derelict dwelling and outbuilding, installation of new sewerage treatment system, construct new entrance walls, along with all associated works.	Granted with conditions on 03/11/2023
CCC Planning Ref: 23198	To extend the existing dwelling house, including part demolition with all necessary ancillary services.	Granted with conditions on 23/06/2023
CCC Planning Ref: 204	for the construction of a Dwellinghouse, new entrance and connection to public services including ancillary site works.	Granted with conditions on 23/07/2020
CCC Planning Ref: 21719	To construct new dwelling and garage, including all ancillary site works, connecting to existing sewers and watermain services, utlising existing service road.	Granted with conditions on 17/01/2022
CCC Planning Ref: 20548	To construct new garage, including all ancillary site works.	Granted with conditions on 02/11/2020
CCC Planning Ref: 21445	To construct new dwelling, utilising existing site entrance and using existing sewer connections, including all ancillary site works.	Granted with conditions on 10/08/2021
CCC Planning Ref: 21383	For the change of design of a dwelling house and garage previously granted under P8-15168 along with all associated works.	Granted with conditions on 30/07/2021
CCC Planning Ref: 23385	To construct 2 dwelling houses, each with entrance from public road, connection to public services and associated site works.	Granted with conditions on 03/10/2023.

CCC Planning Ref: 20306	To construct new dual sided, sports-wall training area.	Granted with conditions on 08/08/2020
CCC Planning Ref: 19734	The development will consist of retaining attic conversion, private garage extension, utility extension, conservatory extension, 7 extra windows and ancillary minor changes.	Granted with conditions on 06/12/2019
CCC Planning Ref: 2460149	To remove existing sheds and to construct a new dwelling house, site entrance, access road, wastewater treatment system and all associated site works.	Granted with conditions on 28/05/2024
CCC Planning Ref: 21243.	To demolish existing sub-standard dwelling and construct new replacement dwelling, using existing sewer connections, including all ancillary site works and utilising existing site entrance area.	Granted with conditions on 17/06/2021
CCC Planning Ref: 20440	To construct a new dwelling house and private garage with new wastewater treatment system with all necessary ancillary works.	Granted with conditions on 08/12/2020
CCC Planning Ref: 21739	To construct gable extension to existing dwelling plus all ancillary site works.	Granted with conditions on 08/10/2021
CCC Planning Ref: 2360426	Of the construction of a mechanic workshop & planning PERMISSION to construct a carpark and handling area ancillary to the workshop along with all associated works.	Granted on 15/08/2024
CCC Planning Ref: 2360287	For the construction of a new dwelling house and attached garage complete with a new entrance, sewage treatment system and ancillary works.	Granted with conditions on 23/04/2024
CCC Planning Ref: 239	To construct a slatted cubicle house, complete with associated underground slurry tanks, and also including cattle crush and ancillary concrete yard, and all associated site works.	Granted with conditions on 19/06/2023
CCC Planning Ref: 22428	To construct a dwelling house, garage, access road linking to an existing private entrance onto the public road, new sewerage treatment system and percolation area along with all other necessary ancillary works.	Granted with conditions on 30/09/2022
CCC Planning Ref: 20948	To carry out alterations and refurbishment of an existing dwelling house along with all associated works.	Granted with conditions on 16/03/2021
CCC Planning Ref: 168002	For the following proposed development; (a) Three metre long two metre high wall and associated works to divide the existing laneway, (b) New vehicular access and three metre wide paved road to facilitate vehicular access from Sycamore Drive to the eastern section of the existing laneway, (c) Relocation of the existing pedestrian crossing point within Sycamore Drive, (d) Site clearance of all	Granted with conditions on 09/05/2016

	waste material from the existing laneway and (e) ancillary site works.	
CCC Planning Ref: 22435	Of as-constructed ground floor bay window and PERMISSION for alterations to first floor windows on front elevation.	Granted with conditions on 05/08/2022

APB – An Board Pleanála, CCC – Clare County Council

Pathways for effect as a result of the Onshore Site were identified in the form of deterioration of water quality, disturbance to fauna, and deterioration of habitats. Where pathways for likely significant effects were identified in relation the Onshore Site, there is potential for in combination impacts with other projects, as listed above, which is assessed in the accompanying NIS. Where no pathway for any effects on a European site was identified as a result of the Onshore Site, there is no potential for any effects on that European site, in combination with other projects.

4.4.3 Conclusion of In Combination Assessment for the Onshore Site

Where the potential for the Onshore site to result in LSE on European Sites has been identified in the preceding sections of this document, there is potential for it to result in LSE when considered in combination with other plans and projects. The sites listed in Section 5.1 will be considered within the NIS.

Where no pathway for effect on a particular European Site was identified, there is no potential for LSE to occur as a result of the Onshore Site. Therefore, it cannot contribute to any in-combination effects on that site when considered in combination with other plans and projects. Therefore, assessment of these sites in the NIS is not required.

No additional European Sites, in view of their conservation objectives, have been identified for LSE on the basis of the In Combination assessment.

4.4.4 Conclusion of In Combination Assessment for the Project (Offshore and Onshore Sites)

Where the potential for the Project to result in LSE on European Sites has been identified in the preceding sections of this document and in Appendix 1 of Volume 1 (Offshore AASR), there is potential for it to result in LSE when considered in combination with other offshore and onshore plans and projects (Appendix 4 - Review of Plans and Projects) and NIS Volume 1 - Offshore Appendix 14 - Long List of Projects). The sites listed in Section 4.1 will be considered within the NIS.

Where no pathway for effect on a particular European Site was identified, there is no potential for LSE to occur as a result of the Project. Therefore, it cannot contribute to any in-combination effects on that site when considered in combination with other plans and projects. Therefore, assessment of these sites in the NIS is not required.

No additional European Sites, in view of their conservation objectives, have been identified for LSE on the basis of the In Combination assessment.

5. APPROPRIATE ASSESSMENT SCREENING STATEMENT AND CONCLUSIONS

The findings of this Screening Assessment are presented in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018), OPR Practice Note PN01 (2021), Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin 7, Ireland OPR (2021) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

5.1 Concluding Statement

The Project alone or in combination with other plans and projects (i.e. Offshore and Onshore plans and projects) has the potential to have LSE on the following European Sites, in light of their conservation objectives and best scientific information (without the application of mitigation). Sites which have been included solely to ensure consistency with the foreshore licensing approach, are marked with an asterix.

- Inishmore Island SAC,
- Kilkieran Bay and Islands SAC,
- Lower River Shannon SAC,
- Slyne Head Peninsula SAC,
- Slyne Head Islands SAC,
- West Connacht Coast SAC,
- Galway Bay Complex SAC,
- Blasket Islands SAC,
- Duvillaun Islands SAC,
- Connemara Bog Complex SAC,
- Twelve Bens/Garraun Complex SAC,
- Maumturk Mountains SAC,
- Lough Corrib SAC,
- Mweelrea/Sheeffry/Erriff Complex SAC,
- Inishmaan Island SAC,
- Carrowmore Point to Spanish Point and Islands SAC,
- Carrowmore Dunes SAC,
- Kilkee Reefs SAC,
- Kenmare River SAC*,
- Hook Head SAC*,
- Belgica Mound Province SAC*,
- Roaringwater Bay and Islands SAC*,
- Gweedore Bay and Islands SAC*,
- Bunduff Lough and Machair/Trawalua/Mullaghmore SAC*,
- St John's Point SAC*,
- Carnsore Point SAC*,
- Blackwater Bank SAC*,
- Lough Swilly SAC*,
- Codling Fault Zone SAC*,
- Rockabill to Dalkey SAC*,
- North Channel SAC*,
- West Wales Marine / Gorllewin Cymru Foro SAC*,

- Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC*,
- Mers Celtiques - Talus du golfe de Gascogne SCI*,
- North Anglesey Marine / Gogledd Môn Foro SAC*,
- Lambay Island SAC*,
- Nord Bretagne DH SAC*,
- Ouessant-Molène SAC*,
- Abers -Côte des legends SAC*,
- Chaussée de Sein SAC*,
- Côte de Granit rose-Sept-Iles SAC*,
- Baie de Morlaix SAC*,
- Côtes de Crozon SAC*,
- Récifs et landes de la Hague SAC*,
- Anse de Vauville SAC*,
- Banc et récifs de Surtainville SAC*,
- Baie du Mont Saint-Michel SAC*,
- Estuaire de la Rance SAC*,
- Baie de Lancieux SAC, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SAC*,
- Cap d'Erquy-Cap Fréhel SAC*,
- Baie de Saint-Brieuc SAC*,
- Tregor Goëlo Es SAC*,
- Mid-Clare Coast SPA
- Slyne Head to Ardmore Point Islands SPA
- Inishmore SPA
- Cruagh Island SPA
- River Shannon and River Fergus Estuaries SPA
- Cliffs of Moher SPA
- Illaunonearaun SPA
- High Island, Inishark and Duvillaun SPA
- Inner Galway Bay SPA
- Illaunnanoon SPA
- Magharee Islands SPA
- Clare Island SPA
- Loop Head SPA
- Bills Rock SPA
- Dingle Peninsula SPA
- Duvillaun Islands SPA
- Inishglora and InisKeeragh SPA
- Blasket Islands SPA
- Puffin Islands SPA
- Iveragh Peninsula SPA
- Skelligs SPA
- Stages of Broadhaven SPA
- Eirk SPA
- The Gearagh SPA
- Deenish Island and Scariff Island SPA
- Clonakilty SPA
- Illanmaster SPA
- The Bull and The Cow Rocks SPA
- Beara Peninsula SPA
- Aughris Head SPA
- West Donegal Coast SPA
- Tory Island SPA
- Horn Head to Fanad Head SPA
- Saltee Islands SPA

- Mingulay and Berneray SPA
- Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA
- Rum SPA
- Seas off St Kilda SPA
- St Kilda SPA
- Copeland Islands SPA
- Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA
- Shiant Isles SPA
- Flannan Isles SPA
- Lambay Island SPA
- Ouessant-Molène SPA (France)
- Handa SPA
- Cape Wrath SPA
- Cote de Granit Rose-Sept Iles SPA
- Camaret SPA
- North Rona and Sula Sgeir SPA
- North Caithness Cliffs SPA
- Hoy SPA
- Cap d'Erquy-Cap Fréhel SPA (France)
- Rousay SPA
- West Westray SPA
- Copinsay SPA
- East Caithness Cliffs SPA
- Calf of Eday SPA
- Iles Houat-Hoedic SPA (France)
- Falaise du Bessin Occidental SPA (France)
- Seas off Foula SPA
- Fair Isle SPA
- Littoral seino-marin SPA
- Troup, Pennan and Lion's Heads SPA
- Foula SPA
- Sumburgh Head SPA
- Buchan Ness to Collieston Coast SPA
- Noss SPA
- Hermaness, Saxa Vord and Valla Field SPA
- Fetlar SPA
- Tullaher Lough and Bog SAC

As a result, an Appropriate Assessment is required, and a Natura Impact Statement has been prepared.

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