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WHITEGATE-AGHADA SEWERAGE SCHEME- UTAS CORK BUNDLE (FS007027)

Appropriate Assessment Screening Report

March 2022

Client:
Foreshore Unit
Department of Housing, Local Government and Heritage
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Foreshore Licence Application for FS007027 Whitegate-Aghada Sewerage Scheme- UTAS Cork Bundle

Appropriate Assessment Screening Report

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1.0 INTRODUCTION

1.1 Project Overview

Irish Water ("the Applicant") have submitted a Foreshore Licence Application, relating to the proposed Whitegate-Aghada Sewerage Scheme, County Cork. This scheme is one of the agglomerations identified by Irish Water's Untreated Agglomeration Study (UTAS), which have been identified as areas where untreated sewerage is discharged directly to receiving waters.

A Foreshore Licence if required in order to complete the proposed Sewerage Scheme. An application for such a licence was submitted to the Foreshore Unit of the Department of Housing, Local Government and Heritage (DHLGH) by Cork County Council (hereafter referred to as "the Application").

The proposed development comprises of the following:

- A new wastewater treatment plant (WwTP), located south-west of Whitegate village in Ballytigeen townland, including a marine outfall and gravity sewer-Outfall.
- Three proposed new wastewater pumping stations with interconnecting pipework and the upgrading of part of the existing sewer network:
  - Rostellan Wastewater Pumping Station and Rising Main
  - Lower Aghada Wastewater Pumping Station and Rising Main
  - Whitegate Wastewater Pumping Station and Rising Main
- The removal of several untreated wastewater discharges.
- Ardnabourkey Gravity Sewer.

ROD has been commissioned by the Foreshore Unit of the Department of Housing, Local Government and Heritage to prepare this Appropriate Assessment (AA) Screening Report in accordance with relevant EU and national legislation, associated guidelines and standards. The aim of this AA Screening Report is to inform and assist the Competent Authority in carrying out its AA Screening Assessment by determining whether or not the proposed development, either individually or in combination with other plans and projects, has the potential to significantly affect one or more European sites in view of their Conservation Objectives.

It is the considered opinion of ROD, as the author of this AA Screening Report, that the proposed development, either individually or in combination with other plans or projects, is likely to give rise to impacts which would constitute significant effects on one European site, namely the Cork Harbour SPA, in view of its Conservation Objectives, and, therefore, that a Natura Impact Statement (NIS) is required in respect of the proposed development.

1.2 Site Location

The proposed development is located on the east side of Cork Harbour. There are four townlands within the footprint of the proposed development, namely Whitegate, Upper Aghada, Lower Aghada and Rostellan. The nearest town is Midleton, approximately 14 km northeast from the village of Whitegate. The location of the proposed development is shown below in Figure 1.1.

1.3 Competent Experts

This report has been prepared by [redacted] and [redacted]. [redacted] has a degree in Botany from Trinity College Dublin and an MSc in Ecological Management and Conservation Biology from Queen's University Belfast. He is a Full Member of the Chartered Institute of Ecology and Environmental Management and has over nine years' experience in the ecological assessment including impact assessment and Appropriate Assessment. Robert holds a bachelor's degree (with honours) in Zoology from Trinity College Dublin, and a Master's in Wildlife Management and Conservation from University College Dublin.

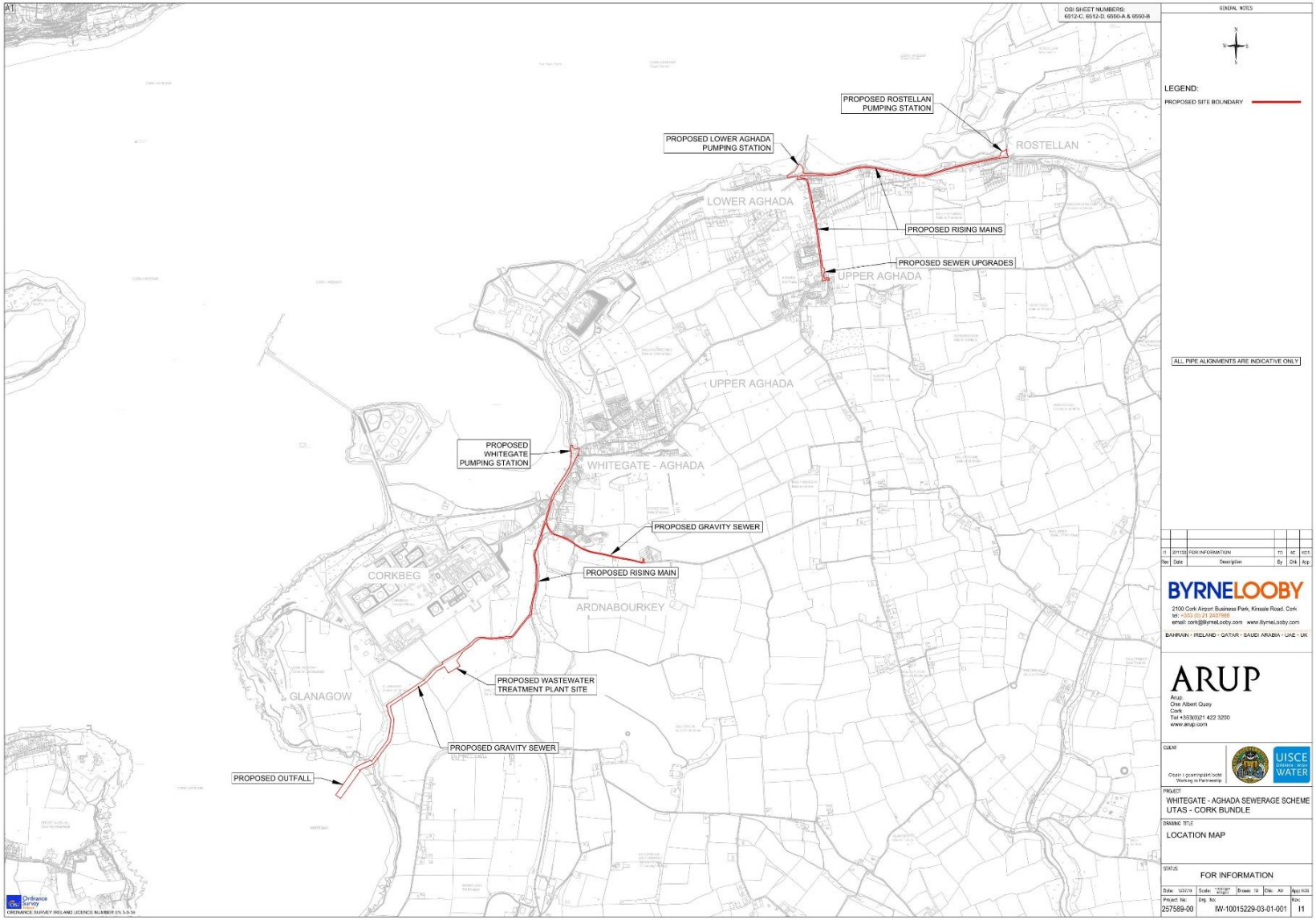

Figure 1.1 Site Location of the proposed Whitegate-Aghada Sewerage Scheme, County Cork

1.4 Application Documents

The following documents submitted with the Foreshore Licence Application were used to inform this AA Screening Report:

- Foreshore Licence Application Form (dated 23/11/2020)
- Site location Maps, Foreshore Licence Map (dated 12/07/2019)
- Appropriate Assessment Screening Report for Untreated Agglomerations Study (UTAS) Cork Bundle, Whitegate-Aghada, Whitegate (Dated 2/10/2020)
- Natura Impact Statement (Dated 22/10/20)
- Site Investigation Monitoring Report (Dated May 2019)
- Whitegate Aghada Far Field Modelling Report (Dated 13/08/2020)
- Construction Environmental Management Plan (CEMP) (Dated 27/10/2020)
- Testing Report – Archaeology (Dated May 2019)
- Archaeological Impact Assessment (Dated 21/03/2018)
- Underwater Archaeological Impact Assessment (Dated September 2019)
- Compulsory Purchase Order (CPO), CPO drawings, and CPO An Bord Pleanala Inspector's Report (Dated 2/07/2019)
- Observations from Prescribed Bodies (Dated April, June, July, September, and October 2021)
- Public submissions (Dated 03/05/2021 and 04/06/2021)
- Applicant Responses to Public submissions (Dated 04/06/2021)
- Applicant responses to Prescribed Bodies Consultation (Dated 04/05/2021, 16/08/2021, 21/09/2021, and 20/10/2021)
- Copies of Newspaper notices (Dated 01/04/2021 and 03/04/2021)

1.5 Legislative Context

Council Directive 92/43/EEC of the 21st May 1992 on the conservation of natural habitats of wild fauna and flora ("the Habitats Directive") and Directive 2009/147/EC of the European Parliament and of the Council of the 30th November 2009 on the conservation of wild birds ("the Birds Directive") list habitats and species which are, in a European context, important for conservation and in need of protection. This protection is afforded in part through the designation of sites which support significant examples of habitats or populations of species ("European sites"). Sites designated for wild birds are termed "Special Protection Areas" (SPAs) and sites designated for natural habitat types or other species are termed "Special Areas of Conservation" (SACs). The complete network of European sites is referred to as "Natura 2000".

In order to ensure the protection of European sites in the context of land use planning and development, Article 6(3) of the Habitats Directive provides for the assessment of the implications of plans and projects for European sites, as follows:

> *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site[1] and subject to the provisions of paragraph 4, the competent national*

[1] Including, where applicable, 'sites'.

authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

In *Case C-323/17* [§34*], People Over Wind*, the Court of Justice of the European Union ('the CJEU') referred to the nature of the test to be applied in making a screening determination as follows:

"[...] it is settled case-law that Article 6(3) of the Habitats Directive makes the requirement for an appropriate assessment of the implications of a plan or project conditional on there being a probability or a risk that the plan or project in question will have a significant effect on the site concerned. In the light, in particular, of the precautionary principle, such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will have a significant effect on the site concerned (judgment of 26 May 2011, Commission v Belgium, C-538/09, EU:C:2011:349, paragraph 39 and the case-law cited). The assessment of that risk must be made in the light inter alia of the characteristics and specific environmental conditions of the site concerned by such a plan or project (see, to that effect, judgment of 21 July 2016, Orleans and Others, C-387/15 and C-388/15, EU:C:2016:583, paragraph 45 and the case-law cited)."

Article 7 of the Habitats Directive provides that the provisions of, *inter alia*, Article 6(3) are to apply to SPAs under Directive 2009/147/EC (the "Birds Directive").

As stated, the requirements arising out of Article 6(3) of the Habitats Directive are transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 as amended[2] (S.I. No.477 of 2011) (the Habitats Regulations), including Part 5 thereof.

The determination of whether or not a plan or project requires AA is referred to as "Stage 1" or "AA Screening". A "Stage 1" or "AA Screening" is completed to determine whether or not the proposed development, either individually or in combination with other plans or projects, in view of best scientific knowledge, is likely to have a significant effect on areas designated as being of European importance for nature conservation ("European sites"), thereby enabling the Applicant, to fulfil its obligations under Article 6(3) of the Habitats Directive.

As set out above, it is the considered opinion of ROD, as the author of this AA Screening Report, that the proposed development, either individually or in combination with other plans or projects, is likely to give rise to impacts which would constitute significant effects on three European sites, namely the Rye Water Valley/Carton SAC, the South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA, in view of their Conservation Objectives, and, therefore, that AA is required in respect of the proposed development.

Article 6(3) of the Habitats Directive specifies that AA must be undertaken by the "competent national authorities". In Ireland, the "competent authority" is the relevant planning authority for each plan or project, e.g. the local authority, public authority or An Bord Pleanála. Consequently, the responsibility for carrying out AA Screening lies solely with the competent authority. In that respect, the AA Screening Report is not in itself an AA Screening Assessment but provides the competent authority with the information it needs in order to carry out its AA Screening.

[2] Including inter alia S.I. 290 of 2013; SI 499 of 2013; SI 355 of 2015; the Planning, Heritage and Broadcasting (Amendment) Act 2021, Chapter 4; SI 293 of 2021.

1.6 Screening Methodology

The AA Screening Report assesses the potential effects from the plan or project on the European sites within the likely zone of impact and evaluates them in view of the sites' Conservation Objectives.

This AA Screening Report has had regard inter alia to the following matters[3]:

- The threshold test is that an appropriate assessment will be required if the proposed development is likely to have a significant effect on (a) European site(s) either individually or in combination with other plans or protects.
- It is not necessary, in order to trigger the requirement to proceed to stage 2 AA that the proposed development will 'definitely' have significant effects on the protected site, but such a requirement will arise if it is a 'mere probability' that such an effect exists. The requirement to carry out an AA will be satisfied if there is a 'probability or a risk' that the proposed development will have 'significant effects' on (a) European site(s).
- Consequent upon the application of the precautionary principle, such a 'risk' will be found to exist if 'it cannot be excluded on the basis of objective information that the particular proposed development 'will have significant effects' on (a) European site(s).
- An AA will be required if, on the basis of objective information, a 'significant effect' on a European site 'cannot be excluded'. An AA will not be required if, on the basis of objective information, *a* 'significant effect' on (a) European site(s) 'can be excluded'.
- In the case of 'doubt as to the absence of significant effects' an AA must be carried out.
- The requirement to conduct an AA will arise where, at the screening stage, it is ascertained that the particular development is 'capable of having any effect' (albeit this must be any 'significant effect') on (a) European site(s).
- The 'possibility' of there being a 'significant effect' on (a) European site(s) will give rise to a requirement to carry out an AA for the purposes of Article 6(3). There is no need to 'establish' such an effect and it is merely necessary to determine that there 'may be' such an effect.
- In order to meet the threshold of likelihood of significant effect, the word 'likely' in Article 6(3) means less than the balance of probabilities. The test does not require any 'hard and fast evidence' that such a significant effect was likely. It merely has to be shown that there is a 'possibility' that this significant effect is likely.
- The assessment of whether there is a risk of 'significant effect' on the European site must be made in light, inter alia, of the 'characteristics and specific environmental conditions of the site concerned' by the relevant plan or project.
- Plans or projects or applications for developments which have no appreciable effect on European sites are excluded from the requirement to proceed to AA. If all applications for permission for proposed developments capable of having *any effect whatsoever* on such sites were to be caught by Article 6(3) activities on or near the site would risk being impossible by reason of legislative overkill.

While the threshold at the screening stage of Article 6(3) is very low, nonetheless it is a threshold which must be met before it is necessary to proceed to the stage 2 AA.

[3] See Eoin Kelly v. An Bord Pleanála [2019] IEHC 84; Kelly v. An Bord Pleanála [2014] IEHC 400; Connelly v. An Bord Pleanála [2018] IESC 31; [2018] ILRM 453.

Accordingly, best practice in undertaking AA Screening involves five steps as follows:

(i) The first step involves gathering the information and data necessary to carry out a screening assessment. These include, but are not limited to, the details of all phases of the plan or project, environmental data pertaining to the area in which the plan or project is located, e.g. rare or protected habitats and species present or likely to be present, and the details of the European sites within the likely zone of impact.

(ii) The second step involves examining the information gathered in the first step and a scientific analysis of the potential impacts of the project on the receiving environment, particularly the European sites in the likely zone of impact.

(iii) The third step evaluates the impacts analysed in the second step against the Conservation Objectives of the relevant European sites, thereby determining whether or not those impacts constitute "likely significant effects", within the meaning of Article 6(3) of the Habitats Directive.

(iv) The fourth step involves considering the potential for likely significant effects to arise from the combination of the impacts of the plan or project with those of other plans or projects. If it is determined in the third step that Stage 2 (AA) is required, consideration of potential cumulative impacts may be deferred to that stage.

(v) The last step involves the issuing of a statement of the determination of the AA Screening. Notwithstanding the recommendation made in the AA Screening Report, the responsibility for completing this step lies solely with the competent authority.

The following guidance documents informed the assessment methodology:

- EC (2018) Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission, Brussels.
- EC (2021) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Environment Directorate-General of the European Commission.
- DEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, Dublin.
- NPWS (2010) Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular Letter NPWS 1/10 & PSSP 2/10. National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin.
- OPR (2021) *Practice Note PN01: Appropriate Assessment Screening for Development Management.* Office of the Planning Regulator.

2.0 IDENTIFICATION OF LIKELY SIGNIFICANT EFFECTS

2.1 Establishing the Likely Zone of Impact

Section 3.2.3 of DEHLG (2010) outlines the procedure for selecting the European sites to be considered in AA. It states that European sites potentially affected should be identified and listed, bearing in mind the potential for direct, indirect and cumulative effects. It also states that the specific approach in each case is likely to differ depending on the scale and likely effects of the plan or project. However, it advises that the following sites should generally be included:

- All European sites within or immediately adjacent to the plan or project area;
- All European sites within the likely zone of impact of the plan or project; and,
- In accordance with the Precautionary Principle, all European sites for which there is doubt as to whether or not they might be significantly affected.

The "likely zone of impact" of a plan or project is the geographic extent over which significant ecological effects are likely to occur. In the case of plans, this zone should extend to a distance of 15km in all directions from the boundary of the plan area. In the case of projects, however, the guidance recognises that the likely zone of impact must be established on a case-by-case basis, with reference to the following key variables:

- The nature, size and location of the project;
- The sensitivities of the ecological receptors; and,
- The potential for in-combination effects.

For example, in the case of a project that could affect a watercourse, it may be necessary to include the entire upstream and/or downstream catchment in order to capture all European sites with water-dependent Qualifying Interests.

Having regard to the above key variables, the likely zone of impact was defined as:

- The entire area within 15km of the proposed development.

This was based on the maximum extent of potential impacts associated with the proposed development.

It was determined that three European sites, namely the Cork Harbour SPA, the Great Island Channel SAC, and the Ballycotton SPA occur within the likely zone of impact. These sites are listed in Table 2.1 which also assesses whether or not there are pathways for impacts to the sites. Where pathways exist, a detailed description is provided in Section 2.2.

Table 2.1 European sites with closest proximity to the Plan.

European site [site code]	Are there potential pathways for effects from the Plan to this site? Explain.
Cork Harbour SPA	**Yes.** The proposed development is within this SAC.
Great Island Channel SAC	**Yes**. This European site is located 4 km north of the proposed development, on the north end of Cork Harbour. The Qualifying Interests intertidal habitats and are hydrologically connected to the proposed development.

European site [site code]	Are there potential pathways for effects from the Plan to this site? Explain.
Ballycotton Bay SPA	**No**. This European site is located 13.3km east of the proposed development. The site is not hydrologically connected to the proposed development. The Qualifying Interests of this European site are wintering waterbird species as well as 'wetlands and waterbirds'. Owing to the location of this site relative to the proposed development and the assimilative capacity of the waters between Cork Harbour and Ballycotton Bay, no pathways for effects could be identified.

2.2 Site Description

The following sections describe the European sites where potential pathways for effects between the proposed development and this site have been identified.

2.2.1 Cork Harbour SPA

Site Overview

The description of the Cork Harbour SPA provided here is based on the Site Synopsis (NPWS, 2015), Conservation Objectives (NPWS, 2014a), and Natura 2000 Standard Data Form (NPWS, 2021) for the site.

Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay, Ringabella Creek and the Rostellan and Poulnabibe inlets.

Owing to the sheltered conditions, the intertidal flats are often muddy in character. These muds support a range of macro-invertebrates, notably *Macoma balthica*, *Scrobicularia plana*, *Hydrobia ulvae*, *Nepthys hombergi*, *Nereis diversicolor* and *Corophium volutator*. Green algae species occur on the flats, especially *Ulva* spp. Cordgrass (*Spartina* spp.) has colonised the intertidal flats in places, especially where good shelter exists, such as at Rossleague and Belvelly in the North Channel. Salt marshes are scattered through the site and these provide high tide roosts for the birds. Some shallow bay water is included in the site. Rostellan Lake is a small brackish lake that is used by swans throughout the winter. The site also includes some marginal wet grassland areas used by feeding and roosting birds.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Mallard, Pintail, Shoveler, Redbreasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Greenshank, Blackheaded Gull, Common Gull, Lesser Black-backed Gull and Common Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Cork Harbour is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl. Of particular note is that the site supports internationally important populations of Black-tailed Godwit (1,896) and Redshank (2,149) - all figures given are five year mean peaks for the period 1995/96 to

1999/2000. Nationally important populations of the following 19 species occur: Little Grebe (57), Great Crested Grebe (253), Cormorant (521), Grey Heron (80), Shelduck (2,009), Wigeon (1,791), Teal (1,065), Mallard (513), Pintail (57), Shoveler (103), Red-breasted Merganser (121), Oystercatcher (1,809), Golden Plover (3,342), Grey Plover (95), Lapwing (7,569), Dunlin (9,621), Bartailed Godwit (233), Curlew (2,237) and Greenshank (46). The Shelduck population is the largest in the country (over 10% of national total). Other species using the site include Mute Swan (38), Whooper Swan (5), Pochard (72), Gadwall (6), Tufted Duck (64), Goldeneye (21), Coot (53), Ringed Plover (73), Knot (26) and Turnstone (113). Cork Harbour is an important site for gulls in winter and autumn, especially Black-headed Gull (3,640), Common Gull (1,562) and Lesser Black-backed Gull (783), all of which occur in numbers of national importance. Little Egret and Mediterranean Gull, two species which have recently colonised Ireland, also occur at this site.

A range of passage waders occurs regularly in autumn, including such species as Ruff (5-10), Spotted Redshank (1-5) and Green Sandpiper (1-5). Numbers vary between years and usually a few of each of these species over-winter.

Cork Harbour has a nationally important breeding colony of Common Tern (102 pairs in 1995). The birds have nested in Cork Harbour since about 1970, and since 1983 on various artificial structures, notably derelict steel barges and the roof of a Martello Tower. The birds are monitored annually and the chicks are ringed.

Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, it supports nationally important wintering populations of 22 species, as well as a nationally important breeding colony of Common Tern. Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Little Egret, Golden Plover, Bar-tailed Godwit, Ruff, Mediterranean Gull and Common Tern. The site provides both feeding and roosting sites for the various bird species that use it. Cork Harbour is also a Ramsar Convention site and part of Cork Harbour SPA is a Wildfowl Sanctuary.

Qualifying Interests of the Site

[A004] Little Grebe (*Tachybaptus ruficollis*)

[A005] Great Crested Grebe (*Podiceps cristatus*)

[A017] Cormorant (*Phalacrocorax carbo*)

[A028] Grey Heron (*Ardea cinerea*)

[A048] Shelduck (*Tadorna tadorna*)

[A050] Wigeon (*Anas penelope*)

[A052] Teal (*Anas crecca*)

[A054] Pintail (*Anas acuta*)

[A056] Shoveler (*Anas clypeata*)

[A069] Red-breasted Merganser (*Mergus serrator*)

[A130] Oystercatcher (*Haematopus ostralegus*)

[A140] Golden Plover (*Pluvialis apricaria*)

[A141] Grey Plover (*Pluvialis squatarola*)

[A142] Lapwing (*Vanellus vanellus*)

[A149] Dunlin (*Calidris alpina*)

[A156] Black-tailed Godwit (*Limosa limosa*)

[A157] Bar-tailed Godwit (*Limosa lapponica*)

[A160] Curlew (*Numenius arquata*)

[A162] Redshank (*Tringa totanus*)

[A164] Greenshank (Tringa nebularia)

[A179] Black-headed Gull (*Chroicocephalus ridibundus*)

[A182] Common Gull (*Larus canus*)

[A183] Lesser Black-backed Gull (*Larus fuscus*)

[A193 Common Tern (*Sterna hirundo*)]

[A999] Wetland and Waterbirds

2.2.2 Great Island Channel SAC

Site Overview

The description of the Great Island Channel SAC provided here is based on the Site Synopsis (NPWS, 2013), Conservation Objectives (NPWS, 2014b), and Natura 2000 Standard Data Form (NPWS, 2019) for the site.

The Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. It is an integral part of Cork Harbour which contains several other sites of conservation interest. Geologically, Cork Harbour consists of two large areas of open water in a limestone basin, separated from each other and the open sea by ridges of Old Red Sandstone. Within this system, Great Island Channel forms the eastern stretch of the river basin and, compared to the rest of Cork Harbour, is relatively undisturbed. Within the site is the estuary of the Owennacurra and Dungourney Rivers. These rivers, which flow through Midleton, provide the main source of freshwater to the North Channel.

The main habitats of conservation interest in Great Island Channel SAC are the sheltered tidal sand and mudflats and the Atlantic salt meadows. Owing to the sheltered conditions, the intertidal flats are composed mainly of soft muds. These muds support a range of macro-invertebrates, notably *Macoma balthica*, *Scrobicularia plana*, *Hydrobia ulvae*, *Nepthys hombergi*, *Nereis diversicolor* and *Corophium volutator*. Green algal species occur on the flats, especially *Ulva lactua* and *Enteromorpha* spp. Cordgrass (*Spartina* spp.) has colonised the intertidal flats in places, especially at Rossleague and Belvelly.

The saltmarshes are scattered through the site and are all of the estuarine type on mud substrate. Species present include Sea Purslane (*Halimione portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Greater Sea-spurrey (*Spergularia media*), Lax-flowered Sea-lavender (*Limonium humile*), Sea Arrowgrass (*Triglochin maritimum*), Sea Mayweed (*Matricaria maritima*) and Red Fescue (*Festuca rubra*).
The site is extremely important for wintering waterfowl and is considered to contain three of the top five areas within Cork Harbour, namely North Channel, Harper's Island and Belvelly-Marino Point. Shelduck is the most frequent duck species with 800-1,000 birds centred on the Fota/Marino Point area. There are also large flocks of Teal and Wigeon, especially at the eastern end. Waders occur in the greatest density north of Rosslare, with Dunlin, Godwit, Curlew and Golden Plover the commonest species. A

population of about 80 Grey Plover is a notable feature of the area. All the mudflats support feeding birds; the main roost sites are at Weir Island and Brown Island, and to the north of Fota at Killacloyne and Harper's Island. Ahanesk supports a roost also but is subject to disturbance. The numbers of Grey Plover and Shelduck, as given above, are of national importance.

The site is an integral part of Cork Harbour which is a wetland of international importance for the birds it supports. Overall, Cork Harbour regularly holds over 20,000 waterfowl and contains internationally important numbers of Black-tailed Godwit (1,181) and Redshank (1,896), along with nationally important numbers of nineteen other species. Furthermore, it contains large Dunlin (12,019) and Lapwing (12,528) flocks. All counts are average peaks, 1994/95 – 1996/97. Much of the site falls within Cork Harbour Special Protection Area, an important bird area designated under the E.U. Birds Directive.

While the main land use within the site is aquaculture (oyster farming), the greatest threats to its conservation significance come from road works, infilling, sewage outflows and possible marina developments.

The site is of major importance for the two habitats listed on Annex I of the E.U. Habitats Directive, as well as for its important numbers of wintering waders and wildfowl. It also supports a good invertebrate fauna.

Qualifying Interests of the Site

[1140] Mudflats and sandflats not covered by seawater at low tide

[1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

2.3 Evaluation Against Conservation Objectives

Table 2.2 and Table 2.3 below detail the evaluation of the likely effects of the proposed development on the sites identified in Section 2.1 and described in Section 2.2, in view of the Conservation Objectives. As explained in Sections 1.5 and 1.6, AA Screening is carried out in view of the Conservation Objectives of the relevant European sites, which are in turn defined by detailed Attributes and corresponding Targets. Therefore, the evaluation of whether or not a likely effect is significant (in view of the Conservation Objective in question) is made with regard to these Attributes and Targets.

Table 2.2 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the Cork Harbour SPA.

Qualifying Interest	Conservation Objective (NPWS, 2015)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
[A004] Little Grebe (*Tachybaptus ruficollis*)	"*To maintain the favourable conservation condition of Little Grebe in Cork Harbour SPA*"	The proposed development is within the Cork Harbour SPA. Due to the proximity of the proposed development to this European site, as well as the nature and scale of the works, and considering the sensitivities of the Qualifying Interests, likely significant effects cannot be excluded.	Yes
[A005] Great Crested Grebe (*Podiceps cristatus*)	"*To maintain the favourable conservation condition of Great Crested Grebe in Cork Harbour SPA*"		Yes
[A017] Cormorant (*Phalacrocorax carbo*)	"*To maintain the favourable conservation condition of Cormorant in Cork Harbour SPA*"		Yes
[A028] Grey Heron (*Ardea cinerea*)	"*To maintain the favourable conservation condition of Grey Heron in Cork Harbour SPA,*"		Yes
[A048] Shelduck (*Tadorna tadorna*)	"*To maintain the favourable conservation condition of Shelduck in Cork Harbour SPA*"		Yes
[A050] Wigeon (*Anas penelope*)	"*To maintain the favourable conservation condition of Wigeon in Cork Harbour SPA*"		Yes
[A052] Teal (*Anas crecca*)	*"To maintain the favourable conservation condition of Teal in Cork Harbour SPA"*		Yes

Qualifying Interest	Conservation Objective (NPWS, 2015)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
[A054] Pintail (*Anas acuta*)	*"To maintain the favourable conservation condition of Pintail in Cork Harbour SPA"*		Yes
[A056] Shoveler (*Anas clypeata*)	*"To maintain the favourable conservation condition of Shoveler in Cork Harbour SPA"*		Yes
[A069] Red-breasted Merganser (*Mergus serrator*)	*"To maintain the favourable conservation condition of Red-breasted Merganser in Cork Harbour SPA"*		Yes
[A130] Oystercatcher (*Haematopus ostralegus*)	*"To maintain the favourable conservation condition of Oystercatcher in Cork Harbour SPA"*		Yes
[A140] Golden Plover (*Pluvialis apricaria*)	*"To maintain the favourable conservation condition of Golden Plover in Cork Harbour SPA"*		Yes
[A141] Grey Plover (*Pluvialis squatarola*)	*"To maintain the favourable conservation condition of Grey Plover in Cork Harbour SPA"*		Yes
[A142] Lapwing (*Vanellus vanellus*)	*"To maintain the favourable conservation condition of Lapwing in Cork Harbour SPA"*		Yes

Qualifying Interest	Conservation Objective (NPWS, 2015)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
[A149] Dunlin (*Calidris alpina*)	*"To maintain the favourable conservation condition of Dunlin in Cork Harbour SPA"*		Yes
[A156] Black-tailed Godwit (*Limosa limosa*)	*"To maintain the favourable conservation condition of Black-tailed Godwit in Cork Harbour SPA"*		Yes
[A157] Bar-tailed Godwit (*Limosa lapponica*)	*"To maintain the favourable conservation condition of Bar-tailed Godwit in Cork Harbour SPA"*		Yes
[A160] Curlew (*Numenius arquata*)	*"To maintain the favourable conservation condition of Curlew in Cork Harbour SPA"*		Yes
[A162] Redshank (*Tringa totanus*)	*"To maintain the favourable conservation condition of Redshank in Cork Harbour SPA"*		Yes
[A164] Greenshank (*Tringa nebularia*)	*"To maintain the favourable conservation condition of Greenshank in Cork Harbour SPA"*		Yes
[A179] Black-headed Gull (*Chroicocephalus ridibundus*)	*"To maintain the favourable conservation condition of Black-headed Gull in Cork Harbour"* SPA"		Yes
[A182] Common Gull (*Larus canus*)	*"To maintain the favourable conservation condition of Common Gull in Cork Harbour SPA"*		Yes

Qualifying Interest	Conservation Objective (NPWS, 2015)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
[A183] Lesser Black-backed Gull (*Larus fuscus*)	*"To maintain the favourable conservation condition of Lesser Black-backed Gull in Cork Harbour SPA"*		Yes
[A193] Common Tern (*Sterna hirundo*)	*"To maintain the favourable conservation condition of Common Tern in Cork Harbour SPA"*		Yes
[A999] Wetland and Waterbirds	*"To maintain the favourable conservation condition of the wetland habitat in Cork Harbour SPA as a resource for the regularly-occurring migratory waterbirds that utilise it"*		Yes

Table 2.3 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the Great Island Channel SAC.

Qualifying Interest	Conservation Objective (NPWS, 2015)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Likely Significant Effect
[1140] Mudflats and sandflats not covered by seawater at low tide	"*To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Great Island Channel SAC*"	The Great Island Channel SAC located 4km north of the proposed development and is within Cork Harbour. This hydrological connection provides a pathway for hydrocarbons and other contaminants to be transported to the site, which could interrupt or delay the achievement of the conservation objectives for these Qualifying Interests. However, considering the nature and scale of the proposed development, and the location of this European site relative to the proposed development, any introduction of pollutants would assimilate in Cork Harbour before reaching this site. It can therefore be concluded beyond reasonable scientific doubt that the proposed development will not lead to likely significant effects on these Qualifying Interests, in view of their Conservation Objectives.	No
[1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	"*To restore the favourable conservation condition of Atlantic salt meadows (Glauco-Puccinellietalia maritimae) in Great Island Channel SAC*"		No

2.4 Summary of Likely Significant Effects

In Section 2.1, it was established that three European sites, namely the Cork Harbour SPA, the Great Island Channel SAC, and the Ballycotton Bay SPA occur within the likely zone of impact.

It was determined that potential pathways for effects exist between the proposed development and two sites, the Cork Harbour SPA and the Great Island Channel SAC. These sites were described in detail in Section 2.2. Table 2.2 above established that, in the absence of appropriate mitigation, the proposed development is likely to have significant effects on the Qualifying Interests of the Cork Harbour SPA, in view of its Conservation Objectives. Table 2.3 established that the proposed development will not lead to likely significant effects on the Qualifying Interests of the Great Island Channel SAC.

3.0 IN-COMBINATION EFFECTS

Article 6(3) of the Habitats Directive requires that AA be carried out in respect of any plan or project which is likely to have a significant effect on one or more European sites, "either individually or in combination with other plans or projects". Therefore, regardless of whether or not the likely effects of a plan or project are significant when considered in isolation, the potential for the plan or project to significantly affect European sites in combination with other past, present or foreseeable future plans or projects must also be assessed.

In the case of the proposed development, this AA Screening Report has found that the proposed development, individually, is likely to have significant effects on one European site. Therefore, the assessment of the proposed development must proceed to Stage 2 (AA). The assessment of likely significant effects on the Cork Harbour SPA arising from the proposed development, in combination with other plans or projects, should be undertaken at that stage.

4.0 APPROPRIATE ASSESSEMNT SCREENING CONCLUSION

In accordance with Article 6(3) of the Habitats Directive and Part 5 of the Birds and Natural Habitats Regulations, the relevant case law, established best practice and the Precautionary Principle, this AA Screening Report has considered the proposed development and its potential to significantly affect European sites. This report has concluded, on the basis of objective information, that the proposed development, either individually or in combination with other plans or projects, is likely to give rise to impacts which would constitute significant effects on one European site, namely the Cork Harbour SPA, in view of its Conservation Objectives.

In light of this conclusion, it is the considered opinion of ROD, as the author of this AA Screening Report, that the Department of Housing, Local Government and Heritage, as the Competent Authority in this case, in completing its AA Screening in respect of the proposed development, should find that the proposed development, either individually or in combination with other plans or projects, is likely to have a significant effect on one European site, namely the Cork Harbour SPA, in view of its Conservation Objectives. Therefore, the Department should determine that AA is required in respect of the proposed development.

The AA must contain complete, precise and definitive findings and conclusions in relation to the implications of the proposed development for the integrity of the Cork Harbour SPA. A Natura Impact Statement (NIS) should be prepared to provide the Department with the scientific information upon which it will base its findings and conclusions. The NIS should take the form of a comprehensive examination, analysis and evaluation, including recommendations, in respect of the implications of the proposed development, individually and in combination with other plans and projects, for the integrity of the European sites concerned.

5.0 REFERENCES

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Official Journal of the European Communities, *L206/7*.

DEHLG (2010) *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*. Department of the Environment, Heritage and Local Government, Dublin.

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (the Birds Directive). Official Journal of the European Union, *L20/7*.

EC (2018) Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission, Brussels.

EC (2021) *Assessment of plans and Projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*. Environment Directorate-General of the European Commission.

NPWS (2010) *Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Department of the Environment, Heritage and Local Government, Dublin.

NPWS (2014a) Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2021) Natura 2000 Standard Data Form for the Cork Harbour SPA [0004030]. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2015) Site Synopsis for Cork Harbour SPA [004030]. Published 21/01/2013. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2014b) Conservation Objectives: Great Island Channel SAC 001058. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2019) Natura 2000 Standard Data Form for the Great Island Channel SAC [0001058]. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2013) Site Synopsis for Great Island Channel SAC [0001058]. Published 24/09/2013. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2021) *Online Map Viewer* <http://webgis.npws.ie/npwsviewer/> [Accessed 09/03/2022]. Department of Culture, Heritage and the Gaeltacht, Dublin.

People Over Wind and Peter Sweetman v. Coillte Teoranta [2018] C-323/17.

Rossmore v. An Bord Pleanála [2014] IEHC 557.

Sweetman & Others v. An Bord Pleanála [2013] C-258/11.